

CRUEL WORLD

Why? An Exploration...

Albert Ball

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Revision 1

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About the Author

Albert Ball is a retired electrical engineer who began his career in 1964 after being accepted by British Railways for an engineering sandwich course, spending alternate six monthly periods training in industry and studying at university. After qualifying he worked for the railway in Derby for six years, mainly on control systems for electric traction supplies on new and existing electrified lines.

In 1975 he attained professional status as a Chartered Engineer, becoming a full member of the then Institution of Electrical Engineers, now the Institution of Engineering and Technology. Also in 1975 he joined the UKAEA near Warrington, specialising in nuclear reactor control and safety systems. In 1989 he joined the Nuclear Installations Inspectorate, a division of the Health and Safety Executive in Bootle, as a Principal Nuclear Inspector, specialising in the safety assessment of control, instrumentation and protection systems for power reactors and nuclear chemical plants.

He retired in 2012 at the age of 65, since then largely spending his time reading widely on economic matters and in writing this book.

His very minor claim to fame came from his fascination with computer programming, beginning in 1982 when he bought one of Clive Sinclair's Spectrum computers. He enjoyed some early success in writing Spectrum computer games, the most popular being *Jumping Jack*, published by Imagine Software in 1983, for which at only ten years old his son Stuart prepared all the graphics; followed by *Rapscallion*, published by Bug-Byte Software in 1984.

He is married, has three sons and one grandson, and lives in Southport, Merseyside.

Preface

Perhaps one has to reach a certain age to ask the question: What is it that humanity seeks to achieve? After seventy years I find myself repeatedly asking that question and not finding a satisfactory answer. Here we all are, busily going about our daily tasks, living our lives, interacting with others, eating, working, sleeping; then repeating it all the next day, and the next. But no-one is directing all this effort towards any commonly desired end. Does anyone think that the world we live in represents the goal that we have been striving for these past thousands of years? I sincerely hope not.

What kind of world have we humans created? Increasing numbers of us live in fear of losing our homes and jobs, many forced to rely on the charity of food banks to feed ourselves and our children. Many of us live on the streets in utter destitution, often with mental health problems, and no-one seems to care. Many more of us live in poor countries where for want of clean water and basic sanitation we must watch helplessly as our children and infants die in their millions every year. At the other end of the scale some of us have wealth that can't be consumed in a thousand lifetimes. Then there are the environmental dangers that we all face - scarcity of fresh water, widespread pollution of the air, sea and rivers, deforestation, loss of biodiversity, and above all climate change - and our governments, severely handicapped by those of us with vested interests, unable to take the decisive action that is necessary to combat them. Why is it that the world's abundant wealth is spread so lavishly for the very few and so thinly for the very many? Why is it that we understand so well the dire consequences awaiting us from environmental catastrophe yet seem unable to do more than a fraction of what is required?

This book presents the results of an exploration into these concerns by someone who feels deeply disturbed by them; who feels that people in great numbers are being squeezed beyond breaking point; who feels that we are racing headlong towards a cliff edge with people who claim to be in control but whose hands are tied.

And where did this exploration lead? To economics: that dull, boring, and so-called 'dismal' science.¹ Economics holds us all in its grip, for better or for worse - in the case of the current economic system better for the few and worse for the many. What I discovered is that the difference between happiness and misery, security and poverty, community and isolation, even life and death, lies in the economic system in which we find ourselves. John Maynard Keynes² understood this when he said:

The ideas of economists and political philosophers, both when they are right and when they are wrong are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually slaves of some defunct

¹ https://en.wikipedia.org/wiki/The_dismal_science

² By the end of this book Keynes will have become a familiar figure.

economist. (Keynes 1936, Chapter 24³)

No subject is more important than economics. Economics is everyone's business. As Ha-Joon Chang maintains: "Economics is too important to leave to the experts."⁴

Economics is neither dull nor boring; it is no more and no less than a set of ideas, ideas that are often in direct conflict with other economic ideas. In powerful hands economic ideas become ideologies, ideologies become policy, and policy directly affects the lives and deaths of everyone. It is alarming to see the extent to which modern prevailing economic ideas permit and even promote practices that lead to exploitation of the many by the few for their own huge advantage. What is deeply chilling about all this is that not only do most of those exploited have little or no knowledge of the fact that they are being exploited, but also that many of the exploiters believe, quite sincerely, that their activities are beneficial to society when in fact they have done and are still doing harm on a massive scale.

All the time I had to keep reminding myself that we are living in the twenty first century; that we humans consider ourselves to be the pinnacle of evolution; and that we have the means to give every one of us a comfortable and secure life and a promising future for our children. Economics claims to be the branch of knowledge concerned with the production, consumption, and transfer of wealth⁵, so surely the service to which we put economics should be to drive towards that comfort and security and to achieve it as quickly as is humanly possible. If that is the purpose we intend economics to serve then we have failed tragically.

I discovered that most of the gross economic injustices that we see all around us emerge from two pillars of the modern establishment - embraced by major left and right wing political parties throughout the developed world:

- banking and associated financial trading services; and
- the prevailing economic ideology of unfettered free markets (which I shall refer to as 'neoliberalism'⁶).

Banking has been with us for hundreds of years, now a legitimised and expanded form of the fraudulent activities of early goldsmiths.

Neoliberalism is the mainstream economic ideology that largely holds sway throughout the developed world. This ideology claims that when people are free to trade as they wish and carry out financial transactions without government, regulatory or other

³ References to external works are given throughout the book. All are listed in detail in the bibliography.

⁴ <https://www.theguardian.com/commentisfree/2014/apr/30/economics-experts-economists>

⁵ <https://en.oxforddictionaries.com/definition/economics>

⁶ There are many expressions that are used to denote modern dominant ideas in economics: Thatcherism; Reaganism; Reaganomics; economic rationalism; market fundamentalism, neoclassical economics; neoliberalism; market liberalism; free market economics; and unfettered free market economics. The one that seems to be most often used is neoliberalism so I shall use that. Classical economics emerged with the writings of Adam Smith (Smith 1776), which evolved into neoclassical economics, which evolved into neoliberalism. These three share many assumptions and beliefs, and represent variations on a similar theme.

external interference - apart from the rule of law that allows people to keep what they own - it brings prosperity to everyone because the free market itself has the miraculous power to ensure that it does so.

Let's just think about that belief. What is being claimed is that the best outcome for everyone emerges from unrestrained human behaviour in all forms of material transaction. It seems unlikely that unrestrained human behaviour in any respect will lead to good outcomes for everyone, let alone in matters of money which often bring out the very worst in people. It is surely common knowledge that people usually seek and press home any advantage they can find in matters that relate to money. Yet that is the mainstream view, founded on principles that are examined in detail later in the book. It is taught by universities and actively promoted by almost all governments and international organisations throughout the developed world, and all the more so since the fall of communism when the western world's economics was seen as unbeatable.

Another quotation of Keynes is again very apt:

Capitalism is the astonishing belief that the nastiest motives of the nastiest men somehow or other work for the best results in the best of all possible worlds. (Attributed by Sir George Schuster in 'Christianity and human relations in industry' (1951), p. 109.)⁷

Even more surprising is that neoliberal ideology still holds sway even after the Great Recession of 2008, also known as the Great Implosion, which was a direct result of that ideology, during which with great irony the banking sector went directly against the neoliberal creed and sought government help to save it from the plight it had got itself into. Neoliberal bankers temporarily overlooked their belief that governments should never interfere and governments obliged to the tune of billions of pounds and trillions of dollars. Notably there was no matching rescue for those who through no fault of their own lost their homes and jobs in the fallout from that catastrophe, the worldwide repercussions of which are still playing out and will continue to play out for many years to come. Very soon afterwards neoliberals reinstated their former beliefs and overlooked having asked for help, and even more surprisingly governments did the same. All seem now to be as confident as they ever were in the infallibility of neoliberalism. This is Roger Bootle's⁸ view:

Academic economics has become a disaster and a disgrace. In a recent lecture

⁷ By 'capitalism' he was referring to the neoclassical economics of his day, from which neoliberalism is derived. Both suffer from the same false assumptions that Keynes exposed. In Keynes' day capitalism *was* neoclassical economics, but he showed us that capitalism could show a much kinder face, which thanks to him it did after the Second World War until the mid-1970s.

⁸ Quotation from Capital Economics website: 'Roger Bootle is one of the City of London's best-known economists. As well as running Capital Economics, which he founded in 1999, Roger is also a Specialist Adviser to the House of Commons Treasury Committee and an Honorary Fellow of the Institute of Actuaries. He was formerly Group Chief Economist of HSBC and, under the previous Conservative Government, he was appointed one of the Chancellor's panel of Independent Economic Advisers, the so-called 'Wise Men'. In 2012, Roger and a team from Capital Economics won the Wolfson Prize, the second biggest prize in Economics after the Nobel.' See <https://www.capitaleconomics.com/about-us/our-team/roger-bootle/>

Nobel Laureate Paul Krugman said that much of the past 30 years of macroeconomics⁹ was 'spectacularly useless at best, and positively harmful at worst'.¹⁰ He is right. Not only did most academic economists fail to see the Great Implosion coming, but they weren't even looking in the right direction. (Bootle 2009 pp232-233)

I am not an economist and have never taken a course in the subject. My discipline is engineering, which I initially saw as a disadvantage but have now come to believe provides a very good vantage point for a critical study of economics. Engineering is above all a practical discipline, firmly rooted in the real world. Unless an engineering solution to a problem works in the real world it is discarded, or developed until it does. Engineering is the application of scientific principles to achieve desired ends, and it is by those ends that engineering achievement is rightly judged. A bridge that is designed using the most elegant mathematical and engineering principles but falls down is useless, and all the design elegance in the world provides no consolation in the face of that harsh real-world judge. In my ignorance I had thought that economics was also a practical discipline, it certainly claims to provide solutions to real-world problems, but in its current form, according to Roger Bootle, modern economics has turned itself into a religion.¹¹ Its basic concepts are articles of faith rather than evidence-based principles, and its god is money. The pursuit of wealth is seen as something to admire, all other considerations must be subordinated to that end. Single-minded devotion to profit is expected and increasingly delivered, and there is but a single measure of personal and business success and that is the accumulation of wealth.

Attributes of good character - integrity, honesty, reliability, compassion, loyalty, responsibility, dependability, fairness, generosity, and above all kindness - count for less and less. In fact hardly anyone even asks about a person's character any more, so outdated has the concept become. In earlier times business reputations were also built on good character, and great pride was felt by both management and workforce in maintaining their reputations. Characteristics that matter today are efficiency, shareholder value, flexible working and above all making money. As a result we have banks that are prepared to cheat customers¹², launder money¹³ and manipulate interest rates¹⁴; we have pharmaceutical companies that withhold or distort dangerous product information from buyers and regulatory agencies¹⁵; we have car manufacturers prepared

⁹ Macroeconomics is the study of the economy as a whole as opposed to the study of individual people and companies. This book is largely concerned with macroeconomics.

¹⁰ The Lionel Robbins Lectures at the LSE, 10 June 2009.

¹¹ Bootle 2009 p234

¹² <http://www.telegraph.co.uk/business/2016/10/26/lloyds-bank-takes-another-ibn-hit-from-ppi-scandal/>

¹³ <http://www.dailytelegraph.com.au/news/world/hsbc-to-pay-us19b-to-settle-money-laundering-case/news-story/aaf7fd3eecc5afa96151729cddf5ff22e>

¹⁴ <http://www.telegraph.co.uk/finance/financial-crime/11781091/What-is-Libor-and-how-is-it-manipulated.html>

¹⁵ Goldacre 2012 and Angell 2005

to damage people's health and the environment by cheating on exhaust emissions¹⁶; and many more.

It would be regrettable though understandable if economics had never been exposed to any other approach, but it has. Keynes, a true economic visionary, showed us the way in his great work known simply as 'The General Theory' (Keynes 1936). In it he overturned the prevailing neoclassical economics of the time, destroying the core assumptions on which it was based, and, as he must have thought, consigned it to history. Keynesian economics, or at least a version of it, took over after the Second World War and ushered in the 'Golden Age of Capitalism'¹⁷, a thirty-year period of unprecedented stability and increasing prosperity. Then came the horrors of the 1970s: high inflation coupled with high unemployment known as 'stagflation'; widespread and prolonged strikes; energy shortages; and governments at a loss to know how to deal with them because Keynes had been misunderstood - though that wasn't widely known at the time. Keynes would have known how to manage the situation but sadly both for him and for the rest of humanity he died in 1946 at the age of 62, exhausted after prolonged negotiations on behalf of the UK for a loan from the US after the war. The former neoclassical economists blamed all the mayhem on Keynes' ideas, and resurrected all the earlier flawed assumptions. Strongly backed by powerful leaders Margaret Thatcher and Ronald Reagan the old ideas evolved into neoliberalism, which became what proponents believed represented the final and 'correct' version of economics. Margaret Thatcher's famous statement "There is No Alternative"¹⁸ sums up the prevailing belief perfectly.

I expected economics to be built on the same basis as engineering and science - that it must both describe and be judged on its compatibility with the real world - but I learned with some astonishment that it is not like that at all. In modern economics elegance is prized for its own sake. Neoliberalism has basic tenets that fly in the face of common sense and it even celebrates that fact.¹⁹ It consists of elegant mathematical models that begin with assumptions that are known not to apply in the real world, it derives conclusions on the basis of those assumptions, and proposes policy on the basis of those conclusions. To an engineer that is both shocking and deeply disturbing, and I hope also to many others. Indeed there are very many non-mainstream economists and others who are shocked by it, and it is from them that I have learned with gratitude much of what I have come to understand. You will meet many of them as we progress. If the assumptions are invalid then the outcome from all subsequent mathematical modelling, however elegant, is also invalid. Computer engineers have a saying that captures well this situation - 'garbage in, garbage out'.²⁰ Indeed, not surprisingly given their credentials, none of the mainstream economic models (examined in chapter 80) predicted even the possibility of the catastrophe that occurred in 2008 - they predicted quite the opposite in fact - continued and increasing stability.

I am one of the very lucky ones. On the day I was born Clement Attlee was Prime

¹⁶ <http://www.bbc.co.uk/news/business-34324772>

¹⁷ https://en.wikipedia.org/wiki/Post%E2%80%93World_War_II_economic_expansion

¹⁸ Press Conference for American correspondents in London, June 1980

¹⁹ See chapter 80.

²⁰ https://en.wikipedia.org/wiki/Garbage_in,_garbage_out

Minister and Aneurin (Nye) Bevan was Minister for Health. William Beveridge had published his famous report known informally as the Beveridge Report (Beveridge 1942), and the newly elected Labour Government was determined to implement it. For a child born into a relatively poor working class family luck doesn't come any better than that! I was a baby-boomer, born immediately after the war into the newly expanded welfare state with all its wonderful benefits for ordinary working people and their families. Later in life I enjoyed free education - when education of the young was regarded as an investment in the country's future rather than a business opportunity. It was a time when jobs were plentiful and the maxim 'work hard and do well' had real meaning. It was a time of great optimism. The future would continue to get better and better for ordinary working people, and for quite a long time it did just that. It was a time when the economic ideas that had been dominant until after the First World War had been overturned by the penetrating insights of Keynes, one of the two greatest economists of all time, the other being Adam Smith, whose remarkable understanding pioneered the discipline.

Of course I took it all for granted at the time, but how very different now, when the economic ideas that Keynes overturned have returned to haunt us with renewed vigour. I fear especially for the young who live in the worst of all worlds. They are forced to take on massive debts if they want a degree-level education - what kind of a start in life is that? Many still can't get jobs even with university degrees, and if they do get a job they can't afford to buy property because it's too expensive so they are forced either to rent at very high rates or to live with parents until well into their late twenties and thirties or even longer. How utterly dispiriting at a time when they should find life exciting and full of hope for the future. This situation strikes me as very dangerous indeed. As a country we have stopped investing in our young. Yet without a thriving younger generation what kind of future lies ahead? We should certainly pay for our education, but not by repaying those who provided it. We pay by providing it for those who follow us. As our forefathers invested in us, so we must invest in our children.

As this book nears completion there is political turmoil in the UK. The snap election on 8 June 2017 severely weakened the government and strengthened the opposition. There are two particularly encouraging outcomes. Firstly young people were inspired to turn out in great numbers in the hope of making their political views count, and count they did, very visibly. Young people have a voice that must be heard. In June 2017 they used it and it was heard resoundingly. That will surely ignite in them the conviction that they can make a real difference. This is their world and they can and must shape its future. Now they know their power and that knowledge bodes well for the future. Secondly there was strong evidence that people are sick of austerity and welfare cutbacks. A major objective of this book is to show that these things are not only unnecessary, they are completely counterproductive. The sooner that is recognised the better for us all.

The book began as a series of notes purely for my own benefit, because for me nothing helps cement understanding better than trying to explain to myself in writing what has been learned. The process exposes many flaws in reasoning and forces me to face up to all the uncomfortable 'Yes but what about....?' type questions that are so easily overlooked in a more casual study. As I progressed I thought that it might be helpful to expose my thinking to others, both to invite challenge so as to allow correction or refinement where necessary, and hopefully also to help others who find themselves

similarly perplexed. Unfortunately it turned out to be a long book, but after several attempts to cut it down, each time I came to the conclusion that more would be lost than gained. However it need not be read from cover to cover. It can be 'dipped into' so as to focus on topics of particular interest, and to help in this respect I have presented a detailed list of contents at the end, and cross references within each chapter to relevant material in other chapters. Throughout the book I have also highlighted in bold points that I consider to be of particular significance, so you may just prefer to read those, together with the surrounding paragraphs for more information.

You won't agree with everything I say, indeed I may well have got some things wrong, and in those cases I hope that readers will be kind enough to explain what the errors are and where the flaws in my reasoning lie. I welcome constructive criticism and corrections but I won't thank people who just tell me I'm wrong without allowing me to understand, acknowledge, and correct the errors. Having said that I shall take a lot of convincing that my views about neoliberalism are wrong, they are shared by too many others around the world, even by some within the bastion of neoliberalism itself - the International Monetary Fund (IMF).²¹ Interestingly, because of the very visible failures of neoliberalism, the label 'neoliberal' has become discredited, to the extent that very few neoliberal economists admit to being neoliberal any longer, though that doesn't stop them promoting neoliberal policies just as they did before. Now they prefer to be known simply as advocates of the free market, which is vague enough to cover a wide diversity of approaches.

It is a pleasure to acknowledge the help and support that I received from my good friend Harry Campbell. He studied the draft manuscript in great detail and made very many comments and suggestions that I was happy to incorporate.

Please join me in my exploration. We have a long and often difficult road ahead. We shall find that hardly anything is what it seems to be - the murky world of modern economics is full of illusions. Some occur naturally but others are human constructions designed to fool us, and fool us they do. There are plenty of surprises along the way. If you are anything like me you will find the journey fascinating, but also frustrating and regularly infuriating. You will be taken aback, alarmed, frightened, angered, deeply saddened, and sometimes feel that there's no hope. But there is hope because as the layers of ruthlessness and inhumanity are peeled back and their workings exposed the things that need to change become clear.

The future doesn't belong to me. I've had my three score years and ten. It belongs to you and your children, to my children and their children, and to all the world's children yet unborn waiting to follow. It is within our power to eradicate all the cruelties and rid the world of the neoliberal economic dogma that has caused so much suffering. Our children deserve better than that. It is within our power to build them a kind world. There is nothing more worthwhile.

Albert Ball August 2017

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²¹ <http://foreignpolicy.com/2016/07/06/the-imf-confronts-its-n-word-neoliberalism/>

Introduction

This book sets down what I have learned about the world in the hope that it will be helpful to others who like me are severely disturbed by the state it is in and seek to understand how we got here and how we might change things for the better. It is for people who give up the search for answers when they read phrases such as 'evils of spiralling debt deflation' or 'rigidities of the gold standard', the meanings of which are assumed by the writer to be self-evident but which to the reader are completely opaque. Until recently that reader was me.

It is a book about fairness and unfairness. It seems strange that there should be such vast wealth inequalities both within and between the countries of the world, when wealth is created either directly by humans or by the environment with human assistance and management, and we humans have the ability to share out wealth however we see fit. It wouldn't seem so bad if inequalities were merely in terms of luxuries, where everyone had the necessities of life but enjoyed different levels of luxury, but tragically it goes much deeper than that. While some people have unimaginable levels of wealth others are so poor that they and especially their children die of starvation or succumb to easily preventable diseases.

Historically the strong took what they wanted and everyone else provided it. Now we have the rule of law to prevent exploitation by strength, so now the unscrupulous **rich**^{1,2} take what they want and everyone else provides it. What is missing is a law to prevent exploitation by wealth. In fact the law as it stands positively encourages it (Reich 2016, Chapter 8).

While it seems fair that a person who by their own efforts creates wealth should be free to enjoy the value of that wealth, it seems much more questionable that a person who has not created wealth should be free to enjoy wealth created by others. In earlier times such people made no secret of how they did so - brute force - but now the mechanisms are much more subtle but no less effective.

The best known mechanism and the one that has been around forever is lending money. If I have money that I don't need for myself I can lend it to you and charge interest - and the more desperate you are the more I am able to charge - thereby enjoying

¹ Words in bold type in the main text have consistent definitions throughout the book. They are defined in the text or in notes but these definitions may not correspond to definitions found elsewhere.

² The terms 'rich' and 'wealthy' are used interchangeably and are defined herein as those who are able to live in reasonable comfort on investment income without having to work (taken as receiving the average wage or more in investment income). Many such people do work from choice, but that is incidental. Many, probably most, of the wealthy are decent, honest people who never use their wealth knowingly to exploit anyone. My quarrel isn't with them; it is with the system - neoliberalism - that works on behalf of the wealthy and allows the unscrupulous to set the rules.

a continuing stream of income from a fixed amount of money, and as that income accumulates I can lend yet more money. You do all the work that earns the interest but I get all the benefit. The same applies when property or any other asset is let for rent. Lending and letting certainly aren't wrong in themselves, they can be very helpful, but the line between helpfulness and exploitation is easily crossed.

The above lending and renting mechanisms are examples of a more general process whereby wealth attracts wealth. It does so because the means of producing wealth is itself a form of wealth. Another example is the factory that makes and sells widgets. The factory itself is a form of wealth and is for sale (normally in the form of publicly quoted shares), so I buy a share of it and enjoy a continuing stream of income from the profits. I save that income and in time use it to buy more shares, and so it goes on. I become richer and richer and never make a single widget. You do the work that makes the widgets but don't share any of the profits; in fact I usually prefer you to be paid as little as possible because that leaves more for me.

Let's call this process **wealth accretion**. The fact that wealth attracts wealth is not bad in itself. It's a natural feature of an economy where people have freedom to spend their money as they wish - on things to consume or things that make more money. Nevertheless it can have bad consequences if it crosses the line into exploitation - when borrowing or renting charges are so high that discretionary income is almost wiped out or labour payment so low that workers struggle to buy life's essentials, so measures should be in place to limit its power. Measures that can be adopted are discussed in chapter 100.

Another mechanism is that increasing wealth brings increasing freedom of choice, which is used in transactions to improve one's own bargaining position. We're all aware of this and have exploited it ourselves. If I am desperate to sell my house because I can't pay the mortgage and you have money and plenty of houses to choose from then who gets the better bargain? You do of course; you can walk away with no penalty whereas I can't - you have more freedom of choice than I do - and you use it to your own advantage and to my disadvantage, and the more unscrupulous you are the more you take advantage of my plight. The same thing happens all the way up the scale with the wealthier normally able to get the better of the less wealthy if they choose to do so. The **poorest**³ get the worst bargains of all: they are unable to shop around easily; they pay extra because they have only enough money to pay bills monthly rather than annually; they pay more for energy because they are only allowed to have prepayment meters; they don't get direct debit discounts because they don't have bank accounts; they can't get credit except at extortionate rates; they can't afford bulk purchase discounts; they pay higher insurance premiums because of where they live; and so on.⁴ Let's refer to this mechanism simply as **bargaining power**.

Again the fact that increasing wealth brings increasing freedom of choice is a natural feature of human transactions. Nevertheless measures should be in place to limit its power to exploit, especially when used against those bargaining for the essentials of life.

The least understood mechanism is what I shall call **wealth extraction**, which is

³ The term 'poor' when referring to people means sometimes or often unable to obtain the basic necessities of life.

⁴ <https://www.theguardian.com/public-leaders-network/2015/nov/10/poverty-premium-costs-poor-energy-phone-tariffs-councils>

charging more for a product or service than fully informed and unexploited buyers would be willing to pay. This goes on right under our very noses and for the most part we aren't even aware of it. It transfers wealth - in great quantities - from customers to owners of businesses that engage in these practices, and many businesses do. The willingness to extract wealth from others is regrettably a natural feature of human nature, but it is one that should be severely limited because it always seeks to exploit. It is discussed in Part 2.

These are broad categorisations applied to make it easier to think about the dynamics of wealth transfer, in reality there is considerable overlap between them.

Taken together these mechanisms ensure that the possession of wealth attracts more wealth - created by others - without any effort on the part of the owner. This is the modern driving force behind inequality - where wealth migrates from poorer to richer (Piketty 2014). Thomas Piketty's great insight - backed up by mountains of evidence - was that this is a process that occurs naturally in the absence of very deliberate measures either to prevent it or to redistribute the proceeds more equitably. One of the basic tenets of modern economics - neoliberalism - is that prosperity comes to all by the natural forces at work in the free market, which in recent times has come to include the freedom to manipulate, misinform and exploit. Provided that the market is permitted to work its magic without any external interference then, so neoliberalism would have us believe, everyone prospers. Let's call this belief the **free market utopia** belief.

That message has been very successfully sold as a law of nature, just like gravity, so we are all subject to it whether we like it or not because it operates at all times and in all places. There is no better way to subjugate people than to convince them that even though they don't like the world they live in - as most don't - any attempt to change it will make it worse.

The other message that has been just as successfully sold is that the more wealth the wealthy have the more wealth the rest of us have too, because the wealthy are the ones who create the jobs and pay everyone else's wages. This is the famous '**trickle-down**' theory that sounds so plausible on first hearing, but just like the free market utopia belief it delivers precisely the opposite of what it promises. For 'trickle-down' read 'hoover-up'.

Neoliberalism gives the wealthy a licence to exploit, and the unscrupulous take full advantage of it. It provides a semblance of legitimacy to practices that are thoroughly reprehensible.⁵

In a democratic society we are entitled to expect the authorities to protect us from the worst excesses of these wealth transfer mechanisms as they protect us from other harmful activities - to apply appropriate limits to prevent exploitation by the unscrupulous. The trouble is that the authorities have heard and become convinced by the neoliberal messages - free market utopia and trickle down - so not only do they not protect us, they encourage all forms of market freedom, promoting measures that add to the wealth of the wealthy and turning blind eyes to their avoiding tax. The process has by now been going on for so long that **wealth power**⁶ has even taken control of governments, by

⁵ <https://www.theguardian.com/books/2016/apr/15/neoliberalism-ideology-problem-george-monbiot>

⁶ I use this term to describe the combined strength of unscrupulous wealthy interests used for purposes that are damaging to society - often for reasons that are mistakenly believed to be for

extending market freedom to international markets, where the power of multinational corporations and international investors acting together exceeds even that of national governments, though, importantly, it only does so by the continued acquiescence of those governments. As people see the injustice of it all they apply less self-restraint themselves and become more selfish in their dealings with others. The 'look after number one and nothing else matters' mentality is seeping into the fabric of society.

Joseph Stiglitz recognised the problem in the preface of his book (Stiglitz 2012):

...capitalism is failing to produce what was promised, but is delivering on what was not promised - inequality, pollution, unemployment, and *most important of all*, the degradation of values to the point where everything is acceptable and no-one is accountable. [His italics]

My purpose in this book is to explain my understanding. It is not to lay blame on any individual or group of individuals for the situation in which we find ourselves, *though here and there my exasperation is bound to show through*. I believe that we have all become enmeshed in a thoroughly rotten system - neoliberalism. It's the system together with human nature that is to blame. But how has it happened? How can a system be to blame when the people who set it up aren't to blame, except for being human?

At its heart is the eternal struggle between freedom and control, where control is deemed to be bad and freedom is deemed to be good. This rings true to most people because everyone wants freedom and no-one wants to be controlled. But herein lies a conundrum. While no-one wants to be controlled we all want to have control, at least over our own lives, and because we are interdependent social animals control over our own lives necessarily involves others. I might want a garden full of tall trees, but that limits my neighbours' freedom to enjoy light and good views; my neighbour might want to play loud music, but that limits my freedom to enjoy peace and quiet. For reasonable contentment all round there has to be some limit to individual freedom, some threshold beyond which individual freedom is severely restricted, hopefully set by the community as a whole to promote harmony, where the threshold is acceptable to the majority. If there isn't then it leaves a power vacuum, which will be filled by someone who seizes authority and enforces it, not to promote harmony but to promote their own interests by constraining the freedom of others. This in effect defines the required threshold - it should be set so as to permit the greatest freedom without allowing the emergence of a power vacuum.

We see the effects of absent or inadequate freedom thresholds everywhere. In the ancient world the unscrupulous strong used their greater power to dominate and enslave others - to remove their freedom completely (Harari 2011 p114). In schools with inadequate discipline the more dominant children bully the less dominant, causing great suffering. In strategic games - where scruples don't come into it - skill is the very ability to constrain the freedom of action of one's opponent. In business, which is the area we are interested in, if there is little external control the unscrupulous have the advantage

society's benefit. It should be regarded as quite distinct from any individual wealthy person or group of wealthy people, many of whom would deplore its effects if they fully understood what they were.

because they are least constrained by self-limitation from conscience or concern for others, and they use it to take for themselves as much as they can. This has the self-propagating effect of drawing many of those more troubled by conscience into the same process. If I depend for my livelihood on a business that competes with the unscrupulous then if I don't do what they do then I risk losing my business. My excuse is that if I don't operate in that way then someone else will, and although it sounds lame it's perfectly true. Therefore, without external constraints, and neoliberalism seeks to remove all such constraints, the unscrupulous set up systems that attract to themselves the most wealth and the most power, and, like whirlpools, those systems then draw in others, whether unscrupulous or not, who operate in the same way to avoid being severely disadvantaged. Once established such systems become self-perpetuating. In business, the bigger the business and the bigger its dominance in the market the more opportunities there are to profit from unscrupulous behaviour. Smaller businesses, where competition is fiercer, are much more constrained by the normal operation of the market, because a small unscrupulous business is much more likely to be shunned by its customers and lose out to businesses with more integrity.

The only way to limit the power of dominant unscrupulous businesses is for society, acting through its **agent**⁷ the government, to apply appropriate freedom thresholds. This was recognised by Robert Reich in his book 'Saving Capitalism' (Reich 2016). In the Preface he gives us a warning:

Britain has not moved as far toward American-style oligarchic capitalism, to be sure, but Britain is following America's dubious lead. Markets do not exist without rules. When large corporations, major banks, and the very rich gain the most influence over those rules, market outcomes begin to favor them - further adding to their wealth and their political influence. Unaddressed and unstopped, this vicious cycle accelerates.

Britain, beware. This trend is not sustainable, economically or politically.

Examples of practices used by the unscrupulous, taken from Reich's book, are given in chapter 98.

Unless freedom is constrained by governments acting in the best interests of society it will be constrained by others acting in their own best interests, and the most unscrupulous have the advantage because they apply least self-restraint.

Unconstrained freedom - the *laissez-faire*⁸ essence of neoliberalism - forces bad practices to drive out good practices.

Let's call this effect the **freedom conflict** - where an initial state of equal freedoms soon polarises into more freedom for those with least self-restraint and less freedom for everyone else. It's a phenomenon that emerges naturally whenever individuals have more freedom than is good for the society in which they live. It isn't a conspiracy.

⁷ I use the term 'society's agent' to refer to government, highlighting the fact that society, acting through its appointed parliamentary representatives, elects a government, whose duty it is to act in the best interests of society as a whole.

⁸ meaning 'let people do as they wish'.

In itself the freedom conflict allows blame to be laid at the door of the unscrupulous for exploiting others. But there's another factor - an apparently legitimate science that declares that in spite of appearances what they are doing is for the good of everyone. This is classical economics and its modern offspring neoliberalism, which teach us that the market is the best possible mechanism for applying the freedom threshold. All we need to do is allow market participants maximum freedom to pursue their own self-interest and the result is full employment, universal prosperity, and all-round material and social wellbeing. What we must not do is try to better the market by setting up external freedom thresholds because they are sure to make things worse. This is the free market utopia belief cited earlier and it provides a convincing veneer of legitimacy to unscrupulous behaviour. It is very easy to believe, especially by those who profit from it, coming as it does from many very eminent and respected economists throughout the developed world.

However, things are beginning to unravel. It is becoming ever clearer that neoliberalism not only doesn't live up to its promises, in fact it does the opposite of what it promises, as Stiglitz so succinctly pointed out above.

Piketty's painstaking and thorough investigation shows that the neoliberal messages are completely at odds with reality. It establishes formally what is evident informally from common sense. There are many who still believe in the magic of free markets even after Piketty's work, and indeed even after the 2008 crash, which was a direct result of neoliberalism, and which, but for government interference on an almost unimaginable scale, would have brought the entire economic world to a standstill. Piketty and the crash destroyed the whole basis of neoliberalism, but it not only refuses to die, it is making a fierce comeback, largely successfully. The reason is that wealth power benefits hugely from it and is desperate not to give away any of its massive gains, which it will have to do if neoliberalism is abandoned for a fair system. Wealth power has a fearsome array of weapons to bring to bear: money, media, political influence, 'economic experts', top lawyers, and so on⁹, and it uses them all with formidable effect. The ability of people to believe what is in their interests to believe, especially when those beliefs are shared by many others, is an extremely powerful force that resists any change.

What we are seeing now are the results of almost forty years of this system. The world's wealth is increasingly owned by fewer and fewer people¹⁰, and that is dangerous. The danger isn't that they are able to live luxuriously if they choose to do so, enjoying all the very visible trappings of wealth - mansions, yachts, jets, fast cars and so on, those things are merely the icing on their cake. The real danger lies in the fact that they own the bulk of the world's productive resources, and of course they apply those resources to benefit themselves. What they want is a good return on their investments, so most resources, including the labour of working people, are devoted to producing things that make a profit for investors. At the same time governments do their best to turn as many

⁹ See chapter 98 and <https://www.theguardian.com/commentisfree/2016/aug/21/death-of-neoliberalism-crisis-in-western-politics>

¹⁰ We have reached the stage where the richest 62 people own the same wealth as the poorest half of the world's population and the richest 1% own more wealth than the remaining 99% (see chapter 97 and https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp210-economy-one-percent-tax-havens-180116-en_o.pdf)

resources over to private control as possible in the firm belief that private control is always better for everyone than public control because that's where the market operates. There are circumstances where it is better for everyone, but only when fair market conditions are met. In unfair markets, of which there are many (see chapter 29), private control does precisely what you would expect - it takes resources that could benefit everyone and hands them to private interests for their own benefit. In consequence the supply of resources that society needs - for services that incur an immediate cost but don't deliver an immediate profit¹¹ - is drying up more and more. This shows up most clearly in poor countries¹², but it also affects rich countries too. In the UK the National Health Service is increasingly unable to cope, the police and emergency services, prison service, social services, schools and local councils are chronically under-funded, and care for the elderly has been in crisis for a long time. The longer the current system persists the worse it will become. What we are witnessing is the fabric of society breaking down. This is considered further in chapter 92.

An economic system that permits and encourages unscrupulousness to secure benefits for the wealthy from the work of everyone else, especially the very poor in poor countries, is not merely unjust, it sows the seeds of destruction. When the level is reached at which people at the bottom are so dispossessed that they and those dear to them are denied the necessities of life they become filled with hatred for those who have grown rich at their expense. It is made all the worse by modern technology, which allows everyone to see how we in rich countries are able to live. The contrast couldn't be starker. Hatred is the most destructive of forces. It is self-reinforcing and passes down generations undiminished. It justifies any action however brutal or indiscriminate, and people consumed by it are easy prey to those with extreme views that promise justice provided that they give them their allegiance. Throughout history extreme poverty has led to revolutions and wars, with widespread and extreme suffering and bloodshed. The Second World War, the most devastating war in human history and still within living memory, when for almost six years people were being deliberately killed at the rate of over twenty-five thousand every day¹³, was significantly fuelled by hatred and desperation caused by the imposition of crushing reparations after the First World War.

There is a lot that is wrong with the modern world. Most people know it and feel it

¹¹ Although catering for social needs doesn't make an immediate profit it nevertheless represents a very sound investment in future productivity. The more security in all its forms that people enjoy and the better the start in life for the young the more healthy, less stressed, happier and educated is the population. This allows them to be more productive and to make fewer demands on health and social services.

¹² Neoliberalised trade policies have resulted in fifty million more Africans in poverty than in 1997, and have brought huge job losses in Ghana, Kenya, Cote d'Ivoire, Morocco, Zimbabwe, Malawi (where real wages plunged 73% between 1990 and 1995) and Zambia (where 95% of all workers are still trapped below the \$2-a-day poverty threshold) (Meacher 2013 pp254-255). We hear frequently that globalisation has lifted millions out of poverty, but what we don't hear is that those people are largely Chinese and Indian, and China and India play by their own rules, not by neoliberal rules (Kay 2015 p53 & Chang 2008 p27). As Richard Peet points out (Peet 2009 p159-160) neoliberal rules create poverty, they don't alleviate it.

¹³ https://en.wikipedia.org/wiki/World_War_II_casualties

even if they don't understand why it is. Most of us think that we live in democracies with governments pledged to work for the benefit of all, but democracy and governments have been subverted to work for wealth power at the expense of everyone else, because just as wealth attracts wealth, wealth also attracts power. It needn't be like that, but it would take a government of extraordinary determination, courage and conviction to wrest power back so as to reclaim democracy for everyone's benefit, including, perhaps surprisingly, the wealthy - whether unscrupulous or not (see chapter 97).

Throughout the book I express a great many opinions - as I am sure you have already noticed - but it would be tedious to prefix each one with 'in my opinion...' or 'it seems to me that...', so please treat all opinions as if they are prefixed in that way. I also make many change suggestions which reflect my own opinions as to how we might deal with the problems that are exposed. The necessity is to make changes. How things should be changed is a matter for serious consideration and debate, so please treat my ideas as inputs to that debate.

However, before we can understand how all the injustice has materialised, before we can clear away all the smoke and peer behind all the mirrors, we have a lot of groundwork to do. So let's get started...

Part I

The Machinery of Civilisation: Wealth, Money and Exchange

1 What Do We Mean by Wealth and Money?

Wealth and money have a bearing on practically everything we do. They are constantly on our minds; they are the source of many if not most of our worries, and feature heavily in our hopes for our own and our families' futures.

Although their importance to all of us cannot be overstated they embody many aspects that remain shrouded in mystery. What are they? What is the relationship between them? Where do they come from? These questions have absorbed many minds and many answers have been offered, but there is no universal agreement. A particular difficulty is that they are at the same time both concrete and abstract. In our day-to-day lives we deal with tangible and manageable elements, yet these represent very limited aspects of the wider concepts that wealth and money embody.

Given this background and in order to provide a basis on which to build an understanding I set out here my very much preferred definitions. They are presented early in the discussion so they are clear from the outset, because the rest of the book is built on them. I arrived at them only after a long and difficult struggle to understand how the economic system works, and I believe that these definitions allow a clarity that is not available with other definitions. In particular:

Wealth and money are fundamentally different.

Most definitions of wealth include money because money and wealth are interchangeable at the level of the individual - individual people, households and businesses. Although money and wealth are fundamentally different there is no harm in regarding them as the same for individuals, where adding money to owned wealth gives a measure of total worth, but there is great harm in regarding them as the same for a whole economy, where money can be created at will and doesn't add to the worth of a country. Thinking that money is wealth at the national level leads us badly astray in economics, and therefore in politics, and therefore in how people are treated. In my attempts to understand why things are the way they are I have found that including money with wealth at the national level causes nothing but confusion, confusion that is compounded further by taking the next logical step of believing that what is good for the individual is good for the economy - a very dangerous error that leads to tragic misjudgements. Separating wealth and money has helped me considerably in making sense of the economic world. It is my belief that a great many misunderstandings and misleading conclusions arise from regarding money as wealth.

This is how wealth is defined throughout this book:

Wealth is that which has inherent value and can be traded, and generally takes time and effort to produce or to make available. It consists of goods and services.

Wealth is created, consumed (used up or degraded over a period of time), lent, borrowed, given and exchanged either for money or for other forms of wealth. Goods

are generally physical, tangible things whereas services are generally intangible things. Some forms of wealth such as food are generally consumed quickly, whereas others such as buildings are consumed over many years.

Now let's consider money. Historically money used to take the form of coins made from precious metals, where their value was taken to be the value of the metal they contained. That form of money is no longer used. Modern money does not consist of anything precious; it has value only because notes and coins are guaranteed by the state and bank money is guaranteed by banks. In this book, unless otherwise stated, 'money' relates to modern, non-precious forms of money, because precious forms of money have different characteristics.

This is how money is defined throughout this book:

Money has practically no inherent value, consisting simply of tokens that take almost no time or effort to produce. It represents entitlement to wealth and its purpose is to be exchanged for wealth. Money is NOT wealth.

Money is created, destroyed (money isn't consumed although it often seems that way), lent, borrowed, given, exchanged for wealth, exchanged for other forms of money (foreign exchange) to allow access to wealth that can't be obtained directly, or exchanged for contracts that give rights or obligations to specific forms of wealth or money or to carry out other specified activities. Money facilitates trade and provides a store of value - it allows postponement of the exchange. It is essential to the smooth running of all but very simple economies.

Wealth is valuable for what it is; money is valuable for what it represents.

I doubt that the money definition and the above statement will come as a surprise to most people, but please bear with me. The difference between entitlement to wealth and wealth itself is a subtle one, and when overlooked it leads to many misunderstandings and to misdirected economic policy, as will be seen.

An example illustrates one form of confusion. We focus our efforts on activities that 'make money' because we all need money in order to buy the wealth that keeps us alive and comfortable. But there are many ways of making money without creating wealth, yet all activities, whether they create wealth or not, use up wealth in the form of resources, usually human labour. Although the accounts of a business might show that money received is more than money spent, and if it is the business is considered to be successful, they don't show that wealth created is more than wealth consumed, and that is a very important but overlooked factor. Any activity that uses more wealth than it creates is wasteful, and there are many such activities; for example those devoted to exploitation (see part 2), to extracting payments from the public purse (see chapters 29, 91 and 92), and to avoiding tax or payments due to others. This is a significant element in the problem alluded to in the Introduction where more and more resources are devoted to private gain, because private investors are only interested in things that make money, regardless of whether or not they create wealth, which leaves fewer and fewer resources available for social benefit. Governments, with unwavering belief in the trickle-down deception (see chapter 20), encourage this process by creating a 'business friendly' environment that allows private interests to keep an increasing share of national wealth.

The things that really matter are forms of wealth, the means for creating wealth - productive capacity - and the resources that are required. Yet all we focus on is money.

As well as money there are other forms of entitlement to both wealth and money known collectively as financial assets, which are legally binding contracts that set out ownership and obligation terms and conditions. A financial asset based on money (another person's debt obligation of some sort) gives an entitlement to an entitlement to wealth - finance becomes very complex very quickly! Contracts are discussed later in this chapter.

I hope that the above definitions and clarifications make the difference between wealth and money evident, and it is important for subsequent discussion that they are evident. In the hope of making it still clearer let me draw an analogy: money is to wealth as a railway ticket is to a train journey. No-one confuses a ticket with a journey; the differences are too evident to warrant any debate. Yet everyone confuses money with wealth, the differences are too subtle to notice. But just as the ticket has no value without taking the journey either now or in the future, money has no value without exchange for wealth either now or in the future.

In stark contrast to wealth, money, at least in its modern form, takes almost no time or effort to produce - a lot less time and effort than it would take to harvest if it grew on trees, however abundantly. Most banking and financial trading services are concerned with the creation, manipulation, allocation and distribution of money and associated financial assets. Practitioners claim that their businesses create wealth, but a much greater proportion of what they create is money and tradable assets, by which means they become entitled to wealth created by others. Keeping the concepts of wealth and money separate helps to clarify how these things happen. These matters will be explored in some detail in Part 2.

People and governments either forget or overlook the fact that money is merely symbolic; treating it as though it had real substance in its own right. People can be forgiven because for them it behaves as though it does have substance; the statement 'we can't do such and such because we don't have the money' makes perfect sense, but that statement by a government in control of its own economy (having an independent currency guaranteed by the state) makes no sense at all, yet we hear it all the time. The correct question is 'do we have the resources - raw materials, manpower, technology and skills?' Those are rarely in short supply but nevertheless that question is hardly ever asked. It will hopefully become clear later why this is a much more important question - see chapter 10.

Money has some truly wonderful qualities. It allows wealth (e.g. labour) to be sold to one person at one time and other wealth (e.g. food) to be bought from a different person at a different time. It allows painting and decorating services to be exchanged for a holiday, legal advice to be exchanged for a suit, and journalism to be exchanged for street lighting. More than that it allows exact monetary value exchanges - money provides a means of measuring value. Provided that we know what we are buying and selling and both sides are free from exploitation (these factors are of vital importance as will be seen later), we receive the same monetary value for what we buy as for what we sell. In short money makes modern civilised life possible.

At the same time it also has some dangerous and unexpected qualities. It is

unfortunately able to act as a store of value, and people store it because it is much more convenient than storing wealth, but for the economy as a whole it can be disastrous. The attraction of money as a store of value comes from its value being guaranteed, either by the state or a bank, but these guarantees depend on the continuing prosperity of the country or the bank, which depend in turn on money continuing to circulate. Storing it prevents circulation and thereby damages prosperity - see chapters 13 and 15. Money and other entitlements to wealth are also easily manipulated and their values exaggerated by people who give the impression (and often sincerely believe) that they are creating wealth by selling valuable services when in reality they are extracting wealth from others - see Part 2.

In a complex economy there are vast numbers of things of all kinds available for sale. Investments in particular contain some very exotic creations claiming to benefit the buyer in a wide variety of ways, but everything that is for sale is wealth itself or entitlement - in one form or another and often conditional - to wealth.

Nothing highlights the confusion between money and wealth better than the fact that the UK has allowed its manufacturing (wealth creation¹) industries to decline in favour of its banking (money creation and allocation) and financial trading (asset creation, sale and transfer) sectors.²

How can creating tokens and trading entitlements possibly result in more overall wealth than creating wealth itself?

Clearly it can't, but it can be made to appear so if we measure wealth creation by double counting the initial creation of wealth and the subsequent transfer of entitlement to it to bankers and financial traders - see chapter 27. As Michael Meacher observed:

The deliberate abandonment of industrial strategy during the neoliberal era on the grounds that the market automatically knows best must rank as the biggest economic blunder in post-war history. (Meacher 2013 p180)

With respect to manufacturing Britain compares very badly with Germany, which has maintained and developed its manufacturing sector. Peter Hain sets out the case very clearly:

Manufacturing accounts for 21 per cent of German GDP but only 11 per cent of the UK's. Germany is the world's third biggest exporter after China and the US, selling three times as much abroad as Britain, which comes tenth in the exporting league table. German industry benefits from a business-supportive banking system, whereas Britain has a business-averse banking system. Where Germany has vocational skills in abundance, Britain has a long-term deficiency. Germany has a government culture that believes in backing business, not a UK Treasury one of

¹ I use the expressions 'create wealth' and 'wealth creation' etc. in relation to people or things that bring new wealth into existence. In contrast there are financial assets (debts for example) that cause wealth entitlement to be transferred from the wealth creator (usually someone who sells labour) to the asset owner, where the owner enjoys the entitlement transferred but the asset hasn't created any wealth. When a generic term is needed to cover both 'create' and 'transfer' I use the term 'produce'.

² <https://www.theguardian.com/business/2011/nov/16/why-britain-doesnt-make-things-manufacturing>

leaving business to survive or sink on its own. (Hain 2015 Chapter 11)

1.1 Contracts

Contracts are legally binding agreements between one party and another. Their essential elements are 'agreement' and 'legally enforceable obligations'. There are many different types of contract but the type we are interested in - financial contracts - have some of the characteristics of wealth but they are not in themselves wealth as they don't consist of goods or services, though they often confer entitlements or impose obligations to give or receive wealth.

One side usually enjoys a privilege, and the other side usually suffers an obligation, the privilege normally being bought and the obligation sold. Each side refers to the other side as the **counterparty**. Counterparty risk is an important factor in finance, and is the risk that the side with the obligation will be unable to fulfil it. Consider a debt: if you lend me £1,000 then I am your counterparty, and the risk you take is that I shall be unable to repay it, that is the counterparty risk that you take. Counterparty risks that turn sour are at the heart of all banking crises.

Modern money is a form of financial contract. Physical money (notes and coins) represents a contract between the holder and the state, which makes it legal tender for the settlement of debts. Bank money represents a contract between the holder and the bank, which promises to redeem the value in cash either on demand or after a time delay depending on the type of account that it is held in, or to transfer the value to another person.

Types of financial contract other than money include financial assets - debts, company shares and derivatives³; tenancies; insurance; employment remuneration terms; and many other things. Contracts represent formal relationships between people and businesses in a society and are vitally important to a modern economy.

³ Derivatives are explained in chapter 56.

2 The Most Fundamental Element of Economics - the Transaction

A transaction is a swap - I swap something that I have and you want for something that you have and I want. There were transactions long before there was economics. In fact transactions are one of the defining features of humanity.

There are three main types of transaction, wealth for wealth (i.e. something with inherent value swapped for something else with inherent value), which is barter - discussed later; wealth for money, which is what we are used to; and money for contracts - again discussed later.

In order for wealth to be traded it must have value. In fact the value of an item of wealth has two forms, **use value** and **exchange value**.¹ Use value is the usefulness ('utility' in economic terms) that a good or service provides to a particular person. A particular good or service has different use values for different people. It can't be measured in any absolute sense though it can be expressed in a subjective sense for a particular person as in I would like an ice cream twice as much as a packet of crisps. Usefulness or utility is not restricted to functional use, it incorporates any reason why a thing is wanted, which may be decorative, ego-boosting, or satisfying in some other way, however obscure it may seem to others. Use value is 'real' value² - it is the extent to which a thing is wanted. It changes with time and circumstances as novelties wear off and as satisfaction replaces desire - I might really want a meal after not eating all day, but as soon as it's eaten I don't want a meal at all.

Exchange value is what a buyer is willing to pay to the seller for the thing that is traded. In barter societies (if any really existed - there's great doubt that they did, see Graeber 2011, Chapter 2) all bartered goods have exchange values related to all other goods that they are bartered for. Sometimes they are fixed and sometimes they are determined by haggling. In non-barter societies exchange value is expressed as a money price, and is again either fixed or haggled over when a good or service is exchanged for money. Exchange value can vary enormously at different times depending on very many factors such as the value of money, the number of buyers that are aware of the item for

¹ These characteristics have been recognised throughout history. Marx in particular discussed the concepts in detail in Marx 1867 Part 1 Chapter 1

² The concept of value is very deep indeed. We all recognise it but can only define it subjectively. Robert Pirsig has built an entire philosophy around it and shown that it is able to replace the standard subject/object duality that we are so familiar with in the western world. He has presented it in two unusual and very readable books where his philosophy is woven into human and moving narratives - 'Zen and the Art of Motorcycle Maintenance: An Inquiry into Values' (Pirsig 1974) and 'LILA: An Inquiry into Morals' (Pirsig 1991). If you haven't read these books then you should - Zen first then LILA. To say that they are enlightening is an understatement. 'Value' is central not only to economics; Pirsig has shown that it is central to reality.

sale, the nature of the available buyers and the money that they have, the general state of the economy, the degree of desperation of the buyer or seller, how fashionable the item is, and so on. Exchange value is therefore not a permanent feature of an item; it just reflects its tradable worth relative to other tradable things at a particular point in time.

The value of a good or service can be expressed in two forms: use value is its usefulness to a particular person, and exchange value is what a buyer is willing to pay for it.

An important point to be aware of is that a change in the exchange value of an item is not in isolation a change in the wealth embodied in that item, although it is normally regarded as such because we measure wealth in terms of money. A change in exchange value represents a change in attitude of people who want to buy or sell it, usually because of a change in circumstances. A two-up two-down terraced house remains exactly that regardless of whether its exchange value is £100 or £100,000. The only way the wealth embodied in the house can change is by its inherent nature changing. It would fall if it became dilapidated or the roof blew off, or rise if it was refurbished or extended.

Wealth only changes when its inherent nature changes such as in quality or extent. A change in exchange value doesn't change wealth, but a change in the inherent nature of wealth normally changes its exchange value.

The confusion of exchange value for wealth is deeply embedded. When people hear that £billions have been wiped off share values in a stock market crash many ask where all the money has gone. The answer is that no money was ever there. What has happened is that people's willingness to buy³ the shares has dropped, sometimes dramatically. The company shares are still just the same as they were before the crash, but now they have much lower exchange values. House owners who find that the value of their house has risen significantly over a short period of time are often tempted to re-mortgage in order to spend the extra 'wealth' that they assume is theirs. Banks are also happy to lend on the basis of increased house values because the collateral is worth more, though this happy situation can easily come badly unstuck when willingness to buy evaporates and house values fall but the debt is still there and still has to be paid off. Taking on a debt on the basis of a recent rise in willingness to buy represents a gamble on that willingness persisting. Companies also often make the same mistake. The only reliable way to turn a short-term increase in willingness to buy into wealth or wealth entitlement is to sell the asset while the willingness persists. Rapid increases in asset values are often bubbles, destined to pop sooner or later, but it is very difficult to recognise a bubble during its formation because there are always plausible reasons - or at least we tell ourselves that there are - for the rise. Asset bubbles are only widely recognised as such after they have burst.

Thinking that money is wealth is harmless enough for an individual person or company, but thinking that a rapid rise in willingness to buy is wealth is not - relying on its persistence is very risky.

³ The terms 'willingness to buy' and 'willing to buy' should be taken as shorthand for 'willingness and ability to buy' and 'willing and able to buy'.

It isn't only individuals and small companies that assume willingness to buy is the same as wealth. Banks and large companies have taken to valuing relevant assets in terms of current market value - termed **mark-to-market accounting**.⁴ This replaced the more traditional **historic-cost accounting** (where value is based on original cost) in the 1980s. Mark-to-market valuations are very volatile, changing daily with the emotions of speculators, whereas historic-cost valuations are much more stable. Mark-to-market accounting is one method by which banks and corporations justify the very large salaries and bonuses paid to directors and senior managers. After all if a company's share price has risen by 10% in a year why shouldn't those who engineered it get a share of the increase in company value? The problem is that company worth has only grown in terms of willingness to buy, which can evaporate much more quickly than it appeared. When it does the directors and managers keep everything they were paid, because it was paid in hard cash, whereas the growth that it was based on had no real substance at all. In these cases the shareholders suffer both the loss of the cash paid to directors and managers and also the loss in value of the shares. It isn't willingness to buy itself that is the problem, because willingness to buy defines all exchange values, it is rapid changes in willingness to buy that should sound alarm bells. Basing payments and debts on long-standing exchange values is justifiable, but basing them on short-term increases is not.

Although people exchange goods and services for their exchange value, they want them for their use value. This is what usually makes trade a win/win situation. When I buy a loaf of bread from a supermarket I want the bread more than the money I pay for it, otherwise I wouldn't buy it, and the supermarket wants the money more than it wants the bread, otherwise it wouldn't sell it. To me the bread is more useful than the money, and to the supermarket the money is more useful than the bread. Hence both I and the supermarket gain from the transaction. This is what makes trade so beneficial. Everything that is wealth must have a use value, because use value is the reason why it can be traded, but things that have use values don't always have exchange values. For example people spend a great deal of time doing or making things for themselves without their being useful to anyone else. Such things can't be considered wealth because they can't be traded. Note that money has an exchange value but no use value, but money isn't wealth.

In order for a transaction to occur in a free society there must be two parties - a willing buyer and a willing seller.

However, trade is only win/win provided that buyers know what is being bought and how much they are paying for it, and sellers know what is being sold and what they are being paid for it. In economics this is known as **information symmetry** - both sides have the same information. Where this doesn't apply - known as **information asymmetry** - the person who lacks information is at a serious disadvantage and is normally exploited by the better informed party. For example the seller of second hand goods normally has a lot more information than the buyer, unless the buyer is an antique dealer, when they are usually better informed. As will be seen in Part 2 much of the banking and financial trading sector is built on buyers not realising what they are buying, or perhaps more

⁴ https://en.wikipedia.org/wiki/Mark-to-market_accounting

especially not realising what they are paying for the services they get.

Provided that each party has the same information trade makes them both better off than they were before - a win/win situation.

Nevertheless a transaction is a competition between seller and buyer. The seller wants to receive as much as possible for the product and the buyer wants to part with as little as possible. Each seeks to exploit any advantage that they can find or can engineer. Sellers emphasise benefits, buyers emphasise faults. Therefore conflict is built into economics at the most basic level. Fairness doesn't arise naturally because both sides prefer bias. Information is one aspect that can destroy fairness, another is bargaining power. When one party is more willing than the other for the transaction to take place and that fact is known to the other party, then it can and usually will be exploited to their advantage.

In a nutshell this summarises the economic problem. We want to exploit other people but don't want to be exploited by them.

You might think that overstates the situation. We don't really want to exploit other people do we? But when offered a bargain how many of us ask why the price is so low and offer more if it is because the seller is desperate? The more considerate of us might pay the asking price without trying to lower it even more, but many do.

Much of the rest of the book is devoted to the characteristics of this problem - where and how it arises, who wins and who loses, how it is managed, and how things can be improved.

If nothing is done to manage the problem the spoils go to those who are more skilled at exploitation and at the avoidance of being exploited. Competitions create polarisation - winners and losers - and unmanaged transactions are no different.

Since the problem lies at the level of individual participants and on its own it creates polarisation, the solution must lie at a higher level - at the level of society as a whole, and the solution is to impose rules that engender fairness as far as possible. Yet that isn't how the problem is currently managed. Since the early 1980s neoliberal economists have been very successful at persuading governments that the higher level is the market, not society. They argue that markets themselves constrain the ability to exploit, and they do it so successfully that any interference by governments or state institutions only makes things worse. The difficulty here is that in order to constrain exploitation a market must be perfect, which requires perfect competition, and a perfectly competitive market requires a multitude of conditions that are never realised in practice.⁵ Nonetheless, neoliberals, while accepting that a perfect market is not achievable, still believe that state interference - even if applied with the best of intentions - will make even an imperfect market worse. It is certainly true that state interference *can* make things worse, but that is a far cry from assuming that it *must always* make things worse. Neoliberals therefore discourage rules aimed at promoting fairness and preventing exploitation, and encourage rules that

⁵ I shall argue later that some markets are able to constrain the ability to exploit - fair markets - but they only occur when special conditions are met, see chapter 29. See also

https://en.wikipedia.org/wiki/Perfect_competition

promote ever more freedom for market participants - freedom whose range and effectiveness increase with wealth but shrink without wealth. The result of nearly forty years of this approach is the world we see today. You can judge its success for yourself - my judgement will be evident from this book.

Part 1a

Wealth

3 The Source of Civilisation - Surplus Wealth, Specialisation and Trade

Surplus wealth¹ is the wealth created by human beings over and above that which is needed to enable the race to survive. It will be seen to be a vitally important concept, and exists because humans have both the capacity and the willingness to produce it - wealth out is greater than wealth in. It derives ultimately from the earth's ability in conjunction with the sun to produce a continuing supply of food and other natural resources, and from the earth itself containing useful recoverable materials. These are greatly amplified by our insatiable curiosity, ability to reason, willingness to work, love of experimentation and ability to communicate our discoveries to others. Taken together these factors have given us ever-expanding spheres of science and technology, and allowed us to invent and innovate across the whole spectrum of human activity. Surplus wealth consists of all the excess that people are producing now, and all the excess that still exists from that which people produced in the past.

Human beings have the capacity and willingness to produce more than they need in order to survive - the excess is surplus wealth.

Many animals also have this capacity, but they don't have the willingness - they usually spend their excess time sleeping, fighting or impressing the opposite sex, whereas humans spend it producing more and more.

Before I retired I used to wonder who really is the more intelligent, especially on a cold wet Monday morning in January when I had to go to work and came down to find our black and white cat curled up in her favourite armchair. She would open her eyes dozily, give me a little 'prrp' in greeting as I stroked her, yawn, stretch and turn over, then go straight back to sleep again.

In the days when our ancestors were hunter gatherers, before about 10,000 years ago, they worked and consumed what they produced. This was known as a **subsistence economy**. There was no surplus, at least no lasting surplus, until agriculture was developed. Agriculture enabled much more productive use of time and effort and populations expanded rapidly (Harari 2011 p110). Initially, surplus produce was stored in case of bad harvests or natural disasters, but as time went on and surpluses built up, fewer people were needed to produce enough for the needs of the community so others began to specialise in other activities such as clothes and shoe making, hut building, soldiering etc. This was specialisation, or the division of labour, which enabled people to become

¹ This term is similar in concept to the term 'surplus value' that was used by Marx, but his use of the term in connection with labour relates to the excess that a worker produced over his or her wages, regardless of whether the wages exceeded or not the things needed to maintain life (Marx 1867, Part 3 Chapter 7).

very skilled in their own employment areas, resulting in a very efficient use of time. Trade developed at the same time to allow people to exchange with each other the different forms of surplus that they produced.

These three elements, surplus wealth, specialisation and trade, are the basis of all our material possessions that aren't part of the natural world. They account for everything that we have ever produced and are still producing, over and above that which keeps us and the race alive - every paper clip, every road, every haircut, every ship, every building; and also every nuclear missile, every illegal drug, every weapon and every instrument of torture. They have created the life that we have, for better or for worse.

Surplus wealth, specialisation and trade are the basis of civilisation, and consist simply of people working in co-operation to do and make things for others.

It is worth keeping this very simple basis in mind as we explore the vast intricacies of a modern economy.

If you think that is amazing then consider this: these three elements have also created you, me and practically everyone else alive today! Of the current world population of about 7 billion it is estimated² that at least 6.9 billion of us owe our very existence to surplus wealth, specialisation and trade. What happens is that the initial surplus enables more children to be raised while they remain dependent, who then go on to produce surplus wealth in their turn so that they can raise more children and so on.

The vast majority of us would not even exist but for surplus wealth, specialisation and trade!

Specialisation fosters innovation, because a person who devotes time to a specialised task also devotes time to finding ways of doing it faster, more easily, or with fewer or more readily available materials. The desire to innovate leads to the development of tools and machines - technology - and to the study of general principles that underlie the physical world and ourselves - science. It is innovation, science and technology that accounts for the bulk of population growth. Sanitation, nutrition and medicines have reduced infant death rates dramatically and given us increased life expectancies, and machinery and the power to drive it have given us the means to feed, clothe and house ourselves for our longer lives. From 1800 to today world population grew from 1 billion to over 7 billion - the fastest growth rate in human history - triggered by the industrial revolution. That's something to consider when we hear arguments that try to convince us that we'd be better off without technology. It's debatable whether or not the survivors would be better off, but the rest of us - the overwhelming majority - would be dead!

In future, if we have enough good sense - and that's not at all guaranteed - we can use our surplus wealth to generate power without carbon dioxide, produce ample food and clean water for everyone, clean up all forms of pollution, retain and expand biodiversity,

² According to the 'Hunger Math' website

[<https://hungermath.wordpress.com/2013/11/05/hunter-gatherers-no-more>] the world can at the very most only support about 136 million people as hunter gatherers - less than 2% of the current population.

and create a sustainable and secure world that is a joy for everyone to live in and to share.

All that is needed to create a better world is the will to do so and the recognition that we are not constrained in what we choose to do, least of all by that which is only symbolic - money.

Clearly the more people who are creating surplus wealth the more wealth there is in the world.³ Not only that, the range of wealth is wider and innovation is greater because more people are engaged in seeking it out. The best investment we can make is to bring as many people as possible into purposeful employment, and trade our wealth for theirs on fair terms so that we all share the benefits.

³ There is a major difference between good wealth and bad wealth, which will be explored in chapter 7. The wealth alluded to here is good wealth.

4 *A Simple Economy*

The way these three elements work together can be explained by an illustration, but before that I need to bring in some new terms, relating to **factors of production** - the things that allow wealth to be produced or made available. The major constituents are **land**: consisting of land itself together with all natural resources; **capital goods**: goods that are used in the production of other goods, consisting of all kinds of tools and machinery and also working animals; **labour**: human effort used in the production or making available of goods and services, including enterprise in generating information and organising production.

An important point is that factors of production are themselves forms of wealth - it is one of the reasons why wealth accumulates. The implications of this are discussed in chapter 20 and examined in detail in chapter 97. Land and unrecovered mineral resources are sometimes excluded from formal definitions of goods, where that term is restricted for things produced by human effort. I prefer to regard them as goods even though they are not the product of human effort because they are useful and have exchange values as do all other forms of wealth. It is for this reason that the word 'generally' is used in the wealth definition.

For simplicity I shall refer to factors of production as **capital wealth**, using this term to denote both goods and services that are used to facilitate the creation of other goods and services but which do not become part of those other goods and services. Capital wealth does not itself sustain or improve people's lives, but provides the means to achieve those ends. Also capital wealth is used in creating other forms of capital wealth. Goods and services that in themselves sustain or improve people's lives are known as **consumer wealth**. For clarity I shall reserve the words 'consume', 'consumed' and 'consuming' to refer to consumer wealth, and the words 'utilise', 'utilised', and 'utilising' to refer to capital wealth. I shall use the general terms 'use', 'used' and 'using' when there is no need to be specific.

A short digression is in order here. Mentioned above were working animals in the economic context of capital goods, but I hope that most people regard them as much more than that. We should take a moment to acknowledge the massive debt of gratitude that humanity owes to working animals, especially horses. Noble, strong and patient animals, they are ever willing to apply their enormous strength to our service, however harsh, dangerous or monotonous the circumstances. The help they and other animals gave improved human lives and prosperity immensely for thousands of years, as they still do throughout the developing world. Horses greatly amplified our power and speed, and as a

result have been central to the evolution of civilisation.¹

On Liverpool's waterfront at Mann Island there is a monument dedicated to the working horse. It honours the horse's steadfast reliability and hard work without which the port and commercial heart of Liverpool could not have flourished as it did. Whenever I visit I make a point of paying my respects.



Figure 4.1: Liverpool's fine tribute to the working horse by sculptor Judy Boyd. Entitled simply "WAITING....." Source: Author.

Now *at last* we come to the illustration.

Let's say that in a (very) simple economy there are three people, each working 10 hours for 6 days of the week to produce enough food. This is a subsistence economy where there is no surplus wealth and no co-operation; all work is devoted to providing for personal needs - survival wealth.

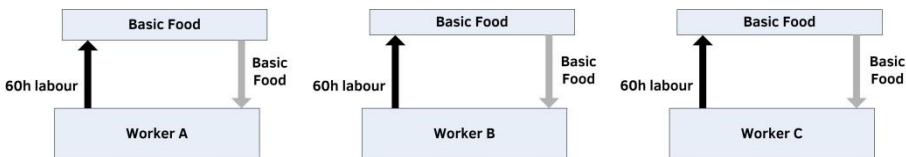


Figure 4.2: A subsistence economy

Worker A discovers a way to make a primitive knife using a sharp-edged stone, which makes the harvesting of food twice as fast, thereby doubling the rate of production. Now A is able to produce enough surplus wealth in the form of basic food to supply B, so A persuades B to go further afield to find the luxury food that they all enjoy so much, and bring back enough for both A and B in return for basic food from A. Note that B is also producing both survival and surplus wealth. B's survival wealth is the luxury food that is traded with A for basic food, and B's surplus wealth is B's own luxury food. This is

¹ Hodges 1999: Animals and values in society. *Livestock Research for Rural Development. Volume 11, Article #23.* <http://www.lrrd.org/lrrdi11/3/hod113.htm>

illustrated in figure 4.3.

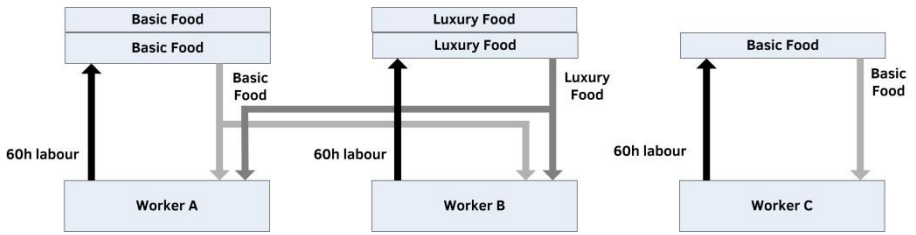


Figure 4.3: A uses a primitive knife to double production

Worker C is now feeling a bit left out but unbeknownst to the others has been working on a device to speed up the production of all goods - the wheelbarrow! The trouble is that the materials available mean that wheelbarrows don't last long, so they have to keep being repaired and replaced, which is almost a full time job in itself. With 60 hours of labour each week C can keep enough wheelbarrows in service for all three, noting that wheelbarrows also speed up the production of wheelbarrows. C is initially happy to do this in return for the same quantity of basic and luxury food that A and B get. Productivity of both basic and luxury food is now enhanced a further threefold, so that A and B only have to work 30 hours each week (60 hours each without wheelbarrows produced enough of each food for 2 people, so a threefold production enhancement would produce enough for 6 people in 60 hours, or for 3 people in 30 hours, which is what is needed). See figure 4.4.

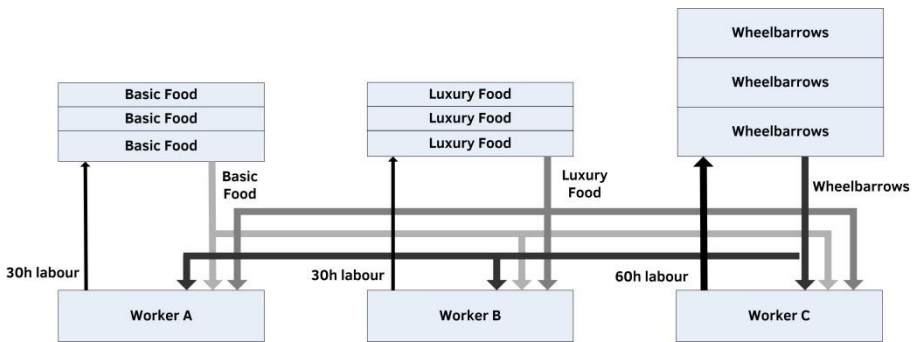


Figure 4.4: Wheelbarrows treble production

Now C again feels that things are not working out fairly, so A and B agree to produce additional products, clothes and jewellery, and find that by spending 30 hours each week at these tasks enough are produced for all three people. See figure 4.5.

Now all three are spending 60 hours each week working, but instead of having just basic food they now also have luxury food, clothes, jewellery, knives and wheelbarrows.

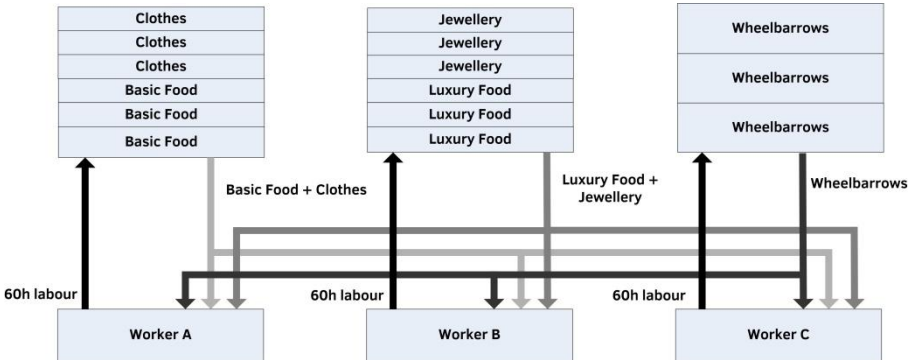


Figure 4.5: Full production in our simple economy

Although only A produces the means for all to survive (basic food), all three are able to share all produce by trading what they produce - A trades for luxuries and wheelbarrows, B trades for survival wealth, luxuries and wheelbarrows, and C trades for survival wealth and luxuries. The surplus wealth that A produces is everything apart from the basic food that is retained for A's own use, and the survival wealth that B and C produce is that which they trade with A for basic food.

In this economy everyone both gives and receives wealth, and the value of wealth they give and receive is the same. This can be illustrated on a **wealth diagram** - a diagram that indicates wealth flows. Wealth diagrams are useful in indicating transfers without the distractions of money, which often complicates the picture.

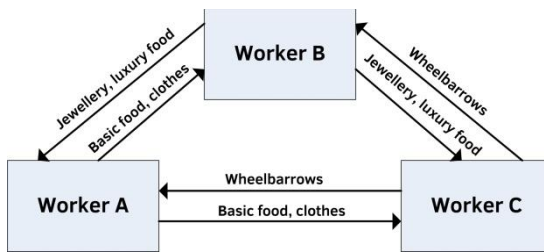


Figure 4.6: Wealth flows in the simple economy

Now here's an interesting question: Should knives and wheelbarrows be included in the wealth that benefits the members of this simple society? They are certainly forms of wealth, but they represent a different kind of wealth from the wealth that benefits the members because they don't in themselves sustain or improve people's lives, what they do is make the creation of things that do sustain and improve lives quicker and easier. They are forms of capital wealth, and as such provide means to ends rather than ends in themselves. If we only consider the things that sustain and improve lives - consumer wealth - basic food, luxury food, clothes and jewellery, 180 hours are spent in producing 12 units (3 people x 4 different types) of this kind of wealth, which is 1 unit of wealth per 15 hours of work - a fourfold improvement in productivity - made possible by the application of capital wealth. In the real world of national economic wealth measurement (indicated by Gross Domestic Product - GDP - see chapter 26) capital wealth is included, which is fine in itself because capital wealth production is part of

overall wealth output, but GDP is incorrectly regarded as material wellbeing - consumer wealth - which it isn't because it fails to exclude production of capital wealth.

The real economic value of capital wealth is not its own exchange value; it is the extent to which it enhances material wellbeing.

Material wellbeing should not be mistaken for happiness or contentment, though inadequate material wellbeing certainly causes unhappiness and discontentment. There is ample evidence that when adequate material wellbeing is achieved further growth does not lead to greater happiness or contentment. In fact these qualities depend more on relative rather than absolute levels of material wellbeing within the population.² This is an important reason why inequality is very bad for the happiness of the population, regardless of absolute levels of prosperity. It is an even more important reason why the rich world should devote much more effort to helping - perhaps ceasing to exploit would be more apt - the developing world, where absolute levels of material wellbeing for most of the population are completely inadequate, and a major source of misery. These matters are discussed in more detail in chapters 73 and 99.

GDP also includes other elements that create even bigger distortions, so in spite of its importance in economics this figure is very misleading. I shall argue later that we need a different measure than change in GDP to indicate change in material wellbeing, and that GDP is itself a distorted measurement of overall wealth creation - see chapters 26 and 27.

If we include capital goods (i.e. wheelbarrows, knives aren't included as they are assumed to be quick to produce) as wealth in our simple economy then we need to count one wheelbarrow as worth two of any other kind of wealth because it takes 60 hours to keep three people in wheelbarrows whereas it takes 60 hours to keep three people in two of any of the other kinds of wealth. So now we have 18 units of wealth produced in 180 hours, or 1 unit in 10 hours, which is a six-fold improvement in productivity. Additionally while only 30 hours are spent in producing survival needs (basic food), 150 hours are spent in producing surplus wealth.

Here's another interesting question: Who is it that creates the increased surplus wealth? One view is that it is the knives and wheelbarrows that create the extra wealth, because without them it couldn't be created. Fortunately knives and wheelbarrows don't demand a share of the wealth they help to create so in this simple economy the benefits all go to the workers since they all work equally hard and share all the benefits, so the question is merely academic. But what about a modern economy where assembly line robots build cars and other goods, and the vastly reduced workforce just look after the robots? Should the owners and remaining workers share all the benefits of this wealth creation between themselves without considering anyone else? And if they do then who will buy all the goods? The remaining workers and owners can't buy them all. And what about a possible future economy where robots do ALL the work, including robot maintenance? This is a future that seems a lot less fanciful now than it did not very long

² See 'Will raising the incomes of all increase the happiness of all?' by Richard A Easterlin, Journal of Economic Behavior and Organization Vol. 27 (1995) pp35-47 '
<http://www.vanneman.umd.edu/soc9789b/Easterlin95.pdf>

ago. How should the wealth be shared out then? There is no doubt that tools and machines do indeed create wealth, just as the earth itself and the sun do, and the question of how machine-created wealth should be shared out is already pressing and will become ever more so if technology continues to evolve as it has in the past. This is both a practical and an ethical question, and is taken up later in chapters 78 and 97.

Other questions also arise:

What surplus wealth do machines and their operators create? It is that wealth over and above what is needed to allow the human race to survive and to run and maintain the machines, and also to replace them when worn out.

What proportion of this surplus is created by the human operators and what by the machines? I don't think there is an appropriate answer as they work in combination, tools and machines amplifying the effectiveness of human labour. Each depends on the other and both are needed to create the wealth. It's like asking which contributes most to life, the heart or the liver? Since both are essential life can't be apportioned between them, they both contribute one hundred percent.

This simple economy illustrates the miraculous power that surplus wealth, specialisation and trade, together with innovation (development of capital wealth - knives and wheelbarrows), have to make life easier and more comfortable for everyone. It also illustrates that surplus wealth is in effect surplus time, and can be taken as additional goods and services, or taken as additional leisure. In this economy all the surplus wealth has come from innovation (a two-fold enhancement from knives and a further three-fold enhancement from wheelbarrows, giving a six-fold enhancement overall if we include capital goods as wealth, or a four-fold improvement if not). Without innovation additional surplus wealth can still be produced, but it must come from working longer hours.

In fact capital wealth and improvements in production techniques are generally much more effective than this example suggests, because capital wealth normally lasts a long time and continues to deliver benefits for many years, and, once they have been implemented, improved production techniques continue to deliver benefits indefinitely.

Another vital factor in a real economy is that innovation and technology, once developed, are easy to share, so that the benefits they bring can be applied by everyone.

5 Ethical and Social Considerations

Economics was originally known as Political Economy, which originated in Moral Philosophy - the study of right and wrong - but it became separated from morality in the late 19th century with publications by WS Jevons (Jevons 1871) and Alfred Marshall (Marshall 1890).¹ Their aim was to make economics an objective scientific discipline in its own right, and thereby deliberately distance it from morality and politics (Mills 2002 p109). In the view of many economists much more has been lost than has been gained by this separation. If economics is an objective science, like physics, then all human activities and behaviours can only occur if economic laws allow them, we are unable to change or influence them. Hence the common belief that the economy is an unfeeling and inhuman machine that drives humanity ever onwards, where the best we can hope for is to understand it so as to align its workings with benefit to ourselves as far as is possible. We can never hope to take control of it. In fact it has come to feel exactly like that. In truth it needn't be like that at all. Economics is the study of human behaviour, and human behaviour is not subject to external laws. We are in control and are free to apply economics for moral purposes, we only need to recognise the fact and choose to do so.

Economics must be tailored to the kind of society we want and increasingly need. It will hopefully soon become very clear that the society we have is a direct result of the prevailing economic system. That is why economics should be understood by everyone, because the lives we lead are directed by it. The current system, neoliberalism, strongly promotes 'laissez-faire' - let people do as they wish. This favours the unscrupulous wealthy over everyone else, because the more wealth a person has the more freedom of choice they have, so they are able to use that freedom to constrain others' freedom; to pay for the best legal representation; to engage in intense government lobbying; to promise lucrative jobs to people in positions of authority who can help them; to form monopolies or cartels to increase prices; to drop prices temporarily in order to squeeze other suppliers out of the market; and so on. We like to think we live in a democracy with one person one vote, but neoliberalism promotes the politics of one pound one vote, and it has been extremely successful in delivering more and more power to the unscrupulous at the expense of everyone else.

We are free to choose whether economics is our master or our servant. We either take control of it for the benefit of everyone, or continue to stand by as others take control of it for the benefit of themselves.

Economics is not a hard science in the sense that physics is a hard science, where the interactions it deals with are outside human control, though many economists treat it as though it is. Instead it is a soft or social science, where the interactions it deals with are human interactions, which are within the sphere of human control. It consists of a

¹ See also https://en.wikipedia.org/wiki/Political_economy

collection of ideas about the production, use and transfer of wealth. Some ideas are derived from observation of human behaviour, some from reasoning, and some from intuition. It is awash with assumptions, many of which fly in the face of common sense, and deductions that follow from those assumptions. Given all that it embodies it is no wonder that it contains many and deep contradictions. Whether we like it or not we are all subject to the laws of physics, but we aren't subject to the laws of economics because there are no such laws. There are only ideas about human behaviour, some of which seem more consistent with real-world events at certain times than others. Human behaviour isn't fixed. It changes according to social acceptability, local and national custom and practice, legal requirements and restrictions, and prevailing conditions, and all these factors evolve continuously with time and circumstances. It is ironic that in claiming fixed laws hard-science economics itself testifies to the adaptability of human economic behaviour. Before the 'greed is good' and 'money is everything' attitudes became fashionable after 1980 it was socially unacceptable for professional people - senior managers, bankers, lawyers etc. - to earn more than about twenty to thirty times the average wage. Nowadays it is acceptable for that multiple to be hundreds of times, though it is at last being increasingly challenged.

Recognition that economics is a soft science prompts us to focus on the objectives that we seek to achieve, and apply our ideas about human economic behaviour in ways that seem most likely to bring them about. We are ever watchful for the failure of current ideas and willing to try different ideas that might be more successful. Our approach is pragmatic, we do what works, we judge the legitimacy of ideas by whether or not they achieve what is wanted, and we recognise that we are master of all ideas and slaves to none. The soft-science approach is one of humility - we are only too conscious of the limitations of our knowledge and therefore tread cautiously, ready to make large or small adjustments as appropriate when events indicate that our initial approach is wrong. With this approach if the medicine isn't working we try a different medicine.

Treating economics as a hard science prompts us to focus on how it works. We look at the events of the past and how they were managed at the time, and develop theories about why those events occurred and why the way they were managed delivered the results that it did. The more we can explain by those theories then the stronger our belief in them. If in addition those theories have internal consistency and can be expressed with mathematical elegance then our faith in them is strengthened all the more. If the application of those theories in the real world doesn't produce the results that we expected, then it can only be because the theories weren't applied properly. The hard-science approach is one of arrogance. We know how economics works and if real-world events indicate otherwise then the real-world has done something wrong. This is the 'There Is No Alternative' approach. It is particularly dangerous and limiting because it becomes a self-fulfilling belief. It isn't true, but if widely believed people give up on any attempt to find a better way because they are convinced that there can be no better way. With this approach if the medicine isn't working we increase the dose.

We can split economic schools of thought into those (neoliberals and others) that treat economics as a hard science, where practitioners require as complete a separation as possible between economics and politics or ethics, and those (Keynesian and others) that treat economics as a soft science, where practitioners acknowledge the links between economics, politics and ethics, and therefore wish to integrate society and its governance

into the economic sphere.

The hard-science schools regard all tradable items as basically similar, differentiated only by their exchange value. They also regard the value of an item as completely defined by its exchange value. If two people want a glass of water, the first having money but no great need for it and willing to pay £1, and the second having no money but dying of thirst, then the water is worth £1 and goes to the first person. In this way these schools equate degree of need with willingness to pay - known as 'demand', which works well when all are similarly prosperous, but fails tragically when there are major disparities. If a person has nothing to trade for a product, then in economic terms there is no demand for it, even if to that person the product represents life itself.

Indeed this is exactly what happens - this is a quotation from the WaterAid UK website:

A lack of safe water and toilets can be deadly for children. Babies and young kids are most vulnerable to the diseases that result from dirty water and poor sanitation. In developing countries, each child has an average of ten attacks of diarrhoea before the age of five. 315,000 children under five die every year from diarrhoeal diseases caused by dirty water and poor sanitation - one every two minutes.²

Those children and their families can't afford to buy or to make available clean water and adequate sanitation - which to hard-science schools means there is no demand - so the market doesn't provide them. As a result the only help they get is from charity, which does its best with very limited resources and as a result is hopelessly inadequate. Is that the best we can do? It's what we are doing - shame on us all.

Hard-science schools claim that (their view of) economics allocates resources in the most efficient manner, but what is efficient about allowing so much suffering and death? Even in purely economic terms it is thoroughly wasteful. All those people and their children are capable of creating great wealth both now and in the future, but they are prevented from doing so because for these schools economics demands the best and fastest returns on investments, and there are better opportunities elsewhere.

Apart from humanitarian considerations this kind of situation is very dangerous. It is what leads to revolutions and wars when people feel, often quite rightly, that they are being treated cruelly. It is essential to remember that the real values that things have to people are their use values, not their exchange values, and that when the most valuable things are threatened then people have little or nothing to lose by taking desperate action. Hard-science economics recognises only exchange values, and that blindness represents a fatal flaw.

Hard-science economic schools such as neoliberalism claim to give us the tools to provide for our wellbeing, but nothing threatens wellbeing more than dispossessed people driven by hatred for those who have what they and their families so desperately need but won't share. We need a world economic system that provides everyone with enough to ensure that they have too much to lose by

² <http://www.wateraid.org/uk/what-we-do/the-crisis/children> Note that this is just one cause of death of under five year old children worldwide. Overall there were almost 6 million such deaths in 2015. See chapter 62.

threatening others.

Hard-science schools regard humanitarian activities as outside the realm of economics, being the preserve of charities and philanthropic aid programmes. Although these do the best they can in difficult circumstances, not only are donations very variable and mostly inadequate even at the best of times, the fact that they comprise many separate organisations means that they inevitably attack problems in uncoordinated, overlapping, and inconsistent ways.

Instead of ignoring humanitarian activities a much more wholesome purpose for economics would be to focus on them by providing everything that human wellbeing depends on - for every human being on the planet.

Soft-science schools regard catering for humanitarian requirements to be the economic responsibility of society as a whole, implemented by the actions of governments. Although in basic economic terms the above glass of water is still worth £1, the person who needs it most but can't pay for it still gets it because society redistributes wealth from those who can afford it to those who can't. Society ensures that an adequately funded welfare state is in place to look after those who need help.

The hard-science principle is: 'if you can afford it you can have it, if you can't afford it you don't deserve it, regardless of how much you need it'. The soft-science principle is: 'if you need it you can have it, if you don't need it you can have it if you can afford it'.

6 Needs and Wants

I shall use the term **needs** to refer to those things that are considered essential for life and for dignity. At the individual level they comprise **survival needs** and **self-respect needs**. Survival needs are those things that are vital for the preservation of life and the survival of the race and are few - clean air, clean water, healthy food, warmth and shelter - for ourselves and our dependants. To that list should also be added readily available medicines and medical treatment that can save lives and prevent or cure disabilities. Very few people in the modern world are completely self-sufficient, so in order to obtain survival needs money is required for all but air and sometimes water, therefore money is as essential as the needs themselves. Self-respect needs are those that maintain dignity in the circumstances that prevail, and they change as the human environment changes. In the modern world they include the means to stay clean, reasonable clothing, safe and dry habitation, social participation, and again of course money in order to obtain these things. They are listed in detail in Table 2 of the Joseph Rowntree Foundation Minimum Income Report.¹

A further category of needs arises at the level of society as whole - **social needs** - which encompass those things that we need to maintain the infrastructure of our civilisation, counter environmental threats, ensure sustainability, and provide security. Threat examples include climate change and its many associated dangers², harmful pollution in all its forms, increasing scarcity of water, loss of biodiversity and deforestation. These are all linked in various ways but climate change is the one that threatens us the most. Although the vast majority of scientists who have studied climate change agree that it is very real there are still others who disagree - often in the pay of polluters.³ My position is simple. Ignoring for now the overwhelming evidence that climate change is real and caused by human activities there are two ways in which we might be wrong:

(i) Climate change is real and we ignore it - result: we unleash a living hell as more and more are forced to compete for less and less in an increasingly hostile environment, and

¹ <https://www.jrf.org.uk/report/minimum-income-standard-uk-2016>

² The most potent danger from climate change is the global warming 'tipping-point'. This is the global temperature at which additional greenhouse gases are released in quantity from within the earth itself, without the need for any help from human activities. At this point the warming earth keeps releasing more and more gases in an upward spiral that man is powerless to stop. Most frightening of all is the fact that we don't know where this point lies; we may already be very close. See [https://en.wikipedia.org/wiki/Tipping_point_\(climatology\)](https://en.wikipedia.org/wiki/Tipping_point_(climatology)) and https://en.wikipedia.org/wiki/Climate_change_feedback

³ <http://www.davidsuzuki.org/issues/climate-change/science/climate-change-basics/climate-change-deniers/> and <http://www.motherjones.com/politics/2005/05/put-tiger-your-think-tank>

there is a very real possibility that we become extinct⁴; and

(ii) Climate change is not real but we act as though it is - result: resources are allocated where they need not be but no real harm is done. What's more we become much better placed to deal with environmental threats that materialise in the future, and if our actions are decisive then we ensure that they never materialise.

Could our best course of action be any clearer? What's more it isn't a situation where the extent of reward is related to the effort expended. It's like a war, we either win or lose. Unless the effort we expend is decisive in countering the threat we will lose the fight no matter how close we come to winning it. At stake is human survival. At stake also is survival of most or perhaps even all other forms of life, though if we don't care about our own survival then we aren't likely to care about all the rest.

Sustainability requires that we live within the earth's capacity to provide both living and non-living natural resources and to absorb waste produced by human activities. Sufficient non-living natural resources must be recycled to ensure that the depletion rate of known reserves allows a very comfortable margin of time - preferably hundreds of years - to cater for the development of substitutes or the improvement of recycling efficiency.

With respect to the achievement of sustainability the work of the Centre for Alternative Technology (CAT)⁵ in Machynlleth, Wales, deserves to be much more widely recognised. They back their sustainability campaign by the development and detailed appraisal of cost-effective sustainable technologies and methods in all relevant areas. They share their knowledge by offering a wide range of long and short courses at all levels of practical and academic detail including post-graduate degrees. When or if the world wakes up to the urgency of environmental threats CAT will be ready and able to deliver the means to counter them.

Security is needed for both internal and external threats, an adequate welfare state providing for internal threats and national defence for external threats. Defence is a regrettable necessity, but should be no more than sufficient, in conjunction with dependable allied countries, to counter terrorist threats and to ensure that potential major aggressors would lose more than they would gain by mounting an attack.

Wants refers to those things that we would like but are additional to our needs. They include luxuries that make our lives more enjoyable and comfortable; investments that (hopefully) make our lives more secure in the future; things that enhance skills, knowledge, mental and physical wellbeing; and so on.

Needs and wants are forms of wealth, and therefore neoliberalism recognises no

⁴ There's no certainty here, just estimates, but the direction is clear. The earth's ability to support human and other life will shrink as temperatures and sea levels rise, the only question is by how much? Steve Kirsch has written a particularly relevant paper available at <http://www.skirsch.com/politics/globalwarming/Extinction.htm>. Some put their faith in so-called 'geoengineering' - the large-scale intervention in the climatic system to limit or reverse damage. Many of these proposals represent last-ditch efforts of desperation which if we have to resort to them will in all likelihood unleash the law of unintended consequences with deadly force. Let's not go there.

⁵ <http://www.cat.org.uk>

distinction between them. However for individuals the distinction is of vital importance. The more a person's needs are unmet the less bargaining power they have.

We shall see in due course that although neoliberalism makes great claims for the efficiency and universal benevolence of the 'unfettered free market', this philosophy in fact strongly favours those in strong bargaining positions, usually the rich, and strongly disfavours those in weaker positions, especially the poor. It permits exploitation of those bargaining for their needs, and is one of the causes of the wealth gap between rich and poor people and between rich and poor countries. Milton Friedman, one of the most ardent supporters of the free market, recognised that to work properly markets must not permit coercion. Two quotations emphasise this point:

- iboth parties to an economic transaction benefit from it, provided the transaction is bi-laterally voluntary and informed. Exchange can therefore bring about co-ordination without coercion. and
- ii The fundamental threat to freedom is power to coerce. (Both from Friedman 1962 Chapter 1.)

The power to coerce is one of the main 'freedoms' enjoyed by the unscrupulous wealthy and supported by neoliberals, especially in modern labour markets. They seem to have forgotten what Friedman said, or perhaps they prefer to ignore it.

It is interesting to note that although inequality of bargaining power is not recognised in neoliberal economics it is implicitly recognised in English law. This is an extract from a judgement by Lord Denning in the case of *Lloyd's Bank vs Bundy* in the Court of Appeal in 1974:

...through all these instances there runs a single thread. They rest on inequality of bargaining power. By virtue of it, the English law gives relief to one who, without independent advice, enters into a contract upon terms which are very unfair or transfers property for a consideration which is grossly inadequate, when his bargaining power is grievously impaired by reason of his own needs or desires, or by his own ignorance or infirmity, coupled with undue influences or pressures brought to bear on him by or for the benefit of the other.⁶

⁶ https://en.wikipedia.org/wiki/Lloyds_Bank_Ltd_v_Bundy

7 *Good and Bad Wealth Creation and Use*

Another significant insight emerges from the foregoing discussion:

The nature of surplus wealth doesn't matter, for the economy to flourish all that is required is that surplus wealth is traded.

This might seem quite surprising, but once our needs are catered for how we spend our extra time and what additional things we produce don't affect our ability to survive and continue the race.

For example, in the simple 3-person economy, instead of producing clothing Worker A could tell fortunes or paint pictures for the others, and instead of producing jewellery and gathering luxury food Worker B could groom the others and sing songs, or keep the homestead tidy and kill vermin. All those who produce non-essentials can do or produce anything at all provided that the others are willing to trade their own wealth for it.

Basic Food (30h)	Clothes (30h)	Luxury Food (30h)	Jewellery (30h)	Wheelbarrows (60h)
Basic Food (30h)	Anything tradable			Wheelbarrows (60h)

Figure 7.1: The nature of surplus wealth doesn't matter

This feature of an economy is most clearly illustrated by the production of military equipment and weapons of all kinds. The function of these things is the exact opposite of providing benefits, it is to cause destruction, yet the economy that produces them flourishes just as much as production of things that do benefit humanity.

But, and it's a BIG BUT:

The kind of economy that flourishes depends critically on the nature of surplus wealth.

So far market freedom has largely been allowed to determine what is produced - whatever people want (or can be persuaded to want) and are willing to pay for is what is produced. This leads to the economy that we have - a selfish individual-centred economy with massive inequality and no barrier to indulgence for those who can afford it, where individual wants, regardless of how frivolous or wasteful of resources, are allowed to direct the productive efforts of the economy. Producers have free reign to persuade us to have whatever they produce, and everyone can do just as they like. That's the neoliberal philosophy - everyone should buy exactly what they want to buy and everyone will be

better off as a result. If that had been true then we should have seen some benefit by now. It is based on Adam Smith's famous 'invisible hand', but even Adam Smith didn't believe in it as a universal truth like neoliberals do - see chapter 8o.

Free markets are blind, they just follow demand whatever it is and wherever it comes from.

The more we allow market freedom to decide the direction of the economy the more indulgent and anti-social it will become. Someone has to control markets - after all a market is merely a forum for controlled exchange. At the moment control is exercised by those with the most freedom - the unscrupulous wealthy - using all their influence to enhance their freedoms and reduce the freedoms of the non-wealthy - see chapter 98. If it continues in that way we are all in deep trouble.

As Michael Meacher pointed out:

Market profit operates only at the level of the individual company; it cannot automatically ensure the national interest is safeguarded across the whole economic spectrum. (Meacher 2013 p178)

Until we recognised the dangers of unsustainability and climate change we were able to go on happily producing whatever people wanted. The unscrupulous rich exploited the rest as far as government rules allowed them to, as they always have done, but now there are new and very present dangers. Allowing things to continue as they have is no longer an option if we are to survive. Individual wants won't provide for social needs, only society can do that. Social needs represent a new imperative that we must respond to.

We must decide as a society what it is that our economy must deliver - especially social needs - and rearrange our productive capacity to deliver them. We have a choice: carry on as we are and die out as the planet becomes uninhabitable; or change our ways, survive and prosper. Why is that such a difficult choice?

Neoliberalism makes no distinction between types of consumption wealth - it believes that all wealth is good - the more stuff we have the better, regardless of what stuff it is. Therefore current consumption is largely driven by indulgence - things that satisfy our wants regardless of the needs of others, whose production methods use up the earth's resources as if they are infinite, and create pollution without thought for the consequences. Let's call these **indulgent wants**. Consumption in the economic sense however encompasses all forms of consumption, regardless of who does the consuming or how the things consumed are produced. We are a world society, where consumers in the developed world can afford to indulge their wants but many in the developing world can't even meet their survival needs reliably. This represents a distortion that must not be allowed to continue.

Therefore a lot remains to be said about *what* we consume and therefore *what wealth we create* in order to secure a fair, stable and sustainable future in the light of massive world poverty, resource depletion and severe environmental threats. While anyone lacks a survival need, while we remain at risk from external dangers, and while we are depleting the earth's resources unsustainably, we need much more **humanitarian wealth** (directed at those without survival needs), and **sustainable wealth** (directed at countering

environmental threats and avoiding unsustainable resource depletion). It isn't only the populations of poor countries who require humanitarian wealth. Increasingly in the UK the survival needs of older people are being neglected, with constant battles for funding between social care and the NHS. These desperately needed services are deliberately rationed by being starved of funds, when those funds are directed instead at the rich so that they can indulge their extravagances - and all because of the neoliberal trickle-down dogma that declares that everyone prospers when the rich have more. Neglected old people don't prosper. It should be plain for all to see by now that trickle-down is a dangerous deception. It is examined and rejected in chapter 20.

We should recognise that over a working lifetime a person creates a vast amount of surplus wealth, much of it going to society to exchange for social needs. Part of that surplus buys the person the right to be cared for at times when they are unable to contribute - when too young, too old, sick or otherwise incapacitated. More broadly, a working population creates a vast amount of surplus wealth, part of which buys all those unable to care for themselves the right to be cared for.

In order to have what is really needed selfish and indulgent wealth should be cut back considerably but not eliminated completely, after all people need to have some recreation and enjoyment, they are what make life worthwhile. It's extravagant indulgence and consumer products manufactured by unsustainable methods that we can't afford. All this will require very substantial investment in sustainable production and more efficient recycling of limited resources, and the wealth that these new processes create will be more expensive than before. Expensive that is to suppliers and buyers - the environmental benefits will of course greatly outweigh the costs. Also let's be clear about humanitarian wealth for poor populations. It is not to be created and distributed for philanthropic reasons but for reasons of economic good sense. It brings more people into full production of surplus wealth, thereby creating more overall wealth - good wealth - for everyone. Currently there are 1.4 billion people living below the absolute poverty line of \$1.25 per day, and contrary to expectations most live in middle-income countries (Chang 2014 p339). Although many are working they can't fulfil their potential on that kind of income so their wealth creating efforts are underused and therefore wasted.

When everyone has everything they need and is fully productive, resources are no longer being depleted unsustainably, and the environment is as secure as we can possibly make it for the next several thousand years, then we can afford to indulge our wants more fully - though as a world society, not as a rich few and a poor many.

As productive capacity is re-orientated indulgences will become less plentiful and therefore more expensive. What will happen is that efficient indulgences - those that give a lot of pleasure for little productive wealth use - will still be taken up at reasonable prices, and these are the ones enjoyed by most people. Inefficient indulgences will become the most expensive, and this is exactly what we want. These are the extravagant indulgences enjoyed by the few. It's the market working as it should.

Another major source of largely dispensable wealth creation is **destructive wealth** - military capability and weaponry of all kinds. This isn't merely wasteful it is intended to

be harmful - *and the more devastating the harm the better*. As said earlier defence is a regrettable necessity, but need be no more than sufficient, in conjunction with dependable allied countries, to counter terrorist threats and to ensure that potential major aggressors would lose more than they would gain by mounting an attack. Any excess over this is not for defence, it is either for offence or because it represents good business. But good business for us - and the UK is a major arms exporter - is far worse for those on the receiving end or threatened by the products of that business. They lose far more than we gain, so I can see no moral case for producing arms for export. *Sadly the modern world doesn't recognise moral cases, it makes money so there is no more to be said*. The same goes for arms for offensive purposes - to mount wars in foreign lands because we don't like what is happening there. What is happening is often indeed reprehensible, but using physical force to make changes doesn't generally or cleanly bring the changes that are desired. Things are always more complex than they seem as recent experiences in the Middle East testify so effectively. Physical force is the bluntest of tools. At best it causes seething resentments and hatred, at worst it triggers unforeseen reactions that can be impossible to control and are far worse for the populations involved than the original reprehensible regime.

Whether or not we need growth - more overall wealth creation - to achieve all that depends on how much of our indulgent and destructive surplus wealth production we can dispense with in order instead to redeploy it as sustainable and humanitarian wealth production. There are vast quantities and ranges of indulgent surplus wealth - ego-boosting rather than purely functional cars, expensive 'designer' clothes, luxury furniture, lavish entertainment, 'must-have' technical gadgetry, exotic holidays, palatial property, 'fashion-statement' accessories and so on, together with their attendant advertising and marketing, all of which absorb massive amounts of productive effort. Beyond all those obvious indulgences there are things that the 'free' market has given us that we have come to regard as necessities. Things like private cars, generating carbon dioxide and other pollutants in billions of tons every year, aircraft criss-crossing the skies generating greenhouse gases in massive quantities, and container ships passing each other on the oceans carrying unnecessary and often similar goods and burning heavily polluting bunker fuel¹ in the process. We need to limit usage of these things because the costings are all wrong. People won't like giving them up, but the question is how much do they really cost? Pollution costs nothing in currency terms - so we feel free to ignore it - yet it may end up costing us our very existence! Likewise there are vast quantities and ranges of destructive wealth, far more than can ever be justified on defence grounds.

No-one wants to hear all this, we would rather carry on with our comfortable lives, but that comfort comes with a very heavy and possibly unpayable price tag. We must face up to the challenge. I don't know what the relative proportions of productive capacity are that are devoted to destructive wealth, lavish indulgences, accepted indulgences, rich country needs, poor country needs and social needs, but I know that the proportions are completely at odds with long-term security and sustainability. Is anyone even trying to establish appropriate proportions? Perhaps they are but their work isn't very evident - progress should be reported regularly and followed with keen interest.

¹ https://en.wikipedia.org/wiki/Environmental_impact_of_shipping

Modern economists use another assumption to get round all these difficulties - *natural resources are fully substitutable by human labour and capital (man-made) goods*. This convenience makes analysis easier, but although on occasion there can be such substitutions, normally human labour and capital goods are used to transform resources into useful products rather than being able to substitute for them (Daly 2007 pp127-136).

Turning it all around will require very substantial reorientation of productive capacity. Whether or not it requires growth remains to be seen, what we need is a radical shift in the wealth that is created and the way it is created. If we do need more overall wealth then it is available from the surplus wealth creating capacity of people currently unemployed, underemployed, and employed by wealth extracting companies (see chapter 36) whose work doesn't help the economy. It is also available from the populations of poorer countries who at present aren't able to contribute to their full capacity.

The chance of unfettered free markets and laissez-faire bringing all this about naturally is as likely as a rudderless ship setting sail from Liverpool, crossing the Atlantic, and arriving safely in New York. Neoliberalism has had its chance and has failed completely.

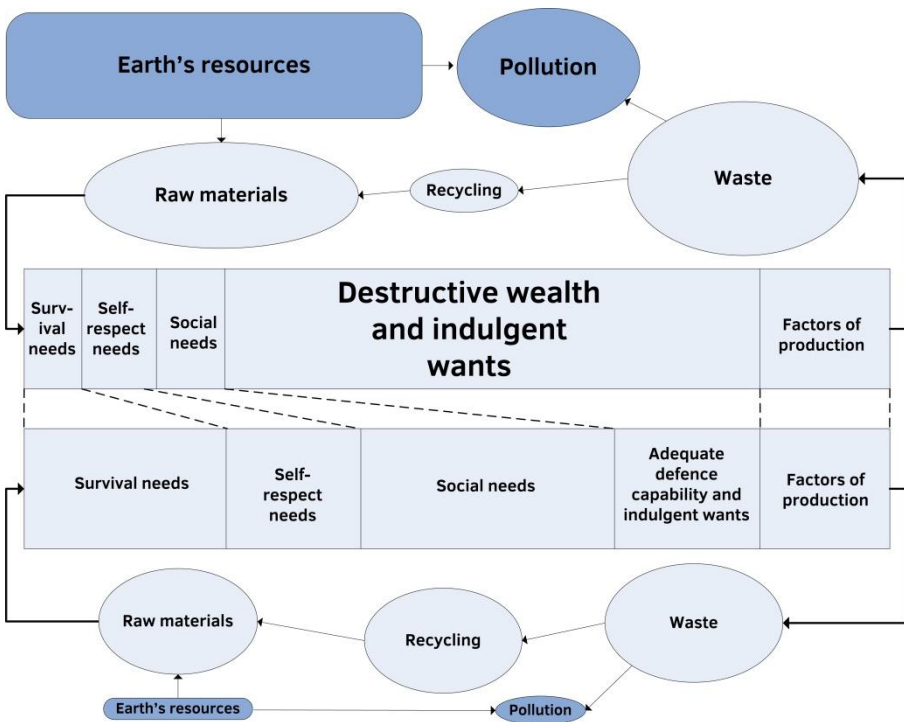


Figure 7.2: Necessary re-orientation of productive capacity

In future the emphasis must be on creating sustainable and humanitarian wealth efficiently, using fewer resources, and recycling more of those resources. Wealth is no more than human effort directed at achieving a desirable end, and nothing is more

desirable right now than reducing raw material usage and production of waste. Wealth can do that, as well as devising the means to restructure existing productive capacity away from indulgence towards socially beneficial products. Each country must carry its proper share in these respects, the lead being taken by rich countries. The work of bringing poor country populations into full production of good wealth must be shared fairly between rich countries. However as will be seen in chapter 62 the first thing that poor countries need is for rich countries to stop exploiting them. The initial cost to rich countries of helping poor countries will be the loss of wealth that is unjustly taken from them. Beyond that there will still be a need for help to bring them up to developed world standards as discussed in chapter 76 section 76.2. Not all countries will be willing to do their part, at least initially, but that shouldn't prevent others from doing all that they can. All won't join the communal effort at the same time, but hopefully in time those that aren't contributing, especially where they still sanction exploitation, will be pressured by the strength of public opinion into taking action.

Wealth creation and use can be good, bad or indifferent, but in order to have the things that eliminate both poverty and environmental threats, and secure the future, we have to create and use sustainable and humanitarian wealth.

We have considered above the kinds of wealth creation and consumption that should be cut down or preferably cut out, so what kinds should take their place? To answer that we must focus on what is needed for a long-term sustainable future, and for that we must first recognise and face up to the enormity of the task and mobilise everyone's best efforts in undertaking it. If we are to succeed then we need everyone's hands on the pump. This demands a society where all are fully engaged and committed to the common cause. That in turn requires a society that treats everyone in a fair manner, and is both seen and understood to do so. We can no longer afford a fragmented and embittered society of haves, have nots and have nothings. We tried that and this is where it got us. A society like that can't work co-operatively because it is divided by hostility.

In particular we must recognise that we all share a single finite planet, and that it is in all our interests for everyone to share in both the creation and consumption of the prosperity that is available to us. We must shake off the wrong-headed view that we only have a fixed-size cake to share so we must grab as much as we can as fast as we can, and understand instead that we are the cake makers, and the more we share with others the more cake those others can make, and the more sustainable wealth in total that can be created. We must work together, applying everyone's best efforts collectively and wholeheartedly if impending dangers are to be averted. So far we have only tinkered with the idea.

What we have is a deeply unfair world that is unsustainable. If we carry on as we are we won't need to worry about future generations because there won't be any.

For our long-term viability we must recognise and face up to the dangers that confront us, and for that we must move from a grasping selfish culture to one that is sharing, generous and sustainable. IT CAN BE DONE. All we need is the will to do it.

Initially we need a proper system of accounting that costs everything properly,

including greenhouse gas generation, pollution, depletion of resources and all other unsustainable activities, as well as including social costs and benefits. There are such accounting systems, a major one being Environmental Full Cost Accounting.² This uses what is known as the 'triple bottom line'³ - People, Planet and Profit. Each is calculated separately and adjustments made between them to give a good outcome for each for a given organisation or enterprise.

With such a system in place incentives and disincentives will emerge and be responded to, setting up a natural migration away from wasteful or harmful productive capacity towards sustainable and beneficial productive capacity. Transport will be seen to be very expensive, so there will be a re-orientation towards local production wherever possible. Many traditional factories and organisations will be seen to be unprofitable and will change their methods so as to align with the new standards. Governments will be responsible for enforcing the new standards, with appropriate transition arrangements to allow time to manage essential changes, and will carry out major infrastructure investments on their own account. At the same time the tax system will require major overhaul to bring the necessary wealth and wealth creating capacity for all these changes back to society for the benefit of society. Taxation is discussed in chapter 95.

People able to waste productive capacity on lavish indulgence must have that ability curbed, because society can't afford it even if they can.

To have a flourishing economy based on self-indulgence is relatively easy. People are eager to have things that benefit them directly so demand for them is widespread. The market is just as eager to respond by producing them in abundance, and neoliberal philosophy justifies all this as right and good. The trouble with this approach is that it not only ignores the poor and disadvantaged, it is also unsustainable.

Sooner or later we run up against the unwanted effects of our indulgence - raw materials start to run out; the environment reacts badly to our polluting it; and diminishing survival needs cause conflicts to increase. Therefore making the transition to an economy based on what society as a whole needs will be difficult. Demand won't come naturally from individuals, so people must be fully informed about the impending dangers and the means to avoid them. Public support is necessary for government action, support that will only be forthcoming by making plain the choices that we face and their consequences. But ultimately it is governments that have to act on behalf of society.

The neoliberal approach of non-interference in the market has set us on a collision course with nature. Strong and courageous governments are needed that turn their backs on neoliberalism and steer us away from self-indulgence towards security and sustainability.

Using a very high proportion of our productive capacity and resources to create indulgent wants when there are increasingly pressing social needs and people dying for want of survival needs is nothing short of grotesque. It is the modern world's version of fiddling while Rome burns.

² https://en.wikipedia.org/wiki/Environmental_full-cost_accounting

³ https://en.wikipedia.org/wiki/Triple_bottom_line

When people fully understand what the problems are, and what is needed for their solution, then I believe they will respond very positively. Currently they have the neoliberal doctrine grabbing their attention - do whatever you can to make money, spend it on whatever you like, and the whole of society benefits. Therefore our first task is to rid ourselves of that dangerous dogma and replace it with the truth.

To those who say that these things are too expensive, or that they would misdirect resources, or that they're completely unrealistic, I say that we have no choice if we want to stay alive for the long term and avoid conflict on an unimaginable scale in the medium term as resources run out and the environment turns against us.

7.1 The dangerous growth fixation

It is almost universally accepted without question that every country should aspire to as high a level of economic growth as possible. If we don't create more wealth this year than last then the government is blamed for having failed in its duty. Why is there such a fixation on growth?

There are several reasons, all of which except the first two arise because of debt.⁴

- National league tables are compiled and published, and national pride is at stake just as football teams' pride is at stake in football league tables. The government of a country sliding down the table feels shame. It is falling behind its neighbours and clearly doing something wrong in managing its economy. The driver is productivity. A country with high productivity stands high in the world, like a child who joins the highest class in school, or a sprinter accepted for the Olympics.
- Wherever anyone finds him or herself in the wealth hierarchy they are always driven to want more because they are acutely aware that at any time they may lose what they have. They strive for security, and they believe that more wealth means more security, though they are chasing a moving target. This is discussed further in chapter 9. Closely associated with this is the drive for visible success, which more and more is measured in terms of accumulated wealth. This is discussed further in chapter 99. Although these are individual drivers their cumulative effect is to drive for ever more economic growth.
- There is the national debt, on which interest is payable from taxation by current and future taxpayers. The only way to avoid taxpayers suffering a reduction in real⁵ disposable income is for the economy to grow so as to generate enough or more additional income to cover the tax without affecting disposable income. Taxation in relation to the national debt is discussed in chapter 100 section 100.5.

⁴ See Jackson and Dyson 2012 pp162-164.

⁵ In economic terms 'real' in relation to money or income means after allowing for inflation or deflation, the converse is 'nominal', which doesn't make any such allowance.

- The need for ordinary businesses to service high levels of debt (and pay their workforce enough to service its debts) necessitates their having to compete fiercely in the marketplace, creating a universal and desperate drive for growth as every business strives to out-compete other businesses.
- Borrowing from a bank requires payments on fixed dates, with penalties for late payment. This incentivises individuals and businesses to generate quick returns in excess of the amount required so as to enjoy peace of mind, and quick returns are generated by growth.
- The current system causes house price inflation that is well above wage inflation. In order to maintain standards of living when housing costs increase more work must be done and more pay earned or more debts taken on, both of which generate growth.
- Loan repayment destroys bank money (see chapter 39), which without compensation in the form of new debts causes the economy to shrink (discussed in chapters 15 and 16). The government therefore designs policies to encourage greater indebtedness to counter these damaging effects, and greater indebtedness leads to more spending and more growth.

But what's wrong with continuous growth? Nothing if it's sustainable, but sadly whether or not it's sustainable is hardly ever enquired into. The prevailing belief is that growth is good - full stop. Therefore the problem is not with growth in itself, the problem is with growth at any cost. We live on a finite planet with limited resources and limited capacity to absorb pollution, and growth, unless it is managed very carefully, threatens to overwhelm those limitations as indeed it has been doing for many years, and that stores up very significant trouble for the future.

Continuous unconditional growth is based on an infinite source of raw materials, an infinite capacity to absorb waste products, and no impact on the environment, yet we know full well that none of these is true.⁶

This is a quotation from 'Modernising Money' (Jackson and Dyson 2012):

The crucial defining factor of a steady-state economy is that it does not exceed the 'carrying capacity' of its natural environment. Carrying capacity can be defined as the maximum population that can be sustained indefinitely by the environment, given that the physical components of the planet (natural resources, human populations etc.) are constrained by the laws of physics and the ecological relationships that determine their rates of renewal. This is problematic as any economy that continually grows (typically characterised by increased use of physical resources) will eventually exceed the 'carrying capacity' of its natural environment.

The league table issue has become deeply ingrained in the consciousness of all governments. As a result the unit of measurement - Gross Domestic Product - has

⁶ "Anyone who believes exponential growth can go on forever in a finite world is either a madman or an economist." Attributed to Kenneth Boulding.
https://en.wikiquote.org/wiki/Kenneth_Boulding

become distorted over time in order to make it reflect more growth than is really the case (Fioramonti 2013 pp63-65). This is good in that less real growth is better for resource depletion and the environment, but is bad in that performance measurements should be accurate and directed at what we really want to achieve; not used as a means of fooling ourselves. There is a lot more said about how growth and economic performance is measured in chapter 26; the point to make here is that growth is not something that we should aspire to for its own sake unless more overall wealth is needed for a specific purpose - rebuilding a country after a war or natural disaster, providing for a growing population, eliminating poverty, or countering environmental threats.

What we should aspire to is to restructure our existing productive capacity to serve humanity's needs better and to do that with as little natural resource depletion and as little pollution as possible. To do that the league table needs a new focus - perhaps 'Degree of Sustainable Sufficiency'.

It's worth pointing out a great irony in all this. We are doing everything in our power to generate growth, telling ourselves that it will give us a secure future, yet unconditional growth is the very last thing we need if we are to have any future at all.

8 Requirements for Wealth Creation

The earlier three-person economy conceals a situation that emerged in the distant past as we developed beyond the subsistence level. The raw materials needed for hunting and gathering, and also in the three-person economy, were already in existence and freely available for the taking. It was what is known as an **empty world** - a world where the ecosystem was vast and raw materials were plentiful compared to the demands made by humans. As the human population and its demands increased, the areas of accessible and fertile land that were unclaimed diminished, so a person who was not already a landowner could not grow food without the agreement of and usually payment to the landowner. At this stage very few people had the ability on their own to create wealth, either for their own subsistence or as a surplus to trade with others.

To create wealth in the modern world people need access to productive capital, at least in the form of land and seed, or tools and raw materials, together with necessary skills. These are no longer available for the taking, they are normally only available through employment. This is why employment is so important. The problem is that the owners of productive capital won't employ others unless their own interests are served in doing so.

Without external constraints this situation creates a very unequal partnership. Throughout history before there were employment laws the owners of productive capital had much greater bargaining power than those without, and used that power to enrich themselves by appropriating the bulk of surplus wealth created by their **workers**.¹ This is what makes the distinction between needs and wants and their relative possession so important in terms of bargaining power. All classical economics saw was a willing buyer of labour and a willing seller. It had no interest in the reasons for the willingness of each - the buyer's because he or she gained all the surplus wealth and the seller's because his or her life depended on it. With no constraints employers held the very lives of their workers in their hands and could take for themselves everything their workers produced beyond their survival needs.

Thankfully things have improved very considerably in this respect in modern times, especially in the developed world, but the relationship is still unequal, and there remains the basic irony that a person has within him or herself the capacity to create wealth but is unable to access that capacity without the assistance of another person.

Each person has within them a wealth creating engine, but the ability to start the engine lies with another person, who won't start it unless it is in their own interests to do so.

¹ By worker, workers or working population I mean people who must work in order to earn enough for their own and their family's needs. There are many who choose to work, but whose needs are catered for by financial returns on their investments. Such people are excluded from my definition of worker.

There is a further requirement, which is that in order to trade wealth one or more other people are needed to trade with. Hence the product must have value to others, and the more valuable the more successful the producer - at least until competitors enter the market. For employed people the value of the product is the responsibility of the employer, whereas for the self-employed it is the person's own responsibility.

9 The Natural Tendency for Wealth to Accumulate

To use a scientific analogy wealth is very much like matter. Matter is anything that occupies space and has weight.¹ Matter has a natural tendency to accumulate because of gravity, which is a force of attraction between any two bodies of matter. Hence in space matter accretes over time to form stars, planets, moons, galaxies and so on. Wealth is the same, and has its own equivalent of gravity in the feature that things that produce wealth are themselves forms of wealth. Strictly speaking wealth produced by assets is transferred to owners as wealth entitlement - money, but the distinction matters little in this discussion because we are only concerned with individuals rather than whole economies.

Wealth production can be by creation or transfer. Wealth creating assets bring new wealth into being themselves, for example shares in companies that make new things for sale or provide services or support in making such things. Wealth transferring assets transfer wealth created by others to the owners of those assets, for example debts where the debtor creates wealth and transfers entitlement to it as interest, or property where the tenant creates wealth and transfers entitlement to it as rent.

When a person has sufficient wealth (or more accurately entitlement to wealth) they can invest it in assets that produce wealth, and enjoy the continuing supply of wealth that those assets produce without further effort, and that wealth can be used in turn to obtain yet more assets. Note that this form of investment is likely to be purchase of existing assets rather than new wealth creating assets, because the vast majority of assets that produce wealth already exist and are owned by someone else before being bought by the investor. Owners of assets that deliver wealth or wealth entitlement without effort are known as **rentiers**.

Wealth produced by assets gravitates to asset owners, and because assets are themselves forms of wealth the owners are able to increase their stock of assets and therefore the rate at which they accumulate wealth.

The process is further reinforced by the two other wealth accumulating mechanisms described in the Introduction: wealth extraction and the fact that more wealth gives more bargaining power.

The natural tendency for wealth to accumulate is disguised to some extent by the fact that owners of wealth often change over time. Recessions and especially depressions cause many wealthy people to lose fortunes in terms of money value as markets collapse, but the wealth they own remains, even though it is worth less after the collapse. If they sell their assets then their loss is another's gain, and as the buyer tends to be wealthy the accumulated wealth generally stays accumulated, albeit owned by someone else. When markets recover then the value of owned wealth returns to where it was before.

¹ Strictly speaking matter has 'mass' rather than 'weight' but the distinction is only of concern to scientists and engineers.

Overall, new wealth migrates towards existing wealth, and owners of the greatest quantities of existing wealth enjoy the highest rates of migration. This is demonstrated in great detail by Thomas Piketty (Piketty 2014), who shows that it is the natural outcome of an economic system based on free markets. The condition that is necessary for it to happen is that the return on wealth creating assets should be greater than the rate of growth of national income, which it has been throughout history except in unusual and short-lived circumstances. Piketty's evidence shows that the normal return on wealth creating assets is normally between 4% and 5%, and the normal income growth rate for developed countries is between 1% and 1.5%, so there is a huge gap (Piketty 2014 Chapter 10). This is discussed in detail in chapter 97.

The belief of neoliberals that a free market economy delivers rising prosperity for all is shown by Piketty's work to be badly mistaken. In fact it does precisely the opposite. The only way to ensure widespread prosperity is to impose fair market conditions that prevent inordinate wealth accumulation in the first place (Reich 2016), and to apply deliberate measures to redistribute existing unfair incomes and wealth. Neoliberalism has not only failed to apply measures to compensate for the dangerous natural process of wealth polarisation, it applied significant measures to encourage and speed it up.

A simple experiment serves to illustrate how inequality can arise quite naturally, without even the need for any unfairness or exploitation to speed up the process. Imagine a group of ten players, each starting with a pot of £20, and gambling with each other on the basis that each pair of players tosses a coin and the loser pays the winner £1. When a player has lost everything they drop out. To begin with in each betting round there are 45 pairs.² As players drop out there are fewer betting pairs, until eventually just one player has £200 and all the rest have nothing. Note that this betting process is completely fair, all start off equal and the rules favour no-one - there is neither wealth extraction nor bargaining position benefit. A simple computer program allows progress to be simulated, and a typical run is illustrated below where round 0 is the starting position and all numbers represent pounds.

² The first player bets against nine others, then the second player - as well as already having bet against the first player - also bets against eight others, and so on, making a total of $9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 45$ pairs.

	Player	1	2	3	4	5	6	7	8	9	10
Round											
0		20	20	20	20	20	20	20	20	20	20
6		6	28	20	18	22	36	18	22	18	12
20		37	9	29	21	8	28	0	34	26	8
50		48	0	43	11	0	12	0	64	22	0
100		74	0	0	13	0	28	0	52	33	0
200		98	0	0	0	0	19	0	41	42	0
500		109	0	0	0	0	0	0	34	57	0
1000		137	0	0	0	0	0	0	0	63	0
2000		101	0	0	0	0	0	0	0	99	0
3620		75	0	0	0	0	0	0	0	125	0
5000		91	0	0	0	0	0	0	0	109	0
6000		163	0	0	0	0	0	0	0	37	0
6610		200	0	0	0	0	0	0	0	0	0

Table 9.1

The reason for growing inequality here is that pure chance initially allows some players to accumulate more than others, but thereafter a player who has more must suffer a longer losing streak to fall out of the game than a player who has less, so the odds favour players with more as the above table indicates. Chance also plays a significant part, as some players can do well in spite of the odds being against them. Take round 6: at that stage player 1 has only £6, less than every other player, so no-one would give much for her chances, yet by round 20 she has the most and goes on to win everything. Take round 50: player 8 has the most at £64 and must be feeling good, yet by round 1000 she is out. After round 1000 there are only two players left, with player 1 well ahead and happy, but by round 3620 player 9 is ahead. In fact from round 1000 it takes another 5000 rounds for one of them to gain any real headway, and even then it takes another 610 rounds to defeat the losing player.

In betting players have the option of walking away, but the real economy allows no such option.

This experiment shows that there is no reason to assume that a particular series of interactions will tend towards equality unless the mechanisms at work are very well understood and known to produce that outcome. The mechanisms at work in the real economy are well enough understood to know that inequality - and growing inequality - is inevitable.

The experiment is also sufficiently like real life to reveal something else, and that is that *everyone* has good reason to feel insecure. The multimillionaire envied by all around is very nervous of losing her millions, which is entirely possible but little acknowledged by poorer people. Take someone with £1 billion. To all else she is bulletproof, but within her own head there are many ways in which she can lose heavily, and for her losing £800 million would be a disaster of the first order. People with a lot of money who lose heavily don't feel good just because by ordinary standards they have a lot left; they feel awful because of what they have lost. Also everyone lives within their own social circle, and a wealthy person who loses more heavily than others in the circle feels bad not only because of the loss itself but because of loss of position within the group.

Therefore we should recognise that wherever we find ourselves in the wealth

hierarchy we are always driven to want more because only by having more can we feel secure, though we're chasing a moving target. If I have £1 million I feel sure that with £2 million I would feel really secure, but with £2 million I need £4 million, and so on indefinitely. This is all psychological but very real in its effects on people's behaviour, and a major factor in the constant drive for more. To the rest of us it looks like pure greed, but there's a lot more to it than that. Chapter 99 discusses another major driver for wealth accumulation - visible success.

Although wealth accumulates to the already wealthy, it doesn't necessarily accumulate for any individual wealthy person, and that is a major source of insecurity regardless of where a person sits in the wealth hierarchy.

A social security system that provides a real safety net for anyone who finds him or herself in straitened circumstances is a benefit to *everyone*, and capping the wealth of the wealthy in order to provide it is a benefit to *them*, though they deny it and fight against it. As is already known it isn't absolute wealth or absolute income that matters to people, it is relative wealth and relative income, relative that is to others in a person's social circle.³ Therefore the rich can still have what they want without having as much wealth, and all of us can enjoy a real and effective welfare state. Chapter 97 discusses the work of Richard Wilkinson and Kate Pickett (Wilkinson & Pickett 2009) which shows very clearly that more equal societies fare better for everyone on every front. Figure 97.4 in chapter 97, reproduced from their book, shows how health and social problems become progressively worse as populations become more unequal. These matters are discussed further in chapters 97, 99 and 100.

³ <http://www.telegraph.co.uk/news/science/science-news/3315638/Relative-wealth-makes-you-happier.html>

Part 1b

Money

10 Characteristics of Money

Money is perhaps the most misunderstood element in all of economics. We all think that we know what it is, we certainly know that we don't have enough and would like more, but what is it really? As a human invention that is central to practically everything that we do in the modern world you would think that it should be relatively easy to understand, but it most definitely is not.

Money is so essential to human societies that it has been invented countless times throughout history in almost every community. Without it people either have to barter goods, which is cumbersome and largely impractical, or remember who owes what to whom, which works within small well-knit communities but is difficult within large or loosely-knit communities and practically impossible when dealing with outsiders (Martin 2014 & Graeber 2011).

Money's essential characteristic is that it must be acknowledged as an acceptable means of exchange for goods and services by all people in the community that use it. A person must be confident that in accepting money in payment for something they wish to sell, others will accept it in payment for something they wish to buy. Other characteristics are that it should be durable, recognisable, not easily made, easily carried and fungible (mutually substitutable - any coin, note or other representation of a given value is as good as any other of that value). If it has inherent value then all the better from a confidence point of view, since acceptability as payment, especially in trades between strangers and between countries, is all the more likely. This is the reason why precious metals have been so widely used as money historically. In the modern world money does not have inherent value, instead its value is guaranteed by the state or banks, and the confidence that is necessary for the public to accept and use it depends on their trust in the guarantor's ability to honour the guarantee.

Money means that the seller of goods doesn't have to trust the buyer; they only need to trust the issuer of the money.

A further characteristic of money is that it can act as a store of value. This emerges from its other characteristics rather than being essential in itself, and it is a very unfortunate characteristic because it leads to hoarding, which takes money out of circulation - money is removed that would otherwise be available for spending - and that can be very damaging to an economy as will be seen later in chapters 13 and 15. Money is seldom hoarded nowadays by individuals, but it can remain idle in bank accounts for long periods, and that has the same effect - see chapter 39.

The essential point to remember is that money is important not for what it is, which is nothing more than symbols or tokens, but for what it represents, which is entitlement to wealth. We shall see in due course that businesses that deal in entitlements are able to manipulate and manage them in ways that make it possible to adjust the distribution of wealth in their own favour, and the processes they use are so clever and subtle that in

most cases those who lose out don't even realise what is happening.

Another feature of money is that it always stays as money. While it exists it never changes into anything else. It can be *exchanged* for very many things, *but it never becomes anything other than money*, all it does is change hands.

This might seem so obvious that it doesn't deserve mention, but it is so often overlooked and so significant that attention needs to be drawn to it. We often hear things like 'Fred's money is tied up in property', giving the impression that Fred's money has become property, and at the individual level it certainly seems that way as we exchange money for goods, but for the economy as a whole money just circulates and always remains as money. This is true even for a particular currency. Although a currency can be exchanged for another currency it doesn't ever become that other currency or anything else.

What this means is that money's role in the economy is that of a lubricant.¹ It circulates around the economy like oil circulates around an engine, and it serves exactly the same purpose - it allows things to happen (exchanges in the economy, metal parts moving against other metal parts in an engine) that without it wouldn't happen.

Money's role in the economy is that of a lubricant, it allows exchanges to happen that without it wouldn't happen, but it is neither used up nor changed by those exchanges.²

We have come so completely to accept that what we can do as a society is limited by the money that society has that we have lost sight of the fact that money only consists of tokens - it is merely symbolic - a human invention created to assist human interaction. The truth is that we do not need to be limited by money unless we choose to be.

We, as a society, are limited in what we can do only by the availability of human effort, willingness, skill, technology, and raw materials, yet we allow ourselves to be limited by the availability of tokens. If the effects weren't so tragic the situation would be comical.

A government in control of its own economy that can't act for lack of money is like a railway company that has everything it needs to run trains - locomotives, carriages, track, signalling and power, with empty trains waiting at stations and passengers wanting to board - but can't run them because it doesn't have enough tickets!

Money was invented to serve humanity - to permit transactions - yet the advent of monetarism in the 1980s turned the tables and made humanity serve money. Government and central bank priorities are now monetary features of the economy -

¹ See the Positive Money article 'What is Money and What Have we Made of It' at

<http://positivemoney.org/2015/06/money-made/>

² A slight amount of oil is burned in an engine but that's because of leakage into the combustion chamber, it's not because of its function as a lubricant. Similarly the physical embodiment of money becomes dog-eared with use but the money that it represents doesn't change.

inflation, interest rates, deficits, and the national debt - when they should be real features of the economy - employment, wealth creation, and public wellbeing.

The prevailing philosophy is 'get the monetary features right and wealth creation, employment and wellbeing will come good automatically', when the truth is quite different: create, allocate and distribute money appropriately in order to create wealth, employment and wellbeing.

Money has become so central to every economy that its role is easily forgotten. Recall what was said earlier about surplus wealth being no more than the product of people co-operating to do and make things for others. In material terms those things are the only real things that we have. We engage in transactions of immense complexity, involving not only exchange of things directly, but agreements to exchange things in the event of certain circumstances, options and commitments to exchange things in the future, loans of things in return for yet more things, and exchange of things for other, bigger things that we and others use communally. Although it is money that makes possible all these exchanges, all that really changes is the creation and ownership of things.

A deep-seated belief is that money is the power to create wealth - with money I can have someone work for me whereas without it I can't. But wealth creating power already exists within every human being. Money merely provides the lubrication that releases that power.

It is often useful to remove money from transactions in order to show what happens to the underlying wealth. The exercise is especially powerful in giving a much more transparent view of events than is possible when money stays in the picture. Let's say I work for someone for a day and am paid £10 - *work isn't my strong point.* Elated with my day's wage I rush off and spend it all on chocolate and make myself ill - *a fool and his money.....* Now from my point of view I have received £10 and paid £10, so my money transfers cancel out and can be removed from the picture. The net effect in wealth terms is that I have given a day's labour and received a pile of chocolate. Money is merely an intermediary in this process in that it came into my possession temporarily and then went out of my possession again. This simple example isn't particularly illuminating but it serves to remind us that underneath all the complexity of modern economic life all that is happening is people co-operating to do and make things for others. I did a day's work that in conjunction with other workers allowed our employer to produce and sell goods or services, and there were vast numbers of people involved in producing and making available the chocolate that I wanted in exchange for my work.

II Types of Money

The simplest form of money and the easiest to understand is **commodity money** - money that has widely accepted inherent value, such as gold, silver and copper coins of recognised purity and weight. Gold has been widely valued throughout much of history, so in using it in exchange for goods and services such transactions are effectively barter - one good of a certain exchange value is exchanged for another good - gold - of the same exchange value. Precious metals used as money do take time and effort to make available and they have inherent value, so they do represent wealth provided that the exchange value as wealth is represented by their face value as money.

The value of gold has always been high, but has often been in short supply, so silver has also been used, along with fierce arguments about whether gold or silver is better for economies. *Note the English pound sterling, which in Anglo Saxon times was one pound weight of sterling silver. You would need a lot more than a pound coin to buy a pound of sterling silver now, that's the effect of inflation!* For small values coins made from less valuable metals were used.

Although gold and silver coins had inherent value, that value nevertheless often diverged from their face value. There wasn't normally a problem when the inherent value was less than the face value, but when the inherent value was more than the face value people would melt coins down to sell as bullion (Conway 2014 p58). This shows that even gold and silver only rarely if ever achieved the objective of being true commodity money where the inherent value of coins exactly matched their face value. Issuers of gold and silver coins also had strong incentives to debase the currency - to substitute the precious metal content for base metal, and history is full of examples of this kind of deception (Martin 2014 p87).

The major disadvantage with genuine (non-debased) commodity money is that the money supply is limited to the supply of precious metals, so the frequency of transactions, rather than depending only on people's ability and willingness to trade, depends also on the availability of precious metals, thereby tying two completely unrelated factors together. This is explained in more detail in the next chapter.

Fiat money has value by being declared by a monarch or government to be legal tender but does not claim to have inherent value. It is the normal physical money that we use all the time and refer to as cash. In the UK it consists of Bank of England (hereinafter abbreviated to BoE) notes and coins. In effect fiat money represents an acknowledgement by the state that it owes money to the holder. UK bank notes even state this on the note, though asking for repayment of a £10 note at the BoE will only result in the offer of another £10 note. *Interestingly people think that when a BoE note has been withdrawn from circulation it no longer has any value, and if the holder failed to change it for a new note before the cut-off date then it is lost. However that is not true. The cut-off date only relates to its use for payment purposes. The note still represents a contract between the holder and the BoE, in that the BoE has made a legally*

*binding 'promise to pay'. It will honour that promise for all time by exchanging it for a note in current circulation.*¹

Fiat money has practically no inherent value, but unlike commodity money its supply is able to keep pace with trade requirements. A disadvantage is that its value depends on the trustworthiness and political stability of the issuer, and trust has been abused in the past because the issuer is able to spend the money first at no cost to itself other than the minting of coins and printing of notes (a feature of fiat money known as **seigniorage**), and monarchs and governments have therefore often been tempted to issue too much so as to increase their own wealth entitlement at the expense of the population (Martin 2014 p88).

Commodity and fiat money are relatively easy to understand. Although notes and coins in current use don't have any significant inherent value they are regarded as having the same value as their face value, and provided that everyone accepts that then for all practical purposes that value might as well be inherent.

Credit money is the one that is the most difficult to understand. It is a monetary claim against an individual or organisation that can be exchanged with others for goods and services. All it consists of is a promise to pay, an IOU, an obligation, but an obligation that can be transferred from person to person, and that makes it money. In effect it is a spendable IOU, provided by a person or company that owes the money and it can be passed in payment for something by the holder to someone else who is then owed the money by the original provider. The most common form is **bank money**, the money contained in bank accounts, where it represents a claim against the bank, and it represents by far the highest proportion of all the money that is used in the economy.² Bank money can be used as easily as cash, or more easily in the case of large transactions. It can be exchanged readily for cash, and cash can be exchanged readily for bank money. Because of these characteristics it is largely regarded as a more convenient form of cash, which indeed it is for practical purposes. But it has some very peculiar characteristics that make it very different from cash.

Bank money has no physical substance, consisting only of numbers in banks' computers, and it never leaves those computers. It is created and destroyed by banks as people take out and repay loans.

*If you weren't aware of that or you don't believe it, then you are in very good company. Very few people including many politicians and even economists aren't aware of it either, and banks much prefer people not to know about it. If you think this is so ridiculous that you are inclined to throw the book away please read first what the BoE has to say about it.*³

¹ <http://www.bankofengland.co.uk/banknotes/Pages/about/exchanges.aspx>

² About 97% of all money in the UK is bank money, the remainder being notes and coins (Jackson and Dyson 2012 p48)

³ <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q102.pdf> and two accompanying videos <https://www.youtube.com/watch?v=CvRAqR2pAgw> and <https://www.youtube.com/watch?v=ziTE32hiWdk>

Banks don't enjoy seigniorage on the money they create because they don't create it to spend, they create it to lend. To see why this is consider my being able to counterfeit money so successfully that no-one can detect it. If I spend the money then I would enjoy seigniorage - I would be able to exchange it for its face value in wealth. But if instead of spending it I lend it, then destroy it when it is repaid, then I would enjoy no seigniorage, but would enjoy the benefit of any interest that is paid. This is what banks do. The borrower is able to exchange its face value for wealth but that isn't seigniorage either, because they have to repay it.

There will be a lot more said about bank money in Part 2.

Just for completeness there are also other forms of credit money. Any IOU or claim for goods or services against any individual or company that can be used as a medium of exchange is also a form of credit money. These usually have a limited range of circulation. The many forms of Local Exchange Trading System (LETS) credits and community currencies are forms of credit money.⁴

⁴ https://en.wikipedia.org/wiki/Local_exchange_trading_system

12 How Much Money Does an Economy Need?

To illustrate the use of money in an economy let's return to our simple three-person economy described in chapter 4. In that economy all goods were shared out by directly bartering for other goods. In the real world that's very inconvenient because it requires what is known as a coincidence of wants: person A must want what person B has to trade at the same time as person B wants what person A has to trade. Also the value of tradable goods must be the same. For example if I raise cattle and a farmer grows potatoes, then it is difficult for me to trade when I only want a small quantity of potatoes, even if the farmer wants a cow. I would need to buy a vast quantity of potatoes in return for a cow and hope to trade them with others for other goods before they became unusable. Also barter is very difficult to arrange when more than two people are involved. I might have turnips to trade and want potatoes, but Fred, who grows potatoes doesn't want turnips, though he does want carrots. Bill grows carrots and wants turnips, but doesn't want potatoes. Between the three of us we could come to some kind of arrangement, but first of all we have to find each other from amongst the community, and then we have to work out a strategy that gives us all what we need without anyone being unduly disadvantaged. Imagine the difficulty when there are thousands of widely dispersed people.

In our simple economy jewellery would probably be used as money. Each person would keep a surplus to trade with in addition to that used for their own purposes. The person making the jewellery would also make standardised items that could be used for trading purposes. Let's say that in 10 hours the jeweller can make a standard bracelet, so in a week three can be made as well as three lots of luxury food. In our economy labour is the basis of value, so one bracelet would be worth, for one person, one week's worth of basic food, one week's worth of luxury food, one week's worth of clothing, or half a week's worth of wheelbarrows. Initially each would continue to barter goods with each other, and in doing so would build up a stock of bracelets. When each had built a surplus of bracelets over and above their own decorative needs they could use the excess to trade with each other. Because each wants what the others produce the bracelets would circulate but not accumulate, so that when there were enough bracelets for trading purposes the jeweller would make other items for decoration rather than continue to make bracelets that weren't needed.

The question then arises: How many bracelets are needed as money in our simple economy (i.e. surplus to those used for personal decoration)? The answer is that since surplus bracelets are only needed to facilitate transactions, there must be enough to allow all the necessary transactions to take place. Now in one week each person produces and trades four units of wealth (where one unit is one week's worth of basic or luxury food, jewellery or clothing, or half a week's worth of wheelbarrows). Although each person produces six units, two are for their own use. Hence assuming all transactions take place each week, each person needs four bracelets for trading purposes, or twelve bracelets in all

in the economy. Having four bracelets allows any person to buy a week's worth of goods before they need to sell anything, because when they sell they receive back the bracelets that they used to buy goods with earlier. Therefore no more than four bracelets are needed per person, and with more frequent trading fewer would be needed.

The quantity of money needed by a society is determined by the value and frequency of transactions it wishes to carry out.

What would happen if the jeweller continued to make bracelets when there were already enough in the economy for trading purposes? In that case there would be an oversupply, and people would become reluctant to trade their goods for bracelets because they already had enough. If I was producing basic food, then my willingness to buy a bracelet would be less than the jeweller's willingness to sell it, so the price of the bracelet would fall - I would offer less than a full week's worth of basic food, and this would be accepted because the jeweller doesn't want to be left with an excess of bracelets. No-one else would offer a full week's worth of their goods either. That is **inflation** and is the signal for the jeweller to make things other than bracelets because bracelets are no longer profitable - the time it takes to make a bracelet can be more profitably spent making something else. This illustrates a very important and basic rule of trade:

In free trade, when buyers' willingness to buy is less than sellers' willingness to sell the price falls, and vice versa.

What if there weren't enough bracelets in the economy to allow all the necessary transactions to take place? Let's say the jeweller stopped making bracelets because they weren't profitable in order to concentrate on making other things. Over time as bracelets broke or were lost the number would diminish, and eventually there would be an undersupply. Then two things would happen. Transactions that a person wanted to make would not take place if the buyer had no bracelets, and a buyer with bracelets would be able to demand more than a week's worth of other goods because the scarcity of bracelets would make them worth more. The way this would work is that with fewer bracelets than available goods sellers would be fearful of being left with unsold stock so they would be more willing to sell goods than buyers would be willing to part with bracelets, so to compensate they would offer more goods per bracelet, in the knowledge that they could buy more goods from others for the same reason. This is **deflation**, which can be very damaging to a real economy because it prevents transactions taking place that both parties want to take place, and stagnation, unemployment and often widespread poverty can be the result. In our simple economy, at the first hint of deflation the jeweller would realise that making bracelets would be more profitable than making other things, so bracelet production would resume until there were again enough to allow all required transactions to take place.

In this simple economy the availability of money in the form of bracelets is self-correcting only because money is produced by a worker in the economy who is free to produce more or less of it in response to profitability.

In an economy where money can't be produced by workers its availability is not naturally self-correcting, and this leads to severe problems that arise for counter-intuitive

and therefore widely misunderstood reasons - discussed in the next chapter.

13 A Fixed Money Supply in the Simple Three-Person Economy

Let's give our simple economy some money that the workers can't produce for themselves and see what happens - the results are quite revealing. Let's also assume that specialisation has gone on so long that each worker apart from A has forgotten how to obtain basic food other than by trading something for it. This is similar to a real economy where very few people are able to feed themselves entirely by their own efforts because they don't own enough land or they don't know how.

We begin with everything progressing purely by barter - money hasn't yet been developed - but just as the workers recognise the need for something to serve as money they discover some gold nuggets at the edge of the river where they go to drink each day. Searching all around they eventually find 12 nuggets, all similar in size and as it happens the only nuggets that exist in the vicinity. They share them out and agree to use them as money, giving each the ability to buy, as before, enough provisions from the others for a week.

All progresses happily for so long that all memories of barter have long been forgotten. One day worker A decides that it would make sense to save some money in case of illness or injury and consequent inability to work, when the extra money will allow normal purchases until full working capacity is restored. In order to save money some normal spending must be abandoned, so no jewellery is bought (saving one unit in the first week) and one day of wheelbarrow maintenance¹ is skipped (saving another unit in the first week). Now worker B is left with one unsold unit of jewellery and Worker C is left idle for a day (C's other five days are spent repairing and replacing B's and C's own barrows at two days each and one day for A). B and C can still buy everything they need for the first week, but at the end of it they each only have three nuggets instead of the normal four, and A has six nuggets. Now even without A saving any more money the economy suffers continuing problems. B and C can't buy the normal amount of goods in the second week because they don't have the money. Each must forego one unit of goods but neither can forego basic food, so C foregoes jewellery and B foregoes a week's worth of clothes. A spends normally. At the end of the second week A has five nuggets - gained three nuggets by selling two units of basic food and one unit of clothes (the other unit would have gone to B but B hasn't the money to spend on clothes) but spent four nuggets, and still has the two nuggets saved last week. Additionally A now has one unit of unsold clothes. B has three nuggets again - spent three nuggets and gained three nuggets - and has one more unsold unit of jewellery as well as the one unsold from the

¹ Neglecting maintenance doesn't impair the functionality of equipment immediately, though it saves money immediately. In business this often gives rise to conflicts between engineers who want high quality maintenance for long service life, and finance controllers who want to save money. Existing wheelbarrows will continue to function well enough for several weeks until they fall apart.

first week. C has four nuggets - spent three nuggets but gained four nuggets by selling four days' worth of wheelbarrow maintenance. As long as A holds on to her two saved nuggets there will only be ten nuggets being spent each week, so no matter who buys what there will always be two additional units of goods that remain unsold each and every week. In fact as unsold goods build up people cut back on their production so between the three of them there will be two idle days every week - corresponding to the two nuggets that aren't being spent.

In an economy with a fixed amount of money a one-off reduction in spending causes a continuing reduction in wealth creation.

This is an unexpected and damaging feature of using a fixed supply of money in an economy - that a one-off reduction in spending causes a continuing reduction in the creation of wealth. The reason is that the number of transactions is limited by the amount of money being spent, so every time those 2 nuggets aren't spent 2 transactions aren't undertaken, so 2 units of wealth go unsold or alternatively 2 days that could be spent in producing something useful are spent in enforced idleness. What has happened is that the prime function of money as a medium of exchange for wealth has been subordinated to its unfortunate secondary function as a store of value.

If A saves more each week (which she can because she can manage without everything except basic food which she produces for herself), before long she will have all 12 nuggets, B and C will have starved to death (luxury food on its own isn't sufficient to sustain life) and A will be working 60 hours each week (30 for her own basic food and 30 for her own clothes - she still has the knife but no longer any wheelbarrows - so her rate of production has dropped by a factor of three). She no longer has any luxury food, jewellery or wheelbarrows, but does have the 12 gold nuggets, which are completely useless. Her aim of saving money as a store of value in case of future illness or injury has backfired completely, much good did it do her!

This is the 'paradox of thrift' that was explained by Keynes in the 1930s. Saving money seems prudent for a single person or family but it is very imprudent for the economy as a whole. In economics we should beware of relying on our instincts - the results are very often not what we expect.

In this simple economy it is easily demonstrated what happens when someone tries to save money, but in a real economy where there are very many participants all trading with each other it is much less clear. It is also disguised by the fact that the money supply isn't fixed. If the supply changed in accordance with the real needs of the economy to maintain trade then when anyone spent less the loss of money could be compensated by an equivalent injection, and all would be well. But the money supply doesn't change in accordance with economic need, it changes in accordance with bank profitability - increasing in optimistic times when people are willing to take on more debt and banks are able to make more profit, and decreasing in pessimistic times when people are fearful of debt and banks fearful of losses. This makes the money supply and production extremely volatile. It is explained in detail in Part 2.

The paradox of a strategy being good for an individual but bad for the whole was illustrated very nicely by Joan Robinson (Robinson 1960 p41) using the analogy of a

crowd watching a procession. If an individual stands on a chair then he or she gets a better view, but if everyone stands on chairs then no-one gets a better view. The general term for this kind of paradox is 'the fallacy of composition', meaning that just because something is true for a single item in a group of items it isn't necessarily true for the group as a whole.

14 Money in the Real Economy

A real economy is vastly more complex than our simple economy and its money is also more complex. Perhaps the biggest difference is that in the simple economy (with jewellery as money) money was itself wealth - created by labour - and the money supply could be expanded or contracted at will simply by producing more or less of it. That was a great strength. The money supply could respond quickly and easily to any shortage or oversupply, so the quantity in circulation remained close to the level that the economy required. Money in a real economy is very different in that it is not wealth and not a product of labour, so there is nothing that ordinary people can do to bring more into circulation except by borrowing from banks, and that incurs heavy penalties in the form of interest payments - more on that in Part 2. Nevertheless in spite of major differences there are similarities. Saving money has a similar effect and is discussed in the following two chapters. The required quantity and rate of spend of money are also similar, in that they should be sufficient to allow all transactions to take place that people want and have the means for - meaning that sellers have goods or services to sell, and buyers have saleable assets (including their own future labour) equal to or in excess of the transaction value - we'll refer to these as **legitimate transactions**. Indeed this is precisely what money is for, to enable people to exchange different forms of wealth with each other.

A simple diagram illustrates the flow of money and wealth when the economy is working properly.

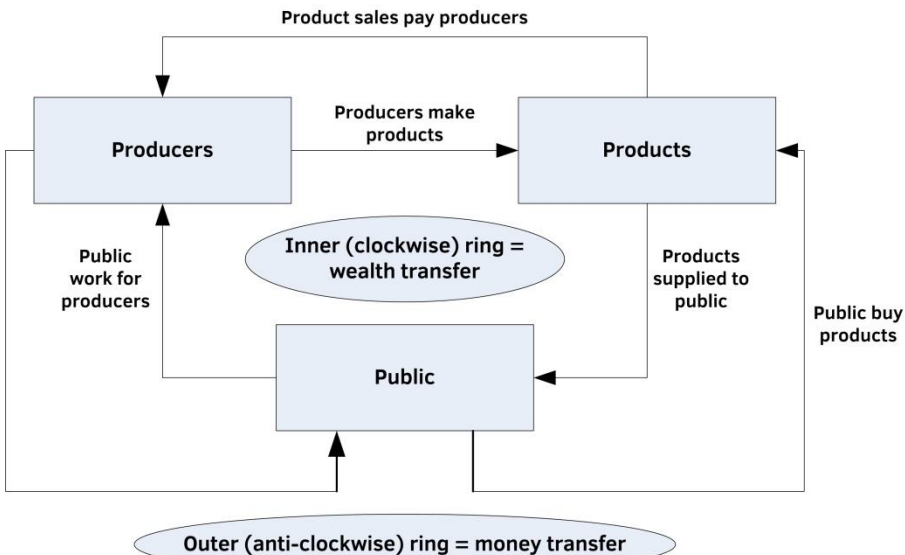


Figure 14.1: Wealth transfer and money circulation

Although it is the same money that circulates continually around the economy, it is new wealth that is created in each transaction. Money circulates but isn't consumed, whereas wealth is consumed or utilised but doesn't circulate. For wealth to be created, traded, consumed and utilised money MUST circulate.

A simple story illustrates this important effect. A person loses a £10 note in a pub one night. When clearing up the landlord finds it and pockets it. Next morning he spends it on a haircut and the barber then uses it to buy his lunch from the lady who owns the local cafe. The cafe owner gives the note to the window cleaner in return for his services, and in the evening the window cleaner buys a round of drinks with it in the pub. Later that night the person who lost the note returns and asks the landlord if anyone found it. The landlord, being honest, says that he found it, and returns it to its original owner. The £10 note is now back where it started from, having circulated around the local economy and made possible the creation of £40 worth of wealth in the form of a haircut, a lunch, window cleaning and a round of drinks. It is the same money that changes hands in each transaction, but it is new wealth that is created and consumed. Money's role as a lubricant is clearly seen in this story - it is the same money that enables every transaction just as it is the same oil that lubricates the engine bearings in every revolution.

If we remove the money from the story we can see what each person gets and gives. The landlord gives a round of drinks and gets a haircut; the barber gives a haircut and gets a lunch; the cafe owner gives a lunch and gets her windows cleaned; and the window cleaner cleans windows and gets a round of drinks. The notable feature is that what everyone gets is from a different person than the person they gave something to, which is exactly how the real economy works. It is money that allows multi-person exchanges, which is quite marvellous when you stop to think about it. We are so used to it that we take it for granted, but without money it would be impossible to keep track of who owed what to whom, and therefore very much fewer transactions would be possible.

What is really happening is that we are all working for each other, both in this story and in the real economy, and money is the lubricant that makes it possible.

The above story illustrates another important point. For the economy to benefit new wealth must be created and become available for use. Money for new wealth is payment for the time, effort and expense involved in creating it. When existing wealth is bought (wealth that has already been bought by someone else when it was new) it doesn't affect the economy because the economy has just as much wealth after the exchange as before it. All that happens is that money and existing wealth change owners.

All wealth in the story is new wealth. When existing products are exchanged the only new wealth, if any, is the service of making the products available to buy, not the products themselves. Therefore a good second hand car dealer provides the service of bringing a range of cars together, cleaning, repairing and servicing them, having them tested and provided with roadworthiness certificates, providing warranties and advertising them for sale. This service represents the new wealth that is created, which is exchanged for an income when buyers buy the cars. The dealer's profit is the excess of income over the cost of the cars together with all other associated expenses and that profit represents payment for the service that the dealer provides. In this case the service (new wealth) provided by the dealer for a particular car is consumed as soon as the car is

bought, as are many services, but it nevertheless added to total wealth prior to its consumption - as indeed does all wealth. The cars themselves don't represent new wealth because when they were new they were sold to someone else, who merely transferred them to the dealer in exchange for money.

It is important to separate spending on new wealth creation from spending on existing wealth transfer. Only the first adds to total wealth and therefore benefits the economy. The second adds no new wealth so it does nothing for the economy though it does benefit the parties directly involved.

If I sell my car to a friend then no new wealth is created, all that happens is that the car (existing wealth) and money change hands. The economy isn't affected by this exchange. This also applies if the car I sell to my friend has serious faults that I keep quiet about and charge twice the price it is really worth. I have made a profit by deception but that profit isn't income in exchange for new wealth because my friend, who is now my ex-friend, hasn't received anything in exchange for it except perhaps the satisfaction of giving me a black eye! In effect the profit represents a money transfer (extraction) by exploitation. In this case my deception becomes clear soon enough, but in many transactions deception or information hiding is much more subtle, especially in banking and financial trading as will be explained later, and as a result the bulk of what is thought to be new wealth created by those sectors is really extraction of existing wealth from others by exploitation. This is considered in detail in Part 2.

Making a profit from another's ignorance is not wealth creation; it is wealth extraction by exploitation.

Recall that wealth extraction is charging more for a product or service than a fully informed and unexploited buyer would be willing to pay.

When money is taken out of the picture and wealth alone is considered it is clear that the economy is a giant human-powered wealth creating and using machine, where people work continuously to produce the products that people need and want, and people continuously use them. Provided that the machine keeps on producing and using then all is well. To keep the machine working we need a means of persuading people to create wealth and to part with it to others without immediately receiving an equivalent quantity of wealth in return (that would be barter and as already discussed barter is very difficult and usually impractical). Hence what is needed is trust, the giver of wealth needs to trust that he or she will receive back the value of that wealth in due course, and that's what money provides. As long as people believe that money will retain its value then to an individual or business money is just as good as wealth and people have no difficulty in exchanging wealth for money. All that is needed therefore is for there to be sufficient trust, embodied in money, to allow all legitimate transactions to take place. It sounds simple - and it could be - but it isn't.

Sadly controlling the money supply in a real economy, given the way the system works, is very difficult indeed. This is why inflation and deflation strike such fear into all participants in the economy, especially governments, which can stand or fall on the behaviour of the money supply, as indeed can businesses, families and individuals.

This is a very peculiar situation. We have a system that has been invented and

designed by humans - there is nothing natural about money - and yet it behaves as though it was a natural phenomenon like the weather, beyond human control. Governments try to exercise a measure of control in the form of **fiscal policy** - taxing, borrowing and spending; and central banks try to exercise a measure of control in the form of **monetary policy** - setting the bank rate (the interest rate charged to commercial banks for BoE reserves - see chapters 39 and 41) and buying and selling securities such as government bonds and sometimes other assets in the market. However these merely provide fine-tuning and is only successful in the absence of major economic turbulence brought on by external shocks (natural disasters, raw material shortages, pandemics etc.) and internal events (asset bubbles bursting, excessive lending and borrowing, major debt defaults, currency attacks by speculators etc.). In these circumstances the levers available to government and central banks prove hopelessly inadequate, and the economy and everyone in it are tossed about like small boats on a stormy sea. The means by which governments and central banks try to control the money supply, why they are inadequate, and how it could be made so much better are examined in chapters 86 and 100.

15 The Effect of Too Little Money - Preliminary Discussion

This discussion expands on and reinforces the 'paradox of thrift' message for the simple three-person economy. I believe that it is worth labouring the point because it is so important. To begin let's simplify things in order to highlight the effects.

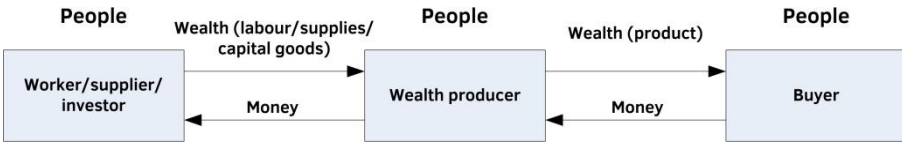


Figure 15.1: A basic transaction structure.

Figure 15.1 indicates simply that regardless of what form transactions take what happens is that people always transact with other people. Figure 15.2 completes the circle of transactions which reflects the situation in a real economy. Although this is a simplified picture it is able to illustrate the effect of saving money on wealth creation.

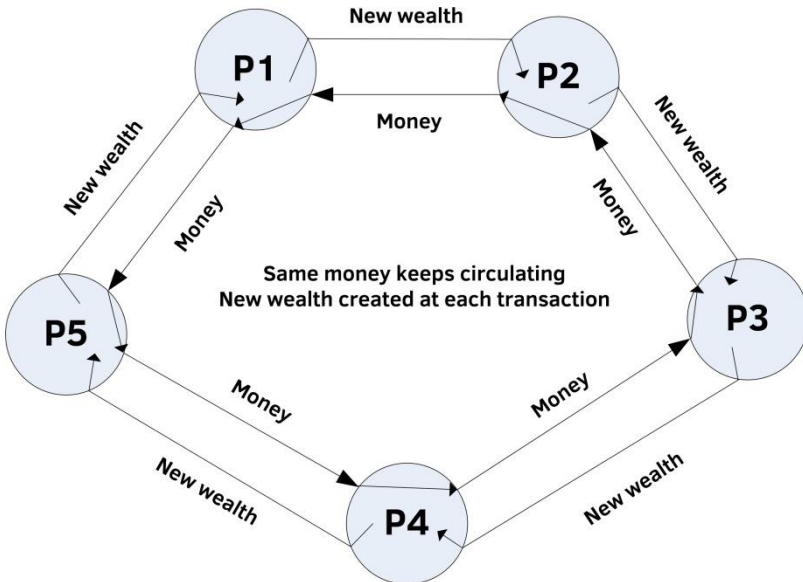


Figure 15.2: People transacting with several other people where the transactions come full circle as they do in a real economy.

Let's say that P₅ ('P' is for person), instead of saving money, decides to save half the wealth that she receives from P₄ instead of using it. She pays P₄ the normal sum of money and receives the normal amount of wealth in return. She puts half on one side for safe keeping and uses the other half. P₄ doesn't care what P₅ does with the wealth, her

only concern is being paid for it. P₄ uses the money to buy the normal amount of wealth from P₃, P₃ from P₂, P₂ from P₁, and P₁ from P₅. Nothing has changed as far as all the other people are concerned, this little economy keeps on working just as before, but with P₅ saving half the wealth she has bought. P₅ can go on saving bought wealth if she wants to, and so can any or all the others.

All well and good so far, and all is as expected. But now consider what happens if instead of saving wealth P₅ decides to save money. Money needs to circulate, so saving it can be expected to cause problems, and it does. Saving money is very much more likely than saving wealth because money can be exchanged for anything. She pays P₄ half the normal sum of money and buys half the normal amount of wealth from P₄. P₅ is happy with that, she didn't expect any more than half the wealth, after all that's her sacrifice for saving the money. But what about P₄? P₄ isn't happy at all. P₄ has only sold half the wealth she has produced so the other half remains unsold. Even worse she can now only afford to buy half the wealth that P₃ has produced, so half of P₃'s wealth remains unsold, and the same for P₂ and P₁. When P₁ comes to buy the wealth that P₅ has produced again she can only buy half the wealth so half of P₅'s wealth remains unsold. The net effect is that everyone is left with unsold stock and only P₅ has any extra money. If P₅ had intended to keep saving money then she now finds that she can't because her income has dropped by half. Let's say she spends all her remaining income because she can't cut back any more, so she buys the unsold stock that P₄ was left with after the first round. Similarly P₄ buys P₃'s unsold stock, P₃ buys P₂'s, P₂ buys P₁'s, and P₁ buys P₅'s. Now there is no unsold stock, but only half the money circulating in the economy. As a result all decide to cut back on production to avoid being left with unsold stock, and the economy eventually settles down with each producing half the normal amount of wealth and half the original money circulating. The economy is now stable again, but P₅ can't save any more money, and by saving just half of one payment great damage has been done to everyone including P₅, and there is only half the employment there was originally. This is again Keynes' paradox of thrift that was referred to earlier. Saving money is another example of the confusion between money and wealth. We think that saving money is the same as saving wealth, but as we have seen it as anything but.

When spending drops the economy declines until production matches the new lower level of spending.

This is a simplified illustration and having so few participants exaggerates the effects, but the mechanism it illustrates is accurate and the paradox is very real and very damaging, and is exactly what happens when people stop spending for any reason, and not just any form of spending, but spending on new wealth production. It is what causes recessions and depressions.

Whenever someone cuts back on spending on newly created wealth, either someone else must spend to make up the difference or there will be unused services or unsold stock, which will only clear when production has been scaled back to match the reduced level of spending, the result of which is unemployment.

This outcome is not widely recognised. It illustrates clearly the dangers of treating money as wealth, as most people including economists and especially politicians do all the

time. The essential factor that makes it happen is saving that which is intended for trade - i.e. money - rather than saving that which is bought for use - i.e. wealth. Hence it is very much more likely in economies that use money - regardless of the form that it takes - because to have the same effect in a barter economy one would have to save the wealth that one produced for sale to others *instead of* using it to buy wealth from others, and that is much less likely because if that wealth was wanted for saving then sufficient would be produced both to meet one's own saving requirements and to use for buying wealth from others. In a barter economy the wealth used to buy things is produced by the buyer - its availability is within the buyer's own control, whereas in a money economy the money used to buy things can't be produced by the buyer, it has to be obtained from someone else - from money received as income.

Storing wealth for use in the future rather than using it now is a prudent thing to do as it increases security, providing a buffer against unforeseen events that can damage later production. Storing money seems to serve the same purpose in that it provides entitlement to future wealth, but it is not at all the same thing because as we have seen money is needed to provide another person's income, and the more that is stored the less future wealth that person can create. So although storing money seems logical and makes sense for the individual, it is counter-productive for the economy as a whole. If a lot of people store money at the same time then the only way that the economy can avoid harm is if someone else (normally the government) spends sufficiently to compensate.

Delaying use by storing wealth for the future is prudent, but storing money for future wealth entitlement is counter-productive because it reduces the amount of wealth that can be created.

The foregoing arguments show why the gold standard - when money was fully guaranteed by gold - was a very poor basis for an economy. The supply of money depended on the supply of gold, and when that was in short supply - due to spending on too many imports or hoarding at times of uncertainty about the future - wealth creation necessarily slowed down and people suffered as a result. The only way to get more money into the economy was for the rulers to take it from the hoarders (difficult because gold is easy to hide) and spend it, export more goods to earn gold from abroad, or conquer foreign countries and take control of their gold. It led to a world of hostile competition

In 1924 in his influential publication 'Monetary Reform', Keynes famously said in response to those who advocated a return to the gold standard:

If we restore the gold standard, are we to return also to the pre-war conceptions of bank rate, allowing the tides of gold to play what tricks they like with internal price level, and abandoning the attempt to moderate the disastrous influence of the credit-cycle on the stability of prices and employment? ... In truth the gold standard is already a barbarous relic. (Keynes 1924 p172)

16 The Effect of Too Little Money - How the Situation Plays Out in the Real Economy

Let's say that we begin with **full employment**¹ and the right amount of money circulating in the economy to allow all legitimate transactions to occur. Now for some reason people's confidence in their ability to maintain living standards drops. It might be caused by a natural disaster, a financial bubble bursting, a significant rise in interest rates or a sharp increase in the price of an essential product such as oil. In these circumstances people begin to fear for the future and cut back on spending, repay debts, refrain from new borrowing, and hoard money. These activities take money out of circulation. In cutting back people don't reduce all spending equally, they continue to spend on things that give them the most benefit, but cut back on things that give little benefit. Although everyone will be different in these respects there will generally be a decline in spending on non-essential products, putting different business sectors under different amounts of pressure.

When money is removed from the economy there is an uneven reduction in spending, the less essential item producers suffering more and the more essential item producers suffering less.

The spending that did occur on non-essentials paid the wages of people who produced them and the profits of the business owners, so as more and more people stop buying them profits are reduced for these products. The producers cut back on production by laying workers off to try to minimise the number of unsold goods, and also reduce prices in an attempt to stay in business, but there are limits to how far they can reduce prices because they still have materials to buy, equipment and building maintenance to carry out and rents to pay, so profits and solvency are very vulnerable. Producers also sometimes try to reduce wages of remaining employees but unless it is done as a last-ditch effort to save the business it can be counter-productive by causing great resentment and loss of company loyalty. Eventually either production is cut back to the level that the market will still support or the business stops trading. In both cases workers lose their jobs and some others suffer a loss of pay, and these people then have less money to spend so they also cut back on non-essentials. This takes away yet more workers' incomes and owners' profits, and so it goes on in a downward spiral.

The spiral effect is a feature of the economy working in a loop - work/create wealth/earn, spend/obtain wealth/consume - and this feature multiplies the effect in terms of created wealth of there being less money in circulation. What happens is that the initial drop in spending reduces the wealth created during the first pass round the

¹ I use the term in the sense that available work is shared fairly between all who want to work, where available work corresponds to that which is required to create all, or as much as possible, of the good wealth that people and society wish to use now and save for future use.

loop, then that loss in wealth itself causes a drop in money available for the second and subsequent passes - without any more money being removed. Let's say that £100 million is removed from circulation, then in the first pass round the loop £100 million worth of wealth is lost to production. That loss of wealth results in £100 million less income for workers, who are then able to spend less for the second pass, not the full £100 million but (say) £70 million because the original £100 million wouldn't all have been spent, some would have leaked out of circulation by the repaying of debts or hoarding as discussed above. So on this basis without any more money being removed every pass round the loop results in 70% less wealth being created than in the previous pass. Overall, for very many passes round the loop, there will be £333 million less wealth created in total² for a one-off reduction of £100 million in money in circulation. This is known as the **income multiplier** (in this case it multiplies a reduction in income) and is extremely wasteful because wealth that is not created can never be recovered. If money is repeatedly removed then the income multiplier magnifies the impact in terms of reduced wealth for every separate removal.

These effects and their causes are analysed in more detail in chapter 23.

How far this process goes depends on how strongly people feel the need to cut back and how much scope governments or central banks have to intervene to limit the effects. If the original cause of the problem is short-lived, limited in the scope of its effects or not too serious, and the government or central bank can lower interest rates in order to stimulate borrowing and spending, then the cutback will be relatively mild and the economy will bottom out at a lower level of wealth creation. This is a recession. If however the cause was long-lasting, widespread in the scope of its effects or very severe then the government or central bank will find that the normal levers available to them to reflate the economy are ineffective and the downward spiral will continue, money becoming ever more scarce and therefore more valuable, prices and some wages falling for more and more products, the extent of the fall being higher the less essential the product (Dalio 2015 Part I Chapter 2 pp11-18).

In this situation unemployment reaches very high levels and skills are lost, idle machinery becomes unserviceable due to lack of use and maintenance, and because of these effects the ability to create wealth declines. This is deflation, and in this form is very damaging to an economy. Once under way deflation tends to feed on itself because people realise that debts will become harder to repay in the future as their incomes fall so they pay them off as soon as possible, and people who are inclined to spend delay because they know that prices are dropping so they will pay less the longer the delay. The effect of these factors, as well as general saving and cutting back, takes yet more money out of circulation, more people lose their jobs, and wealth production is reduced even further. The natural result of this process in the absence of a welfare state or charity is an economy cut back to the barest essentials and many people in dire poverty, many others

² A stable state is reached after many passes round the loop when no further reductions in wealth creation occur. This happens when the whole reduction of £100 million is accounted for in leakage (hoarding or debt repayment), and since the leak fraction in each pass is assumed to be 30% this is when £100 million/0.3 (which equals £333 million) less wealth has been created in total. Mathematically it can be derived from the infinite geometric series (100 + 100x0.7 + 100x0.7x0.7 + 100x0.7x0.7x0.7 + ...) which equals £333 million.

having already starved to death. A welfare state and/or charity raises the floor for the end of the process, but even with these in place the result is a situation where many fewer people are employed, many fewer goods and services are produced, and overall the wealth production in the economy has dropped substantially. This is a depression, and it is indeed a very apt name, because the all-pervading mood in these circumstances is one of severe depression.

There is a secondary effect that should be mentioned that serves to dampen the downward spiral to some extent, which is that as people become worse off they are forced to spend a higher proportion of their income, so spending drops at a lower rate for each successive pass round the loop. This is a positive effect but not one that can prevent the damage, because spending is still dropping, and it is that which is harmful to people and to the economy.

The shortfall in wealth production from that at full employment is known as **spare capacity** - where there are people and unused machines available for work and work that can be done, but because of lack of money they can't get together. The reason is that potential employers won't hire people for fear that the goods they produce won't be sold, and they are right because people don't have sufficient money or willingness to buy the goods that could be produced. It is only the availability of money that has changed, and money is only symbolic, but nevertheless real people are harmed and real lives are blighted. Recall the point emphasised earlier about everyone having within themselves a wealth creating engine where it can only be started by another. This is where the irony that it encapsulates is felt with real pain.

When an economy with sufficient money for full employment experiences a reduction in spending, less wealth is produced, unemployment rises, spare capacity builds up, and prices and some wages fall, especially in industries producing non-essentials.

What has happened is that the economy has shrunk. The view of neoclassical economics (pre-Keynes) was that the wage rate brought supply and demand for labour into balance, so that when unemployment rose the real wage³ should drop to make employing people more attractive to employers and thereby bring back full employment. The theory was that money wages should fall, but prices should stay the same and therefore profits should rise. This sounded quite reasonable and for a single firm or group of firms this is indeed what happens, but it neglected the fact - explained by Keynes in his General Theory (Keynes 1936) - that for the economy as a whole earners are also spenders, and when people earn less they have less money to spend, so there are fewer buyers that can afford existing prices so demand is lower and that causes prices to drop and profits to fall back again, thereby bringing the share of proceeds going to workers and the real wage rate back up to a large extent. This is examined further in chapter 35. It is another paradox - the real-wage paradox - caused by regarding the economy as a whole as behaving in a similar manner to a single participant in the economy, in this case a single firm.

³ The 'real' wage is the wage after adjusting for inflation, in contrast to the 'money' or 'nominal' wage which isn't adjusted.

Nevertheless if all wages and all prices dropped in the same proportion at the same time then nothing need change; the economy could continue as before but with all the same transactions being undertaken with less money. In fact this is what happens when a country's currency falls in value. All domestic prices and wages fall together relative to foreign currencies, but since things are bought and sold in the domestic currency the effect isn't very evident so things go on much as before, albeit with some domestic prices increasing when influenced by dearer imports. Economists who think that all wages and prices should drop in the same proportion when spending drops blame trades unions for resisting wage cuts, and blame the welfare state and charities for preventing workers from being forced to accept wage cuts. The problem is that in order to transform an 'in principle' theory into a real-world effect there has to be a mechanism that can perform that transformation, and in a society where people have freedom of choice there isn't one. In the real world a loss of money in an economy *cannot possibly cause all prices and all wages to fall at the same rate* because when people are short of money they dispense with those products that provide the least benefit to them, which are generally the less essential products, and those products suffer the greatest drop in demand and hence price, whereas the more essential products retain their demand and their prices don't fall. Therefore when people have less money to spend prices (and some associated wages) necessarily fall at different rates.

This reflects the difference between money as used by individuals and families, and by the economy as a whole - the paradox of thrift. For an individual or family money comes into their hands from wages, benefits, savings interest and so on, and goes out of their hands when spent. In effect it is used up in the normal course of life and has to be replenished at regular intervals. In these circumstances thrift is a virtue. However for a whole economy it is completely different, and many people, including many politicians⁴ don't realise this. Within an economy money is not used up, it just changes hands and keeps on circulating. The vital difference between an individual or family and the whole economy is that in the economy one person's spending is another person's income, and when people cut back on spending for whatever reason in significant numbers then workers lose their incomes because without spending producers cut back or stop production.

Wealth creation (known as supply side economics) is generally the main focus of attention in neoliberalism, but sale of wealth (demand side economics) is every bit as important because it provides the destination for created wealth, and without a destination wealth creation soon stops - a company that can't sell its products soon stops producing them.

Since spending on the things that are produced in an economy is what maintains the economy, thrift is most definitely not a virtue for the economy as a whole. Wealth use is just as important as wealth creation, because it provides the destination for created wealth, and without a destination wealth creation comes to a complete stop.

⁴ David Cameron had to re-write his 2011 Conference speech to change his original recommendation for households to pay off debts, when economists advised that '...it would be economically disastrous...'. See <https://www.theguardian.com/politics/2011/oct/05/cameron-speech-rewritten-credit-card-call>

It is of the utmost importance to recognise that the economic engine - wealth being created by people and machines working; people being paid wages; wages being spent on wealth - can never be allowed to stop, because people need to consume a continuous supply of wealth in order to live. At the most basic level they require survival needs to stay alive, and at slightly more prosperous levels they require self-respect needs to live with dignity. Beyond that there are things that make their lives more secure and comfortable, and after that more enjoyable and luxurious - these are the least necessary and as already argued excesses are unjustifiable when there are people without basics and unmet social needs. For all these things capital as well as consumer wealth is needed. The economic cycle of creation and use must continue and anything that slows it down means that there is less wealth available for people to use. Creation and use needn't be simultaneous of course and seldom are. Indeed much wealth (including capital wealth) is created now for use in the future, but when the future comes and that wealth is used yet more wealth will (hopefully) be in course of creation at that time for a later future. Overall, in any time period, in a well-functioning economy, wealth that is created will be balanced by wealth that is used, although the wealth used in a particular period need not be the same wealth as that which is created in the same period.

In order for the economy to function properly wealth must be traded and used at the same rate at which it is created.

17 *The Effect of Additional Money in a Depressed Economy*

Let's say that with our economy in the depths of depression more money is introduced. Provided that the people who receive the extra money are people who will spend it on goods and services that provide an income for others, more goods and services are sold that previously weren't sold, and the producers receive money that previously they didn't receive, so they begin to regain confidence in the saleability of their goods and hire more people. The newly employed people now have more money so they spend more, and so it continues, the spare capacity diminishing and the prices and wages in less essential products picking up. Now that people have more purchasing power they have more products available to them and more money to buy them with - so they tend to buy more non-essential products and better forms of essential products, because they have the means to do so. Hence the prices of the original forms of essential products drops in response to the drop in demand for them, and the prices of non-essentials and better forms of essentials rise in response to the increase in demand for them. Because of this effect the original essential product producers lose out even in the face of economic growth, and the real winners are the non-essential and better essential product producers. In other words the reverse of what happened before now takes place. The increase in prices and wages is not inflation (not yet anyway); it is a reduced level of deflation.

In these circumstances the income multiplier works in our favour to build wealth creation, and if money is repeatedly introduced then wealth creation can build rapidly. Recall the economic loop - work/create wealth/earn, spend/obtain wealth/consume - this feature now happily multiplies the effect in terms of created wealth of there being more money in circulation. Let's say that £100 million is added; then in the first pass round the loop £100 million worth of additional wealth is created. The workers who created that additional wealth are paid for their work, so there is (say) £70 million more money available for the second pass (not the full £100 million as explained earlier). So without any more money being introduced every pass round the loop results in 70% additional wealth being created than in the previous pass. Overall an extra £333 million worth of wealth will be created for a one-off increase of £100 million in money in circulation. If money is repeatedly added then the income multiplier magnifies the impact in terms of created wealth of every separate increase.

This kind of money injection can only be done at the level of the economy as a whole, i.e. by the government, because the private sector is stuck in the deflationary spiral. Consumers can't afford to spend, and producers and investors won't spend because the demand isn't there for their produce. However, provided that the money introduced is substantial, another factor comes into play, and that is what Keynes described as 'animal spirits'. Provided that sufficient money is injected to generate a large spending increase, producers and investors that had been reluctant to invest due to legitimate fears about inadequate demand now have more confidence, and are increasingly willing to expand production and invest in new businesses. This investment has an immediate effect due

to increased spending on capital goods and labour, and a delayed effect due to increased production. This adds to the original injection, hopefully to make it a sustained and self-fuelling recovery. When this takes hold the government needn't keep adding more money. It's like pump priming. Provided that the initial injection is sufficient to prime the pump the pump itself takes over. In these circumstances the income multiplier just keeps on multiplying until all the spare capacity is used up, and the economy is running with full employment at maximum capacity again.

A one-off increase in money in circulation causes several times that increase in the worth of wealth created because of the income multiplier, and if sufficient new money is added then the recovery becomes self-fuelling due to 'animal spirits' taking hold of investors who add further injections of their own.

However it's not all good news. After a severe recession or depression, and even at other times, there often exists **structural unemployment** - unemployed workers with skills that are no longer needed, and unemployed workers living far from centres of employment. These often go together when a former large industry shuts down because it can no longer compete in the world market. At these times simply increasing the money supply isn't sufficient to absorb this type of spare capacity or to generate animal spirits, and more judicious and targeted spending is needed on retraining and subsidies for the setting up of new factories and enterprises in affected areas. In these circumstances it can take considerable time, sometimes many years, for improvements to become visible and especially for animal spirits to kick in.

The redistribution of prices between essentials and non-essentials in cases of shrinking or expanding economies is reflected in the share prices of companies that sell essentials and non-essentials. Here the share price changes don't wait for the economy to shrink or grow, just the expectation of shrinkage or growth is enough for share prices to change, those for essential products (known as defensive stocks) rising relative to non-essential products (known as cyclical stocks) for an expectation of shrinkage, and vice versa for expectation of growth. The business cycle is a well-known phenomenon and reflects the fact that the economy regularly cycles between varying degrees of growth and recession. Cyclical stocks are so named because they tend to follow the business cycle, doing well in periods of growth and badly in periods of recession, and defensive stocks do the opposite. The business cycle and its cause are discussed in chapter 52.

The very fact that we have a phenomenon called the business cycle in spite of governments' attempts to tame it indicates clearly that there is poor control over the economy. Money supply and spending are almost always out of kilter with wealth creation.

18 The Effect of Too Much Money

If yet more money is introduced and spent in an economy that already has enough money for full employment then there is no more spare capacity available to absorb it, so the additional money is used by the people who first get it bid up prices for the things they want, and the increased profits allow the producers of those things to try to expand production and hire more workers. But since there is already full employment if more workers are taken on then they have to be paid more to tempt them away from other producers, who lose workers and their output drops, so their goods become more limited in supply and then their prices are bid up by people who want them, and they increase wages to tempt workers back again. Eventually the wage and price rises ripple through the economy until everything is as it was before, but with higher prices and wages all round to absorb the extra money that was introduced. If the increase in money is temporary then there will be a one-off increase in wages and prices but no more, and relatively little harm is done. Inflation will register in one year but not continue. If however new money continues to be introduced year after year then the same things will happen but there will be continuing inflation, and if significant then it can be very harmful.

When an economy with sufficient money for full employment experiences an increase in the money supply and spending, employment remains the same but prices and wages rise to absorb the increase, which is inflation.

If new money is introduced each year in substantial amounts then people become attuned to inflation. They recognise that their money is losing value so they spend it quickly before prices go up again, and this causes growth in the economy as money is exchanged for wealth as quickly as possible. Hence higher economic growth often appears alongside high inflation, but as a means of promoting growth inflation is not to be recommended because it also fuels further inflation as people bid prices up in order to rid themselves of their money as quickly as possible. This effect makes high levels of inflation very difficult to control and it is very harmful to many people, especially those on fixed incomes and those who have to live on savings.

Inflation also has a major impact on debts, in effect making debts that were taken on before inflation took off easier for borrowers to repay (provided that their incomes rise with inflation) and reducing the value of such debts to lenders. This can hit non-bank lenders hard, because inflation causes them to lose value as shown in the example below. Banks are different in that they don't lend anything of value so they have no value to lose, though they often apply variable interest rates, especially for long-term loans such as mortgages, to ensure that the interest they receive keeps up with inflation. The effect of inflation on bank lending is discussed in chapter 48.

Say a debt for a year of £100 is taken on at 5% interest, then £105 is payable at the year end. The £100 is used to buy goods at that value at the beginning of the year. If,

however there is inflation at 10% during the year then the price of goods rises 10% over the year, and the goods that were bought at the beginning of the year for £100 cost £110 at the end of the year. Hence the £105 that pays the debt off to the lender at the year-end is worth £5 less than its value at the outset, which is a loss to the lender and a gain to the borrower because he or she now has goods to the value of £110 that only cost £105. Because of this effect lenders always try to anticipate the level of inflation and add it to the desired rate of interest. They always get it wrong of course to a greater or lesser extent, because with the current monetary system future inflation is one of life's great unknowns. Deflation has the opposite effect on debts, making them more expensive to repay for borrowers and more valuable to lenders. Both effects are harmful.

The above reasoning shows that there is an amount of spending in an economy that is appropriate for full employment and allows the required quantity of legitimate transactions to be undertaken. More spending causes general increases in prices and wages, and less spending causes spare capacity and unemployment with uneven reductions in prices and wages. The quantity of money available in the economy should therefore be sufficient to enable the full employment level of spending to be undertaken together with an excess to allow for some money to be out of circulation.

It is important to note that inflation always occurs whenever the product sought isn't produced in sufficient quantity to keep up with demand. The above discussion has focused on the products of labour, when labour is in short supply because of full employment. Exactly the same effect is seen in assets such as property, equities and debt, which don't appear in the most-often quoted measures of inflation - Retail Prices Index (RPI) and Consumer Prices Index (CPI), which combine baskets of commonly bought goods and services. When mortgages become easier to obtain house prices tend to rise because the housing stock can't increase at the same rate as demand, and when people have money in excess of their spending requirements they invest it in equities and debts, which again aren't produced in response to demand so their prices inflate, often significantly.

The rates of inflation or deflation are different for every product, and occur whenever demand for a product is higher or lower than supply. If demand exceeds supply then the price inflates, and vice versa.

19 *Economic Growth*

It is usually accepted without question that economic growth is a necessary and good thing. It is one of the basic principles of neoliberalism, but it is only necessary and good for those who don't already have enough. For those who do - most people in the developed world - growth for its own sake makes little sense and can be positively harmful in terms of damage to the environment and depletion of resources - see chapter 7. Therefore in rich countries the requirement should be to share wealth more equitably within the country and to devote more to combating climate change and helping those in poor countries to achieve adequate material wellbeing. Growth is only necessary if there is insufficient productive capacity to achieve these ends.

However we don't yet live in world that wants adequate material wellbeing for everyone, we live in a competitive world where countries vie with each other for supremacy in terms of national prosperity, and if that end is served by disadvantaging other countries then so be it. For all the talk about free trade and globalisation bringing prosperity to all the reality is very different. Rich countries make the rules that all must follow, and those rules are designed to serve the interests of wealth power. All this is discussed in detail in Part 3.

Nevertheless it is important to understand what brings about economic growth, because many people depend on it to lift them out of poverty, so let's examine it.

It was shown above that additional spending can bring about growth but only if there is spare capacity. If not, all it does is cause inflation. To bring about growth in the absence of spare capacity what is needed is innovation, efficiency improvements¹, advances in technology, working longer hours or growth in the working population. When these things happen more wealth is created, there is more surplus wealth to trade, and the economy grows. However if the money supply stays as it is then there is no increase in purchasing power and growth will be restrained. This is because when production improvements occur or new desirable products appear some of the existing purchasing power is used to buy them, which means that other products that would have been bought are not now bought. Therefore the production of those products becomes spare capacity, which must be absorbed (i.e. the potential wealth that they are capable of producing must be produced and traded) in order for the economy to grow. All that has happened so far is that new or improved products have been substituted for existing products, which is not growth; it is just a transfer of purchasing power from one set of products to another. There is *potential* growth however, in that spare capacity has been created from the displaced production without any loss of wealth creation and trade.

The value of this spare capacity to the economy is the exchange value of the wealth

¹ in the sense of all input usage and undesirable output production being costed properly by taking full account of their overall social harm; not as at present when the cost of that harm is suffered by the populations of poor countries who are unable to resist, or dumped on future generations.

that it produced before it was displaced, and this is the amount of extra spending that needs to occur in order for the spare capacity to be utilised. If enough money is added to allow this extra spending then initially it is used as investment by the displaced producers to upgrade equipment to produce better products, develop and produce new products, or engage in other activities to get back into the game, and thereafter the money is used to buy the products that are produced. If successful then the investment will repay itself in due course in enhanced turnover, and the capacity that was spare will then be utilised and full employment will be restored. If the displaced production fails to compete, then it will cease to trade and the workforce will lose their jobs. This still represents spare capacity, which will hopefully soon be utilised by existing or new companies in expanding production or creating new products. This process will utilise the spare capacity just as effectively as before, and the added money and corresponding new spending will again initially be used as investment in retraining the workforce for their new jobs and in buying new equipment for the expanded or new production, and again thereafter in buying the products.

If new money is not added to the economy then the spare capacity that is created will still be utilised eventually by increased spending with the existing money, but it will take longer than it otherwise would, because the money for investment will be harder to come by as it is in short supply and it will cost more in the form of higher interest charges. The outcome will be full employment and lower prices on average to reflect the increased value of money (i.e. same money but more wealth transacted). With added money the transition will be quicker and less costly to the displaced producers, and prices on average will not change.

A common misconception is that an increase in property or financial asset prices represents economic growth; it certainly feels like it to property and asset owners. This is not the case however because no additional wealth has been created, all that has happened is that buyers are willing to pay more for these things. Economic growth is an increase in created wealth.

20 *The Great Trickle-Down Deception and its Implications*

We need to determine who buys what in order to find out whose behaviour is most helpful to the economy and whose is least helpful, and from that decide who should be encouraged in their normal habits and who should be discouraged.

What do people spend their money on? It depends of course on how much money and wealth people already have. People with almost none can only buy things that are vital to life itself, and there are many who lack even the means to do that. The more wealth and money they have the things people buy move up the scale from survival needs to self-respect needs to wants and luxuries - see chapter 6. When people have enough to satisfy most of their desires they generally become concerned about maintaining the value of the wealth they have, and this opens up a vast range of potential investments - things to buy that hold out the hope of at least maintaining and possibly increasing their value over time.

Traditional economic wisdom has it that investment is good for the economy. The argument is that the more rich people have the more they invest and the more that creates jobs and benefits everyone by increased production in the future. If poor people have more money they don't invest it, they merely spend it on additional consumption, which does nothing for the future and once spent the extra money is gone. Investment is good for the economy, consumption is bad. This argument is superficially appealing but it once again confuses wealth with money. Spending on consumption means spending on new wealth, and as shown in chapter 14 it is exactly this form of spending that maintains the economy. When spent on new wealth money pays its production costs and an element of profit, so it at least enables another similar product to be produced. If demand is high enough the producer will use the profit to expand production, so in these circumstances consumption spending *does* increase investment. As will be shown in section 20.4 investing money more often than not does nothing for the economy. Traditional economic wisdom, although it sounds reasonable, has it precisely backwards!

In the traditional view inequality is a side effect of policies that make the overall economy bigger, and everyone, including poorer people, are better off than they would be with a more equitable distribution of wealth. This is the famous 'trickle-down' belief that is used to justify ever increasing income and investment returns for the already well paid, and those associated economic policies that promote it. This policy is about further enriching the already rich by giving them the lion's share of created wealth, so that although they become vastly richer than the majority in absolute terms - so the theory goes - the majority have more than they would have if the rich took a smaller share. As usually stated the philosophy promises ordinary people a small slice of a very big pie, which is bigger than a big slice of a very small pie. I hope and trust that faith in this belief is wearing very thin by now, after nearly forty years of such policies with massively increasing wealth and income gaps, little or no benefit to ordinary people to show for it, all economic growth captured by the already wealthy, and a massive worldwide crash that

all but finished the modern economy altogether. Of course those who are truly faithful to this theory still believe in it, asserting that its apparent failure was due to the policies of the last thirty-odd years not going far enough - *if the medicine didn't work then the dose can't have been big enough.*

20.1 How the trickle-down fantasy is supposed to work

John Quiggin expresses the accepted view very succinctly:

...according to the trickle-down story, that which is given to the rich will always come back to the rest of us, while that which is given to the poor is gone forever.
(Quiggin 2010 p150)

The basis of the trickle-down theory is that everyone who is rich uses all income greater than that needed for themselves to invest, and investment means setting up new businesses or expanding existing businesses, thereby creating more wealth, more jobs and increased prosperity all round. *After all you never get a job from a poor person - right?* It sounds plausible, but it is easily shown to be false. The pie is the total wealth (national income) created in an economy in a given time period, and no matter who does what it can only get bigger until all spare capacity has been used up¹, thereafter it stays the same. At that point a bigger share of wealth entitlement for the rich must be balanced by a smaller share for everyone else so even if it works at all workers can only be better off while spare capacity is falling, which can only be a transitory phase, afterwards they will become progressively worse off. The idea that the rich can be given a bigger share of a static national income continuously and as a result the non-rich also get a bigger share of a static national income continuously makes no sense at all. In fact if we play it out in the real economy we see that spare capacity doesn't even fall, so at no stage are workers better off.

Let's give the rich more money and assume that they spend all the excess over their own requirements on new and expanding businesses - i.e. on creating new jobs - and see what happens. More and expanded businesses means more production, more employees earning wages means more demand - all good so far - but then we reach full employment. At that stage the rich are still getting more money than they need for themselves, so they continue to set up and expand businesses. But now there aren't any unemployed workers waiting to be hired, workers have to be attracted from existing employment, so higher wages must be offered. Workers transfer from lower wage jobs leaving them short-staffed, so they too must offer higher wages, but no additional wealth is being created because there is no more spare capacity to create it. In order to pay for the higher wages product prices rise. Now let's say that extra money is introduced into the economy to cater for the higher wages and prices. This causes inflation, but without anyone being better off in real terms because no more wealth is being created. If money continues to be introduced then inflation will start to spiral upwards as it did in the 1970s, until

¹ New technological developments and techniques improve efficiency and create additional wealth, and as they are taken up they create spare capacity, but their future emergence can't be anticipated - they don't emerge merely by giving more to the already wealthy - so spare capacity can only take account of what is known at any point in time.

measures such as raising interest rates are taken to stop the dangerous spiral.² At that stage no more money is introduced, which is the same as if no new money had been introduced in the first place. Now, producers find that they can't raise prices as much as the wage rises because there isn't any more money in the economy, so they are forced to reduce their own profits in order to pay the higher wages. Workers have more money, so they can pay higher prices for things that workers buy, but business owners have less money, so they aren't able to pay the original prices for the things that business owners buy (capital goods and premises for new and expanded businesses), and therefore they buy fewer of them. Remember that in this theory the rich spend all their excess income on production, so as their profits diminish the rate at which they can set up and expand businesses also diminishes, until they have no excess income. At that stage there is nothing driving further change, but the proportion of national income going to workers has risen - because of the wage rises, and the proportion going to the rich has fallen - because of the falling profits. The transfer in favour of workers began when full employment was reached³, and stopped when the rich had no excess income to invest.

Is this what has happened over the last thirty odd years that trickle-down has been paraded before us as the utopian dream? Clearly not. As Nick Hanauer⁴ said:

...if it was true that lower taxes for the rich and more wealth for the wealthy led to job creation, today we would be drowning in jobs!⁵

We would soon have seen full employment, which would have been preserved thereafter as workers became ever better off and the rich became ever worse off. Ha-Joon Chang also recognised the fallacy:

Once you realize that trickle-down economics does not work, you will see the excessive tax cuts for the rich as what they are - a simple upward redistribution of income, rather than a way to make all of us richer, as we were told. (Chang 2011 p xvi)

It's true that you seldom (not never) get a job from a poor person, but you don't get a job from most rich people either. Jobs in the private sector are only offered if they make more money for business owners than the cost of the employees, trickle-down would have us believe that rich people offer jobs even when it makes them less money! *Do you think the rich are that daft? No, neither do I.* This point is key:

A person is only employed as long as the employer profits from their labour.

² Raising interest rates is the standard method, but this can be very damaging to an economy by reducing the availability of money, stifling production and raising unemployment. Much better is for the state to have full control of the money supply to prevent dangerous inflation in the first place - see chapter 55.

³ In fact it began before that as employment became easier to obtain. As workers become less fearful of unemployment they are less willing to work for poor wages, because they can more easily go elsewhere for better pay.

⁴ https://en.wikipedia.org/wiki/Nick_Hanauer Nick Hanauer is very rich but strongly denounces inequality. For his views he is roundly condemned by neoliberals.

⁵ <https://www.youtube.com/watch?v=bBx2Y3HhplI>

20.2 The fantasy exposed

The glaring fallacy in the theory is that the rich don't use all their excess income to set up and expand businesses, they certainly invest their excess money, but there are many more investment opportunities than setting up and expanding businesses. In fact most rich people don't set up or expand businesses at all. New businesses are set up by entrepreneurs, many of whom have good ideas but no money of their own, so they have to borrow it - these poor people do offer jobs. Furthermore, the motivation for expanding existing businesses does not come from the rich having excess money, but from business owners responding to increasing demand - real or anticipated - when the money needed often has to be borrowed, especially in the case of small businesses. The rich much prefer 'hoover-up' to trickle-down. The way they achieve it is by taking advantage of the process whereby wealth attracts wealth. The more wealth a person has the more they are able to profit from the work of others, by employing them directly if they make more money than their own wages, by buying property and renting it out, by lending money at interest, or by investing in one of thousands of existing businesses that profit from the work of others. The way it works is discussed in detail in chapter 97.

In any case even business owners and managers don't want to create more jobs. They will if demand requires it, but only as a last resort. Almost any other means of production is preferable to employment, the ideal for them is fully automated production - *roll on the robots!* Business owners and managers much prefer to shed staff than employ staff, and if they can find a machine to replace workers then they grab it with both hands. This certainly isn't meant as a criticism, it's just the way things are, and there are very good reasons for it which are explored in more detail in chapter 100 section 100.2.

This is the employment conflict - people want jobs but potential employers don't want to provide them.

In fact it's only a conflict if the focus is on jobs, when the focus should be on what those jobs deliver - tradable wealth for the employer and security for the employee. A job is merely a means to two distinct ends after all; the ends - different for employer and employee - are what really matter. If productive capacity is re-orientated as discussed in chapter 7, and society is given a proper role as will be discussed in chapters 30 and 100, then the conflict disappears.

Let's revisit John Quiggin's statement above. "...according to the trickle-down story, that which is given to the rich will always come back to the rest of us, while that which is given to the poor is gone forever." Why does this sound so plausible if it isn't true? It's another example of confusing money with wealth. If money is given to the poor it is spent on basic consumption, and the things they consume are certainly gone forever. The focus is on the wealth they buy, and that wealth is gone forever by being consumed. But almost all wealth is for consumption whoever buys it, that's ultimately what all wealth is for, so it makes no sense to blame the poor for consuming wealth when that's what the whole of humanity and every other living thing on the planet does. What about the rich? "...that which is given to the rich will always come back to the rest of us...". This acknowledges that the rich don't use all their income in buying wealth for consumption,

so not all the wealth they buy is gone forever - not immediately anyway. It would be fine if all the wealth they bought that wasn't for consumption was for creating new wealth, that would lead to more prosperity for workers as argued above, but it would also lead to less prosperity for the rich and we can't blame them for not being too keen on that.

Instead of focusing on wealth we should focus on production, and the money - that wonderful lubricant - that brings it about. Money doesn't go forever by spending it on new wealth whoever spends it, it merely changes hands, and in doing so it enables the next pair of hands to spend it as well, and the next pair and the next. Recall the story in chapter 14 about the £10 note lost in a pub, it enabled far in excess of its own face value in wealth to be produced, and it did that because everyone spent it in its entirety, no-one saved or invested any part of it, yet it induced everyone to do work - to produce new wealth - and that's exactly what giving money to the poor does. It is spent in its entirety and that helps the economy and all of us.

What's happening is much clearer when we take a very simple look at the difference between workers and investors:

Workers give more than they take, otherwise they're out of a job. Investors take more than they give, otherwise they ditch the investment.

That's not to say we don't need investors because we do. But let's stop adding to the favours given to investors because that only increases the ratio of what they take to what they give, and where does the extra come from? From workers, who suffer an increasing ratio of what they give to what they take. That's the trickle-down fantasy in a nutshell.

20.3 The impact on employment and national income shares

But what about the bigger pie? Well the pie (total wealth) only gets bigger as more people create wealth, and that would happen if trickle-down worked as promised and rich people continued to create jobs, at least up to full employment. But full employment increases security for working people, and security brings confidence in wages, so a fully employed population tends to be well paid because anyone in a poorly paid job can more easily find another job where the pay is better. Much better (for the rich) is to ensure that workers are insecure, with a high rate of unemployment, so that those in poorly paid jobs stay put because they can't easily find a better-paid job. Worker insecurity keeps labour costs down and makes more profit for business owners (Hahnel 2014 p167). A high rate of unemployment keeps the pie small. What the myth of trickle-down achieves is the rich having a bigger share of a small pie rather than a smaller share of a big pie. And the workers? They get a very small share of a small pie rather than a bigger share of a big pie - *that's the wonder of trickle-down!*

But, you might point out, we have had full, or almost full employment for much of the neoliberal era. We have, Great Recession excepted, but only because 'full employment' has been cleverly redefined as the '**non-accelerating inflation rate of unemployment**' - **NAIRU**.⁶ This says that as employment increases so does inflation, and at a high level of employment inflation starts to accelerate out of control - *just look what happened in the 1970s!* So there is a level of unemployment - about 5% - that

⁶ https://en.wikipedia.org/wiki/Full_employment

prevents inflation from accelerating, and that is the level that is referred to as full employment. This is indefensible. 5% of the workforce - one in twenty people able and willing to work but forced to remain idle - is a tragedy. But it's worse even than that. There are many people classed as employed who are working far fewer hours than they would wish to, these are the underemployed. Worse again is that many have given up on ever being able to find work, and many more suffer from stress and other long-term conditions that render them unable to work. Much worse still is that the 5% figure hides the distribution of unemployment, which is weighted heavily towards the young - the group that should be most strongly encouraged to develop the practical working skills that can only come from real work for the security of future generations.

In truth inflation can be fully controlled at any level of employment, but only if we rid ourselves of the unfettered market ideology and ensure that the state, on behalf of society as a whole, takes much firmer control of the money supply. The way forward in this direction is discussed in chapter 100 section 100.2. Tolerating an unemployment rate of 5%, or indeed any rate above that which is inevitable due to people in the process of changing jobs, is one of the most culpable forms of waste - see chapter 22. The work the unemployed could do and the benefit that society could enjoy as a result of the bigger pie they could make is irrevocably lost.

When Keynes' ideas were adopted after the Second World War employment rose very significantly (in spite of his ideas being misunderstood), and as a result the share of output consumed by workers also rose. In fact the worker share had been rising since the end of the First World War but in a volatile manner, whereas after the Second World War the progression was much smoother. This is shown clearly in Figures 20.1 and 20.2, which also show it ending very sharply after 1980 when neoliberalism took over. Leading the inequality race is the US, followed by the UK and Canada, and then Australia. The Netherlands and France show a much flatter progression with little if any decline.

Although the share of national income has diminished for the bottom 99% in most developed countries, it might still have risen in absolute terms if national income had grown more than enough to offset the decline in share. This is the trickle-down theory, which is seen not to work when we look at a chart of real income. Figure 20.3 is for the bottom 90% rather than 99%, but the bulk of workers are still represented in this group.

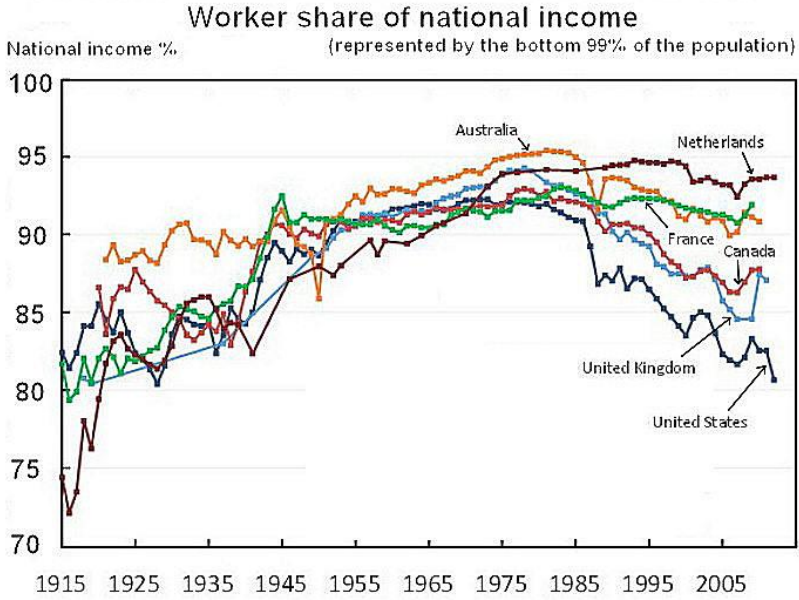


Figure 20.1: Derived from the next chart for the working population (represented by the bottom 99%)

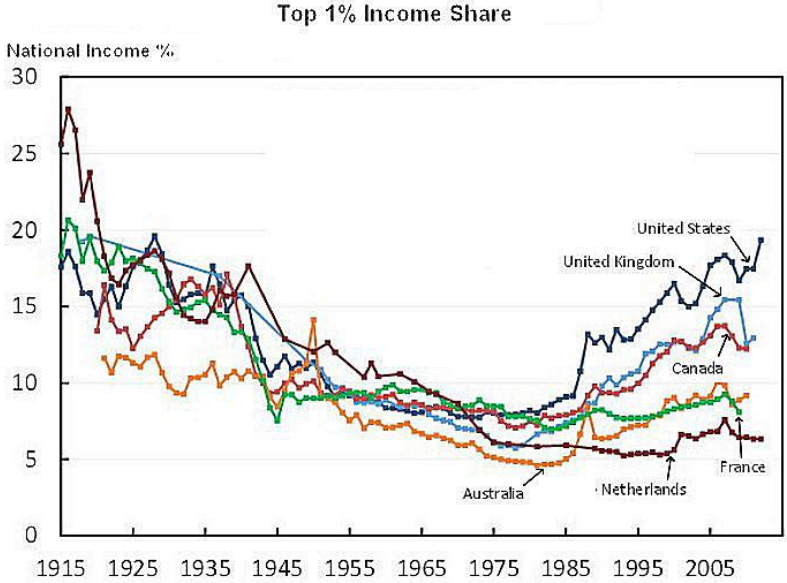


Figure 20.2: Source - World Top Incomes Database, Council of Economic Advisers (CEA) within the Executive Office of the President of the United States. Retrieved from http://www.policy-network.net/pno_detail.aspx?ID=4691&title=Global+lessons+on+inclusive+growth

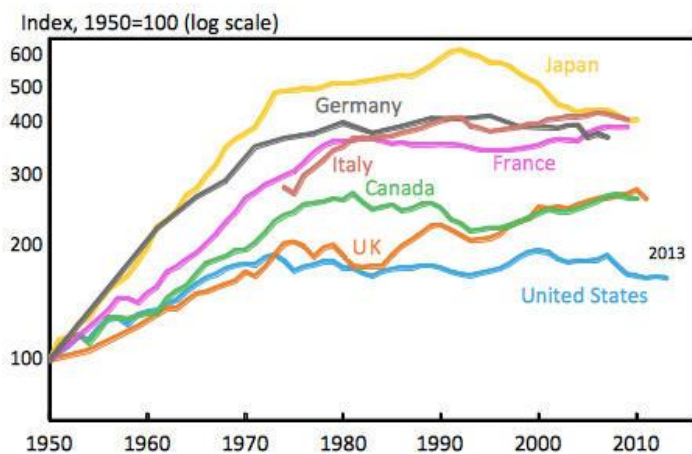


Figure 20.3: Growth in real average income for the bottom 90%. Source - World Top Incomes Database, Saez (2015), Council of Economic Advisers calculations. Retrieved from <http://voxeu.org/article/brief-history-middle-class-economics>

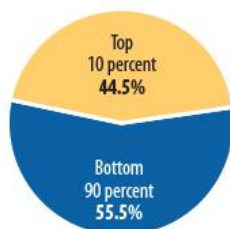
We see that there was substantial real growth in worker income up to about 1980, after which it started to flatten, showing that the real income for workers has either not risen at all since then or only risen slightly. When considered in conjunction with the share of national income going to the top and bottom we see that practically all the benefit has gone to those at the top.

There is no wealth trickling down, but plenty hoovering up!

Those charts were for income, figure 20.4 gives the picture for wealth which is even more unequal.

Wealth Is Even More Concentrated Than Income

Distribution of before-tax income, 2010



Distribution of wealth, 2010



Source: CBPP calculations from Federal Reserve Survey of Consumer Finance, 2010

Center on Budget and Policy Priorities | cbpp.org

Figure 20.4: US Wealth Distribution 2010. Source - Center on Budget and Policy Priorities' calculations from Federal Reserve Survey of Consumer Finance, 2010. Retrieved from <https://fabiusmaximus.com/2013/12/16/income-wealth-political-inequality-60246/>

The reason is the by now familiar 'wealth attracts wealth' phenomenon. This ensures that a significant and increasing proportion of the income of the non-wealthy reverts to

the wealthy through debt interest, property rents, product profits, wealth extraction and stronger bargaining positions. These effects should be taken into account in looking at the earlier income distributions, in that even though the non-wealthy suffer declining income shares the charts still paint a picture that is too rosy for them, because an increasing proportion of their income goes straight back to the wealthy in rents and interest etc. rather than being available for spending by them on things that improve their wellbeing.

20.4 What do the wealthy spend their money on?

Let's return to investment, to see what the wealthy spend their money on. In fact there are many forms of investment, and only some of them - those that promote the creation of new wealth - add to the stock of wealth in the economy. I shall refer to these as **wealth creating investments**. These are investments whose objective is to add value - to create additional wealth - for example by making new things for sale or by supplying services or support to the production of new things for sale. Investment used to set up or expand a business that makes and sells useful products, or provides services, is a wealth creating investment. Most investments are not of this kind, they are **existing asset investments**, where existing assets such as property, shares, bonds and other forms of tradable debt, derivatives⁷ and other forms of contract, funds and trusts, are traded between investors. New debts are also included in the existing asset category because they represent the purchase by the lender of an obligation on the part of the borrower to repay in due course more money than was lent. Money for repayment may be obtained by new wealth creation by the borrower, but if it is then the wealth creation isn't brought about by the debt. Note that existing assets may or may not be wealth. Property is wealth and shares are contracts that give entitlement to wealth, but debts and many derivatives are based on money. Most bank loans are for things other than wealth creation, and derivatives and other contracts often represent no more than bets on some eventuality. Such trading does nothing but change the ownership of things that already exist, so they do nothing for the economy - though they often do a great deal for those who invest in them.

Investment takes two forms: wealth creating investments, which are few but increase wealth in the economy, and existing asset investments, which are plentiful but do nothing for the economy.

If an existing asset increases in value then the increase is not new wealth, though it feels like it to the owner. All that has happened is that a buyer is willing to pay more for it than the original buyer paid.

It should be noted that wealth creating investments are good for the economy only if the wealth they create is beneficial and the production methods they employ are sustainable. In further discussion of wealth creating investments these conditions are taken to apply so they are regarded as good for the economy. Where they don't apply the corresponding investments are not good for the economy.

⁷ Derivatives are explained in chapter 56.

It is unfortunate that there is only one word 'investment' for both wealth creating and existing asset investments, because they are very different in their effects, and having a single word gives the impression that all investment is the same.⁸

The situation isn't helped by economists defining 'investment' differently to its use in plain English. Their definition is the value - expressed in money terms - of new and replacement capital goods and increased product inventories. Therefore when economists talk about 'investment' they are usually talking about wealth creating investment, which is good⁹ provided that the wealth they create is beneficial, whereas when non-economists hear them they aren't aware of their limited definition and think they are being told that all investment is good.

Wealth creating investment is doubly beneficial to the economy because not only does it aim to improve wealth creation in the future, it also represents spending in the present on new wealth in the form of capital equipment or labour, and spending is the life-blood of a well-functioning economy.

Perhaps surprisingly it is not easy to put money into wealth creating investments. Entrepreneurs are the people who do it regularly but there are relatively few entrepreneurs. Entrepreneurs seek out wealth creating opportunities and invest in them, risking their own or other people's money in the hope of high returns from the products and services of new or expanded businesses. Those products and services represent new or improved forms of wealth, and to the extent that they are successful - that is the risk the entrepreneurs and the new businesses take - the economy benefits from them. Lending to entrepreneurs is a way of investing in new wealth creation, but it is very risky so investors tend to use only a very small proportion of their investments for this purpose. There are companies that specialise in entrepreneurial activities, but buying shares in such companies is not the same as investing in wealth creation, it is merely a change of ownership of existing shares. Buying shares in a new business in an initial public offering (IPO) can be a wealth creating investment but only if new money is being raised to expand the business. Often such a purchase is just a change of ownership from private to public, and in that case again it is just a change of ownership of existing assets.

Figure 20.5 shows the increased saving (non-spending) as people become more wealthy.

⁸ See also Reiss 2011 Chapter 10. Reiss also laments the absence of separate words for wealth creating and existing asset investments. He calls wealth creating investments 'true investments' and existing asset investments 'pseudo-investments' - I won't argue with that.

⁹ Increased product inventories can be good or bad depending on why they have increased - good if the producer anticipates increased sales, bad if customers stop buying. This is discussed further in chapter 25.

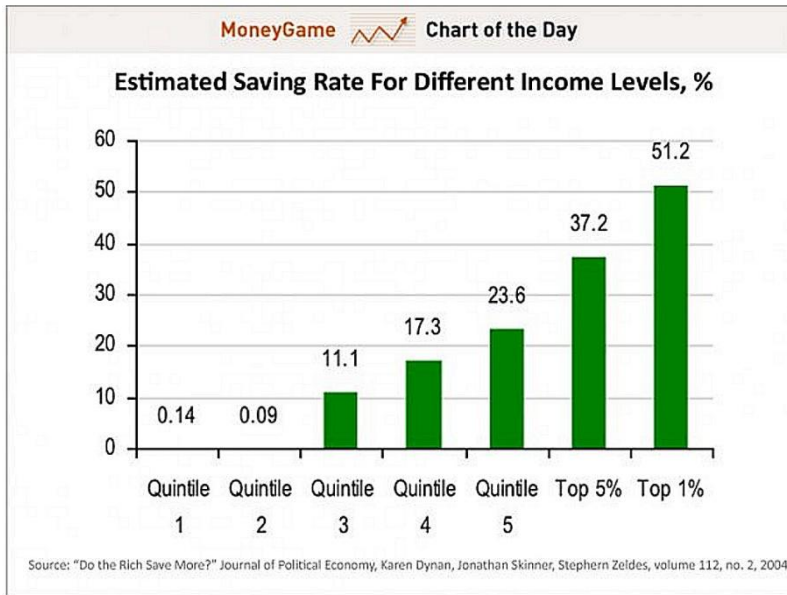


Figure 20.5: The extent to which people save (invest) more as they become richer. Reproduced from Business Insider, March 1 2013, 'Rich People Really Love To Save Their Money' by Sam Ro¹⁰, taken from data published in the Journal of Political Economy Vol 112, No 2, 2004 (table 3 column 2), 'Do the Rich Save More?' by Karen Dynan, Jonathan Skinner and Stephen Zeldes¹¹

It should also be recognised that when a business seeks to expand or a new venture to start up those running or wanting to run that business will seek the funding they need from wherever it is to be had - often from retained profits in the case of large existing businesses (Kay 2015 p164). But here the demand for funds from the wealth creating activity comes first and the provision of funds second, the driver is the wealth creating activity. The conventional view about wealthy investors is that their ability and willingness to invest comes first and as a result wealth creating activities appear from somewhere and absorb that investment, so the driver is the investor. I hope the above argument dispels that view.

The desire for wealth creating investment comes from people who want to start up or expand businesses, not by investors. Investors are free to choose between all forms of investment, and their only concern is a high return.

A word should be added about the retail industry, where existing products are bought, generally from wholesalers or producers, and then resold to the public. This might be viewed as an exercise in existing asset investment on the part of retailers but this would not be correct. Retailers add value to the products they sell by providing the service of making them available to the wider public in more convenient locations and in

¹⁰ <http://www.businessinsider.com/chart-savings-rate-by-income-level-2013-3?IR=T>

¹¹ <https://www.dartmouth.edu/~jskinner/documents/DynanKEDotheRich.pdf>

smaller quantities. This service represents the wealth that the retailers create. They buy in one market and sell in another, whereas existing asset investors buy and sell in the same market and add no value to the economy by their actions - what they gain or lose someone else loses or gains - known as a **zero sum game**.

A common belief is that saving money in a bank helps wealth creation, because banks lend out that money to small businesses which use it to create more wealth. It isn't true, though banks are happy for people to believe it. In fact banks don't lend the money in bank accounts because that money is merely a record of what the bank owes the person with the account, and a record of a debt can't be used by the debtor for anything - see chapter 39. What they do is create new money and make it available to people to buy assets, though they very much favour lending for existing assets where they have a claim on the purchased asset as collateral, which they don't have to the same extent when lending to businesses for wealth creation. They can and do secure business loans against business assets, but these are generally much less saleable than things in existing asset markets. With businesses the banks' security comes mainly from the future income streams that the wealth creating investments produce, and these are much less certain and difficult for the bank to value accurately. Banks, being commercial businesses, aren't concerned with what benefits the economy, but only with what benefits them, and lending for existing asset investment usually benefits them much more than lending for wealth creating investment. In 2010 the bulk of bank lending was for property, and the next highest proportion was for financial assets, with only 8% for the support of businesses (Jackson and Dyson 2012 p114). In fact banks don't lend money at all, but create new money when someone takes on a debt, though they call it lending. Part 2 discusses banking and its effects on the economy in detail.

Having said all that why should an investor seek to invest in wealth creation rather than in existing assets? The answer of course is that they don't unless they happen to be entrepreneurs. What they seek is a good return, and they use their own or their adviser's judgement in making that decision and select from all available investments.

As emphasised earlier money doesn't ever become anything other than money, it just changes hands in a transaction. We therefore need to ask what the recipients of the money do with it when they sell an existing asset to an investor. The answer is that the vast majority of such people are investors themselves, and they have sold the asset in question in order to buy another which they believe will give them a better return. Hence existing asset investors retain a pool of available money that circulates between them as they buy and sell existing assets to and from each other, aided and abetted by banks that are very willing to lend for these purposes. While money remains in this pool it isn't available for new wealth spending and therefore does nothing either for jobs or for the economy in general - see chapter 23 for a discussion of the different purposes for which money is used. The same is true for foreign exchange speculation, where investors similarly retain a pool of money for use in switching between foreign currencies in the hope of a profit.

A common view is that transfer of existing assets between people is of no concern to anyone other than the people who make the transfers. In this view such transfers might not help the economy but they don't harm it either so why be concerned? There are three reasons to be concerned. The first as already indicated is the widespread but mistaken belief that they benefit the economy. Many (and not just the investors

themselves) believe that their investing activities create jobs and economic wellbeing for everyone - the 'trickle-down' effect - so politicians turn a blind eye to tax avoidance and offer generous financial incentives to the very rich and to big corporations, especially the multinationals, for this reason, in effect diverting money from society to the rich. This does indeed harm the economy by transferring money from poorer people to richer people, thereby not only directly harming poorer people but also reducing new wealth spending because rich people spend a much smaller proportion of their income on new wealth than poorer people. The second reason is that many existing asset purchases are made 'on margin', meaning that banks lend money to buy them. This builds up a network of debts that can default in large numbers when asset prices fall rapidly and damage the economy - sometimes disastrously - in the process. This is discussed further in chapter 57. The final reason is that the more people engage in existing asset transfers the more time, talent and money that is tied up in this largely useless¹² activity. Time and talent are applied and largely wasted by those who are drawn into providing these banking and financial trading services because of their rich rewards and away from careers for example in science, medicine, mathematics, technology and so on - careers that would otherwise create substantial wealth and do considerable good for society. Because of the high salaries on offer it is often the most gifted people from these disciplines that are seduced away from them, representing a great and continuing loss to society.

Existing asset investment is usually regarded as an economically harmless activity, but it does great harm by cutting new wealth spending, by increasing the level of economically dangerous debt, and by seducing some of our best minds away from wealth creation.

We can't rely on the wealthy to improve the economy. Like everyone else the wealthy do what benefits them, and if that benefits the economy then all well and good, but if it doesn't, and it usually doesn't, then that's just too bad.

20.5 What do the non-wealthy spend their money on?

So, if what the wealthy spend their money on can't be relied upon to benefit the economy then what can? Let's return to the less well-off to see what happens to their money. One thing about people with too little money to save or invest is that they spend it in order to consume things, largely ordinary things such as food, clothing, housing, heating and lighting and so on, and perhaps the occasional holiday and a few leisure activities. As was shown in chapter 7 spending on consumption maintains the supply of consumer wealth, and if demand is high enough it expands that supply, which increases demand for capital wealth also. This spending by the less well-off excludes the lavish indulgences that the rich can afford, so it is precisely what is needed to maintain a healthy economy. These are the people on whom a sound economy depends. However, as already mentioned, much of their spending is on things that provide the return on the

¹² The benefit in secondary market trading is the liquidity - available cash - that it provides to asset sellers, which helps the initial sale because buyers know they can resell when they wish to, but the scale of trading for this purpose need only be a tiny fraction of the scale that is currently driven by speculators.

investments of the wealthy, so an increasing share of their income goes to the wealthy, and much of that income is taken out of circulation because it is used for more investment. Therefore the wealthy harm the economy firstly by investing much of the money they receive in existing assets rather than by spending it on new wealth, and secondly by taking a bigger share of income from the non-wealthy.

The moral is:

The best way to manage the health of the economy is to look after people who spend most of their money, rather than people who save or invest most of their money. Spending by poorer people creates demand for socially useful products, and that demand maintains and if high enough expands the economy.

Conversely the best way to damage an economy is to take money away from people who would spend it if they had it, and give it to people who don't spend it when they have it - which is exactly what we are doing by favouring the rich.

This is the basis of neoliberal economics. We are fooled by its seductive 'trickle-down' assertion into thinking that it delivers benefits to us all, but 'trickle-down' is a deception. What it really does is to deliver benefits to the already wealthy at the expense of everyone else. The impact on the economy of spending on new wealth and on existing assets is examined more closely in chapter 24.

A word of caution should be given. Spending on imports without balancing exports benefits the economy of the country that provides the imports but not the domestic economy. Therefore in a depression or recession it is only domestic spending that benefits the domestic economy. Increased spending on imports is not helpful. I shall argue later that a country in the world economy is similar to an individual in the domestic economy - see chapter 63 - and just as the Micawber Principle¹³ applies to the individual; it also applies for the same reasons to a country in the world economy.

¹³ Mr Micawber's recipe for happiness: Annual income twenty pounds, annual expenditure nineteen pounds nineteen shillings and sixpence, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and sixpence, result misery. From 'David Copperfield' by Charles Dickens. Micawber's advice was wise, it's a pity he could never follow it himself.

21 Lessons to be Drawn from the Foregoing Money Supply Analysis

These are as follows:

- Production capacity should be re-orientated towards good (humanitarian and sustainable) wealth creation.
- Bad (unsustainable, destructive and indulgent) wealth creation should be cut back dramatically.
- Economic growth is good only if it is sustainable.
- Full employment¹ should be applied to achieve the above re-orientation.
- The money supply and spending should be sufficient for full employment but no more.
- Reductions in money supply and spending below the full employment level are extremely harmful and should be avoided.
- The health of the economy depends on the things it produces being bought - spending and consumption are essential.
- Society should be generous to those who spend their income on new wealth, and ungenerous to those who save their income or invest it in existing assets.
- Inflation and deflation can be controlled if the supply of money is controlled.
- The money supply and spending should grow in line with economic growth.

The above analysis shows that those who control the supply of money control the economy, and therefore have immense power. Those people are not, as is commonly thought, the central bank and the government, but the banks.

Banks create 97% of all UK money (Jackson and Dyson 2012 p48). Like all other commercial businesses banks aim to make as much profit as possible by any and all legal (and sometimes illegal) means, and have little or no allegiance to anyone other than their directors, senior managers and shareholders. Banking is examined in Part 2.

¹ Recall the earlier definition where in this book it means that available work is shared fairly between all who want to work, where available work corresponds to that which is required to create all, or as much as possible of, the good wealth that people and society wish to use now and save for future use.

There is nothing to stop the government and central bank from taking control of the money supply, and therefore also having complete control over inflation.

This option is examined in chapter 55.

In the light of the above information the uncontrollable nature of the money supply is hopefully becoming somewhat less of a mystery, and will be explored further in the banking section in Part 2. In particular the way that banks can cause deflation is explained in chapter 52.

22 Waste, What it is and What it isn't

Waste is another concept that has very different implications for individuals than for the whole economy, and confusing the two gives rise to serious misjudgements. Everyone knows what waste is for an individual or a family, and is usually expressed in terms of money. Even this is slightly misleading because what we mean is that things were bought that were unwise, and better things could have been bought with the money. In this respect it is use value rather than money that has been wasted - the use value of the things we should have bought that is in excess of the use value of the things we did buy. We also use the term when we discard something that we later realise could have been used, here it is wealth that is wasted.

For the economy money is never wasted because it merely passes from hand to hand. Even if notes or coins are lost the economy can easily replace them, though the individual who lost them can't do so. Wealth that is discarded when it could have been used represents a waste to the economy just as it does for an individual.

Probably the worst form of waste for the economy is having people idle that could be creating good wealth – people who want to work but can't find jobs. The wealth that they could have created is wasted and can never be recovered. This is spare capacity.

This waste is rarely recognised because it is never seen and therefore isn't missed. If it is recognised as waste it is thought of as being equivalent to having people create wealth and then discarding it without it ever being used or enjoyed, but in fact it is much worse than that. Imagine that people are given work by creating follies - things that are not intended to have any use other than as a means of creating jobs for otherwise idle hands. Now recall what was said in chapter 7: 'The nature of surplus wealth doesn't matter, for the economy to flourish all that is required is that surplus wealth is traded.' Here someone is willing to trade their surplus wealth for the follies (i.e. wealth that they created in return for money, which they then pass on to the workers for creating the follies), and therefore the fact that they have no use doesn't matter. But when the workers are paid, they are able to spend their money on things they need or want, and the recipients of that money in turn spend it, and so on in accordance with the income multiplier described in chapter 16. Therefore much more wealth is created than the (largely worthless) wealth represented by the follies.

It might be argued that instead of creating follies the unemployed might as well just be given money without working (which they are in the current form of the welfare state). This maintains spending but has many harmful effects in the longer term:

- i. it fails to maintain and build skills;
- ii. it fails to serve the self-respect need to earn one's keep;
- iii. it causes the unemployed to lose the respect of others;

- iv. the foregoing effects lead to stress, depression, family breakdown and other forms of physical and mental deterioration; and
- v. it builds a dependency culture where people become unable to work.

Therefore government-sponsored and socially useful work should be available to all who are otherwise unemployed. These points are taken up in chapter 100 section 100.2.

It might also be argued that the person paying the workers might as well spend the money themselves directly. This would again maintain spending but would leave the unemployed without support. In the past, public-spirited people have employed workers to build follies purely for humanitarian reasons.¹

If follies have such a positive effect on the unemployed and the economy then consider how much more positive is producing things that are useful.

Unemployment is normally regarded as a problem that just afflicts the unemployed themselves, but it is a problem that afflicts the whole economy because of its great wastefulness.

There are also very many people 'employed' in work that brings in much more money than the wealth they create is worth. These are wealth extractors, those who work for businesses that overcharge for their products and services and get away with it. Banking and financial trading are probably the worst offenders but there are many more. The effort and time that all these people devote to their work is wasted in the sense that they could instead be doing useful things. This topic is discussed in detail in Part 2.

Consider also so called 'zombie' industries where the government maintains loss-making enterprises in order to keep people employed. These again serve very useful economic and social purposes provided that there is no profitable industry available with spare capacity for the workers to transfer to; otherwise they prevent the more useful wealth being created that transfer would bring. Again these are very much better for the economy than unemployment, if that is the alternative.

Similar arguments apply for new enterprises that turn out to be failures. In these circumstances blame for 'wasting money' is heaped with abundance on the heads of those responsible, especially in the case of state enterprises, but this is almost always very unfair. All new enterprises carry risks, risks are inherent in the nature of enterprise, and failure is merely the other side of the coin to success. The blame game is dangerous because it discourages enterprise and we need enterprise because society only moves forward on its successes, and successes are much fewer in societies that aren't prepared to be generous to those who fail. At worst a failure is equivalent to a folly, and as already seen follies are by no means wasteful. Failures are very seldom that bad however because many lessons are learned in the process and spin-off products arise from innovations and techniques developed during the project. Failures make subsequent success more likely. It is for these reasons that we need forgiving insolvency laws for private failures and a forgiving attitude towards state failures. Private failures are considered wasteful for the private investors, but they aren't wasteful for the economy as a whole because money was spent and earned, and re-spent and so on, so there was no waste. Similarly for state failures, they waste nothing for the economy; all they do is dash the hopes that were embodied in

¹ <https://en.wikipedia.org/wiki/Folly>

expectations of success.

We must avoid allowing fear of failure to discourage private or public enterprise.

Some of the above arguments might be considered to favour a throwaway society. Goods that are unreliable or don't last long have to be repaired or replaced at regular intervals, which creates jobs and keeps the economy functioning. Such things - to the extent that they are less reliable than they could be or don't last as long as they could last - are similar in some respects to the follies mentioned above in that although they have a use that use is more limited than it could be. They do indeed keep the economy functioning, but how much better to have reliable and long-lasting things and use the wealth creating capacity that is released to make even more useful things - society is all the richer for it.

Fashion also creates waste. Things that are still useful are discarded purely because they have gone out of fashion. People's natural tendency to want the latest things has been exploited very successfully by the advertising industry, which persuades us that if we don't have the latest products and technology then we are inferior to those who do - we're less smart, less attractive, less fragrant and less 'cool'; we won't find an attractive partner; we'll have fewer friends, be shunned by society, be laughed at, be pitied, and on and on. It's all to sell us products that we don't need, to persuade us to discard wealth. Thank goodness there are charity shops, recycling centres and online auction sites where all this useful but unwanted material can be used by others. What they do is lessen the waste that would otherwise occur. Advertising itself is largely wasteful, insofar as it persuades rather than informs, because it diverts valuable talents into activities that promote the sale of indulgent wants by techniques involving partial truths, exaggeration, distortion, and playing on consumers' emotions - usually the baser emotions. It is all geared up to generating a throwaway society, and it works well. The insidious nature of advertising is considered further in relation to particular economic sectors, and especially in relation to wealth extraction in the Introduction to Part 2. Many products have built-in obsolescence by being difficult or impossible to repair, having batteries that can't be changed, having weak or brittle moving parts that are easily broken - especially toys, having limited life components - commonplace in printers, and so on. All these features are designed to benefit individual companies, but for the whole economy they represent deliberate waste.

A particularly insidious form of waste for the economy is asset stripping. This often happens when a company that is trading successfully and creating wealth, though perhaps not as efficiently as it might, sees its share price decline, so that its capital value falls below its asset value. In these circumstances it is vulnerable to a hostile takeover by the managers of predatory asset-stripping companies, not to run the companies to make them more productive and profitable, but to run up debts in the company's name, sack workers and sell off assets, all for a quick profit for the takeover company but leaving lasting damage for the workforce and for wealth creation in its wake. This is described well by Andrew Sayer in his book 'Why We Can't Afford the Rich' (Sayer 2015 Chapter 12):

Adding insult to injury was the rise of 'the leveraged buyout', a practice so monstrous in its parasitism that it's a wonder it's legal. Here the would-be buyer

borrowed vast sums, usually by issuing junk bonds (with tax deduction on the debt), to buy out a company - *and then loads it up with debt to pay for the buyout*. In some cases, this has reduced corporation tax payments to zero - a direct subsidy to parasitic rentiers. The bought-out company then has to cut costs and often the workforce - in order to fund the junk bonds. This was a prime cause of the 'downsizing' of companies in the 1980s and 1990s. So there was a direct link between the rise in unearned income going to the tiny minority who could afford to buy such bonds and the loss of earned incomes of those workers who were displaced following leveraged buyouts. (Italics in original text.)

A political system like ours that follows the neoliberal doctrine of universal free markets - where private enterprise and the free market is relied upon to decide what is produced and in what quantities for as many things as possible - is bound to generate waste. Not waste in the sense that it produces unwanted things, but waste in the sense that it produces unnecessary things that individuals want in preference to things that society and humanity as a whole need such as measures to eradicate poverty and save us from the horrors of climate change.

Let me make it clear that I am not against private enterprise and private profit, though some of my remarks might give that impression. Far from it, these production methods provide the best means of producing very many things, but not all things. They are particularly effective when genuine competition is available by easy entry of new suppliers. What I am against is the neoliberal doctrine that the production of all things (or as many things as is humanly possible) should be decided by the market and hence by what individuals that can afford them want. Individuals generally don't want and won't pay for things that society and humanity needs, so governments on behalf of society must take responsibility for ensuring that those needs are met. I am a pragmatist. I believe in doing what works, and I am convinced that what works best is a mixed economy where social and humanitarian needs take precedence over individual indulgent wants, where governments on behalf of society and humanity channel resources into the production of those needs, and where private enterprise takes care of the rest - in a manner that is fair to everyone.

Waste for the economy is:

- **not employing employable people - spare capacity is waste;**
- **discouraging private or public enterprise;**
- **creating products with built-in obsolescence;**
- **not using or destroying usable wealth;**
- **asset stripping;**
- **using resources to create less wealth than is embodied in those resources (see chapter 1);**
- **satisfying indulgent wants when there are individual and social needs (see chapter 7);**
- **not creating good wealth when there is the capacity to do so (see chapter 7);**

- extracting wealth and employing people to extract wealth (see Part 2); and
- creating wealth by harming individuals, society or the environment (see chapter 30).

23 Transactions that Help the Economy and Transactions that Don't

There is a simple equation that relates the quantity of money to the number of transactions in an economy, and it is a mathematical identity - something that is always true:

$$MV = TP$$

Here M is the quantity of money and V is the velocity of circulation. V is the rate of spending - the number of times that M changes hands in a given length of time, say per month or per year. Note that we're not interested in which particular bits of money change hands. Some bits, £1 coins for example, change hands much more frequently than other bits, £50 notes for example, and some bank money is in constant use whereas other such money remains idle. We're only interested in the number of times the total quantity of money in the economy changes hands, however that quantity is made up. It is very probable that some bits won't change hands at all in the time period of interest. T is the number of transactions that occur in the same length of time, and P is the average price per transaction.

What this equation says is that in one unit of time the total quantity of money changing hands (M times V) is the same as the money value of the transactions (P times T). This must be true because every time a transaction occurs money changes hands, and the money value of the transaction is the amount of money that is exchanged.

In our simple three-person economy in chapter 4 the time unit is one week, the quantity of money is 12 bracelets, the number of times that quantity changes hands is once every week, the number of transactions per week is 10 (2 each for basic food, luxury food, clothes, jewellery and wheelbarrows), and the average price per transaction is 1.2 bracelets (12 bracelets for 10 transactions, made up of 8 transactions at 1 bracelet each for all items except wheelbarrows, and 2 transactions at 2 bracelets each for wheelbarrows). So $MV = 12 \times 1$, and $TP = 10 \times 1.2$, giving us $12 = 12$, which I hope few will argue with.

The amount of money that changes hands represents the value of wealth that is exchanged. The value of wealth exchanged in each time period is therefore MV , which is also of course TP . This isn't necessarily the same as the quantity of wealth that is created in each time period because stocks of goods awaiting exchange can rise or fall.

Also, with the fixed money supply of 12 gold nuggets and worker A saving money, we saw that B's and C's nugget holdings were progressively reduced. They can postpone the inevitable by increasing V as M drops, in other words by increasing their frequency of trading. Let's say they reach the point when they have 2 nuggets instead of the normal 4. While they continue to trade weekly they can only buy 2 units of wealth each week, and either build up unsold stock or not work for part of the week. However if they trade every half week then at the beginning of the week they can buy 2 units of wealth and after half a week also sell 2 units and be paid for them, then at the beginning of the second half week they spend the two nuggets they have just received on another two units of wealth.

Then at the end of the week they sell two more units, receiving again 2 nuggets in exchange ready for the spending at the beginning of the next half week. Here they create and sell 4 units of wealth each week (2 units each half week) and buy 4 units of wealth each week (also 2 units each half week), which is exactly what they bought and sold originally with 4 nuggets, although now they trade with half the nuggets at twice the frequency.

This shows that it is not M in isolation that determines the rate of spend; it is M and V together. What they have done is continue to create wealth at the same rate, but exchange it for money at a rate that allows them to manage with less money overall - their money lies idle for less time. In this case M is halved and V doubled, so MV stays the same. It can only work if others are also willing to trade at the higher frequency. In this simple economy the limit is reached when units of wealth can't be subdivided further, and in the real economy when people spend at the same frequency as that at which they are paid, which many people and especially poor people do all the time.

Note that $MV = TP$ tells us nothing about what happens if one of the factors changes. For example if M doubles, will V and T stay the same and P double? Or will V and P stay the same and T double? Or will both T and P stay the same and V halve? There is a theory known as the quantity theory of money that claims that if M doubles then in the long run P will double, with V and T staying the same. This is generally held to be true by mainstream economists, though they don't define what they mean by the 'long run', but it is strongly challenged by other economists, most notably Keynes, who in a famous quotation declared:

But this long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean will be flat again. (Keynes 1924 Chapter 3 p80)

Indeed!

Provided that prices are reasonably stable (i.e. the value of money isn't changing - no significant inflation or deflation) and the money supply M isn't changing significantly, then the values of V and T will also stay reasonably constant because people tend not to change their habits without good reason. In fact of these four parameters M is the most independent, being determined by central and commercial bank policies rather than by changes in V , T or P . As well as being influenced by changes in M , P can change for many reasons such as material shortages, commodity price changes, technological innovation or natural disasters. The behaviour of V and T are almost entirely dependent on the behaviour of M and P .

From the analysis in chapter 15 it can be seen that if M drops sufficiently then deflation occurs, with an increase in spare capacity and reduced spending, in turn causing V to fall as people cut back and delay spending, T to fall as fewer transactions are carried out, and P to fall as there are fewer buyers. If M increases when spare capacity exists then spending picks up, prices recover, and spare capacity reduces, so V , T and P all rise. If M increases when there is full employment then as explained in chapter 17 P also rises as more buyers compete for limited products, causing inflation. In these circumstances initially V and T stay more or less the same because people don't change their habits quickly, but if M keeps increasing causing substantial inflation then V also starts to rise as

people try to turn their money into wealth as quickly as possible before it loses value. They do this by bidding up prices further - holders of money are in a hurry to be rid of it because delay buys them less for their money, and holders of wealth are in no hurry to part with it because delay brings more money for their wealth. When this happens an inflationary spiral is almost inevitable (provided that M keeps increasing), driven by changes in V as well as M . If this danger materialises there is hyperinflation - as happened in the Weimar Republic in 1922 and Zimbabwe in 2008.

When inflation becomes significant it can spiral out of control because people spend their money ever faster to be rid of it before it drops in value. The result can be hyperinflation.

The equation also tells us nothing about what the money is spent on, which can be newly produced wealth for consumption or investment; existing assets for consumption or investment; or not spent at all - lying idle as cash or in bank accounts.¹ Of these only spending on new wealth promotes wealth creation; the others represent contracts (the bulk of which are financial in nature), transfer of ownership of things that are not new, or idle money. We can therefore split M into three parts: money that is used in the purchase of new wealth, which we shall abbreviate to **MNW**; money that is used in the purchase of existing assets, which we shall abbreviate to **MEA**; and money that is not used in transactions, which we shall abbreviate to **MNU**. MEA is money that doesn't affect wealth creation, though it can and does affect asset prices, and MNU affects the economy negatively by removing money from circulation - it's like the nuggets that A removed from circulation in order to save. The economic impact of this split is considered further in the next chapter.

Note that some of the money in an economy can appear as both MNW and MEA if the same money is spent both on new wealth and on existing assets within the same time period.

The earlier equation can now be rebuilt from these separate components, noting that MNW and MEA have their own corresponding velocity, transaction type, and average price, and MNU, because it isn't used, doesn't have any corresponding velocity, transaction type or average price.

Therefore we have:

$$MNW \times VNW = TNW \times PNW$$

and

$$MEA \times VEA = TEA \times PEA$$

where VNW , TNW and PNW are velocity, transactions and average price for new wealth, and similarly for existing assets. Also:

$$MV = (MNW \times VNW) + (MEA \times VEA)$$

MNU isn't relevant in this equation because its velocity is zero. Therefore:

$$MV = (TNW \times PNW) + (TEA \times PEA)$$

which also equals TP as before.

Here the value of new wealth exchanged in each time period is $TNW \times PNW$, which

¹ Money that is idle in bank accounts is usually considered to be helping the economy because banks lend it out again for constructive purposes. In fact this fondly held belief isn't true - idle bank account money is exactly that - idle. This is explained in chapter 39.

is also of course $MNW \times VNW$, and for the domestic economy this is referred to as the **Gross Domestic Product (GDP)** - a very important (but misleading - see chapter 27) economic indicator, whereas existing wealth that is exchanged in each time period is $TEA \times PEA$, which is also $MEA \times VEA$. GDP refers to the domestic output in terms of wealth, focusing on transactions and prices, but it is also equal to **Gross Domestic Income (GDI)**, which focuses on the money earned from the sale of wealth.

Income and money are often confused because for most people money only comes into their possession in the form of income - they have to sell wealth (usually labour) in order to obtain it.

Income is a flow of money received in return for wealth, as benefits or other forms of transfer, or as returns on investments. Money is a stock of tokens available for transfer.

You are probably wondering by now where all this is leading. But please bear with me. It leads to a conclusion that isn't widely appreciated and results in misplaced economic policy.

The split in the money supply M into MNW , MEA and MNU is of great importance to the functioning of the economy but is ignored by many economic texts which assume that spending on contracts and existing asset transfers is negligible, as is the amount of money that remains idle, but that is a very misleading assumption to make and leads to erroneous conclusions being drawn. For example when credit creation is expanding fast but being spent on existing assets - usually investments or housing, the increase in the $TEA \times PEA$ component causes MV to rise and financial or property prices to inflate, i.e. bubbles are created, but the $TNW \times PNW$ component does not change. If it is thought, as is often the case, that $MV = TNW \times PNW$ without any $TEA \times PEA$ component, then since it is known that new wealth prices haven't risen and the frequency of new wealth transactions remains steady, the rise in M is assumed to coincide with a fall in V , so as to keep MV constant. M is known to have risen because it can be measured, but V can only be deduced, so the wrong assumption is made, and the apparent fall in V is a mystery. This can lead to governments and central banks continuing their attempts to grow the economy by encouraging the public to take on more debts and the banks to create yet more money, without realising that the new money is merely creating bubbles and future inevitable crashes, rather than stimulating wealth creation. All this is very well explained by Richard Werner with particular reference to Japan's economy (Werner 2005 Chapters 13, 14 and 20 and Werner 2012). Werner refers to the separated version of the equation as the **quantity theory of credit**. See also Ryan-Collins et al. 2012 Box 12 pp109-110.

If the existing asset component of spending is ignored then when credit for existing asset investment is expanding bubbles are created with little change in the real economy. Governments and central banks respond by encouraging yet more lending in the hope of promoting economic growth, but all that grow are asset bubbles.

As mentioned earlier some of the money in the economy, as it repeatedly changes hands within a particular time period, will very likely be spent both on new wealth in some exchanges and on existing assets in others, so we can't say that the sum of MNW ,

MEA and MNU is M . This sum can be more than M - if there is spending in both categories - but not less than M . It will be equal to M if there is no spending in both categories. MNU isn't considered because it is money that isn't spent at all in the time period.

Hence

$$M \leq MNW + MEA + MNU$$

where \leq means less than or equal to.

These relationships can also shed more light on the income multiplier encountered in chapters 16 and 17 where chapter 17 showed that under certain conditions adding a one-off quantity of money to an economy generates several times its value in economic growth. The conditions required are that the money added must be spent on wealth that provides an income for others, i.e. on consumption or wealth creating investment rather than saved or spent on existing assets, and that there must be spare capacity in the economy. It must therefore add to MNW and not to MNU or MEA.

Using the formula

$$MNW \times VNW = TNW \times PNW$$

we assume an initial steady state with all values at 100% and choose for ease of calculation a time period of one round of spending ($VNW = 1$). Now, if prior to the first round MNW increases by say £100 million (as before), say by the government stimulating the economy by extra spending, then $MNW \times VNW$ also increases by £100 million, and during the first round TNW will increase in the same proportion as the £100 million is as a proportion of the money supply because the spending of the extra money represents additional new wealth transactions. VNW won't change because all that has happened is that there is more money available as MNW and it is all spent in each round. PNW won't change because there is spare capacity and therefore no excess of demand for wealth over supply of wealth.

During the first round therefore £100 million worth of more wealth than before is created and exchanged - recall that wealth creation is given by $MNW \times VNW$. When the money is received by the workers who have produced the wealth that has been bought, they too are able to spend it in the second round of spending, so prior to the second round there is still £100 million of additional money available, but it is very unlikely that the whole £100 million will be spent on new wealth creation, as some will be saved and some invested in existing assets, hence some of MNW leaks away into MEA and MNU. Let's say (as earlier) that 30% leaks away leaving £70 million available as MNW. This is spent on new wealth in the second round creating another £70 million worth of additional wealth. The same happens in the third and subsequent rounds, the additional money diminishing by 30% each time until it has all gone. At that time the entire £100 million has leaked out so that £100 million represents 30% of the new wealth that has been created, so the total wealth created is £100 million/30%, which is £333 million, i.e. a multiplier of 3.33 more wealth than additional money - as before. Beyond this of course is the additional effect of animal spirits that kick in provided that the initial injection is enough to stimulate renewed confidence in the business community - see chapter 17.

A word should be added about spending on imported goods, which for the domestic economy is just like money leaking out as MEA in that it isn't available as income to domestic workers so it can't be spent again to create more wealth. It does stimulate

foreign production however so for the world as a whole it is still MNW. Part of the above 30% that leaks out from MNW will be spent on imported goods. Domestic exports have the opposite effect in that money is earned from abroad for the sale of wealth which stimulates domestic production, and 70% of it (using the above figures) will be spent without it having to be added by government or taken from anywhere else in the domestic economy. These aspects will be discussed in Part 3.

A further word should also be added about average prices - PNW and PEA. On the face of it these seem quite obscure because we can never know what their values are, being made up of very many vastly different prices for all the many transactions that occur for both new wealth and existing assets. In fact their usefulness lies not in what their values are, but in how they change over time, which is known at least in broad terms from the various inflation figures. Therefore a specific year is chosen as a reference and the average price for that year taken as 100%. Then the price values for subsequent years can be given in terms of relevant inflated or deflated values.

24 The Economic Impact of Money Spent on New Wealth and on Existing Assets

The foregoing analysis shows that what is important to the economy is the rate of spend on new wealth creation - $MNW \times VNW$ - and not money or even MNW in isolation.

MNW is money that is circulating in the productive economic loop: work/create wealth/earn, spend/obtain wealth/consume. MEA and MNU are not available for productive purposes because MEA is merely swapped for something that has already been bought earlier when it was new and MNU lies idle. Therefore they are unable to contribute either to wealth creation or economic growth.

Money moves from MNW to MEA whenever someone takes money that would otherwise be used for consumption or new wealth investment and buys an existing asset. This typically occurs when income is received by people who already have enough for all that they need and want without it so they invest it, the bulk of it buying existing asset investments. Money moves from MEA to MNW whenever someone sells an existing asset investment in order to buy a wealth creating investment or to use it for consumption. This typically occurs when assets are sold, perhaps when a person dies and their estate is split up between the beneficiaries, when investors sell assets in order to provide for their families, or when someone at the head of a property chain downsizes. It is the movement of money that affects the economy, in that when MNW rises the economy is stimulated provided that there is enough spare capacity to absorb it, and when MNW falls the economy declines. Conversely when MEA rises due to increased existing asset investment, asset prices rise and new forms of contract are invented by banks and financial service companies (known as derivatives - see chapter 56) to absorb the new money and increase their business and profits, and when MEA falls asset prices also fall. If asset prices fall precipitously the rush to sell can cause MNU to rise because money is one of the safest assets to hold in these circumstances. With a fixed supply of money, MNW, MEA and MNU would be linked together, one or two of them rising if both or one of the others fell. But the money supply isn't fixed, it rises when banks create more than they destroy, and falls when banks create less than they destroy - see chapter 39.

Money spends almost all of its time in one of several money buffers because transactions take practically no time at all, though preparing for a transaction may take a considerable time. MNW is found in productive buffers, for example people's wallets, pockets, shop tills, and heavily used current and business accounts. MEA and MNU are found in unproductive buffers, for example investor trading accounts, financial investment holding accounts, bank savings accounts and unused current accounts, and hoarded wherever people choose to hoard it.

Money that is transferred from a productive buffer to an unproductive buffer degrades the economy by limiting the number of wealth creating transactions, whereas

money that is transferred from an unproductive buffer to a productive buffer assists the economy by increasing the number of wealth creating transactions - provided of course that there is sufficient spare capacity, otherwise it leads to inflation. Although money continually moves between MNW, MEA and MNU, at any time there is a quantity of money that is MNW, which determines the number and value of productive transactions that take place, and other quantities of money that are MEA and MNU, which have no effect on productive transactions.

When the Bank of England (BoE) injected £375 billion into the economy following the 2008 crash - referred to as **quantitative easing**¹ - with the intention of stimulating the economy, the money was used to buy mainly government bonds and also some commercial bonds. These were bought by the BoE from investors, so the money became MEA, which is why it had very little stimulation effect. Nevertheless it all appeared as additional BoE reserves² in the bank accounts of the bond sellers, which in spite of being MEA might in normal times have tempted banks to create more bank money for borrowers to spend in the economy. That was the BoE's hope. But those were anything but normal times. Banks had suffered a devastating blow because of excessive risk taking so instead of increasing lending they kept the reserves to bolster their balance sheets - both liquid assets and liabilities were up by equal amounts (the new reserves provided the liquid assets, the equivalent amount in new bank money in the bond sellers' accounts provided the liabilities), so the ratio of bank money to liquid assets was much lower and therefore bank risk significantly less.

If, in contrast, the BoE-created money had been targeted at spenders rather than investors, by giving it to the government to spend, preferably on investment projects using domestic labour and materials, then the money would have been MNW. Some may object that this would be illegal under EU Rules which prevents the BoE from funding the government directly, and although this is true it is easily circumvented. The government could have sold additional bonds to the value of the required infrastructure and other investment, and the BoE could have bought the same value of bonds from the market. In fact this is what quantitative easing did in essence, though it wasn't quite that blatant (Ryan-Collins et al. 2012 p118).

What a glorious opportunity was missed by targeting quantitative easing at bond purchase. It was done to disguise the fact that the state was printing money, giving the impression instead that it was a temporary measure to exchange new money for existing bonds, which would later be resold and the money removed when the economy was more settled. However the state can't sell £375 billion worth of bonds without major

¹ This phrase was coined by Richard Werner for a completely different purpose, but hijacked to disguise an almost unbelievably massive money creation exercise by the BoE. Werner's intended use was for the government (in fact Japan's government) to borrow directly from commercial banks so as to have them create new money for the government to spend - just like you or I taking out a mortgage. This would add money to the economy which is what is required, whereas normal government borrowing by selling bonds doesn't add money unless bought by banks. The Bank of Japan and BoE both used the phrase in a way that Werner specifically did not intend! See <http://www.bbc.co.uk/news/business-24614016>

² BoE reserves are a form of electronic cash available only from the BoE and guaranteed by the state. They are discussed in more detail in chapters 39 and 41.

disruption. Firstly it would compete with the government's own bond issues, reducing their price and increasing the interest payable to the detriment of future taxpayers, and secondly it would take money out of circulation with all the damage that would cause to the economy (Jackson and Dyson 2012 Box 8A p226).

More sensible would have been to acknowledge that the economy needed money, and to spend it on long-term infrastructure projects such as flood defences, transport infrastructure, power stations and so on. There was ample spare capacity after the crash so the stimulating effect would have been immediate and significant. Imagine what £375 billion could have done if it had been spent. We could have catered for all our infrastructure needs for many years to come. Also £375 billion wouldn't have been necessary, because the income multiplier would have multiplied up the amount spent; at a guess less than £100 billion would have been required.

Instead the purchase of bonds merely pushed up their price because of the heavy demand by the BoE, and as a result massively inflated all financial assets, making the already wealthy even more wealthy. It might be argued that pension funds are major holders of bonds, so they would be better off too, improving pensions for ordinary people. However that isn't true. What pension funds do is pay pensions from the returns on assets that they hold, and the returns on held bonds didn't change. Bonds pay either a fixed rate of interest relative to their nominal - not their real - value, and for a given bond that stays the same for its lifetime whatever price it is trading at in the market. Therefore pensions weren't improved by bonds being worth more; in fact they were made worse because future bond purchases by pension funds had to be at the higher price, without the return being any higher.

An important parameter for an economy is its **Wealth Creating Capacity (WCC)** - the maximum wealth that the economy is capable of creating in a specific time period, usually a year. If there is spare capacity then there is a gap between WCC and actual wealth created, otherwise wealth created is equal to WCC. WCC is not a fixed quantity; it varies with working population, availability of domestic raw materials and labour required for their extraction, availability and cost of imported raw materials, degree of innovation in production, and prevailing level of technology. Changes in any of these change WCC accordingly.

This concept is closely linked to the ideal quantity of money in the form of MNW in the economy, which should be such that $MNW \times VNW = WCC$. Any more than this and there will be inflation, any less and there will be spare capacity. When there is spare capacity additional money should be introduced and spent, and when there is no spare capacity but there is inflation no more money should be introduced until the inflation has subsided, which it will do if no new money is introduced.

This aim for the ideal quantity of money is easy to state but not as easy to achieve given that the quantities of each form of money and the associated velocities are difficult to measure, and also with the complicating factors of banks creating the money supply, living in a globalised economy with floating exchange rates, and **free movement of capital**³ - the ability to buy and sell physical and financial assets and currencies from and

³ Use of the term 'capital' in economics can be confusing. In the sense of capital goods or capital wealth it refers to things that are used in the creation of new wealth, and sometimes 'capital' is used on its own to denote capital wealth. In other contexts 'capital' refers to investments - things that

to people in other countries. It is ownership that is permitted to cross borders, the assets themselves may or may not move. Nevertheless at present there doesn't even seem to be any goal for the ideal quantity of money. The money we get corresponds to the demand for debts, which is extremely variable and leaves the economy at the mercy of the market - very much a situation where the tail wags the dog. Setting out what is desirable goes a long way towards allowing a means of delivering it to emerge.

produce a monetary return - lent money, financial and physical assets. The expressions 'return on capital' and 'free movement of capital' use the term in the investment sense.

25 *The Puzzle of Investment and Saving*

Economic textbooks tell us that investment and saving are always equal, and often go on to say that this is because people invest by saving money in a bank and then the bank lends that money to a business for investment purposes. Right and wrong! Investment and saving are always equal provided that the words are defined strictly so as to make them so, but banks don't use our saved money to lend to businesses - see chapter 39.

Unfortunately there are in common use widespread differences in meaning for the terms 'investment' and 'saving', and trying to understand their use in one context while thinking that a definition holds that was made in a different context is a major source of confusion - *it confused me no end!*

In finance and in plain English 'saving' means putting money aside for future use, and 'investment' means buying something that will give a return in the future. These meanings are easy to understand but are not the ones normally used in economics or in **national accounting** (accounts drawn up for the country as a whole). To understand the economic use of these terms and for the associated analyses to make sense we have to forget the above definitions and use the economic definitions instead.

The sense in which these terms are used by economists and in national accounting are as follows:

'Investment' is the value of new and replacement capital wealth that is bought from home or abroad during a particular time period for utilisation in the domestic economy, together with changes in the value of domestic company inventories (wherever produced) at the end of the period from their value at the beginning of the period.

This is a complicated and very precise definition, but precision is necessary in order to allow subsequent mathematical analysis to derive equations for gross domestic product and to relate savings to investment. The time period is usually a quarter or a year. Changes in inventories reflect the extent to which quantities of goods in course of assembly and finished goods differ at the end of the time period from the quantities that were held at the beginning of the period, expressed in terms of monetary value.¹ 'Inventories' and 'finished goods' are formally defined in the next chapter.

'Investment' as defined above is also known as **gross investment**, where **net investment** is gross investment less replacement capital goods (goods that replace worn out machinery or maintain existing machinery). Net investment therefore reflects investment in new productive capacity.

'Saving' consists of private saving - after-tax income not spent on consumption;

1

and public saving – government receipts less government expenditures.

In connection with this definition it should be noted that all non-government income in an economy is allocated to individuals. Incomes of companies are paid out to individuals as wages, interest, distributed as profits, spent on purchases and so on, and retained profits accrue to shareholders as equity. Although company purchases are largely from other companies, which form part of other company income, this again finds its way to individuals eventually, often passing through many other companies in the process. Therefore in the above definition 'private saving' represents saving by private individuals, often also referred to as households.

Note also that both definitions relate to the economy as a whole - i.e. aggregate quantities, so exchanges of existing wealth don't count. Two people who trade a second hand car don't alter the total wealth in the economy and also don't alter the total private income - the person buying the car in effect allocates part of his or her income to the person selling it.

Overall the value of wealth traded by an economy in a given period is equal in value to the income that changes hands in buying it, so from a wealth point of view everything that isn't consumed is invested - capital wealth, and from an income point of view everything that isn't spent on consumption is saved. Therefore since the income that is spent on consumption is equal to the value of wealth consumed, the wealth that is not consumed - investment - must be equal to the income that is saved.

In this context saving and investment are always equal by definition. This is the context in which Keynes used the terms in his *General Theory* (Keynes 1936) and the fact that they are always equal is another source of confusion. Note that this equality only applies for the economy as a whole. Any individual or firm can invest more than they save and vice versa.

A common source of confusion is hoarding. How can money hidden in a mattress or anywhere else contribute to investment? It seems impossible yet it is true, but only because of the way investment is defined. In this case the money hoarded causes domestic inventories to accumulate - stock and services remain unsold. The investment represented by hoarded money is in increased inventories and unbought services. In other words the money hoarded is equal to the product value of the unsold wealth that the money would have bought if it had been spent. It is because the money isn't spent that wealth remains unsold, and the inventory increases by the amount that isn't spent. The same thing applies whenever money becomes unavailable to spend in the economy by leaking out of the economic cycle, for example:

- i. when money is held up rather than spent such as remaining idle in bank accounts (idle bank account money really is idle, it is commonly believed that this money is used by the bank for productive purposes, and banks like people to think that, but to the bank it is merely a record of a debt, which the bank can't use for anything - see chapter 39).
- ii. when taxation exceeds government spending, perhaps because money used to pay off government debt exceeds that raised by new government borrowing, or money is held up in government bank accounts;
- iii. when income used to buy imports exceeds income earned from exports;

or

- iv. when income used to pay off bank loans exceeds new bank borrowing.

Unsold wealth, provided that it isn't perishable, can be sold later, but services and perishable products are lost. Nevertheless they still represent investment in that they have been produced or made available for sale, at cost to the owners, and the value of the investment is the product or service value, although the market value rapidly diminishes to nothing.

Saving as defined above includes (i), (ii) and (iv) from the above list. For (iii) only imported capital goods are included as saving because imported consumption goods are accounted for in the consumption term.

This form of saving - where income is taken out of economic circulation - is unstable in that it can't continue indefinitely as was shown for the simple and real economies in chapters 13 and 15. It represents a transitional state where the economy is contracting to a new lower output equilibrium. The only way that income can be taken out of circulation and not shrink the economy is if money is added from elsewhere to compensate.

When many people in an economy try to save part of their income, they find that production drops and their incomes also drop, until as a group they are no longer able to save. They can keep what they have already saved, but as a direct result production has dropped to a lower level.

Investment in unsold wealth, if it is imposed on suppliers by lack of sales rather than being intended by them (perhaps in anticipation of higher impending demand) is *bad investment*. If only the equilibrium state is considered then the harm that can be done in the transitional state is not seen. In Keynes' time - the Great Depression - neoclassical economists were only interested in equilibrium states (i.e. the long run), and because of their faith in labour markets always reaching equilibrium at full employment (see the 'real-wage paradox' in chapter 35), they didn't understand why unemployment could be a problem. No wonder Keynes was so angered by the neoclassical view. It is worth repeating his famous quotation mentioned earlier:

But this long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean will be flat again. (Keynes 1924 Chapter 3 p80)

His remark '*in the long run we are all dead*' is often quoted out of context with the aim of showing Keynes as flippant and not taking economics seriously. It was anything but flippant. It reflected his genuine anger and exasperation at neoclassical economists' detachment from the real world.

Other than hoarding and its equivalents that cause unsold wealth, saving consists of spending on things that are intended to create wealth in the future - capital wealth - rather than spending on things that are for consumption in the present. This is *good investment*.²

² 'Good' in the sense that it has a positive effect on the economy. The wealth the investment creates

It is noteworthy that if we exclude unsold stocks the bulk of investment (i.e. good investment) is undertaken by firms themselves, from profits, rather than from external investors (Kay 2015 p164), and since firms' profits come from consumption purchases by the public the bulk of investment comes from consumption spending. This also applies for capital goods manufacturers, since their profits come from other firms' savings (i.e. money spent by firms on investment), and those savings come from their customers' consumption spending. Hence the traditional view that saving is better than consumption is again seen not to be true for the economy as a whole. In fact maintaining consumption is essential for the economy to continue to function properly.

Saving by adding money to a bank account deserves special mention. The thing that is of interest here is what happens to the totality of bank money - does it expand or contract? If people take out new loans faster than they repay existing loans then it expands; if the other way around it contracts - see chapter 39. People who add to accounts either by transferring existing bank money from someone else's account or another account of their own neither expand nor contract the totality of bank money. Also people who add to accounts by transferring cash have only a tiny effect on the totality of bank money because cash is moving in and out of bank accounts all the time. In any case nowadays cash can only enter the economy by someone exchanging bank money for it, so to get it in the first place the equivalent amount of bank money is destroyed, but is recreated again as soon as it is redeposited, usually by the owner or a staff member of the shop where it is spent.

If the totality of bank money expands then some of the excess will be used for future wealth creation, so that amount is saving in the good investment sense, but most of the excess is normally used to fund the purchase of existing assets - property, shares, bonds, derivatives etc., with some remaining in bank current and savings accounts. This money tends to stay out of circulation for prolonged periods because this type of borrower is usually an investor, and investors buy existing assets from other investors who do the same. This sort of circulation does nothing for the economy because it isn't used to buy new wealth - see chapter 24. If the totality of bank money contracts, then income has been used to pay down loans, and the effect is the same as hoarding.

26 *Measuring Economic Performance*

Here the relationships between the various elements of an economy are developed in order to reach a clearer understanding of the things we are particularly interested in like material wellbeing and growth or decline, and the things that influence them. However it only operates for the economy as a whole, it gives no indication of the distribution of wealth and wealth entitlement.

The chapter includes a lot of maths, which is necessary to illustrate the derivation of standard economic equations and identities. Understanding it is not necessary for subsequent discussion so if maths isn't for you then just skip it.

Economic growth and material wellbeing are discussed in terms of what it is that delivers them. It is not intended to imply that they are desirable ends in themselves unless they are delivered sustainably - i.e. with insignificant impact on natural resources and the environment - see chapter 7.

Each country prepares **National Income Accounts**, which set out its economic activity within a certain timeframe. It lists all sources of domestic income and records how that income is allocated. It allows the country's gross domestic product to be determined. The UK's accounts are recorded by the Office for National Statistics (ONS).¹

First it is necessary to define the terms used and to be very precise and consistent. Definitions in economic texts tend to differ and are often not set out explicitly, so they can be very imprecise, which causes significant confusion and frustration. Some of these terms may well differ therefore from those used in other texts. Some of the terms have been mentioned earlier. I have used the general term 'wealth' where the products may be goods or services:

Capital wealth is that which facilitates the production of finished wealth without becoming part of that wealth. Examples include tools and machines, skills, education and training. It also includes new capital wealth to replace that which is worn out and things needed to maintain capital wealth in an operational state. New replacement wealth is needed to compensate for depreciation, but depreciation is excluded from Gross Domestic Product, in fact that's what 'gross' means. If depreciation is subtracted from Gross Domestic Product then we have **Net Domestic Product**.

Consumer wealth is that which sustains or improves people's lives.

Finished wealth consists of things that are directly usable and ready for sale as opposed to things that are still in the process of being made or things that have been sold. It encompasses unsold capital and consumer wealth and also unsold outputs, including raw materials, used as inputs in other manufacturing processes.

Intermediate wealth includes everything that is awaiting assembly or in course of

¹ <https://www.ons.gov.uk/economy>

being assembled into finished wealth, and services that support the production of finished wealth. Examples include raw materials, unassembled or partly assembled components, and administrative and accounting services. It excludes things that are needed for production but have not yet been obtained by the producer. For example boxes of screws awaiting sale from a screw manufacturer represent finished goods, but when bought by a furniture manufacturer they become intermediate goods.

Investment wealth consists of capital, intermediate and finished wealth.

Inventories consist of intermediate goods and stocks of finished goods (services can't be stockpiled so inventories just consist of goods).

Of particular concern are changes from one accounting period to the next, so time is taken into account in terms of production, consumption and so on within a particular accounting period, normally a quarter or a year. The basic economic elements are consumption, investment, saving, government spending, taxation, exports and imports, all within the period of interest. GDP represents overall (economists prefer 'aggregate' when referring to the whole economy) economic output in the period, which is the production of all new wealth, so it includes the value of all consumer and capital wealth that is sold in the period and also changes in finished and intermediate wealth from the beginning to the end of the period. We are only interested in changes in this wealth because the period starts with a substantial amount already in place, so that must be subtracted from the amount that is in place at the end of the period, giving the change which can be positive or negative. Transfers of existing wealth and money are ignored because in themselves they don't affect aggregate economic output. In fact transfers for any purpose other than for the sale of new wealth are ignored, because our only interest is in aggregate economic output - i.e. new wealth. This can be confusing. Borrowing is a transfer payment, but what about interest? That might be considered payment for the service of making money available.² In the case of business borrowing it is assumed to be for investment purposes so it is counted and lumped in with private investment. In the case of consumer borrowing it is counted and lumped in with private consumption. In the case of government borrowing however it is regarded as a transfer payment, being a transfer from society as borrower back to society as lender - aggregate output not being affected. The essential point is to ensure that all new wealth creation and consumption is counted somewhere, but only counted once.

Transfers of money without anything in return are known as **transfer payments**, examples being benefits, pensions and subsidies, but I think it is fair to extend the definition of this term to include all money transfers for other than the sale of new wealth, and that is the sense in which it will be used in this analysis.

First we derive the equation for GDP in terms of spending on new wealth - this is known as the **expenditure equation**, also known as the **output equation** and as the **national income identity**. We need only consider consumer and investment wealth, because together they account for all wealth changes over the period. Note that a change in intermediate wealth over a period will be reflected as a corresponding change in investment wealth.

² The value of that service in the case of bank lending is very questionable however and is discussed in chapter 49.

Consumer wealth - (here denoted by 'C') can either be consumed domestically or consumed abroad, and can either be produced domestically or produced abroad. The same applies for investments (here denoted by 'I'). We are only interested in domestic aspects for our own economy, so things that are both produced abroad and consumed or invested abroad don't concern us.

Wealth (for consumption or investment) produced domestically will be denoted by 'pd', and produced abroad by 'pa'.

Wealth consumed domestically will be denoted by 'cd' and consumed abroad by 'ca', and wealth invested domestically will be denoted by 'id' and invested abroad by 'ia'.

Gross domestic product (wealth expressed in money terms - also known as gross domestic output) consists of all wealth produced domestically, and is denoted by 'Y'.

Therefore:

$$Y = Cpd + Ipd = Cpdcd + Cpdca + Ipdid + Ipdia$$

This says that GDP consists of all wealth produced domestically wherever it is consumed or invested.

But $Cpdca + Ipdia$ is the totality of exported wealth, so we can denote this by 'X'.

Therefore:

$$Y = Cpdcd + Ipdid + X$$

We can further develop this in terms of total domestic consumption and investment (Ccd and Iid) by noting that:

$$Ccd = Cpdcd + Cpacd \text{ and } Iid = Ipdid + Ipaid$$

Therefore:

$$Cpdcd = Ccd - Cpacd \text{ and } Ipdid = Iid - Ipaid$$

Rearranging the above equation we have:

$$Y = Ccd + Iid - (Cpacd + Ipaid) + X$$

But $Cpacd + Ipaid$ is the totality of imports, denoted by 'M', so:

$$Y = Ccd + Iid + X - M$$

This tells us that GDP consists of domestic consumption (wherever produced), domestic investment (wherever produced), together with exports less imports.

This is the expenditure (output) equation. Here $Ccd + Iid$ include all domestic consumption and investment, but textbooks normally include a separate entry for government expenditure, so we can split Ccd into two components where $Ccd = Ccd(\text{gov}) + Ccd(\text{non-gov})$, and similarly $Iid = Iid(\text{gov}) + Iid(\text{non-gov})$.

Note that government expenditure excludes pensions, benefits, subsidies and so on³, because these are transfer payments whose effect on consumption and so on are included in the other components; failing to exclude them leads to double counting. Borrowing also represents a transfer payment from lender to borrower, so government borrowing is also ignored. If we now let:

$$G = Ccd(\text{gov}) + Iid(\text{gov})$$

we have

$$Y = Ccd(\text{non-gov}) + Iid(\text{non-gov}) + G + (X - M)$$

which is the output equation, normally expressed as:

$$Y = C + I + G + (X - M)$$

where 'C' denotes $Ccd(\text{non-gov})$, i.e. private consumption, and 'I' denotes $Iid(\text{non-gov})$.

³ All payments from government where nothing is received in return.

gov), i.e. private investment.

Expenditure (output) equation: $Y = C + I + G + (X - M)$.⁴ This means: GDP = private spending on consumption (wherever produced) + private spending on investment (wherever produced) + government expenditure excluding transfer payments + the excess of exports over imports.

Next we derive the income equation.

Gross domestic income (or national income) - GDI - is the same as gross domestic product (or output) - GDP, because the money used to buy wealth is the same as the money value of that wealth, so it is also denoted by 'Y'. As discussed above all private income is allocated to individuals, so company incomes aren't included in the income equation because all such income is allocated to individuals in the form of wages, purchases, dividends, interest, shareholder equity and so on as mentioned earlier.

Recall the private saving definition from the last chapter: private saving = after-tax income not spent on consumption. Here after-tax income is gross domestic income less tax, where gross domestic income is denoted by 'Y' as discussed above, taxation is denoted by 'T', private saving by 'S' and private consumption by 'C'.

Therefore:

$$S = Y - T - C$$

or, rearranging:

$$Y = C + S + T$$

This is the income equation.

Note that tax in this context excludes transfer payments as did government expenditure earlier. Although in reality much of taxation goes on pensions, benefits and subsidies etc., those elements are already accounted for in this equation when they are either spent on consumption or saved by individuals, i.e. in the C + S elements.

Tax is also paid by companies from profits, but since all income is allocated to individuals companies' gross profits are regarded as allocated to individuals, with individuals paying all tax, whether levied on individuals or on companies.

Income equation: $Y = C + S + T$.⁵ This means: GDI = private spending on consumption (wherever produced) + private saving + tax (excluding transfer payments).

Now since both equations represent gross domestic product we can combine the two so as to express investment in terms of savings:

$$C + I + G + (X - M) = C + S + T$$

Subtracting C from both sides gives

$$I + G + (X - M) = S + T$$

So overall we have:

$$I = S + (T - G) + (M - X)$$

This is the savings identity.

⁴ [https://en.wikipedia.org/wiki/Output_\(economics\)](https://en.wikipedia.org/wiki/Output_(economics))

⁵ <https://economyhelp.com/how-to-calculate-national-savings-public-savings-and-private-savings/>

The savings identity: $I = S + (T - G) + (M - X)$.⁶ This means that private spending on investment (wherever produced) = private saving + public saving (tax less government expenditure) + excess of imports over exports.

This says that domestic investment is bought by the money that is saved privately and by government out of national income, plus the money from national income that is spent abroad. Note again that saving can be by direct purchase of investments (good investment), or by failing to buy goods and services that are offered for sale - thereby causing unsold stock, unbought services and increased inventories (bad investment). If imports exceed exports then there is a net outflow of spending abroad⁷, which would otherwise buy domestically produced goods and services, so this money contributes to bad investment. Also if taxation exceeds government expenditure then money is lost from circulation, and again this contributes to bad investment. It can only be justified if there is a need to slow down a racing economy, perhaps when there is too much money in circulation and there is a need to reduce it - but if applied it must be done very carefully to avoid stalling the economy - see chapter 16.

The savings identity is normally expressed as above, but this hides the good and bad investment aspects, so we can go further and split S into saving that takes money out of circulation 'Soc' (equivalent to bad investment) and saving to buy new investments 'Sni' (good investment for future production), giving:

$$I = Sni + Soc + (T - G) + (M - X)$$

Note that Soc includes imported investments, since although these will be utilised to increase production in the future the immediate effect is to take money out of circulation.

Of these terms [$Soc + (T - G) + (M - X)$] represents transient saving in that if overall it is positive then it corresponds to bad investment and shrinkage of the economy as firms cut back on production and hence on the workforce. As the economy shrinks (less national income) people become fearful for the future so there is less aggregate spending. Less spending means more paying down of debts, less tax revenue, less good investment, and also less bad investment - people have less money so can't keep as much in cash or in banks and can't import as much. Overall in these circumstances the transient element diminishes until it is zero and a steady state is reached when $I = Sni$, but I and Sni after the transient has gone will be considerably less than they were before because good investment has diminished along with all other spending.

This is the mathematical version of the paradox of thrift insight that was recognised in chapters 13 and 15 for the simple economy and the real economy:

When people cut back on spending and take money out of circulation the only way to avoid economic contraction is for the government to spend in order to compensate. Government must put as much new money into circulation as private individuals have taken out. If the government instead imposes austerity then it

⁶ https://en.wikipedia.org/wiki/Savings_identity

⁷ When importing, the home currency doesn't go abroad, it is exchanged for the currency of the country that exports, and that is what is spent on imports. Although domestic currency doesn't go abroad, the amount that is exchanged is spent abroad in terms of monetary value. See chapter 70.

does the opposite and the economy shrinks even faster.⁸

If however the transient saving element $[\text{Soc} + (\text{T} - \text{G}) + (\text{M} - \text{X})]$ is negative overall, then the economy expands until all spare capacity is used up, and then if it remains negative there is inflation - see chapter 18.

We can now return to a point that was made earlier in chapter 4 that change in GDP is taken to imply change in material wellbeing. A problem is that changes in capital and intermediate wealth are counted as changes in GDP, but this wealth in itself does nothing for material wellbeing, though capital wealth should enable it to grow as it delivers additional wealth in the future.

So how can we measure material wellbeing? At first sight and using the designations given above this would seem to be the same as Ccd for a given accounting period. This is the quantity of consumer wealth consumed domestically in the period. However it is deficient as a measure to the extent that some of it is imported, which will only make us poorer in the future unless it is offset by sufficient exports to pay for it (if not then the country is living beyond its means which leads to grief eventually as Mr Micawber pointed out⁹). Therefore a better measure is one that takes account of exports and imports and is $\text{Ccd} + \text{X} - \text{M}$. This measures Ccd together with national income coming from or going abroad, which is the degree to which the country is well off in terms of both consumed wealth and entitlement to foreign wealth - which might be negative. We might of course choose to spend some of the current entitlement on foreign capital wealth rather than on consumer wealth, but that would affect a future accounting period. So far as this period is concerned we are well off to the extent of how well we have lived plus the extent to which we have accumulated in the present entitlement to live in the future.

Let's call the measurement we are after AMW for Aggregate Material Wellbeing, noting especially that this is a measurement for the country as a whole - as indeed are all the other measurements, it tells us nothing about how wellbeing is distributed between individuals within the country.

From the above discussion:

$$\text{AMW} = \text{Ccd} + \text{X} - \text{M}$$

Aggregate material wellbeing is domestic consumption plus exports minus imports. A more significant measure is AMW per capita, which gives the wellbeing for an individual rather than for the population as a whole. It is easily derived by dividing AMW by the population.

Now from the expenditure equation (before we brought in government taxation and spending)

⁸ see chapter 90.

⁹ Mr Micawber's recipe for happiness: Annual income twenty pounds, annual expenditure nineteen pounds nineteen shillings and sixpence, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and sixpence, result misery. From 'David Copperfield' by Charles Dickens. Micawber's advice was wise, it's a pity he could never follow it himself. (Repeated from chapter 20).

$$Y = Ccd + Iid + X - M$$

so

$$Y = AMW + Iid$$

and

$$AMW = Y - Iid$$

This makes sense because it strips out all investment (capital wealth plus changes in intermediate wealth) from GDP, and neither capital wealth nor changes in intermediate wealth have any immediate effect on aggregate material wellbeing.

Bringing back government aspects for completeness we have:

$$AMW = Ccd(gov) + Ccd(non-gov) + X - M$$

Aggregate material wellbeing is private and government domestic consumption plus exports minus imports, or, in terms of GDP:

$$AMW = Y - Iid(gov) - Iid(non-gov)$$

Aggregate material wellbeing is GDP minus private and government domestic investment.

Aggregate material wellbeing for a given time period can be expressed as private and government domestic consumption together with exports less imports, or, in terms of GDP, aggregate material wellbeing is GDP less private and government domestic investment.

Growth or decline in aggregate material wellbeing can easily be determined by changes from one period to the next.

All the foregoing can be shown on a diagram - see figure 26.1.

This shows the flow of new wealth and money spent on new wealth in the national economy. By any standards it is complex! To make sense of it all elements must be strictly defined. I haven't been able to find any textbook or other source that defines all the terms fully or presents the relationships in a fully developed diagram so I have worked this up to show the validity of the equations and identity. I present it here in case it's of any interest to others.

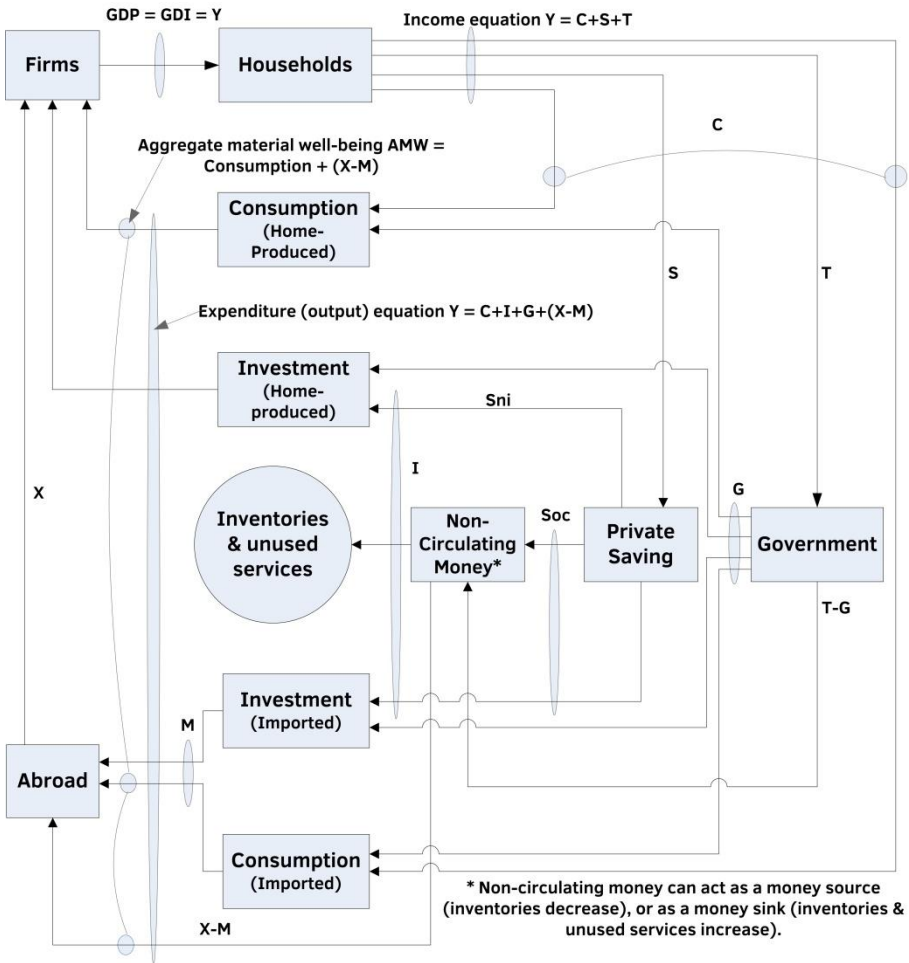


Figure 26.1: The circulation of income and distribution of wealth in a national economy

Note that services that aren't used are wasted, they can't be stored for later sale as can inventories, so they can't act as a money source.

27 Shortcomings of Gross Domestic Product as a Measure of Wealth Creation

The whole purpose of national accounting is to give an indication of how the country is performing economically. From these accounts GDP has become the single most important measure, taken to represent aggregate national wealth creation. However there are many significant shortcomings in this measure, which taken together render it very misleading:

i. Perhaps the main concern is that it double counts wealth extraction. This is explained in detail in the Introduction to Part 2 but in simple terms it counts as wealth goods and especially services that are sold at inflated and unjustified prices, largely due to information hiding. The banking and financial trading sectors in particular are built on this practice and extract many billions of pounds from unwitting people, and convince governments that they are providing valuable services when in reality they are merely transferring vast amounts of money from the public and governments to themselves. Transfer payments are excluded from GDP because they don't represent wealth creation and these transfers don't either. It is double counting because it is counted first when people create wealth and earn income for doing so, then again when they transfer this earned money to banks, financial traders and other wealth extractors for the inflated services they claim to provide. If all wealth extraction was deducted from GDP it would be very much lower, and since a great deal of GDP growth since financial deregulation has been growth in banking and financial trading practically all that growth was illusory. It was this apparent growth that fuelled government encouragement of banking and financial trading.

ii. It treats all wealth creation within the country as domestic, regardless of whether it is owned domestically or by foreigners. This makes a big difference because the bulk of profits from domestically owned businesses are spent domestically, whereas the bulk of profits from foreign owned businesses are repatriated to the owning country, thereby depleting the domestic money supply. If the wealth creating capacity of foreign owned domestic businesses is balanced by domestically owned foreign businesses then it makes little difference, but if not there can be large discrepancies. The worst effects are for developing countries where since neoliberalism came to the fore much of the wealth creating capacity is owned by investors in rich countries, yet the profits they make are counted as belonging to the country of origin when in reality they belong to and are returned to the investors. This is a quotation from a paper by Clifford Cobb, Ted Halstead, and Jonathan Rowe¹:

Under the old measure, the gross national product, the earnings of a multinational firm were attributed to the country where the firm was owned - and where the

¹ <https://www.theatlantic.com/past/politics/ecbig/gdp.htm>

profits would eventually return. Under the gross domestic product, however, the profits are attributed to the country where the factory or mine is located, even though they won't stay there. This accounting shift has turned many struggling nations into statistical boomtowns, while aiding the push for a global economy. Conveniently, it has hidden a basic fact: *the nations of the North are walking off with the South's resources, and calling it a gain for the South.* [my italics]

iii. It ignores wealth destruction from natural and man-made disasters and accidents, but counts as positive those clean-up and rebuilding activities necessary after they have occurred. *We could generate good GDP figures by repeatedly knocking down buildings and rebuilding them. Even the money paid to people to knock them down would count towards GDP!*

iv. It includes intermediate wealth, including services that are necessary to maintain the basic fabric of society and to allow normal business to be conducted, for example: emergency, health and security services; transportation; environmental protection; education, legal services etc.

v. It includes wealth creation whose purpose is destruction;

vi. It ignores all wealth that is created without payment such as caring for children or elderly relatives within the family and voluntary work. *If two sets of parents care for their own children then according to GDP there is no wealth creation, but if they care for each other's children and each pays the other the same amount of money, then GDP counts both as wealth creation.*

vii. It ignores depreciation and replacement of capital goods, necessary to maintain production at the current level. This is what 'gross' means. The Net Domestic Product (NDP) does account for these but isn't used because it's harder to measure.

viii. It ignores population growth or decline. The measure that relates to individuals is GDP per capita, because if GDP grows by 10% and the population also grows by 10% then there is no change from an individual's point of view. This is easily corrected by dividing by the population.

ix. It doesn't count resource depletion, environmental damage or harm to people unless there are direct costs involved.

There are many more problems detailed in Lorenzo Fioramonti's book (Fioramonti 2013). In order to understand GDP and the severely misleading conclusions that are drawn from it, not least by governments in setting policies, I can thoroughly recommend it.

A quotation from his book (page 156) summarises very well the characteristics of GDP:

GDP is built on a great lie. This lie says that markets are the only producers of wealth. What is not priced, what does not involve a formal transaction based on money, does not count - no matter how important it may be for our social and economic wellbeing. Price tags are the ultimate symbol of GDP. Continuous production and endless consumption are its underlying values. Durability, re-usability and self-production are its worst enemies. Things that last are detrimental to GDP, because they only get priced (and thus counted) once. Things that we produce for ourselves are even worse, because they are not priced at all.

A US website run by John Williams² attempts to remove as many distortions as he can from US national accounting data. He gives a graph of US GDP as he calculates it from 1984 to 2012, showing that it is much lower than the official version.³ Nevertheless as far as I can tell he doesn't deduct the double counting from banking, financial trading and other wealth extraction activities, so the true values are likely to be much lower again.

I have recommended measuring Aggregate Material Wellbeing (AMW) rather than GDP, but GDP itself first needs to be corrected for all these distortions - or as many as possible of the major ones. Only then will the value we want materialise with any accuracy. It would be an interesting exercise to see how this parameter has changed over the years, and in particular to see how changes in domestic investment have affected changes in AMW - which they are intended to do - in later periods.

But, importantly, AMW takes no account of the nature of consumed wealth, which may be good or bad and created sustainably or unsustainably. Therefore it is not presented as an aspirational measure, merely as a measure indicating more appropriately what GDP is currently understood to measure.

² www.shadowstats.com

³ http://www.shadowstats.com/alternate_data/gross-domestic-product-charts

Part 1c

Exchange

28 Markets, Supply and Demand

A great deal has been said about money and its exchange for wealth, so it is worth saying something about the mechanisms and processes that facilitate and regulate these exchanges. The most important mechanism is the market, where buyers and sellers come together to exchange goods and services, and enter into contracts to exchange goods and services, in other words to carry out transactions. Past markets were physical locations, and many still are, but increasingly they are electronic, using the power of the internet to bring people together to trade. Each market relates to a particular good, service or type of contract, so there are distinct markets for apples, steel, insurance, money, illegal drugs, labour and everything else that people want to exchange.

The behaviour of markets has been and still is a very contentious issue in economics. Indeed it is probably this issue that divides the different economic schools more than any other. The mainstream neoliberal view is that markets should be left to buyers and sellers, motivated only by money, without any external, especially government, interference - this is the 'free market' or for more emphasis the 'unfettered free market' ideology. According to this view, universal benefits flow from these markets, not only for the participants themselves but also for everyone else. Conversely, according to this view, almost any economic problem can be traced back to market interference, which if the interference hadn't happened wouldn't exist because free markets are able to solve any economic problem on their own.

The motivational power of money is immense. It's like fire. It provides tremendous benefits when properly controlled, but when uncontrolled it does great damage. Neoliberalism insists that the motivation it arouses is best left to itself in the marketplace without external restrictions. Neoliberalism has largely had its way for almost forty years and like an uncontrolled fire it has indeed done great damage.

Markets provide the exchange mechanism for private enterprise, where prices are determined by individuals concerned only with serving their own interests. Other types of exchange mechanism are possible, especially where there are wider interests at stake than those of individuals.

There are three types of markets that need to be considered separately. The first is the **ideal free market**, the second is the **unfettered free market**, and the third is the **fair market**.

These types of markets don't have consistent formal definitions so I have defined them in ways that seem to match those that are generally used.

28.1 An ideal free market

This is a market in which buyers and sellers agree product prices between themselves

without external interference. It reaches an **equilibrium price** - one that depends only on the rates of supply and demand. To be ideal requires **perfect competition**¹ where, amongst other things:

- sellers and buyers are free to enter and leave the market at will and can easily do so;
- there are large numbers of buyers and sellers;
- no buyer or seller is able to set prices on their own, only the activities of all buyers and sellers together can do that;
- there is **perfect information** - all consumers and producers are assumed to have perfect knowledge of price, utility, quality and production methods of products;
- the products are perfect substitutes for each other - the qualities and characteristics of a market good or service do not vary between different suppliers;
- there is **perfect factor mobility** - every productive factor (worker, machine, land, building etc.) can be redeployed in time to serve any other productive purpose at no cost;
- participants always make rational choices;
- costs and benefits don't affect third parties;
- there are no transaction costs; and
- there are no economies of scale.

None of these is ever achieved in practice of course and many lie in the land of fantasy, so an ideal free market is a complete fiction. Nevertheless it is useful to pursue the implications because where conditions fail to be met participants find opportunities for exploitation.

In an ideal free market participants are free to buy at the seller's offered price, sell at the buyer's bid price, haggle, or walk away. Sellers provide the supply of products, buyers provide the demand, and the relative strength of supply and demand determine the price that is agreed. Both supply and demand are flexible, in that new suppliers are free to enter the market if they wish without any barriers to entry, and buyers are similarly free and available in varying quantity depending on the prevailing price - generally the higher the price the fewer the buyers. I say generally because some markets behave differently, especially for things that are not for use but for later resale. Here a rise in price is often taken as a signal that further rises are likely, and demand increases as prices increase, and vice versa - see chapter 57.

The price is the mechanism that matches supply to demand. If a new product is developed that is popular, initially the supply rate is limited so there are more buyers willing to buy than there are products available for sale. If the initial price was set too low

¹ https://en.wikipedia.org/wiki/Perfect_competition

by the supplier then it rapidly rises as buyers compete between themselves by offering more in order to obtain the product or sellers recognise the high level of demand and raise the price themselves. In these circumstances supply is limited, the price is high, and buyers are limited because relatively few are prepared to pay the high price. Both supply and demand are low but matched at this high price. A high price tempts the first supplier to increase production and also tempts other sellers to enter the market, causing supply to increase. The new suppliers offer products at lower prices to attract buyers and existing suppliers are forced to follow suit. This they do until the rates of supply and demand are again matched at higher levels at this new lower price. Of course there are many more potential sellers willing to supply at a higher price and many more potential buyers willing to buy at a lower price, but there is only one price at which both supply and demand rates are equal, and this is known as the equilibrium price. At a higher price sellers make less money because there are fewer buyers and they lose more on the unsold stock than they gain on the increased price, and at a lower price sellers make less money because although there are more buyers they lose more by the reduced price than they gain by selling more stock.

If it happens in an ideal free market that external effects cause an oversupply of a particular product relative to the number of buyers - perhaps another product has been produced that people prefer to the product in question - then buyers diminish because fewer are prepared to pay the current price, and sellers are forced to compete with each other by reducing the price to attract buyers so as to avoid having unsold stock, and as a result the least efficient sellers lose the most money and abandon the market. As sellers leave the market the oversupply diminishes and the fall in price levels off until it again matches the new lower supply and the new lower demand rates *at the new price*. If the opposite happens and there is a shortage of a particular product - perhaps the government has imposed a high tariff on similar but preferred imported products - then buyers' willingness to buy increases and the price rises as before for the new product.

Although the concept of ideal free markets is an attractive one, it isn't realisable in the real world because it relies on neither side being able to take advantage of the other side. In effect both sides have equal freedoms in the ideal free market. In the real world of course both sides don't automatically have equal freedoms. Buyers and sellers are naturally in conflict - buyers want to buy cheaply whereas sellers want to sell dearly - and in any conflict each side tries its best to use its freedom to restrict the other's freedom because that gives it the advantage. Think of almost any interactive game of skill where the actions of one player affect the actions of other players, and it is seen that skill in the game represents precisely this ability to restrict one's opponent's freedom of action. Free markets are games of this sort, though seldom played for fun, and participants use whatever freedoms they have to enhance their own position and restrict others. This is the freedom conflict discussed in the Introduction. Several examples are given in the next chapter.

A particularly unrealistic assumption in the promotion of free markets is that there are no economies of scale. In the real world there are of course, and they allow bigger companies to capture markets (which is what they all strive to do) and become monopolies by forcing smaller and less competitive suppliers out of the market. However this spoils an otherwise very elegant theory, so, in the well-established tradition of neoliberal economics it is simply assumed not to exist! Neoliberals prefer unrealistic

assumptions that lead to orderly and easy-to-analyse relationships that don't work to realistic assumptions that lead to disorderly and hard-to-analyse relationships that do² (Schlefer 2012 pp10-15).

It is worth adding that although free markets are much praised and loved by neoliberals, they are hated by suppliers. In markets that approach this ideal most closely; where it is hard to hide relevant information and easy for new suppliers to enter, suppliers have to struggle constantly to stay afloat against fierce competition. Life for suppliers is hard in these circumstances. In fact today there are very few if any such markets. In markets that had these characteristics in the past - for example for ordinary household products and consumables - suppliers who were slightly more successful grew their businesses by taking advantage of economies of scale, often on very narrow margins, so that now they are dominated by very few large companies, some of them multinational corporations.

28.2 An unfettered free market

For neoliberals this is the perfect market. It is again one where no-one other than buyers and sellers is involved in the working of the market, but the difference between this and an ideal free market is that it acknowledges the inability of a real market to achieve ideal market conditions but dismisses it as inconsequential. As a result, and by holding fast to the non-interference rule, it allows participants to pursue whatever advantage they are able to. Proponents of unfettered markets strongly favour *laissez-faire* - literally 'let do', meaning let people do as they choose.

Belief in the benefits of unfettered free markets is an act of faith (as indeed are many economic beliefs), in that it has never been proved in spite of many attempts to do so, that such markets deliver the benefits that are claimed for them - see chapter 80. Claimed benefits are that they allocate resources in the most efficient manner, and in so doing bring about the best outcome for everyone - buyers, sellers and the rest of society. This is the free market utopia referred to in the Introduction.

28.3 A fair market

This is a market where everyone, participants and non-participants, is treated fairly. No-one is exploited or harmed by the trade, and everyone is able to exchange goods and services at prices that reflect the true value of the product. A fair market applies appropriate external regulation where necessary to ensure that no-one can unfairly exploit others. It acknowledges the need for general state intervention in the form of supporting and enforcing functions - property rules to establish ownership; courts to

² Sometimes we have to make assumptions that seem to fly in the face of reason - quantum mechanics and relativity are two such cases. But in science data come first - we find odd results from experiments that can't be explained by accepted reasoning, so we have to try different reasoning. However assumptions that fly in the face of reason are subjected to the most rigorous examination by thorough testing, and shown to be true because, and only because, they have been proved to apply in the real world. Here we recognise that it's our common sense view of the world - which evolved with us to allow us to function in the world we live in - that is leading us astray.

enforce contracts; trading regulations to protect buyers and sellers; a police force to investigate crimes and bring wrongdoers to justice; health, safety, labour and environmental standards to comply with accepted norms; social insurance to insulate against market risk; and taxation to fund all these and many more requirements (Rodrik 2012 p22)

The main differences are between unfettered free markets and fair markets, so these are discussed at greater length.

29 Unfettered Free Markets and Fair Markets

A major problem is that being free and being unfettered are two aspects of markets that are in constant conflict with each other, reflecting the fact mentioned earlier that buyers and sellers are in constant conflict - buyers wanting low prices and sellers wanting high prices. Because of the buyer/seller conflict a market cannot be free to the same extent for both participants, because each seeks advantages for him or herself, and an advantage for one is used to disadvantage the other. Therefore any freedom of choice that permits an advantage to be taken by one side naturally restricts the freedom of choice of the other side.

A transaction is an adversarial encounter where one participant's freedom is the other participant's constraint.

Because of this an unfettered free market is a logical impossibility. A free market can only work if both buyers and sellers respect each other's property and refrain from taking advantage of the other side, and they only do so if an outside authority (law enforcement) guarantees respect for property and prevents exploitation. This is the irony:

A free market must be fettered in order to guarantee its freedom, and an unfettered market can't be free because those with stronger positions exploit the weaker.¹

From now on therefore I shall refer to unfettered markets rather than unfettered free markets, because unfettered markets are what neoliberalism champions, and the freedom they embody is strictly one-sided.

The distant past was a time of unfettered - but certainly not free - markets.² The strong took what they wanted - usually land - and distributed it to their supporters, who 'allowed' peasants to work it to provide for their own and the owner's survival needs, and to provide surplus wealth almost exclusively for the owners. Slavery, child labour and widespread exploitation of the poor were commonplace because such people would work, or could be made to work, for no more than barely kept them alive. People who had strength used it for their own benefit.

Although proponents of the unfettered market view insist on the enforcement of law, order, property rights and contracts, regarding these as the only legitimate duties of the state, they argue fiercely against any further outside interference. In this they are faithfully following in the footsteps of earlier proponents, who fought every proposed infringement of market freedom, including slavery and child labour since both were

¹ Bootle 2009 pp74-75

² The term 'market' doesn't really apply in these circumstances but the example serves to show the contradiction between the concepts of 'unfettered' and 'free'.

particularly lucrative.³ An unfettered market has no means of applying self-limitation. It operates very much like a machine, doggedly maximising the output for any level of input, without any concern for the environment, resource depletion, fairness, justice, human suffering or even death. The limitations that these concerns demand must be applied externally, by the state on behalf of society as a whole. Modern proponents of unfettered markets now accept the need for many of these limitations (or at least they daren't deny it), but in accepting, however reluctantly, such limitations, they have moved their position on fettering from absolute rejection to acceptance by degree. Their position has moved from upholding a point of principle to one of arguing where society should draw the line.

A major problem with unfettered markets is that often there are third parties that are affected by the transactions, without having any say or sometimes even any knowledge of them. This has become more evident as we increasingly recognise the environmental dangers of human activity. Suppliers whose production processes create pollution or carbon dioxide have been allowed to dispose of these unwanted products into the atmosphere or rivers or the sea free of charge, even though harm is done by them. Here production costs are borne by the population as a whole rather than by suppliers, who are able to sell their products and buyers to buy them more cheaply than they would if they bore the full costs themselves. These effects are known as **negative externalities**. The only way to ensure that proper account is taken of external costs is to impose them from outside, by taxation, regulation or in extreme cases by prohibition. There is no way that an unfettered market can allow for such costs.

Yet another problem is that while neoliberals loudly denounce any form of external intervention as distorting the market, they allow participants to do their level best to distort the market, and without appropriate intervention by an external authority there is nothing to stop them. This is ideal for dominant suppliers who go to enormous lengths to apply their own fettering to prevent potential competitors from entering the market and to exploit any advantage, both legal and sometimes illegal, that they can find to sell their products for as much as possible. This is the use of one participant's freedom to constrain the other participant discussed above.

A few common examples illustrate the point:

- banks sold unwanted credit card payment protection insurance (PPI) to unwitting customers by hiding it in the detail of the card agreement;
- energy suppliers confuse customers by offering vast numbers of different tariffs so that it is difficult to compare one supplier's offerings with another's⁴;
- sellers withhold or distort disadvantageous product information from buyers and sometimes also from regulatory agencies, for example see what pharmaceutical companies are prepared to do for profit^{5,6}, and also a car

³ http://abolition.e2bn.org/slavery_112.html and https://en.wikipedia.org/wiki/Factories_Act_1847

⁴ <http://www.bbc.co.uk/news/business-11916422>

⁵ <http://www.theguardian.com/society/2008/mar/06/health.health>

manufacturer's disregard for people's health and the environment in cheating on exhaust emissions⁷;

- when there are relatively few existing competitors suppliers form cartels (informally or in secret to avoid prosecution) to rig prices against buyers; in a similar vein contracting companies apply collusive tendering for the same reasons⁸;
- sellers hide information about the true costs to customers of their products, first prize in this regard going to the banking and financial trading sectors who by concealing how they operate and opaque charging practices manage to divert a massive share of national income to themselves. This is so successful that it deserves and gets a complete part of the book to itself - see Part 2;
- dominant sellers apply restrictive trade practices to limit competition, for example exclusivity deals where companies are granted exclusive rights to sell or resell a manufacturer's goods or services in return for a binding agreement not to deal in other manufacturers' goods⁹;
- a large unscrupulous supplier can supply goods below cost temporarily to undercut and force smaller suppliers out of business, then raise prices afterwards to more than before to make up for the loss and make ongoing extra profits¹⁰;
- companies offer bribes to foreign officials in order to sell products¹¹;
- "...cigarette companies stealthily made their dangerous products more addictive, and as they tried to persuade Americans that there was no 'scientific evidence' of their products' dangers, their files were filled with evidence to the contrary." (quoted in the preface of Stiglitz 2012); and
- companies offer special deals to new customers - mobile phones, broadband, insurance, credit cards, bank accounts etc., all designed to exploit people's forgetfulness or disinclination to change when the deals run out.

Whenever they can unscrupulous people and businesses use whatever tactics they are

⁶ <http://articles.mercola.com/sites/articles/archive/2012/05/14/mercks-adhd-drugs-unsafe.aspx>

⁷ <http://www.bbc.co.uk/news/business-34324772>

⁸ <http://www.telegraph.co.uk/business/2017/03/20/cma-launches-crackdown-cartels-illegal-activity-rises/>

⁹ <http://businesscasestudies.co.uk/office-of-fair-trading/the-importance-of-competition-policy/restrictive-trade-practices.html>

¹⁰ https://en.wikipedia.org/wiki/Predatory_pricing#Examples_of_alleged_predatory_pricing

¹¹ <http://www.independent.co.uk/news/business/news/bae-systems-pays-400m-to-settle-bribery-charges-1891027.html> and <https://www.theguardian.com/business/2012/jul/03/glaxosmithkline-fined-bribing-doctors-pharmaceuticals>

able to dream up to serve their own interests. The rewards for hiding the truth, cheating, lying, obfuscation, exaggeration and so on are very substantial. Neoliberals claim that unfettered markets reduce the risk of corruption by taking power away from public officials who had authority over others during the heavily state-controlled post-war economy, but the freedom that *laissez-faire* confers merely provides different opportunities which are exploited to the full.

Buyers are usually the losers in the above situations but large buyers can also exploit their position as do supermarkets that use their immense buying power to fix prices and impose exclusive supply contracts on small suppliers.

People are heartily sick of having to be on their guard all the time to avoid being taken advantage of and of having to switch energy and other suppliers every year because in today's market not only are there no rewards for loyalty there are penalties. What we have is a very far from the ordinary person's view of what markets should provide.

There is also the natural supply effect mentioned earlier that acts to prevent new suppliers from entering the market, and that is economy of scale. It is normally cheaper per product to produce two products rather than one, ten products rather than two, and so on, until the full production capacity of the supplier has been used up. At that point it is normally cheaper per product again to expand production or set up new production facilities. This can go to great lengths as evidenced by the many massive global suppliers - oil companies, supermarket chains, car producers, consumer product suppliers, pharmaceuticals, IT companies and so on. It is very difficult for potential new suppliers to gain a foothold in markets that are dominated in this way, so competition is very limited (although suppliers make it seem otherwise by offering many similar products under different brand names and by supplying wide product ranges) and therefore unfettered markets lead to domination by the few.

The sheer size and wealth of these corporations allows them to set up their own:

- research and development departments to find ways to innovate to reduce costs further wherever possible;
- extensive well-funded legal departments to challenge or intimidate potential competitors or anyone who might pose a threat to their business, and to deter challenge from aggrieved parties;
- marketing and advertising departments to keep their products at the forefront of consumers' minds;
- lobbying departments with generous budgets to befriend and persuade ministers and other authorities to favour their own interests; and
- production and administrative facilities across the world to take advantage of low labour costs and favourable tax regimes.

These are the multinational corporations, many of whose revenues exceed the gross national products of entire countries.¹² The particular problems thrown up by the

activities of multinational corporations are examined in more detail in chapter 75.

Additionally there are many products that don't lend themselves to market competition or are too big or too risky for private investors to consider without government guarantees and subsidies. These include public utilities such as water provision, effluent disposal, electricity supplies and public transport. Public utilities have few sellers but many buyers, and would gravitate to monopoly provision in an unfettered market, which would allow exploitation of buyers by sellers. Although the current policy is for these markets to be privatised, at best they represent contrived markets requiring substantial regulatory overhead to prevent exploitation of customers and oversee proper investment. Also if the government hoped by these means to divest itself of failure risk then it can't do so because the fact that the economy depends on them means that regardless of who makes the profits during good times ultimately the government is responsible for keeping them in service during bad times - see also chapters 91 and 92.

There are also things known as **positive externalities**, where benefits accrue to external parties from market activities. If the externality is significant and can't be prevented the unfettered market provides no buyers and no sellers, since neither is willing to pay for or to provide things that can be enjoyed free of charge by others. Such things include state (national and local) infrastructure and services such as roads, street lighting, bridges, emergency services, flood barriers, and security services such as policing, defence forces and intelligence agencies. It might be argued that a completely unfettered market might provide many of these services provided that it was free to restrict use to those who could pay and by charging enough to be profitable. Indeed this is what happened in the past with turnpike roads, bridges and fire services, but to introduce them widely into a modern economy would disrupt its operation to such an extent that it couldn't be allowed. Some use is still made of road and bridge tolls but these are very limited and often applied to restrict usage, as in congestion charges, rather than to make a profit. The only way to provide these services without exploitation is by state ownership.

The 'market freedom vs state control' debate is a smokescreen to hide what's really going on. All markets must be controlled, indeed a market is no more than a forum for controlled exchanges.

Robert Reich (Reich 2016) makes this case very effectively. While people engage in the debate they miss the real question, which is: 'Who should exercise market control?' The unscrupulous know full well that markets must be controlled, but they don't say that openly. They are content to let the debate rage on in the foreground, while in the background they surreptitiously and with mounting effectiveness increase their stranglehold over markets - this is the freedom conflict where without effective state control the powerful seize control for their own benefit.

Reich identifies five areas where rules have to be laid down for markets to function:

- Property: what constitutes property? This used to be relatively simple but with modern intellectual property it is much more difficult and strict definitions are needed - and change regularly. What are the things that can

be exchanged in a legal market? Human beings - not any more; explosives - only under strict conditions; body parts - in some countries yes and others no; and so on.

- Monopoly: to what extent can single players be permitted to dominate the market?
- Contract: what terms are allowable and what are prohibited when parties engage in contracts to exchange things?
- Bankruptcy: under what conditions can people under contract be allowed to walk away from their obligations?
- Enforcement: what penalties are to be applied when any market rules are broken?

It is the government acting as society's agent that must set the rules, yet Reich shows very clearly how wealth power labours ceaselessly and with frightening success at applying any and all tactics to persuade governments to change market rules so as to channel an increasing share of national wealth production into its own hands, against the interests and even without the knowledge of other members of society. He further shows how governments - if they can muster the courage and political will - can change back those rules so as to become fairer to all, and do it transparently so that all can judge for themselves how fair they are and argue their case if they feel they are being discriminated against.

As Reich points out: "The pertinent issue is not how much is to be taxed away from the wealthy and redistributed to those who are not; it is how to design the rules of the market so that the economy generates what most people would consider a fair distribution on its own, without necessitating large redistributions after the fact" (Reich 2016 p102).

If unfettered markets always worked for the benefit of society there would be no need for the Sale and Supply of Goods Act, the Trade Descriptions Act, the Consumer Credit Act, the Consumer Protection Act, the Distance Selling Regulations, the Unfair Terms in Consumer Contracts Act, and all the other many relevant protection laws and regulations. There would be no need for the Office of Fair Trading, The Trading Standards Institute, the Financial Conduct Authority, the Competition and Markets Authority, the Office of Gas and Electricity Markets (Ofgem), the Water Service Regulation Authority (Ofwat), the Office of Communications (Ofcom) and so on. In truth constant vigilance is needed to guard against any tactics that suppliers can find to distort the market in their favour, particularly when they are supplying essentials. Buyers generally have less scope for distorting the market but where they can, such as in colluding against suppliers or in using buying power to exploit suppliers, appropriate measures are again needed to counter such activities.

Armed with all this information we can now set down some conditions that are required for markets to be fair:

- v. buyers and sellers are free to enter or leave the market at will and can easily do so;

- vi. all relevant product information is accurate and freely available;
- vii. products can do no or limited harm to buyers;
- viii. either no harm is done to third parties or to the public interest, or full compensation is provided for such harm.

Additionally:

- ix. where private markets fail to meet social needs the state must make provision.

There is another condition that isn't primarily to do with fairness, but has a strong influence on how markets behave, and that is independence of participants. This is considered separately in chapter 34.

The more that fair market conditions fail to be met and the more harm that the unfairness can cause the more regulation is necessary.

The more that fair market conditions are met, the more the market provides a mechanism that operates automatically, efficiently and cheaply, and delivers very substantial benefits for all.

Adam Smith, in his influential 1776 book 'The Wealth of Nations' (Smith 1776 p24), summed up this mechanism nicely:

It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest. We address ourselves not to their humanity but to their self-love, and never talk to them of our own necessities, but of their advantages.

Butchers, bakers and brewers were trades where it was easy in Smith's day for new suppliers to enter and compete in the market, so they represented fair markets. It is less easy now because economies of scale favour large suppliers to the detriment of potential new entrants. Neoliberals cite this quotation in arguing that all markets should be unfettered, thinking that Smith's reference to the 'invisible hand' was used in connection with competitive markets, when it was used in quite a different context - see chapter 80. In fact Smith was very well aware of the dangers of unfettered markets - see his quotation in the next chapter in relation to monopolies.

If the state tries to control all markets, as it did in the USSR, it collapses under its own inefficiencies. Imagine the administration and waste involved in trying to ensure sufficient supplies of all consumer products for all villages, towns and cities. It can never succeed and oversupply or more often acute shortages are the result. All this can be avoided by leaving it to the market wherever possible, and to the resourcefulness of people in recognising good opportunities for personal gain by catering for what other people want.

The mistake is in believing that all markets should be unfettered. Although belief in the widespread benefits of universal unfettered markets is untenable, it still remains mainstream economists' and many politicians' ideal to be aspired to as far as possible.

The most telling cases are the banking and financial trading sectors, which have great wealth and power and use it to lobby governments to reduce or remove regulations that

restrict their activities. They were immensely and increasingly successful during the 80s, 90s and 00s and in consequence there was woefully inadequate fettering of financial markets, resulting in the 2008 worldwide crash and subsequent Great Recession - see chapter 54.

A major reason for their rise to prominence was the Efficient Markets Hypothesis (EMH) - the idea that prices generated by financial markets represent the best possible estimate of the value of any investment. This became one of the central theoretical doctrines of neoliberalism, developed by Eugene Fama just as the Keynesian era was drawing to a close. Empirical work tended to support the theory, in that fluctuations in financial pricing appeared to be random, implying that there is no underlying pattern in the data. If this is true then there is no point in trying to 'beat the market' because at every instant the price of any investment is 'correct', meaning that it automatically includes everything that is known at that instant, not only about the investment itself but also about market behaviour, so that any tendency for a pattern to emerge (say prices rising before Christmas and falling afterwards) will be immediately and fully exploited and therefore rendered ineffective. Once EMH is accepted it follows that any form of financial regulation is harmful because it hinders the market's ability to reflect correct prices. In fact any form of state interference can only distort the market, making it less efficient, and the only satisfactory solution is expose all businesses, or as many businesses as possible, to market forces, by allowing the private sector to run them, because private enterprise will always outperform the state. It implies that there can be no such things as bubbles and busts in asset prices, and in spite of plenty of experience to the contrary throughout history, and even in spite of the dotcom bubble and bust in the early 2000s, it was accepted as truth by neoliberals. The dotcom bubble should have killed the theory because, as was pointed out by many observers at the time, the prices being offered for dotcom companies could not be justified on the basis of standard principles of valuation. Even if some turned out to generate the massive returns that the prices promised it was impossible for the sector as a whole to do so. In fact very few such companies turned out to be successful. The theory was finally killed, in terms of intellectual credibility, by the 2008 crash (Quiggin 2010 Chapter 2). Steve Keen has done a very thorough demolition job on the EMH in Keen 2011 Chapter 11.

A truly frightening thing is that the degree of fettering in financial markets is still woefully inadequate, so successful is the unfettered market lobby. If anything has ever shown the need for fettered markets it is surely the 2008 crash, because not only did it do immense and lasting damage throughout the world but it really could all happen again, and next time the consequences might well be so bleak as to cause complete social breakdown across the world. It is deeply worrying that the prevailing sentiment seems to be 'let's get back to normal as quickly as possible', where 'normal' is with world economies racing headlong towards another and much higher cliff edge.

In spite of everything the unfettered market lobby still believe that all market problems arise because markets are too fettered! If only regulation had been even less restrictive there wouldn't have been any crash. This is the hard-science approach in action - *if the medicine isn't working then we need to increase the dose!*

If this had been true then as regulations were gradually relaxed more stability rather than less would have been the expected result, but it clearly wasn't as evidenced by the

frequency of banking crises in OECD countries. John Kay analysed this data¹³ and showed that the period after the Second World War was characterised by a very low frequency until about 1968 when there was a slight increase which lasted into the 1970s, but after 1980 it began to pick up significantly. This is illustrated in chapter 50 figure 50.1.

That people can retain a belief in unfettered markets in the face of what happened in 2008 is quite astonishing. It testifies to the ability of people to believe what is in their own interests to believe, especially when those beliefs are shared by many others in the same position.

There is a lot more to be said about banking and financial trading activities. The story is taken up in Part 2.

¹³ Taken from work by C M Reinhart and K S Rogoff.

30 Which Markets Should be State-Controlled, and to What Extent?

The way to distinguish between such markets is not as difficult as it might appear at first sight. In fact it aligns very much with common sense. Once we rid ourselves of any belief in economic universal truths then we find that common sense turns out to be a very good guide, at least as far as market control is concerned. We just look at how the fair market conditions derived in the last chapter can be established.

In all cases where there is a requirement for state control the degree of control should relate to the extent to which individual participants or society might be harmed or exploited by any unfairness. A market that isn't fair but can do little harm or has limited scope for exploitation requires correspondingly little or no control. For example, a supplier of luxury products whose production incurs no negative externalities, whether or not there is effective competition from other suppliers, will find it difficult to exploit customers because they always have the choice of walking away.

Let's see what is needed to bring about fair market conditions:

30.1 Condition 1 - Buyers and sellers are free to enter or leave the market at will and can easily do so:

Whenever there is a private monopoly or cartel (whether formal, informal or tacit - which there will always be with limited numbers of sellers or buyers¹ then regulation is needed to limit their ability to keep other sellers or buyers out.

In monopoly or cartel cases where products are essential - for example energy supply, water supply, waste services, public transport, pharmaceutical products and national security, then the state (either centrally or locally) should provide them. The main criterion that determines the need for state supply of goods and services in these circumstances is when provision must be guaranteed, because no supplier other than the state can provide that guarantee. Contractual guarantees for private suppliers are very limited. Suppliers can go bankrupt, cease trading, be bought out by other companies that don't wish to continue the service, be closed down by the regulator for gross failure, or walk away because the business is not profitable enough. This is what happened when National Express walked away from the East Coast rail franchise in 2009.² The

¹ A good example is provided by the big four supermarkets that always tried to give the impression that they were in fierce competition with each other to keep prices at absolute rock bottom for the benefit of customers. But look what happened when Aldi and Lidl entered the market. Prices dropped substantially, showing that they weren't fighting each other for the benefit of consumers quite as hard as they had claimed. See <http://www.dailymail.co.uk/news/article-3574136/Supermarket-price-wars-save-400-year.html>

² <http://news.bbc.co.uk/1/hi/business/8127851.stm>

government re-nationalised the route, which, incidentally, went on to make a profit of over £1 billion for society while under state control.³

The real danger comes when the state loses the ability to provide a formerly private service, as it is bound to do eventually, so that when the guarantee is invoked the government is at the mercy of remaining suppliers and must pay whatever they demand. Also, when essential private supplies have to be underwritten by the state then the state must set up regulatory bodies to try to stop them from exploiting their position, the costs for which are levied on the private suppliers making them even more desperate to cut the costs that remain under their control. Private suppliers find it well worthwhile devoting considerable effort to finding ways to exploit whoever pays for their services, and this sets up cat-and-mouse games between regulators and regulated, where the regulated suppliers always remain one or two steps ahead of regulators because it is very profitable to do so.

Indeed the objective of private suppliers is to make money for themselves, the level of quality or even the supply itself of the contracted product is not their objective, it is merely a vehicle for making money and as such all controllable costs must be minimised and all revenues maximised. In contrast the objective under state control is not to make money, it is to provide an appropriate quality product at an appropriate price. This has great significance for privatisation of essential public services, Private Finance Initiatives (PFI), Public Private Partnerships (PPP), and outsourcing. These matters are discussed in detail in chapter 92.

Monopolies that are currently deemed to be against the public interest tend to be broken up into a group of smaller suppliers. But all this achieves is to change a monopoly into a cartel. The essential factor that makes market competition work is ease of entry for new suppliers. Without this the existing suppliers will always find ways to collude to increase profits at the expense of customers. Another quotation by Adam Smith from 'The Wealth of Nations' sums up the situation well:

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. (Smith 1776 Chapter X Part II)

Another criterion for state supply is when the state is the main or a major customer for research-intensive products of monopoly suppliers, such as pharmaceutical drugs and medicines. There is so much wrong with the pharmaceutical industry and the way it is allowed to operate that it gets the next chapter all to itself.

30.2 Condition 2 - All relevant product information is accurate and freely available:

Whenever there is a danger of harm or exploitation by means of inaccurate, missing or biased product information the state should apply regulation that enforces accuracy and availability, charged to the suppliers.

30.3 Condition 3 - Products can do no or limited harm to buyers:

³ <https://www.theguardian.com/uk-news/2014/aug/04/east-coast-mainline-fury-reprivatisation-plan>

The state should prohibit or restrict the sale of dangerous products, or establish and enforce minimum health and safety standards. In the absence of minimum standards competition acts against the interests of health and safety, giving bad products competitive advantages over good products, driving them out of the market. Other products can be harmful, especially in excess, but full and accurate information is insufficient to dissuade or limit buyers' appetites for them. These are products that are habit forming or very pleasurable. At the same time in some cases people are used to having them so outright prohibition is impractical or ineffective. For example alcohol was prohibited in the US in the 1920s and early 1930s but the law was widely disregarded and eventually scrapped. Street drugs are prohibited in many countries but again laws are widely flouted. Outlawing these products drives them underground where product information and quality are outside the state's and buyers' control. As a result far more harm is often done than if they were permitted and adequately controlled, but restricted or strongly discouraged as are tobacco products in the UK.

Further complication arises when the issue becomes a moral one, as it has become for drugs, when any suggestion of legalisation in any form is regarded as the state encouraging their use. Where morality is not involved the state should apply appropriate levels of discouragement or control, which can be by taxation, restrictions on advertising⁴, licensing - appropriate for potentially dangerous activities, registration and availability through prescription - as was done for drugs in the UK prior to 1964, rationing and so on, or a combination of these measures. At the same time advice and practical help for people who wish to stop using the products should be freely available. Where morality and public acceptability are involved the issue is much more difficult but the same approach could still be taken, especially given the dreadful impact of street drugs on users and even entire communities, and also the vast amount of crime and associated damage, distress and fear that comes as a direct result. Victims shouldn't be seen as criminals, they need help. On any measure prohibition just doesn't work, except for drug dealers, who benefit enormously from it.⁵

Potentially harmful products aimed at children should be particularly closely controlled. Soft drinks are recognised as having many dangerous effects, including obesity and hyperactivity. These and fast foods generally cause harm that threatens to overwhelm the NHS, yet little is done to restrict or discourage them. These cases in particular show the 'unfettered market knows best' philosophy to be deeply flawed.⁶

30.4 Condition 4 - Either no harm is done to third parties or to the public interest, or full compensation is provided for such harm:

⁴ There are very good reasons apart from this to restrict advertising, see chapter 100 section 100.9

⁵ A fascinating and very revealing TEDx talk about drugs and addiction has been given by Johann Hari, where he presents compelling arguments for changing the way the problem is currently dealt with. It is available at

https://www.ted.com/talks/johann_hari_everything_you_think_you_know_about_addiction_is_wrong

⁶ <https://www.healthychild.com/10-reasons-to-keep-kids-off-soda/>

<http://www.telegraph.co.uk/food-and-drink/healthy-eating/11-reasons-to-stop-drinking-fizzy-drinks/> and <https://www.theguardian.com/society/2015/aug/17/diabetes-bring-down-nhs-charity>

Whenever there can be harm to third parties or society as a whole (negative externalities), the state should ensure that companies prevent any such harm at their own expense, prohibit the activities, or require that proper compensation be paid either directly or in kind and distributed to those suffering the harm, again at the companies' expense.

30.5 Additional point 5 - Where private markets fail to meet social needs the state must make provision:

This happens when benefits are purely social or when a socially beneficial investment project is too long-term, too risky or too expensive for private financing. In such cases the state must accept its responsibility to make provision on behalf of society. Examples include public amenities such as parks, gardens, libraries, galleries, museums, sports facilities and playing fields; and large scale or long-term investments such as power stations, transport infrastructure, flood defences, national security and countering environmental threats. Private investors only operate on short timescales because of uncertainties. For long timescales they either won't invest or demand extortionate returns to hedge profit success as in private finance initiatives - see chapter 92.

Given the above conditions and remedies all else (most things in a prosperous country) should be produced and supplied privately, because markets will then be sufficiently fair, and a fair market is the most efficient and responsive way to match supply to demand.

In stark contrast to the claims of neoliberals there is very extensive evidence that markets and governments are strongly positively correlated - i.e. markets function best when there is strong government. Research by David R Cameron (not the former UK PM), extended by Dani Rodrik, shows that the more developed a country is the greater the share of national income that is taken by the public sector - the richer the country the better its markets function and the bigger the government. Rodrik was so surprised by Cameron's findings that he repeated and extended the study and found exactly the same thing (Rodrik 2012 Chapter 1). A major contributor seems to be openness to international trade. The more a country's markets expand the more that government must expand also. The reason seems to be social insurance. Governments are needed to preserve the legitimacy of markets by protecting people from the risks and insecurities that markets, especially international markets, bring with them. Markets and governments are not in opposition, they are complements. This of course flies in the face of neoliberalism.

The role of the state and of the government as society's agent are explored in detail in Part 4.

31 *The Pharmaceutical Industry*

Nowhere is private industry's promotion of self-interest more evident than in the pharmaceutical industry. Companies offer strong incentives to anyone with any influence, especially doctors who are persuaded to prescribe their products and to act as cheerleaders for them.¹ This is what Dr Marcia Angell² said:

No one knows the total amount provided by drug companies to physicians, but I estimate from the annual reports of the top 9 U.S.-based drug companies that it comes to tens of billions of dollars a year in North America alone. By such means, the pharmaceutical industry has gained enormous control over how doctors evaluate and use its own products. Its extensive ties to physicians, particularly senior faculty at prestigious medical schools, affect the results of research, the way medicine is practiced, and even the definition of what constitutes a disease.³

Also quoted by Fiona Godlee⁴ in the *British Medical Journal*:

The power of drug companies to buy influence over every key group in health care—doctors, charities, patient groups, journalists, politicians—has clearly shocked a UK parliamentary committee. It should shock us all. Can we console ourselves that companies' lavish spending on research and marketing, which far outstrips spending on independent research and drug information, leads to truly innovative treatments? No, says the committee's report. Can we rely on regulatory bodies to keep the industry in check? No, again.⁵

They regularly manipulate, distort and misrepresent research findings to support sales, and hide results that could harm profits⁶, sometimes with catastrophic results.⁷ Ben Goldacre and Malcolm Kendrick have done extensive work in revealing the many deliberate and underhand tricks that drug companies use to promote their products and hide true data from doctors, the NHS and the public (Goldacre 2012 Chapter 1 and Kendrick 2014 Chapter 7. See also Akerlof & Shiller 2015 Chapter 6).

In addition they devote much of their research and development (R&D) effort to producing variants of existing drugs rather than producing new ones. That is much

¹ <https://www.theguardian.com/business/2012/jul/03/glaxosmithkline-fined-bribing-doctors-pharmaceuticals>

² Former editor in chief of the *New England Journal of Medicine*

³ <http://www.nybooks.com/articles/2009/01/15/drug-companies-doctors-a-story-of-corruption/>

⁴ Editor in chief of the *British Medical Journal*

⁵ <http://www.bmj.com/content/330/7496/0.8>

⁶ <http://healthland.time.com/2013/02/28/how-drug-companies-distort-science-qa-with-ben-goldacre/>

⁷ <http://articles.mercola.com/sites/articles/archive/2012/05/14/mercks-adhd-drugs-unsafe.aspx> and <https://www.drugwatch.com/dangerous-drugs.php>

easier and more profitable. If they can present trial results to give the impression of increased effectiveness or reduced side effects for some groups of people then they can claim a new patent and enjoy a new period of protection for what is in reality only a slightly modified version of an earlier drug. These products are what Marcia Angell calls 'me-too' drugs (Angell 2005 p21).

Where sales potential for new products is limited - for example new ranges of antibiotics effective against traditional antibiotic resistant bacteria which would be used very sparingly - then their profitability is limited and they are reluctant to fund the necessary research.⁸ Instead the state must provide the funding. In fact most of the really innovative new drugs come from publicly funded laboratories (Mazzucato 2014 p72). Most people think that the vast pharmaceutical profits are used for R&D, but most of those profits are used to buy back their own shares so as to boost the share price and benefit management and shareholders (Mazzucato 2014 p32).

There have been very many occasions when pharmaceutical companies have been fined for illegal activities. A table published by Business Ethics May 5 2016⁹ shows US fines over the last ten years, where a total of \$30 billion was paid in settlement of crimes committed by pharmaceutical companies in 374 separate cases. This catalogue of repeat offending shows clearly that the industry regards such fines as mere business costs, vastly outweighed by the profits available by conducting their business in ways that harm people. So called punishments of this sort are in no way deterrents, quite the opposite in fact, they encourage and reward social harm.

Levying such 'punishments' also makes the state complicit in the crimes as it in effect receives a fee for each crime detected. In effect the state and the pharmaceutical companies share the proceeds while members of society pay the cost in terms of serious side effects and death.

It also shows how ridiculous it is to punish a company. A company is not a person, it feels no shame or humiliation, and a fined company allows real criminal employees to hide from view.

It's as if the government announced that in future burglary would no longer be punished by custodial sentences no matter how many offences had been committed, it would be punished by a fine of a proportion of the proceeds of the crime that was detected. Furthermore a new corporate entity would be created called 'Burglary', and the fine levied on that rather than on the burglar in question so there would be no stain on their character - though the burglar would have to pay the fine. Would that be an effective deterrent do you think? It would probably be as effective as pharmaceutical company punishments.

If there is one principle that should attach to a punishment it is that it should be sufficient to make the perpetrator bitterly regret ever having committed the crime.

⁸ See chapter 2 in https://amr-review.org/sites/default/files/SECURING%20NEW%20DRUGS%20FOR%20FUTURE%20GENERATIONS%20FINAL%20WEB_o.pdf

⁹ <http://business-ethics.com/2016/05/05/1606-drug-companies-pony-up-in-illegal-marketing-cases-but-critics-wonder-if-penalties-are-enough-see-more-at-http/>

Punishments should only ever be meted out to people responsible for crimes, and should sting. Punishing a company stings no-one and allows real criminals to escape punishment.

However it is often difficult to identify responsible individuals when actions can be attributed to systems that are in place within a company, especially when those systems have existed for a long time. Every company should have a director whose responsibilities include company systems, tasked with ensuring that all such systems are fully compliant with the law. If they aren't then that director must answer for it.

I said earlier that it was not my intention to blame individuals for the situation we find ourselves in (see Introduction), but that comment excludes those who engage in criminal activities - I do think they are to blame for what they have done. However at the same time we should recognise that the current system, where the overriding aim and purpose of private companies is to make money, rewards the unscrupulous, and the only deterrents for the unscrupulous against criminality are the likelihood of being caught and the punishment they will receive if they are. Conscience and self-control only serve to limit the rewards that are available. What is really to blame is the system that allows the unscrupulous so much scope.

The only thing that can be said in their defence is that pharmaceuticals, like other companies, operate in fiercely competitive markets and have to employ any and all means to remain competitive. It's the freedom conflict again where the rules are set by the most unscrupulous and must be followed by everyone else.

Marcia Angell summarises the problems in her book (Angell 2005 p239):

- i. Drug companies produce too many me-too drugs and too few innovative ones.
- ii. The Food and Drug Administration (FDA) is too much in the thrall of the industry it regulates.
- iii. Drug companies have too much control over clinical research on their own products.
- iv. Patents and other exclusive marketing rights are undesirably long and too elastic.
- v. Drug companies have too much influence over medical education about their own products.
- vi. Important information about research and development, marketing, and pricing is kept secret.
- vii. Prices are too high and too variable.

Joseph Stiglitz weighs in too on the subject of lobbying (Stiglitz 2006 p191):

Pharmaceutical companies spent \$759 million to influence 1,400 congressional bills between 1998 and 2004; the pharmaceutical industry ranks top in terms of

lobbying money and the number of lobbyists employed (3,000). Their success reflects their investment: as we saw in chapter 4, the U.S. government has made their interests paramount in international trade negotiations, and under the new Medicare drug benefit the government is proscribed from bargaining for lower prices - a provision worth billions of dollars just by itself.

After all that it will hardly come as a surprise that pharmaceutical companies are heavily involved in tax avoidance. Richard Brooks expresses it this way:

Few companies have thicker files on the shelves of the world's tax offices than Britain's dominant drug companies, GlaxoSmithKline and AstraZeneca. For decades tax inspectors have struggled to work out where the companies really make their profits on blockbusters that might be developed, manufactured and sold in separate countries, and for which the all-important patents might be owned somewhere else still. (Brooks 2013 p131)

The case for state control of the pharmaceutical industry is overwhelming. R&D effort can then be properly applied in proportion to social benefit rather than monetary value; research findings can be analysed objectively and made public to allow greater scrutiny; vast sums can be saved in advertising and marketing; and doctors and nurses can be given accurate information.¹⁰ The problems involved in nationalising one or more multinational companies will be severe, but if society demands it then it will be done. Society can't allow itself to be held to ransom by private interests.

We need to recognise that it is society that pays whether drugs are produced privately or publicly. The difference is that when produced privately society also pays for the incentives, exorbitant management salaries, shareholder dividends and all the advertising and marketing. Even worse, it is deceived about benefits and risks, and therefore pays for drugs that it not only doesn't need but also sometimes cause significant harm.

In state control much more research effort can be devoted to factors that improve overall health and wellbeing, including diagnostics, surgical treatments, preventative medicine and lifestyle changes, which are currently neglected by the private sector because they don't yield much in terms of profit even though they have the potential to yield a great deal in terms of social health (Mazzucato 2014 p10).

The behaviour of these companies shows that whenever there's a choice between making profits or avoiding harm to people and society, profits win every time. It's the same for all businesses, that's why we need strong regulation whenever there's a risk to society or to individuals, but for the pharmaceutical industry the potential damage is so great that it should not be allowed to remain in private hands.

¹⁰ <http://www.pharmaceutical-journal.com/opinion/correspondence/drug-industry-should-be-nationalised-and-kept-under-control/10004829.article> and <http://bigthink.com/dangerous-ideas/15-nationalize-drug-development>

32 Rationed Markets, Efficiency, Competition and Incentives

The general characteristics of markets and their shortcomings have been discussed above, but there is a particular feature of many markets - rationing - that deserves special attention.

One of the basic assumptions of free markets is 'perfect information'. Buyers have all information about every product and its price, and every potential substitute product and its price, including quality, durability, safety and so on.¹ Sellers have all information about buyers' wishes, including how many of every product they will buy at every possible price. In these circumstances oversupply and undersupply can't occur because sellers produce at exactly the right rate to satisfy buyers. In economic jargon all markets are assumed to **clear**, meaning that there is no excess production and no shortage. None of us lives in this perfect world however so it is normal for suppliers to misjudge demand, leading either to shortages or to excess unwanted production. In reality markets are rationed, either by supply (supply limited - demand exceeds supply - known as sellers' markets where sellers' willingness to sell is less than buyers' willingness to buy), or by demand (demand limited - supply exceeds demand - known as a buyers' markets where sellers' willingness to sell is more than buyers' willingness to buy) (Werner 2005 p27, pp326-331). This can be temporary, for example when suppliers can quickly remedy any excess or shortfall or when supply is interrupted by a strike or minor natural event; or long lasting, for example when it takes a long time for suppliers to respond to excesses or shortfalls, or when a natural resource is running out and it takes time to make substitutes available. Rationed markets are inefficient because products are not allocated to best effect, either there is too much stock with prices so low that suppliers suffer losses and in extreme cases go out of business, or there are unsatisfied buyers because prices are so high that only the rich can afford the products.

In a market that is rationed by demand buyers have the stronger bargaining position because sellers' willingness to sell exceeds buyers' willingness to buy, so the outcome is that the price falls. The reason is that a seller faced with few buyers risks having unsold stock, in which case the costs incurred in making it have been wasted. It is far better to accept a reduced price so that at least some and hopefully all costs are recovered. Competitive sellers therefore reduce prices in order to compete for the few buyers that there are. The same thing happens in reverse with a supply rationed market, and supply rationed markets are greatly favoured by suppliers who go to great lengths to engineer them wherever possible because they then have control and can raise prices considerably.

¹ Richard Werner has listed the implications of the perfect information assumption in his book (Werner 2005 pp20-24). It makes for very amusing reading because the assumption is so far-fetched. He points out that amongst many other things, if it were true, there would be no advertising, no news corporations, no internet, no meetings, no accountants, no secrets, no education, no lawyers, no doctors, no scientists, no experts of any sort, not much of anything in fact.

In some cases the government steps in as they did during the Second World War when ration books were introduced to ensure a fair distribution of food and other essentials rather than allow an unfettered market to enrich sellers at the expense of buyers who would have to pay high prices or go without. Nevertheless there was a parallel and thriving 'black market' that operated to give suppliers and wealthy buyers more than their fair share.

It is market rationing that explains some anomalies such as the fact that air, the most valuable thing on the planet, has no exchange value, whereas diamonds, whose value is largely decorative, have enormous exchange value. In the first case air is rationed by demand - there is a much greater supply than there is demand, even though its use value is unlimited, so it is freely available. Diamonds on the other hand are severely limited by supply, so even though their usefulness is superficial they command a very high price. Traditional economics explains the anomaly using **marginal utility** theory, where, as a buyer continues to buy more of the same product the benefit gained from each additional one (the marginal utility) is less than the one before, but the money paid is the same for all. While the product benefit exceeds the value of money spent products will continue to be bought, but when not there is no further willingness to buy and no further exchanges will be made. Here one additional lungful of air has no exchange value because we already have all the air we need, but one additional diamond has a high value because our stock of diamonds is limited. Both explanations amount to the same thing but I think the rationing explanation is easier to understand.

The diamond/air anomaly is seen as such because it seems logical that the exchange value of an item should increase either as its usefulness increases, or as the time and effort that have gone into making it increases, but usefulness is not the deciding factor for exchange value, and nor is time and effort.

Exchange value depends only on levels of supply and demand, and not on usefulness or time and effort that have gone into making the product.

It used to be thought that an item's exchange value was related to the labour that had gone into producing it. Several early economists subscribed to this view including Adam Smith, Karl Marx and David Ricardo. It is known as the **labour theory of value**.² It was overturned by later economists, notably William Stanley Jevons, Leon Walras and Carl Menger, who independently realised that exchange value was subjectively determined by market participants based on how eager or reluctant sellers are to sell, and how eager or reluctant buyers are to buy.³ It is summed up nicely in the following quotation:

It is not that pearls fetch a high price *because* men have dived for them; but on the contrary, men dive for them because they fetch a high price. Richard Whately, Lecture IX of his 'Introductory Lectures on Political Economy' 1831.

Rationed markets are prominent features of the business cycle - the alternating boom and bust phases that characterise the economy. Housing in particular flips from being rationed by supply during booms when people fight to bid prices up because credit in the

² https://en.wikipedia.org/wiki/Labor_theory_of_value

³ <http://www.investopedia.com/terms/l/labor-theory-of-value.asp>

form of mortgages is freely available, to being rationed by demand during busts when no buyers can be found because people are short of money or they fear parting with it, or mortgages are harder to obtain. The same thing happens on stock markets where booms are known as bull markets and busts as bear markets.

The business cycle is examined in more detail later - see chapter 52.

Rationing shows the benefits of bigger markets. A supplier selling into a large market has a much greater level of demand, so demand isn't rationed to the same extent that it often is in small markets. Similarly consumers buying from a large market have a greater level of supply, so supply isn't rationed to the same extent as it often is in small markets. Bigger markets also allow for more specialisation: in traditional products where there is a bigger workforce employees can specialise to a greater degree, and in specialised products where there are buyers that wouldn't exist in sufficient numbers in small markets. With specialisation comes greater expertise and therefore greater efficiency - more wealth out for a given level of wealth in - which benefits everyone. These benefits provide the drive to expand both domestic and international markets as widely as is possible. Globalisation in terms of expanded trade in goods and services is a very good thing, but the manner in which it is managed leads to some very bad outcomes, especially for poor countries, as will be seen in Part 3.

It is important to understand the implications of an item's exchange value depending only on relative levels of supply and demand, and not on usefulness or on time and effort that have gone into its production. The relationship between time/effort and exchange value is efficiency. It is possible to spend lots of time and effort in producing something of very limited value, as suppliers do when they overestimate the level of demand, and in these cases the time, effort and the producer's money are largely wasted. When Worker A in the simple economy invented the knife the harvesting of food became twice as efficient, in that only half the time was needed to produce the food that was needed, and when wheelbarrows came along efficiency improved by a further three times.

Efficiency is at the heart of modern wealth creation. Producers in a competitive private-enterprise environment seek improvements all the time, and when they succeed their profits go up, which means that they are able to expand production by paying workers more than their competitors, and they can capture more of the market by reducing prices below their competitors (remember that wealth use is as important as production, it is no use expanding production if use can't also be expanded - see chapter 16), and still keep some of the additional profits for themselves. In this way wealth production naturally gravitates towards the most efficient producers, and less efficient producers then also have to improve, go out of business, or suffer much lower profits. In this way competition promotes efficiency, which is good for more efficient producers and consumers because both gain from the improvements - higher profits and lower prices. It isn't necessarily good for workers because more efficient production methods often require fewer workers, so some might lose their jobs. Over time some of these workers move to more efficient producers, whereas others can remain unemployed for long periods. Also, competition between producers by utilising labour from low wage countries or just the threat of doing so allows domestic wages to be driven down to much lower levels. This is one of the reasons why the income of the general population hasn't risen much in real terms since the 1970s whereas the income of the already well paid - those who benefit from improved workforce competition - has soared, see Figs 20.1 and

20.2. The fact that higher efficiency improves overall benefits means that displaced workers should be compensated fairly for their loss because they too deserve a fair share of the benefits, but the firm that profits rarely compensates them except to the extent that the law forces them to make redundancy payments.

Note that we are talking about genuine competition here - where new suppliers can easily enter the market and are free to do so - not the contrived competition favoured by governments intent on privatising public enterprises and services. That isn't real competition and doesn't promote efficiency; it promotes self-seeking opportunities for profit maximisation from the public purse, opportunities for cost cutting by exploitation of the workforce, and neglect of service recipients - see chapters 91 and 92.

Conversely lack of competition in private enterprise stifles efficiency, because monopolies can sell their products and still make handsome profits regardless of how inefficient the process. This hurts consumers and users considerably, because not only are they paying much more for products than they would be in a competitive environment, the products themselves will be of lower quality because the supplier has no incentive to improve them.

Competition in a private enterprise environment promotes efficiency, and lack of competition stifles it.

It all comes down to incentives. People seek to minimise costs and effort, and maximise profits and benefits, and if an incentive exists to achieve either or both of these then people will respond to it. Hence in a competitive environment the incentive is to apply effort to innovate to achieve lower costs, higher profits and hence benefits, and also (unfortunately) to apply effort to finding ways to drive down wages and to limit competition and extract more money from buyers - see chapter 29. In a monopolistic environment the incentive is to maintain or extend the monopoly so as to maintain high profits. With monopolies there is little or no incentive to apply any effort to innovation because profits and benefits are already as high as the market will stand without it.

People respond to incentives.

Neoliberalism elevates one incentive above all others - money. There is no doubt that money is indeed a powerful incentive, and if the company you work for sets the accumulation of money as its highest goal then that single-mindedness will rub off on its staff and their approach to work and life. It represents a one-dimensional outlook and misses so much else. People are motivated by much more than just money, for example pride in the job, being reliable, being knowledgeable, serving the public good, being loyal, winning the trust of workmates, and so on. In fact as far as money is concerned people are motivated and demotivated much more by their relative pay with respect to colleagues and others in the same profession than by absolute levels of pay. Relative pay and relative wealth are discussed further in chapter 99. In Maslow's hierarchy of needs⁴ money can only satisfy the two most basic ones - physiological (survival needs) and safety, the higher ones involve relationships and realising one's potential. This recognises that people are multidimensional and a company that recognises that is much more likely to

⁴ https://en.wikipedia.org/wiki/Maslow's_hierarchy_of_needs

provide a pleasant place to work than one that doesn't, regardless of its profitability. The problem is that a pleasant working environment doesn't appear on the balance sheet, though it is a very significant asset nonetheless.

33 Asset Bubbles and their Collapse - Induced Market Rationing

In a market economy the price of a product or asset can be expected to rise to reflect a rise in its underlying value. For example if a company develops a successful new product then the company has become more valuable, or if a new transport route opens near a property then the property has become more valuable. However another effect causes prices to rise over and above that expected from the underlying value change, but is often triggered by such a change, and that is when underlying value is expected to rise further, which causes new buyers to enter the market faster than new sellers. In these circumstances the price of the asset rises sharply as buyers try to get in before other buyers, and in the process bid prices up. This is an asset bubble, and it particularly affects property and shares.

What happens is that buyers are in a hurry to buy in order to obtain the asset as quickly as possible before other buyers can buy it, and bid the price up in order to persuade sellers to sell, but sellers, seeing this happen, become less inclined to sell because the asset is rising in value and delay is likely to result in a higher price. Hence the buyers' hurry to buy coupled with sellers' reluctance to sell creates a market that is rationed by supply, and a supply rationed market sees rising prices. In these circumstances the rationing is not for any reason other than the activities of buyers and sellers, and in that sense is induced by them.

The common belief is that more money is pouring into property or shares, so the price rises accordingly. That belief seems reasonable until it is recalled that money doesn't 'pour into' anything, it merely changes hands but always stays as money. For every purchase there is a sale, and as soon as money is used to buy an asset the seller immediately takes that money away. Therefore the price rise is not because of money pouring in, it is because of the rise in willingness to buy, coupled with a corresponding fall in willingness to sell, though the rise in willingness to buy is usually caused by a rise in the availability of money in the form of credit, especially for property.

The defining feature of an asset bubble is that buyers are buying not primarily because they want the income that the asset promises to give them, but because the price is rising, and as a result they foresee further price rises that will net them a profit. This approach, which is pure speculation, soon overwhelms any change in underlying value, and in the case of rising equity prices is known as the '**greater fool theory**' - I may be a fool for paying such a silly price for this overpriced stock but there will be an even greater fool along shortly who will pay me even more than I paid for it. In the case of property bubbles a significant driver is the entry of investors into the market seeking both good returns from rents, which rise in accordance with prices, as well as capital gains. Induced rationing in the housing market is strongly assisted by real rationing due to new housing failing to keep pace with demand, creating an underlying supply rationed market, where even base-level price rises put property out of reach of many would-be first time buyers

and also make rents too expensive for them.

The reverse happens when a bubble has run its course, and also happens without a bubble if there is an expectation of a future fall in value. In the case of a bubble, collapse is inevitable sooner or later, because there isn't an unlimited number of new buyers. As willing buyers obtain the assets they seek, their numbers drop and the price rise levels off. Seeing this the asset holders become more inclined to sell to avoid being left with an asset of falling value, and the willingness rapidly switches over. Now sellers are keener to sell than buyers to buy, and the price falls back again, often dramatically, not because the asset has changed in terms of its inherent value, but purely because sellers are desperate to offload and buyers are reluctant to buy into a falling market. Again rationing is induced by the activities of buyers and sellers, but this time the asset is rationed by demand.

34 Dependencies between Buyers and Sellers.

Another condition, mentioned earlier in chapter 29, is required for markets to work in a predictable manner, and that is independence:

- buyers and sellers should be independent of each other, their only connection should be the transaction;
- buyers should be independent of other buyers; and
- sellers should be independent of other sellers.

In other words the activities of buyers should have no effect on the actions of other buyers or on the ability of sellers to sell, and the activities of sellers should have no effect on other sellers or on the ability of buyers to buy. This condition is one of the basic tenets of free markets and follows from assuming perfect competition, which is required by perfect markets and in turn assumes perfect information and the presence of many buyers and sellers.¹ With perfect information participants act only on that information, there is nothing to be gained from being influenced by what other participants do. Also with many buyers and sellers there is nothing to be gained from banding together with other buyers or sellers because they can't influence such a big market. However, as for many other such tenets, it never applies in the real world and without it some very unexpected things occur. Three markets where there are important dependencies are labour markets, discussed below, the bank lending market, discussed in chapter 52, and financial asset markets, discussed in chapter 57. The effects of the dependencies are hidden at the local level for labour and lending markets, but they become very evident at the national level where they affect the economy as a whole. In financial markets the dependencies are plain for all to see all the time, in spite of the Efficient Markets Hypothesis (EMH) which denies their existence - see chapter 29. Dependencies also arise when other fair market conditions are missing or weak. For example if there are high entry barriers for new suppliers then existing suppliers form cartels, which may be formal, informal or tacit, where their actions are coordinated so as to benefit them at buyers' expense.

Dependencies between things that change over time are commonplace in all spheres of human and natural activity. Scientists and engineers devote a great deal of time and effort to analysing and understanding the behaviour of dependencies, and engineers make use of them all the time. An example will hopefully illustrate the point. The speed of a car engine changes in response to changes in accelerator pedal position, but the position of the accelerator pedal does not change in response to changes in engine speed. Here engine speed is dependent whereas pedal position is independent. Technically, engine speed is known as a dependent variable (a variable is something that varies with time or some other condition - in this case pedal position), and accelerator pedal position

¹ https://en.wikipedia.org/wiki/Perfect_competition

is known as an independent variable.

A special type of dependency is one where there is feedback. The word 'feedback' has two distinct meanings, the usual meaning of the term is for example in product information, where users feed back their experiences of using a product to potential buyers, and this information is known as feedback. The other, more technical meaning, is where the effect or output of a controlled process influences the control or input to that process. For example body temperature is regulated by negative feedback. Receptors in the skin and brain measure blood temperature, and if it differs from the required set point of 37°C the brain responds by switching on the appropriate responses - shivering and narrowing of surface blood vessels (vasoconstriction) if too cold, sweating and widening of surface blood vessels (vasodilation) if too hot. With negative feedback an increase in the output (body temperature) causes information to be fed back to the control centre to take action to reduce it, and vice versa for a reduction in the output. Negative feedback acts in opposition to the output, and such mechanisms tend to be stabilising - they keep an output in a stable state.

Potentially more dangerous are positive feedback mechanisms, which act to reinforce an output by increasing the input control when the output increases, and vice versa. These tend to cause instability, and whenever they are applied in practice to achieve specific results great care is taken (or should be) to ensure that the system in question remains stable, or that there is an overriding limitation on the output movement. An example of deliberate positive feedback in an engineered system is an electrical on/off switch. Here if gradually increasing pressure is applied to the switch an internal spring is put under increasing tension until it responds suddenly by changing the state of the switch from off to on or vice versa. In this case the extent of the movement is limited by the geometry of the device. Switches are engineered in this way to ensure that they can only be positively on or positively off and always change rapidly from one state to the other, without any vague intermediate state which could cause arcing between the switch contacts, leading to overheating and possible fire. An example of unwanted positive feedback is when a microphone is placed too near to a speaker, when the amplified speaker signal from the microphone is inadvertently picked up by the microphone itself and re-amplified to give a loud howl that has everyone covering their ears. This is relatively harmless, but there are many very worrying positive feedback effects in global warming, where human activities to date have produced greenhouse gases and planetary warming, but the warming itself threatens to release yet more greenhouse gases from within the earth without further human intervention.² These and other positive feedback mechanisms present the most potent danger from global warming because we don't know with any certainty just where any of the 'tipping-points' lie. A tipping point is the point at which the release of greenhouse gases from the warming earth causes enough additional warming to release yet more gases in an upward spiral that man is powerless to stop. *Worrying or what?*

The examples cited are relatively simple positive feedback mechanisms where output growth continues until limited by the characteristics of the system. More complex systems involve two or more competing elements, where growth in one causes decline in

² [https://en.wikipedia.org/wiki/Tipping_point_\(climatology\)](https://en.wikipedia.org/wiki/Tipping_point_(climatology)) and https://en.wikipedia.org/wiki/Climate_change_feedback

one or more of the others. Such systems tend to exhibit oscillations. A good example of this type of mechanism is provided by the behaviour of populations of predators and prey. If we start with a large population of prey and a small population of predators the predator population rapidly increases because it has a large food supply. However this causes the prey population to fall until it can't sustain the predator population and the predator population begins to fall. As it does the prey encounters less predation so the prey population starts to rise again, and so it goes on, each population size oscillating, with predator oscillations lagging behind prey oscillations.³ Engineered systems also often exhibit oscillatory instabilities, and measures are taken to control them so as to ensure that the outputs remain within the required ranges for the purposes that are served.

I believe the point about dependencies in market behaviour is worth labouring because it has such important consequences in economics. Bank lending and financial asset markets both suffer from positive feedback, and both exhibit oscillating instabilities as a result, the competing elements being lenders and borrowers in lending markets and buyers and sellers in financial markets. In these cases measures are rarely taken to control them, because as ever the markets themselves are believed to apply all the controls that are needed. These markets are discussed in chapters 52 and 57 respectively in Part 2.

Labour markets are different in that they are subject to a natural negative feedback effect, which can leave them stranded in low employment conditions for long periods, where there is work to be done, people able and willing to do it, but no-one willing to make jobs available to bring the two together. This effect was encountered earlier in chapter 16 and is discussed in detail in the next chapter.

³ A good discussion of this phenomenon is available at <https://services.math.duke.edu/education/webfeats/Word2HTML/Predator.html>

35 Labour Markets

Until Keynes explained the negative feedback at work in labour markets (Keynes 1936 Chapter 3) it had been assumed, quite reasonably, that supply of labour by working people balanced demand for labour by businesses at an appropriate price, which was the **real wage** for an hour of basic labour, so that full employment was always maintained. The real wage is the value of each hour of basic labour after correction for inflation or deflation, whereas the money wage (also called nominal wage) is the value that varies with inflation or deflation. Different skill levels are dealt with by multiplying up the basic rate so that a person with twice the basic skill is paid at twice the basic real rate. In this argument if there is a shortage of labour (more jobs than workers), then workers move to where higher real wages are paid, which are the more profitable industries, whereas less profitable industries won't be able to afford the higher wages and go out of business. In this way the number of jobs drops until there is a balance at full employment but at a higher real wage than before. If there is a shortage of demand (more workers than jobs), then workers are prepared to work for lower real wages which increases industry profitability allowing production to expand and more jobs to become available, again bringing about a balance at full employment but at a lower real rate than before. This works exactly as expected for individual firms, where for example the setting a minimum wage can be detrimental to their short-term profitability - as they are quick to point out very loudly - but at the level of the economy as a whole the picture is very different as will be explained. For individual firms longer-term profitability may rise as demand increases due to more people are able to buy the products - provided that the type of products sold are what people on minimum wages buy.

Before it was solved it was a puzzle why there should ever be involuntary unemployment - people willing to work for the prevailing real wage but no jobs available for them. Traditional economists solved this problem by assuming that involuntary unemployment didn't exist, any unemployment was a minor and localised aberration due to labour unions asking for too much or to individuals preferring leisure to work at the basic rate. With this mindset of continuous full employment the economy always operated at maximum capacity with all wealth produced being used at the same rate. There could never be a shortage of demand so all economic efforts were directed at improving and extending the supply of wealth, because however much was supplied would always be demanded (this is known as 'Say's Law', first set out by Jean Baptiste Say in 1803¹). This was not to say that everything produced would be bought. There would always be things produced that people didn't want and wouldn't buy at a profitable price, but such a situation was temporary in that such things would soon stop being produced. The money that was formerly spent by producers in producing them would be available to produce other things that people did want but were temporarily in short

¹ https://en.wikipedia.org/wiki/Say's_law

supply because insufficient workers were employed in producing them. Hence people employed in producing useless things would soon be re-employed elsewhere in producing useful things. The steady state (equilibrium) was with everything produced being used. Say's Law is based on the assumption that money received for wealth is either immediately spent by the person receiving it on other wealth, or, if money is in short supply for any reason then money substitutes become available and are used instead. The money substitution assumption is examined in chapter 81. If these assumptions hold true then whenever something is produced and sold, it creates an equivalent demand for something else, in effect supply creates its own demand.

That this view was palpably untenable because of many families in dire poverty during the Great Depression in the 1930s didn't cut any ice with such economists. They still preferred to believe that starving people chose leisure over work.² Other economists were more open minded and recognised that there was something very important missing in the economic theories of the time that caused a mismatch between expected and actual conditions. One such economist was John Maynard Keynes, who wrestled with the problem and realised the reason for it, setting out his work in his 1936 publication (Keynes 1936).

Keynes' great insight was that the key factor in a depressed economy is not supply but demand - demand can fall short of supply for long periods, so that equilibrium is not in fact necessarily with everything produced being used, but can also occur with far fewer things being produced and used than could be, resulting in high levels of involuntary unemployment and low levels of production. The reason is simply that the assumptions underlying Say's Law don't always hold (Hahnel 2014 p161). Money received for a sold product is not necessarily spent on other products, it can and often is taken out of circulation, especially when people fear for the future and deliberately don't spend it. This is the situation illustrated in the simple and real economies when one person tries to save money - see chapters 13 and 15. It was believed that the impact of taking money out of circulation was automatically limited because any other product could substitute for money, so as savings in the form of money increased money started to become scarce so people saved other things instead. That people would do this was rejected by Keynes, who argued that when money can't be produced by the population like other products can other products aren't able to substitute for it. This is discussed in more detail in chapter 81.

In these circumstances the involuntarily unemployed are the people who could produce the things that could be used, but they can't, not because they are too stubborn to work for the wages that are on offer, but because there are no jobs on offer because producers fear that their produce won't be sold - Catch 22!

The element that was missing was that what works for any individual group of workers and any single business doesn't work for the economy as a whole. It is a variation on the paradox of thrift. Let's call it the **real-wage paradox**. The insight was the recognition that workers are also spenders, and that they can only spend what they earn, so a reduction in wages, expected to bring supply into line with demand, also reduces

² Keynes noted in his General Theory that classical economics recognised only frictional unemployment - people 'between jobs', and voluntary unemployment - people who chose leisure over work. Involuntary unemployment for them did not exist (Keynes 1936 Chapter 2).

their spending power and hence demand for the very products that their labour is producing. Reduced demand for products means that product prices have to fall, which means that workers' real wages - i.e. adjusted for prevailing price levels - come back up again to a large extent and therefore industry does not become more profitable so it can't make more jobs available. Keynes showed that although workers can agree to reduced money wages (nominal wages), it is not in their power to accept correspondingly reduced real wages because of the negative feedback effect (though Keynes didn't call it that) of their wages on prices.

Furthermore, Keynes showed that far from the labour market always leading to full employment, meaning no involuntary unemployment, it could settle at any level. He showed that in any prevailing situation there is an equilibrium level of output that it is worthwhile for producers to supply, at which level there are sufficient customers who are able to buy and find it worthwhile buying, where more output (some stock remains unsold) or less output (not selling as much as could be sold) than this amount reduces firms' profits. This level need not and often does not correspond to full employment. In this respect full employment represents a special case, where the general case is represented in the title of Keynes great work, '*The General Theory of Employment, Interest and Money*'.

He showed that the Great Depression was caused by the economy being trapped in a high unemployment/low productivity trough, from which neither workers nor employers could extricate it. The solution was simple; since workers weren't able to spend, the government must do the spending instead. His policies were adopted (in spite of the finer points of his theory being misunderstood) throughout much of the developed world after the Second World War, and economic growth during that period and levels of employment were substantially higher than afterwards when neoliberal policies took over, see chapter 83 and Skidelsky 2010 pp116-118. Granted there was a great deal of work to do after the dreadful destruction of the war, but without government spending there would still have been a great deal of work to do, and there would have been plenty of people - including very many ex-forces personnel - available to do it, but no-one to create the jobs because no-one could afford to buy the output. It is a situation where no one employer or even several employers can extract the economy from its Catch 22 trap, but the country as a whole can do so when the government has the courage to spend decisively. Similarly increasing the minimum wage has a positive effect for the overall economy because it creates more spending power and therefore more demand, so overall production rises to match it.

Note that Keynes' analysis relates to an economy where all workers spend in the domestic economy - i.e. a closed - not trading with the outside world - economy. In an open economy it relates only to the domestic market, because in export and import markets workers and spenders live in different countries. Here account must be taken of the extent of these markets in correcting for unemployment, because increased spending has two effects:

(i) some of the extra spending is on imports, which increases the incomes of foreign workers but does nothing for domestic workers; and

(ii) it increases demand for domestic goods which diverts productive capacity towards the domestic market, thereby displacing export production and reducing export earnings.

Both of these effects reduce the income multiplier - see chapter 16 - that is brought to

bear in stimulating the domestic economy. Increased imports and reduced exports also affect negatively the balance of payments, so these factors are very important. These effects are discussed in more detail in chapter 68.

Given the inability of workers to change their real wages significantly you might wonder, as I did, how any change in real wages can come about. The answer is that during the depression the Catch 22 trap was caused by workers being the main consumers of the economy's output, so their real wages were tied closely to the prices of the products of that output. When wages fell prices also fell, in broadly the same proportion as the proportion of overall output consumed by workers. In an economy where the link is much weaker, as when much of an economy's output is not consumed by workers (exporting economies such as China's or economies geared up to providing for the ruling classes as in medieval times), then real wages can drop to very low levels. In contrast when the proportion of output consumed by workers increases the real wage of workers also increases in similar proportion.

Part 2

Wealth Extraction: Banking, Financial Trading and Other Extracting Sectors

36 Introduction to Part 2

Let me make it clear at the outset that my remarks are not aimed at specific individuals who work in the sectors targeted. My aim is the sectors themselves and the collective controlling minds - directors and senior managers who set the harmful policies that the sectors implement. The unfettered market philosophy and the freedom conflict working together provide fertile ground for proliferation of wealth extraction in all its forms. The modern world is awash with wealth extraction and the sectors are major employers, so you may well work in one of these sectors yourself. My quarrel is not with you. Nevertheless my contention is that wealth extraction is exploitation, which is not only unjust but also damages the economy. However there is a silver lining in that it represents an enormous reservoir of spare capacity that is available for redeployment in creating useful humanitarian and sustainable wealth.

Society contains a vast array of wealth extractors in many different forms. They are all around us and so commonplace that we take them completely for granted and regard them as necessary elements of the economy. A striking feature is that these sectors consider themselves to be essential wealth creators - their reward reflects no more than the value of the services they offer - but the wealth they create is dwarfed by the wealth they extract from those whose main job is to create wealth.

Wealth extraction is excess wealth entitlement gained from selling goods or services for more than fully informed and unexploited buyers would be willing to pay.

Wealth is extracted by overcharging. For example, if I was to offer a service to you that promised a massive increase in confidence, a worry-free future, the ability to deal easily with any kind of stress and no more sleepless nights, and charged £500 for it, some might think it represented a good deal. For your money you would get a home-study course consisting of thirty hours of mental exercises, ten hour-long guided meditations on a CD, a book of advice, and self-monitoring checklists to complete every week to measure progress. I would have prepared all this material by compiling it from internet searches and I had no qualifications in anything related to what was being offered and indeed didn't claim any. This might well prove to be a lucrative business. Unsatisfied customers would be fobbed off by being told that they hadn't followed the instructions or advice properly, or recommended to repeat the course, but no refunds would be given. Some people might even be helped by it. Let's say I made £200,000 each year. That £200,000 would add to GDP because money had been spent. Also tax had been paid and jobs had been created for a few assistants dealing with enquiries and sales.

The question is: *Does this service represent the creation of wealth?* Wealth has already been defined as that which has inherent value and can be traded, and generally takes time and effort to produce or to make available. It consists of goods and services - see chapter 1. This service can certainly be traded because people give me money for it, it

took time and effort at the outset to prepare the material and some more to manage the ongoing business, and it's a service, but does it have inherent value? In a sense it must do because people have come along of their own free will and paid money for it - aspects that neoliberal philosophy would claim as giving it value. But in another sense it doesn't because many customers felt cheated - they thought they were going to achieve something that they didn't achieve. They paid for something based on expectations, and in all but a small minority of cases those expectations weren't met. Let's say that after having taken the course and achieved whatever was achieved customers were asked what they thought the course was worth, and the average value they came up with was £50. That represents a more appropriate valuation than £500 because it is assessed from a position of knowledge. Each buyer's £500 had been earned by their creating wealth, and they gave it freely, but I took £450 of it by exploiting their hopes in the knowledge that most would be unfulfilled. I took their wealth entitlement for myself, with a bit for my staff and a bit for the taxman. What I did in effect was to extract £450 worth of wealth from each buyer in the form of entitlement to wealth that they had created, rather than to create new wealth myself. I was given a free ride by those who were overcharged. *Please note that my use of this example is not intended as a criticism of any similar services that are on offer. As far as I know they might be very effective and represent good value. I haven't tried any so I don't know.*

People hate being taken advantage of, being ripped off, but the whole purpose of wealth extraction is to rip people off - to exploit them in one way or another.

Wealth extractors fall into two main categories, though there is substantial overlap between them:

The first category exploits people collectively, and includes all those who have found ways to interpose themselves between product suppliers and their customers, so that the services they provide give the product suppliers that use them an advantage over other suppliers. They sell services that are initially helpful but when they are widely taken up any supplier that doesn't use them or tries to dispense with them is severely harmed, so no-one can thereafter afford to be without them. Let's call these **ratchet services**, the defining feature of which is that the more they are used the more they have to be used. Consider a crowd watching a procession. An enterprising salesperson comes along selling stools to give a better view.¹ Those who buy the stools do get a better view, but at cost to others behind them who get a worse view, so they have to buy stools as well. Eventually everyone has bought a stool and all are in exactly the same position they were in before anyone bought a stool. No-one except the stool seller has gained anything but woe-betide anyone who tries to do without a stool; they are guaranteed a much worse view. Stools don't last forever of course so people have to keep buying new stools - *this procession lasts a very long time!* What has happened is that the stool seller has become rich by providing a service that appeared to be helpful but in fact contained a trap - it was a ratchet service. The wealth entitlement enjoyed by the ratchet service provider is paid by those who buy the relevant products. In effect it represents a hidden product tax.

¹ You might recognise this as a reworking of Joan Robinson's 'paradox of thrift' analogy in chapter 13.

Examples are all around us and include:

- adverts that use methods of persuasion, as most do - product suppliers that are early users benefit at the expense of non-users, but soon all suppliers have to follow suit and we are now bombarded with adverts from all sides;
- credit and debit cards - the first merchants accepting them enjoyed higher sales that more than offset the fees, but soon all merchants had to accept them;
- contactless credit and debit cards - the latest and more convenient form of card transaction, soon all merchants will be forced to offer contactless payment;
- charity muggers ('chuggers') - many of whom are employees of private companies that are on contract to the charities they represent. They accost people in the street or make unsolicited phone calls seeking direct debit commitments, and are paid substantial sums by the charity for everyone they sign up. All charities must use them or lose out to those that do;
- non-company-specific discount cards and voucher schemes; and so on.

Although many of these claim or appear to be free they are run by companies that make profits and employ staff who receive wages, and it is the final consumer who pays - very heavily - for all of it. This is the exploitation: service suppliers using ratchet services pass on their costs to customers, who pay the associated costs without receiving much if any benefit. Ratchet service providers and their supporters point out that they help the economy by boosting spending - people spend money that they otherwise wouldn't, and while there is some truth in this the spending is almost entirely of the self-indulgent kind, which when taken to excess is unsustainable and harmful - see chapter 7. What isn't claimed but also true is that they distort the market, especially advertising. People are persuaded to buy products or services that are inferior to or more costly than others purely because their attention is drawn to them. For example a company with poor value products but good marketing and advertising can do better than a company with better value products but poor marketing and advertising.

Some ratchet services are very convenient to users and in these cases the service should be retained. It's the wealth extraction element that should be stopped.

Also in this category of collective exploitation are tax avoidance and rent-seeking.² Tax avoidance is discussed in chapter 95 and rent-seeking in chapter 98. Rent-seeking occurs when individuals and companies influence authorities to favour their interests over those of others. Such activities include, when done for private gain, lobbying, campaign funding, seeking to influence the drafting of laws and regulations, seeking to influence law enforcers and regulators, seeking to limit competition and so on. In these cases people are overcharged to the extent that the favoured party obtains subsidies, profits, or direct payments, or avoids penalties or payments, that without rent-seeking wouldn't occur.

² <https://en.wikipedia.org/wiki/Rent-seeking>

The second category exploits people individually, taking advantage of need, ignorance, trust, loyalty, laziness, gullibility and so on, and these exploiters are to be found everywhere³, setting expensive traps for us all. Note that by 'ignorance' I merely mean lacking relevant information, not lacking in education.

A major form of individual wealth extraction is by wealth power having taken control of essential resources that others need but lack, so they must pay the owners for their use. This applies particularly for property and money, where scarcity in both for ordinary people is driven by the relentless migration of wealth upwards to the wealthy. As a result property prices are inflated because of enhanced demand by investors over and above demand by people who want property to live in, and by public funding restrictions causing social housing shortages, making prices and rents much higher than they would otherwise be. Money is kept in short supply for ordinary people by real wages having been largely stagnant since the early 1980s. However production hasn't been stagnant, more and more products are available and wanted, so people have to work more hours and to take on debts to pay for them. This aspect of wealth extraction - the rich owning more and more essentials thereby forcing ordinary people to pay to borrow them - focuses on exploitation in the above definition. It underlies the 'hoover-up' phenomenon discussed in chapter 20, and is discussed further in chapter 54 section 54.3 and chapter 97. Andrew Sayer discusses the subject in detail and explains the effects very clearly in his book 'Why We Can't Afford the Rich' (Sayer 2015).

Wealth extraction does harm on two fronts. Firstly there is the deep injustice of people being taken advantage of, which harms members of society and rewards extractors, and harms the economy to the extent that money is taken from poorer people who spend more and given to richer people who spend less. Secondly there is major harm to the economy in the form of enormous waste, which is the useful work that the extractors and their employees could do that is not being done - the wealth they could create is lost. Instead, although they are doing work of a sort, their efforts are not devoted to the creation of wealth but to extracting wealth from others, so the work they do is unproductive. They are being carried on the backs of those who do create wealth. Perhaps the saddest thing is that many who work in these sectors are particularly bright, talented and innovative, and the wealth they could create would be of very high quality. The sectors are so lucrative that they are easily tempted away from useful work by the rewards, and don't have to wrestle with their consciences because they are widely admired and thought of as wealth creators.

Wealth extraction is unjust, extremely wasteful, and should be eliminated by appropriate legislation. What stops it being eliminated are the vested interests of those who profit from it and the failure to recognise that it exists by those who pay for it.

The New Economics Foundation released a report in December 2009 titled 'A Bit Rich: Calculating the Real Value to Society of Different Professions'.⁴ They analysed the

³ a list of such practices is given in chapter 29.

⁴ http://neweconomics.org/2009/12/a-bit-rich/?sf_action=get_results&sf_s=city+workers&post_date=01012009+31122009

impact of six professions on society, taking account of all associated costs that don't appear on company balance sheets. Their findings are summarised in table 36.1. This shows the extent to which particular professions contribute or extract from society. The full report, downloadable from the web page cited, provides the detailed calculations and external references that lead to and support these perhaps surprising results.

Wealth extraction also includes theft in all its forms including tax evasion, but theft is already illegal so it isn't considered further.

Profession	Salary	Value to society added	Value to society destroyed
Investment banker	£0.5-£10 million		£7 per £1 generated
Childcare worker		£7 - £9.50 per £1 paid	
Advertising executive	£50k - £12 million		£11 per £1 generated
Hospital cleaner		£10 per £1 paid	
Tax accountant	£75k - £200k		£47 per £1 generated
Waste recycling worker		£12 per £1 paid	

Table 36.1

36.1 Wealth extraction misinterpreted as production

When a service is sold for more than properly informed buyers would pay for it, and the full value of the sale added to GDP, the excess value over its true worth represents double counting, because that amount was already included in GDP when the buyer earned it. Transferring it to another by extraction adds nothing to real economic growth and shouldn't add anything to GDP. In effect wealth extraction is a transfer payment, and as discussed in chapter 26 transfer payments are ignored (or should be) in calculating GDP.

Some might still think that the creation of jobs makes it worthwhile, but the income earned by extraction workers is paid from extracted wealth so the people doing those jobs represent resources that aren't helping society or the wealth creating economy.

Wealth extraction adds to GDP, generates taxes and creates jobs, but makes society as a whole no better off. It does NOT represent the creation of new wealth. All it does is transfer wealth entitlement from those who have it to those who have found clever ways to take it for themselves.

We don't count the proceeds of theft as contributing to GDP, so why should we count the proceeds of wealth extraction? Society benefits from neither, the only difference is that one is illegal and the other isn't.

37 Banking and Financial Trading

These services grew enormously from the 1980s onwards as successive governments were seduced by their apparent profitability into widespread deregulation. I say 'apparent' because there was very little new wealth created, in spite of well-publicised claims about their being wealth creators. Indeed these services are not in the business of creating new wealth. What they do is create money, and manage money and financial assets. Banks make loans available for people to spend on wealth, and financial traders attempt to increase wealth entitlement for their customers. It is in these senses that they claim to create wealth. They also charge a great deal in interest and fees for their services. It is the fact that these charges count towards GDP that gives the appearance of new wealth and that pleases governments, but counting towards GDP is misleading in two ways. Firstly they are wealth extractors, and when added to GDP wealth extraction represents double counting, secondly they are intermediate services, and as already argued in chapter 27 interpreting growth in GDP as economic growth is inappropriate when GDP includes intermediate services.

An example will hopefully help to illustrate the problem. If a barber offers you a haircut and charges £10 for it, that service represents wealth, and you are better off for having it and have received £10 worth of value directly. That service is an end in itself, it represents a consumer service and it has made you a better-looking person - hopefully. However banking and financial trading services aren't like that. They aren't ends in themselves, you aren't better looking, better fed or better clothed directly as a result of these services. What they do - if they succeed in their aim - is to provide the means to those ends. You generally accept these services in the hope that they will make you financially better off in the course of time, and being better off you can then become better looking or whatever you want. Take the case of bank loans. These might be taken out to buy something for immediate benefit such as a house, car or holiday, or for deferred benefit such as starting or expanding a business. The loan provides the means to buy whatever you want, and in the case of loans for immediate benefit that benefit is the end that you seek, or in the case of deferred benefit the new or expanded business is a means to a yet further end, the end in that case being what the business repays in due course. The loan provides money, but the benefit comes from what the money is spent on. Banks also consider themselves job creators, but it is people who borrow to set up and expand wealth creating businesses that create genuinely productive jobs.

Therefore banking is like the knives and wheelbarrows in our simple economy (see chapter 4) in that it provides means to ends rather than ends in themselves, and therefore shouldn't be lumped together with consumer wealth as they are in GDP terms as that gives the impression that society is better off than it really is - see chapter 27. If the intermediate wealth really is useful, as knives and wheelbarrows are, then that usefulness will emerge in due course in the form of consumer wealth, and it is that which makes society better off. Financial trading services aren't even intermediate services; they

represent 'investment services', which at best only increase the wealth of the well served at the expense of the poorly served. This sort of service doesn't facilitate the creation of new wealth like genuine intermediate services do; it only moves existing wealth entitlement from one person to another. It's like racing tips, if they're good then people will pay for them, but all they do - if they work - is transfer money from non-tipped to tipped, overall no-one is any better off because of them.

Whereas financial trading largely extracts wealth by exploiting people's ignorance of the charging structure, banking does so both by exploiting ignorance of how banks work and by having interwoven itself deeply into the fabric of society as its biggest ratchet service.

Wealth extraction by exploitation is a major part of the deregulated banking and financial trading sector, which explains why it expanded so much after 1980. Governments favour it because of its effect on GDP, which they think is economic growth but in reality is largely double counting.¹

It would be very revealing to see how GDP without double counting had behaved since the massive growth in banking and financial trading after 1980. I feel sure that it would be very significantly less.

Some might argue that a lot of UK banking and financial trading business is brought in from abroad, because these services represent major exports, so that justifies them. I would argue that exploitation can't be justified whether it is from UK or foreign residents. Exploitation of foreigners by the UK is hardly something to celebrate.

Paul Volcker (Chairman of the US Federal Reserve from August 1979 to August 1987) expressed the situation well in a speech he gave in 2009.² Here are some excerpts:

...I wish that somebody would give me some shred of neutral evidence about the relationship between financial innovation recently and the growth of the economy, just one shred of information.

...I found myself sitting next to one of the inventors of financial engineering who I did not know, but I knew who he was and that he had won a Nobel Prize, and I nudged him and asked what all the financial engineering does for the economy and what it does for productivity. Much to my surprise he leaned over and whispered in my ear that it does nothing. I asked him what it did do and he said that it moves around the rents in the financial system and besides that it was a lot of intellectual fun.

The most important financial innovation that I have seen the past 20 years is the automatic teller machine, that really helps people and prevents visits to the bank

¹ Table 1 of the BoE document at <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/qbr110304.pdf> gives a breakdown of financial services' contribution to GDP in 2011.

² Paul Volcker address on ideas for reforming financial services at a Wall Street Journal Future of Finance Initiative in the UK in December 2009 - <http://nypost.com/2009/12/13/the-only-thing-useful-banks-have-invented-in-20-years-is-the-atm/>

and it is a real convenience. How many other innovations can you tell me of that have been as important to the individual as the automatic teller machine, which is more of a mechanical innovation than a financial one?

I have found very little evidence that vast amounts of innovation in financial markets in recent years has had a visible effect on the productivity of the economy, maybe you can show me that I am wrong. All I know is that the economy was rising very nicely in the 1950s and 1960s without all of these innovations. Indeed, it was quite good in the 1980s without Credit Default Swaps or CDOs. I do not know if something happened that suddenly made these innovations essential for growth. In fact, we had greater speed of growth in the 1960s and more importantly it did not put the whole economy at risk of collapse.

Banking and financial trading form part of financial services, which also includes insurance, accountancy, financial advice, managing large-scale transactions, and associated supporting services. Banking and financial trading have been separated out because they predominantly involve the creation and manipulation of money and financial assets, and these activities provide great scope for wealth extraction.

Much of the business that bankers and financial traders undertake is on behalf of other financial companies and other branches of the same companies. In this respect they are very inward-looking, and from the public's point of view much of their business is shrouded in mystery. They very much prefer it that way because the less public scrutiny they attract the more they are able to carry on their business to their own advantage.

Banking and financial trading like to be thought of and are often referred to as industries. In public, political and economic minds this builds an association with traditional industries - productive, industrious, bringing together raw materials and labour and creating useful products for society. This very nicely hides the truth of the matter, which is that these so called 'industries' feed off real industries and people, extracting a significant part of what they produce for themselves.

John Kay hit the nail on the head when he said:

'Why does [the finance sector] *appear* so profitable?' The common sense that suggests that the activity of exchanging bits of paper cannot make profits for everyone may be a clue that much of this profit is illusory: much of the growth of the finance sector represents not the creation of new wealth but the sector's appropriation of wealth created elsewhere in the economy, mostly for the benefit of some of the people who work in the financial sector. (Kay 2015 p6)

Having said all that we do need banking and financial trading services, indeed a modern industrialised economy can't function without them. At issue are the unjustified charges that are being made and the size and stranglehold that they currently have over the economy as a whole. The industrial revolution in Britain is well known to be associated with the development of civil and mechanical engineering, but just as important was the ability to raise large amounts of money and to trade shares in the new industries in an active market. It was banking and financial trading that facilitated those developments. The services need to remain, but they should be made to serve industry and society rather than being allowed to make industry and society serve them.

Ratchet and straightforward exploitation services won't be discussed further because they are relatively easy to understand, though the wealth they extract is considerable. More difficult to understand are banking and financial trading, so these are discussed in much more detail.

Part 2a

Money Magic: Banking

This part focuses on what is known as retail banking - the provision of current and savings accounts, loans, overdrafts, direct debits, standing orders, cheque books, cash handling, payment administration and so on - in other words the normal business of high street banks. Another type of banking is investment banking, which involves large-scale financial activities such as acquisitions, mergers, splits, initial public offerings and raising large amounts of money from investors.

However, since the widespread banking deregulation that occurred in and after the 1980s, financial services of all types are increasingly carried out by large banking corporations, so the traditional demarcations between retail banking, investment banking, financial trading, insurance and so on which used to be carried out by separate companies, are now also carried out by separate branches of banking corporations.

Nevertheless for this discussion when I use the word 'bank', I am referring to a retail bank, or the retail banking branch of a banking corporation.

38 A Brief History of Banking

Goldsmiths were the first bankers beginning in the 16th century. They had secure storage vaults so in addition to keeping their own gold they offered people secure storage for their gold for a fee, in return for which they issued a receipt. Initially the receipts carried the name of the depositor, so only he or she could withdraw the gold, which they had to do to carry out transactions with it, after which the new owner of the gold would generally soon deposit it back with the goldsmith. To avoid this cumbersome business receipts began to be issued to pay the bearer, rather than or in addition to a named person, so that the receipt itself could be used in transactions without the need to disturb the gold. In this way each receipt for a given value was as good as any other receipt for the same value, and ownership of gold was easily transferred by transferring the receipt. This type of receipt became very popular and began to circulate widely as money, especially for large transactions, because it was much more convenient to carry around than large quantities of gold.

At the same time part of the goldsmiths' business was to lend gold at interest, but because of people's preference for receipts they increasingly lent receipts rather than gold. They could only legally lend receipts for gold that they themselves owned, and not for gold that was in their vaults but owned by other people, except when expressly permitted by them, but because gold was only rarely withdrawn they soon realised that they could get away with lending more receipts than the gold that they owned, and often more than the total amount of gold that was in their vaults. By this trick they obtained interest on money that people believed was backed by the goldsmith's own gold but in fact was backed either by gold belonging to others (when two receipts for the same gold were circulating at the same time) or by nothing more than the agreement to repay that the borrower had made. This was of course fraud but very lucrative. In spite of the fact that the receipts weren't legitimately backed they were still accepted in payment so they were in all respects genuine money. The amount of money circulating in the form of receipts consisted of the receipts held by depositors of gold left for safe keeping, plus the receipts lent out for the goldsmith's own gold, plus the additional receipts lent out by the goldsmith for gold that was either not owned by the goldsmith or for gold that didn't exist at all. When this total exceeded the amount of gold owned by the goldsmith money had been created fraudulently because there was now more money in circulation than there was gold in the vault (Ryan-Collins et al. 2012 p38).

The fact that the goldsmith held debts to cover the fraudulently issued receipts was important because provided that the borrower didn't default the debt would eventually be repaid and all would be as it was, except that some of the gold that had belonged to another person now belonged to the goldsmith because of the interest payments. When a debt was repaid the money that had been created and entered circulation was withdrawn from circulation by the borrower giving it back to the goldsmith and thereby in effect it was destroyed. There was nothing of course to stop the goldsmith from re-

issuing the same receipt to someone else in return for another debt agreement but this procedure was no different to the original receipt being destroyed and another identical one being created.

In due course goldsmiths found that they could safely lend out receipts for several times the amount of gold in their vaults because it was rare that people would withdraw significant amounts in gold, and when they did withdraw gold and transfer it in a transaction it soon came back to the goldsmith for safe keeping from the new owner. All the time the goldsmith pocketed the interest on money that had been created out of thin air, so it is easy to see why they grew so rich so quickly.¹

This is an extract from a letter written by the Rothschild brothers of London to associates in New York in 1863:

The few who understand the system will either be so interested in its profits or be so dependent upon its favours that there will be no opposition from that class, while on the other hand, the great body of people, mentally incapable of comprehending the tremendous advantage that capital derives from the system, will bear its burdens without complaint, and perhaps without even suspecting that the system is inimical to their interests.²

Although there was nothing to stop goldsmiths from creating receipts for direct spending by themselves, if they did this to any significant extent then they risked exceeding the safe limit of receipts in circulation because in this case there was no corresponding debt to be repaid so these excess receipts would add to the total without ever being recycled - far better to await the interest and spend that.

When gold depositors suspected or realised what the goldsmiths were up to they demanded a cut of the interest, so eventually the fees for gold storage had to be dropped and interest paid instead, at a lower level of course than that charged to borrowers.

This is an instance where the earlier definition of money as entitlement to wealth can be seen as important, because what had happened was that the goldsmiths had created money with negligible effort without creating any wealth, but were repaid with more money than they had created because of the interest, and by these means they became entitled to wealth that others, the borrowers, had created.

From these beginnings grew the banking sector, which still creates money by the same means, still charges interest on it, still becomes entitled to wealth created by others, and still enjoys just as lucrative a business. A major difference is that banking activities are no longer classed as fraud in the legal sense, provided that the bank is in possession of a banking licence.

Banks claim that they provide a valuable service to borrowers, and there is some truth in this, so in chapter 49 the value of the service is examined.

¹ <http://positivemoney.org/how-money-works/how-did-we-end-up-here/>

² http://www.moneyreformparty.org.uk/money/about_money/quotes.php

39 Modern Banking - Creation of Money and Debt

Although the modern banking sector grew out of the fraudulent activities of goldsmiths, it is subject to greater rigour and oversight than was possible historically. Nevertheless the same principles and processes apply, in that money in the form of credit is created in response to people taking on debt, and destroyed when debts are repaid. For completeness it should be added that money created by banks in return for loan agreements can only be in the form of bank money, they cannot create coins or banknotes for this purpose.¹

Before exploring how banks create money in a modern economy it is worth discussing the two other theories of banking that have been predominant for most of the history of banking: (i) the **intermediation theory**; and (ii) the **fractional reserve theory**. Banks themselves have encouraged belief in these theories, especially the first, because it nicely conceals what they are really up to. Also it hasn't just been the public that have believed these theories, politicians and economists have also believed them and largely still do, indeed many economic textbooks still set out one or other of these theories as fact (Ryan-Collins et al. 2012 p11 and Werner 2005 Chapter 11). In truth neither theory is tenable.

i) The intermediation theory of banking - the simplest and most believed theory.

In this theory savers deposit money in banks and banks lend out that money to borrowers. Banks make money by charging borrowers more interest than they give to savers. In effect banks intermediate - i.e. they act as middlemen between savers and borrowers. In this theory there is no question of banks creating money, the money supply is fixed outside the banking system and all banks do is redistribute it. The theory is easy to understand and easy to believe, but it soon falls down because it fails to consider the next step which is what happens to the money that the borrower receives. Borrowers of course spend the money which is then owned by someone else, who is likely to save it in a bank - indeed with bank money they have no option as bank money never leaves the banking system - this feature is discussed later. At this stage the money has already been lent once and then re-deposited, so if the bank lends it again the same money has been lent to two different people, then three, then four and so on. Banks are bound to do this because they don't ask a depositor whether the money has already been lent once, and indeed even if they did the depositor can't know, because when someone buys a product the seller doesn't know and doesn't care how the buyer got the money to buy it. Therefore the intermediation theory has to give way to the fractional reserve theory, which is more complex but nevertheless just as false as the intermediation theory.

¹ Although some banks in Scotland and Northern Ireland are permitted to issue their own banknotes, any that are brought into circulation must be backed by an equivalent amount paid by the issuing bank to the BoE in the form of BoE notes, coins or reserves (BoE electronic money - discussed later) that are taken out of circulation. So commercially issued banknotes in effect take the place of BoE issued money.

ii) The fractional reserve theory of banking - the more sophisticated theory (Ryan-Collins et al. 2012 p38).

Here banks do indeed re-lend the same money over and over again, but not indefinitely because a single bank can never lend out more than its savers have deposited, and it has to retain a portion of deposits in order to pay out people who want their money back or want it transferred to someone else when they buy something. Say someone deposits £1,000 in cash and all banks retain 10% of deposits to meet their reserve requirements, so the bank that took the £1,000 cash lends out £900 as bank money. That £900 comes back to the same or another bank as a new deposit (as bank money this time, not as cash), and 90% of that is re-lent, which is £810. As this process continues the amount lent at each stage gradually lessens and the total amount grows ever more slowly. Eventually when the initial £1000 is all retained as the reserve, not necessarily in the same bank but somewhere in the banking system, then that £1000 represents 10% of the total amount of money deposited and lent, which is therefore £10,000, consisting of £1,000 in cash and £9,000 in bank money. In other words the original £1,000 cash is now believed to be owned by no less than ten different people or organisations, only one of which is the original depositor of the money. This works because all ten believe (most of the time) that their money is safe, so they don't all want their money in cash at the same time. If they did then the system would collapse - this is known as a run on the bank.

In the fractional reserve theory banks do create money, but they can only do it collectively by working together, no individual bank can lend out more than it has on deposit.

Belief in this system is reinforced in countries that set a **minimum reserve requirement** - i.e. fixing by law the lowest ratio of central bank reserves to bank money. This sets a limit on the amount that a bank can lend as a multiple of its reserve, and the lower the reserve requirement the more likely it is that banks will be unable to pay depositors who want to take their money out.

Banks don't operate in either of the above ways, they operate by **credit creation** - i.e. banks create new money both individually and collectively and are not restricted in the amount they lend by what has already been deposited. It is known as the **endogenous money theory**. Most of the money is created when a person or organisation takes on a debt - it is the debt obligation to the bank that is the trigger for new money to come into existence. In countries where there are reserve requirements banks are free to create money *first*, and obtain the reserves *afterwards*, by borrowing from the central bank, from other banks or from the money markets.² As with the fractional reserve system many people in effect have claims on the same money - they all think they have access to the same cash reserve, so again if they all want their money in cash at the same time then the system collapses.

In fact there are two forms of 'cash', cash itself as we all know it and 'reserves', which are a form of electronic cash, issued in the UK by the BoE. BoE reserves are freely exchangeable by banks for cash and vice versa. Reserves are only used by banks, the BoE,

² These are lending and borrowing markets for large sums of money for relatively short periods, used by banks and other financial institutions and large organisations. See https://en.wikipedia.org/wiki/Money_market

the government and a few other organisations that need access to them. They are not available to the general public because the public has no need for them. The story of how reserves came into being is discussed in more detail in chapter 41. Both cash and reserves are the most secure forms of money because they are guaranteed by the state.

In this system there is no need for any concern about whether bank money is owned outright or has already been lent, because almost all bank money has been lent - most of it only comes into existence by being lent - although the term 'lent' isn't appropriate for newly created money as will be seen later. Occasions when bank money is created other than in return for debt obligations are as follows:

- i. when banks buy things for themselves; pay their employees, managers, and directors; and pay dividends to shareholders. All they do is credit the relevant bank accounts, either by a keyboard entry if their accounts are with the bank in question or by sending reserves to another bank if not, and the other bank then creates bank money and credits their accounts. However this gives the impression that banks can create as much money as they want and spend it for their own purposes, but this isn't the case. Bank money created by a bank for its own purposes merely offsets some of the other bank money that is destroyed when interest payments are received from borrowers, so it doesn't increase the overall supply of bank money, and the interest it receives is bank money that was created in return for another loan agreement to a bank, though not necessarily the bank that receives the interest. In effect a bank's own purchases are funded by interest, or if there isn't enough interest then the shareholders have to fund it, so there is no net creation of bank money in these cases. These transactions are explained more fully in chapter 44.
- ii. when the BoE creates reserves and uses them to buy things in the economy in **open market operations**³ or quantitative easing. When the reserves are sent to bondholders' banks in return for bonds, the banks credit the bondholder's accounts with new bank money.

The only way that banks, on their own, can create money is by simultaneously creating debt.

Credit creation is the true basis of bank operation and all debate on the subject should have ended when the BoE published its paper and videos⁴ describing exactly how the system works. Old beliefs die hard however so the earlier discredited theories are still in widespread circulation.

An easier way to understand bank money - *at least I find it so* - is to regard it as IOUs. If I have £100 in a current account then what I have is an IOU from the bank for £100

³ Buying and selling government bonds on the open market so as to add or remove money to or from the economy. In the context of banks creating money they do so when the BoE buys bonds.

⁴

<http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q102.pdf> and two accompanying videos <https://www.youtube.com/watch?v=CvRAqR2pAgw> and <https://www.youtube.com/watch?v=ziTE32hiWdk>

(the bank owes me £100). What's more this is an especially good form of IOU because I can spend it. Everyone has heard of Barclays or NatWest or whatever bank I use, and they know that an IOU from them is a lot better than an IOU from me which might circulate as money amongst my friends but wouldn't circulate any wider than that. Therefore whoever gets the bank IOU will be confident that they can use it to purchase goods from anyone else so it meets all the requirements of money. When I take on a debt with a bank I give the bank a personal IOU, which they will accept subject to a string of conditions, and in return the bank gives me a bank IOU in the form of bank money which is credited to my account.

When I take on a bank debt the bank swaps my IOU to them for an IOU from them, which can be used as money.

When I spend this money it is transferred to someone else's bank account, and when they spend it is transferred again, probably being split up as well as dispersed, until fractions of it are held by probably hundreds or even thousands of different people who have never heard of me or my debt, but at all times that precise amount of bank money remains firmly tied to my loan agreement to the bank, and it exists only as long as that agreement exists. A very clear and highly recommended fifteen minute TedX talk on this subject by Mick Taylor is available at

<http://www.youtube.com/watch?v=KveTVWCY4xQ>.

It should be noted that banks create money, not wealth. What the banks have done is to create **spending power** - the ability to spend - by converting a non-spendable IOU or asset into a spendable IOU.

The fact that banks create the bulk of the money supply by simultaneously creating debt means that the economy can only have money if it has debt. This is a vitally important point - money only exists as long as debt exists.

If we want more money then we have to have more debt, if we want less debt then we have to have less money. In the current system the two are inextricably linked together.

The person paying the debt is very rarely the same person who is holding the money, but nevertheless for almost every pound that exists in a person's bank account, someone, somewhere, is paying interest on it to a bank.

Perhaps unexpectedly it is the destruction of money when debts are repaid that is normally more harmful to the economy than its creation, because money being taken out of circulation, when done in significant amounts, is what causes recessions and depressions. When people become fearful for the future for whatever reason they repay their debts, cut back on spending and avoid taking on new debts. Money destroyed in debt repayment reduces the overall money supply, so there is less money available for anyone to spend, and spending cutbacks represent other people's income that is not paid, leading to lay-offs and even more spending cuts by those laid off in a damaging downward spiral - see chapters 13 and 15. In contrast when banks are creating money it is because people are happy to take on debt, which means that they are generally optimistic about the future, and as more money enters circulation more jobs are created and everyone prospers - for a while at least until the next recession.

There is another confusion surrounding debt interest payments, and it arises because of the following question. Since banks only create bank money when debts are taken on, and the full amount of the debt is repaid at the end of the term, where does the money used to pay the interest come from? It seems that it can only come from new money created by new debts, so the money supply must continually increase. However that isn't the case, it only seems so if we overlook the fact that money circulates. Banks use the interest to pay salaries, dividends, bonuses and to buy things for themselves, and that money circulates back in the economy to be earned by work done by the people who are in debt to pay the next interest instalment, and so on.

39.1 Banks don't lend money

A common misleading statement perpetuated by banks is that they lend money. In fact they don't lend anything. In lending someone is deprived of whatever is lent for the duration of the loan. Most bank money comes into existence as a result of someone taking on a debt, and would not exist without the debt, so no-one is deprived of anything when the borrower's account is credited with bank money. The misconception is very helpful to banks however, because no-one questions whether they are entitled to interest, but interest entitlement only follows from giving up something of value for a period, whereas banks give up nothing. They are entitled to something for their service, but interest due for deprivation isn't one of them - see chapter 49. In fact something real is indeed lent when a person takes out a bank loan, but it isn't the bank that lends it - see chapter 48. Because the terms lending and borrowing are in such common usage with regard to bank money I shall continue to use them for consistency, but strictly speaking their use is inappropriate.

In considering how bank money is used it will be helpful to consider a particular bank - Barclays. All Barclays' bank money is held in bank accounts, all maintained in Barclays' computers and all positive balances owned by people *other than Barclays*. The money in those accounts represents money owed by Barclays to the account holders; unless the account is overdrawn in which case it is in effect negative bank money - money owed by the account holder to Barclays. In fact that is all that the account is - an electronic record of the amount owed by Barclays to a particular person or organisation, or owed by them to Barclays if overdrawn. As members of the public with bank accounts we are so accustomed to think of the money in our accounts (when not overdrawn) as something that is both useful and tangible (we can exchange it for cash which we can see and touch), which indeed to us it is, that it is hard to see it in any other way. But to Barclays it is neither useful nor tangible - Barclays can't exchange it for cash or anything else - so it can't and doesn't ever use it for itself. To Barclays it is simply a record of something owed. All Barclays does with that money is to respond to our instructions - to transfer it, add to it, or exchange it for cash.

When we and others talk about banks lending, investing or gambling with our money, we imagine that it is our bank money - the money in our bank accounts - that is being used for these purposes, but it isn't. Banks can't use a record of a debt *owed by them* for anything that is of benefit to them.

Banks don't use the money in our bank accounts for anything that benefits them because to the bank that money is merely a record of what the bank owes to us, and a record of what is owed can't be used for anything useful by the bank.

This point is worth emphasising because it is so widely misunderstood:

It is commonly assumed that when we have money in a bank account, that money is used productively by the bank in lending on to businesses and individuals. We think therefore that we can keep money in the bank, perhaps idle for long periods, without any concern about it being taken out of economic circulation. Yet that is precisely what is happening. Money that lies idle in bank accounts has exactly the same effect on the economy as cash hoarded in a mattress!

The misunderstanding comes from the belief that bank money is something that is being held by the banks on our behalf for safe keeping, just as goldsmiths held customers' gold for safe keeping. However nothing is held for safe keeping except the loan agreement that the original borrower signed and gave to the bank in return for a newly created record of liability, which is transferable from person to person as money.

The BoE confirmed this in their quarterly bulletin for Quarter 1 2014⁵:

In fact, when households choose to save more money in bank accounts, those deposits come simply at the expense of deposits that would have otherwise gone to companies in payment for goods and services. Saving does not by itself increase the deposits or 'funds available' for banks to lend. Indeed, viewing banks simply as intermediaries ignores the fact that, in reality in the modern economy, retail banks are the creators of deposit money. This article explains how, rather than banks lending out deposits that are placed with them, the act of lending creates deposits - the reverse of the sequence typically described in textbooks.

What banks do is to create new money for new debts and call it lending. Although our money isn't used by banks it is nevertheless put at risk because as more money is created the amount owed by banks increases, but the amount of state-guaranteed money that they use to pay customers doesn't increase, so their ability to discharge their debts is reduced. What happens is that the ratio of bank money (bank debts to customers) to reserves (state money) rises, making individual banks and the banking system as a whole more fragile and therefore less able to withstand financial shocks, as was seen only too clearly in 2008.

Money is anything that is immediately available for spending - cash or bank money in bank current accounts. Credit cards appear to be money because they allow money to be created (if issued by a bank) or transferred (if issued by a non-bank) when it is demanded, but the credit card isn't itself money, it is a facility that permits rapid money creation or transfer. **Time deposits** - bank savings accounts that don't pay out for a fixed period of time - also aren't money because such deposits aren't immediately spendable. Spendable money used to buy such savings products is taken out of circulation (destroyed by the bank in return for the time deposit - reducing the bank's liability) for the duration of the

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<http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q102.pdf>

saving period. Some savings accounts allow immediate withdrawal on penalty of some of the interest that would have been paid. This still isn't money, but it is immediately convertible to money on demand. Although savings accounts don't contain money the money that was used to buy them is still in effect idle, in that it is taken out of circulation and only brought back when the account pays out. Therefore money 'in' savings accounts can also be considered idle money.

39.2 Just what is this stuff called bank money?

At this point it will be helpful to examine just what bank money really is. Let's start from something we recognise as money - cash. Cash is created by the BoE, which is an agent of the state. The BoE also creates reserves - electronic cash - which is as good as cash but much more convenient in transactions between banks, the BoE and government. Cash and reserves have their value guaranteed by the state, which is as good a guarantee as we can get now that precious metals aren't used any more.

From our point of view as account holders we know that banks respond to our instructions to exchange our bank money for cash, transfer it to another account and so on, but what do banks do when they receive these instructions? In a transfer we probably imagine that it is bank money itself that is transferred. For example Barclays might say to HSBC 'we have received an instruction to transfer £100 from John Smith's account with us to Fred Bloggs' account with you, so please credit Fred's account and we'll debit John's.' But why should HSBC take on a debt to Fred Bloggs when Barclays discharges a debt to John Smith? It would be of great help to Barclays but quite the reverse for HSBC so it doesn't happen. Instead Barclays transfers £100 in reserves to HSBC, so Barclays loses £100 in reserves but balances that by losing an equivalent debt to John Smith, and HSBC accepts a debt to Fred Bloggs but balances it by accepting £100 in reserves from Barclays. After the transaction both banks have neither gained nor lost. Similarly if we withdraw £100 in cash from our account, then our bank loses £100 in cash but balances that by reducing its bank money debt to us by £100, so again everything balances. There is a very significant point here, and it is this:

The only money that banks recognise as having real value is state-guaranteed money. Therefore we should agree with them on this - *cash and reserves represent real money.*

It was noted in chapter 11 that bank money never leaves the banking system. In fact it goes further than that.

Each bank has its own particular form of bank money which never leaves that bank.

Bank money from different banks never mixes; it always stays as positive or negative numbers in each bank's computers in named accounts. Transfers between banks are made with state-guaranteed money, normally reserves, not with bank money.⁶ Although this basic point is worth keeping in mind and is of great importance to banks, it is not

⁶ In practice interbank transfers can be made with anything that particular banks consider acceptable between themselves, but to keep it simple we shall only consider transfers using reserves, which represent the main and most secure form of settlement.

normally significant in practice to bank users because it is hidden by the payments system - the mechanism by which one person pays another using bank money, which operates as though all bank money is the same. It does become significant however when a bank is in danger of being unable to pay its debts.

Now consider how bank money comes into existence. I take out a mortgage for £100,000 which I owe to my bank, Barclays for example, and in return my bank acknowledges a debt of £100,000 to me, which they do by recording that debt as an entry in my account at the bank. That is bank money. Note that no more cash has come into existence as a result of my new mortgage, and Barclays hasn't paid me anything, they just acknowledge that they owe me £100,000 and that acknowledgement is bank money. When I buy a house with it £100,000 in reserves is transferred from Barclays to the house seller's bank, which for example might be HSBC. At the same time a customer of HSBC also takes out a £100,000 mortgage, and £100,000 in reserves is transferred from HSBC to the house seller's bank which happens to be Barclays. At the end of these transactions no reserves have moved - they went from Barclays to HSBC but promptly came back again - but £200,000 in bank money has been created - out of thin air! Banks are granting loans to lots of people all the time, for mortgages, cars, furniture, holidays, investments and so on, and cash is being withdrawn from accounts and paid into accounts all the time, so the only reserves that are transferred between banks or lost or gained by them from withdrawals and deposits is the small residual amount needed after all balancing transfers have cancelled out at the end of each settlement period. In our simple example above nothing at all was transferred. In practice it has been found that about thirty times as much bank money can be created as is required in reserves, because the residual transfers are so small.

So what do we now know? Four things:

- i. bank money is no more than a record of what banks owe to account holders;
- ii. banks promise to pay all owed money in cash (real money) on demand;
- iii. banks owe account holders vastly more than they have available as cash or reserves; and therefore
- iv. banks can't possibly pay what they owe.

So now we know what bank money is - an illusion! And like all illusions *it doesn't exist*. But here's the trick: *as long as we believe that bank money exists, it behaves as though it does exist!* More than that, even though you and I know that it isn't real we shall still go on using it, because in order to live a normal life we and everyone else must *pretend* that it is real. Indeed the economy can only function *provided that* we and everyone else maintain the pretence that it is real!

Cash is real money, bank money is pretend money.

The banking system as a whole does its best to maintain the pretence by lending reserves on a short-term basis between member banks, the BoE does its best too by acting as lender of last resort, and the government does its best by guaranteeing the value of the first £75,000 of each depositor's money in a single banking institution. Only the

government guarantee carries any weight in a crisis however because banks soon stop lending to other banks if they think they may be in trouble, and the BoE stops lending if it thinks the bank's assets aren't worth what the bank hopes they are. Also the government's guarantee doesn't mean that £75,000 of every depositor's bank money is real money, it merely means that if a particular bank fails the government will pay £75,000 to a sound bank which will credit the depositor's new account with that amount. This gives security to the depositor, but it gives even more security to the bank, because in reality it is always less expensive for the government to save a failing bank than to pay out depositors. In effect therefore the government guarantees all bank money (Jackson and Dyson 2012 pp91-94).

Every so often banks' inability to pay becomes so evident that we can't go on pretending any more, and then the government (i.e. the taxpayer) must step in to save not only the bank but the banking and financial system as a whole.

It is a mystery how the authorities can possibly believe that this is a good basis on which to finance the economy. A banking licence legalises activities that if anyone else carried them out would be fraud. If you or I did what banks do we would go to jail, and rightly so.⁷ But fraud is deception whether legalised or not, and deception on this scale is bound to be found out, and is, at regular intervals, leaving a trail of damage in its wake that is very real.

As well as current accounts banks also offer savings accounts (time deposits as discussed above), where an attractive rate of interest is payable, usually for a fixed period of time, to induce people to save in this way. It is tempting to assume that the money banks receive in return for setting up these accounts is lent to borrowers, but it isn't, instead it is a bank debt that is bought with money when it is taken out, but isn't money while it lasts, because it isn't immediately spendable. Banks like people to invest in savings accounts because they improve bank security - they exchange short-term liabilities for longer-term liabilities - so they help banks in matching incoming reserves with outgoing reserves, which is the cash flow balancing act that all banks have to undertake on a day to day basis. Often there are interest penalties if these investments are cashed in early, the aim being to discourage early cashing in or transfer. The bank also hopes the customer will keep the account after the good rate has expired as this costs the bank much less, and it is largely successful in this because people tend not to cash them in if they don't immediately need the money.

An irony is that as we have seen (chapter 23) the quantity of money required in an economy is that which supports the totality of transactions that the economy wishes to undertake within a given period of time, taking account of the rate of spend ($MV = PT$). However the amount of money that the economy gets (by far the most money in the economy is bank money) is determined by the totality of banks' lending policies, which may be more (during the expansionary phase of the business cycle) or less (during the contractionary phase) than is really required, but seldom and only by chance is it ever exactly equal to what it needs.

The quantity of money an economy requires is determined by the value of

⁷ Robertson 2012 p99.

transactions it wishes to carry out, but the quantity of money it gets is determined by banks' lending policies - thereby tying two completely unrelated factors together.

40 *The Contradictions of Modern Banking*

Although banks portray themselves as very solid and dependable institutions - *their buildings are often modelled on Greek or Roman temples with massive stone columns in effect declaring 'we're here to stay forever'* - in fact they operate on very shaky foundations. What they do is borrow short (customer deposits and interbank loans to the bank are held on a short-term basis) and lend long (loans are provided by the bank on a long-term basis), which is a very hazardous business.¹ In their normal day to day business banks have to settle accounts with other banks using BoE reserves as people move money between bank accounts, so at any one time banks that are short of reserves depend on loans from other banks that have a surplus of reserves. If the banks with a surplus become reluctant to lend to the bank with a shortage, or if substantial numbers of depositors want their money in cash, then the bank has to transfer or pay out its liquid assets, which are generally severely limited. It can't use its illiquid assets (customer debts, buildings etc.) because they can't convert them into cash at short notice. If many depositors want their money at the same time then they create a 'run on the bank' and this has happened many times throughout history, the most recent being in September 2007 when customers of Northern Rock formed long queues in fear that they would lose their savings. Borrowing short and lending long is known in the jargon as **maturity transformation**, which gives the impression that risky short-term borrowings are somehow transformed or converted into safe long-term loans. The truth is much simpler: nothing is transformed, all short-term borrowings remain short-term borrowings, and all long-term loans remain long-term loans. The term 'maturity transformation' gives a veneer of safety and control over a practice that is very risky, especially when banks have a high ratio of short-term borrowings to liquid assets, which they are strongly incentivised by profit to have.

Given the shaky nature of banking the great fear that banks have (and it is a very real fear, especially in downturns) is that their assets will fail to cover their debts, or in other words that they will be insolvent. Since the 2008 crash many banks still hold what are known as toxic assets, things like mortgage backed securities and collateralised debt obligations - mortgage and other debts owed by people across the world that have been packaged together and sliced up into saleable segments - see chapter 54. The problem with these is that no-one, not even those who did the packaging and slicing, knows what they are really worth, and when a rash of mortgage defaults occurred in the US confidence in them evaporated. Because of this they are now all but unsaleable, so in effect they are worth almost nothing. It was this problem that caused banks to stop lending to each other in September 2007 leading to the run on Northern Rock. Banks didn't know whether they themselves or other banks were solvent or not, and wouldn't

¹ At least it is if the bank retains the loan for its duration. In the run-up to the 2008 crash they used a clever system of 'securitisation', they sold off the loans to investors. See chapter 54.

lend money to another bank for fear of it going bankrupt, in which case they would lose the money that was lent. The BoE is very reluctant to lend to a bank that is insolvent, or even thought to be insolvent, because that risks losing public (i.e. taxpayers') money², so there is an enormous incentive for a bank that is close to insolvency to value its assets as highly as possible.

In reality the bank asset/debt balance is completely academic because in a practical sense all banks are insolvent in that none of them can pay all their debts any more than the fraudulent goldsmiths of old could pay all the receipt holders. Although now legitimised and regulated, the original deception remains in the system, and the deception is that banks promise to pay everyone that has an account in credit that they can have their money in cash, either on demand for a current account or on maturity for a savings account. That promise can't possibly be kept because the bank doesn't have access to enough cash, by a very large margin, to be able to do so. Just like the goldsmiths' fraudulent activities modern banking is based on promises that can't be kept.

The banking business is based on deception: banks make promises that they can't keep, yet the economy only functions when the deception is believed.

This fact highlights the contradiction at the heart of modern banking - as long as depositors believe that their money is safe then indeed it is safe because they leave it in the bank, but as soon as they begin to fear that their money is not safe then indeed it is not safe, because everyone rushes to get their own money out in cash before it is all gone. To deal with this contradiction a number of sticking plasters have developed over the years as a result of bitter experience, as discussed in the last chapter, but apart from massive government intervention they are hopelessly inadequate in a serious crisis as was shown in 2008. The one measure that would remove the contradiction - preventing banks from creating money - is one that has not been tried in the UK. We shall explore alternatives to the current system in chapter 55.

Note that a solvent bank's ability to borrow from the BoE when it has cash flow problems is a privilege not afforded to other businesses. Many solvent and socially valuable businesses suffer cash flow problems - for example when debtors don't pay on time and creditors demand payment - and those problems often cause the businesses to fail. Neither the BoE nor any other state organisation provides any help to those businesses, which must go cap in hand to their own or another ordinary bank for a temporary loan or overdraft and hope for the best. The bank approached will only lend if it feels sure that the loan will be repaid with interest, in other words it will only lend if its own interests are served, it won't lend purely to help the business.

² The conditions under which the BoE will lend to a bank are discussed in chapter 42.

41 The Bank of England (BoE)

Individual banks existed long before there was a central bank, and the central bank, the Bank of England, was set up in 1694 as a private company with the express purpose of lending money to the state, which had lost all creditworthiness following vast expenditure first by Charles II when he was forced to default on his debts, and subsequently by William of Orange in wars against the French. Many schemes were put forward to solve the state monetary crisis, mostly based on raising funds to be repaid by future taxation, but none could escape the fact that money could only be borrowed at punishingly high interest rates because of widespread and justified distrust. In fact merchants could borrow at significantly better interest than could the state because they were trusted and the state was not. This led to a successful scheme put forward by William Paterson, to found a new bank, to be governed and managed by merchants and thereby reflect their financial credibility, but with the ability to issue bank notes that carried the authority of the Sovereign. This was what Felix Martin has called 'The Great Monetary Settlement' (Martin 2014 Chapter 7). In effect the King enjoyed the credit that only a bank governed by creditworthy merchants could provide, and the bank enjoyed the authority that only the King could provide. The new bank was the Bank of England.

Because of the sovereign authority it suited the separate merchant banks to become customers, because they then had an independent and trustworthy source of money with which to settle accounts between themselves. As a result the BoE's money expanded greatly, lending in turn its authority to an ever widening group of merchant banks, as their money became more widely transferable by their own customers from one merchant bank to another. In a crisis, when people were finding it increasingly difficult to repay their debts, confidence in the merchant banking system was lost because it was the banks that held those debts. At such times the BoE often acted as lender to the troubled banks because it was able to provide sound money by printing it in return for the loan agreements that other banks had accepted and which now no-one else would buy for fear of default. It did this not because it was obliged to do so, but because it could turn a good profit by buying banks' debts at considerably less than their face value, the discount representing interest to the BoE, which was often very high in times of crisis.

To this day banks normally settle debts between themselves using BoE money, although cash is now seldom if ever used for this purpose. Instead they use BoE reserves, which, being electronic, are much more convenient than cash. All banks have accounts at the BoE, as does the government, and these accounts use reserves. The BoE is the banks' and government's banker, and:

Just as bank money never leaves the banks, reserves never leave the BoE.

Debts are not all settled between banks immediately. Most are accumulated during the day and the net difference settled at the end of each settlement period, which varies depending on the type of settlement system used - BACS, CHAPS, cheque clearance etc.

Because only net differences are settled the total quantity of reserves at the BoE needed for settlement is only a fraction of the total quantity of bank money in customers' accounts - see chapter 39.

The BoE was nationalised in 1946 by the then Labour Government headed by Clement Attlee.

42 If Banks Can Create Money How Can They Go Broke?

It does sound odd. You would think that with this ability a bank would be completely bulletproof. Indeed if you or I could create money then there is no way that we could go broke. But in our case we can count our bank money as an asset, and if we could create it then we could increase our assets without limit. A bank is very different, bank money to a bank is not an asset, as already discussed it is a debt - in fact the reason that our bank money is an asset to us is because the bank owes it to us, they must make it available to us on demand, either in cash if we wish or by crediting the account of someone else that we have traded with if we instruct them to do so. Recall from chapter 39 that bank money is an IOU from the bank to the customer that happens to have it in their account. It was created when an original borrower signed an agreement with a bank to repay it with interest, but has since been transferred and split up many times to other people when the borrower traded with them. The IOU is money to the customer, but it is a debt to the bank, so what the bank has done is to create money, and what the original borrower has done is give the bank a signed agreement to repay, which is a debt for the borrower but an asset for the bank.

As a result, creating bank money is not a way to avoid bankruptcy for a bank, all it can do is to ensure, as far as possible, that its assets always exceed its liabilities, and that it manages its cash flow (in terms of cash and BoE reserves - used between banks to settle transactions) to be able to pay customers and other banks when necessary. If it encounters cash flow problems, which is not at all unusual for a bank since its assets are largely long-term loan agreements and its debts (mainly customer deposits of bank money) are short term, then it can borrow reserves temporarily from other banks or from the BoE, provided that it is solvent - that its assets exceed its debts. If it isn't solvent then it must go cap in hand to the government to seek help, and if it is not forthcoming then it is bankrupt. It all comes down to risk taking. The more risk (i.e. the higher the ratio of bank money to cash and readily cashable assets - see next chapter) that a bank takes on the more money it makes in good times when almost all interest and borrower debt repayments are made on time, but the more money it loses in bad times when substantial numbers of borrowers fail to make interest and debt repayments on time, or even when bank creditors (those who have lent the bank money) think that borrowers may fail to make those payments - as Northern Rock discovered in 2007.

But why doesn't the BoE simply lend the bank all the reserves or cash it needs to pay people it owes? The BoE could do that, but it won't because it would encourage excessive risk taking by banks because then they would have nothing to lose by it. In fact the BoE requires collateral, normally in the form of government bonds (gilts - short for 'gilt-edged securities' - so called because they are so secure), for any reserves or cash it lends (as do other banks when they lend to another bank), and the value of gilts held by banks is very much less than the value of customer deposits and therefore the value of reserves and cash that it might need in an emergency. Banks can also offer as collateral longer-

term debt assets in the form of 'repos' - sale and repurchase agreements - where another bank or the BoE buys the repo on the condition that it will be rebought by the selling bank in a relatively short time. In such cases there must be confidence in the collateral that underlies the repo and these transactions are only intended for short-term cash flow problems, not for long-term borrowing to rescue an insolvent bank. Banks are in trouble when depositors and other creditors lose confidence in their ability to repay, and this loss of confidence infects other potential lenders including the BoE, so reserve lending to a bank in trouble soon dries up.

Note again that a bank never uses bank money that has been allocated to customers for itself because it represents debt, and debts aren't useful to the debtor. It is often stated that banks use customers' deposits for their own purposes - lending, investment, speculation and so on, but they don't, they create new bank money for these purposes - see chapter 39.

43 Banks' Balance Sheets

Before going on it will be helpful to introduce balance sheets, because these are vital to banks, as indeed they are to any business.

A balance sheet presents a snapshot of the financial state of a business at a specific point in time, indicating the nature and value of all its assets (money and wealth that the business owns or is owed) and liabilities (money and wealth in the custody of the business owned by others or due to be paid or transferred to others), and therefore whether or not the business is solvent (its assets exceed its liabilities). Balance sheets arise out of the process of double entry bookkeeping, which is a powerful and informative way to set down transactions that the business carries out. They consist of a number of linked accounts, each account representing an entity that both gives value to and receives value from the outside world, and is meaningful with respect to the nature of the business. Imagine the accounts as pots containing quantities (which can also be deficits) of money or things of value related to the business. All value associated with the business is represented by the accounts, which give a continuously changing picture of the financial state of the business as it carries out its transactions. Values, whether of wealth or money, are always expressed in terms of money, but money need not always change hands.

Every business transaction involves two entries, one giving value to an account and one receiving value from an account - hence 'double entry', normally but not necessarily involving two different accounts. The account that gives value is credited - it has the value given added to it, and the receiving account is debited - it has the value received subtracted from it. Accounts that have a positive balance represent net givers; representing value owed by the business (liabilities), whereas accounts that have a negative balance represent net receivers; representing value that the business owns or is owed (assets). Because the amount of each transaction is always added as one entry and subtracted as another the sum of all the accounts is always zero.

It is important to define all accounts very clearly in terms of the nature of wealth or money that they contain. Misunderstandings at this level can easily cause confusion and errors. Figure 43.1 illustrates a simple structure. Here the cash and bank accounts are fairly straightforward. The cash account holds all the business' cash, and the bank account does the same for the business' bank money. The payments due account records payments that the business must make in the short term, usually no more than a year in advance, so these are liabilities. The receipts due account records money that is owed to the business but has not yet been paid, again in the short term. The fixed asset account represents all the business' fixed assets, offices, equipment, machines and so on. Owner equity is a bit more complex and is discussed later.

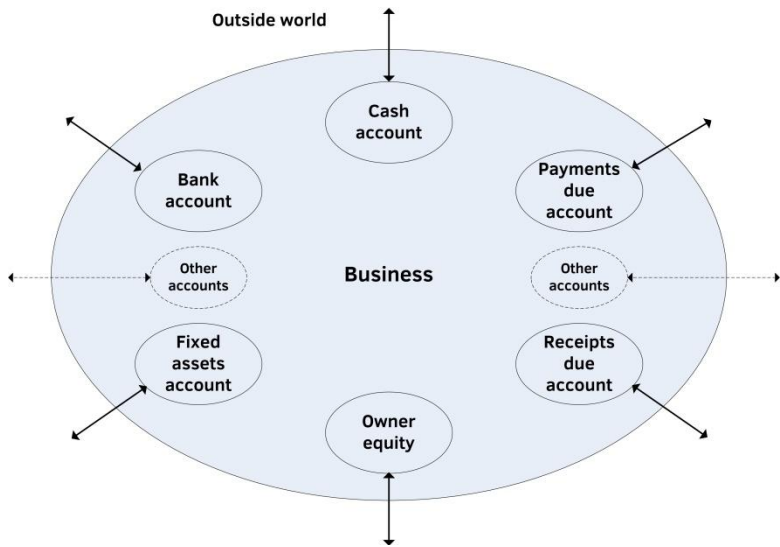


Figure 43.1 A simplified business account structure.

In operating the accounts the purchase of an office would appear as a debit in the 'fixed assets' account - wealth in the form of the office is received by the business, and as a credit in the bank account - the business takes money from the bank account to pay for the office.

The number and types of accounts depend on the nature of the business. Small businesses might have only a handful of accounts, whereas large businesses might have hundreds. Also there might be a hierarchy of accounts, where a top level account might be 'Long-term debts', representing all debts owed by the business falling due later than a year in advance. This might contain the combined totals of a group of subordinate accounts, for example 'Corporate bonds repayable 2019 - 2025', 'Repayment mortgage', and so on. The subordinate accounts record the detail of each relevant transaction, and the top level account contains the net amount at the date of the balance sheet.

Note that the business is a trading entity in its own right, so its owner is separate from the business and is represented within the business by a special liability account called something like Owner Equity or for a larger business Shareholder Equity, which is the net value of the business to its owner(s) consisting of all assets minus all other liabilities. This account is a liability because it has given value to the business in the form of the start-up capital and the business now owes that value together with any increase or less any decrease to the owner, and the business is solvent provided that it is positive.

A point that often causes confusion is that because accounts that receive value are debited, cash and bank accounts are negative when healthy. For example if the business bank account contains £100 then it will be shown as £-100. The reason this seems odd is that when someone receives a bank statement the account is healthy when it is in credit, meaning that the account holder is a creditor of the bank (she has lent the bank money). But a bank statement is drawn up from the bank's own point of view - it is the bank itself that is the business that prints the statements - so a customer account is in credit when the bank owes that customer money, which is healthy from the customer's point of view. A positive customer account is a liability of the bank. If a business has a bank account

then from the business' point of view the situation is reversed, its bank account is healthy provided that it is negative.

A balance sheet is just one of the major elements of a business' accounts but the one that is relevant for our purposes. The others are the income statement (also called profit and loss statement), the statement of cash flows, and the statement of stockholders' equity. These don't concern us so they won't be discussed further.

Bank assets consist of liquid (easily convertible to cash) and illiquid (not easily convertible to cash) assets:

Liquid assets consist in the main of:

- government debts - in the form of bonds issued by the government (gilts), tradable on the open market, and bought either directly from the government or from the market;
- cash and central bank reserves.

Illiquid assets consist in the main of:

- buildings and offices, computers, furniture, consumables and so on;
- customer debts - agreements to repay signed by borrowers.

Bank liabilities consist of:

- positive balances in customers' accounts (deposits);
- loans from the BoE, other banks and money markets;
- shareholder equity - this is what is left over when all other liabilities are subtracted from all assets. If it is positive the bank is **solvent**, if negative the bank is **insolvent**.

This can be shown on a simple diagram - see figure 43.2 - where the convention is to show assets on the left and liabilities on the right:

Assets		Liabilities
Liquid assets	Cash, Gilts, Reserves	Shareholder equity
		BoE and other loans
Illiquid assets	Property Office equipment Customer debts (loan agreements)	Customer deposits

Figure 43.2 A simplified bank balance sheet

44 Transactions, and their Effect on Bank Balance Sheets.

It will be useful to consider all the main transactions that a bank (i.e. a retail bank) undertakes, to see when and how money is created and destroyed. It will be useful also to explore the main transactions of government in the same way, because government transactions always involve banks, and the insights gained can be used in Part 4 to examine how the government currently raises money and to consider how it might raise money more beneficially.

The major point to bear in mind is:

New bank money comes into existence whenever a bank makes a payment in bank money (increase in customer liabilities) and goes out of existence whenever a bank receives payment in bank money (decrease in customer liabilities).

Given the above basic principle we can set out the various transactions that banks undertake, noting that for every transaction an account receives value from the bank (account debited) and an account gives value to the bank (account credited), and that the balance sheet balances both before and after the transaction:

i) Bank loan to a borrower with an account at the lending bank (figure 44.1): a loan agreement signed by the borrower is received by the bank's loan account (account debited), creating an asset for the bank. At the same time bank money is made available to the customer and recorded as a bank debt in the customer's deposit account (account credited), creating a liability for the bank. It might appear that since bank money has been received by the customer the deposit account should be debited, but remember that it is the customer who has received the money and the customer is external to the bank. In order for the customer to receive the money the bank must take it from somewhere, and that somewhere is the customer's deposit account, so the account is credited.

Assets		Liabilities
Liquid assets	Cash, Gilts Reserves	Shareholder equity
		BoE Loans
Illiquid assets	Property Office equipment Customer debts	Customer deposits
		Increased money supply
	<i>New customer debt</i>	<i>New customer deposit</i>

Figure 44.1: Balance sheet expands, new asset balances new liability.

ii) Bank loan to a borrower with an account at another bank (figure 44.2): the lending bank sends BoE reserves to the borrower's bank (lending bank reserve account credited so an asset is destroyed), and the loan agreement signed by the borrower is received by the lending bank's loan account, which is debited (an equivalent bank asset is created). When the borrower's bank receives the reserves its reserve account is debited

(an asset is created), and a new debt to the borrower recorded as a credit in the borrower's deposit account (an equivalent bank liability is created). The net effect is exactly the same as in case (i): bank money (a liability) has been created and an equivalent asset in the form of the loan agreement has also been created. The borrower's bank merely acts as an intermediary in the process, receiving reserves in return for crediting the borrower's account.

In this case the lending bank doesn't create money; it 'buys' the new customer debt with state money - BoE reserves. But, importantly, that state money isn't given to the customer who takes on the debt; it is passed to another bank to compensate it for creating money and thereby taking on a new liability to the customer. Bank money has still been created, but not by the lending bank. In reality all banks lend money all the time, so for almost every loan that bank A gives and sends reserves to bank B, bank B also gives a similar loan and sends reserves to bank A, so the net effect is very many loans and very little reserve transfer.

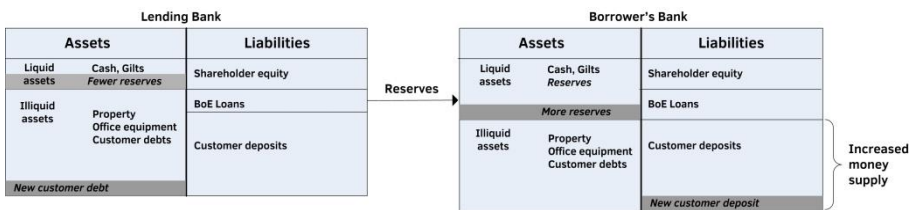


Figure 44.2: No change in lending bank balance sheet; it gains one asset (customer debt) and loses another (reserves). Borrower's bank balance sheet expands; it gains an asset (reserves) and a new balancing liability (customer deposit).

iii) A borrower with an account at the lending bank repays a loan (figure 44.3): the customer pays the bank which passes that value to the customer's deposit account (account debited - bank money representing a bank liability is destroyed), the original loan agreement is stamped as paid (in effect sold back to the borrower in return for the repayment) and the bank's loan account is credited (an equivalent asset is destroyed).

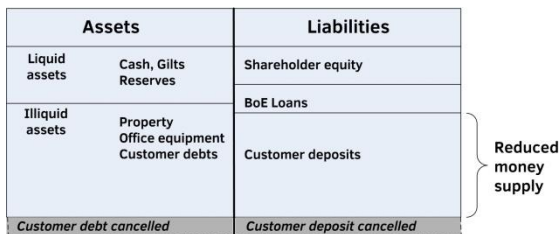


Figure 44.3: Balance sheet shrinks, an asset loss balances a liability loss.

iv) A borrower with an account at a bank other than the lending bank repays a loan (figure 44.4): the borrower transfers money from their bank account to the lending bank, which receives reserves from the borrower's bank and debits its reserve account accordingly (an asset is created). The original loan agreement is stamped as paid and the bank's loan account is credited (an equivalent asset is destroyed). The borrower's bank credits its reserve account (an asset is destroyed) and debits the borrowers account (an

equivalent liability is destroyed). The net effect is exactly the same as in case (iii): bank money (a liability) has been destroyed and an equivalent asset in the form of the loan agreement has also been destroyed. The borrower's bank merely acts as an intermediary in the process, sending reserves in return for debiting the borrower's account.

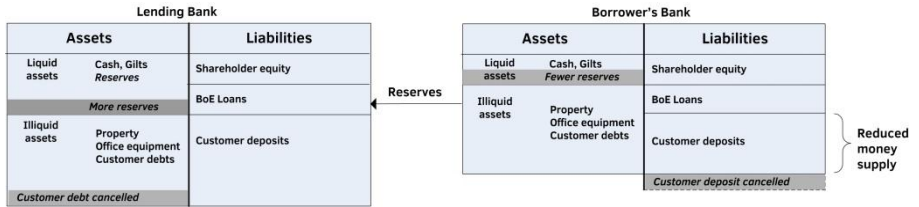


Figure 44.4: No change in lending bank's balance sheet, it gains one asset (reserves) and loses another (customer debt). Borrower's balance sheet shrinks; it loses an asset (reserves) and loses a liability (customer deposit).

For simplicity the remainder of these examples will just involve a single bank, other banks may be involved in reality but as above they only act as intermediaries. Also the effects on assets and liabilities and the money supply will just be stated rather than illustrated.

v) A borrower pays interest on a loan: bank money is received by the bank (debited from the borrower's account - a liability is destroyed), and the bank gives its shareholders the equivalent value (the shareholders' account is credited - an equivalent liability is created). Recall that the equity account is a liability to the bank because it 'owes' this amount to the shareholders.

vi) A bank pays an employee's salary: bank money is made available to the employee and the bank debt recorded in the employee's deposit account (account credited - liability created), and value is received (debited) from the shareholders' equity account (an equivalent liability is destroyed). In effect the shareholders have taken on the debt represented by the employee's salary by reducing their holdings in the bank.

vii) A bank buys office equipment: bank money is made available to the supplier and the bank debt recorded in the supplier's deposit account (account credited - liability created), and the bank's asset account is debited (office equipment received - an equivalent asset is created).

viii) A bank pays a dividend to its shareholders: bank money is made available to the shareholders and the bank debt recorded in the shareholders' deposit accounts (accounts credited - liabilities created), and value is received by the bank from the shareholders (the equity account is debited - an equivalent liability is destroyed). In effect the shareholders have been given value in the form of bank money and in return that reduce their holdings in the bank.

For vi, vii, and viii recall what was said in chapter 39: bank money created for a bank's own purchases (salaries, bonuses, dividends, goods and services) is taken from debt interest payments that were destroyed when received, so there is no net creation of new money for these purchases.

ix) A customer withdraws cash from an ATM: bank money is received by the bank (debited from the customer's account - a liability is destroyed), and cash is given to the

customer (credited to its cash account - an equivalent asset is destroyed). Note that a bank can only obtain cash from the BoE by paying reserves for it; it can't create and use bank money for the purpose because the BoE doesn't accept bank money. Similarly if a bank pays cash to the BoE then it receives reserves in exchange. Note that in this case the bank discharges its liability to the customer by paying out state money.

x) A customer pays cash into a bank account: bank money is made available to the customer and the bank debt recorded in the customer's deposit account (account credited - liability created), and cash is received by the cash account (account debited - an equivalent asset is created).

xi) A customer repays a bank loan with cash: this is an interesting case in that no bank money is involved; one bank asset (the customer debt) is exchanged for a new asset (the cash). The bank money that was created when the loan was originally taken out was destroyed when the cash was handed over from a bank to a customer, regardless of who got it and how it found its way to the borrower to repay the bank.

xii) A borrower defaults on a loan repayment: this is another interesting case in that again no bank money is involved. The bank money created in response to the original loan remains in the banking system, but not in the borrower's account because he or she can't pay. The asset in the form of the loan agreement that the bank thought had value is now seen to have none, so on the balance sheet the loan account is credited (an asset is destroyed), and to balance it the equity account is debited (an equivalent liability is also destroyed). In effect the debt is transferred from the original borrower to the shareholders and the bank itself has lost that amount of value.

The remaining transactions involve government borrowing by selling and repaying bonds (gilts) to banks and others. They are quite complex but are included to show the mechanisms involved, and to show that to banks gilts are just the same as any other debt that they own, in that when banks buy gilts they do so with created bank money - not as individual banks but in conjunction with other banks. This will be taken up in chapter 89 on government borrowing.

xiii) A bank buys a government bond directly from the government (i.e. on the primary market): government bond purchase is very important for banks because they can be used as collateral for loans of reserves, so if the bank can create money to buy them then it is in effect able to create the means to obtain reserves at no cost. However, since one organisation with a reserve account (the bank) is dealing with another organisation with a reserve account (the government), no bank money is involved. The bank merely transfers reserves to the government in return for the bond (its reserve account is credited (an asset is destroyed) and its bond account is debited (an equivalent asset is created)). It seems therefore that a bank can't create money to buy a bond. However, if we pursue the matter further we see that the government wants the money in order to spend it in the economy, on public servant salaries, benefits, the NHS, subsidies and many other things. When it spends this money bank money is created - reserves are transferred from government to the recipient's bank (increase in bank assets), and the bank credits the recipient's account with new bank money (increase in bank liabilities). Hence the banking system as a whole can create money to buy bonds, though the original bank that bought the bond won't necessarily be the bank that creates the money. What has

happened, after the money from the bond has been spent, is that the banking system has created the money to buy the bond, and thereafter enjoys the interest that is paid on the bond from the taxpayer - for nothing in return - nice! Also, perhaps even more importantly, it has increased its stock of high quality assets, and thereby improved its position with respect to the capital and liquidity ratios that banks are bound by, and as a result it can lend more and further increase profits. Although this process involves the banking system as a whole, all the players are involved so they all share the benefits. This is shown in figure 44.5.

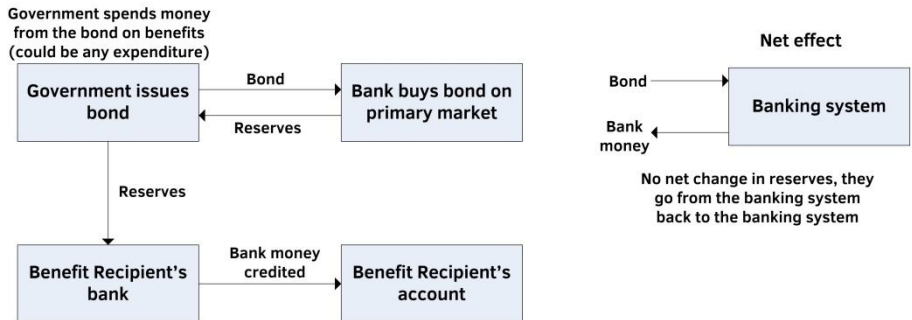


Figure 44.5: How the banking system creates the money to buy government bonds on the primary market.

xiv) A bank buys a bond on the secondary market (i.e. from someone other than the government): here the bank creates the money directly by crediting the account of the seller (a liability is created), and debits its bond account (an equivalent asset is created). The bond seller might well bank with a different bank than the bank that buys the bond, as shown in figure 44.6, in which case reserves are transferred to the seller's bank which then creates the money to credit the seller's account. In either case money has been created by the banking system, although the bond buying bank might well not be the bank that creates it.

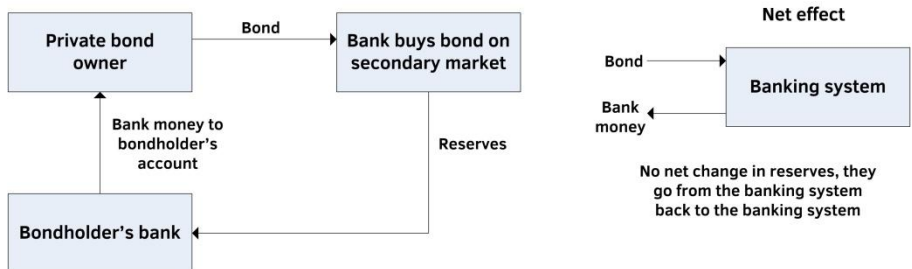


Figure 44.6: How the banking system creates the money to buy government bonds on the secondary market.

However the banking system obtains government bonds, either on the primary or secondary market, it has created the money to buy them. As a result it gets interest from the taxpayer on a zero risk asset, the taxpayer gets nothing in return, and at the same time the banking system is able to increase its lending.

xv) A non-bank company buys a bond on the primary market: the company pays

money to the government and its bank transfers the corresponding reserves. Bank money is destroyed in this process, but is recreated when the government spends the money raised in the economy. Hence there is no net effect on the money supply in this process. The same applies if a non-bank company (or individual) buys a bond on the secondary market. Here bank money merely changes hands and the bond also changes hands. See figure 44.7.

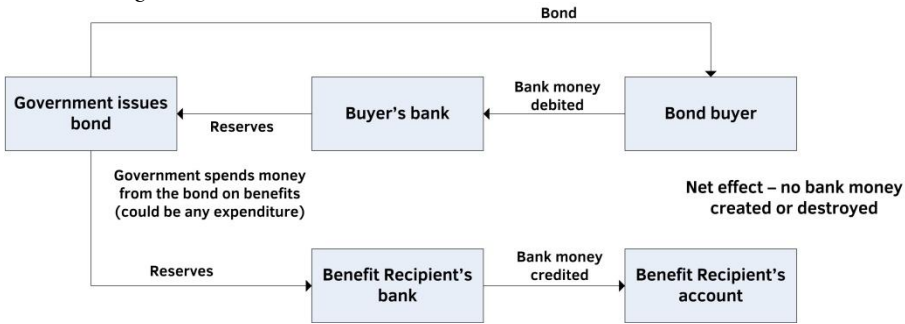


Figure 44.7: If a non-bank company buys a bond on the primary market then there is no effect on the money supply. The same applies if it is bought on the secondary market.

xvi) The government repays a bond owned by a bank on maturity: the government transfers reserves to the bank and the bond is cancelled. The bank's reserve account is debited (an asset is created) and its bond account credited (an equivalent asset is destroyed). Hence no bank money is involved directly, but in order to repay the bond the government has to raise the money, either by issuing a new equivalent value bond or by taxation. Figure 44.8 shows the effect if the money is raised from taxation. Here bank money is destroyed because bank money is debited from the taxpayers' account, but isn't credited anywhere else. If the money to repay the bond is raised by issuing a new bond, then the overall effect depends on whether it is bought by a bank or a non-bank. If bought by a bank then there is no net change (no bank money is involved, reserves are transferred from the new bond-buying bank to the government which transfers them to the bank holding the maturing bond), and if bought by a non-bank then money is destroyed in the same way as it is if taken from taxation.

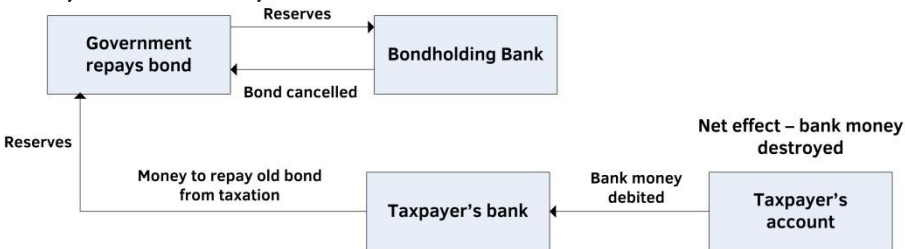


Figure 44.8: Government repays a bond held by a bank from taxation - bank money is destroyed.

xvii) The government repays a bond owned by someone other than a bank on maturity: the government cancels the bond and transfers reserves to the bank of the bond owner which debits its reserve account (an asset is created), and the bond owner's bank creates bank money by crediting the bond owner's account (an equivalent liability is

created). Hence bank money has been created. However, again the government must raise the money to repay the bond as above. Figure 44.9 shows the effect if the money is raised from taxation. Here bank money is destroyed as before so there is no net effect - bank money is created for the maturing bond holder and destroyed for the taxpayer. If the money to repay the bond is raised by issuing a new bond, then the same applies as discussed above - the overall effect being to create money if it is bought by a bank but no effect if bought by a non-bank.

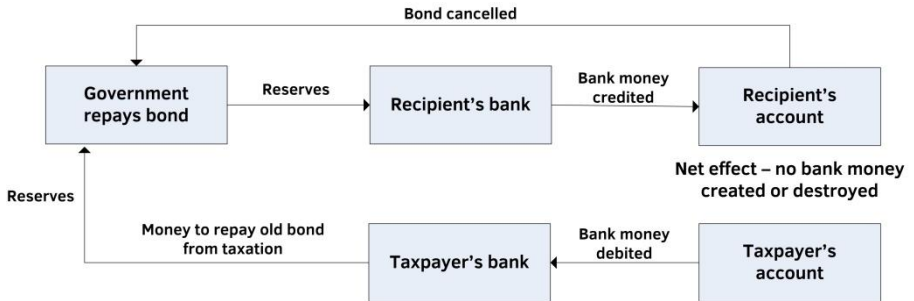


Figure 44.9: Government repays a bond held by a non-bank from taxation. No bank money is created or destroyed.

Isn't it strange that the state refuses to create money for itself, preferring instead to borrow money created out of thin air by private companies, when taxpayers have to pay heavily for this 'service'? See also chapter 89.

Although the mechanisms of bond sale and repayment when banks are and are not involved are complex, the overall outcome is simple and exactly the same as when a bank buys or sells any other type of debt other than when dealing with another bank - banks don't create bank money for each other. The point made earlier about new bank money coming into existence whenever a bank makes a payment in bank money and going out of existence whenever a bank receives payment in bank money can now be restated in terms of debts:

When a bank buys a debt from anyone other than another bank, bank money is created and lasts as long as the debt lasts. When a bank sells such a debt then bank money is destroyed. If any other person or organisation buys or sells a debt then there is no net effect on bank money.

A bank buying a debt includes accepting a signed mortgage or other form of debt agreement as well as buying a government bond, and selling a debt includes a mortgage or other debt being paid off (in effect the bank sells the original agreement back to the borrower in return for the repayment), and in the case of a government bond the bank sells the maturing bond back to the government in return for reserves.

45 Why Can't Banks be Allowed to Fail like any Other Business?

If a business fails to pay a creditor when what it owes becomes due then the creditor can apply to the courts to have the business wound up - to be made bankrupt.¹ If that happens then it ceases to trade and as much value as possible is secured for the creditors. The owners receive what is left after all creditors have been paid in full, usually nothing, and often the creditors aren't paid in full. A business fails to pay a creditor because it cannot access sufficient cash to do so, which is not necessarily the same thing as it being insolvent (liabilities exceed assets). An insolvent business can continue to trade as long as it can pay its bills, and a solvent business can fail to pay its bills because of a temporary cash flow problem. Nevertheless, the more a business moves into insolvency the harder it becomes to access the necessary cash to maintain trade, because new creditors become wary of lending money or sending goods in advance of payment, and existing creditors become ever more forceful in pressing for the return of their money or for the goods that they are owed.

Almost any business that fails to pay its bills can be forced by its creditors into bankruptcy, but banks are not just any business. They are tightly integrated with all other banks, businesses and people in the economy, lending to many, borrowing from many others, and administering the country's **payments system** for all but cash transactions. The payments system is the system that handles all transactions involving bank money. Every time a person or company makes a payment or buys a good or service using a credit card, debit card, cheque, direct debit or standing order the money is transferred from the person's account to the account of the merchant, and banks handle all the mechanics of the transfer using the payments system which operates in conjunction with the settlement system (settlement of accounts between banks), which is administered by various organisations - BACS, CHAPS, FPS etc. - and overseen by the BoE.

People who carry out transactions using bank money (practically everyone) keep sufficient money in a current account for that purpose, and they assume that that money exists and will be available when needed. Indeed banks promise to make it available on demand. But to recap what was discussed earlier almost all bank money comes into existence in response to someone taking on a debt, it did not exist before the debt was incurred, and it just consists of numbers in bank accounts. It first appears in the account of the person who takes on the debt, but rapidly moves to other people's accounts as that person buys whatever he or she wanted the money for. The other people's accounts will be spread between all banks, so in most transactions the bank will have to transfer

¹ Strictly speaking 'bankruptcy' only applies to individuals. Businesses are 'liquidated' or 'wound up'. However for simplicity the terms 'bankrupt' and 'bankruptcy' will be used for businesses as well as individuals.

reserves to other banks (in fact it is just the net amount of reserves at the end of each settlement period that are transferred, because many transactions between banks cancel each other out within a settlement period). Banks can't create reserves, only the BoE can do that, and if a bank runs short of reserves then it must borrow them, preferably from other banks (because the interest rate is lower) or failing that from the BoE. However when other banks doubt whether the bank in question is solvent (they believe that its borrowers are likely to default on their debts, making the failing bank's assets worth considerably less than their original value), they are unwilling to lend reserves for fear of losing them, and the BoE will only lend to a solvent bank, so a bank in this situation can't transfer reserves, and therefore it can't take part in the payments system on behalf of its customers and its role as borrower, lender and custodian of people's money seizes up. A failing bank is like a person with a very infectious disease, it can rapidly spread to other banks, businesses and personal customers because (a) the assets that the failing bank holds that are no longer trusted are more than likely held by all banks, as in the 2008 crash; (b) banks borrow reserves from each other to cover their day to day funding requirements, so a bank that can't pay back the reserves it owes to another bank puts the other bank at risk of not being able to pay its creditors and so on throughout the banking system; and (c) businesses and personal customers that rely on new borrowing or overdraft facilities from the bank can't have any more credit because the bank knows that it won't have the reserves to be able to pay the banks of the customers that those borrowers pay in bank money.

The government then has to decide how to handle the situation. Does it allow the individual bank to fail in the hope that it is the only bad apple in the barrel, compensating the bank's customers so that they can continue making transactions? Does it try to persuade another bank to take over the failing bank, perhaps offering a guarantee to cover its bad debts? Or does it embark on a massive confidence building exercise by making blanket guarantees for a wide range of banks' bad debts to persuade the banks to lend to each other again and thereby to rescue the lending and borrowing functions of banks and the payments system? In fact they are likely to try all possible solutions, increasing the stakes as the infection spreads, as they did in 2008. They are much more likely to rescue failing banks than to pick up the bill for deposit insurance because in practically all cases that would be much more costly (Jackson and Dyson 2012 pp91-94). Whatever they do it is the taxpayer that picks up the final bill. For an excellent account of government thinking and activities in this very situation read Gordon Brown's book 'Beyond the Crash' (Brown 2011). In it he gives a blow by blow account of the unfolding crisis and the deliberations and heart searching that went on in government at that very difficult time.

You may be forgiven for wondering why such a vital public service is allowed to be put at risk by banks, which are private, commercial companies with no obligation to manage their operations for anyone's benefit other than themselves and their shareholders. Indeed banks know full well that they will very likely be rescued if they fail, so they have every incentive to take excessive risks in pursuit of profits. This is known as '**moral hazard**' - see chapter 50.

Since the crash a great debate has opened up as to what to do about banks that are too big to fail. Breaking them up into smaller entities and tighter regulation are the main contenders, but breaking them up doesn't guarantee to solve the contagion problem

which relates to the degree of integration that banks have with each other and with other businesses and people; and private companies are able to devote many more resources into finding ways round regulations than public bodies are into devising those regulations, so the regulators are always one or more likely two or three steps behind. More radical and considerably more effective solutions are examined in chapter 55.

46 If Banks Are So Profitable and Protected Why Don't We Start Our Own Bank?

Good idea - if we can't beat 'em let's join 'em.

The trouble is that it's not so easy, as Dave Fishwick discovered when he tried to set up a non-profit making bank in Burnley to help local businesses, savers and charities (Fishwick 2012). The first problem is obtaining a banking licence from the BoE. It is the banking licence that allows a company to take deposits and lend money. These are very difficult to obtain as you will discover if you read Dave's very entertaining and enlightening book - Dave wasn't able to get one. In fact one bank that did manage to get a licence in 2010 was Metro Bank - which was the first for 150 years! However since then changes have been made to make it easier to obtain a licence (though still very far from easy), and new entrants are starting to apply.

Let's overlook those difficulties for now and say we've somehow managed to get our banking licence. We already have a few million pounds in equity (i.e. we have put this money into the bank to start it up) because having that capital is one of many conditions of the banking licence. Now we open the bank and await our first customer. Along comes Joe Bloggs who wants to borrow £200,000 for a house. Joe looks like a sound bloke so we say certainly, just sign this contract where you agree to pay us a large fortune in interest and repayments over the next 25 years. Joe signs and we carefully file away the contract and then credit his account with £200,000 that we've magically created out of thin air - marvellous - big smiles all round! Joe immediately buys the house, transferring the money to the seller who of course banks with a different bank. That bank then asks us for the money to be paid to them in BoE reserves, and we only have a day or so in which to pay depending on the form in which the request is made. No problem, we have plenty of reserves bought with the millions we started the bank with, but the fact that we created Joe's money out of thin air is already starting to seem a bit less magical as we have to part with £200,000 of our own money to pay the other bank. Not to worry, we'll have lots of money coming in in due course from Joe's interest payments and some savers will be along shortly to deposit money. Remember that when savers transfer bank money from another bank that bank sends us reserves, which is what we want.

In order to attract business we have to offer savings and loan interest rates that are typical of the current market, hoping to make profits that are typical of other banks. In due course more borrowers come along and also some savers, but the amounts saved by the savers are normally very much less than the amounts requested by borrowers, and practically everyone the borrowers pay for whatever it is they want the loan for bank with other banks, so over time our equity diminishes, until it is down to the minimum permitted by the banking regulations. At that point we can no longer use our own equity to pay other banks when they demand reserves, we have to borrow them, preferably from other banks because they charge lower interest rates than the BoE, or failing that from the BoE. Still, the interest we pay the banks or the BoE is still

considerably less than the interest we receive from borrowers, so we should still be profitable. But, and it's a big but, before banks or the BoE will lend to us they want collateral. They don't trust us to pay the money back without a guarantee, and the loan agreements that we have from Joe Bloggs and fellow borrowers won't serve the purpose because they can't be sold on the open market and aren't liquid enough - they aren't easily convertible to cash. Also the lending bank doesn't know what the risk of the borrower defaulting is.¹ Hence we have to offer government bonds or other high quality tradable assets as collateral, and where do we get them? We have to buy them with our equity, but our equity is already down to the minimum, so we're stuck! Recall that the banking system as a whole can buy government bonds with created money (see chapter 44), but an individual bank can't buy them with its own created money, so that doesn't help us either.

In fact it is clear now that we needed a lot more equity to begin with, enough to buy not only plenty of reserves for interbank transfers but also plenty of collateral for interbank loans for those times when we are temporarily short of reserves. We needed enough in fact to tide us over until we have built a high enough share of the market of all bank current account holders. When we have a high enough share then the reserves that other banks send us (when borrowers who bank with them pay people who bank with us) will come in at a high enough rate to balance the rate at which we transfer reserves to other banks over a reasonable timescale.

At this point a digression is in order: it might be thought that since we only have a tiny market share of current account holders reserves will go out from us in much greater quantity than they come in from other banks. In fact this isn't true. Reserves transferred out and in should always balance over time, even with a very small market share. To illustrate why this is say we have 1% of the market of current account holders and there is only one other bank with the other 99%. Then 99% of all loans originate in the other bank and 1% originate in ours. For loans from the other bank, in only 1% of cases do the borrowers pay people (for the things they want the loans for) who bank with us. Therefore the reserves coming in to us from other banks are 1% of 99% of the total of all loans = 0.99%. For our bank loans, in 99% of those cases the borrowers pay people who bank with the other bank, so the reserves going out from us to the other bank are 99% of 1% of the total of all loans = 0.99%. Hence the reserves coming in and going out are the same - on average. And that's the big snag - on average. Although the average rate of reserves coming in and going out balance they certainly can't be relied upon to balance every day, every week or every month. So to be secure we must have access to enough reserves to cover the size of deficit that we can expect in practice, and the smaller our market share the longer the period we must allow for. With 1% of the market we can expect to have 1% of the reserves on average, and with 99% of the market the other bank

¹ Banks do use these agreements as collateral in the form of 'repos' - sale and repurchase agreements. They sell a repo to another bank in return for reserves, on the basis that they will buy it back from them a short time later for more reserves - the extra covering the interest. In our case it is unlikely that these would do us any good because with so few savers depositing money the time period for which we would need them would be too long and also because other banks don't yet know whether or not we can be trusted.

can expect to have 99% of the reserves on average. But since the reserves coming in and going out are the same for us and for the other bank, the other bank has 99 times more reserves than we do to cover any deficit, so we are very much more vulnerable than they are because of our small market share. In our case we don't have even a 1% market share, it is more like 0.01% or less, so we might be without sufficient reserves for years!

All banks experience reserve deficits and surpluses, so those with a surplus lend to those with a deficit, and such loans are normally only for short periods because the situation changes over short periods, though they can normally be rolled over to allow for longer periods. Provided that the ratio of total bank money to total reserves is at or below that needed for security in the banking system as a whole then there will be enough reserves somewhere in the system to cover any deficit. Therefore provided that those reserves are accessible to banks in deficit then all banks can manage their cash flow. In effect this facility ties all banks together making them into one big bank from a reserve availability point of view.

With our new bank it will be a long time before we have the many thousands of current account holders that we need for the expectable reserve deficit to amount to significantly less than the total number of loans that we have made, so in effect until that time we have to be prepared to fund all loans with the money that we put into the bank to set it up, over and above the amount necessary to meet the banking licence requirements. Therefore in practice the only people who can realistically set up new banks are those with enormous resources, and even they rarely start from scratch. What they do is either buy up an existing chain of banks like Virgin bought Northern Rock, or they already have access to a large number of people who they can persuade to set up accounts with the new bank. Large retailers like Marks and Spencer, Tesco and Sainsbury's meet these requirements.

Market share in banking also brings considerable economies of scale. A bank that has a large market share has as customers both borrowers and those whom the borrowers pay, and in these cases no reserves are transferred at all because no other bank is involved. All that happens is that the borrower's account is debited and the payee's account credited, it's that simple and no costs are involved.

It is clear that a sizeable market share is vital for a bank, and that is why existing banks are so keen to attract new customers, often with strong inducements, and also why banks seek to amalgamate with or take over other banks. As a result 95% of the UK personal current account market (65 million active accounts) is held by only five banks and one building society - Lloyds TSB, HSBC, RBS, Barclays, Santander and Nationwide Building Society.² The remaining fourteen between them have the remaining 5%. Although there are many other banks that offer personal current accounts they do so as agencies of one or other of the above twenty, which handle, for fees, all payment and settlement services for them.

As is now hopefully evident, true market competition that arises from easy entry of new suppliers is completely absent for banking, even if the difficulty of obtaining a

² https://assets.digital.cabinet-office.gov.uk/media/53c834c64ofob610aa00009/140717_PCA_Review_Full_Report.pdf July 2014, see page 3 and Fig 2.1.

licence is ignored. It is very far from the ideal free market discussed in chapter 28.

Never mind, instead of starting our own bank why don't we buy shares in one or more of the big banks and wait for the money to roll in? Sadly that won't work either - at least not as well as we might hope. The real winners in banking were the original shareholders who set up the banks in the first place. Since then the market has determined the share price in competition with all other available shares, so the returns on average aren't any higher than other large company shares of similar risk - if they were the price would be driven up until they weren't.

Also, as you are no doubt aware, much of the profit goes to the directors and senior management of those banks. The ownership structure of large companies (many relatively small or institutional shareholders intent on making short-term profits from increases in share price rather than from long-term dividend payments) means that the owners don't care about the long-term interests of the business. Therefore they are happy with managers who seek to earn short-term profits at the expense of long-term viability, and who reward themselves enormously for doing so. This is known as the **agency problem** and is explored more fully in chapter 93.

47 *What is it that Makes Banks Different from Other Companies?*

For the information in this chapter I am indebted to Richard Werner whose paper¹ makes it all very clear. Until I found Werner's paper I really struggled to understand it. Indeed after reading many other papers and opinions on the subject I always ended up with many more questions than answers.

What is it that prevents any company from creating money as banks do? In fact it's very simple; banking licences exempt banks from the 'client money rules' set down by the Financial Conduct Authority (FCA). These require that whenever a company handles a client's money that money must be segregated from the company's own money and kept in an account that can't be accessed by creditors in the event of bankruptcy of the company in question. In other words client money is to be kept safe from failure of the company itself and can only be used for the purposes for which it was supplied by the client. Such companies include asset managers, solicitors, insurance brokers and many others.

Because of these rules clients enjoy a very privileged position with such companies. Their money is segregated from all other money belonging to the company and remains secure, as opposed to non-client suppliers of money or suppliers of goods and services whose payment has to come from the company's own funds. In the event of bankruptcy such suppliers must join the queue of creditors hoping to get at least some of their money back, whereas clients have their money returned in full.

When a person deposits cash or bank money from another bank into their bank account the bank need not segregate it from its own money because it becomes the bank's own money, although more accurately it's the BoE reserves that accompany the depositor's money that the bank uses as its own money - see chapter 39. In the event of bankruptcy of the bank the depositor becomes just one of many creditors of the bank and must wait in the queue with the others hoping to get at least something back.

A very interesting point that Werner draws attention to is that there is no legal basis by which a company is permitted to create money from nothing, which banks do as a matter of course. Specifically the client money rule exemption for banks only allows them to handle clients' money differently from other companies, which strongly implies that such money must have been in the possession of the client prior to it being transferred by the client to the bank. But as we know it isn't. Banking is based on this bending of the rules!

So how do banks create the impression that money they create from nothing is deposited by the client in a bank account? They do it by a very clever accounting trick.

¹ 'How do banks create money, and why can other firms not do the same?' by Richard A Werner. International Review of Financial Analysis 36 (2014) pp71-77.
<http://www.sciencedirect.com/science/article/pii/S105752914001434>

To see how the trick works we need to consider what happens when a company other than a bank lends money. To do this it must *take existing money from its assets and swap it for the asset that is the loan agreement*. In effect it receives the loan agreement from the borrower, which appears as an asset on its balance sheet, and to counter that it must create a matching liability, which is the money that is available to the borrower to spend. In other words it owes the borrower money. This is shown in Figure 47.1.

A non-bank company before making a loan		A non-bank company after a loan agreement is accepted	
Assets (£)		Liabilities (£)	
Cash	100	Loan from bank	40000
Money in bank	500	Accounts payable	60
Accounts receivable	25		
		<u>Loan Agreement</u>	<u>400</u>
Offices	50000	Shareholder equity	11565
Equipment etc	1000		
		<u>Loan payable</u>	<u>400</u>
Totals	51625	Totals	52025

Figure 47.1: A non-bank company makes a loan available

When the borrower spends the money the non-bank company must draw down some of its existing money in order to make the payment. This is shown in figure 47.2.

A non-bank company after paying a loan			
Assets (£)		Liabilities (£)	
Cash	100	Loan from bank	40000
<u>Money in bank</u>	<u>100</u>	Accounts payable	60
Accounts receivable	25		
<u>Loan Agreement</u>	<u>400</u>	<u>Loan payable</u>	<u>0</u>
Offices	50000	Shareholder equity	11565
Equipment etc	1000		
Totals	51625	Totals	51625

Figure 47.2: The loan is paid to the borrower

The company's balance sheet now balances as it did before; all that has happened is that £400 of the company's bank money has been transferred to the borrower in exchange for the loan agreement.

A bank does exactly the same but misses out the last step. Instead of discharging its liability by paying the borrower it doesn't discharge its liability at all, *it merely calls the liability a customer deposit*. This is shown in figure 47.3.

A bank before making a loan				A bank after a loan agreement is accepted			
Assets (£)		Liabilities (£)		Assets (£)		Liabilities (£)	
Cash	100	Loan from BoE	300	Cash	100	Loan from BoE	300
Reserves	500	Loan from other bank	625	Reserves	500	Loan from other bank	625
Gilts	25			Gilts	25		
				<i>Loan agreement</i>	<i>400</i>	<i>Customer deposit</i>	<i>400</i>
Offices	50000	Shareholder equity	50700	Offices	50000	Shareholder equity	50700
Equipment etc	1000			Equipment etc	1000		
Totals	51625		51625	Totals	52025		52025

Figure 47.3: A bank makes a loan

The fiction is that the bank has taken existing funds and put them at the disposal of the borrower, by depositing them in the borrower's account. In fact neither the bank nor anyone else has deposited anything, no transfer of funds has taken place, it continues to owe the borrower money until the borrower withdraws it in cash or instructs the bank to pay it to another person or company, when the receiving bank takes over the liability to its customer in return for reserves sent from the borrower's bank. The bank's paying reserves to another bank isn't the same as a non-bank company paying a borrower, because the receiving bank creates new bank money in return for the reserves, the new bank money stays in the system. If the borrower takes the loan in cash then that is the same as for the non-bank company, because the new bank money is then destroyed in return for the cash, but very few such transactions are settled in cash. The net effect on the bank's balance sheet is very different to the effect for a non-bank company; both its assets and its liabilities expand by the amount of the loan. The strict legality of this operation is thus still open to question, though not only have the authorities clearly chosen to turn a blind eye to it they have strengthened it by making it much easier to pay taxes using bank money than by using cash.

Companies that make loans without a banking licence can only do so either by transferring their own existing money to the borrower, or by accepting money from investors and tying that money to specific loans or to packages of specific loans. This is what Dave Fishwick's company does. He can't call his company a bank, so unofficially he calls it 'Bank on Dave!', but the official title is 'Burnley Savings and Loans Ltd'. What non-bank companies can't do is take deposits and allow the depositor access to the cash that is supposed to underlie those funds and at the same time allow others access to the very same cash, as banks routinely do.

48 Who Really Does the Lending When Banks 'Lend' Money?

When something is lent, the lender is deprived of its use for the duration of the loan. Its use is handed over to the borrower until it is paid back. This applies to money or anything else. In deciding to lend money the lender loses the opportunity to spend it, and this lost opportunity is known as the **opportunity cost** of the loan. The lender is therefore entitled to compensation by recovering the opportunity cost from the borrower, who enjoys the opportunity to spend it in place of the lender. The same applies when a house is let to a tenant. The landlord gives up the opportunity to live in the house or to use it for any other purpose, and the tenant enjoys the opportunity given up by the landlord. In this case the opportunity cost is recovered as rent from the tenant. In passing it is worth mentioning that deprivation is examined in more detail in chapter 96, where we see that the degree of deprivation depends much more on total wealth than on the value of the thing that is given up. However that is a separate matter to the issue discussed here.

Opportunity cost is one of three main costs in lending money - though it is normally the biggest - the others being the cost of **default risk** - the risk that the loan won't be paid back; and the cost of **inflation risk** - the risk that inflation occurring over the duration of the loan will reduce the value of the repayment.

As has already been discussed in chapter 39, money in the form of spendable IOUs (bank money) is created when a borrower signs and hands to the bank his or her non-spendable IOU (the loan agreement).

Before the loan agreement was signed and handed over there was no new bank money, the act of creation was done by both parties together, the borrower and the bank. Hence in 'lending' new bank money the bank is not deprived of anything at all; it has not lost an opportunity to do anything else with the money because the money did not exist.

Now here's the fiction: the bank and everyone else believes that the bank has indeed lent money, and is entitled to recover an opportunity cost in the form of interest to compensate it for the loss of use of that money - money that it couldn't have used because there was no money. What is generally believed is that the money lent is money that has been deposited by savers, but deposited money (or more accurately the BoE reserves that accompany it) is used to help the bank manage its cash flow. Banks don't need to have money deposited in order for them to create new money. However banks are entitled to recover costs for default risks, because they represent real risks to banks. A loan that isn't paid back leaves the bank with a liability that it must meet from its own resources - see chapter 44. Banks are not entitled to recover costs for inflation risks because as will be seen later these are borne by society. Nevertheless for long-term loans (when inflation risk is much more serious) banks normally vary the interest rate in order to maintain the real value of the interest payments to protect their profits and to allow them to increase

rates on savings products.

If we follow through the events relating to a bank loan what we see is as follows. The person signs a loan agreement with the bank and in exchange the bank credits their account with a sum of money. People who take out bank loans invariably want the money in order to spend it, on a house, car, holiday, furniture or many other things. So they spend the money and receive the goods or services that they want in return. At this stage what has happened is that the person has entered into a financial contract with the bank, and in return received wealth from *someone other than the bank*. That wealth was already available before the person bought it, ready to be traded for any other kind of wealth. But in this case the person did not trade any wealth for it, they traded it in effect for a promise to make wealth available in the future, and it is the bank that enforces that promise by requiring repayment plus interest in money, which must be earned by creating wealth, usually by selling labour.

If money is removed from the picture we can reveal what is happening to real wealth. We begin with a steady state economy where the money supply is constant - new loans are balanced by repayment of old loans, and for that we need an old borrower who pays back a loan at the same time as the new borrower takes out a new loan. Also the rate of wealth creation is matched by the rate of wealth consumption - the economy is neither growing nor declining. We establish a steady state so that the effects of the bank loan can be examined without being masked by other factors.

We examine the situation at the instant in time at which a new borrower takes out a new loan, and an old borrower pays back an equivalent old loan.

The players involved are the bank, the new borrower, the old borrower and the **productive economy** - i.e. participants who create, trade and consume wealth between themselves - people who both create and trade wealth in return for an equal value of wealth from someone else in order to consume it. A bank is only marginally part of the productive economy because it deals mainly in money rather than in wealth, though the service it provides does represent some wealth and that is considered in the next chapter. The new borrower is not part of the productive economy because she consumes wealth without (yet) creating it - she receives wealth without giving any. The old borrower becomes a part of this economy again following repayment of the wealth that was owed - he gives wealth without receiving any.

The new money created by the bank is used by the new borrower to buy wealth from the productive economy, and this money is matched by an equivalent amount that is withdrawn by the old borrower who sells wealth (usually labour) back to the productive economy in order to repay his debt to the bank. In this illustration, shown in figure 48.1, the money borrowed is paid back in its entirety at the end of the term.

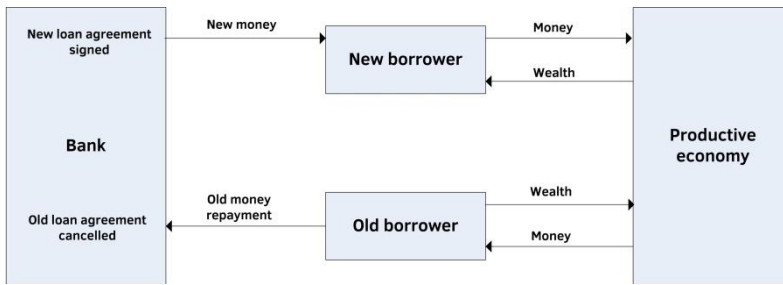


Figure 48.1: A new bank loan is taken out and an old loan paid back

By including the old borrower we have arranged things so that money can be removed from consideration because there is no net change in terms of money for any of the participants - all money transfers for each participant cancel out. The bank both creates and destroys the same amount of money, the same amount both enters and leaves the productive economy, and each borrower both receives and pays out the same amount. Additionally there is no change for the bank with respect to loan agreements. The loan agreement created for the new borrower is cancelled out by the loan agreement that is destroyed for the old borrower. Therefore the bank can be removed from the picture entirely because it is not involved in any net transfers. Although the productive economy both receives and supplies wealth it can't be removed from the picture because the wealth supplied and received is different - the productive economy is in a different state after the transfers than it was in before. What we are left with is wealth passing from the productive economy to the new borrower and different wealth (though of the same value) passing back to the productive economy from the old borrower. This can be illustrated on a wealth diagram in figure 48.2.

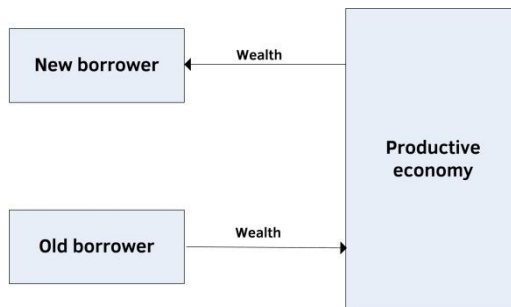


Figure 48.2: Simplified picture of wealth transfers

The important point is that the wealth that passes to the new borrower *is wealth that the productive economy is deprived of for the duration of the loan*, because it does not receive back any wealth until it is created by the new borrower and sold some time later, as the old borrower did at the end of the old borrower's loan term. The productive economy was similarly deprived of the wealth that the old borrower consumed until an equivalent amount was paid back. Hence it is the productive economy, or in other words society, that has lent the wealth! There is only so much wealth available at any point in time, and that is all we have to play with, however we may buy and sell it between ourselves using this magic substance called bank money. Note that we only examined the

specific point in time at which the new loan was taken out. For the duration of the loan the new borrower pays interest to the bank that made the loan so during the loan term there is a continuing transfer of wealth entitlement from the borrower to the bank.

The final punch line in this tale is that although it is society that is deprived of wealth and the bank is deprived of nothing, *it is the bank that gets the opportunity cost interest and society gets nothing - nice!*

Since it is society that does the real lending it is society that is entitled to compensation in the form of opportunity cost interest, but society gets nothing - the bank pockets the interest and no-one even notices the sleight of hand!

To indicate just how big this benefit is to banks; before the BoE lowered interest rates in 2008 banks received just over £213 billion in interest payments (Jackson & Dyson 2012 p156). To be fair we should recognise that banks don't pocket the entire opportunity cost interest, they get the difference between the average opportunity cost interest that they charge for loans less the average interest they pay out on deposits - known as the 'interest rate spread'. Nevertheless this difference is very substantial and accounts for the bulk of bank profits.

In practice for repayment loans borrowers make repayments gradually over the loan duration as they supply labour to the economy in return for money, but at any time until fully paid off there remains some outstanding wealth that society is deprived of and some outstanding money that the bank is charging interest on. For interest only loans the full repayment is made at the end of the term.

Note that this situation only arises for banks. When non-bank lenders lend money they have already sold wealth to society in return for the money (they may have extracted the wealth entitlement of course but in that case the person they extracted it from sold wealth to society in return for money, and transferred it to the wealth extractor), so society is not deprived of anything as a result of the loan.

But what about inflation? Let's say that inflation erodes the value of money by 50% over the lifetime of the loan. Apart from interest the borrower is only obliged to pay back the original amount of the loan, regardless of what inflation or deflation has done to its value in wealth terms over the duration of the loan. If £100,000 is borrowed from the bank and a house is bought with that money, then at the end of the term £100,000 is only worth half a house, so the borrower only has to repay wealth to society to the value of half a house rather than a full house, because half a house's worth of wealth can be sold at that time for £100,000, which is what the borrower owes to the bank. Therefore it is society rather than the bank that has lost out by the value of the inflation risk, because it lent a house but only got back half a house. Of course the opposite would occur if there was deflation.

Although society is deprived of wealth when banks create money this should not be seen as harmful to the economy, quite the reverse in fact. Whenever the supply of new bank money exceeds the withdrawal of old bank money the difference represents extra money in the economy, which to the extent that it is spent on new wealth creation and to the extent that there is spare capacity in the economy the effect is to stimulate the production of more wealth. Recall from chapter 21: 'The health of the economy depends on the things it produces being bought - spending is essential.' This applies whether or not the person or company doing the spending trades an equivalent value of wealth

themselves. In this respect lending wealth is very much like exporting wealth. Here again the wealth that is exported is consumed by someone outside the productive economy but the stimulating effect on production is still felt. The same applies to money given to someone to spend who is unable to contribute to wealth creation; the economic stimulus is just as effective when they spend it, assisted as always by the income multiplier - see chapter 16.

Nevertheless the above observation should not lead us to conclude that banks are necessary in order to provide economic stimulus by creating and distributing money. The converse situation applies when the withdrawal of bank money exceeds the creation of new bank money, as it does when banks are reluctant to provide credit as they were following the 2008 crash in spite of the massive BoE quantitative easing stimulus. In these circumstances banking is harmful to the economy because it causes it to shrink. Economic stimulus can be provided no matter how money is created, and as will be seen in chapter 55 there are much fairer and far less harmful ways to do it.

In addition to repaying the original loan the borrower also has to pay interest to the bank, although it is really due to society, and to do so she must create and sell to the productive economy sufficient wealth to cover it. The interest gained by the bank in the form of reduced liability adds to its profits. In balance sheet terms the loan agreement was cancelled (bank asset removed) when the borrower returned to the bank the original amount of the loan (bank liability removed), but the interest remains with the bank as a decrease in a liability (a customer's account has been debited) - balanced by a corresponding liability increase in the form of shareholder equity. In other words the bank and its owners are worth more by the amount of the interest. Although new wealth has been created by the borrower and sold in order to obtain the interest, that wealth is not returned to those who originally lent the wealth because it belongs to the bank - the interest that the bank now has entitles the bank to that amount of wealth.

It is a difficult process to accept because it's so counter-intuitive. It's one thing to accept that banks create rather than lend money, but quite another to accept that wealth is lent, especially when the lenders are given money and can spend it on whatever wealth they want. No *individual* is deprived of anything because they have money; it's the *whole economic society* that suffers the deprivation, though that's a difficult form of deprivation to pin down conceptually. Therefore to show how it works a more localised example will be used in which the mechanics of the process are worked through.

Consider a gardener who grows 40kg of potatoes for her family each year. A newcomer comes along wanting a share of potatoes for his family but without anything to trade for them. The gardener agrees to lend the newcomer 20kg of potatoes on condition that he prepares some land and works hard for a year so as to grow 60kg of cauliflowers, 20kg to repay the loan of potatoes, 20kg for himself for the following year, and 20kg to exchange with the gardener for potatoes for the following year. Thereafter they will each grow 40kg of their own vegetables and exchange half with the other.

So far so good.

Now let's start again but this time the newcomer isn't alone, a banker comes along too. The banker claims to have a very large stock of gold coins safely locked away in a secure vault but in truth only has one. This is the now familiar deception that banking is based on. Neither the gardener nor the newcomer has any reason to disbelieve the claim because the banker is clearly very wealthy and gives every impression of having a vast

quantity of gold. The banker explains that there is no need to borrow potatoes; instead he will lend the newcomer enough money to buy the potatoes. The local community uses gold coins as money, and one coin is worth 5kg potatoes. Instead of lending coins the banker writes out four elaborate tokens, each worth one coin, explaining that these are more convenient than coins but if required he will be happy to exchange any for coins at any time - though he only has a single gold coin and hopes that the gardener won't ask for more than one token to be exchanged. These are then lent to the newcomer on condition that he pays 25% in interest to the banker after a year. The pair accept the banker's word about the tokens and in return for the four tokens the newcomer receives 20kg potatoes from the gardener.

The gardener has no need to exchange any tokens so at the year-end she still has all four tokens. Note again that as before she is deprived of 20kg of potatoes for the loan period, but this time she doesn't realise it because she has money in the form of tokens.

At the end of the year the newcomer has grown 60kg of cauliflowers; 20kg to sell back to the gardener for four coins or tokens, 20kg to keep, and 20kg to exchange for potatoes as agreed for the following year. The gardener pays the newcomer using the original four tokens and the newcomer pays this back to the banker plus a further coin as interest.

To summarise, the essential points of the story are as follows:

- the gardener was deprived of real wealth (potatoes) for one year without any compensation;
- the banker was not deprived of any wealth at any time (all he lent was paper);
- the newcomer had to do extra work to earn the coin paid as interest to the banker;
- the banker gained gold to the value of one coin without having to do any work;
- in a fair world the gardener would be entitled to interest because she was the one who was deprived for the duration of the loan and deserved compensation for that deprivation.
- In other words the banker took the interest that was due to the gardener.

In a modern economy the effects are completely hidden because the productive economy is so big and the quantity of tradable wealth is always very large, but the economy is deprived of wealth without compensation nonetheless. Until wealth (usually labour) has been supplied by the borrower to the economy in return for money to repay the loan the total wealth available for trade has gone down though the money in circulation hasn't, and because money is still available transactions can continue as if nothing had happened and the loss of tradable wealth isn't missed.

The loss of interest by society that is instead enjoyed by banks is wealth extraction by banks from society, and in spite of its magnitude is only one of several forms of extraction as will be seen.

48.1 Why didn't we notice that we were being deprived of wealth whenever someone took on a bank debt?

I believe that an examination of this question opens up the possibility of a solution to many of the world's most pressing problems. We didn't notice because no-one felt it. The deprivation was at the level of society as a whole, and society not only has a vast store of existing wealth ready to lend but also a vast store of spare capacity ready to be released to create more wealth. All that is needed in either case is money - mere tokens - and that's what banks provide. Let's just take away for a moment the opportunity cost interest that banks receive and consider what happens. Banks make money available almost free of charge¹ to anyone who is creditworthy. In effect creditworthy people can have almost free money on condition that they pay it back in due course.² Many of those borrowers buy existing wealth, and many of the sellers of that wealth buy other existing wealth, but sooner or later much of the money will be spent on the creation of new wealth, and use up spare capacity in doing so. As has already been argued in chapter 22 spare capacity is waste - waste that we didn't even recognise as such - so bank money allows us to avoid waste, and that is a very good thing. Spare capacity is freely available for use, money costs nothing, but together they create wealth. This brings us right back to the insight that emerged in chapter 3 - *Surplus wealth, specialisation and trade are the basis of civilisation, and consist simply of people working in co-operation to do and make things for others.* The key point is that the capacity to create wealth is inherent in human beings - wealth is available for the taking.

In effect we are able to turn tokens into wealth - base metal into gold - we have realised the alchemist's dream!

There's one last mental step that we need to take and that's to bypass banks altogether and have the state create money and use it to release the wealth creating ability of spare capacity. We can use that wealth for ourselves or others, or, better still, both at the same time. Consider the BoE giving money - not lending it - to poor countries, on condition that they spend it on UK wealth. They import UK goods and services that help their country develop. The money that was given comes back to the UK, where it creates employment and uses up spare capacity. The money multiplier works its magic and the UK benefits enormously as well as the poor country - as long as there is spare capacity to be absorbed.

If you are inclined to think that this can't possibly work - *and I wouldn't blame you because it really does seem too good to be true* - then we already have a shining example. It is exactly what the US did after the war in implementing the Marshall Plan. They gave us and other war-torn countries free money, and both we and they benefited enormously - because everyone had plenty of available spare capacity. Between us all we turned US dollars into jobs, wealth and prosperity - magic! The Marshall Plan is discussed further in chapter 67 subsection 67.2.1 - 'The Miraculous Power of Gifts', and giving or lending money to poor countries is discussed in chapter 76 section 76.2.

¹ costs need only cover default risk and administration.

² This is for illustration only, it isn't a suggestion!

It seems like magic, but only because we don't recognise the waste that spare capacity represents. Spare capacity is wealth that is freely available. The capacity is already there, all it needs is to be released, and all that takes is money - money that is no more than tokens - which are also freely available.

Of course it all has to stop when all the spare capacity has been used up, because thereafter additional money just creates inflation. But we have a great reservoir of spare capacity that we don't even recognise as such - it is in redeploying all the wealth extractors and their employees as wealth creators. Add that to the 5% acknowledged unemployment and massive underemployment and we see that we aren't about to run out of spare capacity anytime soon. These aspects are discussed further in chapter 100 sections 100.9 and 100.11.

49 What is the Bank's Service and How Much is it Worth?

In spite of the fact that it is society that does the real lending, the bank has still performed a useful service, albeit without parting with anything material in the process, and deserves payment for that service. But what exactly is the service?

The service is to make money available to those who need it and are able to repay it. In the process it puts itself at risk in the event of the borrower defaulting on repayment.

The bank has created money which circulates round the economy, and regardless of where the originally created money is at any time the value of that amount of money remains a liability until paid back by the borrower. If the borrower defaults then the bank asset represented by the loan agreement becomes worthless, but the liability that balanced it still remains and the bank's balance sheet must then be rebalanced. In fact the liability represented by the shareholder equity goes down by the amount of the default, which means that the value of the bank has dropped by that amount.

Therefore the bank is entitled to a premium (in effect a default risk insurance premium) from the borrower to cover the risk of default, and since the risk is related to both the amount of the loan (the bigger the loan the more the bank loses in a default) and the duration of the loan (the risk exists for as long as the loan exists), the default premium takes the form of a component of interest and not only is the bank fully entitled to it indeed it *must* charge it or it will go out of business. Default risk is quantifiable from a borrower's credit rating. Collateral lodged by the borrower significantly reduces and often completely eliminates this risk. In default the bank sells the collateral for money which is then destroyed along with the original loan agreement. In these circumstances society gets the wealth represented by the collateral in the same way as if the borrower had created an equivalent amount of wealth to pay back the loan. In effect the borrower does pay back the loan by trading pre-existing wealth rather than by creating new wealth.

The bank also has to carry out some administration to set up the loan and manage the repayments, which is related loosely to the duration of the loan but isn't related to the amount of the loan, and in modern systems is largely automated, so a small fixed fee can be expected to cover this.

Additionally the bank must manage its cash flow (i.e. BoE reserves and real cash - notes and coins), which places an extra management burden that is related to both the amount and duration of the loan. Therefore a small additional component of interest is appropriate to cover these costs.

The above costs represent a baseline that banks have to charge to stay in business. Over and above this, being private businesses, they charge as much as they can and pay out as little as they can in order to maximise profits.

The free market philosophy of banking maintains that with sufficient competition interest rates will be driven down to the minimum to sustain the business but without undue profit, because if the profits were too high more competitors would enter the

market and drive them down again. However as was seen in chapter 46 there are massive barriers to entry for would-be banks and massive economies of scale for large existing banks. For these reasons banking is anything but an ideal free market, and as a result banks are immensely profitable - until that is they over-reach themselves in trying to make even more profit - see chapter 54.

50 The Moral Hazard at the Heart of Banking and the Damage it Causes

A moral hazard is an incentive to do something that is beneficial to the person or company that does it but is harmful to others, and the unfettered market economy is full of them - see chapter 29. For example when a salesperson is paid a bonus for every customer they sign up for a particular product (as most are) they have every incentive to emphasise the benefits and hide the disbenefits, even when the product is likely to be highly detrimental to the customer. What's more the most successful of such salespeople are often those least hindered by conscience.

Moral hazard is a prominent feature of the banking system as it is currently set up, and it became very much worse as banking regulations were progressively weakened and removed from the 1980s onwards.

To illustrate the fertile ground for moral hazard that the banking sector presents I ask three simple questions that were first asked (along with many others) by James Robertson (Robertson 2012 Chapter 3).

- i. **Who should create money?**
- ii. **How much money should be created?**
- iii. **Who should decide where to allocate newly created money?**

In a truly democratic society the answers should surely be:

- i. **A public body, acting in the public interest, independent of both government and private interests, operating transparently to criteria set by government.**
- ii. **As much or as little as is judged by experts, who are fully accountable for their judgements, to be in the best interests of the public.**
- iii. **The government of the day.**

In stark contrast, the answers currently in place are:

- i. **Banks, acting purely in their own interests (banks have created 97% of the money in circulation - bank money - whereas the BoE has created just the remaining 3%, as notes and coins).**
- ii. **As much or as little as best serves the interests of the banks.**
- iii. **The banks themselves, with the object of maximising their profits.**

In light of these answers how can anyone believe that the system serves the public interest? Yet there are such people, and they aren't just those who profit by it. Neoliberals believe that banks operate in a free market and anything that the free market does is bound to be in the public interest. They are wrong on both counts.

Ultimately it is the government that is responsible for the economy, so the government always provides the backstop for any mismanagement by the banking system. In this respect banks enjoy a very privileged position relative to any other private business. The government permits banks to operate in this way and to create the country's money supply with very little restraint, yet the value of that money and the validity of the corresponding debts (no matter how toxic) are guaranteed by the taxpayer, as the 2008 bailout clearly demonstrated. This creates a very severe moral hazard. Sir Mervyn King recognised this when he said: "Of all the many ways of organising banking, the worst is the one we have today."¹

We entrust private banks with the responsibility of creating the national money supply, and permit them to do so in the manner that best suits themselves, but the value of the money they create is guaranteed by the taxpayer. When operating successfully the banks enjoy the profits, but when reckless lending leads to widespread defaults it is the taxpayer that suffers the losses.

Heads the banks win; tails the taxpayer loses.

This effect is a severe negative externality. The banking service benefits the banks, its managers and shareholders, but when things go wrong it severely harms everyone. It is in effect a polluter, and although the pollution isn't visible until crises erupt, at those times the pollution unleashes its toxic effects on everyone.²

Andrew Haldane - Chief Economist and Executive Director, Monetary Analysis and Statistics, BoE - in a speech to the Institute of International and European Affairs in 2011, estimated the cost to the world of the banking failures in 2008.³

He presented the following estimates (US dollars):

¹ Page 18 of his Second Bagehot Lecture, Buttonwood Gathering, New York City, 25 October 2010 - see

<http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2010/speech455.pdf>

² Page 2 of Andrew Haldane's speech to the Institute of Regulation and Risk, Hong Kong, 30 March 2010 - see

<http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2010/speech433.pdf>

³ <http://www.iiea.com/events/andrew-haldane-on-fixing-finance>

Temporary loss of world output	\$4 trillion
Loss of banks' market value	\$5 trillion (peak to trough)
Government intervention	\$15 trillion
Mark-to-market asset loss	\$24 trillion (peak to trough)
Loss of world output	\$60 – 200 trillion (at 2009 values)

Table 50.1: World cost of 2008 banking failures

Let's just take a moment to digest that last figure. Between \$60 and \$200 trillion in wealth value lost to the world. That represents the wealth that would have been created if the crisis hadn't happened, and is now irrevocably lost. To put it into context world output in 2011 according to the World Bank was \$71 trillion⁴, so if Haldane's estimate is right then between one and three years of world wealth creation was lost. That's a staggering loss.

With that wealth we could have stabilised carbon emissions at sustainable levels,⁵ guaranteed clean water for everyone,⁶ ended world poverty,⁷ and stopped the destruction of the biosphere.⁸ That's the level of catastrophe that the banking system unleashed.

In fact the real damage of the 2008 crash may well be environmental. Because of it we have devoted precious efforts and resources just to keep economies afloat and environmental concerns have gone on the back burner, making eventual catastrophe all the more likely.

Haldane in the same speech also estimated the total implicit subsidy to UK banks as £10 billion in 2007, £55 billion in 2008 and £100 billion in 2009. The subsidy is implicit because it manifests as much lower costs to banks than would be the case if banks rather than taxpayers bore the risks involved. For example when depositors (including you and me) know that banks will be rescued if they fail then we don't worry about what the banks do with their money and we are satisfied with a low rate of interest on our deposits. If on the other hand we knew that no rescue would occur, and that in the event of bankruptcy we would lose our money, then we would take great interest in what banks did and would want a much better rate of interest before taking the risk of trusting banks with our money. Note that the above subsidies don't include the subsidy from society to banks for lending real wealth whereas banks take all the profit (see chapter 48), and they don't include the interest payments from taxpayers to banks for the government bonds that they own when there is no need for any such payments - see chapter 44. Also,

⁴ Page 654 of 'World Development Indicators 2013' -

<http://databank.worldbank.org/data/download/WDI-2013-ebook.pdf>

⁵ http://www3.weforum.org/docs/WEF_GreenInvestment_Report_2013.pdf

⁶ <http://www.nytimes.com/2000/11/23/world/price-of-safe-water-for-all-10-billion-and-the-will-to-provide-it.html>

⁷ <https://www.oxfam.org/en/pressroom/pressreleases/2013-01-19/annual-income-richest-100-people-enough-end-global-poverty-four>

⁸ <http://grist.org/article/whatz/>

and more importantly, these subsidies represent a completely separate cost to the cost of the damage to world output that the banking failures caused. The subsidies are what society pays to banks so that they can continue to provide services at great profit to themselves, whereas the lost output is what it cost society when banks over-reached themselves. For comparison purposes the cost to the UK taxpayer of the NHS is about £100 billion per year.

Banks have every incentive to grow as big as possible, because the bigger they are the more likely they are to be bailed out when they fail. They try their hardest and largely succeed in becoming 'Too Big To Fail' because doing so represents for them a major safeguard. In fact it isn't just size that makes them more likely to be bailed on failure, at least as important is interconnectedness. The more likely it is that one bank failure will lead to other bank failures again the more secure is the entire sector and the more insecure is the taxpayer.

Sir Mervyn King put the point very succinctly on page 15 of his talk referenced above:

It is hard to see why institutions whose failure cannot be contemplated should be in the private sector in the first place.

Other helpful references on bank subsidies include the Positive Money website⁹, and a BoE paper in May 2012 that addresses the different ways of estimating the subsidies.¹⁰

50.1 What changed?

What was it that changed banks from the old regime when they took great pride in integrity and probity? A regime that prevailed until the 1980s and was characterised by the phrase 'my word is my bond'; when reputation was everything both for individual bank managers and for the banking system as a whole. Banking was always profitable, and the profits represented easy money, but the profits were nothing compared to those in more recent times, and bank managers and directors were paid no more than people with similar qualifications, experience and responsibilities in other professions. As globalisation gathered pace with the removal of restrictions on global capital flows it became easier and more profitable for banks to set up businesses in other countries both to compete with existing banks in those countries and to get round their own country's restrictions. Countries with lower regulatory and taxation burdens were very attractive to foreign banks, and this put pressure on home governments to reduce their own regulations and taxes to avoid losing business to foreign countries. This began the 'race to the bottom' in terms of regulation and taxation (Kay 2015 p20 and Rodrik 2012 pp263-264).

One of the major relaxations was in the rules relating to **securitisation** - the packaging up of banks' long-term loan contracts and selling derivatives based on them in the market to investors. Until that time banks had to take great care with regard to whose debts they were willing to finance because they retained those debts until they were paid off, so they were on the hook for the duration of the loan in the event of the borrower defaulting. This caution provided a natural brake on banks' enthusiasm to take on more and more

⁹ <http://positivemoney.org/issues/subsidising-banks/>

¹⁰ http://www.bankofengland.co.uk/financialstability/Documents/fpc/fspapers/fs_paper15.pdf

debt - the more debts they took on the more profit they made, but the more likely a significant default would break the bank. After securitisation banks could be a lot less cautious about borrower creditworthiness because the buyers of the securitised loans were at risk of default, not the banks themselves. There was then almost no restriction on the amount of debt they could finance without risking their own security, though they were risking the security of the whole financial system - see chapter 54.

As profits grew, so did bank management and director salaries and bonuses - to almost unimaginable levels - as there was little to stop them. Indeed so much was taken from banking profits in management payouts that the initial bailout of £50 billion for UK banks following the 2008 crash was equal to just 10% of those payouts between 2000 and 2007 (Brown 2011 p106). At this time greed took over from probity as the defining feature of the banking sector. So deep was the culture of greed that bankers were quite willing to break the law in the interests of even more profit - mis-selling of payment protection insurance (PPI), money laundering, LIBOR fixing, predatory lending, forgery, fraud, foreign exchange manipulation and much more.¹¹

And who was and still is it that pays for all those profits, salaries and bonuses? It is ordinary people, those who take on debts, either by choice or necessity. To pay the banks people have to work longer hours, have two or more jobs, have both partners in a relationship working, and even then still have to rely on credit cards (yet more profit for banks) to make ends meet. An increasing number of people have become slaves to stress and misery as a result.

It is a sobering thought that if all associated costs of the banking sector were to be paid by the sector itself banking would very likely not be profitable at all. This is what John Kay said:

If banks had to pay for the insurance provided by the doctrine of 'too big to fail', the trading activities in which they privately engage simply would not take place, or at least would not take place on the current scale. Much, perhaps all, of the profitability of these institutions comes from the willingness of lenders (including other financial institutions) to make finance available on terms that would, in the absence of such public support, be regarded as too risky. (Kay 2015 p140)

It is worth pointing out that Kay doesn't include the interest charges in excess of default risk that society pays as argued in chapter 48, so if we were to deduct these from bank profits then I think we can be quite confident that the banking system as it is currently structured - with such a high degree of integration and therefore so high a risk premium - would not be profitable.

We can therefore regard ALL of the banking system's profits (made up largely from interest charges in excess of default risk), together with the salaries and bonuses of everyone employed in other than the everyday banking services that society needs, together with all the crisis insurance paid by society, as a huge subsidy from society to banks. Subsidies are transfer payments - wealth extraction - and as such represent a massive and completely unjustified burden on society.

All this begs the very serious question put by Mervyn King above: Why is banking a

¹¹ <https://www.linkedin.com/pulse/banking-criminals-exposed-rowan-bosworth-davies>

private sector activity when it receives such massive support from society? No-one would dream of providing such support to any other private business. I suspect it is because the support is largely hidden, but no less real for that.

A very pertinent and telling quotation attributed to Mayer Amschel Rothschild sums up the situation well: "Give me control of a nation's money and I care not who makes its laws."¹²

If ever an event showed the economy's dependence on and vulnerability to the activities of the banking sector it was the 2008 crash. To avoid similar and potentially worse events in the future radical overhaul of the banking system is therefore urgently required. But such is its power and hold over world governments that all that has happened and is intended to happen is some minor tinkering around the edges.

The banking sector puts up massive resistance to any proposal to restrict its activities and it does itself no favours by doing so. Surely its leaders can see for themselves the damage that their activities have already caused both to society and themselves, and will cause again on an even bigger scale in the future if they are left to their own devices. Perhaps they believe that they have learned all necessary lessons from the last crash and can avoid a future one by self-restraint? If so they are deluding themselves by forgetting the main factor that promotes success during economic expansion, which is risk-taking. Those banks that take the biggest risks attract the most profits, and any bank that exercises restraint is left behind. In fact if a cautious bank is left too far behind then it becomes a target for a hostile takeover by a more profitable bank, which then continues its risky strategy but on a bigger scale. A strategy of exercising caution on the part of a single bank sets up a positive externality - see chapter 29 - in that the whole sector becomes safer because the degree of interdependence is less fragile (the extent depending on the size of the single bank), but the single bank bears all the costs. Other banks can enjoy the safer climate without any cost to themselves. In effect they become free-riders on the cautious bank's back. It is the same as if a single household pays for street lighting on the road where they live. The lighting benefits everyone on the road but the costs are borne by the single household. I don't know of any single household that provides street lighting, and I don't believe that any single bank will exercise adequate caution when the others don't.

It is this feature of banking - the bigger the risks the bigger the profits - that drives all banks to take bigger and bigger risks, in the current climate banking competition enforces it. Managers that are inclined to caution either suppress it or suffer from competition with more profitable banks that don't exercise caution. If their banks suffer then they are sacked and replaced with someone less cautious. It's the effect of banking freedom allowing bad practices to drive out good practices that was discussed in the Introduction. A comment by Charles "Chuck" Prince (former chairman and chief executive of Citigroup) sums up the situation:

As long as the music is playing, you've got to get up and dance. We're still

¹² <https://www.armstrongeconomics.com/tag/mayer-amschel-rothschild/>

dancing.¹³

When restrictions are imposed from outside the sector all banks are subject to them so competition driven by risk disappears, and this benefits not only society but the entire banking sector by becoming safer. Other industries that impose risks on society are subject to restrictions, and everyone including the industries themselves recognises the need for them. Banking should be no different, indeed if anything the restrictions should be more severe for banking because the damage is so much greater.

Can it be that bankers don't care about safety, knowing that whatever damage their activities cause to society as a whole they themselves will likely keep their gains? I sincerely hope not. Selfishness on that scale is truly frightening. A very notable feature of the 2008 crash is that no bank directors or managers suffered any penalties other than disgrace after their reckless lending. I am convinced that sending the worst offenders to jail for their misdeeds would help to concentrate all similarly placed minds very forcefully. Benefits would be weighed much more carefully against costs if those costs included significant jail terms!

In any other walk of life if someone is asked to guarantee a debt that responsibility is taken very seriously. Yet governments guarantee bank debts (bank money), not only for existing debts but for any future debts, and banks are free to take on whatever debts they wish.

Banking is generally regarded as only one factor amongst many that contributed to the Wall Street Crash of 1929, but bank credit fuelled the excesses in production during the 'roaring twenties' and fuelled much of the investment in the stock market during its meteoric rise in that decade. Share prices were rising not because companies were worth more but because buyers were much more willing to buy than sellers to sell - and their willingness came from the fact that easy credit fuelled share price rises - a vicious circle that created a massive bubble. Banks created the money to buy them on the collateral of the shares themselves - a classic positive feedback mechanism - see chapter 52. The bust came as busts always do when new buyers were no longer available, at which point investors started selling shares to avoid losses and share prices started to drop. Banks then forced investors who had borrowed in order to buy shares to sell yet more shares to avoid them becoming overdrawn, and that accelerated the price drops on an ever steeper downwards slope. Hence without the activities of banks in fuelling the over-expansion of production and the stock market bubble the crash would either have been very much less severe or wouldn't have happened at all.

Following the 2008 crash there has been a strengthening of the Basel III accords (a global voluntary regulatory framework) consisting of three linked limits - minimum capital adequacy ratios, minimum leverage ratios, and minimum liquidity ratios. They are intended to allow banks to survive for longer during periods of stress such as that experienced during the 2008 crash. They may well succeed to some extent, but at best all they will achieve is to extend banks' survival time, they certainly won't fix the system (Ryan-Collins et al. 2012 Sections 5.1.1, 5.1.2 and 5.2 pp95-100). What they also don't take into account is banks' ability to find ways round regulatory limits. Banks have every incentive to circumvent limits because the result is increased profits (often massively

¹³ https://en.wikipedia.org/wiki/Charles_Prince

increased profits), whereas regulators have practically no incentive to increase regulation. Banks employ armies of well-paid experts to plead their case to regulators and politicians and to show that what they propose will be good for the economy, and that what regulators propose (if banks don't like it) will be bad for the economy. Regulators stand no chance against such massed might. Banks have shown themselves to be very adept at such practices in the past and there is no reason to hope that they will be any less so in the future. For these reasons it is very unlikely that restrictions, however stringent, will provide a cure for the severe dangers that are inherent in the system. I believe that nothing less than a complete and radical redesign of the systems that create and allocate money will provide a permanent cure.

Without an effective and permanent cure for the ills of the banking system we can expect another great crash, when in all likelihood the sector will be 'too big to bail'.

In addition to major crashes, such as happened in 1929 and 2008, minor crashes (known as downturns in the business cycle - driven by positive feedback in money creation - see chapter 52) and lower level banking crises happen all the time. These are also very damaging to society in causing loan foreclosures with loss of homes for individuals and loss of output and jobs for businesses. The following chart, figure 50.1, shows the number of countries having a banking crisis in each year since 1800. Note especially the Bretton Woods period after the Second World War. This represents a very unusual and stable period in economic history and is examined in more detail in chapter 67.

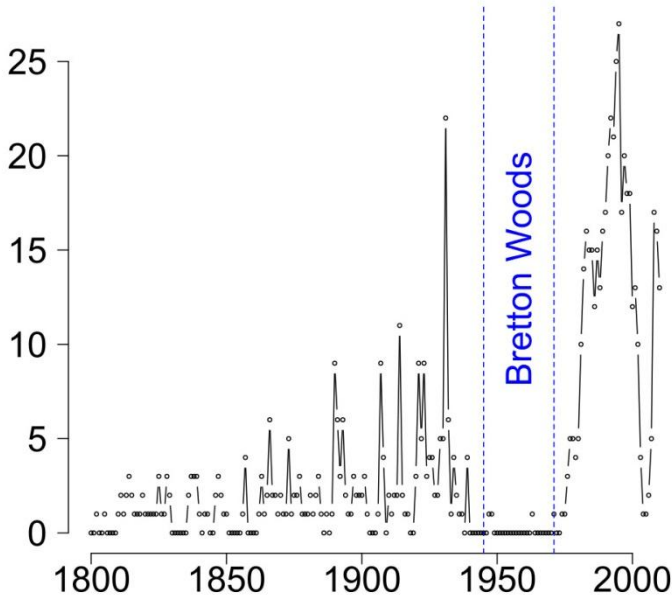


Figure 50.1: From Wikipedia 'List of Banking Crises' By DavidMCEddy (his own work) [CC BY-SA 3.0 (<http://creativecommons.org/licenses/by-sa/3.0/>)], via Wikimedia Commons. Source data taken from Reinhart and Rogoff 2009.

In summary, in its current form, banking has the following characteristics:

- i. it is based on deception;
- ii. it does major damage to society on a regular basis during business cycle downturns; and
- iii. it does almost unimaginable damage to society when there are major economic crises.

For all that we get services that can easily be provided by other means - see chapter 55.

51 The Rate of Interest and its Effect on the Economy

There are always many rates of interest quoted by banks both for savers and for borrowers. For savers there are low or zero interest current accounts, and savings accounts of varying periods, the longer the duration the higher the interest. For borrowers the interest is generally much higher than for savers, and varies according to creditworthiness and availability of collateral. There are also non-bank lending companies that also quote various rates.

All these rates are available in the lending market - market rates - and what matters to everyone in the real economy is not the rate that is quoted but the rate relative to inflation. For example if a quoted rate is 5% per year when inflation is running at 2% per year, then the rate relative to inflation is $5\% - 2\% = 3\%$.¹ The rate relative to inflation is known as the **real rate**, and the quoted rate is known as the **nominal rate**. The terms '**real**' and '**nominal**' have these same meanings in many contexts in economics.

What is the ideal interest rate? Is there one? Economics normally regards the lending market as any other market, supply being provided by banks and other lenders and demand being provided by borrowers. The interest is the 'price' of money set by the relative strengths of supply and demand. But as discussed in the next chapter the lending market is very different to other markets because banks don't lend something that already exists, they create new money in exchange for loan agreements and destroy it on repayment. Because of this there is a strong positive feedback mechanism that makes the supply of money unstable, with accelerating lending and borrowing during times of economic growth and the reverse during economic decline.

The BoE attempts to regulate interest rates by varying the interest (known as **Bank Base Rate** or **Bank Rate**) that is charged to banks for borrowing BoE reserves, the theory being that the less banks have to pay for reserves the less they charge to borrowers and pay to savers, and vice versa. The target that the BoE tries to maintain is an inflation rate of 2% plus or minus 1%. If inflation rises or threatens to rise above 3%, then the bank rate is raised to raise the cost of bank borrowing with the hope of raising the cost of customer borrowing and the expectation that the money supply will drop as a result. The opposite is the case if inflation drops below 1%. The theory is that inflation only rises when there is too much money for the economy to absorb in expansion - see chapter 18, and that inflation only falls to low levels when too little money is in danger of shrinking the economy - see chapter 16.

At best the bank rate is a very crude device with which to control the economy, and inflation is not always an appropriate target as it can be caused by commodity price changes on the world market as well as by the quantity of money - recall the oil price spike in 1973 that pushed almost all prices up massively. Also when the bank rate is very

¹ Strictly speaking it should be 1.05/1.02 but for low rates the difference is very small - here it would be 2.94%.

low as it is now, there is no further it can fall, so this as a control measure ceases to be effective, requiring other more desperate measures to be applied such as quantitative easing. Government and BoE control measures and their effectiveness are discussed in more detail in chapter 86.

Knut Wicksell, a leading Swedish economist argued persuasively that the **natural rate of interest** is equal to the overall return on wealth creating capital - the rate of new wealth created per unit wealth invested (Wicksell 1936). This is not to be confused with economic growth which is the rate of change of aggregate wealth creation within the economy - see chapter 97.

The logic is as follows: If the loan rate for borrowers is less than the natural rate then investors can profit by borrowing to invest in production - sufficiently high returns are generated both to pay back the loan and also enjoy a profit. The investment first absorbs spare capacity, which is desirable, then competes for existing labour by raising wages and also prices (as far as competition will allow) to pay the increased wages, causing inflation, which is undesirable. However two countering effects soon materialise. Firstly, with more borrowers seeking funds banks are able to make more profit by raising interest rates. Secondly, if the inflationary stage is reached at full employment the cost of production rises because of the need for higher wages as staff have to be tempted away from other employment, and competition limits the ability to raise prices to the same extent, so the rate of return on capital drops. The net effect is that if the rate of interest to borrowers is below the natural rate then the tendency is for interest rates to rise and, at full employment, the return on capital to fall, until they equalise at the natural rate.² Low interest rates are good for taking up spare capacity but bad when there is full employment. They are also bad in that they foster inefficiency by allowing poorly run industries to remain viable when the health of the economy is best served when industries have to maintain high levels of efficiency.

Conversely if the interest rate is higher than the natural rate then this will have a depressing effect on the economy as money that would have been used for productive investment is saved instead because it provides a better return. In these circumstances businesses don't expand, new businesses aren't set up, uncompetitive existing businesses fail for lack of investment in maintaining production, spare capacity builds up as people become unemployed, wages and prices fall as demand drops, and the value of money rises threatening deflation. At the same time the number of borrowers falls so banks reduce the interest rate. The effects, while the high interest rate lasts, are bad for the economy, but hopefully before it becomes too serious the effect of decreasing numbers of borrowers causes the rate of interest to fall back towards the natural rate.

Therefore in stable conditions the rate of interest should remain at or close to the natural rate, with a slightly higher rate for borrowers to encourage investment in businesses that are better than average so as to promote an improving trend, and a slightly lower rate for savers to discourage saving in preference to wealth generating investment. The natural rate is therefore that which achieves stable prices, and the aim is to achieve stable prices at full employment.

This is a very well argued and convincing theory, but, to achieve stability it depends

² <http://www.economist.com/news/finance-and-economics/21588354-central-banks-ignore-century-old-observation-their-peril-natural>

on 'all other things remaining the same' (*ceteris paribus* in economic jargon), which they never do (*ceterisn't paribus!*) Banks create and destroy money, governments tax, borrow and spend, imports and exports rise and fall, natural disasters occur, confidence in the future waxes and wanes, so stability is never achieved. Therefore both the impact and the direction of all these things and more must be estimated in any attempt to predict what the economy will do in any set of circumstances, and the interest rate is just one of a number of factors that have influence. In the face of all this the BoE's two control parameters - bank rate and open market operations (buying and selling bonds on the open market), together with its single target - inflation rate, are very unlikely ever to be sufficient to control the economy in any but the most benign circumstances, and in crises they are seen to be woefully inadequate - see chapter 86.

Nevertheless Wicksell's 'natural rate' remains as good a target as we are likely to get for the prevailing rate of interest for ordinary borrowers and savers, and when rates are well out of line with it we should be aware that unless there are very good reasons for it - perhaps to compensate for some other destabilising effect such as high unemployment or high inflation - then we are likely to be moving away from stability.

Unfortunately the natural rate can't be calculated directly, but there are methods available for estimating it from economic data. A much-cited paper on this subject is Laubach and Williams 2003.³

³ 'Measuring the Natural Rate of Interest' by Thomas Laubach, Board of Governors of the Federal Reserve System and John C. Williams, Federal Reserve Bank of San Francisco: Review of Economics and Statistics, November 2003, Vol. 85, No. 4: 1063-1070.

52 The Bank Lending Market and the Business Cycle

Supply and demand for money and the central role that banks play in it can be very confusing, so what follows is a longish preamble aimed at explaining the dynamics. The main point then follows which is how positive feedback operates and causes instability.

52.1 Preamble

Before Keynes published his general Theory (Keynes 1936) supply of and demand for money was regarded as a relatively simple business. Supply came from those who wished to lend money and demand came from those who wished to borrow it. Money was a marketable commodity like any other, where the price - the interest rate - was set by the relative levels of supply and demand. If savers were more willing to lend than borrowers to borrow then the interest rate would fall, and vice versa.

The involvement of banks in the process didn't change the fundamental understanding, whether or not people understood that banks created money rather than merely acting as intermediaries between savers and borrowers. Those who understood the money creation process regarded banks rather than savers as providing the supply of money, and borrowers again as providing the demand.

However Keynes recognised that there was something wrong with this understanding. Marketable commodities are normally produced by market participants and sold to other market participants, who then consume them. Money isn't like that. It is neither produced by market participants nor consumed by other market participants; it is produced by banks (and a bit by the state) and then circulates round the economy enabling transactions to take place. If we consider a borrower of money then they initially provide a demand for money but then very quickly supply it to someone else when they buy whatever it is that they wanted the money for. However their buying something with the money doesn't count as a supply of money, but why not? Simply considering borrowers as demanders and banks or savers as suppliers misses all the other transactions. If we are to pursue this line of reasoning then we should consider every buyer of wealth as a seller (supplier) of money and every seller of wealth as a buyer (demander) of money. The only difference between these transactions and a borrower is that the borrower sells the bank a promise to repay - to sell wealth in the economy in the future to earn the money to repay the debt. It's still a transaction albeit based on future rather than immediate wealth exchange.

We quickly realise that pursuing this approach leads to confusion because money isn't a commodity, it has a different character and must be treated differently, but how?

What we have to do is to stand back and consider the economy as a whole, and money either being supplied to the circulating flow (by bank lending or by people spending money that had been held out of use) or taken from it (by repayment of debt or by holding money rather than spending it).

In his General Theory (Keynes 1936) Keynes explained that demand for money comes

from people's wish to hold money rather than other interest-bearing or dividend-paying assets, so the demand for money comes from those who wish to take money out of the circulating economy, even if only temporarily - to hold it rather than spend or invest it. This is what Keynes termed **Liquidity Preference** (Keynes 1936 Chapter 13). Money is the most liquid of all assets. Keynes explained that liquidity preference has three components:

- i. the transactions motive - having enough ready money to cater for day to day transactions;
- ii. the precautionary motive - keeping money available as security in preference to volatile assets and to deal with the unexpected; and
- iii. the speculative motive - keeping money available to take advantage of bargains.

These relate to the various money buffers that were mentioned in chapter 24. The transactions motive is what keeps money in people's pockets, wallets, shop tills and in current accounts awaiting use for transactions, the precautionary motive keeps money out of use, and the speculative motive keeps money in investor trading accounts and financial investment holding accounts.

At times of uncertainty the precautionary motive comes to the fore. Assets may well be giving a good return, but if investors think their price might fall then they prefer to hold money because although the return on money is zero it isn't negative, as asset returns often are. Until Keynes explained it in this way people regarded interest as a reward for saving, but Keynes explained that it was compensation for foregoing liquidity - the higher the interest the more liquidity that people will forego. When people fear for the future their liquidity preference rises, and a much higher rate of interest must be offered to compensate them for foregoing liquidity.

If demand for money increases faster than money supply (higher liquidity preference), perhaps because people are fearful of a downturn and falling asset prices, then they try to sell their assets for money before the expected fall, but because the money supply isn't increasing as much as demand the only way to induce people with money to buy the assets is to lower the price, often bringing about the very fall that was feared. As asset prices drop the corresponding returns rise - directly as interest for debt assets (e.g. bonds), and indirectly for **equities** (company shares) as an increase in dividend yield. If, conversely, supply increases faster than demand, say because lots of people are borrowing money and spending it and banks are happy to create it for them, then people bid asset prices up, and as they do so the corresponding returns drop.

To make sense of events we must be clear about cause and effect. In the above discussion increasing or decreasing demand with respect to supply was the cause, and the initial effect was asset prices falling or rising respectively, with subsequent effects of returns (interest or dividend yield) rising or falling respectively.

If banks want to create more money, perhaps because they are optimistic about the future and want to attract more borrowers so as to make more profit, then they lower the interest rate to make borrowing cheaper, and the normal result is more borrowers, a higher money supply, and a correspondingly higher liquidity preference - because all money ends up being held by someone. Here the cause is a reduction in interest rate, and

the initial effect is higher money supply and subsequent effect is higher money demand. People's liquidity preference (demand for money) has risen to match the increased supply because the corresponding interest rate has fallen - they are compensated less so they forego less liquidity. Note that this is the opposite of what occurs if the cause is increasing demand, and is why it is important to understand which factor is the cause and which is the effect. It sounds complex but it's no more than our old friend 'willingness to buy' that was discussed in chapter 2. If people demand more money then they are more willing to 'buy' it (by selling wealth or borrowing) than holders of it are willing to 'sell' it (to buy wealth or to lend it), so the price of money goes up (reflected in the price of wealth falling or interest rates rising), and vice versa.

If we just consider the bank lending market it is the interest rate that balances supply and demand, as in the traditional understanding, but there is a difference. The traditional view considers that demand comes from one sector of the market - borrowers, and supply comes from another sector - banks. Banks certainly have control over supply, but in normal times (i.e. when creditworthy people are willing to borrow money) banks also have control over demand, because demand (initially from borrowers but eventually from those who receive the money that the borrowers spend) responds directly to supply, as described above where the interest rate provides more or less compensation for foregoing liquidity. By means of the interest rate banks have control over both supply and demand for money.

In normal times (i.e. other than when creditworthy borrowers can't be persuaded to borrow at any interest rate) there is an almost unlimited number of potential borrowers, ranging in creditworthiness from governments of mature well-established democracies at one extreme to people on low incomes and no security at the other. A cautious bank will lend only to a limited range of secure borrowers, and charge rates of interest that are competitive with other banks for each of this type of customer. A less cautious bank will lend to a wider range of borrowers of different levels of security, again charging competitive interest for borrowers in each range. In this way banks decide on the level of default risk that they are prepared to take, and achieve it by balancing the security of the borrower (the less secure the higher the risk), against the interest rate charged (the higher the interest the more defaulters the bank can cope with but the higher the chance of default), always taking account of rates charged by other competing banks. In this way the banking system as a whole provides a supply of money at different interest rates depending on the creditworthiness of borrowers. When banks have the borrowers the money is created at the stroke of a pen (or the click of a mouse) - money supply is simplicity itself.

In a nutshell both supply and demand for money are limited only by the risk that an individual bank is prepared to take - the more money they supply the higher their profits, but the higher the risk of defaulting borrowers overwhelming the bank's capital.

In abnormal times, as in severe recessions or depressions, banks' freedom of choice is much more limited because the demand for loans from secure borrowers is much lower. In fact people repay loans at a higher rate than new borrowers take on new loans at such times, so the money supply diminishes. The demand for loans from insecure borrowers remains high, but the risk of defaults in these circumstances is all the higher, so few banks will lend to such people.

Liquidity preference features again later in discussing Keynes' rejection of neoclassical

economics in chapter 81.

52.2 Positive feedback and instability

The bank lending market is not normal because the bank and the borrower are not independent - dependence in general terms between market participants is discussed in chapter 34. The dependence is a subtle one, and it works through the information that banks use to assess creditworthiness. They do this in two ways:

- security of borrowers' income to be confident of repayment; and
- availability of collateral in case of default.

If there is spare capacity in the economy, then when banks lend money and at least some of it enters circulation, wealth creation increases, more workers are employed, and there is generally increasing prosperity all round. This provides positive feedback to the creditworthiness assessment in both of the above respects:

- the very fact that banks create money when there is spare capacity increases the number of creditworthy borrowers because more are employed and therefore more have a sufficient income to justify banks' lending to them; and
- with most bank lending being for property house prices rise thereby providing the secure collateral that the banks need in order to lend.

Here we see the effect of positive feedback - the activities of banks in supplying money increases the ability of borrowers to borrow it, so supplying money causes even more money to be supplied.

This process fuels an economic boom. People are spending the money they have borrowed in addition to their normal income, and the money they spend provides incomes for other people, so more wealth is created as spare capacity is absorbed. When that wealth is traded spending rises in the second and subsequent rounds in line with the income multiplier discussed in chapter 16. More people are now apparently more secure so they are better able to borrow, and in a growing economy there are good opportunities available to use borrowed money so more is lent (created) and borrowed, and the income multiplier does its work yet again and growth continues ever upwards at an increasing pace.

However there is a downside to borrowing. Borrowed money must be repaid, and as debts build so do the repayments. As banks create new money when they lend, they also destroy money when it is repaid (this is explained in more detail in chapters 39 and 44), and destroyed money is of course taken out of circulation. The increasing quantity of repayments acts as a brake on people's spending, but growth continues as long as more new money is created than old money is destroyed and spare capacity remains available. Unsurprisingly this situation can't go on forever, because eventually either the availability of new borrowers dries up before the spare capacity is absorbed, or the spare capacity is absorbed stopping the rise in new employment and overall income earned from employment, so again the availability of new borrowers dries up. At this point the money supply starts to shrink because the repayments of existing borrowers continue to

take money out of circulation without sufficient new borrowing to replace it, and this precipitates the downturn.

Here the positive feedback loop (lending affecting creditworthiness) is still in operation, but now it works in reverse. As people continue to repay debts and borrow less, money is lost to circulation, spending is cut back, and less spending means falling incomes and higher unemployment. Falling incomes means that people sell assets in order to repay debts so as to keep their heads above water, and that causes falling asset prices. Lower incomes and lower asset prices means that people have poorer creditworthiness, so banks cut back on lending even to people who would otherwise still wish to take on debts (Dalio 2015 p13). Again we see the dependence loop - the activities of borrowers in borrowing less money reduces the ability (or in this case the inclination) of banks to supply it, so borrowing less money causes even less to be borrowed. Even worse for banks is the fact that falling incomes and poorer collateral means that there will be substantial numbers of defaulting borrowers, which seriously threatens banks' solvency.

Positive feedback often causes oscillations in dynamic systems in the absence of deliberate measures to control them (see chapter 34), and the system of bank lending and borrowing is no different. The severity of the oscillations depends on total debt - in the growth phase on the rate of spending from newly acquired debts as a proportion of total spending, and in the decline phase on the rate of reduction in spending due to repayment of existing debts as a proportion of total spending. The way it works is explained in more detail in the next chapter. These oscillations give rise to the business cycle and also to more severe booms and depressions.

The existence of positive feedback between banks and borrowers causes the lending market to oscillate between boom and bust, without ever finding a stable equilibrium state.

All this is explained very clearly in a video made by Ray Dalio available on Youtube.¹ I strongly recommend it - it makes a complex process much easier to understand.

¹ <https://www.youtube.com/watch?v=PHeobXAluko>

53 *Debts, Constructive and Destructive*

This chapter considers only private debt - debt taken on by individuals and businesses. Public (government) debt is discussed in chapter 88.

The history of debt is intimately tied up with the history of the human race. Debts are listed in the earliest of recorded documents; in fact the purpose of many such documents was to record debts (Graeber 2011 p21). Hence it is likely that debt was around long before there were written records. Debt probably originated soon after agriculture was developed, when humanity first enjoyed surplus wealth, as a means of sharing out the excess in a manner that ensured it would be returned in equal or greater value later. The history of debt is a fascinating subject in its own right, and I can heartily recommend Graeber's book (Graeber 2011) as a very readable and informative account.

Debt has always been deeply ambiguous, debtors feeling badly treated by their creditors and creditors throughout history regarded as greedy and uncaring. At the same time 'paying one's debts' has always been regarded as a cornerstone of morality, defaulting on debt repayment being highly dishonourable and ruining reputations.

What debt does is to allow the trading of wealth to be spread across time. I can obtain something today that I don't yet have the wealth to trade for it, on the basis that I shall have sufficient wealth in the future both to pay back the value of what I obtained and to compensate the provider for being deprived of it until paid back. Trade would be very difficult and much more restricted without debt.

Let's consider an economy without debt. The only way in which I can increase my income is to work harder or longer or find a quicker way of making whatever it is that I make and sell. In other words I have to increase my productivity. To get more income I have to trade more wealth. Such an economy is both very stable and very sluggish. Once people are working as hard as they can the only way they can have more is to become more efficient - to develop better techniques so that the work they do results in more wealth being produced. *If they want more wealth then they must produce and sell more wealth.* Now let's introduce debts. With a debt I can increase my income beyond that which I get from working, which means that I can spend more. There are four ways in which I can spend the extra money and the difference couldn't be more important, both for me and for the economy:

- i. I can buy wealth creating investment - buy myself a tractor so that I can work more land than I can without one; buy an electric saw so that I can produce more doors and window frames; buy a van to carry my gardening tools further afield and speed up travelling between gardens; and so on;
- ii. I can buy an existing asset in the hope that it increases in value in the future;
- iii. I can buy a new television or pay for a holiday or find some other way to spend it on enjoyment; or

iv. I can buy day to day consumables such as food and clothing.

In summary these are wealth creating investment; existing asset investment; luxury consumption (satisfaction of wants) and basic consumption (satisfaction of needs). Wealth creating and existing asset investment were discussed earlier when considering what people spend their money on in chapter 20. The thing that is important is the provision made for repaying the debt, because debts must be repaid, and if the lender and borrower are not to be harmed (by defaulting on repayment) then sufficient additional wealth must be available to trade in order to repay it by the time that repayment becomes due. If it is then all is well. If the debt was for wealth creation then the debt has allowed earlier economic growth than there would otherwise have been, and, importantly, it is the debtor who enjoys the growth and has additional wealth available to trade for money to repay the debt. Debts for existing assets don't promote economic growth because they merely represent wealth and money changing hands, there is no net effect on the economy. If the debtor is lucky then the assets bought will rise in value and enable the debt to be repaid, but this represents a gamble, it might work and it might not. Debts for any form of consumption can promote economic growth if demand is high enough, as discussed in chapter 20, but that growth (if there is any) is at the level of the economy as a whole, it isn't enjoyed by the debtor. Therefore wealth that is traded to repay consumption debts, and debts for existing assets that don't rise in value, must be taken from wealth that the debtor would otherwise trade for spending. Debts for luxury consumption are commonplace and are taken up to permit enjoyment sooner than would be possible by saving up. The interest is the price paid for bringing the enjoyment forward and hopefully the person taking the debt knows that he or she will have the wherewithal to repay it when due. Debts for basic consumption are bad news both for the debtor and the creditor. If there is insufficient income to pay for basic consumables today then it is unlikely that there will be sufficient to pay for both consumables and interest in the future.

If the creditor spends the money received from debt repayment then aggregate spending doesn't drop and the economy isn't harmed. But such people in the main are investors, who don't tend to spend their money on wealth creation - see chapter 20.

Debts are therefore very much a mixed blessing for the economy. They are good when used to buy wealth creating investments - provided that the economy has the capacity to accommodate those investments (it's no good buying a tractor if there isn't any more land available to cultivate), and when used for consumption they allow the economy to expand while they are being taken out in larger quantities than they are being paid back. Economic expansion arises because debts create a much bigger market for wealth than there would otherwise be - it includes those who don't yet have money as well as those who do, so productivity increases to meet this additional demand - as long as there is spare capacity.

However debts aren't always good for the parties involved. A debt that isn't repaid isn't in itself bad for the economy because it still allowed wealth to be created, traded and consumed, but it is bad for both the debtor, who invariably suffers a penalty for the default, and for the creditor, who has given away money and gets nothing in return. There will always be some debts that aren't repaid, that is the risk that the creditor takes in making the loan, so a prudent potential creditor assesses carefully the creditworthiness

of a potential debtor. This assessment usually rules out those who want debts for basic consumption because they are least likely to be able to repay. The interest charged normally includes an allowance for default in addition to the charge for being deprived of wealth or money for the duration, unless of course the lender is a bank which isn't deprived of anything - see chapter 48.

Debts are also incurred when wealth itself is lent rather than money. For example rents paid on land and property represent interest on the loan of wealth.

Debts transfer money (or wealth) from creditors to debtors immediately, and then transfer money back from debtors to creditors over a period of time. Creditors tend to spend much less of their money on new wealth than debtors do, because creditors have money in excess of their needs and wants whereas debtors have needs and wants in excess of their money. Therefore transferring money from creditors to debtors increases spending in the economy, which has a stimulating effect provided that there is sufficient spare capacity to absorb it, otherwise it merely fuels inflation. The same applies for bank-created money. Although it didn't exist before the loan was taken out it adds to spending when spent by the debtor.

New debts stimulate and expand the economy provided that sufficient spare capacity exists to absorb the new spending. However this stimulus only occurs until payments from debtors to creditors equals or exceeds new debt issued from creditors to debtors. In these circumstances there is no new spending because spending by new debtors is balanced by loss of spending from repaid creditors. When this situation occurs the impact on economic stability depends on the overall level of private debt in the economy. If private debt spending is small in comparison with total spending then it will only have a minor effect, but if it is a significant fraction of total spending then it will have a major effect.

As the total level of private debt increases the economy becomes increasingly unstable, even before repayment equals or exceeds new debt issue. To see why this is so we should recognise that debtors for whom interest payments absorb a high proportion of total income have little excess for all other purposes and are therefore very vulnerable to any decrease in income. Also large amounts of debt create a web of interconnecting links between all the players in the economy. Businesses depend on spending by a steady stream of customers taking on new debts, and debtors, whether individuals or businesses, depend on continuing streams of business revenue to keep themselves in work and businesses afloat. Banks, money markets and other lenders depend on debtors repaying their debts so that they can pay their creditors - savers, depositors, other banks, the BoE, money markets, private investors, pension funds, insurance companies and others, and everyone depends on savings, banking, pensions and insurance. Any slight economic downturn, such as might be triggered by an increase in the price of essential imports or a slowdown in the housing market, hits debtors hard - the heavier the debt the harder the hit. What happens is that such people are forced to spend less, especially on non-essentials, so producers are forced to cut back on production by cutting the hours of work for employees or by laying them off, reducing their incomes and causing increasing numbers of rescheduled and defaulted debts in a knock-on manner, reducing further the interest and repayment income stream to creditors.

Additionally many debts, especially mortgages, carry variable interest rates, so any increase in interest payable also increases the number of rescheduled and defaulted debts.

Debtors in these circumstances cut back heavily on all expenditure, and people who were considering taking on new debts now feel much less secure in their income, so they delay or abandon such thoughts. These effects cause even more loss of productivity in a self-reinforcing downward spiral. The extent of the decline depends on the total amount of private debt, and more specifically on the proportion of total spending that came from newly issued debt.

The loss of income to creditors is directly related to total private debt in the economy, and when it is high the tight linkages between separate players makes the instability even worse. Companies that engage in lending - banks and others - have accepted debts in the form of loan agreements, which are assets to the lenders, but they have also borrowed funds from depositors, savers, other banks and so on, which are liabilities. They normally have positive balances - their assets exceed their liabilities - but they generally sail so close to the wind that a sustained series of defaults soon tips them over into negative balances. They are like mountaineers walking on treacherous slopes. They all own backpacks containing large quantities of money, but they are all carried by other climbers who have borrowed them at interest. Their rate of climb is fuelled by debt interest payments, where the income of each depends on all the others maintaining their payments, so these tight linkages rope them all together, but without any fall arresting equipment. All is well provided that they all keep repaying and climbing, but as soon as one can't pay she starts to fall and all the others are dragged down too. This is the **debt domino effect**, where even though each participant's net debt is small (i.e. almost the same amount is owed by others as what it owes to others) it can still go down when a debtor defaults. The banking and financial network is so complex that each participant has multiple debt and credit connections to many others.

These are economically destructive debts - not individually, but collectively.

Debts are destructive when spending from newly issued private debt becomes a significant fraction of all spending in an economy, and the higher the fraction the more destructive the debts.

53.1 The increasing debt spiral.

Debts arise not because people want what they don't have, people have always had such wants, but because other people have sufficient money over and above their own needs and wants to lend it out. Banks are even smarter; they found a way to lend money they don't even have. The reason that debts increase is that the debtor pays back more to the creditor than the creditor paid to them, even allowing for inflation and default risk, which provides the creditor with even more in real terms to lend next time.

However in normal circumstances this spiral is self-limiting after a number of circuits have run their course, the limit being reached when all the good quality debtors have all the debts that they want or can manage. A major concern for potential creditors is the creditworthiness of potential debtors. Once money is lent the creditor is normally tied to the debtor and his or her ability to repay until the debt is discharged, so great caution is called for.

The necessity for creditors to exercise caution in lending acts as a major safeguard in limiting economic instability, but creditors themselves see it as a severe hindrance because

it limits their ability to make profits, which are directly related to the amount of money they lend.

Happily for creditors, but unhappily for the economy, a very clever way round this hindrance was found and exploited to the full prior to the 2008 crash. The massive build-up of debt before the crash kept the boom going for longer, but all it did was make the crash all the bigger when it happened. The way it played out is examined in the next chapter.

53.2 Taking control of individual private debts.

The above discussion has focused on the impact of private debts on the economy, but debts can have very damaging effects on individuals, so measures should be in place to mitigate those effects. At the moment people in debt are offered advice as to how to manage their money, and in extreme cases they can declare themselves bankrupt, but in all cases debt is regarded as the debtor's problem. The following is offered as a suggestion for how better control might be applied.

In the case of loans taken out for wealth creation purposes the interests of the creditor should be aligned more closely with the fortunes of the debtor. At present the person who can't pay his debts is the one at fault, no blame attaches to the original lender or later buyer of the debt, even though they should have been more careful in offering the loan or in buying the debt.

- For every debtor who shouldn't have borrowed there is a creditor who shouldn't have lent.
- Creditors should be duty bound to help debtors in trouble because they share the blame for repayment difficulties. Also the default interest that debtors pay provides insurance for creditors against default (i.e. total interest from all debtors covers all defaults), and is sufficient to allow for any and all circumstances provided that it has been assessed correctly, and assessment is the responsibility of creditors. The additional opportunity cost interest that debtors also pay provides creditors with a profit, so creditors are adequately rewarded even allowing for defaults. What should be avoided is bankrupting debtors or forcing the sale of collateral. Many creditors do agree to deals when debtors are in trouble, but only because it is in their interests to do so, they are under no obligation to accept any lesser terms than were agreed at the outset. A promising approach to the current mismatch might be to have the initial interest rate and repayment period agreed in the normal way, but in the case of difficulties the debtor can request an interest reduction or deferment, an extension of the repayment period, or even debt reduction or cancellation. The debtor will make a proposal with reasons and accounts to back it up; the creditor will consider it and accept or negotiate with the debtor. If agreement can't be reached the two sides will each make their proposals to an adjudication panel, on the basis that the panel can only agree to one or other proposal in its entirety, whichever they believe is the more reasonable in the circumstances. This ensures that both sides will be as reasonable as they

can - the more outlandish the proposal the more likely its rejection. Adjudication fees will be split equally between the two parties, regardless of outcome, again to encourage resolution without the need for adjudication. In the same way if the debtor does particularly well (recall that the loans we are considering are for wealth creating purposes) the creditor can request an interest rate increase, a shorter repayment period, or whatever else they feel is appropriate, and have it negotiated and adjudicated if necessary in the same way.

Similar procedures can apply for loans for purposes other than wealth creation, but without the creditor being able to claim any betterment of the terms. This will make the lender much more cautious in offering loans in the first place, especially where collateral is involved. Measures such as these aim to achieve for domestic lending what Keynes attempted to achieve for international lending. He was unsuccessful, not because his proposals didn't have merit, but because the Americans vetoed them for no better reason than that they thought it was in their interests to do so at the time, though in the longer term it wasn't. These matters are discussed in detail in chapter 67 section 67.2.

Other much wider recommendations for reform of the economy are set out in chapter 100.

54 *The Role Played by Destructive Debts in the Run-Up to the 2008 Crash*

Indebtedness expanded explosively prior to 2008, and made a severe crash inevitable. The underlying cause was massive risk-taking on the part of the finance sector, but it was helped by complacency on the part of governments and regulators. This complacency seems quite extraordinary, given the exponential rise in household debt in the years preceding the 2008 crash - see figure 54.5. It was helped by the theories and economic models used by central banks, the treasury and other policy-making agencies - the so-called Dynamic Stochastic General Equilibrium (DSGE) models. The name sounds impressive but the underlying assumptions are less so. Those theories and models assume that as long as inflation stays low then financial and macroeconomic stability follow. They therefore ignore much of the financial system - banks are almost entirely missing and there are no mortgage lenders or financial traders (Turner 2016 p170 and Desai 2015 p197), so it is no wonder that household debt can't ever be a problem. That policy-making bodies can apply methods that are so far out of touch with reality is quite staggering. Not only that, they are still being applied even after the crash. As Turner observed:

You cannot see a crisis coming if you have theories and models that assume that the crisis is impossible. (Turner 2016 p246)

DSGE models are considered further in chapter 80.

Debts exploded when banks persuaded regulators to relax the rules on securitisation - the selling of derivatives based on debts, especially mortgages, to investors. These were touched on earlier in chapter 50. This was the key element that removed the need for caution in the selection of debtors by creditors. Increasing creditor profit depends on increasing debts, which depends in turn on finding a steady supply of new debtors to take on the debts. With traditional caution this requires high quality debtors, the supply of which dries up fairly soon, as does the growth in creditor profits. But without caution the supply is almost endless, and culminated in the ludicrous situation where money was lent to debtors with no creditworthiness at all - no income, no job, and no assets - the 'NINJA' borrowers. These were the 'liar loans'¹, given to people against properties that they couldn't hope to pay for but would cover the investors' and banks' loan and associated interest and fees when repossessed. How anyone, especially regulators, could have seriously thought that this was an economically harmless activity is amazing. It was all based on the belief that property prices would keep on rising. *Why should we care if a borrower can't make the payments? We just repossess their property and sell it to pay off the debt, with a few nice fat fees for our trouble. What about the people who are made homeless? Who cares about them? We're making money and that's all that matters.*

¹ http://www.investopedia.com/terms/l/liar_loan.asp

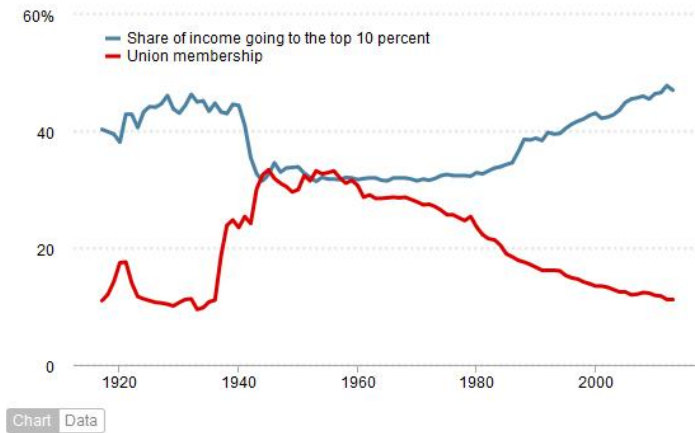
To see how these debts worked we need to examine the three main parties involved: the investors who wanted to own them (the creditors); those who made them available to investors (the finance sector); and the borrowers who funded everything (the debtors).

54.1 The investors who wanted to own the debts:

These were mainly the growing number of people, institutions, businesses and governments with sufficient excess of money over and above their requirements to wish to invest it, preferably for a high and secure return. As the chart below shows, from 1980 onwards, when the Thatcher and Reagan Governments began the process of removing power from unions and the workforce in favour of employers and cut the rate of tax for high earners, wealth inequality began to climb. Figure 54.1 shows the growth in US income for the most highly paid from that time onwards related to the decline in trades union membership. The UK situation was similar.

ECONOMIC SNAPSHOT

Union membership and share of income going to the top 10%



Source: U.S. Census Bureau and Piketty and Saez (2013)

Figure 54.1: Relationship between the decline in workforce power and wealth for the top 10%. Source data from *The US Census Bureau, Thomas Piketty and Emmanuel Saez*², recovered from <http://www.epi.org/publication/unions-decline-and-the-rise-of-the-top-10-percents-share-of-income/>

Much of the increased income for high earners and for their businesses became available for investment, and as a result the demand for financial assets began to increase with corresponding price increases. The effect of a price increase for an asset that delivers a fairly constant return in terms of income (as do bonds and equities) is to make the ratio

² 'Top Incomes and the Great Recession: Recent Evolutions and Policy Implications' by Thomas Piketty and Emmanuel Saez, IMF Economic Review Vol. 61, No. 3, 2013.

of price to income (price/earnings ratio) higher. This effect is seen in figure 54.2.

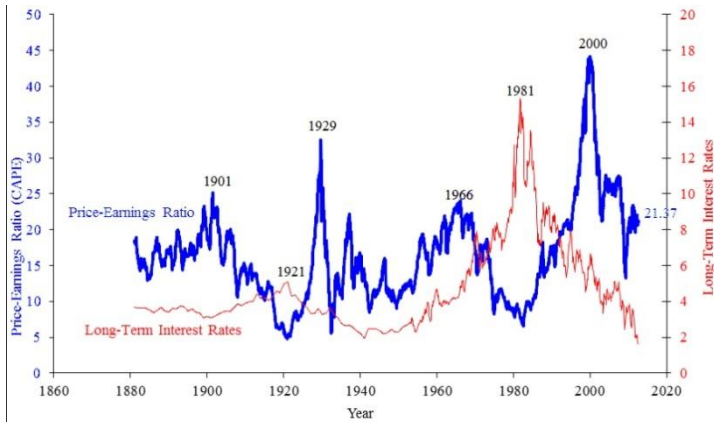


Figure 54.2: Long-term interest rate and price/earnings ratio. Modelled on a plot from the book *Irrational Exuberance* by Robert Schiller, 2005, with data taken from http://www.econ.yale.edu/~shiller/data/ie_data.xls. Recovered from https://en.wikipedia.org/wiki/Price%E2%80%93earnings_ratio

It shows that the long-term interest rate was in steep decline from 1981 onwards, so the returns on traditional debt assets such as government and corporate bonds grew correspondingly lower. Returns on equities were also in sharp decline, at least until 2000 when the dotcom bubble burst, the chart showing the price to earnings ratio increasing rapidly in this period. After the dotcom crash equity returns improved as their prices dropped, but the appetite for them remained constrained because so many had lost money in that crash. Therefore those with money to invest had an increasing amount of it, and that provided a strong demand for investments, the more secure the better, and bond prices rose correspondingly.

54.2 Those who made the debts available to investors:

From the mid-1980s, when the finance sector expanded massively in the wake of 'big bang' deregulation³, the opportunities for banking and financial innovation increased dramatically and the bankers and financiers were not slow in taking advantage of them. Remember that bank's profits depend on the amount of money they create, so the more they create the better it is for them. But there is a problem - banks are constrained by the need to keep risks to an acceptable level. Remember from the last chapter that there are plenty of potential borrowers, and the less able they are to repay the more there are, so a bank finds itself in severe competition with other banks for high quality borrowers that all banks want to attract, but must turn away low quality borrowers that no bank wants to attract. If only there was a way to get rid of the risky loan agreements it could take on more of the risky borrowers.

Bright idea no 1! Sell the loan agreements to others. The advantage for the banks is

³ [https://en.wikipedia.org/wiki/Big_Bang_\(financial_markets\)](https://en.wikipedia.org/wiki/Big_Bang_(financial_markets))

that they sell the risk along with the loan agreement and no longer need worry about creditworthiness, but the disadvantage is that the investor gets the interest payments instead of the bank. That won't matter though provided that the bank gets a nice fat fee, and uses the money (or more accurately the reserves that accompany it) from the investor to fund another loan agreement, and keeps on doing that indefinitely. That way the gains will massively outweigh the losses - perfect! But investors aren't daft, they know that the loans are risky, so no-one would buy a loan as it stands except at a very deep discount. Besides that banks don't want to have to find buyers for every separate loan that they have on their books, they want a rapid and continuous transfer of loans to investors.

Bright idea no. 2! Package up the loans so as to average out all the individual default risks, then slice them up and sell the slices. That still sounds a bit dodgy so let's call it 'securitisation' - that sounds much more respectable.⁴ But why would anyone buy a slice? Investors would know that some proportion would go bad so the quality of the investment would be hard to determine and they would most likely play safe and not touch it.

Bright idea no. 3! The bank itself could specify the risk by first carving up the mass into a small number of big slices, and arranging them in a tiered hierarchy such that any defaulting loans would affect the lowest tier first, then if there were even more defaulting loans the next tier would be affected, and so on, each tier carrying a different interest rate - highest at the bottom because that tier carried the highest risk and lowest at the top because that tier carried the lowest risk. These tiers were called tranches, each appealing to a different type of investor related to risk appetite. For example cautious pension funds would only buy from the topmost tranches whereas hedge funds would buy from all tranches. The rating agencies would be called in to rate each separate tranche to give confidence to the investors, and nice fat fees paid by the banks to the agencies for their trouble together with the promise of a continuing supply of products to rate would keep them well disposed to the bank and its products. The group of loans packaged up would be called Mortgage Backed Securities (MBSs) if made up of mortgages of varying quality, also called Collateralised Mortgage Obligations (CMOs), or Collateralised Debt Obligations (CDOs) if made up of different types of loan - mortgages, car loans, student loans, credit card loans etc. The collective name for these is **asset backed securities (ABSs)**. In each case the investor would have the original assets in the package as collateral in the event of the provider going bust. Looking good!

But here the banks ran into another problem - the risk limits imposed by regulators. Note that the investors didn't buy any of the original loan agreements, those agreements stayed with the bank. The investors bought a contract, typically giving them the right to a rate of interest for a specific duration, after which the original cost of the contract would be repaid by the bank - just like any other loan agreement. The investors didn't in fact buy a slice of a package of loan agreements; they bought a slice of an income stream that was funded by a package of loan agreements. This is important because only the bank knew what was in the package of agreements, all the investors knew were the terms of the contract they had with the bank, the rating of it by the rating agency, and the fact that what they had bought was collateralised by loan agreements, but exactly what that

⁴ <https://en.wikipedia.org/wiki/Securitization>

collateral consisted of was unknown to them. In fact it was much worse even than that because for simplicity we have been considering the bank as the sole player in making the original debts available to investors. In fact there were dozens of players, all playing some part in the complex web of dealings, so neither the banks nor anyone else knew for certain what the packages contained. Unbelievable I know but true nonetheless! It was that ignorance that brought the world to within a whisker of economic collapse in 2008.

To see why risk imposed a limit we have to consider the bank's balance sheet. The money paid by the investor would largely appear as reserves which would add to the bank's capital, but those reserves would disappear again when another loan agreement was accepted and the borrower spent the money on a house, car or whatever, and the seller banked with a different bank. Over time the bank's balance sheet would show a growing number of loan agreements (risky assets) and a growing number of ABS liabilities, with the bank's risk-free capital base unable to keep pace. Therefore the ratio of risk-free assets to risky assets would keep dropping until the regulator stepped in to stop further growth.

Bright idea no. 4! Sell the risky loan agreements to a separate company, wholly owned by the bank but operating under a trust arrangement so that it could carry out business independently of the bank. These trusts were known as Special Purpose Vehicles (SPVs), and were not banks, so they could attract much higher levels of debt than could a bank as they weren't subject to any risk limitation. The SPV would initially borrow money, normally from the money market (because borrowing from banks would just load the banks back up with risky loan agreements) to buy the first batch of loan agreements, but would buy later batches using money from the investors who bought the ABSs. The effect for the bank was that the loan agreements (long-term risky assets) were removed from its balance sheet and replaced with money in the form of reserves (short-term safe assets) from the SPVs, which it could use to fund more loans. There was no limit to this process because the bank's risk limitation was no longer challenged. The effect for the SPV was a build-up of both long-term risky assets (loan agreements) and liabilities (ABSs), but this build-up wasn't a problem because it had no risk limitation to worry about. The SPV would normally work with other companies that did all the slicing, dicing and making the ABSs available to investors, and were located in tax-friendly environments so as to avoid paying what they owed to the country in which the loans were taken out. *Sorted!*⁵

As a further twist to the tale some investors wanted insurance against defaults, so a new derivative was invented for the purpose - the Credit Default Swap (CDS). In return for fees paid by the swap buyer to the swap seller for the duration of the contract, the seller would agree to make good all interest payments and the final capital repayment in the event of a default on the original debt contract. In effect the CDS buyer swapped the credit default risk that came with the ABS contract for a risk free contract with the CDS seller - the CDS seller taking over the risk in return for the fee that was paid. These were extremely popular and very lucrative for the sellers, notably American International Group (AIG), which collected fees without any thought that they might have to pay out.

⁵ A short guide to this process available at:

http://www.barbicanconsulting.co.uk/collateralised_debt_obligations

So confident were they that they were happy to issue CDSs to anyone who wanted them, regardless of whether or not they owned any ABSs. In other words in the event of a default on a debt contract the issuer would be required to pay many times over the value of the default. This was because such derivatives were classed as swaps, not insurance, which in reality they were. Anyone wanting insurance is required to own or at least have a material interest in the asset insured, if the insurance is classed as a swap then they don't. *I have house insurance which gives me peace of mind, but I would have a good deal less peace of mind if I discovered that dozens of other people I didn't even know had also insured my house!* Anyone interested in this story is recommended to read 'The Greatest Trade Ever' by Gregory Zuckerman (Zuckerman 2010), which tells the story of the trader John Paulson who predicted the economic crash and made the biggest windfall in history, by betting against the market using CDSs.

Yet another complicating factor was that many non-bank finance companies also offered mortgages and other loans, and funded them initially by borrowing from the money market rather than by creating bank money. In that way they avoided falling foul of the client money rules (see chapter 47) - they didn't take deposits - so weren't regulated as banks and could therefore take bigger risks by operating with much less capital. Later, as they packaged, sliced and sold rights to the income stream from loans money would come in from investors so less would need to be borrowed from the money market. These companies offered credit to the borrowers but didn't create money because they lent existing money. However by means of the packaging and slicing process they created what is known as 'near money' - assets (i.e. ABSs) that are (or were at the time) easily exchanged for money in the market. In that respect they operated very much like traditional banks, not only offering long-term loans to borrowers but converting them into short-term liquid assets to sell to investors. This is another form of maturity transformation process that was discussed in chapter 40, but this time the liquid assets were near money rather than money itself.

The term 'near money' is interesting. It is considered by many that because financial institutions can easily create near monies in effect they create money, so there is no point trying to control banks' creation of money because others would just step in to create near monies which would defeat the object. In reality, as the 2008 crash so clearly showed, near money only deserves its name when everyone, buyers and sellers, believe in its worth. When there is doubt, as there was with ABSs in 2008, they become anything but near money! No-one would touch them at any price. There is no way that a non-bank can create money or genuinely near money that retains its value under all circumstances, because the only thing that holds its value in terms of money is money. I like the Positive Money definition of money - it is that which passes the 'Tesco Test' - if you can walk into Tesco's with it and buy a basket of groceries then it's money, if you can't then it isn't.⁶ So called near money is no reason to give up on the ambition to control banks' money creation activities as discussed in the next chapter.

The above explanation is a very brief summary of the essence of what the banks and finance companies were up to. In practice it was immensely complex, with very many separate players involved (though several of them often owned by the same entity). The

⁶ Note that credit cards aren't money though they allow money to be created (if issued by a bank) or transferred (if issued by a non-bank) on the spot and that is what Tesco accepts.

whole structure apart from the traditional banks became known as **shadow banking** because of the many players that weren't banks but in effect did business that was traditionally the preserve of banks. As an indication of just how complex the arrangements were, after the 2008 crash the Federal Reserve Bank of New York wrote a paper which is available online⁷ and contains a map of the shadow banking system on a single sheet of A4, but in order to read the labels clearly this must be magnified 6 times to form a legible map of about 5 feet x 3 feet! I think it is fair to say that no-one understood or indeed understands the full complexity of all this. Individual players understood their own part in it and those they dealt closely with, but no individual needed to understand all of it, except in conceptual form. Figure 54.3 below gives an outline of the structure.

Although no-one understood it all the many players were very well rewarded for their efforts, and the final investors also enjoyed a handsome return, all funded by the borrowers at the bottom of the pile, and they are considered next.

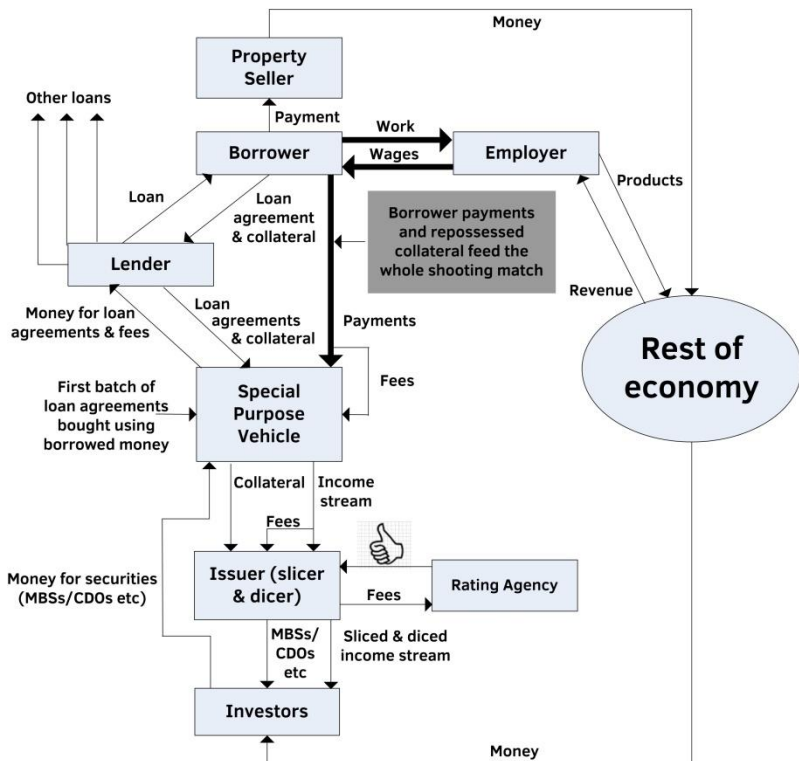


Figure 54.3: An outline structure of the securitisation process.

54.3 The borrowers who funded everything:

In order for the whole house of cards to stand up there has to be an increasing

⁷ See page 3 of https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr458.pdf

number of borrowers at the bottom, not only taking out new loans but also hopefully paying them back. If new borrowers can't be found then banks won't have anything new to package up and investors won't be able to continue investing in these products. The wonderful money-making machine would grind to a halt.

How can banks and investors be sure of a continuing supply of borrowers? Well here's the really clever part - clever that is in a deeply sinister sense - the more money that is in wealthy hands the more that ordinary people have to borrow it back in order to live a normal life. It is fuelled by the 'hoover-up' phenomenon - *it's what neoliberals prefer to call 'trickle-down'* - which we met in chapter 20, but here it became supercharged. This is how it works. Banks create new money and make it available to borrowers in return for loan agreements. These borrowers aren't investors so they spend the money mainly on new wealth - houses, cars, furniture, holidays, consumption goods, university education and many other things, but mainly houses. That expenditure helps the economy because it provides income for wealth producers. Even money spent on existing houses eventually finds its way back into the economy when people at the top of housing chains downsize and spend the excess or they die and their offspring sell the property and spend their inheritance. The borrowers, in paying interest on the money borrowed, provide the income stream that provides all the fees to the banks and shadow banks, each taking their cut, with the residue going to the investors who buy the ABSs. In order to provide the income stream the borrowers must work in the economy, using a portion of their earnings for the purpose. Now that income stream in the hands of banks and investors represents money available for yet more loan agreements. At this point banks and borrowers together have injected new money into the economy which fosters growth, but also set up a process whereby a continuing flow of money runs from the debtors back to the banks and investors. With this process the banks are a lot less concerned about the creditworthiness of the borrowers because the default risk is transferred to the investors, so the new generation of borrowers consists of people who would have struggled to obtain loans in earlier times, but now see an opportunity to improve their lives using borrowed money - these are the people who represent the continuing supply of borrowers. The main purchase that borrowers make is houses, so with more willing buyers property prices rise, generating even bigger loans and also a 'feel-good' factor amongst home owners, and because home owners are voters the government feels good too. Existing property owners also join the party by re-mortgaging in order to spend their newfound 'wealth', except that their wealth hasn't changed at all, their house is still what it was before the price rise. All that has changed is other people's willingness to buy it, and willingness can disappear as fast as and usually much faster than it appeared. As investors notice that property prices are rising they see it as a good investment in its own right, so they also rush to buy property, assisted by banks offering 'buy-to-let' mortgages. People unable to buy their own property have to rent, which represents interest on the borrowed property, and as prices rise rents also rise. Note that property hasn't become more intrinsically valuable in terms of use value, its exchange value has risen purely because there are more willing buyers than willing sellers, all convinced that prices will rise yet further - the classic recipe for a bubble. As property prices rise in excess of inflation mortgage payments and rents take an even bigger slice of people's income and it all largely goes to banks and investors - *this of course is no more than business as usual - take from the poor to give to the rich - but in the run-up to 2008 it was on steroids.*

Although money used to buy ABSs was existing asset money (MEA), the BoE reserves that accompanied it were used by the banks to fund the creation of new money mainly for property purchase, so much of this new money quickly became new wealth money (MNW) when it was spent in the economy by the new house builders and existing house sellers. That was why there was economic growth in this period - whenever money is taken from the stock of MEA to increase MNW then growth is fostered provided that there is spare capacity to absorb it - see chapters 23 and 24.

Note that although bank money is created when a loan is made, it is destroyed again when investors buy ABSs - recall the general rule that a bank creates money when it pays out in bank money and destroys money when it receives payment in bank money, see chapter 44. ABSs represent debts sold by banks (or Special Purpose Vehicles on banks' behalf). Therefore although the total value of debts was increasing the total value of money was not increasing at the same rate, so the danger of rampant inflation was much less, and indeed didn't happen apart from in property and asset prices. Other institutions than banks also offered mortgages and sold ABSs - shadow banks - but in their case no money was created or destroyed, so again the overall money supply wasn't affected although debts still mounted.

Banks were significant buyers of ABSs because they were rated highly and therefore didn't harm the risk ratio as much as the underlying loan agreements would have done, so when doubts arose as to their real value those doubts also fell on the value and solvency of banks. It was those ABSs - toxic assets - that eventually crashed the system.

Because people need somewhere to live they must either borrow the property and pay rent on it, or borrow the money to buy it, as indeed they always have done. But with the advent of easier credit for less creditworthy borrowers and easily available buy-to-let mortgages - making property a much more popular investment - demand for it increased and prices rose considerably in consequence. Rising prices mean higher mortgages and rents, and a higher proportion of people's wages used to pay for them, money that flows back to banks and investors. This money is then available for further investment in mortgages and property and so up go property prices again, and up go the mortgage payments and rents and so on in an ever increasing spiral. The driver at the bottom is people's need for somewhere to live and the effect is an accelerating accumulation of debt and therefore an ever increasing proportion of their earnings taken by banks and investors. Figure 54.4 shows this as the price to earnings ratio for first-time buyers (FTBs).

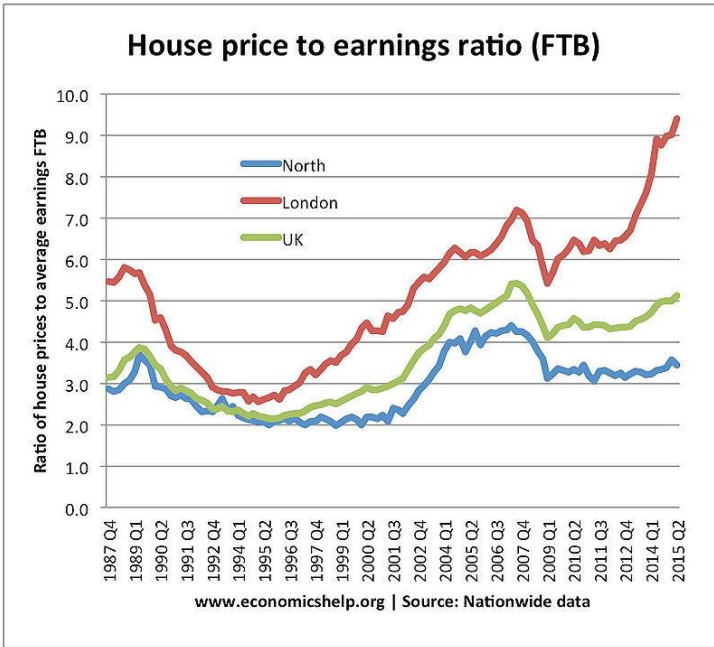


Figure 54.4: House price to first-time buyer earnings ratios for London, the North and UK as a whole. Source Economics Help website by Tejvan Pettinger, retrieved from <http://www.economicshelp.org/blog/5709/housing/market/>

The relentless rise from 1994 to 2007 is clearly seen, amplified as ever for London property, and after the dip which lasted until 2009 it has remained fairly static for the north but taken off again and climbed even higher than before the crash for London.

People are forced to borrow either money or property from those who own it, and pay them handsomely and in increasing amounts for the privilege. With so much money circulating around the economy the rate of interest was low during this period - see Figure 54.2 - so the amount of debt was able to rise to unprecedented levels - people's ability to repay depends on the level of interest payments rather than the level of debt, so with low interest debt can be very high.

Figure 54.5 below shows the accelerating trend in household debts and the increasing gap between debt and income until it was stopped by the crash of 2008. Income is now catching up slowly but the level of debt remains very high. Note though that the income in the chart is an average so it includes the income of the wealthy, therefore non-wealthy income isn't rising at anything like the same rate.

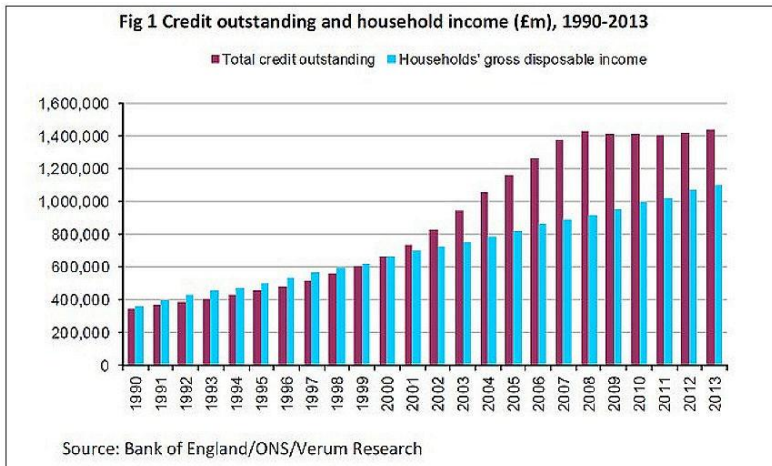


Figure 54.5: Household debt (credit) outstrips household income. Retrieved from <http://www.thisismoney.co.uk/money/news/article-2724894/Families-red-pose-threat-UK-recovery-household-debt-quadruples-1990.html>

Figure 54.6 shows house prices keeping pace with the growth in household debt up to 2008, indicating that the bulk of loans were to buy property.

Note that these charts don't include borrowed property as debt, although that's what it is because interest in the form of rent is payable on it, so in reality the aggregate household debt burden is and was considerably higher than indicated.

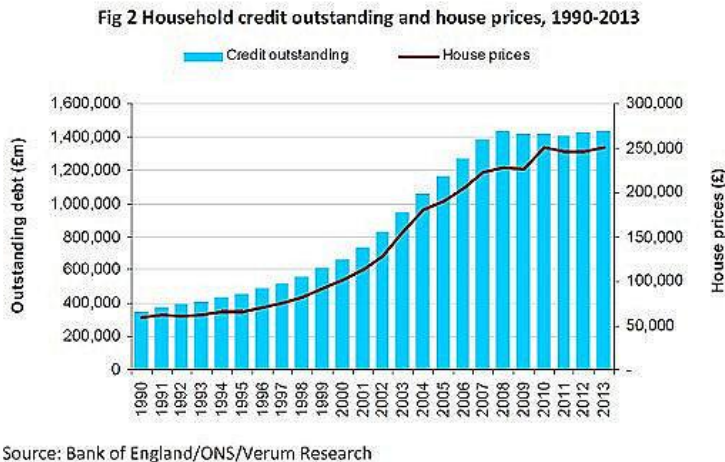


Figure 54.6: Household debt (credit) and house prices remain closely linked. Retrieved from <http://www.thisismoney.co.uk/money/news/article-2724894/Families-red-pose-threat-UK-recovery-household-debt-quadruples-1990.html>

All the time the economy was growing because of all the new money (M_{NW}) being spent (although not as much as indicated by GDP because that included substantial wealth extraction by banks and finance companies - see chapter 36), which delighted

politicians and the financial community who advertised it as improving living standards for all, which it certainly wasn't. The growth was enjoyed solely by the wealthy but bought at the expense of the borrowers at the bottom, many of whom were desperately trying to keep their heads above water in the face of increasing debts, increasing workload and increasing stress, with an increasing share of the wealth they created syphoned off by banks, all the constituents of shadow banks, and investors. To make ends meet in those circumstances people had to work longer hours or have two or more jobs, and endure all the attendant stress that goes with such a life. *This is the unfettered market working its magic.*

It was only after the Second World War when governments stepped in and forcibly redistributed wealth from the better off to the worse off that we moved towards a more equal society, with all the benefits that that brought in terms of economic growth accompanied by genuinely improving living standards for ordinary people. Unfortunately the oil price spike in 1973 triggered recession and unemployment, and coupled with a rapidly increasing money supply caused inflation to rocket. This was 'stagflation', and was blamed entirely on government interference in the market, which in fairness was partly true. It's no good trying to use government spending to correct a recession brought on by higher imported commodity prices, in those circumstances the value of national wealth really has dropped and we have to live with it by foregoing consumption of domestically produced wealth and instead exporting it. This period is discussed in more detail in chapters 84 and 85.

Very regrettably, in probably the most damaging instance ever seen of throwing the baby out with the bathwater, everything was reversed. It began with the Thatcher and Reagan Governments of the early 1980s and was pursued by all governments since then in both the UK and the US and followed to a greater or lesser extent by all democratically elected governments. From that time onwards neoliberalism displaced Keynesianism as orthodox economics and unfettered markets were increasingly given their head. Inequality began its rise back to where it was before the Second World War and indebtedness - the worse off working for the better off - rose with it, indicating that inequality and indebtedness represent a natural and hardly surprising outcome of the operation of unfettered markets, as was shown in great detail by Piketty (Piketty 2014).

Unfettered markets don't deliver rising prosperity for all; they deliver it for the few with ever increasing debt and anxiety for the many.

54.4 The inevitable crash happened - and came as a complete surprise.

It really is a very clever system. You have to admire the ingenuity of those in the banking and financial trading sectors who are able to come up with such sophisticated ways of taking wealth from ordinary people - all the while claiming that they're doing it for the benefit of ordinary people - and at the same time convincing politicians of all stripes and regulators that what they are doing is in the best interests of the economy. As cunning plans go this one is world-class!

Clearly a process like this can't continue indefinitely because one of several things will stop it:

- i. for an increasing number of people the money left over after paying for their debts is so little that it severely harms their ability to live any kind of normal life, so they do everything they can to cut back on spending and pay down their debts. When this number is high enough a recession is triggered;
- ii. many people are unrealistic in estimating their ability to repay and take on debts that they can't afford. Banks allow them to do so knowing that they are offloading the default risk to investors, so when the borrowers can't pay they default. If numbers are large enough a recession is triggered;
- iii. the BoE decides that the economy is becoming dangerously overactive and increases the bank rate, banks respond by increasing borrower rates, and people can no longer afford their debts so they cut back drastically on spending and many default on their debts, triggering a recession;
- iv. there are price rises in essential imports such as oil or food, again causing people to cut back on spending, and because their expenses are stretched so tightly (because of debt repayment) this again triggers a recession.

However as it happened none of these things was directly responsible for stopping it although the second point contributed indirectly. It wasn't the unsustainability of the debts that caused the 2008 crash - though it would have caused a crash sooner or later - it was precipitated instead by banks' panic reaction to US sub-prime borrower defaults, when they realised that the contents of packaged and sliced loan agreements were critical to banks' solvency and they didn't know what those contents were. This led to a massive loss of confidence by banks in the creditworthiness of other banks that might be holding these dubious loan agreements, so they stopped lending to them. Without interbank lending banks couldn't make payments on behalf of customers so the payments system threatened to come to a complete halt with devastating consequences for the world economy. That was the reason for the crash, and for governments having to step in with capital payments and guarantees in order to keep the payments system working.

In fact US sub-prime mortgages represented only about 15% of the US mortgage market⁸, and many sub-prime borrowers didn't default, so in the event the system could easily have withstood the losses. It was fear that crashed the system, not facts. Nevertheless given the speed and direction in which events were unfolding the system was going to crash sooner or later.

The amazing thing is that all those with any authority at the time thought that things were wonderful. It doesn't take a great imagination to see that exponential debt increases such as were seen can't be sustained. Yet the twin factors of low consumer inflation and high economic growth (even though much of that growth was merely apparent because of wealth extraction) convinced politicians, regulators, and their many mainstream economic 'expert' advisers that we had reached a stable state - a Great Moderation⁹ -

⁸ <http://cep.lse.ac.uk/seminarpapers/27-02-15-FF.pdf>

⁹ https://en.wikipedia.org/wiki/Great_Moderation

where there would be no more boom and bust¹⁰, and that all the complex derivatives were financially beneficial in that they allowed risks to be taken by those most able to bear them. Indeed all must have been well because the only thing that could threaten stability was believed to be inflation, and so embedded was this belief that the BoE had only this as its target. Inflation remained low, so what could possibly go wrong?

I think this illustrates well people's remarkable ability, even in the face of mounting contradictory evidence, to believe what they want to believe and what is in their own interests to believe, especially when those beliefs are shared by many others in the same position. Those beliefs are now seen as the illusions they always were, and all the risks that were apparently catered for were risks to banks and investors, who in the event weren't able to bear them at all. In stark contrast risks to ordinary people all increased dramatically: insecurity; inadequate pension provision; uncertain wages; debt default; repossession; eviction; and serious health issues and domestic strife brought on by all the associated stress and constant anxiety. The market had nothing to offer for those risks.

Having said all that and explained all the risks and damage associated with securitisation the rewards it offers for the financial community are proving too strong to resist so it is on the rise again.¹¹ *Of course all necessary lessons have been fully learned by both participants and regulators so this time nothing can possibly go wrong... Mmm...*

¹⁰ <https://www.theguardian.com/politics/2008/sep/11/gordonbrown.economy>

¹¹ <http://www.economist.com/news/finance-and-economics/21593424-much-maligned-financial-innovation-early-stages-comeback-back>

55 *Better Systems*

As supporters would have pointed out before 2008 if you had asked them: 'the system might seem perverse but it works, and it works well!' Although a lot of objections to that view could have been raised before 2008 (and indeed were by Steve Keen and others), after the crash of 2008 and the immense damage that it did and is still doing to the entire world (see chapter 50) that view is completely untenable, though there is still a very strong and very wealthy opposition to any change. But if it doesn't change then we are certainly in for more - quite possibly fatal - economic and environmental damage in the future.

A very disturbing fact is that 85% of UK money is held by just five banks, and in creating that money the directors of those banks set the policy for where it is allocated. The result is that investment in the UK largely reflects the interests of those banks rather than government or public interest. Gross bank lending in 2011 was over 5 times GDP, exceeding government spending by more than ten times, so that small group of bank decision makers commands very much more spending power - directed at serving themselves - than the whole of government (Meacher 2013 pp165-166)

The banking system demands radical change, the only questions are when and how.

So far the debate has centred on increasing the regulation of unchanged banks, requiring amongst other things higher capital adequacy ratios so that the risks taken are smaller than before. This is just tinkering. One thing that banks are really good at is staying one or more often several steps ahead of regulators. The current incentives guarantee it:

- bankers are rewarded in £millions for finding profitable and clever ways round regulations;
- they develop and implement innovations before regulators are even aware of them; and
- they employ the best lawyers and lobbyists to plead their case.

In contrast regulators:

- are rewarded only by drawing their normal salaries;
- have to react to banks' innovations after they are in place;
- have much poorer weapons to fight banks' innovations if they don't like them; and even worse
- have access to well-paying jobs in banks and other financial companies

provided that relations with those companies remain good.¹ This is one of the revolving doors that link public bodies to the private sector, in this case government, regulation and finance, through which senior members of those bodies and their advisers move freely. (Meacher 2013 p247, Reich 2016 Chapter 12, Crouch 2016 pp105-107)

Nothing less than a radical overhaul is required.

55.1 Nationalise the banks?

Relatively speaking this is probably the easiest (perhaps least difficult would be a better description) to implement. Nevertheless it would still encounter strong opposition from the banking and financial community. This system would retain banks largely as they are now except that they would be publicly owned and required to operate in the public interest rather than for their own benefit. Lending policies would be re-aligned to serve the economy better, by increasing the proportion of loans to businesses for start-up and expansion of economically beneficial products and services. Although money would still be created by banks in return for loan agreements it wouldn't be pretend money because the government would explicitly guarantee its value so it would have the same status as cash and reserves.

Perhaps the major disadvantage with this system is that as now new money only comes into existence along with new debt. We still have to have debt to have money, and we still can't rid ourselves of debt without also ridding ourselves of money. The quantity of money in the economy remains practically the same as the totality of bank debt, so it grows when new debt take-up exceeds debt repayment and vice versa. Therefore the money supply is still dependent on the vagaries of people's willingness to take on debt so we would still be subject to booms and busts as we cycle between optimism and pessimism about the future. This, as now, is traditional banking's major flaw; it couples together two completely separate factors - willingness to borrow and quantity of desired transactions.

Bank nationalisation has become a hotly debated topic since the 2008 crash, with arguments for and against it. Three websites that address the matter are given below.²

55.2 Abolish pretend money?

This is my strongly preferred option and is that proposed by Positive Money. At a stroke it gets rid of all the paradoxes, limitations and moral hazard of the current banking system and provides a strong and sound basis for the economy. The big problem is that whenever it is suggested it brings on apoplexy amongst all the aforementioned supporters of the status quo. Therefore to establish this system would require a bitter fight with very strong and well-provisioned opponents, and the longer we leave it the stronger and

¹ see http://highpaycentre.org/files/FINAL_REVOLVING_DOOR.pdf

² <http://www.brighthub.com/money/personal-finance/articles/46188.aspx>
<http://www.voxeu.org/article/case-and-against-bank-nationalisation> and
<http://positivemoney.org/faqs/why-dont-we-just-nationalise-the-banks/>

better provisioned they become. But it is a fight well worth having nonetheless.

The proposals are set out in great detail in Jackson and Dyson 2012 Part 2, Huber and Robertson 2000, and on the Positive Money website³, so I shall merely summarise the main points here.

Banks' power to create money would no longer exist. They would only be able to lend (genuine lending in this system) money that was real in the sense that *all* money would be real money - created by the BoE in the form of cash or electronically - but now instead of only banks and a few others having access to BoE electronic money in the form of reserves everyone would have access to it. Banks would operate in the way that most people think they operate now - as true intermediaries between savers and borrowers. When they lent money in return for a loan agreement that money would exist before the loan was made, and, more importantly, it would continue to exist when it was repaid.

Therefore the money supply would be entirely divorced from people's willingness to take on debt, which of course it should be because money and debt serve completely different purposes. As a result booms and busts would at worst be very much smaller than they are now, and quite possibly might become no more than periodic undulations in a smoothly running economy.

Money would be created by a new committee of the BoE - the Money Creation Committee (MCC) - working independently of government and as now targeting a consumer price inflation rate of 2%. Newly created money would be handed to the government of the day to use as it deemed fit, which would largely consist of spending in the economy. Initially the money supply wouldn't change. All existing bank money would become state-issued electronic currency owned by the customers who formerly held bank money, though banks would continue to administer transactions on behalf of customers.

The imperative for people to keep taking on debt would no longer exist. Debts would be available to those who wanted them, but without any of the taxpayer subsidies to banks there would be more money circulating in the wealth creating economy and much less need for debts. Also the government (and therefore society) would enjoy the seigniorage (profit from creating money consisting of its face value) of newly created MCC money. This would be worth in excess of £50 billion per year⁴ - almost half the cost of the NHS. People saving money would take it out of circulation as it does now, but if the extent threatened to damage transactions the MCC would compensate by putting an equivalent amount back into circulation so the circulating money wouldn't change. Conversely if many people drew down their savings for spending at the same time then the MCC would create correspondingly less money in order to offset it.

Private banks would continue to exist and to provide the same services that they do now, though without all the massive subsidies. Some say that banks wouldn't take on this function because they wouldn't be profitable, but it's the degree of integration and insurance against the massive risks currently taken by taxpayers on banks' behalf that make them unprofitable now without subsidies. There is no reason why much simpler

³ <http://positivemoney.org/our-proposals/>

⁴ Estimated in Huber and Robertson 2000 p2 and Appendix, Table 4G. It was estimated at £47 billion in 2000, so it is likely to be much more today.

banks couldn't be profitable, lending to good quality borrowers with little default risk. Perhaps the big banks would move their businesses abroad to where they could avoid all the restrictions, but others would soon take their place. The services provided to current account holders would attract fees, as they used to do and still do for business account holders, but these fees would be negligible in comparison with the current hidden fees that everyone pays to banks. It might even be that competition - genuine competition this time - between new banks would allow some to offer current accounts free, or perhaps on condition that some money is tied up in investment products - time will tell.

No bank would be too big to fail, a failed bank would go bankrupt just like any other business, but customers' money, unless it is invested in the bank, would remain safe because it couldn't be accessed by the bank for its own purposes. Former savings accounts would become investment accounts, where interest would be paid and the money lent to borrowers, and that money would then be at risk from the bank failing just like money invested in any other business. Banks would continue to operate the payments system as they do now in conjunction with settlement systems, but there would be provision for the state to take over all payment and settlement functions at short notice in the event of all banks ceasing to function at the same time.

There would be no need for any international repercussions because from outside pounds sterling would look exactly the same as they do now. The currency would very probably be more stable than currently as this reform would remove many sources of instability.

Positive Money has also dealt with all the common criticisms of these proposals, and these are set out on their website.⁵

⁵ <http://positivemoney.org/2015/08/sovereign-money-common-critiques/>

Part 2b

Asset Juggling: Financial Trading

56 The Evolution of Modern Trading

Before the 1980s banking and financial trading were based on relationships. Bankers and Stockbrokers knew their clients personally, success in their professions depended critically on sound judgement and good reputations, which were guarded and nurtured by exercising caution and providing carefully considered advice. It was a time when integrity and trust were the bedrock of the sector. Today things are very different. Anonymous markets have replaced personal relationships, finance is dominated by trading, and trading is a principal source of revenue and remuneration. Fifty years ago the average length of time that a company share was held was seven years, today, thanks to computerised high frequency trading, it is twenty-two seconds.¹

The changes accelerated after 1980 because of extensive deregulation, and increased the sector's turnover and profitability dramatically - a process known as **financialisation**. However the changes had little to do with the real needs of the economy. Those needs remain the same now as earlier - payment processing; credit; management of personal finances; and management of risk (Kay 2015 p18). However changes were taking place before that in the early 1970s following the US's abandonment of the international gold standard in 1971. That killed off the Bretton Woods agreement that had been reached in 1944 in the last years of the Second World War, and ushered in floating exchange rates. Details of these events and their wider implications are covered in Part 3. This triggered the explosion in derivative trading, which now dwarfs world trade in non-financial goods and services.

Derivatives are financial products whose value is derived from some other financial or non-financial product, and some have been around for a long time. For example futures contracts for agricultural produce allow farmers to agree today a price for produce that will not be available for several months, thereby relieving them of risks associated with later price fluctuations. In effect they provide insurance against price drops, but at the cost of missing out on possible price rises. Farmers value these products because they can plan for the future rather than having to gamble on it.

When floating exchange rates came about so did associated risks due to exchange rate fluctuations, which exporters and importers preferred to avoid, so contracts in foreign exchange futures became popular. Options are another form of derivative contract with a long history. These give the holder the option, but not the obligation, to buy or sell a particular commodity or stock at a given price at a given time in the future. Like futures contracts, option contracts are themselves tradable at any time before they expire, and markets exist for the purpose.

The range of derivatives has mushroomed in recent years, now not only providing insurance against future risks, but access to otherwise hard-to-trade assets such as

¹ <http://www.telegraph.co.uk/finance/personalfinance/investing/9021946/How-long-does-the-average-share-holding-last-Just-22-seconds.html>

commodities, products designed to take advantage of tax rules, and products of largely speculative interest.² Some of the more common derivatives include forwards, futures, options, swaps, and variations on these such as synthetic collateralised debt obligations (*don't ask!*) and credit default swaps. All are tradable and speculation in them is rife. Derivatives form one of the three main types of financial asset, the others being equity (company shares) and debt (bonds, mortgages etc.). Much of the growth in the financial sector since 1980 has been the direct and indirect consequence of the growth in derivatives markets (Kay 2015 p19). Banks and associated financial companies create derivatives and collect fees when people trade in them, and banks lend money to those who want to carry out those trades, so they are hugely profitable for the banking and financial trading sector, and this is why they have expanded so dramatically since deregulation.

Derivatives also increase the level of complexity and integration in the financial world. We have already seen that banks, financial trading companies and insurance companies have become ever more tightly bound together, not only with each other under global parent corporations but also between each other by an interconnecting web of debt contracts. Derivatives extend the complexity and integration further by binding financial products together. In worrying about financial crises it isn't the size of individual companies that poses the problem - expressed as 'too big to fail' - it's the degree of coupling between them, where the tighter the coupling the more they act as a single company and the more likely they are to fail together.

Trying to limit the risk of financial crises by making individual banks and financial companies smaller, when they are all tightly coupled together, is like trying to limit the crash risk to train passengers by making individual carriages smaller.

The derivatives market is huge, estimated in 2015 to be \$1,200 trillion³, which is more than ten times world GDP. There are several reasons. Firstly the same assets might be involved in several different derivatives so they are counted multiple times; secondly many derivatives are hard to value accurately so for simplicity they are valued at the underlying asset value; and thirdly because derivatives are often used to hedge risks there's a good chance that many contracts cancel one another out.⁴

² [https://en.wikipedia.org/wiki/Derivative_\(finance\)](https://en.wikipedia.org/wiki/Derivative_(finance))

³ <http://www.investopedia.com/ask/answers/052715/how-big-derivatives-market.asp>

⁴ A good explanation is provided at

http://www.slate.com/articles/news_and_politics/explainer/2008/10/596_trillion.html

57 Financial Asset Markets

It is well known and can be observed daily that these markets display great volatility and are highly unstable. Price charts of all assets - equities, commodities, derivatives, foreign currency and debt assets - show that prices in these markets are in constant movement up and down, never settling in any stable state. Also such charts are all very similar in their appearance because they reflect human behaviour rather than changes in the assets themselves.

What's happening? Can the underlying assets really be changing in value to such an extent and so quickly? Well it depends on what is meant by value. The exchange value certainly changes that much and that quickly because the price that willing sellers and willing buyers agree on is the exchange value. But the inherent value of that which is represented by the asset only changes when something specific happens that can affect it, such as poor company results, the appearance of a powerful competitor, changes in the rate of inflation or government or central bank action. These changes are of course immediately reflected in exchange values, but exchange values also change because market participants' estimation of the relevance and importance of these things differ, so not all revise their exchange valuations to the same extent.

So far everything that has been cited is to be expected, but there is another major factor that comes into play with assets, and that is that buyers' and sellers' emotions and therefore actions are very much dependent on other buyers' and sellers' actions, as reflected in price changes second by second, hour by hour and day by day, and all participants scrutinise these prices and therefore each other constantly. Buyers and sellers in these markets are therefore anything but independent, and the markets they engage in rarely if ever reach a stable state. Greed and fear are the two emotional and extremely powerful drivers - greed fuels the desire not to miss a likely price rise - buy! buy! buy!, and fear, which often turns to panic, fuels the desperation not to be left holding a worthless asset - SELL! SELL! SELL! The trader's philosophy, especially in the case of selling, is 'trade first and ask questions later'.

Hence positive feedback - participants watching and being guided by what others are doing - is at work in these markets constantly. The mechanism is that a watcher, seeing several buy orders go in for an asset and the price rising accordingly, thinks that others must know something that he or she doesn't, so they go along with the crowd and as others make the same deduction the price keeps rising. Before too long a few people start to become nervous that the rise can't continue and they sell to make a quick profit, and this causes the price rise to level off, bringing in more sellers and reducing the number of buyers. Eventually sellers exceed buyers and the price starts to fall, and that is the signal for yet more selling to gather pace. The reverse then happens as earlier buyers who missed out on the price they wanted find that they have another chance and take it, and up it goes again, the chart moving in a zigzag fashion, often in a fixed and easily identifiable price band where the upper level is known as the resistance level and the

lower as the support level. These levels are the prices at which sentiment changes, and participants watch these avidly, some trading between the bands and others awaiting a 'breakthrough', which is interpreted as a strong signal to buy in the rising direction and a signal to sell in the falling direction. The remarkable thing is that similar zigzags and levels appear second by second, minute by minute, hour by hour and day by day, in fact in all time periods, reflecting the time frame that particular groups of speculators trade on. The second by second zigzags themselves zig and zag creating rising and falling zigzag patterns that last for minutes, and they create rising and falling zigzag patterns that last for hours and so on. And it's all driven by millions of buyers and sellers betting against each other, many of these buyers and sellers now being computer programs, betting against other similar computer programs and often buying and selling thousands of times a second to exploit tiny price differences.

What makes the financial situation even more dangerous is that the major players in these markets use what is called '**margin trading**' - where banks lend them the money to buy the lion's share, often as much as 90% (known as **margin factor**) or even more of the exchange value of the assets, with the assets themselves acting as collateral for the loans. This is called '**leverage**', where the amount bought is levered up from the amount paid. Leverage amplifies the price movements and the positive feedback by the margin factor. It works by allowing a buyer to buy five or ten times as much of an asset as they have money for, thereby amplifying the buy order and price rise accordingly and the corresponding sell order and price fall when sold (Reiss 2011 Chapter 6).

As has been seen in chapter 52 bank lending is itself subject to positive feedback, and a process with positive feedback of its own applied to another process with positive feedback creates one with a level of instability that can be explosive. This is how it happens: if prices move against the player who has assets on maximum margin then the allowable margin is exceeded, and the bank issues a 'margin call' - it demands either more money from the player or the selling of some of the assets so as to restore the margin factor. The bank is usually also the broker so if the margin call is not heeded the bank itself starts to sell the player's assets. In this situation assets are sold not because the seller thinks they are worth less but because a margin call has been issued and the margin factor must be re-established. The seller might not think the value has changed, but everyone else in the market who sees the corresponding price drop does, and then they too sell and the price falls even further and then they too are likely to be issued with margin calls and the effect rapidly snowballs (Buchanan 2013 pp212-213). The same effect is seen in interbank lending, where the collateral that is posted against a loan falls in price, requiring more collateral, and selling of assets by the borrowing bank to obtain it, causing yet further price falls (Turner 2016 p102). These effects were significant factors in the 2008 crash.

All this wouldn't matter if it only affected the players themselves, but with banks involved and with really serious snowball price falls the players soon can't meet the margin calls, and the banks are left with debts that borrowers can't repay and collateral that no longer covers them. Then the banks are in trouble, and because society depends on banks' ability to make payments for everyone to carry out normal everyday transactions the government can't allow them to fail, so it is the taxpayer who bails them out by taking on the debts that the asset market players can't pay.

Because all the players want to do is gamble, and because direct asset purchase and

sale can be costly and often difficult or inconvenient, banks have created derivative products that avoid the need to buy the assets themselves. Instead players buy and sell these derivatives with the bank acting as intermediary in the process. In effect they buy and sell them to bet on future price changes. Contracts for difference (CFDs) and spread betting are two popular forms of derivative for this purpose and offer greater flexibility in that they allow bets to be placed on prices falling. They also offer the ability to play in many different types of market. Leverage is routinely offered for these products.

The fact that people are buying and selling things not because they want them for themselves but to make money means that they don't follow the usual supply and demand behaviour of consumable products. In fact there are buyers waiting for the price to fall before they buy if they think the price is too high, but other buyers waiting for the price to rise before they buy, hoping for the price rise to signal further price rises, and the same for sellers. It makes for a very complex market. It provides yet more evidence that participants aren't independent, because buyers buying on price rises and sellers selling on price falls depend for success on the herd instinct kicking in to bring about further rises or falls, which it often does. In fact, so commonplace and well known is this phenomenon that it has its own name - 'momentum investing'.¹ The Efficient Markets Hypothesis, not surprisingly, has a hard time trying to explain it.

Buyers who buy more in response to a price rise often give rise to bubbles because their willingness to buy has increased and this inflates the price without there being any increase in underlying value. Bubbles always collapse sooner or later because they only inflate as long as new buyers keep entering the market, and new buyers can't be found indefinitely, so when they run out the price levels off, then falls sharply as sellers stampede to be the first to sell. An odd thing about bubbles is that even when some players recognise them as such they continue to inflate because of the 'greater fool' theory mentioned earlier - I might be a fool to buy this product at this price, but there will be an even greater fool along shortly that I can sell it to and make a nice profit. It can be very disturbing to participants who hold off buying or sell an asset short (i.e. borrow a quantity of the asset from someone else and sell it, with an agreement to buy it back and replace it at a later date when the short seller hopes the price has fallen) in expectation of a price drop, only to watch the price keep on rising. Keynes had a lovely quotation for just this situation:

The market can remain irrational longer than you can remain solvent.

Indeed so!

The positive feedback that characterises financial markets makes them subject to manipulation by big players, who are able to buy in quantity and await the usual herd mentality that kicks in and inflates the price further, then sell at a nice profit. The same applies for selling. This kind of manipulation works to the advantage of speculators who are both sizeable and quick off the mark, but injects a destabilising effect on the market as a whole. Deliberate market manipulation is illegal, but the rewards are high so it goes on all the time. Insider dealing is also illegal - this is trading on information that is not in the public domain - but occurs because it is so lucrative. Many of the senior managers and directors of companies quoted on stock exchanges are very knowledgeable about

¹ https://en.wikipedia.org/wiki/Momentum_investing

impending good and bad news before it is made public, and there are very many of them. In fact people in the know don't just work for the companies themselves, they work for accountancy firms, law firms, banking corporations, consultants and so on, so the opportunities for insider dealing are widespread and the rewards very high indeed.

Perhaps the saddest thing about all this is that so many very talented people are spending all their time gambling against each other, or managing computer programs to do the gambling for them. What a dreadful waste. The argument in favour is that this kind of trading maintains a liquid market for assets, which is desirable as it allows people to buy or sell them easily for reasons other than for gambling. However this reason nowhere near justifies the level of activity or the dangers that we see in these markets. Another of Keynes' quotations is very apt:

When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done.

Since the deregulation of finance in the 1980s, after which banks were permitted to offer mortgages on much more profitable terms², property has become a very popular form of investment. It is driven by the same mechanisms as drive other tradable assets, though on a longer timescale since there is as yet no immediately available central market for trading property - though it has found its way in the form of property indices into spread betting derivatives. This phenomenon has emerged because banks strongly favour lending on property over businesses because of the immediately available collateral, and have encouraged buying in quantity by existing and new landlords using buy-to-let mortgages. Prices have risen considerably as a result of all this buying activity, and governments like rising property prices because of the feel-good factor for property owners which they hope will be translated into votes. However this development is unfortunate because those who want property to live in have to pay an increasing share of their income in mortgage payments to banks or in rental payments to landlords, which is good for banks and landlords but bad for those individuals and for the economy because there is less of that income available for spending on consumption - it takes money out of the wealth-creating loop - which is what a healthy economy depends on - see chapters 20 (especially section 20.5) and 24.

² http://eprints.lse.ac.uk/38285/1/Scanlon_Whitehead_The-UK-mortgage-market-responding-to-volatility_2011.pdf

58 Pooled Investment Funds

The basic financial assets (also known as **financial instruments**) - equities, debt and derivatives - are sold not only singly but also more usually in pooled investments, known as funds - thousands of them! These are managed by a host of providers, including all the big banks, each running several or many separate funds, and each fund investing in various combinations of UK and foreign equities, bonds, and derivatives. Insurance companies also manage funds linked to endowment and life policies. Advantages claimed for pooled funds include diversification over many different investment types so as to reduce risk, management by experts, shared costs, and less work because all the buying, selling and associated administration are done by the provider. The most popular in the UK are unit trusts and open-ended investment companies (OEICs). In the US they are known as mutual funds.

Funds can be actively managed, where a manager is appointed to oversee the fund, select particular investments and buy and sell as he or she sees fit in accordance with the fund policy as specified in its prospectus; or passively managed, where investments are selected automatically so as to match the performance of a particular index such as the FTSE 100. Passive fund charges are lowest because they involve much less management than active funds, and passive funds do significantly better than the majority of active funds because of the lower charges.

Fund providers were given a great boost with the migration from defined benefit (you know what you will get) pension schemes to defined contribution (you know what you will pay but not what you will get) schemes. This migration was sold as giving people more choice and control over their own pensions, but the real reason was to transfer risks from employers to employees. Employers lost the risk of suffering future heavy pension liabilities and employees took on the risk of inadequate future pensions. As will be seen, the real winner from the migration was the financial trading sector, and it won massively.

All companies selling pooled investments claim outstanding performance for the funds they want to promote, and carefully worded advertising can give that impression, often by showing how much an investment would now be worth if it had been held from the outset of the fund, by listing yearly growth over the last few years, or by providing growth charts. However what is not said is that many new funds are started every year, and that all funds start with a relatively small amount of capital. Some do well and some do badly, and the bad ones aren't mentioned publicly but are merged into existing bigger funds. What is important to note is that funds with a small amount of capital have much greater scope for doing both well and badly. To understand why this is consider investing in a single lottery ticket; it has a very small chance of winning a very big amount, so if it does win then its investment growth has been phenomenal. Now consider investing in every single lottery ticket for a particular draw. All the prizes are won but the cost has been enormous, and overall the investment won't have grown at all,

in fact it will have lost by the amount that is taken for administration and awarded for lottery-funded projects. As badly performing funds are weeded out what are left are the well performing funds, which after several years begin to be advertised and grow substantially in terms of invested capital as new investors buy in - that isn't investment growth, it's growth in fund size. Now, because more is invested the performance begins to match more closely the benchmark for that type of fund, and all funds have benchmarks which represent the overall performance of funds investing in similar asset classes. This is the same as would happen if more and more lottery tickets were bought. Nevertheless, by advertising the (correct but very misleading) outstanding early growth, and by combining the high initial growth with later lower growth or even decline, the impression is given that the fund will continue to deliver outstanding growth, but that becomes increasingly unlikely as the fund size grows. Let's consider an example, originally quoted by Fabrice Taylor for the *Globe and Mail*¹:

A manager can wipe out hundreds of millions of dollars of value and still enjoy a sterling investment track record. How? Suppose a company launches a fund with \$10-million and the manager returns 100 per cent in the first year, doubling the assets to \$20-million. That stellar return attracts \$500-million in new investment at the beginning of the second year. But the manager then loses 40 per cent, or just over \$200-million. Yet the average annualized return over the two years is still about 9.5 per cent, and the fund can use that number in its marketing, despite having destroyed a massive amount of money.

How can the company claim a two-year performance of 9.5% per year after losing \$200 million? It's because only fund performance (growth or decline due to investment skill - or lack of it) is counted, and not fund growth due to new investment. In the first year the fund performance was 100%, in the second year the performance was -40%, so we take a starting value of 1, then double it to 2 after the first year. Then we ignore the fact that massive new investment piled in as a result of the widespread advertising campaign, so at the start of year two the fund is still 2 - for performance analysis purposes. During the second year the fund lost 40% so what was 2 at the start of the year is 1.2 at the end. Now overall growth of 1 to 1.2 in two years is a yearly growth of 9.545% per year, or 9.5% in round terms. However the chances are overwhelmingly likely that if you were an investor in the fund you would have made your investment at the end of year 1 in response to the adverts, and after the second year you would have lost 40% of your investment. Nevertheless the company can still claim and advertise growth of 9.5% per year over two years, which isn't quite a lie, but very misleading.

If a particular manager's fund does better than the benchmark then they are rewarded more, but if it does significantly worse their reputation suffers, and if poor performance continues they are sacked. Therefore, given such a major difference between good and bad performance in terms of the effects on the manager, a sensible manager tries to match the benchmark as closely as possible so as to avoid being sacked and to retain an

¹ Fabrice Taylor is a Canadian financial journalist, publisher and investor, see <http://www.theglobeandmail.com/report-on-business/rob-magazine/the-dirty-tricks-of-the-investing-trade/article5767371/>

exceptionally good income.² Note that it is benchmark rather than absolute performance that matters, so if the benchmark drops by 20% in a given year then a manager whose fund also drops by 20% won't suffer a penalty and if the fund drops by only 15% then he or she is rewarded for good performance. Staying close to the benchmark isn't difficult; all a manager has to do is maintain a similar (not identical as that would be too obvious) proportion of investments for the fund as there are in the overall total of investments in the benchmark (Kay 2015 p206). That's not to say that there aren't any exceptionally good fund managers, look at Warren Buffet for example. But for every Warren Buffet there are hundreds or even thousands of mediocre managers. Bear in mind too that they are all fishing in the same pool, so average performance can't be better than the performance of the pool itself; in fact it has to be worse because of all the fees that are taken by the managers and providers.

In 2008 Warren Buffet made a \$1 million bet with money management firm Protege Partners.³ The bet was that Buffet could choose a simple index fund (one that mimics the performance of a financial index, in this case the Standard and Poor 500, being the performance of the largest 500 companies listed on US stock exchanges) that would perform better than a group of five funds chosen by Protege Partners. In May 2016 Buffet's fund was up 65% and Protege's up 22%. Interestingly if all fees are excluded Protege's funds grew by 49%, which is still less than Buffet's but shows quite dramatically the effect that fees have on performance of pooled funds. The bet still has some time to run, but the chance that Buffet will lose is by now vanishingly small. The \$1 million will go to charity.

Fund managers and providers are all very handsomely rewarded - paid not for the work they do but as a generous proportion of the value of the funds they manage, taken directly from investors in those funds. The incentive that fund managers have is therefore to grow the funds they manage as much as possible, and growth can be fuelled much more reliably by the addition of new investors - tempted in by advertising - than by good performance. What fund managers and providers want therefore is plenty of funds that they can advertise as having done exceptionally well in the past, so as to bring in many new investors and boost their own salaries and bonuses.

The fact that management and related fees are calculated as a proportion of the fund capital rather than of the investment gain means that fund managers and providers don't take risks - their income is assured whether the investments under management do well or badly. The investment risks are taken by the investors who often lose significant amounts. All adverts carry a disclaimer warning investors of the risks, but providers aren't as keen to make clear their own risk-free position:

The value of investments and the income received from them can fall as well as rise. Investors may not get back the amount invested *but the providers will be very handsomely rewarded whatever the outcome.*

Even worse are hedge funds, which are able to borrow money and also have available

² <http://www.cnbc.com/2014/04/25/can-anything-save-active-management.html?view=story&%24DEVICE%24=native-android-mobile>

³ <http://fortune.com/2016/05/11/warren-buffett-hedge-fund-bet/>

to them a much wider range of investments, including short selling, because they are only available to wealthier and institutional investors who are deemed to understand the risks. These funds typically charge 2% of the capital under management per year plus 20% of any gains made in the year. If the fund loses value then the 2% is still taken but no contribution is made to the loss. In this way hedge fund managers take a big slice of any winnings, but if there are losses the investors bear them all in addition to the 2% that the managers still take. Hedge funds sometimes produce very high returns, which make the managers seem very skilled, but they do it largely by borrowing money to invest. For example an investment that normally returns 5% can be boosted massively by borrowing ten times the fund's own money and investing all of it. Say £1,000 of the fund's own money is used together with £10,000 of borrowed money at 1% interest. After a normal year the total would be £11,550 (105% of £11,000), but £10,100 would be paid back to the lender (£100 is the interest), so the net return is £1,450. This represents a return of 45% on the original fund stake of £1,000. A return like that makes the manager seem as though he or she is a genius, but not so, what is happening is just gambling. Just as easily the investment might have dropped in value by 3%. In that case the total would be worth £10,670 (97% of £11,000), but £10,100 still has to be repaid to the lender, so the original £1,000 is now worth £570, a loss of 43%. Because of this many hedge funds go bankrupt, but while they exist the manager still pockets 2% of the fund value and 20% of the gains in the winning years - *nice!* This is why hedge fund managers can and do become fabulously wealthy, but their clients usually don't (Kay 2015 p99).

59 *Wealth Extraction by Fund Providers, Managers and Others*

Fees are taken from pooled investments in the following ways:

- One-off charges: so called 'entry' or 'exit' charges can be up to 5% but relatively few funds now levy them, and where they are levied they can usually be avoided by buying through a broker.
- Annual charges: typically between 0.75% and 1.25% for actively managed funds and between 0.25% and 0.85% for passive funds.¹
- Trading fees and commissions: charged each time assets are bought or sold within a fund. A typical fund changes all assets every year, which can add 1.8% to the annual charges.²

Overall for an active fund typical annual charges amount to about 2.5%, with significant variations between funds. This is still high but lower than it used to be before the Financial Conduct Authority (FCA) changed the rules.³ Nevertheless 2.5%, levied on the total investment in a fund every year represents a huge amount. It means that if a fund grows at an average of 5% per year - which is a good return - then about as much is paid in fees as is gained. One reason the fees are so high is because there are so many middle-men involved. John Kay gives a list in his book (Kay 2015 p207). They include registrars, custodians, nominees, asset managers, investment consultants, fund trustees, financial advisers, insurance companies, trading platforms, traders, stock exchanges and investment banks. All are very highly rewarded for their contributions.

Take an example: Say a wealthy father starts a fund with £100,000 for his daughter when she is born. When she cashes it in at the age of twenty-one at an average growth rate of 5% per year ignoring fees it would be worth £278,000 if all growth had been re-invested each year, but not all growth was re-invested, 2.5% was removed in fees each year so the annual growth she sees is only 2.375% and she only gets £163,700, with £70,400 paid out in fees.⁴

Is £70,400 a reasonable sum to pay for the service that has been provided? The fact that this sum is taken from growth, which is never seen by the father, makes it seem as

¹ <https://www.moneyadviceservice.org.uk/en/articles/understanding-investment-fees>

² <http://www.which.co.uk/money/savings-and-investments/guides/different-types-of-investment/are-fund-charges-eating-into-your-returns/>

³ <http://www.which.co.uk/money/savings-and-investments/guides/different-types-of-investment/a-guide-to-unit-trusts-and-oiecs/>

⁴ Annual growth of 5% for 21 years with principal of £100,000 is calculated as $£100,000 \times (1.05^{21}) = £278,000$, whereas annual growth at 5% with fees of 2.5% removed each year after that year's growth gives a net growth rate of just under 2.5% (it would be 2.5% if the fees were taken without that year's growth added). The symbol ^ means 'to the power of', so for example $3^6 = 3 \times 3 \times 3 \times 3 \times 3 \times 3$.

though no money has been paid at all. In effect it is a disguised cost - and that is how the sector gets away with it. If, instead, the father decided to make the daughter a gift of £278,000 on her 21st birthday, but her bank told him that it had deducted £70,400 for making the transfer, he would probably faint on the spot. Clearly there are very significant differences in these two situations but they serve to illustrate the very different impact that a large unexpected charge makes on a person from an equivalent lower gain, especially when the gain was always going to be uncertain.

"People don't miss what they never had" - the unspoken rallying cry of the financial trading sector.

The factor that makes it easy to extract money for financial trading is that what the investor pays for is future hopes and expectations, which are magnified by distorted advertising. Traders sell expectations - very dearly - but are careful to ensure that failure to deliver carries no comebacks.

Let's take another example of a similar fund that grows at 2.5% per year ignoring fees. After twenty-one years it would be worth £168,000, but after fees it is worth £98,700 - a slight drop in value. Nevertheless the fund provider, managers and associated dealers and traders have taken £53,500. How's that for value? In this case the father would probably react badly because his money was worth substantially less because of inflation as well as the slight drop, even though the provider had taken less in fees than in the earlier case.⁵

The sector justifies its fees by the 'service' it provides and the 'expertise' that is applied, but we can judge the validity of these claims when we compare the 'experts' incomes with the incomes of similarly qualified people in other professions, when we find that they are several tens and sometimes hundreds of times more.

An estimate of the real value of fund management services can be made by looking at the charges for passive fund management, administered by computers rather than 'experts', which are of the order of 0.25% per year for the lowest charging funds.⁶ This is still enough to pay all the providers' salaries and administration costs because they don't run funds at a loss. What investors pay is more than this by the amount of trading costs and commissions, but much of that cost is also extracted, so let's err on the generous side and add a further 0.25% for these services, giving 0.5% overall. This will also allow for government stamp duty which is payable at 0.5% of the value of all UK shares that are bought. Passive funds don't turn over their holdings to the same extent as actively managed funds so there will be considerably less stamp duty to pay. But what about the salaries of fund managers? Well, since funds under active management do significantly worse on average than passive funds⁷ it doesn't seem a good idea to pay people very well indeed just to lose other people's money. If any of those managers really do have exceptional investing skills then they can make a good living by investing their own money. There will still be a need for pooled funds and for fund managers, but there is no need for so many funds and therefore no need for so many managers, and certainly no

⁵ In this case the fund grows at 2.5% each year, but again the fees are taken after each year's growth, so the net growth rate is slightly negative overall.

⁶ <https://www.moneyadvice.service.org.uk/en/articles/understanding-investment-fees>

⁷ <https://www.betterment.com/resources/investment-strategy/index-fund-portfolios-win/>

need for such high salaries and bonuses - see the next chapter.

For the first example, growth after fees would be just under 4.5% and the amount returned to the daughter after twenty-one years would be £251,000. The amount paid in fees would be £17,700, which seems a much fairer price for the service, though still quite generous. That means that £52,700 of the earlier £70,400 had been extracted rather than earned.

For the second example growth after fees would be just under 2% and the amount returned to the daughter after twenty-one years would be £151,200. The amount paid in fees would be £13,200, which means that £40,300 of the earlier £53,500 had been extracted rather than earned.

From these examples it can be seen that overall wealth extraction by the financial trading sector is huge. Taken together with wealth extraction by the banking sector and all the many other exploiters and ratchet services it is clear that wealth transfer from ordinary people to those who ride on their backs is vast. Additionally every one of the very many talented people employed in wealth extraction represents a wasted wealth creation opportunity.

This explains where all the money comes from that pays the enormous salaries of the armies of traders in Canary Wharf and elsewhere. Although they spend all their time trading against each other, which is a zero sum game for all players taken together⁸, the money they make as a group isn't from trading; it's from the real-world earnings of investors in the funds, especially pension funds.

What financial traders do is to sell claims on future monetary returns, so it is easy to make claims that can't be refuted at the time they are made but can turn out to be hopelessly inaccurate. They are able to milk off a large share of any growth that does occur, and still make a handsome profit even if there are losses, all at buyers' expense. All the traders' protections and all the buyers' risks are very neatly spelled out in the small print of the terms and conditions drawn up by ranks of clever lawyers on the payroll.

How much wealth is extracted by the UK financial trading sector as a whole? David Craig (Craig 2011) maintained that it was £105 billion per year - £413 million every working day in 2011, but the fee structure was tightened by the FCA in 2013 and 2014 so it is probably less now, though still very substantial. For comparison purposes £105 billion is about the annual cost of the NHS.

The situation in the US is very similar. Stewart L Brown of the Department of Finance at Florida State University wrote a very detailed paper in November 2016⁹ in which he analysed all associated costs for pooled investment funds (known as mutual funds in the US), showing that they totalled about 2.6% of funds under management (Part V Section D Page 32). The subject of the paper was Regulatory Capture, costs to fund holders being one of the elements. This is the abstract:

⁸ It isn't quite a zero sum game as overall growth is the growth of the totality of investments, but that is longer-term growth whereas trading is carried out on a very short timescale, so for those short timescales to all intents and purposes it is zero sum.

⁹ Downloadable from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2854312

Regulatory agencies are created to act in the public interest but often end up acting in the interests of those regulated. This is known as regulatory capture. The mutual fund industry is the custodian of massive levels of wealth of the investing public and is regulated by the Securities Exchange Commission ("the SEC"). Mutual fund assets are currently in the neighborhood of \$16 trillion and these assets generate revenues in excess of \$100 billion per year for the firms that manage mutual funds. The investment management industry is incentivized to influence the regulators by whatever means available to maximize profits for their owners. This paper documents how the investment management industry has captured the SEC in certain key policy areas. As a result, the industry is able to siphon off billions of dollars per year in excessive and often hidden fees. The SEC has within its power to unilaterally blunt the worse abuses if it were willing to act in the public interest.

The \$100 billion figure quoted above is for fund management and is just one of the many costs borne by fund holders. In Part 7 of the paper he quotes US Senator Peter Fitzgerald:

The mutual fund industry is now the world's largest skimming operation - a \$7 trillion trough from which fund managers, brokers and other insiders are steadily siphoning off an excessive slice of the Nation's household, college, and retirement savings.¹⁰

Part 6 of Brown's paper describes the attempts by Sen. Fitzgerald to bring into law the Mutual Fund Reform Act of 2004, which would have addressed the concerns. However in spite of being supported by both democrats and republicans it was killed by the chairman of the examining committee who used his discretion not to bring it to a vote.

¹⁰ Fitzgerald made his remark in 2003, that's why his figure of \$7 trillion differs from Brown's 2015 figure of \$16 trillion.

60 How Can Wealth Extraction be Eliminated from Financial Trading?

Wealth extraction is exploitation, and can never be justified, so what can be done about it? Advertising has already been mentioned as a ratchet service and is a major driver of extraction in financial trading. I shall argue in chapter 100 section 100.9 that advertising that seeks to manipulate or persuade by any form of deception, selective information or emotional appeal should be prohibited, because it distorts markets and costs society dearly in diverting the efforts of so many talented people away from good wealth creation. These measures would also help in limiting financial trading extraction, but I believe that there are additional and more effective methods available. Most ordinary people (as opposed to those who invest professionally or from personal interest) who invest for the future don't want to spend time thinking or worrying about what to invest in, they want to put money aside, perhaps regularly, for use later in life, in the belief that it will stand a very good chance of growing over the years. The finance sector serves these people very badly. They are presented with a plethora of choices, all claiming to be better than the rest, so they are forced to gamble. Some go to financial advisers for help, of whom some have a high level of personal integrity and some haven't, some are very knowledgeable and some aren't. But how is a person to tell the difference? Adverts don't help and word of mouth is similarly unreliable because it's usually based on recent experience whereas investments take years to show their potential. Again it's a gamble.

People deserve better than this.

What drives investment growth? It is re-investment of the return from the investment. Note that this is not the same as economic growth. The economy as a whole may grow or decline, but investment return is linked only loosely to that growth or decline. If I lend money at interest, I expect to be paid whatever the economy does. Similarly if I own a factory, I expect to make profits whatever the economy does, though I can normally expect higher profits in a growing economy and lower profits in a declining economy. The return on investments as a whole relates to the share of national income taken by capital (in the broadest sense) as opposed to the share taken by labour - see chapter 97 - whereas economic growth or decline affects the amount of national income. If the national income shares are fixed then investment returns grow with a growing economy and vice versa, but in reality the shares vary continuously and the amount varies continuously, so although there is linkage it is a loose linkage. Some investments, such as high value property in capital cities, grow at certain times significantly faster than other investments, but this growth is driven by increasing willingness to buy, which is balanced by reduced willingness to buy other types of investment, which don't grow as much or decline in value. This is the basis of the investment problem - trying to pick investments that perform better than others.

At its heart investing is a simple business. Basically there are three¹ things in which to invest - equities, debt and hardware (property, commodities, antiques, precious metals, works of art, classic cars and so on). Equities and debt are financial assets whereas hardware consists of tangible assets. Derivatives are also a type of financial asset, but they are derived from one or other of these basic three and are often used to make investing in them, especially hardware, easier.

The single thing that an investor needs to specify, or be advised on, is the risk that he or she wishes to take. A high risk carries the chance of higher gains, but at the cost of the chance of lower gains or even losses. Equities and hardware in general carry higher risks, whereas debt in general carries lower risks, but there are wide variations within these groups. Another factor is inflation; debt suffers much more than equities or hardware in this respect. What is of particular note is that the potential gain from higher risk investments is higher than for lower risk investments even allowing for the risk, because the higher the risk the deeper the discount that investors demand.

Given these observations appropriate strategies can be worked out for particular investment aims. For example for pension purposes young people should invest in a wide range of equity and hardware derivative assets across the risk spectrum, the wide range ensuring adequate diversity so as to enjoy the higher average potential gain from higher risks without risk of major loss, and higher risk assets are suitable for young people because there is plenty of time for variations in performance to iron themselves out. Additionally young people don't want much exposure to inflation risk because this can erode inflation-sensitive investments very significantly over long periods of time. As working life progresses investments should switch progressively into lower risk areas, because there is less time for variations in value to recover and less time for inflation to erode inflation-sensitive investments. In the last few years before retirement the majority of investments should be in the lowest risk areas so as to keep what has already been gained. Different levels of risk can be taken to suit personal preference, or because a person has other sources of income.

It would be relatively easy for the state to sponsor an appropriate range of well-diversified not-for-profit funds covering all risk levels, suitable for all those who do not wish to take personal charge of their own investments. There would still be a need for managers of these funds, but there would be far fewer funds and therefore fewer managers, and they would be paid a normal professional salary related to the work they did, not a percentage of the funds under management. At the same time there would be free investment advice from independent state-sponsored advisers. I feel certain that these funds would be immensely popular because people would no longer need to fear being taken advantage of as they do with the vast choice of privately run investments and advice from private advisers. Privately run funds could continue, but with much tighter restrictions to prevent exploitation it is doubtful that any could compete successfully. Of course to make this happen we, and especially the government, would need to rid ourselves of the 'everything private is good, everything public is bad' neoliberal dogma. Investments by ordinary people and especially their pensions are far too important to be

¹ If foreign currencies are included there are four, but these are bets rather than investments, because they don't return any interest or dividends and they don't hold out any reliable hope of long-term increases in value, as do items of hardware used as investments.

exposed to 'free-to-exploit' market forces.

61 Speculation and Investment

There isn't a consensus on the difference between these two, I suspect because speculators don't enjoy the same gravitas that attaches to investors, so all prefer to be seen as investors. Because of this speculators are generally regarded as those who engage in short-term high-risk trading with all others regarded as investors.

I think there is a much more fundamental and important difference, and it is that speculators attempt to profit from price changes in a financial asset, whereas investors profit from its ongoing return in terms of dividends or interest. Speculators buy assets not because they want to keep them, but to sell them later in the hope of a profit. Investors buy assets because they want to keep them. On this view the vast majority of traders are speculators. They have little interest in dividends¹ or interest, except insofar as changes in these payments are reflected in changes in the asset's price.

Warren Buffet must be the best example of an investor. His strategy is to buy and hold, often indefinitely, and he sometimes backs his judgement by buying entire companies. He watches the performance of companies closely, analysing deeply their inherent value - their capacity to generate profits for as long a period as possible. His only interest in price is as a trigger to buy or buy more of a particular stock, his cue being when inherent value is well above the price for which it is offered. He sells stock only very rarely.

Investors are good for the economy. They are like engineers who ensure that the machines in their charge are properly looked after to ensure smooth running, maintained performance and long life. Investors commit for the long term.

Speculators are bad for the economy. They are gamblers, gambling with things that society depends on, and in the process often damage those things, sometimes fatally.

Speculators seek short-term profits, so they buy assets that for whatever reason they believe will rise in price, and sell assets that for whatever reason they believe will fall in price. Buying doesn't normally cause problems in itself, though it can set up the conditions for a later sell-off, it is selling that is potentially harmful. It was mentioned earlier that emotion fuels financial markets (see chapter 57), so that when an asset is subjected to heavy selling, either by a single large holder or by many small holders, other holders see what is happening and also sell for fear of being left with a worthless asset. In this way a cascade of selling can be triggered very easily, and is often started deliberately purely to profit from the drop in price. Short selling is very popular in these situations, when speculators borrow assets in order to sell them, hoping to buy them back later at a

¹ Yet dividends and future dividends are the only reason shares have any value at all (Reiss 2011 Chapter 5)

much lower price and profit from the difference. A variation on the same theme is also used by market makers² who are short of a particular stock - they drop the bid price sharply so as to panic holders into selling for fear of bigger drops to come, and then raise the bid price again as soon as they have the stock they want. It is known as a 'tree-shake', and is very frustrating for those who were panicked into selling (Burns 2007 pp85-87).

Speculators are gamblers, but the markets they gamble in behave differently to other gambling markets. When bets are placed in horse racing for example it is expected that the bets will alter the odds offered, but they aren't expected to affect a horse's chances of winning the race. But equity market bets do exactly that. The more a company attracts bets (shares are increasingly bought), the higher the share price and the higher the company's value - known as capitalisation. This makes it more secure, enabling it to borrow more and at cheaper rates; enjoy better credit terms from its suppliers; and offer lower prices or better credit terms to its customers. In other words its chance of success improves - if it was a horse it would be more likely to win the race. The opposite happens with selling, and this is a lot more serious. A company that suffers a heavy share price drop finds credit drying up and what credit is available is at higher rates; suppliers won't extend credit, instead demanding payment immediately or in advance; debtors delay payment in the hope of yet further delays if the company is wound up; and customers are asked to pay higher prices or are offered poorer credit terms. In other words its chance of failure rises. If it was a horse it would be more likely to lose the race. This is another example of positive feedback, in this case real company fortunes are tied to the activities of speculators. Speculation distorts the market. In a normal market a company does well or badly as its products are better or worse than similar products from other companies. But with speculation muddying the waters a company does well or badly as speculators, reacting en-masse, buy or sell its shares.

With respect to equities, investors and speculators are the owners of the company, so they do what they can to make management serve their interests. The problem is that investor and speculator interests couldn't be more different. Investors focus on long-term performance, even at the expense of short-term performance, whereas speculators focus on short-term performance, very often at the expense of long-term performance and even of long-term viability. The value to society and the country of a business is its performance over its lifetime - its long-term performance. A country's economy depends on the success of its companies, so anything that damages those companies damages the country's economy, and speculation does exactly that.

The way the market is structured now means that speculators are heavily in the majority, so they are the ones that management serve. Even their own rewards are based on share price (i.e. short-term performance), so inevitably they devote a great deal of time and effort to that single measure. If markets really were rational and efficient, as neoliberals like to believe, the share price would reflect the long-term wealth creating capacity of the company. But it doesn't, it reflects what buyers and sellers in the

² A market maker is someone who accepts a duty to both buy and sell a particular asset whenever the market is open. They buy at a lower price (the bid price) than they sell (the offer price), the difference being the spread, and that gives them their profit. They compete against other market makers, varying the prices continually so as to keep enough stock available for sale without accumulating too much of the stock.

marketplace are doing, and fewer and fewer of them base their decisions on a study of the company's long-term prospects as Warren Buffet does - in his case in meticulous detail. Therefore the share price becomes ever more susceptible to manipulation by speculators and especially managers, who have every incentive to postpone or abandon investments or research and development that cost money in the short term but only deliver benefits in the long term, even if without them the future viability of the company is threatened. Similarly they have every incentive to boost short-term performance at the expense of long-term performance, such as cutting back on maintenance, shedding staff and overworking remaining employees, and using creative accounting techniques to defer expenses and bring forward revenues. These things boost the share price, as does using retained earnings to buy back a company's own shares rather than using them for investment in future productivity - a practice that has become very common indeed but is seldom beneficial to the improvement of long-term performance. All this is in spite of everyone knowing full well that maximisation of wealth creation can only be achieved by taking good care of long-term performance.

As an example let's say a company with an average return of 3% on share capital per year can boost its short-term performance up to 5% for a year, but at the expense of long-term performance dropping to 1% for the next ten years, reducing the average performance over 11 years to 1.36%. Investors who knew about the plan would of course be very much against such a boost, but speculators who knew about it would be very much in favour. They would buy shares in order to enjoy the one-year boost, with the intention of selling before the share price dropped to reflect its longer-term return of 1%. Short-term share price boosting happens because speculators know that they can buy and sell rapidly, and the share price rises and falls in relation to short-term performance as a result. You might think that this example is too far-fetched, that no-one, speculators or investors would favour such a scheme, but it often happens as a result of share buybacks. Here a company uses its excess cash not to invest for the future, but to buy its own shares, thereby raising their price. If there are potential investments that the company could make for future benefit then foregoing them improves the share price in the short term at the expense of long-term performance. It is discussed further in chapter 94.

As might be expected banks are heavily involved in all of this activity, speculating on their own account and extending loans to speculators to encourage and amplify their bets, and as a result they tie the whole economic system to speculation. This is what they did in the run-up to the 2008 crash and what they are still doing.

This really is the speculating tail wagging the wealth creating dog.

When heavy selling occurs real damage can be done. In the case of equities a sudden drop in share price leaves companies very exposed. Everyone that deals with the company fears, quite reasonably, that the company is in financial trouble. Even if there was no basis for the original sell-off the imagined fears of later sellers soon become real in a self-fulfilling prophesy, and the company now finds itself, through no fault of its own, in severe financial trouble. All this can cause a perfectly sound company to go into liquidation because of cash-flow problems, or it can become a target for a hostile takeover, when often unscrupulous asset strippers move in to destroy what's left of it to sell the property and other assets at a nice profit. It's all good for the speculators and all bad for the company's employees, customers, suppliers and the economy.

It's one thing for a business to fail because of lack of demand for the wealth it creates, that's market competition working as it should, but quite another thing for it to fail for lack of capital – either because it can't obtain new credit or because interest payments on existing credit take the lion's share of revenue – when product demand is healthy.

Governments can suffer similarly if their bonds or currencies are sold heavily, in which case the economy may collapse when they can no longer borrow money at the interest rates that are on offer and they default on their debts and on paying their employees. Alternatively the IMF may step in with a loan and a host of punishing conditions that make the situation even worse - see chapter 73.

61.1 Discouraging speculation

For all these reasons speculation needs to be tamed and controlled, not encouraged as it is under neoliberalism. A **Tobin tax** has been suggested at various times whereby a small tax is levied on each financial transaction, especially currency transactions, so that the higher the frequency of trading the greater the cost to the speculator. It would help but would only ever increase the cost of trading and perhaps reduce the volume of very high frequency trades; it wouldn't stop speculation, especially when traders sense an opportunity to make a killing. Something much more substantial is needed that favours investors over speculators, because at present both trade on exactly equal terms, whereas investors should be encouraged and speculators discouraged. We don't want to stop speculation completely because it is needed for the secondary market to work - if all investors traded like Warren Buffet it is doubtful that a proper secondary market³ would exist.

The basic problem is one of inertia mismatch. Wealth creating companies have high inertia; they can't change their size or direction quickly without damage. When a company needs to change, perhaps because a production facility is obsolete, then it must run down or evolve at a pace that allows time for workers to be redeployed and for materials and property to be transferred to new ownership or be disposed of, or for new technology to be installed and commissioned, teething troubles to be ironed out, and the workforce trained to become familiar with new modes of operation. This can only happen at an appropriate pace if hostile speculative influences can be kept at bay. Speculators and investors are the owners of a company, but only investors take the long view and therefore seek to work in the long-term interests of the company. Speculators seek a quick profit, and don't care one iota whether that is generated by helping or by harming the company. We need a mechanism therefore that makes the movement of shareholder capital reflect the inertia that is inherent in the company and its workforce.

The wealth creation process is subject to considerable inertia, it can't change quickly. Changes in capital allocation need to match the company's inertia in order to allow for properly managed changes to take place. Rapid removal of capital destroys the process and ruins the people engaged in it.

³ the market where existing shares are traded

The neoliberal view that capital should be free to move wherever its owners choose and as rapidly as they wish, in the belief that it provides the most efficient and beneficial allocation, completely ignores the dependence between wealth creation and capital. It would be fine if labour, capital equipment and buildings could relocate as quickly as capital can, but of course they can't. The benefits of rapid capital allocation accrue entirely to the capital owners; there is no benefit to wealth creators. Allowing rapid capital movement - effectively without inertia - forces rapid wealth creation change, and the only change that can occur rapidly is destruction, and that is what happens whenever wealth creation is starved of funding.

Recall the money equals lubrication analogy: for an engine the lubrication it needs is recognised as an integral part of the engine. If the engine is required to reduce its speed then it is brought down under proper control. No self-respecting engineer would dream of slowing an engine by draining its lubrication. It would certainly be effective - but by causing overheating and seizure, in all probability destroying the engine in the process. This is exactly what rapid draining of capital does to the wealth creating engine, it destroys it.

Governments and whole economies have considerably more inertia than even the most inertia-intensive companies, so rapid capital movement can be correspondingly more damaging, and should be controlled all the more tightly. We shall see in chapter 73 the extent of damage done to developing countries and their populations by following the neoliberal philosophy, enforced by what Richard Peet calls the 'Unholy Trinity' - the International Monetary Fund, the World Bank and the World Trade Organisation (Peet 2009).

The mechanism we need is one that ties capital more closely to wealth creation, something that increases its inertia in order to make rapid movement more difficult or more disadvantageous to the holder. Better minds than mine will be able to devise appropriate mechanisms once the issue is recognised as a problem to be solved. At the moment it isn't even recognised as a problem so no solutions are on the drawing board. However to start the ball rolling here are some ideas.

For equities, rather than sharing dividends equally between shareholders regardless of how long shares have been held, a time element could be included whereby the longer a share is held the greater the dividend share. That would encourage longer-term shareholding, because the price offered would relate to the share's value to a new holder, whereas its value to a long-term holder would be considerably more. The same principle would apply for new share issues when companies don't intend to offer dividends until much later. Here dividend entitlement would grow with duration of shareholding. This arrangement could also be used to allocate voting rights, giving longer-term investors more say in how companies are managed. Another beneficial effect of this would be to make hostile takeovers much more difficult, because longer-term shareholders would be much less likely to be tempted to sell. This measure would discourage short selling, because a share lender would not be allowed to lend the share and keep the long-term benefit of the shareholding. Regardless of that however share lending should be prohibited in any case, because it represents gambling on the failure of a company in a form that makes failure more likely.

An alternative might be a much more aggressive Tobin-type tax on share selling.

What is required is for buyers of shares to want them for their long-term dividends, not for short-term price gains, so a tax could be levied that diminished over time. Perhaps 50% of the sale price for a share sold in less than a month, 25% for less than six months, 10% for less than a year and so on, with zero tax after five years. That would certainly damp down stock market trading! Of course in all cases people would try to get round the new rules by smart tactics so they would need very careful drafting, including the spelling out of the purpose of the rules, so that any attempts to circumvent them could be outlawed. Speculators could still be accommodated using suitable derivatives, provided that in all cases they were gambling against themselves - like other forms of gambling - , without any feedback element to the real value of companies. Also careful watch would be needed for any unintended consequences, which there often are for major changes, and measures put in place to counter them.

If floating exchange rates are retained then similar measures will be needed to restrict currency speculation, but I shall argue in Part 3 that the free movement of capital should be abandoned and floating exchange rates with it.

The major argument in favour of speculation is that it provides liquidity - the ability to sell assets for cash at the market price very quickly. I think this argument is greatly overstated. What is needed is a market; it doesn't have to be a very liquid market. The only people who are really helped by a liquid market are speculators - speculation is good for speculators. Those who want shares for dividends only very rarely need to sell quickly, except in emergencies if they find themselves short of cash, and people should make provision for emergencies without depending on having to sell long-term assets. In those circumstances if they can't find an immediate buyer they can use the shares as collateral for a short-term loan, and sell the shares in due course to pay it off.

In the case of property, speculation is profitable because supply is severely rationed, so an appropriate answer would be to make much more housing available, especially for first-time buyers and the general population. There are always major objections to new house building proposals because they make existing property less valuable. But shortage of housing is damaging individuals and the economy much more than would a loss of value for existing property, so those objections should be overruled. Everyone needs somewhere to live so supply should match demand. At the same time social housing should be greatly expanded to meet demand for rented accommodation at rents that are comfortably affordable.

These matters are considered further in chapter 100.

Part 3

Globalisation: the Good, the Bad and the Very Ugly

62 Preamble to Part 3

Of all the injustices and abuses of the current financial and economic systems the most harrowing by far are those suffered by the populations of poor countries. Here the freedom conflict discussed in the Introduction is at its most extreme, because international control is weak, so freedom is at its maximum for the unscrupulous and at its minimum for poor populations. In international dealings wealth power goes well beyond unfairness and exploitation, it costs lives, especially children's and infants' lives, in their millions, year after year. It is made worse because everyone involved is forced to compete using the rules set by the most unscrupulous, because otherwise the businesses and associated investments of the less unscrupulous fail. It's the same old excuse - if I don't operate this way then someone else will - and although it's a poor justification it's true, and shows that control must be applied at a higher level, because players aren't able to exercise effective control themselves.

This is the arena that demonstrates more brutally than any other just how much more important the acquisition of wealth and money is than the lives of others, even the lives of children.

These figures are taken from United Nations Children's Fund (UNICEF) reports. The overwhelming majority relate to poor countries.

- 5,900,000 children die each year before their 5th birthday - more than 16,000 every day, almost one every 5 seconds.¹
- 2,600,000 new-borns die each year in their first month of life - more than 7,000 every day, almost one every twelve seconds.²
- 2,600,000 children under 15 are living with HIV.³
- 2,400,000,000 people lack access to adequate sanitation (1 in 3 of the world's population).⁴
- 1,000,000,000 children are deprived of services essential to survival and

¹ UNICEF 'The State of the World's Children 2016' Table 1 p121

<https://www.unicef.org/sowc2016/>

² UNICEF 'The State of the World's Children 2016' p10 (45% of overall under age 5 deaths)

<https://www.unicef.org/sowc2016/>

³ UNICEF 'The State of the World's Children 2016' Table 4 p133

<https://www.unicef.org/sowc2016/>

⁴ UNICEF 'Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment' June

2015 https://www.unicef.org/publications/index_82419.html

development.⁵

In November 2009 UNICEF released a special edition of their annual 'State of the World's Children' report to celebrate 20 years of the United Nations Convention on the Rights of the Child, signed by world leaders in November 1989 (referenced above). It discusses progress during that time and with some irony its tone is one of optimism, in that the figures were significantly worse in the past and there is every hope that they will continue to improve in the future. Indeed later reports in the main show continuing improvement, but so very slowly. In 1990 there were 12.5 million child deaths before the age of 5, and in 2015 that had reduced to 5.9 million, indicating an annual reduction rate of 3% per year over 25 years. If that rate of reduction is maintained it will take another 80 years to reach the UK rate at 4 deaths per 1000 live births, and in that time a further 180 million children will die. If there was real determination on the part of the developed world to eradicate those deaths and that suffering they could become history within just a few years. Tragically there is no such determination.

Much of world apathy to these statistics comes from the belief that poor countries raise far more children than they can afford, so high levels of child death, though tragic, are inevitable. The underlying but seldom voiced view is that this undesirable state of affairs is the fault of the populations themselves. This view misses a very important and dangerous vicious circle - which can and must be stopped. An inability to save for old age and an absence of welfare leaves poor people with only one choice if they are to have any security in later life - a big family. Although many of their children die, enough will hopefully survive to look after them when they can no longer care for themselves. It makes perfect sense. The same situation existed for exactly the same reasons in the UK and other now prosperous countries before the Second World War. It is self-perpetuating because there are always more mouths to feed than there are resources available to feed them. To stop it requires better prosperity for the whole population, and better prosperity does indeed stop it, as now prosperous countries can testify. Far from being inevitable, high child mortality and unsustainable birth rates are both direct effects of poverty. End poverty and those effects end with them. What is needed throughout the world is a population that is stable and comfortably within the world's capacity to support it, and for that we need a much more equitable share of wealth throughout the world.

However, not only is the developed world not determined to eradicate child deaths in poor countries it is preventing those countries from helping their own populations by massive extraction of resources. This is probably hard to believe given the developed world's widely trumpeted aid programmes, but what isn't so widely trumpeted is just how much is extracted from poor countries in comparison with what is given.

The countries involved are largely former colonies, exploited in the past for their natural resources and now exploited again by tax avoidance and repayment of crippling levels of debt - often incurred for loans that gave no help at all to the populations that are saddled with their repayment - they were stolen by corrupt politicians and officials of the

⁵ UNICEF 'The State of the World's Children, Special Edition' November 2009 p18
<https://www.unicef.org/rightsite/sowc/>

countries involved.⁶ The rules of the game are set by the international economic institutions - the International Monetary Fund, the World Bank, and the World Trade Organisation. Those rules serve the interests of investors in rich countries at the expense of people in poor countries (Stiglitz 2002 p214 and Stiglitz 2006 Chapter 8 pp211-244).

Those pursuing poor countries for debt repayment argue that any form of relief creates moral hazard - it sends out the wrong signals to potential and existing borrowers. A borrower who believes that the debt will be reduced or forgiven has no incentive to ensure sound financial management and will not take proper steps to prevent debt problems arising in the future. Furthermore, it may be argued that borrowers do not have a chance to learn from their mistakes, and continue to make the same mistakes that led to debt problems in the first place.

This type of argument is typical of creditors who place all the blame on debtors. Yet any lender in any circumstances takes a risk that the debt will fail to be repaid, and they build this risk into the interest payments that they demand - the higher the risk the higher the interest. A fairer response is that rather than the debtor being to blame, the creditor with a defaulted debt is either unlucky in that the risk materialised, or to blame for not carrying out proper due diligence in the first place (Stiglitz 2006 p212). The truth is that lenders didn't do much due diligence; they felt secure in the belief that a strong ruler would force the population to pay.⁷ Also many poor countries are forced to borrow in foreign currencies, so they are always at the mercy of interest rate changes in those currencies and can hardly be blamed when they change to their severe disadvantage. Above and beyond all that however is that arguments objecting to debt relief, when the alternative is death and appalling suffering, are morally indefensible.

A report published in December 2015 provides a very comprehensive analysis of all financial inflows and outflows from developing countries⁸, and shows how much the rich world is extracting from them.⁹ Figure 62.1 is repeated from that report and shows the annual outflows of wealth from developing countries, which total a staggering \$16.3 trillion (yes, trillion!) US dollars since 1980. The GDP figures represent the combined GDP of developing countries. To put this in perspective the report states (for the last decade):

"...for every dollar of development assistance received by developing countries, more than ten dollars disappear from these countries."

⁶ <http://rinf.com/alt-news/latest-news/corrupt-politicians-imf-loans-foreign-aid/>

⁷ See Joseph Hanlon's paper 'Illegitimate Loans: lenders, not borrowers, are responsible', published in *Third World Quarterly*, Vol. 27, No. 2, pp211-226, 2006, available at <https://core.ac.uk/download/pdf/167.pdf> In it he states: "The minimum case: knowingly making bad loans to dictators. Surely there can be no question that banks and international financial institutions must accept responsibility and cannot collect on loans which were knowingly made to corrupt and nasty dictators." He goes on to cite four specific examples.

⁸ These are largely the non-OECD countries.

⁹ <http://www.gfintegrity.org/wp-content/uploads/2016/12/Financial-Flows-final.pdf>

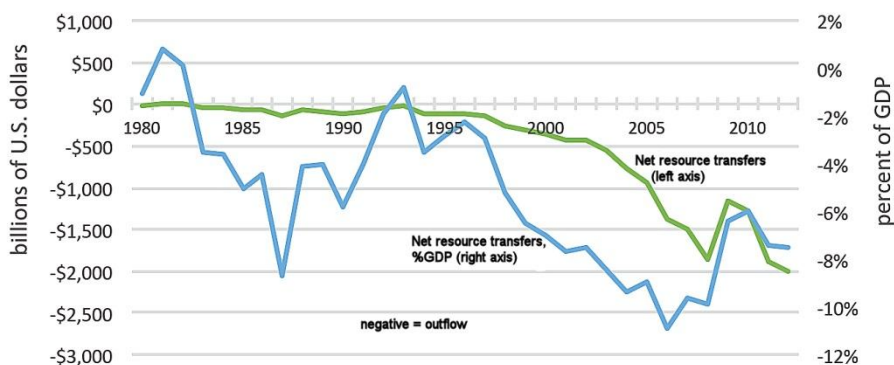


Figure 62.1: Annual wealth transfers from poor countries to the rich. Source *Financial Flows and Tax Havens' December 2015*, by the Centre for Applied Research, Norwegian School of Economics, Global Financial Integrity, Jawaharlal Nehru University, Instituto de Estudos Socioeconomicos, and the Nigerian Institute of Social and Economic Research.

The outflows consist of debt repayments and repatriated investment income from rich country investments, but the biggest component, and one that received little attention prior to this report, is unrecorded capital flight transfers, mostly illicit, via tax havens¹⁰ and secrecy jurisdictions. Of the \$16.3 trillion total \$13.4 trillion is unrecorded capital flight, with \$2.9 trillion in recorded transfers.

How can poor country populations ever escape their poverty trap with a millstone like that hanging round their necks?

How do these illicit transfers work? A favourite trick is **trade misinvoicing**. Here a company in the poor country imports goods from abroad via an intermediary, who adjusts the invoice upwards to give the impression to the authorities that the cost is much higher, and sends the excess to an offshore account belonging to the importer. This is shown in figure 62.2.

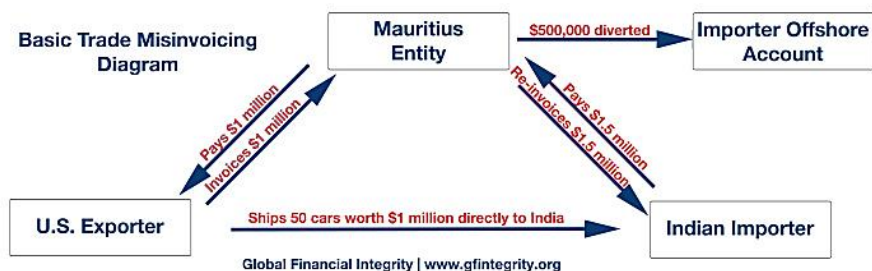


Figure 62.2: Trade misinvoicing. Source <http://www.gfintegrity.org/issue/trade-misinvoicing/>

¹⁰ For details of tax havens, the way they operate and how they are sanctioned by governments see Shaxson 2012.

Another trick is transfer pricing by multinational corporations, where they are able to lower taxable income in the poor country to escape local taxation and deny the government revenue that is badly needed for its own population. Multinationals also engage in other tax avoidance strategies, all with the aim of enriching themselves at the expense of the poor country. The report gives more details.

As Jason Hickel¹¹ pointed out:

Poor countries don't need charity. They need justice. And justice is not difficult to deliver. We could write off the excess debts of poor countries, freeing them up to spend their money on development instead of interest payments on old loans; we could close down the secrecy jurisdictions, and slap penalties on bankers and accountants who facilitate illicit outflows; and we could impose a global minimum tax on corporate income to eliminate the incentive for corporations to secretly shift their money around the world.

We know how to fix the problem. But doing so would run up against the interests of powerful banks and corporations that extract significant material benefit from the existing system. The question is, do we have the courage?¹²

This preamble highlights the worst and very ugly side of globalisation, where those least able to cope are hardest hit. It shows the level of ruthlessness that those who wish to change things are up against. Those who are prepared to tolerate so much injustice in the pursuit of profit aren't likely to stop by appeals to conscience, indeed they can't stop because those with conscience are caught up in a system controlled by those without. To stop them it will take strong and effective legislation enforced with determination and backed up by stiff penalties for those responsible. We can't persuade the perpetrators to stop because it's outside their power to do so, we must persuade those who can make them stop - governments - and if we can't persuade governments to do so then we must elect better governments.

The international market is the most unfettered of all markets, and shows where such markets lead without strong and effective control. Far from bringing prosperity to all they bring extreme wealth to some and extreme hardship to most.

However, before we can work out how best to solve the problems thrown up by globalisation we have a lot more groundwork to do to understand international economics. So once again, let's get started...

¹¹ Jason Hickel is an anthropologist at the London School of Economics.

¹² <http://climateandcapitalism.com/2017/01/14/how-poor-countries-finance-the-rich/>

63 Introduction to Part 3

The key to understanding international trade is to recognise that a single country trading with the rest of the world is very much like a single person trading with other people. In particular a country that wants to buy wealth from abroad must either sell wealth abroad or borrow from abroad.

This is a very simple and basic reality but in studying international trade it is easily forgotten, becoming lost amongst all the very many complexities that globalisation throws up. Most of these complexities have arisen from the sticking plasters that have been necessary because we have no world currency to act as a lubricant in freeing up world trade. We would have had if we had listened to Keynes but we didn't - see chapter 67.

Just like an individual a country that buys more wealth than it sells becomes indebted - it becomes poor internationally and has less influence in the world, whereas if it sells more than it buys it becomes entitled to the difference - it becomes wealthy internationally and has more influence in the world. This is the where the drive to export comes from - the desire to be wealthy and to have influence.

All the same factors that beset individuals beset countries - variable bargaining positions, wealth extraction and exploitation, the need for employment, vulnerability to environmental degradation and so on - but in the international sphere everything is much more extreme. Those who are exploited aren't merely disadvantaged, they often die. Protection from human rights abuses is often non-existent, and things that we like to think have been consigned to history such as child labour and slavery flourish.¹ Not only that, we ourselves are parties to it, enjoying cheap food, raw materials and many types of manufactured goods bought at the cost of hardship, misery and death for those we don't want to see or acknowledge.

A major reason for the more extreme conditions that prevail in international trade relative to domestic trade is the absence of state institutions. Although there is much talk of globalisation and the global economy and its benefits, it's not an economy in the sense that a country's economy is. An economy requires proper regulation and control for the benefit of everyone in that economy if it is to function well - in spite of what neoliberals tell us - but there is no-one regulating or controlling the global economy for the benefit of the people of the world. Recall from chapter 28 the list of state provisions to make markets at least approach fairness: property rules to establish ownership; courts to enforce contracts; trading regulations to protect buyers and sellers; a police force to investigate crimes and bring wrongdoers to justice; health, safety, labour and environmental standards to comply with accepted norms; social insurance to insulate against market risk; and taxation to fund all these and many more requirements. These are largely absent for international trade so there is very little protection available to

¹ <https://www.freedomunited.org/>

participants and third parties. There are international organisations that do regulate and apply controls - the International Monetary Fund (IMF), World Bank, and World Trade Organisation (WTO) - but as will be seen they embrace the doctrine of unfettered markets and as a result the control they exercise benefits rich countries at the expense of poor countries - see chapter 73.

International trade has a very long history. It goes back at least 5,000 years and may well go back further. As humans spread out over the world and their descendants came into contact they found that each had things that the other wanted. If they could just take them they did, but if they couldn't they traded. Goods traded over long distances in ancient times had to be non-perishable, portable, and valuable in relation to their size. Therefore we see spices, rich textiles, precious metals fashioned into jewellery and ornaments, and useful items made of copper, bronze and iron making their way over long and tortuous river, sea and land trade routes. And let's not forget the slave trade, which goes back to the very beginnings of civilisation, and although no longer sanctioned by governments it is shamefully still alive and flourishing today.²

The growth in international trade or 'globalisation' as it is more generally known is usually regarded as a relatively recent phenomenon, yet there is some merit in the view that the heyday of globalisation was prior to the First World War. This is what Keynes said in his book 'The Economic Consequences of the Peace' published in 1919 after he resigned in disgust from the Paris Peace Conference at Versailles in the same year.

The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world, and share, without exertion or even trouble, in their prospective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend.

The First World War put an abrupt end to that degree of freedom, and it's debatable whether it has even now been re-established in spite of the vastly increased value of international trade that we see.³

For most of its history, world trade depended on gold as the medium of exchange. The value of gold was universally acknowledged, it was sought by everyone, and indeed most people considered wealth and gold to be the same thing.

An economy that trades with other countries is called an **open economy**; otherwise it is a **closed economy**. In the modern world all countries trade with at least some other countries, and most countries trade with many others.

² <https://www.freedomunited.org/>

³ <http://ourworldindata.org/data/global-interconnections/international-trade/>

64 A Brief History of World Trade

The early history - from the 16th to and including the 18th century - of world trade was based on **mercantilism** - where governments regulated economies for the benefit of the state at the expense of its rivals. International trade was regarded as an important part of state business, and armies and navies were dispatched to enforce trading conditions on weaker countries. The aim of international trade was to accumulate gold and other resources and to prevent others from accumulating them, thereby strengthening the home country in its ability to provision large armed forces so as to wage and win wars. A major objective in support of this policy was to colonise and build empires in order to exploit poorer resource-rich countries with inferior military capabilities in Asia, Africa and America, while preventing other strong countries from doing the same. Tariff barriers to restrict the import of foreign goods were applied by the home country and forcibly removed wherever possible when applied by rival countries.

Adam Smith (1723 - 1790) was a sharp critic of mercantilism and its passion for the accumulation of gold. He showed that real wealth was created by the work of human beings, particularly when applying specialisation, and that gold was merely the medium of exchange for that wealth. His influential book 'An Inquiry into the Nature and Causes of the Wealth of Nations', usually abbreviated to 'The Wealth of Nations' (Smith 1776), was written at the beginning of the industrial revolution and hastened the decline of mercantilism and the start of **classical economics**, which espoused free trade and a laissez-faire approach. The British Empire spread this liberal economic model around the world, though in a very one-sided manner by forcing it on unwilling trading partners while retaining barriers at home - see chapter 73 section 73.3 'The historic free trade myth'. The economic model developed by Smith largely holds today, with much of it embraced in the core beliefs of neoliberalism.

World trade began to expand slowly from the industrial revolution, but took off in the 19th century when transport and communication technology improved dramatically, supported by increasing political liberalisation. It declined very significantly when the First World War broke out and continued to decline between the wars as countries favoured self-sufficiency over interdependence.

Towards the end of the Second World War the Bretton Woods conference (July 1944) set the scene for international trade for almost thirty years. It had been recognised that everyone suffered from limited world trade, not only by going without goods that would benefit them, but also by fostering hostility from protective barriers such as high import tariffs and outright trade bans set up to limit or prevent imports from other countries. During this period gold was still the basis of trade, but instead of exchanging gold metal countries exchanged their own currencies at fixed rates in relation to the US dollar, and the dollar was tied to gold at the rate of \$35 per ounce. It was a period of unusual stability, but it began to unravel in 1971 when President Nixon was forced to abandon the link between gold and the dollar because too many dollars were held in

foreign countries than could be repaid in gold. This became known as the '**Nixon Shock**'. It was caused by other countries, fearing that the dollar was overvalued - which it was - demanding gold in return for dollars, and with inadequate gold reserves the US was unable to honour its dollar exchange rate promise. Nixon promised that the link would be re-established as soon as conditions permitted it, and there were some attempts, but one by one other countries abandoned the link between their currencies and the dollar, and by 1973 the Bretton Woods arrangements were at an end. Afterwards all major currencies floated freely against each other with some minor currencies tied to stronger currencies. This meant that the value of one currency against another was set by supply and demand, with foreign exchange dealers acting as intermediaries. That event marked the first time in history that **fiat currencies** - where the value is guaranteed by governments - were completely detached from any external standard (Kaletsky 2011 p329), and the world is still coming to terms with the changes that it ushered in. One major effect was to make currency speculation mushroom to enormous proportions. This is the regime we are living with now.

65 Basic Considerations

The economics of international trade, in spite of its complexity, rests on some basic foundations:

65.1 Advantages and disadvantages:

There are many very significant advantages to be had from international trade. Markets are much bigger so there is more demand for products and greater opportunities for economies of scale, and higher levels of specialisation are possible thereby improving efficiency. For consumers there is a much greater choice of products, including products that are completely unavailable in the home country. Consumers enjoy lower prices because of increased levels of competition from a wider range of suppliers. The economy as a whole also benefits. Exports bring in money that stimulates the economy without having to rely on domestic demand, and imports bring in wealth at less cost than would be required to produce locally. All this arises from the fact that the effort to create surplus wealth differs greatly in different countries and in different environments, so the UK buys bananas from Colombia because it would be very costly for us to grow them here, and Colombia buys gas turbines from the UK because it would be very costly for them to build them there.

However there are also disadvantages. Dependence on external markets can backfire if for any reason imported foreign supplies dry up or foreign consumption diminishes for exported goods. Domestic suppliers and their employees can be especially hard hit in specialised industries such as coal mining or shipbuilding when external competitors are able to undercut prices significantly. In such cases there are great temptations for the home government to apply protective measures such as import tariffs, limited quotas, outright bans or home currency devaluations - known as **trade barriers** - in order to protect workers, or to grant subsidies to enable home producers to sell products competitively. If this happens similar measures tend to be applied in retaliation by foreign trading partners in a tit-for-tat response, damaging both sides of the trade. In effect there is a paradox of thrift at the international level. Just as an individual can save effectively in isolation but if everyone tries to save at the same time then their efforts are ineffective because they stifle trade (see chapter 15), a country in isolation that applies trade barriers will find them helpful, but if all countries try to apply such barriers at the same time then they will be ineffective because they stifle international trade. In the past trade restrictions were extensive and commonplace, but in more recent times such barriers have been reduced significantly, though not completely. Neoliberalism strongly discourages any form of trade barrier and backs up that position using the 'Theory of Comparative Advantage', which purports to prove that countries are always better off by trading with each other rather than not, but as will be seen in the next chapter there are some serious objections to the assumptions that underlie that theory.

Problems also arise if there is a serious imbalance between a country's exports and

imports. If exports exceed imports then foreign consumers benefit at the expense of home consumers, and if imports exceed exports then debts are incurred to the exporting countries - see section 65.5 below. Also spending on imports without balancing exports (more sellers of the currency than buyers) depreciates the home currency which risks shrinking the economy as a result of imports and import-dependent products increasing in price.

65.2 Totality of world trade:

For the world as a whole the sum of all international trade is zero - every export from one country represents an import to another country. Countries generally prefer to export rather than to import, because a country that exports more than it imports is like an individual that creates more wealth than he or she consumes - it increases wealth and power, but countries that pursue that policy, as do Germany and China amongst others, can only do so provided that other countries are willing to import their products.

65.3 Trade balance:

An overall trade balance between exports and imports is a healthy state, but it isn't necessary to maintain a balance with every country that is traded with. Imports from China can be balanced by exports to Europe. This is exactly the same as individual trade, where buying from one person can be balanced by selling to another. *I have a dreadful trade balance with the owner of my local garage. I regularly pay for servicing and repairs from him but he never buys anything from me - but neither of us loses any sleep over it!*

65.4 Currency and wealth:

A particular currency can only be used to buy wealth from those who accept that currency - normally those within the issuing country, so domestic currency normally only buys domestic wealth. Also wealth suppliers are usually only willing to accept their own currency in exchange, whether the buyer is domestic or foreign. In the absence of an international currency therefore exchange dealing is a necessary element of international trade. This doesn't apply to the same extent for reserve currencies - see 65.10.

65.5 Excess imports and borrowing:

With fiat currencies a country that imports more than it exports borrows the difference from the exporter *even though the goods are paid for*. This is not obvious, but imagine two desert islands, one that specialises in growing coconuts and the other in growing mangoes. They agree to trade coconuts for mangoes. Now if the first island imports mangoes before its coconuts are ready, what can it trade with instead? The answer, in the absence of anything else of equivalent value, can only be a promise to pay, which is precisely what fiat money is. In other words the first island pays for the mangoes in money - coconut currency - which, being fiat money doesn't have intrinsic value (if it did it would be an equivalent value export and no debt would arise) and is therefore nothing more than a promise to pay the equivalent back in coconuts in the future. In the

meantime it is in debt to the second island. *It is the very fact that the goods are paid for in fiat currency that creates the debt.* Note that in this case the local currency of the importer is acceptable to the exporter, which is important because whenever this can be arranged it gives the debtor a great deal of control over the debt. The alternative, if the exporter won't accept the importer's local currency, is for the importer to borrow the exporter's local currency and pay for the goods with that. This is much less favourable to the importer because now the exporter has control over the debt. Both cases involve borrowing by the importer.

In this simple example there is a difference in these two ways of borrowing. If the person who imports mangoes pays in coconut currency then it is the importing country that has borrowed and the exporting person who has lent. The importing person has given coconut currency to the exporter and for the importer the transaction is complete. The exporter can use it to buy coconuts from anyone in the coconut country so it is the country as a whole that carries the obligation to send coconuts to the exporter rather than any particular person in that country. In effect the exporting person has lent mangoes in return for a coconut IOU from the importing country. If the importing person borrows currency from the exporting country then it is the importing person who has borrowed and a lender - a third party - in the exporting country who has lent. In this case the importing person has borrowed mango currency and used it to pay the mango exporter for mangoes, for whom the transaction is complete. The importing person retains an obligation to the lender, and can only discharge it by selling coconuts for mango currency and repaying the loan with that. The real world doesn't work in either of those ways. Most currencies float freely against each other and are traded on foreign exchange markets, where currency dealers continuously balance sales and purchases of currency, changing the offer and bid prices in order to maintain that balance as closely as possible. In that way the individuals doing the exporting and importing don't need to bother about lending and borrowing, once the importer has arranged for the home currency to be exchanged and paid to the exporter the transaction is complete for both. In this case the importing country borrows and the exporting country currency dealer lends¹. This type of exchange is explored in more detail in chapter 68. With countries that trade without floating currencies, China and the US for example, the importing country (US) buys in its own currency, which is exchanged by the central bank of the exporting country (China) for its home currency, so again the importing country borrows and the exporting country lends. Trade between the US and China is considered further below.

With fiat currencies a country that imports more than it exports must borrow the difference from the exporting country.

Let's consider further the point about debt in the importer's home currency being

¹ The importer pays the import country dealer in import currency and obtains export currency in return. That is used to buy the imported goods, leaving the import country dealer with less value in export currency than the export country dealer holds in import currency, so there is an excess holding of import currency by the export country dealer. That holding represents an import country debt to the export country dealer. The debt won't last long however because the dealer will sell it to someone else in return for export country currency, and will adjust the exchange rate to make sure that happens quickly.

acceptable to the exporter. At the present time the US - the importer - is heavily in debt to China, because China holds massive quantities of the US home currency (largely in the form of government debt - treasury bills and bonds) in return for the goods that it has sold to the US.² At any time the US can reduce the wealth value of this debt by engineering a depreciation of the dollar - making it worth less in terms of tradable wealth - or by reducing the value of its bonds. It can depreciate the dollar by creating and circulating more dollars, thereby encouraging inflation, it can sell dollar currency in the market and buy other currencies, thereby reducing the demand for dollars and hence the value of the dollar, or its central bank can sell treasury bonds in the secondary market thereby directly reducing the value of China's bonds. All these actions have the effect of reducing the US wealth debt to China, whereas China can do very little on its own to maintain the value of the dollar. Ironically China has more economic interest in maintaining the value of the US dollar than does the US itself.

Conversely if the importer's debt is in the exporter's or some other foreign currency, then the value of that currency is out of the hands of the importer. If its value increases then the debt will grow, sometimes to enormous proportions. This has happened in the past in the case of developing economies and was ruinous for them - see chapter 73.

When gold was used for direct international transactions no debts were incurred because the same value of wealth was both exported and imported in each transaction, one side in gold and the other in goods or services.

65.6 Types of currency exchange:

Nowadays all countries trade with other countries, and all use fiat currencies. There must therefore be arrangements for exchanging currencies with other currencies, but these arrangements differ for different countries.

Most countries allow their currencies to be freely traded with other currencies, and there are two types of free trade. The first and now the most common is floating currencies, where the relative value of each is determined in the foreign exchange market by supply and demand. Values of floating currencies change all the time in response to many factors - see chapter 67 subsection 67.4.2. The other type of free trade is fixed or pegged exchange rates, where the rate is fixed by the government or central bank of the country in question relative to a stronger currency such as the US dollar or Euro. In this case the country's central bank holds a quantity of the stronger currency, and uses it to buy or sell its own currency to change the level of demand for it and thereby to maintain the fixed exchange rate. If the amount of buying of its own currency is excessive it's because other people are selling it excessively - more importing than exporting - so the currency is devalued (the exchange rate moves downwards - less of the strong currency for one unit of the domestic currency) or, for excessive selling - more exporting than importing - it is revalued (the exchange rate moves upwards - more of the strong currency for one unit of the domestic currency).

Countries that don't allow their currencies to be freely traded arrange exchanges at state level by the government or central bank. Imports or exports to and from the

² In China's case it is the state - the Chinese central bank - that is the foreign exchange dealer. How it operates is explained in section 65.8.

country are paid in an external currency, usually the US dollar, and the state manages the exchange with the domestic currency. China is the most obvious case in point and avoids free exchange so as to keep the value of its own currency low (it would rise significantly if traded freely because China has a large excess of exports over imports). Chinese international trade is discussed further in section 65.8.

65.7 Currency values:

Even though currencies float, at any point in time they are tied together by the value of internationally traded wealth. If any currency is even slightly out of balance in this respect **arbitrageurs** - traders who make profits by searching for and exploiting price differences - rapidly bring them back into balance again. For example if zinc is trading at £1,000 per tonne and also at \$1,500 per tonne, but the exchange rate is \$1.4 per £1, a trader can buy 100 tonnes of zinc in the UK for £100,000 and immediately sell it for \$150,000 in the US (transport costs can be ignored - see below), then exchange the \$150,000 for £107,143, making a risk-free profit of £7,143. But this opportunity won't last long because every time dollars are sold and sterling bought the dollar is made weaker and sterling stronger, so the exchange rate soon approaches \$1.5 per £1 at which point balance is restored. Traders in these markets buy derivatives (futures) linked to commodities rather than commodities themselves to avoid having to deal with physical goods. Arbitrageurs are also on the lookout for any anomalies between currency values themselves that are offered by the various brokers. Again any opportunity to make money is soon taken and as before the effect is to keep currency values in balance.

65.8 Self-correcting imbalances:

Imbalances between imports and exports tend to self-correct, provided that either a common currency is used or currencies are freely exchanged. If these conditions aren't met, such as when an exporting country retains the currency of the importing country, then the self-correcting tendency is absent. When these conditions are met a country that exports more than it imports finds that its exports become dearer in importing countries so export demand drops, and imports from foreign countries become cheaper so domestic demand for them rises, as explained below. The opposite happens if a country imports more than it exports. However, in order to work properly there must be adequate domestic buying power available when imports become cheaper from abroad, and adequate spare capacity available to expand export production when foreign demand rises.

Consider the case of a common currency such as gold, with two trading countries A and B, A exporting to B more than it imports. With an excess of exports gold is accumulated in A and diminished in B. An accumulation of gold tends to depreciate its value in relation to A's home wealth, so in A prices rise, which makes exports to B dearer for B and imports from B cheaper for A. Conversely for B gold is in short supply so its value in relation to its home wealth rises and prices fall, further strengthening the effect of making imports from A dearer for B and exports to A cheaper for A. Therefore exports from A diminish and imports to A increase, tending to correct the earlier imbalance.

With the same two countries using free exchange and floating rates there is more demand for A's currency when A exports more than it imports. B has to sell more of its currency to buy A's currency than A has to sell to buy B's currency, so A's currency increases in value relative to B's, and exports from A again become dearer for B and vice versa, again correcting the earlier imbalance. With free exchange and fixed rates B has to sell more of its reserves of A's currency in order to buy back its own currency from importers who sell it to buy A's currency, so as to maintain the value of its currency. Losing reserves prompts B to cut back on imports and promote exports, thereby correcting the imbalance, or, if it doesn't, then eventually it runs out of reserves and is forced to devalue its currency with the same result as with floating exchange rates, again tending to correct the imbalance.

The effect doesn't occur if there is no common currency and currencies aren't freely exchanged. For example China exports goods to the US but doesn't allow its currency, the renminbi³, to appreciate against the dollar as it would do if it was freely traded. Instead China's central bank handles all renminbi currency exchange on behalf of the government by taking dollars from US importers and investing them in US securities, and paying out renminbi to its export workers, which it obtains by borrowing from its own population at low rates of interest. The Chinese population have little in the way of job or health security and so save heavily, but have very restricted investment opportunities available other than lending to the government. The exchange rate between dollars and renminbi is thereby completely controlled by China's central bank, and that prevents the dollar from falling in value against the renminbi but builds up massive investments for China in the US. This explains why both China and the US are heavily in debt - China is in debt to its own population and the US is in debt to China. The perverse effect is that the population of China, still very poor in spite of the country's recent growth, lends money in great quantities to the US (via the Chinese central bank), one of the richest countries in the world.

65.9 Domestic and international prices:

Most trade is carried out within a country's domestic economy. Very often, relatively poor countries whose currencies have low valuations have much cheaper domestic prices than the exchange rate would imply. This is because the exchange rate reflects the value of internationally traded wealth, not wealth that is only traded domestically. Most services are purely domestic and many locally sourced products, especially when perishable, are only available in the domestic market. In order to take account of these factors another comparative rate, more realistic in terms of the value of a currency to its own people, has been devised, called Purchasing Power Parity (PPP). This reflects the relative values of different currencies when used to buy representative baskets of goods. For example in 2015 the international exchange rate between Mexican pesos and US

³ Chinese currency can be confusing as both renminbi and yuan are often used interchangeably.

The renminbi is the name of the currency - like sterling is the name of the UK currency. Renminbi means 'people's currency'. The yuan is a unit of renminbi just as the UK pound is a unit of sterling. When referring to the currency renminbi should be used, whereas when referring to a price or a quantity of currency yuan should be used.

dollars was 16 pesos to the dollar, whereas for a representative basket of goods in each country one US dollar would buy the same in the US as 8.4 pesos would buy in Mexico, showing that in PPP terms the peso is worth almost twice the international exchange rate. The OECD publishes tables of PPP values as well as exchange rates.⁴ In 2011 the World Bank published a report stating that the size of the world economy was \$90 trillion in terms of PPP but much less at \$70 trillion in terms of exchange rates, indicating the higher value of domestic wealth when calculated in terms of a common currency based on domestic exchanges rather than on international exchanges.⁵

65.10 Reserve currencies:

A **reserve currency** (also known as an 'anchor currency', 'hard currency' or 'safe-haven currency') is a currency that is held in significant quantities by governments and institutions as part of their foreign exchange holdings. The reserve currency is commonly used in international transactions because it is acceptable to many other countries in addition to their own domestic currency.⁶

The distribution of reserve currency holdings for assets denominated in currencies throughout the world at the end of 2014 were as follows⁷:

US Dollars	63.7%
Euros	21.0%
Pounds Sterling	4.1%
Japanese Yen	3.5%
Australian Dollars	2.1%
Canadian Dollars	2.0%
Chinese Renminbi	1.1%
Remainder	2.5%

Table 65.1: Reserve currency distribution in 2014

As can be seen the US dollar is by far the world's most favoured reserve currency, meaning that central banks hold significant quantities of US dollars in preference to any other currency. Additionally many commodities are bought and sold principally in US dollars because it's easier to trade in a common currency, and after the Second World War the US dollar was the only viable currency for this purpose and it has retained that position ever since. When exchanging less common currencies it is usually easier to change the first for dollars and then change the dollars for the second, because all exchangeable currencies can be converted to and from dollars whereas they can't all be converted to or from each other. Chapter 71 deals with reserve currencies in more detail.

⁴ <https://data.oecd.org/conversion/purchasing-power-parities-ppp.htm#indicator-chart>

⁵ 'Purchasing Power Parities and the Real Size of World Economies' available at <http://siteresources.worldbank.org/ICPEXT/Resources/ICP-2011-report.pdf>

⁶ https://en.wikipedia.org/wiki/Reserve_currency

⁷ <http://www.imf.org/en/Data> (Currency Composition of Official Foreign Currency Assets)

66 International Trade Theory

Surplus wealth, specialisation and trade - everyone doing what they are best at and trading the output with others - are of course just as beneficial in international trade as they are in domestic trade. This led Adam Smith to set out his claim that countries should export those things that they can produce at less cost than other countries - i.e. where they have a production efficiency advantage, and import those things that other countries can produce at less cost than them. This makes sense because if country A can create wealth X at less cost than can country B, but country B can create wealth Y at less cost than can country A, then both gain if A produces all X and B produces all Y, and they trade their excess produce of X and Y with each other. This is known as the **Theory of Absolute Advantage** and is fairly easy to understand.

Less easy to understand but with much wider applicability is the **Theory of Comparative Advantage**, set out by David Ricardo (Ricardo 1817). He explained that for both trading countries to benefit it is not necessary for each to have an absolute advantage over the other in producing anything. Provided that country A can produce X at less cost than it can produce Y, and that country B can produce Y at less cost than it can produce X, then it still benefits them to have A produce all X and B to produce all Y and trade their excess, *even if A can produce both X and Y at less cost than can B*. In other words provided that each has a comparative advantage - not in comparison with other countries but in comparison with other products that it produces - then both can gain.

The easiest way to see why this is so is to consider an example, and the most famous is that used by Ricardo himself. Let's say that both Portugal and England produce both wine and cloth, and that to produce a given quantity of wine in Portugal takes the labour of 80 men for a year whereas in England it takes 120 men for a year. To produce a given quantity of cloth in Portugal takes the labour of 90 men for a year, whereas in England it takes 100 men for a year. Portugal therefore has an absolute advantage over England in producing both wine and cloth, but it is comparatively cheaper for it to produce wine, whereas it is comparatively cheaper for England to produce cloth. Let's now say that Portugal produces twice as much wine and exports half to England, and England produces twice as much cloth and exports half to Portugal. Now Portugal is better off than it was before because it has saved the labour of 10 men, and England is also better off than before because it has saved the labour of 20 men, but each still has the same quantity of both wine and cloth as before.

However, before applying the comparative advantage theory in the real world we would be wise to dig much more deeply rather than trust that it works in all circumstances.

Firstly we should examine the factors that give rise to differences in production efficiency, because if they can be reproduced in the country that doesn't already have them then we can increase the overall rate of creation of that type of surplus wealth, and

just trade the types of wealth whose factors of production can't be reproduced.

Factors include:

- the natural environment - climate, resource availability, land quality;
- population - abundance, skill level, age distribution, health; and
- innovation and technology - production techniques, energy availability, transport infrastructure, communications, machinery sophistication.

Secondly we should scrutinise in detail what assumptions it makes, and determine whether or not those assumptions apply in real world circumstances where we are inclined to apply the theory.

Assumptions include:

- only two countries producing the same two commodities;
- tastes similar in both countries;
- no transportation costs;
- capital and labour can be redeployed within a country for use in any sector at no cost;
- goods bartered rather than being bought and sold using different currencies;
- no production costs other than labour;
- demand available for all that is supplied;
- all workers have the same output;
- no trade barriers;
- both countries equally capable;
- no changes over time;
- no economies of scale; and
- no labour or capital movement across borders.

This is a formidable list of assumptions, and shows how a simple and attractive theory can become immensely complex when attempts are made to apply it in the real world. How can we extrapolate from two countries with similar tastes trading two commodities to dozens of countries with widely different tastes trading thousands of products, and still be sure of mutual advantages all round? We can't. Two particularly dubious assumptions are the two before the last:

- No changes over time: In reality everything changes over time - labour supply, technological know-how, raw material availability, and exchange value ratios. Any country that devotes itself to producing a limited range of products where it currently has an efficiency advantage leaves itself very vulnerable to changes - not only in its own country but in its trading partners - that can seriously damage or even wreck its economy. This

assumption also means that countries rich in raw materials must keep extracting them, and assumes infinite supply.

- No economies of scale: In reality all production is subject to economies of scale that are either positive (more than double the output for double the input = increasing returns to scale), or negative (less than double the output for double the input = diminishing returns to scale). At a stroke this significantly undermines the comparative advantage theory because with increasing returns to scale a single producer can come to dominate a market both domestically and internationally - as many multinationals can testify - and with diminishing returns to scale the efficiency advantage is soon lost with increased production.

If those two aren't bad enough the last assumption kills it stone dead!

- Even Ricardo himself admitted that his theory depends on labour and capital staying in the country of origin otherwise they will move to where the best wages and returns are to be had. The modern economic system does restrict labour movement but free capital movement across borders is one of the major tenets of neoliberalism. Ricardo felt that capital retention within the home country could be relied upon because of its great insecurity in those days when abroad. As John Gray said (Gray 2009 p82):

When capital is mobile it will seek its absolute advantage by migrating to countries where the environmental and social costs of enterprises are lowest and profits are highest. Both in theory and practice the effect of global capital mobility is to nullify the Ricardian doctrine of comparative advantage. Yet it is on that flimsy foundation that the edifice of unregulated global free trade still stands.

Using the above example, if I am an investor in England why should I invest in expanding cloth production in England when I can invest the same money in Portugal and import wine and make more profit? If I have enough money I might also invest in Portuguese cloth and import that. With free capital movement investors are always better investing in countries with absolute advantages. However this point is at best only ever glossed over by global free trade economic supporters, who continue to cite both comparative advantage and free capital movement as factors promoting international trade, without acknowledging the contradiction between them. Reinhard Schumacher has written a detailed paper entitled 'Deconstructing the Theory of Comparative Advantage', published in the World Economic Review, Issue 2 2013, pp83-105.¹ In this he very thoroughly debunks the theory, concluding with the statement:

After deconstructing the theory of comparative advantage and its assumptions, it cannot be endorsed any longer. Not only were the assumptions dismissed in this article, but it was also shown that the theory of comparative advantage is wrong on its own terms. The obvious suggestion is to dismiss the theory of comparative advantage after nearly 200 years in order to get a better and sounder understanding of international trade.

¹ <http://wer.worldeconomicsassociation.org/files/WEA-WER2-Schumacher.pdf>

Thirdly we should consider what the long-term effects are on countries that are forced to trade on the basis of the theory, particularly poor countries that exploit natural resource availability. This has been the pattern for much of history. Rich countries manufacture finished goods from raw materials supplied by poor countries, very often in competition with other similar poor countries so that prices stay low. The theory allows no room for development - no changes over time - so poor countries continue to supply raw materials and rich countries benefit greatly from their availability. The poor country is indeed better off than it would have been without the trade, but it doesn't have a way to improve beyond that better off level, it and its workers are locked into that state. Also, the more that resources are devoted to producing raw materials for rich countries rather than to producing essentials for home consumption, the more dependent poor countries become on rich countries, both for the import of manufactured goods that make modern life possible and for continuing demand for exports. Their fortunes are tied very closely to the economies of rich countries, and they are therefore very vulnerable to downturns in those economies when demand for raw materials drops and manufactured goods become unaffordable. Not only that, dependence on natural resource exports limits prosperity to the rate at which resources can be extracted or harvested, and if extractable resources begin to run out or environmental conditions cease to favour harvestable resources then the economy plummets.

If a poor country wishes to become a rich country then it cannot do so by trading on the basis of comparative advantage (Chang 2008 p47).

Ricardo's theory of comparative advantage underpins the neoliberal approach to international trade. It has been developed in more recent times to include other factors of production as well as labour, and these models - Heckscher-Ohlin and its derivatives - are more sophisticated. Nevertheless they too incorporate many unrealistic assumptions and the success of these models in explaining trade patterns in the real world is poor.² It reflects the fact that there are always many more interacting factors at work in the real world than any mathematical model, however sophisticated it appears to be, is able to take into account.

Nevertheless such is the faith of neoliberalism in the theory that it ignores all these assumptions and has enforced its doctrines on poor countries through the International Monetary Fund (IMF), the World Trade Organisation (WTO) and World Bank, whose activities are examined in more detail in chapter 73.

² https://en.wikipedia.org/wiki/Heckscher%E2%80%93Ohlin_model

67 Major Developments in International Trade

67.1 Prior to the Bretton Woods (1944) agreement

In the days when physical gold was used for both domestic and international trade the international element presented no difficulties - trade was trade regardless of whom it was with and gold was the medium of exchange. However increasingly from the 18th century onwards as the industrial revolution gathered pace pound sterling notes became acceptable substitutes for gold, both in Britain and abroad, because the BoE not only 'promised to pay the bearer on demand the sum of', but did indeed (mostly) exchange the note for the equivalent value in gold. However, notes were never quite as secure as gold. During wartime when conditions caused gold shortages the Bank, on instruction from the government, was forced to restrict payment in gold in order to preserve its gold stocks, but later resumed payment when conditions improved. After the First World War, in 1925, the government again restored payment in gold, but only in quantities of 400 ounces or more. In 1931 Britain was forced to abandon the gold standard once again, and has never since restored it.¹

After the First World War the world economy was in a mess. There erupted a series of economic crises - hyperinflation in Weimar Germany due to punitive and unpayable reparations², severe deflation in Britain following the 1925 restoration of the gold standard, and the Wall Street crash and subsequent worldwide depression. In fact it was only with preparations for the Second World War that high levels of production resumed, demanded by the war effort. During the war it was clear to all that something radical was needed in order to stabilise national currencies and to put world trade on a much more sound footing. Plans were being drawn up by Germany and also by the UK and the US, each assuming victory by its own side. By the time the war began to favour the allied powers Britain and the US started to negotiate in detail a post-war arrangement, to which all parties would be invited to join, aimed at avoiding the disastrous economic outcome of the First World War and providing for post-war reconstruction. Those negotiations culminated in the Bretton Woods conference and agreement in 1944, the story of which is superbly told by Ed Conway in his book 'The Summit' (Conway 2014).

67.2 The Bretton Woods proposals and agreement

¹ <http://www.bankofengland.co.uk/banknotes/pages/about/history.aspx>

² Keynes was involved in the reparations discussions in 1919 in Paris as the chief representative of the British Treasury. He was so enraged by the unpayable sums demanded that he resigned in disgust. Later that year he wrote 'The Economic Consequences of the Peace', in which he said in chapter V that the reparations were "...one of the most outrageous acts of a cruel victor in civilised history." He also predicted in chapter VII that the deliberate impoverishment of the German peoples would lead to vengeance, which it most certainly did in the form of the Second World War.

Almost forgotten now, the Bretton Woods conference in 1944 was a pivotal moment in world economic history. It was the one and only time that world economic experts came together to design and agree an international financial system whose aim was to encourage and organise international trade for the benefit of all participants. It was led by the US and UK, and had its roots in the knowledge that economic failures after the First World War, especially the levying of punitive and unsustainable penalties on Germany, was a significant factor in leading to the Second World War. Although the war was still raging, the allied invasion of Normandy had begun just a month earlier and the allies were by then confident of ultimate victory. It was recognised that in order to preserve peace and international co-operation in the future it was necessary to establish a fair, stable and strong international financial system, and to have it ready when peace finally came. It was believed, quite rightly, that the more that countries established mutual dependencies the less likely they were to go to war.

It was so important a development, and contains so many lessons that are as relevant today as they were then, that it is worth exploring what it was and what it did in some detail.

The two main contributors were Harry Dexter White for the US and John Maynard Keynes for the UK. Both men were highly intelligent and experts in their field, and had discussed and submitted their own plans beforehand. The two plans had both significant points of agreement and significant points of disagreement.³

The UK was very heavily in debt to the US, which made it very much the poor relation, and the US by far the strongest player at the table. Although Keynes had developed a more sophisticated plan the US was able to enforce in preference its own plan, in which the US dollar would in effect be the international currency, a role it has held ever since. As mentioned earlier the system established at Bretton Woods lasted until 1973, following the breakdown of the link between gold and the dollar in 1971, an outcome that Keynes had foreseen and which his plan would have avoided.

It is worth looking at Keynes' plan in more detail, not only because it achieves what the world needed at the time and still does in terms of fair and equitable international trading, but also because it is beginning to be considered again following the 2008 crash.⁴

Keynes began by considering the negative effects of world trade as then established:

- i. Firstly it was based on the transfer of gold for wealth, which worked well as a currency of universally acknowledged value, but restricted trade to the availability of gold, and made hoarding advantageous to the hoarder (obtained by exporting) as it became less available and therefore more valuable, and correspondingly disadvantageous to everyone else, especially importers. Therefore international trade should not use gold, or at least should not be restricted to gold. Hoarding gold by excessive exporting is the international version of taking money out of circulation, and it has exactly the same effect as it does domestically - it reduces the ability to trade wealth.

³ See 'The Keynes' Plan' and 'The White Plan' in the IMF's historic documents available at http://www.elibrary.imf.org/staticfiles/IMF_History/IMF_45-65_vol3.pdf

⁴ <http://www.bis.org/review/r090402c.pdf>

- ii. Secondly trade imbalances are caused just as much by excess exporting as by excess importing, so the obligation to restore balance should be shared by both sides instead of being placed wholly on the side of excess importers - *a situation that is still in place today*. Although there are pressures on both sides to rebalance (excess exporters see their exports becoming dearer and imports becoming cheaper, and vice versa), those pressures are not felt equally. If an excess exporter chooses to continue to export, even at higher prices, then there is nothing to stop them - there is no ceiling to the amount of gold that they can accumulate. However an excess importer can't continue to import because eventually it runs out of gold and is forced either to stop or to borrow, but if it borrows the borrowing also stops when creditors fear that they will never be repaid. There is a very definite floor to the amount of gold that importers can lose or owe.
- iii. Thirdly the existence of restrictive trade practices (import tariffs and quotas, export subsidies, currency devaluations etc.) represent attempts to improve a country's economic position at the expense of other countries and usually lead to similar reciprocal actions in other countries - known as beggar-thy-neighbour policies, thereby harming all parties and severely damaging world trade. Therefore any new system should encourage world trade and discourage restrictive practices.

Keynes recognised that threats to his scheme would come from individual countries feeling unduly disadvantaged by it, so he deliberately made the scheme attractive to join, avoiding any hint of compulsion or coercion. He further deliberately avoided any pressure to disrupt existing arrangements for international trade between countries or groups of countries; for bilateral currency agreements between central banks; or for restrictions on countries' ability to pursue their own interests through trade restrictions, though he hoped that the new measures would apply strong discouragement.

Countries would be encouraged to join both as members and non-members, members having a say in the running and management of the scheme, but all enjoying the benefits in terms of trade.

The essence of what he proposed was as follows:

- i. The main administrating organisation of the scheme would be the International Clearing Union (ICU), governed by a board consisting of representatives of member countries.
- ii. There would be a new international currency - the bancor (bank gold) - only ever held inside the ICU and having no material existence other than as records in ICU books. Bancor would have no use other than for international trade, and bancor balances would earn no interest. All currencies would initially have fixed exchange rates in terms of bancor, to be agreed between the participants themselves. Thereafter any exchange rate changes could only be made by agreement between the countries involved and the governing board.
- iii. The governing board would fix the exchange rate between gold and

bancor, and to avoid the bancor depreciating against gold outside the governing board's control member states would not be permitted to buy gold for more than the equivalent bancor price in terms of their own currency. No-one would be likely to sell gold for less than this value because they would be better off selling it to the ICU.

- iv. Countries would be free to sell their gold reserves to the ICU for bancors, which would be credited to their account, but they could not sell bancors for gold. Keynes hoped that by these means gold would gradually disappear as a medium of world trade.
- v. Each member country would begin with a zero bancor balance in its account at the ICU, but would be assigned a quota, measured in terms of bancor and based initially on its pre-war international trading volume. The quota would determine its level of responsibility for the management of the union and also the level of credit facilities provided by the union. Quotas would be subject to periodic review.
- vi. Trading would continue between countries in the manner that was normal when the international gold standard was in force prior to the First World War, each importing from and exporting to others. At that time each pair of trading countries periodically cleared their outstanding balances by the transfer of gold from the debtor country to the creditor country. This transfer might be by physical shipment or merely by a change of ownership of gold in a trusted vault such as that held by the BoE. In the ICU system bancors would represent the equivalent of gold, and would be transferred between the countries instead of physical gold by crediting the ICU account of the creditor country (net exporter) and debiting the ICU account of the debtor country (net importer). The intent would be to make transfers at the ICU at the same frequency and times as transfers of gold were made under the old system.
- vii. Countries with excessive debits or credits of bancors (measured relative to their quota) would be penalised for maintaining excesses by the levying of interest, though they would be free to lend and borrow bancors between themselves at rates that suited them in order to keep them active rather than lying idle and to avoid interest payments to the ICU. This is of vital importance - both debtor and creditor countries would have equal disincentives to run with high levels of bancor credits or debits - both would be responsible for correcting imbalances. The prevailing situation both then and now is that the responsibility for imbalance correction sits firmly with the debtor country, which is perverse as the debtor has little room for manoeuvre (as does anyone who needs to borrow) whereas the creditor country has a great deal of room (as does anyone with excess money to lend). If both share the responsibility the creditor is incentivised to import (not necessarily from the debtor country but from anyone in the system) so as to reduce its bancor balance, and the debtor is incentivised to export (again to anyone in the system) so as to increase its

bancor balance.

This simple device would enhance world trade and help both economies at the same time as correcting the imbalance. If the responsibility lies wholly with the debtor then all it can realistically do is implement policies that cut down on imports - it can't force anyone else to buy its exports and there is no particular incentive for them to do so. Import reducing policies - raising interest rates and cutting public expenditure to limit spending by the public - reduces world trade and corrects the imbalance by shrinking the debtor's economy, causing great hardship for the population.

In a nutshell it is far better for a debtor country to expand exports than cut imports, thereby expanding world trade instead of contracting it. The principle behind Keynes' proposal was that creditors must buy what debtors have to sell. The ability to lend unused bancors was also important as it encouraged keeping them in circulation for trade purposes rather than having them lie idle.

- viii. The system would be truly multilateral - exports to any country could be used directly to fund imports from any country via the clearing system embodied in the ICU. This is very different and much more powerful than the prevailing situation both then and now of many separate trading arrangements.
- ix. The role of capital transfers in destabilising economies was well recognised from experiences between the wars, so countries would be strongly encouraged to restrict speculative capital transfers while still allowing transfers for legitimate investment purposes.

"The lesson that the main protagonists at the conference - John Maynard Keynes and Harry Dexter White - took from the economic chaos of the interwar experience was that a regime of unfettered capital flows (allowing money to cross borders freely for the purpose of buying and selling a country's financial assets as opposed to buying and selling goods and services) is fundamentally inconsistent both with a government's aim to achieve full employment and with liberal international trade. The reason is that significant capital flows have a destabilising effect on an economy and lead to calls for protective trade barriers. Therefore they preferred free trade to free capital flows - especially to short-term 'hot money' flows and flight capital. Hence the emphasis in the IMF's Articles of Agreement (drawn up at the Bretton Woods Conference) on currency convertibility for trade in goods and services rather than for trade in financial assets, and explicit recognition that countries may need to impose capital controls.⁵

Also free trade should not be seen as more trade. There is a great desire to trade internationally in spite of its cumbersome current nature. What Keynes' plan would have achieved in a properly managed manner is much more world trade in goods and services from which everyone would have benefited, without free movement of capital

⁵ IMF Working Paper WP/16/25 'What's In a Name? That Which We Call Capital Controls' at <https://www.imf.org/external/pubs/ft/wp/2016/wp1625.pdf>

which benefits the few at the expense of the many.

By these provisions Keynes' system would have enhanced both world trade and international stability, rather than restricting world trade and threatening international stability. In short it was exactly what the world needed both then and now, but the US was having none of it. The US was the world's biggest creditor and had the biggest share of gold, so it saw no reason why it should in effect be penalised for enjoying so happy a position. Instead the White plan prevailed - because he had the power to insist - where gold was retained as the basis of international trade, the dollar was pegged to gold and all other currencies pegged to the dollar, multiple bilateral trading continued, and debtor countries bore full responsibility for correcting trade imbalances. Common to the two plans were proposals for the creation of an International Monetary Fund, designed to monitor exchange rates and lend reserve currencies to countries with trade deficits, and an International Bank for Reconstruction and Development, now known as the World Bank, initially to fund reconstruction after the Second World War and then to provide underdeveloped countries with capital. Both institutions survive today, though their functions have changed radically over the years.

It was never a foregone conclusion that the conference would reach agreement. Delegates had to convince their home governments to sign up and there were plenty of misgivings around the world. Right up to the last minute horse trading continued, until finally all signatures were obtained, the deal was done, and everyone could go home, thoroughly exhausted but deeply satisfied.

Nevertheless there were still major objections. The Wall Street banks in particular were desperate to prevent the agreement from becoming law. They had been doing their best to discredit both Keynes' and White's plans with equal vehemence ever since they had seen copies of them. Their motives were understandable; both plans would severely disrupt their business. During the interwar years the banks had provided loans to stricken countries - Britain had become dependent on loans from J P Morgan. Not only would White's scheme make the IMF the main port of call when a country faced a crisis, but it proposed to regulate international capital flows and foreign exchange, two of Wall Street's other profitable activities. There were many gruelling hearings, but the argument used by both White and the US Treasury was that if the US rejected the agreement it would put the country at risk from a possible third world war - this was a powerful argument indeed. As Conway put it: "The New York bankers, the only effective opponents of the bill, were repeatedly lambasted as wanting, for their own immoral reasons, to drive the world towards another war." (Conway 2014 pp300-301). The bill was passed by 345 votes to 18 in the House and by 61 to 16 in the Senate. By July 1945, Bretton Woods was officially law in the US (Conway 2014 Chapter 13).

In all fairness to the US it was extremely generous in providing funds and materials for the reconstruction of war-torn countries after the Second World War, both as direct aid and as cheap loans, and the world enjoyed more than twenty years of stability and high growth thereafter. Although it wasn't bound by the restrictions to which the Keynes plan would have subjected it, nevertheless it provided massive support voluntarily and freely. The policy was reinforced by political motives, in that the US recognised the potential attraction of communism to countries in desperate need of the means for their populations to survive, so generosity in providing aid countered any such

attraction. Nevertheless it would be quite wrong to be critical of the US. It was the only country strong enough to fund the rebuilding of Europe and other devastated countries after the war, and it is to its great and enduring credit that it applied its enormous strength to do precisely that.

However the White plan did incorporate instabilities, which surfaced eventually and inevitably, and were made worse by the developed world's subsequent love affair with neoliberalism.

Keynes' ICU was perhaps the greatest of all his insights. It would have revolutionised and stabilised world trade without handing power to international creditors. It would have benefited everyone in the world, and would very likely still be in place and working well today. We would have avoided the chaos of floating exchange rates after the US was forced to abandon gold convertibility - the inevitability of which Keynes foresaw. Sadly however Keynes' plan was just too far ahead of its time. Hopefully it will be recognised that its time has now come.

Paul Davidson⁶ and Joseph Stiglitz (Stiglitz 2006 Chapter 9 pp245-268) have both developed systems based on Keynes' plan that could be implemented today.

67.2.1 The miraculous power of gifts

The experiences after the Second World War when the US gave aid to Europe and Asia contain valuable lessons that deserve more widespread acknowledgement and understanding. There were two major aid programmes - Western Europe (the Marshall Plan)⁷, totalling \$13 billion between 1948 and 1951, and Asia⁸ totalling \$6 billion up to 1953. In today's money the equivalent would be about \$200 billion in all, not to mention the very substantial aid that was provided during the war itself - that's quite a gift! This was mentioned earlier in chapter 48 section 48.1.

The Marshall Plan represented about 2% of US output and lasted for four years, yet no US citizen felt deprived of goods or services because real income per person was still 25% more than it was in the last peacetime year of 1940 (see Paul Davidson's proposed system based on Keynes plan referenced above). The aid was spent on importing US produced food, goods and materials so US exports and employment boomed - and there was plenty of spare capacity in the US as troops came home looking for work. Paul Davidson highlighted the benefits that all enjoyed:

For the first time in its history, the United States did not suffer from a severe recession immediately after the cessation of a major war. The US and most of the rest of the world experienced an economic 'free lunch' as both the potential debtor countries [*which they would have been if the US had lent rather than given the money*] and the creditor country experienced tremendous real economic gains resulting from the Marshall Plan and other foreign aid give aways. (From Paul Davidson's proposed system referenced above.)

In other words the US gift both paid for itself and kept on paying as all countries

⁶ http://www.i-r-e.org/fiche-analyse-183_en.html

⁷ https://en.wikipedia.org/wiki/Marshall_Plan

⁸ https://en.wikipedia.org/wiki/Marshall_Plan#Aid_to_Asia

enjoyed unparalleled growth and prosperity throughout the 1950s. This shouldn't really be surprising when we recall that money is not a commodity that is used up, but a lubricant that facilitates transactions, and transactions provide the willingness to create surplus wealth - the capacity for which already exists within all human beings. The US gift enabled all countries - giver and receivers - to apply their efforts to best effect in creating surplus wealth, and it was surplus wealth, amplified by the income multiplier - see chapters 16 and 17, that rebuilt Europe and Asia and brought everyone unequalled prosperity.

As members of prosperous societies this is a lesson we would do well to remember when we sympathise impotently when faced with the great sufferings of the world.

After the great recession there is massive spare capacity in the developed world - spare capacity that could be well utilised in relieving world suffering. With a modern spirit of generosity like that shown by the US after the Second World War we could do so much more - not only for the sufferers but also for ourselves.

67.3 The Bretton Woods Era - 1945 to 1973

The Bretton Woods system of monetary management established the rules for commercial and financial relations between the United States, Canada, Western Europe, Australia and Japan in the mid-20th century. It was the first example of a fully negotiated monetary order intended to govern monetary relations between independent nation states. Each country agreed to adopt a monetary policy that maintained its exchange rate by tying its currency to the dollar, and the IMF undertook to bridge temporary imbalances.⁹

The roles of the IMF and World Bank were hardly established when the US embarked on its massive aid programme to both Europe and Asia. The amounts involved swamped anything the new international organisations could muster so they remained largely ineffective in their early years. Only later did the World Bank begin to carry out its objectives of funding the development, infrastructure and anti-poverty programmes in the undeveloped countries of the world. The IMF fared even worse. It was largely emasculated when Britain massively devalued sterling in 1949 in order to improve export competitiveness and reduce its wartime debts. It didn't even consult with the IMF before doing this, though it did consult with the Truman Administration. It was only much later that the IMF became a player in world monetary relations, a period that began when the United States used the IMF as a vehicle to make an enormous loan for Great Britain after the Suez crisis in 1956-7.¹⁰

During this period world trade expanded at its most rapid pace of the 20th century. Between 1948 and 1968, the total volume of merchandise exports from non-communist countries grew by 290%, a rate that far exceeded the expansion in world output.

⁹ https://en.wikipedia.org/wiki/Bretton_Woods_system

¹⁰ <http://www.americanforeignrelations.com/E-N/International-Monetary-Fund-and-World-Bank.html>

and <http://www.americanforeignrelations.com/E-N/International-Monetary-Fund-and-World-Bank-A-rough-start-for-bretton-woods-and-the-imf.html>

However the extent to which this was due to the Bretton Woods agreement itself, to US generosity in funding post-war reconstruction, or to other factors such as technology, is debated. A paper by Andrew Terborgh of the London School of Economics in 2003¹¹ argues that the stable environment for multilateral payments established at Bretton Woods had a significant effect in allowing trade to flourish. This seems very plausible, especially considering that the biggest increase in world trade occurred in the 1960s, well after the US aid programmes had ended. This is strongly supported by another important study by Andrew Rose of the University of California in 2000¹², which shows that a common currency has a dramatic effect on international trade, also showing, conversely, that having different currencies severely limits international trade. This is unsurprising given that exchange rate volatility creates very high risks for businesses that import and export goods and services, risks that can easily wipe them out completely during periods of large adverse rate movements.

The period was also characterised by an extraordinary level of financial stability in comparison with earlier and especially later times. The chart in chapter 50 (figure 50.1) shows this clearly.

Nevertheless the system contained the seeds of its own destruction. The whole system relied on the US dollar as its anchor, and the dollar therefore became the world's reserve currency. A reserve currency confers significant advantages on its home country. A single dollar bill worth \$100 costs the US only a few cents to print, yet because it is valued throughout the world at its face value it can buy wealth worth \$100 and be retained by the country selling the wealth because it knows that it can use it in paying for wealth from other countries. In other words the US can exchange paper for wealth. The benefit of this to the US has been estimated to be in excess of \$100 billion per year.¹³ The same applies to a lesser extent for other reserve currencies, most notably today for the Euro which represents 21% of world reserves.

However there are also disadvantages in having the home currency as the rest of the world's reserve currency in that the country's domestic interests (stimulating production at home) are in conflict with its international interests (benefiting from the ability to exchange paper for wealth). This is known as the Triffin Dilemma¹⁴ first identified in the 1960s by economist Robert Triffin. In order to enjoy the international benefits of providing the reserve currency the US must allow other countries to accumulate dollars, and to do that it must import wealth from abroad - indeed that is what the benefit is - exchanging paper for wealth. If imports exceed exports, as they must if the US is to be a net exporter of dollars, the home money supply diminishes which reduces the quantity of domestic transactions and risks deflation. It is no good the US trying to get its dollars back by exporting to stimulate its home economy, because then it depletes foreign US dollar reserves which defeats the object. To counter the risk of deflation the US can create more dollars and spend them in the domestic economy to stimulate domestic demand, but that demand won't be confined to domestic output because foreign output

¹¹ <http://www.lse.ac.uk/economicHistory/pdf/wp7803.pdf>

¹² <http://faculty.haas.berkeley.edu/aroze/Grav.pdf>

¹³ https://en.wikipedia.org/wiki/Reserve_currency

¹⁴ https://en.wikipedia.org/wiki/Triffin_dilemma

can be bought just as easily and probably more cheaply, so the outflow of dollars will continue and imports will grow. This is the dilemma: enjoy the benefits of importing almost free wealth but risk a struggling domestic economy; or enjoy a thriving domestic economy but forego the benefits of importing almost free wealth.

This dilemma is what lay behind the 1971 Nixon Shock. The US dollar was tied to gold, but to stimulate its economy sufficiently to pay for the Vietnam war it had to create many more dollars than it had reserves of gold. Other countries strongly suspected what was happening and demanded gold in return for dollars, demands that couldn't ultimately be met. It was an instability built into the Bretton Woods system by the US insisting on using the dollar as the reserve currency rather than accepting Keynes' proposal to create an international accounting currency - the bancor. Keynes had in fact anticipated this very danger (see the Triffin Dilemma reference) for the US and his proposal would have avoided it. Had Keynes' proposal been adopted the Bretton Woods system using the bancor would probably have lasted very much longer - in all probability we would still have it - and the world and especially developing countries would have been very much better off for it (see chapter 73). Nixon's move was intended to be temporary, but after several attempts to re-establish the gold-dollar link under a reformed system failed¹⁵, most currencies became freely floating by 1973 and have been ever since. That marked the final breakdown of the Bretton Woods system.

67.4 Post Bretton Woods: Floating exchange rates 1973 - present

67.4.1 Aftermath of the Bretton Woods failure

After the Bretton Woods system ended in 1973 there was chaos in the markets as they struggled to adjust to the never-before-seen phenomenon of floating exchange rates. Inflation rose to unprecedented levels as world commodity prices soared - all currencies lost considerable value against real wealth once the dollar/gold link was removed - and economies that depended on imports stagnated as spending was diverted abroad.¹⁶ Countries dependent on commodity imports, including the UK, were considerably worse off and had to suffer the consequences. Raising interest rates was able to stem the currency depreciation by making the home currency more attractive to foreign investors, but at the cost of yet more jobs as the domestic economy slowed even more due to people having less money to spend. Investment money coming in from abroad can slow the decline to some extent if it is spent in the economy because it compensates for money going abroad to pay for imported materials, but it is of no help in the longer term as it has to be paid back together with interest or profit. The economic squeeze was felt most keenly after the oil price quadrupled when OPEC, in reacting to the severe decline in revenues after the dollar plummeted, embargoed exports to countries that supported Israel in the Yom Kippur War, and buyers bid up the price in response. This caused knock-on effects in the price of most goods because transport and other oil related

¹⁵ https://en.wikipedia.org/wiki/Nixon_Shock

¹⁶ When importing, the home currency doesn't go abroad, it is exchanged for the currency of the country that exports, and that is what is spent on imports. Although domestic currency doesn't go abroad, the amount that is exchanged is spent abroad in terms of monetary value. See chapter 70.

production costs rose dramatically.

Governments kept pouring in new money by increased borrowing from banks and the private sector in the belief that it would stimulate economies by absorbing the spare capacity that was rapidly increasing, but rampant inflation was causing the value of that money to drop so fast that although demand was stimulated it was buying less and less wealth and few businesses were willing to risk production expansion in the face of rapidly rising production costs and so much uncertainty in the future. Unions were also very strong at this time which further reduced business confidence. In fact many businesses were cutting production in order to cut their rising costs leading to even more spare capacity. This was the phenomenon of **stagflation** - stagnation coupled with inflation. The reality was that with essential imports costing so much more there was considerably less money available for domestic spending, so there was no way to avoid the major disruption that it caused - see chapters 84 and 85 for a detailed discussion of stagflation and the tragedy of ignoring and condemning Keynes.

67.4.2 Floating exchange rates

In the days when gold was used for both domestic and international trade a country ran down its stock of gold when it bought from abroad and vice versa, just as an individual did when she bought or sold in a domestic market. Under the Bretton Woods system with fiat currencies in domestic trade, fixed but adjustable exchange rates managed by central banks and the IMF, and all currencies tied to gold through the US dollar in international trade, things were more complex but relatively easily understood. With floating exchange rates and no common international currency things are very much more complex.

With the current system of floating exchange rates it is as if an individual (let's call her Mary) lives in a country that has no common currency. All she can do is write personal IOUs when buying and accept other people's IOUs when selling. Each IOU is written in the form of (say) an hour's labour from the person offering it, so that each IOU has the same value as all other IOUs from a particular person, but a different value from anyone else's IOU. This raises the question of how to value each person's labour relative to every other person's labour, and that is a real problem. It can only work domestically between people who know each other and their work capabilities, but what happens if Mary buys more wealth than she sells - she has more people working for her than she does work for others? The IOU rates were set initially based on work capabilities, but that only lasts as long as everyone trades the same value of work. If there is an imbalance then market forces start to take over. If Mary buys more wealth than she sells then other people accumulate Mary's IOUs, so more people want to sell them than want to buy them - they want Mary to work for them more than they want to work for her. This applies even if Mary's and other people's work capabilities are equal, so if they do work for Mary then they want more of Mary's IOUs than they used to do when they traded equal values of work. The longer this goes on the more in demand are her services and the more reluctant others are to work for her. As people begin to wonder whether Mary will ever redeem her IOUs they start to offer them to others at a discount for their more stable IOUs, and the discount will vary with different people's expectations of Mary's future activity. In other words people will use Mary's IOUs as gambling chips. From Mary's

own point of view she is forced to work more if she wants to do any trading with others, so the operation of the market itself - supply and demand - applies a corrective mechanism. In effect when she buys more labour than she sells buying becomes more expensive, but there is more demand for her labour because to everyone else it is cheap. Exactly the same mechanisms, especially gambling, are at work in currency markets.

Although currency exchange rates depend on the relative levels of supply and demand, the fundamental rate (i.e. the underlying rate about which supply and demand normally fluctuate) depends on the value of a country's output in terms of internationally tradable wealth. Let's say that Countries A and B start with identical rates of wealth creation and both export 20% of that wealth. Their currencies have the same value, the same quantity of money is in circulation and all other things are equal. The starting exchange rate will of course be 1 for 1. Over time country A pulls ahead in terms of productivity, so that eventually its wealth creation is twice that of country B, but all other things, including the quantity of money in the home currency received by the producers, remain the same. Within country A, since the quantity of money in circulation hasn't changed but the quantity of created wealth has doubled, wealth will be half the price it used to be. Now the price of international wealth is fixed by the world market so neither A nor B can influence that price by itself. Therefore in selling A's international wealth abroad it earns twice what B earns from selling its international wealth because it sells twice as much wealth, but since the amount of money received by A's and B's producers is the same, foreign buyers are willing to pay twice as much in their own currency for A's currency as they are for B's because they receive twice the wealth from A. A's currency is therefore worth twice what B's is worth to the outside world. If, in contrast, in country A the quantity of money in circulation grew in line with growth in wealth creation, then one unit of currency would still buy the same number of items of a standard international product as before, and in exporting A would now expect twice as much of its own currency in exchange for twice the wealth sold. Therefore the exchange rate between A's and B's currency would still be 1 for 1.

The trouble is that there are very many things that influence the value of a country's currency in terms of internationally tradable wealth. The rate is complicated by the fact that different currencies generally evolved from different starting valuations. For example one pound sterling was worth one pound weight of sterling silver in Anglo-Saxon England, whereas the US dollar can trace its origins to the Spanish dollar which in turn was minted to correspond to the German thaler, and was formally defined in 1900 as 25.8 grains (1.67gm) of gold of 90% purity under the Gold Standard Act. However starting values are only of academic interest as all currencies change significantly in value over time. Money supplies in different currencies are subject to different rates of growth and decline, and levels of inflation and deflation, so they change in value relative to the country's own wealth as well as relative to internationally tradable wealth. Different interest rates are a major factor in changing the level of demand for the currency, and **balance of payment** (difference between money flowing into and out of a country) issues also affect currency demand. Levels of government debt and political stability are other factors that have an impact because they affect the risk involved in holding the currency. Finally the main factor that determines demand for a currency is not the situation that exists at the present time but expectations about the future. Exchange rates therefore often swing wildly and rapidly due to changing expectations. All in all there are so many

factors involved and so many future uncertainties that foreign exchange dealing presents an ideal platform for speculation, and that, together with the fears and greed both rational and irrational of speculators, drives exchange rates more than anything else.

Internationally, currency supply and demand are largely provided by a mass of gamblers who trade heavily in currencies in the hope of making a profit. To exchange currencies for genuine trading purposes requires joining in with the gamblers because there is no way to distinguish people who want to exchange currencies for the purpose of genuine trading from those who want to exchange them for gambling. Some degree of gambling does serve a useful purpose in that it enhances **liquidity** - the ability to buy and sell assets (in this case currencies) quickly without affecting the price by much. If only import and export traders used the foreign exchange market there might not be anyone wanting to sell a currency in the quantity required at the same time as someone else wanted to buy it. This is the reason that there are foreign exchange brokers (**market makers**) - usually investment banks - who both buy and sell assets and make a profit from the **spread** - i.e. selling at a higher price than they buy. Banks also gamble heavily themselves, because they can do so at minimal cost, but they also encourage other gamblers to enter the market so as to do more business and make more profit, but competition between brokers also ensures that the price difference between buying and selling narrows, which helps both gamblers and genuine traders. Provided that currency values exchanged by genuine traders is high enough exchange rates will be influenced mainly by fundamental differences in the strength and export/import balance of respective economies, but when currency values exchanged by gamblers greatly exceeds that of genuine traders the activities and especially the emotions of gamblers have the biggest influence.

The self-correcting balance provided by supply and demand is a good thing, but the predominance of gambling is a bad thing, because gambling is a highly emotional business driven as much by greed and fear as by logic, so instabilities in exchange rates are commonplace, and poor exchange rates can do and indeed have done great harm to economies. As Keynes famously said

Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. (Keynes 1936)

The comparison between Mary in a single economy and many economies trading together reveals quite starkly the severe problems that arise when there is no common international currency. It leads to gambling, and gamblers' interests are purely selfish; they have no interest at all in the interests of trading countries. Indeed when gamblers' interests are served by a currency's collapse they do everything possible to try to bring about that collapse - and sometimes succeed.¹⁷

Betting on the collapse of a currency when a country is in difficulties has significant potential for gain but little potential for loss. It is done by selling a currency short - borrowing currency in order to sell it. If the currency does collapse then it can be re-bought for a fraction of the value of the currency that it was sold for, thereby making a

¹⁷ https://en.wikipedia.org/wiki/Black_Wednesday

handsome profit, but if it doesn't collapse then it can be re-bought for much the same price as it was sold for.

No single country could possibly manage if its entire people traded using their own personal currency (IOUs), that is the very reason that money - i.e. a common currency - has evolved so many times in human history. The world economy can only cope in this way because there are many fewer trading countries than there are people in a single country, but nevertheless the inefficiencies and damage that it causes are severe.

The gambling element in floating currencies severely obstructs world trade. Volatile exchange rates depress trader confidence because they bring in a major factor that can heavily influence profits. If I am an exporter and spend £10,000 on materials and labour in producing goods for the international market, then at the time I decide to spend that money the exchange rate might give me a profit of 5% which I consider worthwhile. But if by the time the goods are ready for sale the domestic currency has appreciated by 6% against the world price of the goods I have produced then I suffer a 1% loss. The reason is that a buyer will only pay the world price, which hasn't changed, and when they exchange their currency for sterling I receive 6% less sterling than I would have done if the currency hadn't changed. Export industries that suffer a domestic exchange rate rise become less competitive, whereas a domestic exchange rate fall, although making export industries more competitive, reduces profits in world price terms, and all the more so if raw materials are imported. The greater the uncertainties in future exchange rates the more reluctant are traders to trade internationally. Traders can insure against rate changes using currency futures, but this adds to trading costs, and if rates are particularly volatile then this insurance can be very expensive.

Why do we put up with this tortuous system? It was never designed to be this way.

It came about after President Nixon was forced to withdraw the link between the US dollar and gold, leaving currencies without a stable anchor and thereafter allowed to float - i.e. at the mercy of supply and demand created by traders and gamblers. To change the system requires international agreement, something that is extremely difficult to achieve, but a major reason for its staying is that it is strongly supported by the neoliberal doctrine where 'markets always know best and government interference is always harmful'. This doctrine is strongly supported by the financial community, at the heart of which are banks, and banks make the most money from floating exchange rates. Banks skim off a fraction from every foreign currency exchange that they arrange, ostensibly in return for the service they provide (which is of course worth something but not nearly as much as is charged) but in reality largely extracted from the traders and gamblers (other than the banks themselves) who engage in currency exchange.

As has been said before the neoliberal doctrine has been accepted as orthodox economics, at least in the developed world, since the early 1980s, and even though the crash of 2008 should have killed it off it continues to live on and is still claimed as valid by those economists and politicians who remain in denial. However increasing cracks are visible in its foundations, and voices raised against it are no longer ridiculed quite as much as they once were.

68 The Dangers of Overspending in the International Market

The UK spends more on imports than it earns from exports and has been doing so for the last fifteen years. This means that sterling must be sold to buy the foreign currency needed to buy the excess imports. Now, importantly, the foreign exchange (forex) dealers who buy sterling and sell foreign currency have to maintain a balance at all times because their stocks of foreign currency are limited, so, unless there are as many buyers as sellers of sterling they very soon take action to encourage foreigners to buy sterling and sell their own currencies. They do that by offering sterling for sale at a lower price - they become willing to sell more pounds per dollar or per euro than they were before, in order to make them more attractive to foreigners. In these circumstances the pound depreciates against other currencies. A depreciated currency means that the UK as a whole is worse off with respect to other countries - UK wealth is worth less on world markets. For the UK, which is far from self-sufficient, this carries significant dangers. When the depreciation becomes significant, imports, and everything that depends on them become much dearer, threatening a recession or worse, when life becomes harder for everyone.

What do the foreign buyers do with the sterling that they buy? That is a key question. They aren't buying our exports because those buyers are already accounted for; we're only talking here about the buyers that take the sterling that is sold to buy the excess imports. They invest, in bonds, equities, derivatives, even building entirely new factories (foreign direct investment - FDI); anything that is available in sterling that provides an ongoing return or a likely price rise, and they will only do that if the return or price rise is equal to or preferably better than they can get with their own or other currencies. To pay for our excess imports therefore we must:

- i. rely on foreign investors to buy our debts (lend us money);
- ii. sell our ability to produce future wealth (FDI); or
- iii. sell some of our accumulated wealth (shares in UK companies, commodities, antiques etc.).

Borrowing money (i) and allowing foreign investors to buy UK wealth production (ii) carry very painful penalties. They make money available immediately but remove continuing streams of money thereafter. Indeed that is why foreigners invest - because they believe that they will reap more than they sow. The UK does the work that earns the income, but the benefits go to foreign investors. Selling accumulated wealth (iii) to buy essential consumables (which is what the bulk of our imports are) diminishes the country, just as a family that sells its furniture to buy food diminishes the family. (ii) and (iii) represent the export of wealth, but (i) is borrowing, where the obligation is to repay the foreign investor in domestic currency because the investor has bought domestic currency debts, which may be public (government bonds) or private (commercial bonds or other forms of private debt). The important point, which follows on from the

discussion in chapter 65 section 65.5, is that since the obligation is to pay domestic currency it is the country's currency that will be sold by the investor to buy the foreign currency that he or she wants, both for the interest and the principal. Therefore, regardless of whether the debt obligation is public or private, it is the country that is affected by having its currency sold when the foreign lender exchanges it. This point will come up again when we discuss the Lawson doctrine later in the chapter.

A normal transaction is usually beneficial to both parties, where the use value of the things traded to each party exceeds their exchange value, as discussed in chapter 2. However foreign investments aren't transactions of that sort, they are intended to make a profit, and if the investment is profitable for the buyer then that profit is paid by the seller - we are worse off with the investment than without. The neoliberal policy of selling wealth creating assets to anyone who wants to buy them, regardless of nationality, is particularly dangerous for the domestic economy. Continual borrowing and selling either accumulated wealth or wealth producing capacity are unsustainable. The more that profit from industry and interest on debts flow abroad, the less that is available for recycling in the domestic economy, and the more the economy declines.

The unpalatable fact is that as a single country trading with other countries we can only buy foreign wealth by selling our own wealth abroad or by borrowing, just as an individual trading with others can only buy wealth by selling wealth (usually labour) or by borrowing.

The UK never needs foreign direct investment. As a country in control of its own economy we can generate the necessary money (which is only lubrication after all - see chapter 10) for whatever investments we require (Werner 2005 p217). The government says it wants foreign direct investment because it creates jobs, but we can more easily create our own jobs, and create them in order to produce things that we want produced, not whatever foreign investors choose to produce. All it needs is for the government to take proper control of the economy instead of leaving everything to the unfettered market. We should ensure that our imports are paid for by selling exports, not by borrowing or selling existing wealth because both are harmful to the domestic economy. Attracting foreign investment to pay for excess imports is like an individual paying for today's basic consumption by borrowing or by contracting future labour - there's no happy outcome. We can only pay for today's imports without future penalty by selling today's exports, just as an individual can only buy today's basic consumption without future penalty by selling today's labour.

The UK is on a dangerous and slippery slope. Depending on foreign investors to offset our excess spending is very hazardous. Investors will only invest if they have confidence that the exchange rate won't move too far against them, because of all the risks they take that relating to adverse exchange rate movement is one of the biggest. The more we continue to overspend on imports the less confidence that foreign investors will have, and when they abandon sterling in significant enough numbers then the exchange rate will plummet. Forex dealers will have to discount sterling very heavily to attract investors, and the only investors they will attract are those willing to take big risks - high-stakes speculators. If the exchange rate falls heavily then the UK economy will go down with it because all the essential imports that we depend on, and most of our essentials have at least some imported component, will rise rapidly in price.

Surprisingly, trade deficits seem to worry governments less than budget deficits (excessive government borrowing), yet the UK has control over budget deficits - if it chooses to exercise that control (see chapter 100 section 100.5). With trade deficits it is at the mercy of nervous foreign investors who, like all investors, care only about benefiting themselves and operate with a herd mentality. In the relatively recent past foreign investors have devastated weak countries when an event has triggered a stampede for the exits, and with the cruellest of ironies the very organisations that were set up to help countries in distress - the IMF and World Bank - made the situation for them far worse (see chapter 73). It is a dangerous mistake to think that the UK is immune from similar treatment.

If the worst happened and we were left with a very weak pound there would be no quick fix. In effect UK wealth would have become worth very much less than foreign wealth. Keynes was well aware of this and pointed it out in his submission to the government setting out his proposals for the Bretton Woods conference in 1942¹:

If, indeed, we lack the productive capacity to maintain our standard of life, then a reduction in this standard is not avoidable.

Keynes was well aware of the implications of a drop in productive capacity as happens when essential import prices rise. In fact Keynes foresaw the problems that would arise by the adoption of floating exchange rates and his Bretton Woods proposal would have avoided them. No-one would have been at the mercy of foreign investors. There would have been an international agreement in force administered by an organisation charged with overseeing and managing international trade for the benefit of the whole world. There would have been a single international currency together with guaranteed overdraft facilities for all countries that needed them. More than that, there would have been measures in place to help any country in difficulties, where creditor countries as well as debtor countries shared responsibility for correcting imbalances. Every country would have known exactly where it stood and have had increasingly forceful warnings about movements out of line with sustainable development. Instead we have a system where any country in difficulties is ruthlessly attacked for private gain with little warning - see chapter 73.

The current drive to outsource jobs abroad also weakens the UK position internationally. Although the main damage is to domestic jobs the wages that are paid to outsourced workers represents even more spending diverted abroad - to buy the imported labour, and it stays abroad because those workers spend their earnings in their own country

68.1 Some think that trade deficits don't matter.

There is a strong school of thought, especially amongst neoliberals, that trade deficits don't matter or are even a good thing. This belief is strongly supported by the Efficient Markets Hypothesis (see chapter 29) which sees international markets in the same way as domestic markets - best left solely to market participants because they have already taken

¹ See 'The Keynes Plan' (A) para 12, at http://www.elibrary.imf.org/staticfiles/IMF_History/IMF_45-65_vol3.pdf

all relevant information into account. Quiggin states in his book - Quiggin 2010 p49 - "In the United Kingdom, this view became known as the Lawson doctrine, after Chancellor of the Exchequer Nigel Lawson. Lawson argued in 1988 that current account deficits² that result from a shift in private sector behaviour should not be a public policy issue." However recall the discussion earlier in the chapter about currency being sold when foreign lenders and investors take home debt interest, principal and profits. Doing so means that trade deficits directly affect the value of the national currency and are therefore very much a public policy issue, or should be.

The line of reasoning is that floating exchange rates compensate for trade imbalances. However the only compensation they offer is to keep borrowing and investment from abroad in step with excessive importing - for as long as the currency remains internationally viable. What they don't compensate for are the penalties involved in excessive importing. Floating rates continuously balance money flows in and out of a country, but they don't continuously balance trade. The main country with this view is the US, which has massive foreign debts of over \$4.5 trillion³, of which China holds over \$1.2 trillion. It isn't a good thing even for the US, but the US is a special case in that its currency is the world's major reserve currency. China has been stockpiling dollars and using its own stock of yuan from its own population's savings to pay its own workers to produce exports. It uses the dollars to buy US bonds, on which the US pays interest. The US is like a credit card holder who has a massive outstanding balance but is content just to pay the interest on it every month. For the US though, being in debt to China isn't the same as any other country being in debt to another, because the debt is more China's problem than the US's, as was discussed earlier in chapter 65 section 65.5. This is because depreciation of the dollar would hurt China's economy more than the US's by reducing the value of the debt.

Nevertheless the imbalance has hit US employment hard, and contributed to keeping domestic wages and living standards low for most of its population for the last thirty years. Also it gives foreign powers the ability to depreciate the dollar if they wished to do so. For example if China wanted to create economic problems for the US it could spark a major dollar depreciation by selling its dollar holdings. That would panic the markets and the dollar would plummet. Its own economy would suffer but hostile political reasons might make that less important than damaging the US economy. The US is probably prepared to take this risk because it is largely self-sufficient in most things, and could cope with some painful but manageable re-adjustment. Oil usage would have to be cut back, but it is predicted to be self-sufficient even in oil by the 2030s.⁴ Also it is by far the most heavily armed country, so other countries are wise to think very long and hard before incurring the wrath of the US.

The UK, as most other countries, is in a very different position to the US. Sterling is not a significant reserve currency so we have to buy practically all our imports by exchanging it for other currencies, and we are far from self-sufficient. Yet we continue to ignore or play down our trade deficit.

² Current account deficits arise because of trade deficits as explained in the next chapter.

³ <http://usgovinfo.about.com/od/moneymatters/ss/How-Much-US-Debt-Does-China-Own.htm>

⁴ <http://www.oilandgas360.com/bp-energy-outlook-united-states-likely-self-sufficient-oil-2030s/>

However, in our case we have a different reason for complacency - our liabilities to foreigners are largely balanced by foreign assets owned by the UK. In 2014 the UK's liabilities to foreigners (debts, equities, derivatives and direct investments) was 587% of GDP, or £10.7 trillion, whereas the UK's holdings of foreign investments was 569% of GDP, or £10.37 trillion.⁵ These figures are massive by any standards but the difference is much smaller at *only* 18% of GDP or £328 billion. The difference is known as the **Net International Investment Position (NIIP)**, and it is only this difference that concerns the complacent. But complacency isn't appropriate. It's like being trapped between two enormous forces that balance each other for now, but may become unbalanced at any moment. Imagine my owing someone £1.5 million and being owed by someone else £1.6 million. I have a net worth of £100,000 - *happy days!* But not so fast, this is a very different situation to my having £100,000 in the bank and no debt. At any moment the person owing me £1.6 million might default, leaving me with an unpayable debt of £1.5 million - *happy days no longer!*

There's an additional and significant worry with international assets and liabilities, they are all investments of various sorts and all denominated in different currencies. Investments vary in value continuously and foreign currencies fluctuate, often quite wildly, relative to sterling. Changes in investment and currency values operate on the gross investment positions, so the difference - the NIIP - can easily be squashed between the gross changes, and at over £10 trillion the gross values are formidable.

One heartening factor is that if sterling were to depreciate significantly against other currencies the UK's foreign investments would rise in value in sterling terms, so if foreign investors do take fright and abandon sterling then we have a cushion to soften the blow. Nevertheless the UK is in a very uncomfortable position, and relying on such a cushion might well prove ineffective in a world that starts to suffer severe consequences from political or environmental changes. In these circumstances our foreign investments might vanish in a haze of debt defaults and unilateral investment repatriations. We could retaliate in kind in cases where there are foreign investments in the UK from the same countries, but not otherwise, except perhaps by going to war, but let's not contemplate that.

It is better to plan for a pessimistic turn of events than to rely on optimism. Hope for the best but prepare for the worst!

We would therefore be wise to reduce both our holdings of foreign investments and foreigners' holdings of ours - by buying them out and repaying the debts. The effect on the value of sterling will relate to the net investment, so should be relatively small compared to the gross position. This of course means restricting capital flows which goes directly against neoliberal orthodoxy, but there are other good reasons for capital flow restriction as well as this, as discussed in chapter 74. At the same time we should take urgent action to expand our export industries and reduce our imports. The sooner we establish a proper trade balance the more secure we shall be.

⁵ See 'Analysis of the UK's international investment position: 2016' at <https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/articles/analysisoftheuksinternationalinvestmentposition/2016>

69 Balance of Payments (BoP) Accounts

A country's BoP accounts record transactions between a country's residents and non-residents in a specific time period. They present an aspect of the national accounts relating to imports and exports. The accounts are drawn up for the country as a whole, it is the country that sits at the centre of the accounts and administers them, so it is only interested in movements of wealth and money between residents and non-residents.

Monetary value leaves the country by purchase of foreign goods, services and assets; by returns paid on UK assets held by non-residents; and by transfers out such as when UK residents exchange money to send abroad and the government sends aid to foreign countries.

Monetary value enters the country by sale of UK goods, services and assets; returns on foreign assets held by UK residents; and transfers in such as when non-residents exchange money to send to the UK.

Note that what matters is not whether or not things physically enter or leave the country but whether or not ownership changes between UK residents and non-residents.

For accounting purposes these transactions are split into three main accounts, each with many sub-accounts for specifics. They are the Current Account, the Capital Account, and the Financial Account.

The current account is the trading account and records:

- trade in goods and services;
- primary income - income earned by UK residents from non-residents and vice versa (investment returns, wages, taxes, subsidies etc.);
- secondary income - provision (or receipt) of economic value by one party without directly receiving or providing any economic value in return (money transfers other than for trade purposes between residents and non-residents).

The capital account is a minor account in the BoP and records:

- the acquisition and disposal of non-produced, non-financial assets (such as copyrights, patents and trademarks);
- capital transfers where there is no quid pro quo to offset the transfer of ownership of fixed assets, or the transfer of funds linked to fixed assets such as aid to finance capital works, or the forgiveness of debt.

The financial account records UK claims on, and liabilities to, non-residents.

A very confusing aspect of the BoP is that the financial account used to be known as the capital account, and is still often referred to as such. It's a pity the same name has been used for the new minor account because it causes ambiguity.

The current account holds wealth rather than money, and the wealth it holds is that received from and given to non-residents. Therefore whenever wealth is received by residents from non-residents (wealth is imported) it is given to the current account and is therefore recorded as a debit, and when wealth is given (wealth is exported) it is taken from the account and therefore recorded as a credit. It can be confusing because all explanations tell us that the account records primary and secondary income, so income received would seem to be a debit, whereas it's the wealth that the income was earned for that the account holds, not the income itself. For example when a UK resident does work for a non-resident, and is paid for it, it is the export of work that is recorded in the current account – wealth is taken from the account - so it is credited. The same applies for secondary income. When a UK resident receives money from abroad, perhaps a parent receiving money from a son or daughter working abroad, then the account holds the putative export - nothing was exported but for accounting purposes it is considered to be an export, and again in this case it will be credited. A country that imports more than it exports suffers a current account deficit, and a negative current account balance indicates that the totality of imports to date has exceeded the totality of exports.

The capital account represents non-produced, non-financial assets and capital transfers received from and given to non-residents as listed above.

The financial account represents money and financial assets received from and given to non-residents. It records the opposite end of each import/export and capital account transaction, so money paid out for an import or for work done by a non-resident is credited (money is taken from the account) and money received for an export or for work done by a resident for a non-resident is debited (money is given to the account). The current and financial accounts are by far the main players in the BoP.

The sum of these accounts must always be zero, but in practice in recording all the transactions there are errors and omissions, so a balancing item with this name is included to make the overall total zero.¹

¹ See the 2016 'Pink Book' at

<https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/bulletins/unitedkingdombalanceofpaymentsthepinkbook/2016> and for a detailed explanation of transactions see <http://internationalecon.com/Finance/Fch5/F5-6.php>

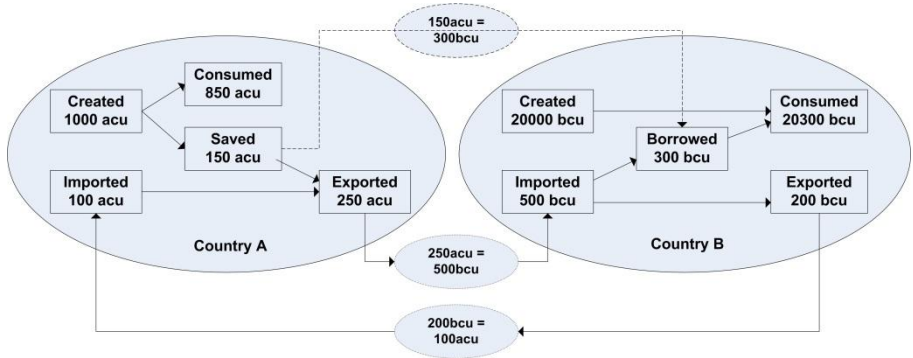


Figure 69.1 International Trade with Different Currencies

Figure 69.1 shows how international trade plays out using a simple world economy consisting of just two countries, A and B. Each box indicates wealth value in terms of the country's own currency, where A's currency is worth twice B's - one A currency unit (acu) can be exchanged for two B currency units (bcu). B creates ten times the wealth of A, but B consumes more wealth than it creates, whereas A consumes less wealth than it creates, so it is able to export more to B than it imports from B, the difference being the value of wealth created less that consumed. The difference between creating and consuming wealth represents saving if positive, and borrowing if negative. The dotted line indicates the equivalence of saving and borrowing, but the actual saving and borrowing is done by money payments for the transfer of wealth between the countries, A having been paid an excess of 150acu in money by B after B had exchanged 300bcu for A's currency (B imports 500bcu worth of wealth but only exports 200bcu worth of wealth, so it must pay the difference in money).

Here A's BoP accounts would show a current account surplus of 150acu (more wealth taken from this account than received by it), and a financial account deficit of 150acu (more money received by this account than taken from it). B's BoP accounts would be the reverse of A's but expressed in bcu. If the residents in A that had savings of 150acu decided to use them to buy B's government bonds there would be no effect on either country's current account because no goods or services had been traded, but the financial accounts would change. A's financial account would replace the money with the bond - money taken from the account = credit and bond received by the account = debit, the net effect still being 150acu deficit, but now in the form of a bond rather than money. B's financial account would replace the money debt with a government bond debt - money received by the account = debit and bond taken from the account = credit, the net effect still being 300bcu surplus, but now in the form of a bond debt rather than a money debt.

70 International Wealth and Money

In a closed economy transactions are limited by the quantity of money spent on new wealth (M_{NW}) - see chapter 23. In a stable state the quantity of M_{NW} will equal the value of wealth created in each spending round, but as Keynes showed, that wealth value does not necessarily correspond to full employment. This is because workers are also spenders so with too little money there is a Catch 22 situation whereby employers won't hire more workers because there is no demand for the extra products they would produce, and there is no demand for those products because unemployed workers don't have the money to buy them - see chapters 15 and 16. If the quantity of M_{NW} drops, then transactions and product sales drop as well, but not across the board. Non-essentials suffer first, so there isn't an even drop in demand. Some products suffer price drops and the employees of those producers suffer wage cuts and redundancies, but not others, at least not to the same extent. If all suffered equally and at the same time - which they can't - then there wouldn't be an unemployment problem; prices and wages would all fall together until they matched the reduced quantity of M_{NW} but there wouldn't need to be any loss of jobs. With unequal price and wage drops, a balance will eventually be achieved when the level of wealth creation matches the lower amount of M_{NW}, but that level will be less than before because more people are now unemployed and spend less than before. If the quantity of M_{NW} rises then while there is spare capacity product supply increases to take up the excess, but when there is full employment a rise in M_{NW} causes the value of money to fall because the value of wealth created can't rise any more, and there is inflation. All this is explained in chapters 16 and 18.

Now, consider an open economy with full employment, floating exchange rates (ignoring reserve currencies for now), free trade, free capital movement and plenty of internationally traded wealth. Barring full employment this is the current situation for the UK.

An important point to make is that the value of money coming into the country always matches the value of money going out because the foreign exchange (forex) market equates these amounts by varying relative currency values - which change continuously so as to bring about this match.

With floating exchange rates, apart from reserve currencies, hardly any domestic currency is owned by people outside the country.

Money created in the country stays in the country but varies in value continuously. This is an important point because we often hear about money flowing into or out of countries, and the term 'free capital movement' strongly implies such flows. Money flowing out of the country means that the home currency is being exchanged for another currency, and that is what is spent abroad, not the home currency. It is of course possible for people to hold foreign notes and coins, so this form of money does enter and leave a country, and forex dealers always hold quantities of the currencies they deal in, but the

amounts in both cases are so small as to have negligible effects (remember that we are ignoring reserve currencies for now, these are foreign currencies that are deliberately retained), and in any case only changes in these amounts would show up in cash flows between countries and changes in amounts are of course much smaller than the amounts themselves.

Most foreign exchange is carried out by banks exchanging currencies with other banks. They each quote both bid and offer prices for the foreign currencies they deal in, where these prices are for other banks, not for anyone else. The difference between the bid and offer prices is the bank's spread, and represents its profit margin. They deal in very large amounts - at least \$millions and often \$billions. To facilitate transfers all large banks have accounts with the central banks of the major currency countries, where reserves of all currencies pass between them just like BoE reserves pass between UK banks (amounts traded are so large that reserves are the only practical way to handle them), and outstanding net balances are settled periodically just like BoE reserve net balances are settled periodically between UK banks (Ryan-Collins et al. 2012 Section 6.4 & Appendix 3).

If a country's currency drops in value (depreciates) relative to other currencies then the price of its wealth becomes cheaper to buy with other currencies and exports tend to increase, similarly imports become dearer, so some pressure is brought to bear to reverse the decline, but this will only be significant if the country involved responds appropriately by increasing exports and decreasing imports and that isn't always easy, especially in the short term.

In open economies, changes in MNW, as well as reducing or stimulating domestic production, also change the value of the currency, and attempts to stimulate or dampen the economy by the government are countered by offsetting changes in the currency value. What happens in an open economy if the government tries to stimulate it by increasing the quantity of MNW? Let's say the UK government increases MNW by taking it from investment money (MEA - see chapter 23) - it sells bonds and spends the proceeds - then MNW increases, which in a closed economy would stimulate domestic production by the increased spending and hence demand taking up spare domestic capacity. But in an open economy the increased spending isn't just on domestic products, it also causes more products to be imported. Also domestic spending increases demand for products that would have been exported, so imports rise and exports fall, so more sterling is sold and less bought, leading to depreciation of the currency. Therefore whatever stimulus there would have been in a closed economy is now lessened by leakage of spending abroad and the associated drop in currency value. The loss of stimulus is related to the ratio of spending on imports plus spending on products that would have been exported to spending on domestic products.

Alternatively the government might try to stimulate the economy by reducing the bank rate (central bank base rate) so as to encourage banks to reduce their rates. In a closed economy this would normally stimulate demand by reducing the cost of debts and increasing demand for new loans, thereby increasing the money available to spend, but in an open economy it just reduces the demand for the currency as investors sell it to buy currencies that give better returns, so the currency again drops in value as spending is diverted abroad. In order to buy the better paying foreign investments the domestic investments that were paying lower interest rates are sold, reducing their value, and

bringing the real interest they pay back up to match foreign interest rates, and only then will the excess selling of domestic currency stop. The opposite occurs if the government tries to dampen the economy. Hence in a fully open economy government control is very much reduced. In effect the whole world is the market, and government actions affect the whole trading world rather than just the domestic economy, so any impact is considerably less effective domestically.

Because of these factors there are no fully open economies. Governments need to retain a degree of control to avoid domestic unrest. The financial sector does its best to make them as open as possible because that benefits the sector in having wider and deeper markets and therefore more profitable investment opportunities, so the financial sector tries to limit government control and regulation as much as possible.

Keynes understood the dangers of fully open economies, in particular their effect of handing over economic control to the international financial community for their own benefit and taking it away from individual governments for social benefit. That was why his Bretton Woods proposal required governments to maintain fixed exchange rates as far as possible and allowed retention of capital movement controls. It was designed to avoid damaging national sovereignty while stimulating world trade, which is to everyone's benefit, by:

- i. use of an international currency, thereby avoiding the severe trade disincentives that accompany variable exchange rates;
- ii. ensuring that both creditor and debtor countries strive to maintain trade balance to within reasonable limits; and
- iii. discouraging trade barriers.

71 Reserve Currencies and their Impact

Because reserve currencies are held by foreign central banks they do leave the home country, in contrast to non-reserve currencies where there is no net outflow or inflow from or to the home country as discussed above. The balance of payment accounts for reserve countries therefore have an entry in the financial account called 'Reserves held abroad' or something similar - being the quantity of home country reserves held outside the country.

Following the 1973 Bretton Woods breakdown and in response to growing faith in neoliberalism countries began to remove capital controls - restrictions on the movement of money between countries for other than trading purposes - in the belief that capital allocation should be subject to unfettered market forces just like everything else. The US, Canada, Germany and Switzerland removed controls between 1973 and 1974, and the UK followed in 1979. Most other developed and emerging countries followed, mainly in the 1980s and early 1990s.¹

Throughout all these major international changes the US dollar retained its position as the favoured reserve currency. Note that there is no international agreement as to which currencies should take the role of reserves; it is up to individual countries to decide for themselves. However when a particular currency finds favour as a reserve it is used more widely, and that strengthens its reserve position, so it grows in favour. The US dollar has taken this role ever since the Second World War and its position is both reinforced by and reinforces the pricing of many raw materials in dollars. Also as mentioned earlier many foreign exchange transactions use dollars as an intermediate step, because all freely floating currencies are tradable against the dollar whereas they aren't all directly tradable against each other.

Why do countries keep reserves in foreign currencies? It is to safeguard their own currencies. It suits a country to have an exchange rate that enables it to export and import wealth at prices that don't threaten to disrupt its economy. If a country's currency becomes too weak (drops in value against other currencies) then imports become expensive, causing knock-on price increases for all associated goods and services in the case of essential imports such as oil. For countries that depend heavily on imports this can have a destabilising effect as more of the country's spending flows abroad to pay for them so there is less to sustain the domestic economy. Conversely exports are cheaper so export industries are stimulated, as are domestic producers for products that can be made at home because they are now more competitive against equivalent imported products. Much more dangerous however is when a currency becomes very weak and domestic and foreign investors take fright and sell off their investments in order to get as much of their money out of the country's currency before its economy collapses completely. This of course makes the situation very much worse as others see what is

¹ https://en.wikipedia.org/wiki/Capital_control

happening and do the same. Having plenty of foreign exchange reserves, especially US dollars, allows countries to buy their own currency to maintain demand and hence provide support when external conditions threaten to depress it. Those countries that suffered most in the East Asian crisis during the 1990s (see chapter 73) in particular keep large stocks of reserves to protect themselves from currency attacks.

Rather than keep reserves in currency countries prefer to invest them, but opportunities for investment are limited for countries in danger of currency attacks, because they must be able to **liquidate** - sell quickly without significant loss - their investments at short notice. Therefore short-dated government bonds are the preferred option, but they pay very little in interest because they carry minimal risk, and often pay less than the prevailing rate of inflation, in which case the reserves lose value over time, as do the debts of the reserve home country.

If a country's currency becomes too strong (too high in value against other currencies) then its exports become expensive to foreign buyers so they decline. Conversely imports increase because they are cheaper than equivalent domestic products. Export industries suffer so foreign earnings fall, and domestic producers also suffer because of increased competition from cheaper imports. If this goes on too long then the economy can stagnate as workers are laid off. If this threatens to occur the country sells its own currency in order to reduce demand for it, which builds up foreign reserves as it exchanges its own currency for them.

In order to avoid the dangers associated with floating currencies China doesn't trade its currency on the open market and therefore the renminbi isn't exposed to high demand from outside China. Instead it keeps its currency at a value below the market rate and its exports cheaper than they would be if its currency floated. As a result it keeps its export industry strong by amassing great quantities of reserves, particularly US dollars, the full value of which aren't passed on to Chinese workers. Instead the reserves flow back to the US from China in return for US government bonds, and are recycled in the US economy, often by buying yet more Chinese imports. In effect Chinese workers work for the US at poor rates of pay, but the Chinese economy enjoys enormous growth fuelled by their work and that is what the Chinese authorities want. The way it works is that the Chinese state limits the return on its population's savings, of which there are plenty because there isn't a welfare state to speak of so people save for their own security. It recycles the savings to industry, which borrows at cheap rates and is strongly encouraged to invest in wealth creation, so the rate of wealth creation increases year by year. At the same time there is high employment so enough is returned to the workers to keep them fed, clothed, housed and in good health, and the surplus wealth they create is sold to the US for dollars.

However the situation is very dangerous both for the US and for China. They have become mutually dependent - China produces and sends wealth to the US in return for contracts that promise an entitlement to US wealth in the future, and the US promises more and more of its future wealth to China. The danger for China is that its high employment rate is dependent on export earnings, there isn't enough internal demand to keep everyone employed, so without earnings from abroad there would be widespread unemployment and the economy would collapse. Therefore if US demand for imports falls for any reason (as it did after the 2008 crash) then its export industries can't sell their output and lose their income, severely damaging China's economy. China is well aware

of the dangers and since 2005 has been taking steps to rebalance its economy by allowing the renminbi to appreciate against the dollar.² However after the 2008 crash exports did indeed falter, so China embarked on a massive state funded (from people's savings) investment programme on infrastructure (roads, railways, airports, irrigation) and social welfare.³ This provided a stopgap but the state became much more indebted to its people as a result, and therefore programmes like this aren't sustainable for the long term. The danger for the US is that sooner or later it will have promised more wealth entitlement than it is able to make good, and when investors begin to fear that this may be the case then they will offload the dollar and its value will fall, probably rapidly, damaging not only the US economy but the world economy as well - all countries depend on the soundness of the US dollar because so many commodities are priced in dollars.

The 2008 crash may yet turn out to have stopped the process; it has certainly brought about a significant unwinding of the mutual dependency, so far harming China's economy more than the US's, but the long-term fallout can't yet be judged. Hopefully it won't all start up again as the US economy continues to improve.

² https://en.wikipedia.org/wiki/Renminbi_currency_value

³ https://en.wikipedia.org/wiki/Chinese_economic_stimulus_program

72 Europe and the Euro

The adoption of the euro by a number of EU countries (known as the Eurozone) represented the beginning of a dangerous experiment. A common currency is only really viable when:

- i. all parties using it are very close in terms of productive capacity;
- ii. there is a common government that takes responsibility for shifting money from more productive regions to less productive ones, as happens for regions within a single country; or
- iii. people in less productive regions accept a much lower standard of living than those in more productive regions.

The situation is similar to a single country without a common government. In a single country the productivity of its various regions often differs. Once prosperous regions decline as its industries become obsolete, and new prosperous regions spring up where advantage is taken of new industrial opportunities. In these circumstances a common currency is a problem, because money migrates away from the poorer region as people buy from elsewhere things that either they can't obtain locally or that give better value. Local firms lay people off because they can't sell their products, and money becomes very scarce. People who can relocate easily do so, leaving a core of people without modern skills, or who are unable to work for other reasons. The government of such a country, if it has the interests of the whole of its people at heart, transfers money from more prosperous regions to less prosperous ones, both to set up new productive businesses there and to ensure that the local people are saved from destitution.

Take away the government and no-one has any such responsibility, and therefore the likelihood of there being adequate safety provisions is considerably reduced. This doesn't happen with different countries using different currencies. A country whose industries become obsolete finds its currency becoming depreciated, so imports become dearer and fewer are bought. Local produce is bought instead, protecting local producers, and exports become cheaper for foreigners so more are produced and sold. It's all to do with spending on new wealth, because that spending drives the economy - see chapter 14. Different currencies force a depreciated currency country to increase its domestic spending and reduce its foreign spending, whereas with a common currency there is nothing, apart from trade barriers, which aren't available to Eurozone countries, to stop money in an impoverished country from being spent in foreign countries and impoverishing the home country even more.

Reasons for adoption of the single currency were both economic and political. A single currency makes trade between member countries significantly cheaper, easier, and more secure. There are no exchange rate costs and associated administration overheads are eliminated, and exchange rate risks associated with movement in rates between the supply of goods and payment for them are removed. These benefits are substantial, and

arise because of the cumbersome nature of trading with different currencies. Politically the move was a major step towards the goal of 'ever closer union'.

There is a European central bank (ECB) in Frankfurt whose main responsibilities are to control inflation and ensure financial stability. Each member of the Eurozone has its own central bank, called a national central bank, which is a shareholder in the ECB, and holds a portion of ECB stock capital (reserves) in proportion to its shareholding.¹

National central banks implement decisions made by the ECB in their own countries and act as lenders of last resort for their own country's banks that get into difficulties - though only for as long as their reserves last. Notably, apart from commercial banks, only the ECB has the power to create money. National central banks have no such power, so if the country as a whole finds itself in economic difficulties it is unable on its own to apply reflationary policies such as buying its own bonds (quantitative easing) or lowering the interest rate. Once its reserves have run out there is no more that a national central bank can do. The government then has to appeal to the ECB and IMF for a bailout.

Each member country is free to issue and sell its own bonds, though their value is not guaranteed by the ECB and interest rates vary independently of other member bonds. Notably the ECB was very specifically not to be a lender of last resort for member countries in difficulties, though following the 2008 crisis the restriction has been lifted, albeit reluctantly, but only on the acceptance of specific and in practice extremely harsh economic conditions by the receiving country.²

At the beginning all went well, and investors seemed to believe that all countries had similar productive capacity because they were willing to lend money to every Eurozone country at very similar rates of interest. As a result several countries that had suffered from high interest rates found that credit was available to them at much lower rates of interest than before, and in response private credit also became available at lower rates, fuelling high levels of debt, productivity booms, high wage levels, and excessive imports. Presumably investors felt that formerly risky countries would exercise more financial prudence in the Eurozone or that they would be protected by membership of the larger bloc, though no guarantee was given.

Things fell apart after the 2008 crash when it was discovered that European banks held large quantities of what were then recognised as toxic assets - mortgage backed securities, collateralised debt obligations and so on - see chapter 54. The financial stability of each country was now judged separately by investors and bond prices diverged very significantly, causing credit to dry up in vulnerable economies where it had formerly been plentiful, resulting in severely deteriorating economic conditions.

¹ https://en.wikipedia.org/wiki/European_Central_Bank

² For Ireland see

http://ec.europa.eu/economy_finance/publications/occasional_paper/2011/pdf/ocp76_en.pdf

For Spain see

http://ec.europa.eu/economy_finance/publications/occasional_paper/2012/pdf/ocp118_en.pdf

For Portugal see

http://ec.europa.eu/economy_finance/publications/occasional_paper/2014/pdf/ocp202_en.pdf

and for Greece see

http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/pdf/ocp61_en.pdf

Although the 2008 crash was unexpected and precipitated financial havoc in the Eurozone as well as elsewhere, there are reasons to believe that the underlying structure of the Eurozone system would have led to problems eventually without any external trigger. The combination of a common currency, no common government, a central bank with neither responsibility nor willingness to act as lender of last resort, free movement of capital across borders, and member countries of very different character and productive capacity, contains significant contradictions and instabilities.³

³ <https://www.rt.com/news/eu-doomed-failure-schachtschneider-051/>

73 International Neoliberalism and the Damage it has Done

When floating exchange rates began the IMF's role was over. It was set up to monitor countries' balance of payments accounts and lend to countries whose currencies were under threat of devaluation. Its purpose was to help them maintain their fixed currency exchange rates and reduce deficits without their having to resort to interest rate rises and damaging deflation. With floating exchange rates currency values change all the time so there is no need for help in this way. However no organisation likes winding itself up and the IMF is no exception, so it quickly found an even more influential role for itself as an international economic consultant and adviser. It retained the power to bail out stricken countries, and whenever it doled out money it predicated its assistance on recipient countries reforming their economies - in the way the IMF dictated (Conway 2014 p398).

In fact the IMF has turned its founding principles on their head. It was created because markets often work badly, so it would act as a stabilising influence to help counter the impact of destabilising market forces. It was to be the friend of countries that found themselves so much in debt to creditor countries that private lenders would no longer lend. IMF loans would help them to extricate themselves from difficulties that threatened to lead to severe and lasting economic damage. It has now become the friend of creditor countries, imposing draconian measures designed to ensure that debtor countries repay their debts, including putting their most attractive economic assets on the international auction block at bargain basement prices, come what may to the health and lives of their people and especially those of their children (Hahnel 2014 p218).

This is how Joseph Stiglitz described the IMF in 2002:

Founded on the belief that there is a need for international pressure on countries to have more expansionary economic policies - such as increasing expenditures, reducing taxes, or lowering interest rates to stimulate the economy - today the IMF typically provides funds only if countries engage in policies like cutting deficits, raising taxes, or raising interest rates that lead to a contraction of the economy. Keynes would be rolling over in his grave were he to see what has happened to his child. (Stiglitz 2002 pp12-13)

After the massive oil price rises in 1973 and 1979 oil-rich countries found themselves awash with dollars - known as **petrodollars** - and were on the lookout for somewhere to invest them.¹ Their own economies were generally too small to accommodate significant quantities in terms of investment, but they did spend some on defence systems and consumer products. The only other alternative was investing overseas, which they did in great quantities, mainly in US government bonds and in US and European banks. Those banks in turn needed somewhere to invest the money they received, and developing

¹ The general term for US dollars held outside the US is '**Eurodollars**'. See <https://en.wikipedia.org/wiki/Eurodollar>

country governments, especially in Latin America, seemed like a good idea. Those countries desperately needed investment because of the oil price rises and because of the need to develop their economies.² Foreign government lending was seen as very secure, because governments are able to raise taxes to repay debts.

The poorest countries, mainly in Africa, weren't able to borrow very much from private sources so borrowed principally from the IMF and World Bank.

Beginning in the 1980s when monetarism came to the fore in the US, dollar interest rates were raised dramatically in order to bring down the rampant inflation that was raging at the time. This had a devastating effect on countries that had borrowed in dollars, and in 1982 the 'third world debt crisis' was well under way.³

A particularly poignant element in all this was that much and sometimes all of the original loans were spirited away in '**capital flight**' - where money is moved quickly out of the country, often to secret accounts in tax havens by corrupt politicians and others in positions of authority, so the people of the countries involved - those saddled with the debts - saw very little benefit if any. The amounts stolen vary significantly, the worst offenders being Venezuela (240%), Philippines (188%), Bolivia (178%), Uruguay (159%), Nigeria (136%), Ecuador (115%), Mexico (114%), Argentina (111%) and Colombia (103%). These are the percentages of long-term public and publicly guaranteed debts incurred by each country that went abroad. More than 100% implies that not only the money from loans went abroad but privately held capital went too (see the third world debt crisis reference).

In stealing money lent by foreign banks, investors and the IMF a very pertinent question is: Who was the money stolen from? Surely it was from those who provided the loans - the lenders, after all the populations had no say in accepting the loans and had no money to steal. But the lenders, aided by the IMF, used their power to transfer the theft from themselves to the poor populations.

It's like my taking out a big unsecured loan and then running off with it, and the lender making my penniless children work to pay off the debt.

73.1 The Unholy Trinity - The IMF, World Bank and WTO⁴

The IMF and World Bank operate primarily as bankers to the central banks of nation states (Peet 2009 p17), and although they are international in reach they are controlled by rich countries, especially the US, which can use its power to veto any decision that it doesn't like (Peet 2009 p53 - IMF and p142 - World Bank). The role of the IMF is to oversee the international monetary system, and to assist all member countries, both rich and poor, that find themselves in temporary balance of payments difficulties. The World Bank seeks to promote the economic development of the world's poorer countries, providing long-term financing for development projects and programs. Having said that there is considerable overlap between the two in dealing with poorer countries and both subscribe to the Washington Consensus - see below. A detailed explanation of the

² https://en.wikipedia.org/wiki/Petrodollar_recycling

³ <http://www.econlib.org/library/Encr/ThirdWorldDebt.html>

⁴ This is the title of Richard Peet's book - Peet 2009.

difference between these organisations is provided at <https://www.imf.org/external/pubs/ft/exrp/differ/differ.htm>

The World Trade Organisation (WTO) evolved from the earlier General Agreement on Tariffs and Trade (GATT), which was a multilateral agreement regulating international trade. The basic idea behind GATT was to eliminate protectionism and discrimination, allowing trade in goods but not services to flow smoothly between countries. It all changed in the Uruguay Round, which lasted from 1986 to 1994, and represented a new phase in trading history within a new era of neoliberal globalisation. Coverage was extended to include services, intellectual property (TRIPS agreement - Trade Related Aspects of Intellectual Property Rights) and investments. The WTO was founded as the enforcing organisation in this round. On the face of it the WTO is much more democratic than the IMF and World Bank in that it allows each country an equally weighted vote and no country can veto any decision. But peel back the democratic facade and we find that it is just as undemocratic. No vote has ever been taken, instead decisions are made by consensus, but a consensus heavily dominated by rich countries which negotiate behind doors closed to poor countries and then use their power to intimidate or entice them by means of foreign aid budgets or by using their influence on the loan decisions of the IMF, World Bank and other lenders. The WTO holds no public hearings and has never opened its processes to the public. Its meeting rooms don't even have a section for the public to observe its activities. The rules on intellectual property rights (IPR) have had particularly harmful effects on poor countries, where the World Bank estimates that following the TRIPS agreement the increase in technology licence payments alone will cost them an extra \$45 billion a year without any corresponding benefit because they don't have comparable levels of IPR. Rich corporations get all the benefits. These aspects are discussed more fully in bullet points (i) to (v) in chapter 75. (Peet 2009 Chapter 5), (Chang 2008 pp36-37).

73.2 The Washington Consensus

As neoliberalism was embraced by governments and economists in the 1980s its principles became the policies of power-wielding organisations. The international approach was known as the **Washington Consensus**, so called because it was strongly advocated by the three most powerful economic organisations in the world - all based in Washington - US Treasury, IMF and World Bank (Chang 2014 p70).

The Washington Consensus consisted of the following principles:

- i. fiscal discipline;
- ii. re-ordering public expenditure priorities;
- iii. tax reform;
- iv. liberalising interest rates;
- v. competitive exchange rates;
- vi. trade liberalisation;
- vii. liberalisation of inward direct foreign investment;

- viii. privatisation;
- ix. deregulation; and
- x. property rights.

When John Williamson⁵ drew up this list and coined the term in 1989 it represented what he believed were ten policies that would be more or less agreed by everyone in Washington (comprising Congress, economic agencies of US government, international financial institutions, the Federal Reserve Board, and economic think tanks) as needed by countries in difficulties, notably Latin America, at the time. He never imagined that it would become a widely used term or that the interpretation of the policies would be commandeered by neoliberals and applied as a one-size-fits-all set of requirements for all developing countries in all circumstances. Indeed he believed that most of the neoliberal ideas of the Thatcher and Reagan Governments, notably monetarism, supply-side economics, and minimal government, had by then been discarded as impractical or undesirable fads. The one idea that he did believe was beneficial and widely accepted from that period was privatisation. Williamson is at pains to distance himself from the later interpretation where it is used as a synonym for the policies of neoliberalism, including minimising and demonising the state, creation of a laissez-faire global economy, and where the only thing that matters is growth in terms of GDP. In particular Williamson did not agree with the free movement of capital or with the polarised approach to exchange rates - i.e. fully floating or fully fixed - preferring instead the middle ground adopted at Bretton Woods of pegged but adjustable rates.⁶

Nevertheless IMF policies from the 1980s onwards reflected neoliberal ideology, where debts must be paid; the state must be minimised; public assets sold off; public spending cut; interest and exchange rates determined by world markets; markets deregulated; and capital allowed to move freely across borders. This can be seen as a possible interpretation of Williamson's original list, but it is an interpretation that Williamson himself rejects.

As Stiglitz so wryly observed:

We have an obvious problem: a public institution created to address certain failures in the market but currently run by economists who have both a high level of confidence in markets and little confidence in public institutions. (Stiglitz 2002 p196)

These harsh policies, applied principally by the IMF and World Bank and known as 'Structural Adjustment Programmes', either caused or made worse a number of major crises - Latin America and Sub-Saharan Africa in the 1980s, East Asia in the 1990s, and Russia after the collapse of communism. The countries involved often disagreed strongly with the policies applied but they didn't complain publicly for fear of incurring the IMF's displeasure and subsequent withholding of loans, not just by the IMF but by all foreign banks and the World Bank, who took their lead from the IMF. Such was the power that the IMF had over them. It is no wonder that 'Washington Consensus' and 'IMF' are

⁵ https://en.wikipedia.org/wiki/John_Williamson_%28economist%29

⁶ <http://studentorgs.law.smu.edu/getattachment/International-Law-Review-Association/Resources/LBRA-Archive/15-1/SMB118.pdf.aspx>

terms of abuse in developing countries. Lessons learned during this period, notably in Asia, led them later to accumulate US Dollars in great quantities in order to avoid the risk of similar humiliations and economic damage in the future. The details of these policies and the damage they caused are discussed at length in Chang 2008, Peet 2009 and Stiglitz 2002.

The basis of the IMF and World Bank approach is austerity. A quote from Richard Peet sums up the situation:

The policies suggested by the IMF almost always require reducing tariff barriers on imports, and this eliminates jobs. They increase interest rates to cool the economy and reduce inflation, and this too reduces employment. At the same time, they impose austerity programs that cut back government services and remove state subsidies that have kept food prices low. So, critics argue, IMF policies create unemployment and poverty while reducing the national state's power to remedy the resulting social problems. Immediately people who can least afford it are made to pay for loans to governments whose previous policies are deemed mistaken by IMF economists. (Peet 2009 p67)

As has been shown it is employment that creates wealth, so putting people out of work does the opposite. How can a country whose problems stem from insufficient wealth creation solve them by reducing wealth creation? This is what austerity tries to do and of course it doesn't succeed.

Economic success stories other than Chile in this period were in economies where there was extensive state intervention and markets were liberalised only gradually, the best examples being Japan, South Korea, Taiwan, Singapore and China (Chang 2014 pp93-94). Ironically their successes are often claimed as successes of neoliberalism, but they came by deliberately avoiding neoliberalism because they knew full well the damage it could cause. Chile is often cited as a success story of a country following neoliberal doctrines, and overall it has done well, but the story isn't straightforward. It was suffering under the ruthless dictatorship of General Pinochet, and the early adoption of neoliberal policies from the mid-1970s ended in a disastrous financial crash in 1982 when GDP fell by nearly 14% and 20% of the workforce was unemployed (Stiglitz 2002 p114). This was only resolved by nationalisation of the whole banking sector. The country only recovered its pre-Pinochet level of income in the late 1980s. After the crash the country started to pick up, but only by going against the neoliberal creed in giving government assistance to exporters and imposing capital controls to reduce the inflow of short-term speculative funds. Also over the years it has come to depend more and more on natural resource exports rather than on manufacturing, which has declined significantly. As discussed in chapter 66 the more that resources are devoted to producing raw materials for rich countries rather than to producing essentials for home consumption, the more dependent a country becomes on rich countries, both for the import of manufactured goods that make modern life possible and for continuing demand for exports. Its fortunes are tied very closely to the economies of rich countries, and it is therefore very vulnerable to downturns in those economies when demand for raw materials drops and manufactured goods become unaffordable. Not only that, dependence on natural resource exports limits prosperity to the rate at which resources can be harvested or extracted, whereas manufacturing can be expanded indefinitely as technologies evolve.

These effects cast serious doubt on the long-term prospects for Chile's success (Chang 2008 pp30-31).

At the same time as rich countries insisted on the abolition of poor country trade barriers against rich country imports they maintained their own barriers in the form of strict limits on imports from poor countries and by government subsidies for their own country's agricultural exports. By these means they limited poor country exports and made what they did export uncompetitive on the world market, depressing prices and depriving them of desperately needed export income. This is the strong bullying the weak. This is Stiglitz again: "The critics of globalisation accuse Western countries of hypocrisy, and the critics are right." (Stiglitz 2002 pp6-7).

In more recent times, and in response to the 2008 crash, there has been some softening of the IMF's insistence on free capital movement⁷, but its other policies remain rigidly in place as evidenced by its treatment of Greece⁸, where very harsh conditions were imposed including deep austerity involving very substantial public spending cuts, extensive dismantling of labour market protection, and increased privatisation of public assets (Crouch 2016 pp40-41). This approach is a further example of the well-worn path of austerity - attempting to increase wealth creation by stifling wealth creation - see chapter 90.

According to Stiglitz the IMF approach makes sense only if its actions are viewed as being to serve the interests of the global financial community, rather than - as was its mandate - to serve the interests of the countries concerned. Many of its key personnel were drawn from that community and went back to it after leaving the IMF. With this insight its focus on ensuring that foreign creditors are paid rather than domestic businesses remain viable and populations remain fed is more understandable (Stiglitz 2002 pp207-208).

The billions of dollars which it [the IMF] provides are used to maintain exchange rates at unsustainable levels for a short period, during which the foreigners and the rich are able to get their money out of the country on more favourable terms (through the open capital markets that the IMF has pushed on the countries). (Stiglitz 2002 p209)

The people enforcing these conditions perhaps believed - or persuaded themselves to believe - that their approach would benefit the countries involved in the long run, but their beliefs were based on faith rather than evidence, and they did immense harm to countries whose populations were desperate for help (Stiglitz 2002 Chapters 8 and 9).

Hahnel summarises the situation well:

If the interests of international creditors are given priority, the IMF programs make perfectly good sense. They are only counterproductive if one cares about employment, output, productive investment, and prospects for economic development in economies where the poorest four billion people in the world live and suffer. (Hahnel 2014 p224-225)

⁷ <http://www.imf.org/external/pubs/ft/survey/so/2012/POL120312A.htm>

⁸ Memorandum of Understanding on Specific Economic Conditionality, 9 February 2012, at <http://www.tovima.gr/files/1/2012/02/10/mnhmonioagglika.pdf>

73.3 The historic free trade myth

The hypocrisy of Western countries cited earlier by Stiglitz doesn't end there. The outstanding universal benefits that are claimed to arise from the free trade and laissez-faire ideology are sold to the world on the basis of a myth. The myth is that Britain became great by applying this ideology from the 18th century onwards, and by the middle of the 19th century its approach was so successful that it was copied by other countries, and general prosperity was enjoyed by all until the First World War. Following that things deteriorated when countries began re-erecting trade barriers in response to global instability, causing economic misery right up to the outbreak of the Second World War. Thereafter the world economy was re-organised along more liberal lines under US leadership, but protectionism and state intervention still persisted, especially in most developing and communist countries. Happily the rise of neoliberalism in the 1980s led to much wider recognition of the benefits of that ideology, and it is gradually being adopted globally with the encouragement and assistance of the IMF, World Bank and WTO. When it reigns supreme throughout the world there will be global prosperity on a scale that is unparalleled throughout history (Chang 2008 pp21-23).

It's a persuasive story but it completely misrepresents the truth. As early as 1721 Robert Walpole, Britain's prime minister, recognised the economic benefits of importing raw materials and turning them into manufactured goods for export. To promote this policy he introduced a law aimed at protecting manufacturing industries from foreign competition by the use of export subsidies and high import tariffs for foreign manufactured goods. At the same time tariffs on raw material imports were reduced or dropped altogether. In fact the measures adopted were very similar to those applied by the 'miracle' economies of East Asia after the Second World War. Strong protectionist measures remained in place in Britain until the mid-19th century, during which time Britain's manufacturing industries caught up with and then passed those on the Continent. At that time Britain had a growing empire, and was able, by force, both to prevent colonial competition in manufactured goods and to ensure a continuing supply of raw materials (Chang 2008 pp43-45). In one of the most shameful episodes Britain went to war with China to force it to import opium from Britain that Britain imported from India. In China the sale of opium was illegal, but to the British that was merely an inconvenient barrier to a desirable trade that would enable Britain to balance its books with China because of large imports into Britain of Chinese tea (Chang 2008 p24). In relation to the opium wars William Gladstone declared:

...a war more unjust in its origin, a war calculated in its progress to cover this country with a permanent disgrace, I do not know and I have not read of.⁹

The free trade that developed prior to the First World War was made possible largely by the use of force, or the threat of force, imposed on unwilling and weaker trading partners to their significant disadvantage by rich colonial masters, for their own huge benefit (Chang 2008 p 24).

The US learned from Britain and applied similar protectionist policies after independence. The Washington Consensus may be Washington's prescription for

⁹ <http://papertigertail.blogspot.co.uk/2005/10/opium-wars.html>

developing countries, but it was certainly not Washington's prescription for the United States (Schlefer 2012 p183 and Chang 2002 pp48-56).

Developing countries, if they are to develop, need time for their infant industries to become proficient enough to compete on the world stage. A new business that is directly exposed to world markets will be destroyed because its products are initially lower in quality and often higher in price - it hasn't had time for its staff to acquire necessary management and production expertise or to develop smooth production processes. Chang explains it in terms of the development of children - he suggests, tongue in cheek, that his six year old son should get a job! No-one questions the need for children to be safeguarded from market forces while they acquire the necessary skills and worldly wisdom to be able to contribute at least on something approaching equal terms with other participants (Chang 2002 pp65-83). Furthermore, acceptance by poor countries of Ricardo's theory of comparative advantage keeps them at the level of exporting just their raw materials and prevents them from developing further (see chapter 66), which of course suits businesses in rich countries by avoiding the emergence of new competitors, but it is ultimately worse for all because the more countries that trade on equal terms the more wealth that is created overall.

Companies in developed countries shouldn't be protected from other similar but more efficient companies because it wastes resources to do so. A company that can't compete with its peers is suffering from poor management, poor or inappropriately skilled workers, or is failing to keep up with technology or other developments. Such a company should be exposed to market forces to improve its working practices and therefore its efficiency. However a different situation arises when companies in developed countries can't compete with other companies that use cheap labour in developing countries. The bigger the company the more easily it is able to take advantage of foreign cheap labour, and the better its trading position with respect to smaller companies. The effect strongly favours the bigger company, which is able to take great advantage of poorer countries' weak labour laws, lack of regulation, and low health, safety and environmental standards compared to those of the developed world. These companies are the multinational corporations, and are discussed in more detail in chapter 75.

73.4 The impact on poor countries of rapid capital movement

The free movement of capital has its most destructive effects when inflicted on poor countries. All seems to be well as capital floods into a poor country, but that capital inflow is always based on hopes for high returns to the foreign investor, and not for the good of the country itself, though if investments are successful then the country reaps benefits too. Very often a poor country becomes an asset bubble as the investor herd instinct kicks in, with increasing urban land and property values and ever decreasing investment potential. When investor disillusion sets in, as it does with all bubbles sooner or later, capital floods back out again as investors rush for the exits by selling their holdings for whatever they can get - which isn't usually much at this stage - to avoid being left holding unwanted and worthless assets. That is when the damage is done. All businesses that haven't yet reached the stage where revenue exceeds costs - many in developing countries subject to former high levels of foreign direct investment (FDI) - are

forced to shut down and lay off workers, and those whose revenues do exceed costs find that demand for their output drops as their customers can't afford their products so they lay off people too in a vicious downward spiral. It is always a problem in any country for laid-off workers to find new employment, but workers in poor countries are especially disadvantaged because all sources of employment tend to dry up together as foreign investment moves out. It is also impossible for populations to move back to an earlier peasant form of lifestyle because so many have moved into cities to take advantage of the better paying employment opportunities that foreign investment made possible. Poor countries don't have effective welfare states so the inevitable result is widespread poverty and often death.

What purpose is served by rapid capital movement in and out of poor countries? It is an opportunity for the rich to make money. Those quick off the mark do make money, the slower ones lose money, but the real price in ruined lives is paid by the local population.

This situation is bad enough in making worse the already heavily distorted wealth distribution between rich and poor people and rich and poor countries, but the rapid movement of capital out of a poor country destroys the creation of wealth because of the inherent inertia that wealth creation involves. This was discussed earlier in chapter 61 and is even more pertinent in poor countries where wealth creation inertia is higher (fewer opportunities for redeployment of workers and productive equipment) and the consequences for the population are much harsher (no welfare state and people have little or no savings to allow any breathing space). Again what is required is for movement of capital to be subject to the same level of inertia as the wealth creating process it supports. In poor countries that means limiting outflow by quantity and time, and restricting inflow by purpose. China has very successfully implemented such controls and its economy has flourished. Unfortunately the poorest countries have little ability to control capital or anything else because they are at the mercy of the IMF, WTO and World Bank, which use their power to favour rich countries at the expense poor countries (Chang 2008, Peet 2009 and Stiglitz 2002).

73.5 International finance and the 2008 crash

Much has already been said about the role of finance in the 2008 crash - see chapter 54. The point to reiterate here is that although the internationalisation of finance - free capital movement - was driven by neoliberal ideology, the 2008 crash demonstrated for all with eyes willing to see that neoliberalism contains the seeds of its own destruction. It is not an ideology that is internally consistent, being designed to generate continuous money growth by rapid movement of investment capital from one geographic area and one asset class to another. The problem is that money only ever represents entitlement to wealth, so overall the real value of the totality of money cannot grow faster than growth of wealth itself. What happens is that entitlement to wealth grows fastest for those who already own the most invested wealth, less fast for those who own less invested wealth, and grows at the slowest pace of all or declines for those who own no invested wealth and must work for what they get. For those whose entitlement to wealth is growing faster than wealth growth the excess entitlement is obtained by transfer from those whose

entitlement to wealth is growing slower than wealth growth, and they are the ones that largely create the wealth - the workers - see chapter 97. In poor countries it is local people who create the wealth, but where capital has flooded in to fund wealth creation and loans, creating asset bubbles in the process, it is foreign investors who take the proceeds until the bubbles burst, when they rush for the exits leaving a trail of destruction in their wake.

The international finance aspect of neoliberalism not only amplifies inequality both within and between countries - benefiting the few at the expense of the many - but also destroys the very wealth creating capacity that it depends on, with the most devastating consequences being suffered by the populations of poor countries.

74 Free Capital Movement and the Death of Democracy

Free capital movement - the ability to buy and sell foreign assets including currencies and debts freely and in any quantity - was one of the changes ushered in after the collapse of the Bretton Woods agreement. It is strongly supported by neoliberal ideology.

The damage that can be done to poor countries when capital is allowed to move freely across borders has been discussed in the last chapter, but it also damages rich countries. Keynes and White recognised only too well the dangers during the Second World War when designing the post-war international trading arrangements - see chapter 67 section 67.2. What they wanted was to stimulate trade in goods and services, which benefits everyone provided that those benefits are shared fairly, and they saw clearly that free movement of capital can and does damage that trade. Keynes and White argued that freedom of movement for capital conflicted both with a nation state's freedom to pursue economic policies based on its own domestic circumstances - for example by stimulating a sluggish economy or by calming a racing economy, and also with the semi-fixed exchange rate system that was widely agreed to be important to maximise international trade in goods and services.¹ Since then White has been forgotten and everything that Keynes ever said and wrote is treated with contempt by neoliberals.

Many benefits are cited for free capital movement: money can be allocated to where it can do the most good; it enables investment in developing countries to aid their growth; it allows financial markets to expand; and it reduces the cost of capital because of increased lending competition. Before the crises that affected developing countries in the 1980s and 1990s it was widely regarded as unarguably beneficial, but since then it is becoming increasingly controversial, with even the IMF accepting that it might not be the universal good that it had believed it to be following the Bretton Woods breakdown.²

Joseph Stiglitz tells us what's really going on:

As a matter of simple economics, the efficiency gains for world output from the free mobility of labor are much, much larger than the efficiency gains from the free mobility of capital. The differences in the return to capital are minuscule compared with those on the return to labor. But the financial markets have been driving globalization, and while those who work in financial markets constantly talk about efficiency gains, what they really have in mind is something else—a set of rules that benefits them and increases their advantage over workers. The threat of capital outflow, should workers get too demanding about rights and wages, keeps workers' wages low. (Stiglitz 2012 Chapter 3)

The crux of the matter is that all economies depend on the circulation of money, as was shown in chapter 14. Anything that threatens that circulation threatens wealth creation, and wealth creation is what everyone depends on because we all need to

¹ http://en.wikipedia.org/wiki/Embedded_liberalism

² <http://foreignpolicy.com/2016/07/06/the-imf-confronts-its-n-word-neoliberalism/>

consume wealth both to stay alive and to live a normal life. The free movement of capital across borders allows money to be transferred to where it can 'do the most good' - i.e. the most good for the owner of that capital³ - which is not at all the same thing as the most good for trade or for individual countries.

It was recognised as a result of bitter experience after capital controls were loosened that there are three policies that can't all operate at the same time:

- i. free movement of capital;
- ii. government control over the domestic economy (ability to set interest rates and control domestic demand); and
- iii. fixed exchange rates.

At most only two of these three can exist together - this is known as **The Impossible Trinity**⁴ (and also the **Monetary Trilemma**), shown in figure 74.1..

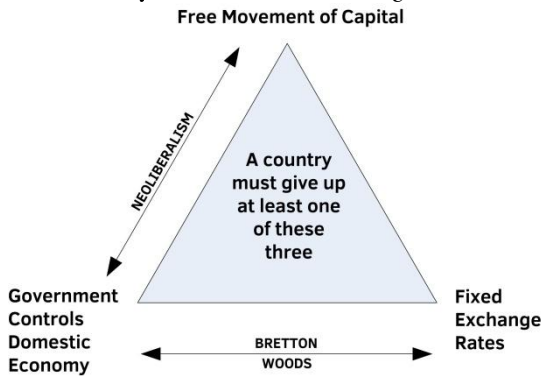


Figure 74.1: *The Impossible Trinity*

Before it was recognised there were several financial crises as countries attempted to maintain all three. The UK example was in 1992 when we were forced out of the European Exchange Rate Mechanism (ERM) by the action of 'the markets'.

To see why it is true imagine the UK attempting to adopt all three policies at the same time with a sterling interest rate set by government at 5%. If in the US the interest rate is 10%, UK investors sell their UK investments, exchange the money for dollars at the prevailing rate and invest it in US bonds because they get a much better return on their money. As UK investors continue to do this UK investments fall in value and therefore the interest they pay rises in real terms, until it is the same as the US interest rate. Hence the UK government has lost control over UK interest rates, which are forced to match the dollar interest rate. In fact but for different expectations of inflation in different currencies and abilities of governments to repay, all interest rates would have to match each other with free capital movement and fixed exchange rates.

What most countries have chosen to give up since Bretton Woods is fixed exchange

³ Even that isn't always true. It is moved to where its owner thinks it will do the most good for himself or herself, but owners often get it wrong.

⁴ Ryan-Collins et al. 2012 Section 6.4.3 pp130-132 and https://en.wikipedia.org/wiki/Impossible_trinity

rates. China is an exception, giving up instead free movement of capital but keeping control of interest rates and exchange rates. This is the same as applied during the Bretton Woods era. This is significant.

The economy that has grown the most (now world number two) and lifted the most out of extreme poverty during the neoliberal era is China's, but China plays by Bretton Woods' rules, not neoliberal rules (Chang 2008 p27).

However it isn't as simple as that, as Rodrik shows (Rodrik 2012). When Bretton Woods collapsed and floating exchange rates took over, it was thought that rates would stay fairly stable, with supply and demand for traded goods and services setting the price in terms of exchange rate as they are supposed to do in other markets. What hadn't been considered was the effect of setting up a new gambling forum with speculators able to bet on exchange rate movements in the hope of making profits. Even that wouldn't have mattered so much if gamblers were completely independent of each other as they are assumed to be for market predictability - see chapter 34. But, as already discussed in chapter 57, financial markets are anything but independent; they are driven much more by what others in the market are doing than by objective assessment of value. As time progressed and speculation mushroomed, any exchange rate signals that there might have been from trade in wealth were drowned out by speculative transactions. In 2007 the daily volume of foreign currency transactions had risen to \$3.2 trillion, whereas the volume of wealth trade was \$38 billion (Rodrik 2012 p107) - eighty-four times as much speculation as genuine trade!

Another factor is that with free capital movement the raising or lowering of interest rates has a much smaller effect on the domestic economy than it would with capital restrictions. This was discussed in chapter 70 but in summary a government induced rise in interest rates, intended to slow a racing economy by reducing the money supply, will instead cause an inrush of spending from abroad for investment purposes, thereby offsetting much of the intended decline.

Therefore although the triangle gives the impression of three equally balanced factors, the free movement of capital is by far the most dominant.

Rodrik expresses this as another triangle, but here, instead of merely free movement of capital he takes it further, calling it 'hyperglobalisation' - which is the situation that neoliberalism drives us towards, consisting of:

- free movement of capital across national borders;
- opening up to foreign trade and investment of all national markets;
- enforcement of intellectual property rights across the world;
- disempowerment of national bodies for economic policy-making and regulation of health, safety and welfare standards;
- disappearance or privatisation of social insurance;
- low corporate taxation;
- removal of social compacts between business and labour; and
- subordination of national developmental goals to market freedom

(Rodrik 2012 Chapter 9).

The other two factors are Democracy, where government authority derives from the will of the electorate, and an Independent Nation State, where there is national rule, but any thought of government controlling its own economy has gone. This is **The Political Trilemma of the World Economy**, shown in figure 74.2.

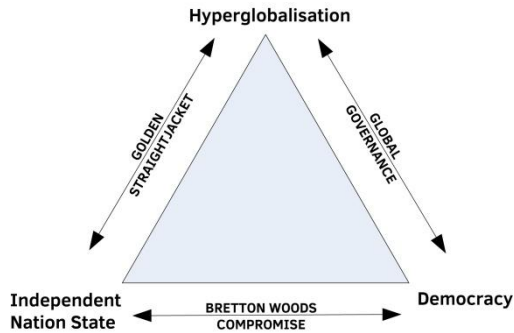


Figure 74.2: Political Trilemma of the World Economy. Source: Rodrik 2012 p 201.

If we have hyperglobalisation then all matters relating to money and markets are determined at the world level and can't be set independently by an individual country. This is the same as a single region within a country, which must abide by the monetary policy and the markets of the country as a whole. The only way in which a nation state can be governed in these circumstances is by maintaining global monetary and market rules even when its population is severely disadvantaged by them. In effect the government is a dictatorship. With hyperglobalisation it really is a choice between democracy and dictatorship, because if democracy exists then the government will be overthrown when the suffering of its population becomes too great, and then the rules of hyperglobalisation can't be maintained - the democratic country would become isolated.

Rodrik cites Argentina between 1990 and 2002 as a good example, beginning with Cavallo's tying of the country's currency, the peso, to the US dollar in order to bring confidence back in its economy. At the same time privatisation and deregulation were accelerated, and the economy was opened up to world trade. Things went very well indeed for several years until the Asian crisis in the late 1990s, when investors' appetite for emerging market investments suddenly dried up. This was followed by Brazil devaluing its currency by 40% in 1999, thereby picking up exports at Argentina's expense. Soon the peso was under severe pressure and Argentina's creditworthiness collapsed. Strict austerity policies were applied in 2001 in an effort to shore up foreign investor confidence, but the internal strife that was unleashed proved decisive. There were strikes, riots and looting. Eventually the government was forced to abandon its monetary policies; it froze foreign bank accounts, defaulted on foreign debt, re-imposed capital controls and devalued the peso. In short politics won the day over hyperglobalisation (Rodrik 2012 pp184-187).

Keeping hyperglobalisation and the nation state is known as the **golden straightjacket**, where the state is forced to follow the dictates of the world market. During hard times when productivity is low it can only do so by impoverishing the

population. Democracy is sacrificed in these circumstances because a democratic country wouldn't tolerate the harsh conditions that world markets can inflict. The name evokes the gold standard that tied all economies together in this way before the First World War, when fully democratic politics hadn't yet emerged. In effect this is the situation that European countries using the Euro are in with respect to the European Union as a whole. Individual nation states still exist but they have largely lost democratic control over their own economic affairs. The conflict between democracy and European hyperglobalisation has been most sharply seen in Greece, where the population is reacting with great hostility to the straightjacket that they are forced to wear. The European special case was considered in chapter 72.

The Bretton Woods compromise retained the nation state and democracy, but severely restrained globalisation in terms of free capital movement and other international factors. The focus then was on trade in goods and services, and it worked very well until the Nixon shock in 1971 when the dollar was unpegged from gold. Had Keynes' Bretton Woods proposals been adopted instead of White's we would have retained the benefits in terms of world trade and democracy, and there would have been no Nixon shock - see chapter 84.

The other alternative is full globalisation, with democracy, a world government, world central bank, world judiciary and robust global regulatory institutions. This is an appealing prospect in many ways but the difficulties that would be faced are enormous. In particular if one or more countries wanted out because they strongly disliked the rules then how could they be stopped? Would the rest send in armed forces as in colonial days? I doubt that there would be widespread support for such a measure - I certainly hope there wouldn't. A world government would need very strong and lasting world support to retain legitimacy. However a world government would have responsibility for all people, so any who were disadvantaged as a result of changes in trade patterns and improvements in technology would be looked after (hopefully) until they could find new employment. In addition to this global safety net there would be a global lender of last resort, a global monopoly watchdog, and a series of global regulators for all health and safety aspects of the global marketplace. This is the same as happens in existing developed countries where all such governance measures are in place in some form.

At present we have a world economy that mirrors practically all the characteristics of a single country economy, but without any of the safeguards.

As Rodrik said:

...markets and governments are complements, not substitutes. If you want more and better markets, you have to have more (and better) governance. Markets work best not where states are weakest, but where they are strong. (Rodrik 2012 p xviii)

Rodrik is right and we need to face the problem that emerges from his insight. We must recognise that the more we drive towards hyperglobalisation the more we drive out democracy. Allowing the rules to be set by strong business interests, i.e. undemocratically, is dangerous. Not only are the majority of people severely disadvantaged for the benefit of the very few, but there is no way that such a system can face up properly to the social dangers posed by climate change. Private interests will never voluntarily pay for public goods or pay to avoid public or environmental harm,

they will and indeed can only pay for things that deliver private profits. On occasions when they do appear to pay for such things voluntarily they are really paying to enlist public support so as to enhance profits.

To quote Rodrik again:

So we have to make some choices. Let me be clear about mine: democracy and national determination should trump hyperglobalisation. *Democracies have the right to protect their social arrangements, and when this right clashes with the requirements of the global economy, it is the latter that should give way.* (Rodrik 2012 p xix, his italics.)

Voices in favour of restrictions on the free movement of capital are becoming more widespread. A report by the New Economics Foundation⁵ written on behalf of the Green New Deal Group⁶ stated:

In June 2005, the Bank for International Settlements, perhaps one of the most conservative institutions in the financial system, addressed the problem of global imbalances and suggested that the international financial system could 'revert to a system more like that of Bretton Woods'. It added that 'history teaches that this would only work smoothly if there were more controls on capital flows than is currently the case, which would entail its own costs.'

Such controls would not be hard to police. Large financial movements are tracked already by national authorities, in the name of 'anti-money laundering measures'. They use the technology that makes possible almost instantaneous money transfers and split-second dealings in cash and securities around the world. Moreover, there is a low-tech reinforcement for this high-tech equipment. Contracts or deals entered into in offshore jurisdictions, or anywhere else, in defiance of financial controls could be declared void in British law. This 'negative enforcement' is highly attractive. It requires no police; it relies simply on British courts not doing something, i.e. recognising and enforcing financial arrangements made without authorisation.

Both these methods of enforcement also give the lie to the objection that financial controls can work only with international agreement.

Michael Meacher cites the above in his book (Meacher 2013 p172) as well as a BoE report issued in December 2011.⁷ Meacher states:

A Bank of England paper released in December 2011 points out that under the Bretton Woods system (1944-71) of fixed exchange rates and capital controls, compared with floating exchange rates and deregulated capital flows that followed after 1980, growth was higher, recessions were fewer and there were no financial crises. It notes that governments were able to pursue their domestic objectives without the constant fear of destabilising flows of hot money. The paper concludes that 'the period stands out as coinciding with remarkable financial stability and sustained high growth at the global level.' In terms of trading balance enabling governments to deliver strong non-inflationary growth, the capacity to

⁵ <http://www.greeneconomics.net/NEF-GreenNewDeal.pdf>

⁶ <http://www.greennewdealgroup.org/>

⁷ http://www.bankofengland.co.uk/financialstability/Documents/fpc/fspapers/fs_paper13.pdf

allocate capital efficiently and the achievement of financial stability, the paper argues that 'overall the evidence is that today's system has performed poorly against each of these three objectives, at least compared with the Bretton Woods system, with the key failure being the system's inability to maintain financial stability and minimise the incidence of disruptive sudden changes in global capital flows.'

The free movement of capital hands wealthy people and corporations a very strong lever over governments in that they can move their wealth out of the country very easily and thereby damage national economies. Fear of this power forces governments to respond to their interests rather than the interests of the society that elected them.

75 *The Overwhelming Power of Multinational Corporations (MNCs)*

Critics of MNCs who claim that they now rule the world have a strong case.¹ Many MNCs have revenues that are bigger than entire countries, in fact according to the World Bank in 2011 out of the top 100 economies in the world 13 are MNCs, with 4 MNCs in the top 50.²

This gives them colossal financial power. They are strong enough to bully governments using the threat of moving their business elsewhere, which governments fear will cause great damage to employment and economies.

There have been MNCs ever since the days of colonisation, but the major proliferation occurred since restrictions on capital movement were relaxed. Indeed MNCs themselves have lobbied vigorously for reduced barriers to trade and capital flows, being deeply involved in shaping to their liking Europe's Single Market agreement, the North American Free Trade Agreement (NAFTA), the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), and currently the Transatlantic Trade and Investment Partnership (TTIP).³ For MNCs, the freer their operating environment the less able are governments to restrict their activities and therefore the more able they are to maximise returns.⁴ Not only that, MNCs stand above individual countries and are able to pick and choose the countries to which they allocate their various operations so as to minimise overall tax.

A few cases, taken from Chang 2008, serve to illustrate how MNCs use their power in defending and extending their rights for their own benefit against the public interest:

- i. HIV drug treatment is very expensive, and African populations are suffering heavily from this disease. As a result many African countries exercised their right (as all countries have) to restrict the intellectual property rights of holders in the public interest. They obtained much cheaper drug copies from India and Thailand at only 2-5% of the price of the originals. In response a group of pharmaceutical corporations decided to make an example of the South African government and took it to court in 2001 to prevent them from importing illegal copies. Fortunately, as a

¹ <https://www.newscientist.com/article/mg21228354-500-revealed-the-capitalist-network-that-runs-the-world/>

² <http://siteresources.worldbank.org/INTUWM/Resources/WorldsTop100Economies.pdf>

³ <http://www.independent.co.uk/voices/comment/what-is-ttip-and-six-reasons-why-the-answer-should-scare-you-9779688.html>

⁴ See the section on TNCs and International Politics at https://www.globalpolicy.org/empire/47068-a-brief-history-of-transnational-corporations.html#bk2_ftu6

result of international pressure and public outrage they backed down. If they had continued in their action and succeeded, the countries involved wouldn't have been able to buy the drugs in anything like the quantities needed so they wouldn't have made much more money anyway, but very many more people would have died. This shows how much more important defending the principle of money-making intellectual property is to these corporations than saving lives (Chang 2008 p123).

- ii. In 1998 Disney successfully lobbied the US government to extend the copyright protection term from the life of the author plus 50 years to 70 years, or from 75 years to 95 years for a work of corporate authorship. This was also applied retrospectively, giving all works, and especially Disney's early Mickey Mouse work, 20 more years of protection. It was no coincidence that Mickey Mouse was approaching his 75th birthday! Copyrights are granted in order to encourage the production of new creative works, but extending the protection of existing works creates no new knowledge, the only reason is for the financial benefit of the intellectual property rights (IPR) holder (Chang 2008 pp134-135).
- iii. Similarly the US pharmaceutical industry successfully lobbied to extend existing drug patent protection for up to a further eight years. In the third quarter of the 19th century the average life of a patent in a sample of 60 countries was around 13 years. Between 1900 and 1975 this was extended to 16 or 17 years. But recently the US 20 year patent protection became standard throughout the world by enshrining it in the World Trade Organisation's TRIPS agreement.⁵ It is hard to see any social benefit in extending patent protection in this way, but easy to see the benefit to IPR holders (Chang 2008 p135).
- iv. As well as extending existing patent protection the definition of what is patentable is being lowered all the time. A notable example occurred in 1995 when two Mississippi University researchers were granted a patent for the wound healing use of turmeric, the wound healing properties of which had been known in India for thousands of years, but after 1995 even use in India became subject to payments to the US university because of the TRIPS agreement. Happily it was successfully revoked after a challenge by India, but a smaller country that could not afford to fund a challenge could find its traditional methods stolen and then sold back to it in exactly the same way (Chang 2008 pp137-138).
- v. All this extension of IPR protection costs poor countries dearly. As mentioned earlier the World Bank estimates that following the TRIPS agreement the increase in technology licence payments alone will cost them an extra \$45 billion a year, which is nearly half the total foreign aid given by rich countries (\$93 billion in 2004/5). Not only that, but each country must set up extensive and expensive policing arrangements to

⁵ https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm

enforce the TRIPS system. The tragedy is that for all this extra expense and trouble poor countries get almost nothing in return because they have little IPR. Yet rich corporations get all the benefits of the additional revenue that is brought in (Chang 2008 p141).

MNCs are also adept at avoiding tax by the use of loopholes in tax laws, one of the most lucrative being **transfer pricing** - when two parts of the same MNC located in different countries buy and sell things to each other at a price set by the MNC. The pricing of transfers within a company has nothing to do with competitive economics and everything to do with overall benefit to the company. All MNCs have branches in low or zero taxation countries - **tax havens**, which typically employ very few if any staff⁶, where the branches in higher taxation countries buy consultancy or other services from them at exorbitant prices. In this way very little profit appears to be made in the high tax countries - so little or no tax is due - but instead the profit appears to be made in the low tax countries, where again little or no tax is due because the tax rate is low or zero (Murphy 2013 Chapter 5).

In general governments claim to be indignant about this abuse but don't do anything except make a few complaints, and in the UK's case persuade a few MNCs to pay a fraction of their real profits in tax so they can claim to have brought them to heel. In reality this is little more than window dressing. Governments don't insist on MNCs paying tax because the more they pay the less inclined the governments believe they are to operate in the country concerned. They are big employers and their employees pay tax, and most governments are willing to settle for that. Governments raise the taxes they want from the people and businesses that can't avoid paying, or don't try because they are honest. If a government really wanted to make MNCs pay their fair share of tax they could legislate to force full account disclosure and outlaw inflated transfer pricing. In fact the OECD guidelines on transfer pricing require this, but they are only voluntary, so MNCs don't volunteer to comply.⁷ Governments believe they must create a 'business friendly' environment, to encourage MNCs and other big businesses to set up and expand their operations thereby creating more jobs and increasing national prosperity. This sounds reasonable but is another example of trickle-down thinking. Allowing big business to keep a larger share of its profits for itself by reducing society's share doesn't mean that the money saved will be used to create jobs, it will be used as its other excess money is used: to buy its own shares to boost share prices (see chapter 61); to invest in existing assets; to boost director and manager salaries and bonuses; to distribute as dividends to shareholders; and so on. It will only expand production if demand justifies it, and even then it will only create jobs if there is no alternative - see chapter 20 section 20.2 and chapter 100 section 100.2. Governments argue that business-friendly policies persuade big businesses to move their operations to their countries from other countries,

⁶ The Cayman Islands (a British Overseas Territory) have only 30,000 inhabitants but no fewer than 457,000 (shell) companies. UK tax haven activities could be shut down if the government insisted on full financial information disclosure for taxation purposes. Tax havens that failed to comply would render all transactions with them illegal (Meacher 2013 pp206-207).

⁷ <http://www.oecd.org/tax/transfer-pricing/oecd-transfer-pricing-guidelines-for-multinational-enterprises-and-tax-administrations-20769717.htm>

which to the extent that it happens does create jobs, but all it achieves is to force other governments to follow suit in a 'race to the bottom' where all societies lose out, and is a manifestation of the transfer of power from governments to big business, a transfer where societies become ever poorer and private interests ever richer.⁸

Ideally international agreements on proper account disclosure and taxation would counter this power transfer. It makes no sense for countries to compete for MNC business by giving away bigger and bigger shares of potential tax revenue - making their own societies poorer by doing so. MNCs have to carry out their business somewhere; they certainly won't voluntarily liquidate themselves just because they are forced to pay a fair share of tax, and the sooner that they are forced to do that the better for everyone - except the owners and senior managers of MNCs of course (Murphy 2015 pp133-136).

Smaller domestic businesses also create jobs and their employees pay tax, but they are unable to benefit from transfer pricing and can't use tax havens unless they are unusually cash rich. This gives MNCs a major competitive advantage over smaller businesses. In effect they enjoy an economy of scale in the form of avoided tax. This destroys one of the basic advantages of ideal free markets - that competitors are free to enter and leave the market easily. Neoliberalism doesn't complain about this, in fact it is a strong supporter of MNCs.⁹ The laissez-faire aspect of neoliberalism is probably its most fundamental aspect, and in this case laissez-faire means letting the strong (MNCs) bully the weak (governments and smaller businesses).

Perhaps the greatest advantage that an MNC is able to take is that of poor country exploitation. They pay low wages; have no obligation to pay for pensions, health insurance or other benefits; pay little tax; suffer few if any regulations that stop them extracting as much wealth as possible; are subject to low health, safety and environmental standards; and leave behind whatever pollution and damage their operations make (Monbiot 2004 p223). In effect MNCs are able to bypass safeguards that have evolved in developed countries over many years to protect people and the environment. In these circumstances poor countries are unable to improve their standards because other poor countries will undercut them and get the MNC jobs. They find themselves locked into a situation that is harmful to them and their people - imposed by the stranglehold that MNCs have over them. At the same time workers in the home country are priced out of their jobs. This is another consequence of laissez-faire, and neoliberals still persist in believing that it is a policy that benefits everyone. The ability of people to believe what they want to believe knows no bounds. Apart from all that, as was pointed out in the Preamble - chapter 62 - MNCs extract vast wealth from poor countries by tax avoidance measures, saving for their own benefit the tax that those countries so desperately need to keep their populations alive and well.

MNCs are bullies, and as with all bullies the way to deal with them is to stand up to them. Giving in to their demands merely increases those demands. In fact although MNCs can move their headquarters to other countries they can't move their actual business - customer transactions - elsewhere because they already do business everywhere they can. The customers they sell to can't be moved - they live where they live and stay

⁸ <http://www.taxjustice.net/topics/race-to-the-bottom/tax-wars/>

⁹ <http://www.alternet.org/world/neoliberal-order-fuels-global-unrest>

there. All an MNC can do is abandon its business in a given country, and few are likely to do that just out of pique, especially when having to pay tax changes the business from being very very profitable to being merely very profitable. Even if the managers were prepared to do that the shareholders would hopefully prevent it. Perhaps one or two might consider it on in the hope of making an example of the country in question, but it seems doubtful because they know full well that the gap they left would very soon be filled by others who would be very happy to mop up a very profitable business. It would be a case of sell to the country in question and make a bit less profit than they did, or cut their noses off to spite their faces and make no profit at all. It might not need to come to a confrontation however. MNCs exercise their power and influence in secret. They can only work against the public interest by keeping their activities under cover. What is needed is to expose to public scrutiny all their meetings and dealings with government and state bodies - all meetings should be recorded and transcripts made publicly available. George Monbiot has provided a list of recommendations, including the need for public scrutiny, in a Guardian column¹⁰, and I can't improve on that. In summary they include:

- All lobbying to be transparent - as discussed above.
- Any company supplying public services would be subject to freedom of information laws and gagging contracts would be illegal, in the private as well as the public sector.
- Ministers and top officials should be forbidden from taking jobs in the sectors they were charged with regulating.
- Plus other measures designed to discourage antisocial activities and to democratise international organisations and treaties.

See also Monbiot's more detailed prescription summarised in the next chapter in section 76.3.

However when all's been said in criticism of multinationals - and there's a lot to criticise - we have to remember that they are in fierce competition with each other, and regardless of any scruples the managers and directors might have, they are forced to operate to rules set by the most unscrupulous. The freedom conflict, discussed in the Introduction, applies to all businesses including multinationals.

¹⁰ <http://www.monbiot.com/2014/12/08/there-is-an-alternative/>

76 A Way Forward

76.1 Adopt an updated Keynes' Bretton Woods proposal

Fortunately there is a way out, but it will be anathema to neoliberals - Keynes' Bretton Woods proposal updated for the modern world, such as one of those put forward by Davidson¹ or Stiglitz (Stiglitz 2006 Chapter 9 pp245-268). National governments will be free to implement policies that suit their domestic circumstances in pursuit of full employment, price stability, and an appropriate level of sustainable economic growth. To allow such freedom governments will apply appropriate restrictions on capital movements across their borders, and revert to the fixed but adjustable exchange rate system set up at Bretton Woods. In this system finance takes its proper place as the servant of the people, rather than people being forced to serve finance. People, through democratically elected governments, make the decisions and set up arrangements to carry them out and finance them appropriately, rather than being hamstrung by the power of the finance industry and unable to do a fraction of what is necessary. Decisions on tackling climate change can be taken and the finance sector called upon to support what is required, rather than fighting anything that damages its own interests and those of big business and the wealthy. Market forces and laissez-faire will never make individual companies increase their costs in order to reduce environmental damage when the cost of that damage is borne by others. They couldn't even if they wanted to because they would lose business to those less scrupulous.

Market forces promote individual rather than communal advantage.

The only way is to force all private businesses to reduce or eliminate environmental damage, where possible by international agreement, and to set up and fund new enterprises that undo much of the damage that has already been done.

With a new Bretton Woods system international trade thrives - this is the irony - it is much better for international trade than the hyperglobalisation beloved of neoliberals. This is because the focus of a modern Bretton Woods is on the promotion of international trade for the benefit of both sides of each trade, with particular help for debtor countries, rather than on using international trade as just another means to make money, very often from poor countries, with no help at all for debtors. A new Bretton Woods would favour developing countries rather than exploit them, which would be to everyone's great benefit in the long run as the world would then create and share much more surplus wealth.

76.2 Stop exploiting poor countries and relieve them of debts

¹ http://www.i-r-e.org/fiche-analyse-183_en.html

Poor countries will either have their debts written off (surely a moral imperative in all cases where loaned money was stolen by corrupt officials - in these cases lenders deserve to lose for failing to carry out due diligence), or be allowed to repay them from future revenue without accruing interest in the meantime beyond that which can be supported without any harm at all to their people. At the same time they will be empowered to develop industries that are able to contribute to world markets, and given all necessary help to bring their countries up to developed world standards. Exploitation by external companies will stop - see next section - and they will be strongly discouraged from unsustainable exploitation of their own natural environment, for which they will be compensated appropriately. Recall the 'Miraculous power of gifts' in chapter 67 subsection 67.2.1 and the discussion in chapter 48 section 48.1. Giving money to help poor countries works wonders, not only for the poor but for the rich too - not in dribs and drabs as now but in substantial quantities that are really able to make a difference. The US showed us the way in the late 1940s and early 1950s. People of poor countries are every bit as resourceful and hard working as those in rich countries, probably more so, all they need is to stop having their potential choked off by exploitation and exorbitant debt repayment.

A poor country trying to make economic progress while in debt and suffering exploitation is like trying to drive a car with the handbrake hard on.

A difficulty stems from confusion between making money and creating wealth, which neoliberalism encourages us to see as the same thing. Focusing on making money relies on loading up the poor with debts that they have the greatest difficulty in repaying, and leaving them to find their own way to create wealth and then passing the lion's share of entitlement to that wealth to the debt owners. Focusing on creating wealth gives attention to both the means to create it and the kind of wealth to be created, ensuring that it is wealth that is wanted and will command a fair price on the world market. Once all the unrepayable debt demands and exploitation have stopped poor countries will be much better placed to help themselves, but there will likely still be a need for further material help. The money to set up all new forms of wealth creation will be provided either as a gift, where it is required to be spent on importing goods and services from the giving country as in the US case, or as an interest free loan, where repayment only starts when revenue is earned, and at a rate that is humane and sustainable without exploiting or harming the poor in any way. There will be a need for providers of money to poor countries to take an active part in its management and distribution unless the poor country government has a proven and prudent track record. We don't want to see it disappearing again through corruption and theft.

This isn't helping poor people out of pity or philanthropy, but out of long-term self-interest. Consider the UK BoE creating and giving say £50 billion to a poor country to be spent on imports from the UK. The £50 billion cost the UK nothing to create, and enters the UK economy when spent. Provided that there is spare capacity (and there is enormous spare capacity - see chapter 100 section 100.11) the income multiplier (see chapters 16 and 17) does its work and creates even more wealth within the UK than is exported. Who loses? No-one; who wins? Everyone. We all gain because people in both the UK and the poor country create more wealth than they otherwise would, and the money is merely the lubricant that makes it all possible - money that cost nothing. This is

a form of quantitative easing where money is spent rather than used to buy bonds, and what's more it is spent in the UK to boost exports - what could be better, both for us and for the poor country?

Alternatively the £50 billion could be an interest free loan, to be spent anywhere in the world, and repaid in due course out of revenue at an appropriately slow rate. Again the £50 billion cost nothing, but when it is spent in countries other than the UK there will be a depressing effect on sterling as it is sold for other currencies. Provided that the amount lent is small compared to total sterling exchanges the effect will be negligible, and in any case will be reversed in due course as sterling is bought to repay the loan. When it is repaid the BoE will destroy it, leaving the money situation just as it was but with a great deal more wealth in the world and especially in the poor country.

76.3 Curb the power of multinationals

MNCs will have their power to bully governments and to exploit poor countries taken away. Governments will take back control. Private interests should never be allowed to take precedence over social interests when they are in conflict, wherever those societies are in the world. It is shameful that the developed world permits abuse by MNCs of poor people. Yes, those people are better off working for an MNC than they would otherwise be - this is the neoliberal argument. But we all know that MNCs don't employ them to make them better off, they employ them to make themselves better off - vastly better off - and would drop them in an instant if they failed to do so.

Many rough sleepers would be better off working as slaves - they would have a sufficient supply of food, clothing and shelter to keep them alive and in reasonable health, but that is no more an argument for legalising slavery than the neoliberal argument for exploiting the poor.

What is required is what George Monbiot recommends (Monbiot 2004 Chapter 6). There he proposes an international Fair Trade Organisation that is able to prescribe and enforce the standards to which corporations wishing to trade internationally must conform. It will operate along the lines of the existing Fair Trade Organisation, except that adherence to its requirements will be mandatory and applied universally. We need not question therefore whether or not it will work, because it works already. Also we need not devise a new set of regulations for the purpose; there are already standards in place:

- i. the International Labour Organisation (ILO) has already developed standards for fair treatment of workers²;
- ii. the UN Commission on Human Rights has drafted 'Guiding Principles on Business and Human Rights'³; and
- iii. the OECD has drafted 'Guidelines for Multinational Enterprises'.⁴

² http://www.ilo.org/empent/Publications/WCMS_094386/lang-en/index.htm

³ <https://business-humanrights.org/en/un-guiding-principles>

⁴ <http://www.oecd.org/corporate/mne/>

The problem is that these guidelines are voluntary, and as should by now be very clear voluntary standards and principles stand no chance against profit when they come into conflict. They bring about increased costs for those companies that try to adhere to them, so in effect those companies are penalised, whereas companies that ignore them are rewarded, and the harsher and more ruthless the companies the more they are rewarded. Furthermore without international mandatory standards corporations can force governments to abandon national laws by threatening to disinvest (Monbiot 2004 p229). The Fair Trade Organisation is an exception in that it has enjoyed success by bringing the treatment of poor farmers and others to the attention of the public, whose fair mindedness has led many to abandon cheaper and unfair alternatives in favour of fairness.

Monbiot proposes to add to the above list internationally binding regulations on health and safety, an expanded mandate for the International Criminal Court so as to prosecute company directors wherever they are, and the requirement to make companies carry the full costs of resource extraction and waste dumping. We might very well find that as soon as such laws are passed and enforced many MNCs cease to be profitable at all. Where that is the case it means that their profit was made by the avoidance of legitimate costs, in effect being extracted by causing harm without compensation (Monbiot 2004 pp229-231).

Joseph Stiglitz also has a lot to say about MNCs, along with sound proposals for reform of the way they conduct business (Stiglitz 2006 Chapter 7 pp187 - 210).

76.4 A final word on Keynes and his treatment at the hands of neoliberals

Keynes was widely acknowledged as having one of the most outstanding intellects of the 20th century. Bertrand Russell - not exactly short of intellect himself - said of him:

Keynes' intellect was the sharpest and clearest that I have ever known. When I argued with him I felt that I took my life in my hands, and I seldom emerged without feeling something of a fool. I was sometimes inclined to feel that so much cleverness must be incompatible with depth, but I do not think that this feeling was justified.⁵

Humanity has benefited immensely by taking to heart the wise words of great people down the ages, discarding any of their ideas only after the greatest deliberation and the amassing of very strong evidence against them. Given Keynes' credentials it is remarkable that neoliberals are able to cast aside so easily everything that he said and wrote, taking it as almost self-evidently worthless. It is as though a modern scientific school of thought arose expounding the belief that Einstein was a complete idiot and his General Theory of Relativity no more than the incoherent ramblings of a deranged mind. In the scientific world I don't think that any such school would last very long, but in the economic world neoliberalism has thrived, to the unimaginable harm of countless millions of people around the world.

That's not to say that Keynes was infallible, far from it. This is what Paul Samuelson

⁵ *The Autobiography of Bertrand Russell* Chapter 3 p69 - <https://books.google.co.uk/books?isbn=0415189853>

said:⁶

Since Keynes had the notorious reputation for always changing his mind, how could he always have been right? The charges, like the jokes about economists, are a little tiresome. "When a Royal commission solicits opinions from five economists", the story runs, "they get six answers - two from Mr Keynes"...

Keynes provided his own impeccable defence of being protean. "When my information changes, I alter my conclusions. What do you do, sir?"

We should re-recognise Keynes as the visionary that he was, research carefully everything he said and wrote, and enjoy the benefits of his penetrating insights. He left us a treasure chest full of ideas and policies for a better world, but instead of examining its contents with the most detailed scrutiny we left it mouldering in the attic.

What a different world we might be living in if only Keynes' insights had been understood, taken to heart, and adopted.

⁶ Samuelson, Paul. 1983. "The Keynes Centenary: Sympathy from the other Cambridge", *The Economist*, 26 June, pp19-21.

Part 4

Society and Civilisation

77 Introduction to Part 4

Almost everyone who does so is proud to live in a civilised country. Civilisation emerges from the morals, attitudes, social conduct and sense of fairness that prevails within society. The more inclusive that civilisation and the more people who enjoy the benefits the better it is for society as a whole.

Yet neoliberal economics downplays the role of society and attacks its demands for the taxation and spending it needs to maintain and enhance civilisation. It claims that devoting resources to society deprives enterprise of them and therefore damages society itself. The neoliberal view is that apart from enforcing law, order and property rights the unfettered market will provide all that a civilised society requires, if only it is left alone to do so. But private suppliers only produce things that yield a profit, and their focus is on the amount of that profit, doing all they can both fair and sometimes foul to maximise it. They can't afford any interest in society as a whole; they only supply things that provide sufficient benefit to individuals to induce individuals to pay for them. In contrast many of the things that civilisation requires benefit society as a whole, so no individual will pay for them in isolation and no profit is available to suppliers. How can the unfettered market give us clean streets; public parks; freely available libraries, galleries and museums; a national defence capability; emergency services; food and clothes for destitute people; and so on? Clearly it can't. The only way that private businesses will provide for society's needs is if society pays them to do so, and to do that society needs resources that neoliberals would withhold.

A BBC2 programme broadcast late in 2016 - 'The Victorian Slum' - showed the filthy and disease-ridden conditions in which the Victorian poor had to live, work and bring up their children, and graphically illustrated the constant stress that they were under as they fought to keep themselves and their children alive. Those conditions were a product of the laissez-faire unfettered market system that prevailed at that time, and thanks to neoliberalism and the rediscovery of its 'universal benefits' we are moving back in that direction. We aren't there yet but we'll get there soon if we carry on as we are.

But this paints a very unfair picture of private suppliers. We should recognise that they have to operate in that way because if they don't they will lose their business. Private supply is a world of fierce competition, a world that is hostile and dangerous; it requires all the skill and guile that a supplier can muster just to stay afloat, the freedom conflict requires it as explained in the Introduction.

It would be quite wrong to blame private suppliers for not providing for society as a whole, we should blame neoliberalism for claiming that they will. The only way to pay for things that benefit the whole of society is for the whole of society, represented by a democratically elected government, to pay for them. The alternative is to restrict civilised life to a privileged class who are able to pay for benefits that are denied to the non-privileged. That form of civilisation largely prevailed until the First World War and declined thereafter, but is now re-emerging with a vengeance as the gap between the

'haves' and 'have-nots' increases remorselessly. This is what neoliberalism seems to want and certainly what it brings about - a divided society. It did so before the First World War and is doing so again today.

It seems inconceivable that that is what society as a whole wants. It certainly seems to be what the privileged want but even their best interests aren't served by it - see chapter 97 and in particular figure 97.4.

I have emphasised society and civilisation because these are environments that we can identify with in a positive manner. Governments are often felt to lie outside society, and even to be hostile to it. Yet a democratically elected government is no more and no less than the body that speaks and acts on behalf of society. It is society's agent, providing society's power base, and it has that power only because society has granted it - a democratic government is the servant of society. If in society's opinion it fails to represent society or society's interests properly then it is society that discharges it and appoints a new agent. However it is no longer enough to appoint a new agent because the free international movement of capital, more than anything else, has taken power away from governments - all governments - and democracy away from society - see chapter 74. It's the free movement of capital that gives so much power to investors in stock markets and foreign exchange markets, and to multinational corporations. So much so that whenever governments wish to take action their concern is always: 'How will the markets react?' Or, when a government does act everyone's eyes turn immediately to 'the markets' to see how they have reacted. This shows where true power lies, not with governments but with faceless markets, also known as 'The City' or 'Wall Street'. This is no way to run a country or a world.

Distrust of governments has increased as their love affair with finance and big business has blossomed and their support for traditional industries and manufacturing has been progressively withdrawn. Most working people feel distanced from finance and big business because their inner workings are hidden and therefore mysterious, whereas most industries are relatively straightforward. Nevertheless the government represents society, finance and big business certainly don't, and society has real needs that only government can address.

A government that is seen to be working on behalf of the whole of society, rather than favouring the wealthy while trying to convince us that such favour is in society's best interests, will win respect and wide support. For that to happen we need to re-establish a genuine democracy where one person one vote has real meaning, instead of the present system that works on the principle of one pound one vote.

78 Surplus Wealth and Civilisation

Surplus wealth has given humanity abundance (see chapter 3). Human ingenuity and capacity for hard work have created surplus wealth in ever increasing quantities, but who should create the wealth and who should enjoy it are questions that have preoccupied humanity since earliest times. These are political questions.

Throughout history people have wanted to enjoy surplus wealth but have others create it. Slave-owning civilisations succeeded by allocating all the surplus wealth to slave owners and none to the slaves - the creators of the bulk of wealth - who were allowed only their survival needs so as to maintain a sufficient quantity of slaves. Such regimes could only be maintained by force and the threat of force. Later non-democratic regimes have applied similar mechanisms to preserve the privileges of the wealthy at the expense of the poor, and many, after long periods of suffering, have been violently resisted by the oppressed population - violence often merely replacing one form of oppression with another.

Democratic societies, at least in principle, must allocate shares fairly, or at least as little unfairly as is tolerable to the voters. Also, in order for prosperity to continue the requirement is for the capacity to create wealth to be maintained. Therefore the shares that people receive must be consistent with this requirement. Different schools of economic thought have very different views on these relative shares and their ability to deliver prosperity, and this is why they impact directly on people's lives and wellbeing.

A distorting factor is that an economic regime that allocates the biggest share to a particular sector is strongly supported by that sector because they enjoy the greatest prosperity from such a regime, whether or not it delivers the highest level of prosperity for all of society.

Vested interests will do all they can to manipulate the economic regime in their own favour, regardless of the effects on society as a whole.

The current neoliberal regime that promotes amongst other things:

- big shares for the wealthy - *because they create jobs and their wealth trickles down to everyone else;*
- austerity - *because that gets the deficit down which is in everyone's best interests;*
- privatisation - *because the private sector does everything better than the public sector;*
- unfettered markets in goods, services, labour and money - *because they self-regulate and maximise efficiency;*
- free movement of capital - *because that allocates it to where it is most beneficially employed;*

- small government - *to prevent it disrupting the ideal regime of unfettered markets;*
- minimum public spending - *to maximise the scope for private markets to work their magic;*
- limited welfare - *to wean people off dependency;*
- labour laws that favour employers - *to prevent workers from promoting their own interests at the expense of productivity;*
- low inflation, regardless of unemployment - *because a sound economy depends on stable prices;*
- unfettered global trade - *because that benefits everyone and lifts people out of poverty;*
- low taxation for businesses and high earners - *because they create prosperity for everyone;* and
- claims that there is no alternative - *because there is no alternative;*

is just such a manipulative regime where those in positions of power and influence are bombarded with loud voices proclaiming the benefits of neoliberalism. The volume of a voice depends on the power available to amplify it, and wealth power has plenty of that. The voices of those without power are much quieter and largely drowned out.

To what extent those shouting the loudest sincerely believe in the universal benevolence of the neoliberal regime is an open question, perhaps many do, but in any event they are helped by the strong tendency inherent in us all to believe what is in our interests to believe. Also to what extent those hearing the voices sincerely believe what they are hearing is also an open question, though judging by the policies they have promoted they give every indication of being fully convinced. However such beliefs must by now be very stretched in anyone of conscience when they consider, if they do, the effects of austerity on the poor and disadvantaged in society when even many of those with jobs are forced to turn to food banks to keep themselves and their children alive (O'Hara 2014 pp21-22), and are thrown into the hands of payday lenders and loan sharks to pay for energy, food, rent, or to give their children treats for birthdays and Christmas (O'Hara 2014 Chapter 3). Michael Meacher knew what was going on:

Britain is run by the elites in finance, business, the media and politics, and each of them has failed profoundly in their role to contribute towards producing a viable, sustainable and harmonious society. They have chosen instead to maximise their own interests to the intense detriment of the wider public interest. (Meacher 2013, the quotation is from p63 and Chapter 5 provides the evidence.)

78.1 Who gets the shares?

There are four main contenders for shares (in the form of entitlement) of newly created wealth:

- workers;

- business owners;
- rentiers (owners of assets that deliver wealth or wealth entitlement without effort); and
- society.

Workers are those directly employed in creating the wealth, and generally - though not always - receive at least enough to provide for their survival and self-respect needs. Business owners own or rent all equipment, property and so on required to run the business and receive the after-tax profits, rentiers receive interest on loans and rent on property, and society receives the taxes.

Worker shares are determined by negotiation on the basis of abundance or scarcity of particular skills but strongly influenced by prevailing labour laws, the general level of unemployment, and, in the case of managers, their ability to manipulate company performance to their own advantage. Business owner shares are those left over after all other shares have been allocated, and they do all they can to minimise those other shares. Rentier shares are determined by negotiation with business owners or managers, and society's share - taxes - are determined by government but strongly influenced by avoidance measures that big companies are able to exploit.

For analytical purposes shares are normally split between labour (workers) and capital, where capital consists of everything involved in production apart from labour. In this split owners and rentiers are merely different elements of capital since they are the owners of capital. Taxes are considered in terms of adjusting labour and capital shares, which are presented as gross (before tax) or net (after tax) proportions. Chapter 97 analyses in detail the factors that determine capital and labour shares.

79 *What Are the Duties of a Democratic Government?*

The basis of a democratically elected government is to serve the interests of the whole of society, regardless of who voted for it and regardless of any special pleading by particular groups. Its main duties are to protect its citizens against both external and internal threats by maintaining an appropriate national defence capability and welfare state, and to maintain a functioning economy.

I am aware that there are many who would argue with these duties. Most but not all would agree that national defence is necessary. To those who think not my own view is that we enjoy freedom today only because our ancestors fought and died for it, and to maintain it we must be prepared - *and be seen to be prepared* - to fight and die for it again. Those who are not prepared to fight for freedom become at best the servants and at worst the slaves of those who are prepared to fight for domination - see the freedom conflict in the Introduction.

Many, particularly hard-line neoliberals, disagree with the need for a welfare state. UK governments since 2010 seem at best to be half-hearted about it, and appear to feel that the 2008 financial crisis compels them to scale it down significantly on the basis that 'we don't have the money'. Money was shown in chapter 10 to be merely the lubricant that releases pre-existing wealth creating capacity, so this argument doesn't hold water. Perhaps what they mean is that society no longer has the resources to maintain a properly functioning welfare state, and sadly there is some truth in this, because society's resources are increasingly devoted to providing the investment returns that private investors demand - things that make money - regardless of whether they create wealth, as was argued in chapter 1. Private investors aren't interested in social benefits; they can only afford to be interested in private benefits, so as more and more resources are turned over to serve private interests fewer and fewer are available to serve social needs.

In responding to the events of 2008 in this way it is deeply ironic and shameful that the weakest and least responsible for the crisis are forced to forego financial support when those who caused it are permitted to keep and even enhance their £millions. The Liberal Democrats' part in the process between 2010 and 2015 is all the more disappointing when it is recalled that one of their greatest leaders and social reformers - David Lloyd George - introduced the welfare state in the form of old age pensions and national insurance, and perhaps their greatest visionary, William Beveridge, was the architect of the modern welfare state.

In 1942 Beveridge declared that 'there are five giant evils on the road to reconstruction: poverty, disease, ignorance, squalor, and idleness' (Beveridge 1942). To defeat those giants he proposed social security, a national health service, free education, good quality social housing and full employment. The Labour Government under Clement Attlee, with great courage, set about making his vision a reality in 1945. The more that society is starved of resources the more likely it is that those giants will return.

This is what Paul Krugman (winner of the 2008 Nobel Memorial Prize in Economic

Sciences) said in 2012:

The austerity drive in Britain isn't really about debt and deficits at all; it's about using deficit panic as an excuse to dismantle social programs.¹

A welfare state represents no more than insurance against life's hazards. We are all at risk and unless an individual is wealthy the consequences can't be borne without help. Insurance represents an agreement between those at risk to share the costs of making good any individual's misfortune. Individually we can't afford the consequences but collectively we can. We are used to insuring against major damage to our possessions, so why should welfare risks be any different? The difference is that the wealthy resent paying insurance premiums when the beneficiaries are predominantly non-wealthy. But the wealthy only have their wealth because it has been provided predominantly by the non-wealthy, so the premiums they are asked to pay are fully justified.

With regard to maintaining a functioning economy the arguments that rage relate to how government should carry out this function. Neoliberals believe that apart from maintaining law, order and property rights it should keep out of all markets, leaving them free to operate without restraint. But players in unfettered markets always operate within their own limited sectors; none operates at the level of the economy as a whole. Yet nevertheless neoliberals believe that the economy as a whole will prosper. They have searched long and hard to find a mechanism that benefits the whole economy from the pursuit of individual self-interest, but without any success. The search is discussed in the next chapter. Nevertheless their faith is undimmed. They believe that everything that society needs will magically appear. It really is a belief in magic because there is no known mechanism that can make unrestrained markets work in society's best interests.

Other economists believe that government has a vital role to play not only in regulating markets so that they do benefit society, but also as a provider of social needs where the market is unable to do so. There is no magic involved in these beliefs, just plain common sense and pragmatism.

¹ New York Times, May 2012, quoted in Mary O'Hara's book (O'Hara 2014 p19).

80 Market Freedom or Market Control?

Modern democratic society exists within a spectrum of freedom and control. It isn't a choice of one or the other, but a series of dividing lines, or more generally dividing areas that lie between complete freedom and complete control. Markets are no different in this respect than any other area of life. Consider violence. Everyone starts off with the freedom to commit violent acts, but if they do and are caught, then depending on the severity they normally suffer initially a fairly mild punishment and are free to continue. But the more violence a person commits or the more severe the violence the more severe becomes the control that is applied, until the person finds him or herself in jail, and if it still continues then the extreme would be solitary confinement, when control is complete. The aim in this and other situations is not for the state to exercise control, though it will if it has to, but to persuade the individual to exercise self-control, as indeed, thankfully, most people do, and that is in everyone's best interests.

In principle in a democracy all citizens have equal freedoms, but as stated in chapter 29 'a transaction is an adversarial encounter where one participant's freedom is the other participant's constraint', so unless equal freedoms are enforced, and only the state can enforce them, very soon freedoms migrate towards the wealthy and away from the non-wealthy because of unequal bargaining power. This is what the dismantling of the welfare state leads to. The poor find increasingly that they and their children have less and less access to the things that they need, including basic essentials, security, transport, housing, justice, self-respect and even sometimes the means to stay alive, so they are forced to accept harsher and harsher conditions in order to get them.

With markets the state sets the overall operating environment and must do so, because without it the strong take what they want from the weak and markets don't exist at all. Therefore the question is not should markets be free from state control or controlled by the state, but how much freedom should the state allow market participants? Neoliberalism, currently backed by the state, supports freedom from state control fiercely, with the result that markets are controlled by wealth power. Neoliberals' belief in the power of markets to solve any economic problem amounts to an obsession. This what Roger Bootle said:

What has emerged is a set of beliefs - and an accompanying set of knee-jerk reactions to almost any issue - which hardly bears at all on practical matters, yet which unthinkingly favours free markets as the solution to almost any problem. Ironically, in seeking so assiduously to become a science, modern economics has turned itself into a religion. (Bootle 2009 p234)

The person most respected by neoliberals and from whom they take their inspiration is Adam Smith, so it is worth examining his economic philosophy to see how far it aligns with that of neoliberalism.

Adam Smith is rightly considered the father of economics. It was he who first presented, in his great work 'An Inquiry into the Nature and Causes of the Wealth of

Nations' (Smith 1776), a coherent explanation of what wealth really is and how it is created. Before then wealth was thought to be gold, and that one person's gain was necessarily another person's loss. Smith showed that by co-operation and specialisation wealth can be multiplied many times, and that trade permits both sides to gain. Smith is perhaps most famous nowadays for his use of the phrase 'invisible hand', used to describe how individual actions, carried out purely for personal gain, can produce outcomes of benefit to society. For example people generally prefer to buy domestically produced items rather than imported items provided that the imported items are not very much cheaper, and by doing so they help, often without realising it, domestic producers. In fact this was the context in which Smith used the phrase in the 'Wealth of Nations', referring to wholesale merchants preferring to buy in the home market rather than from abroad because the transaction was more secure. It's a perceptive observation and often true, but hardly a great insight, and Smith doesn't make much of it as it is only mentioned once in passing in the whole of that book - in Chapter II of Book IV.

Indeed not much was made of it by anyone else until the mid-20th century, when it was interpreted as the justification for promoting self-interest, which it is believed leads to the greatest good for everyone, and it has now been elevated to the status of a universal truth. We often hear of 'Adam Smith's theory of the invisible hand', when Smith never intended his passing remark to be any such thing. This is largely due to a statement by Paul Samuelson in his 1948 textbook on economics (Samuelson 1948), in which he said that Adam Smith:

...was so thrilled by the recognition of an order in the economic system that he proclaimed the mystical principle of 'the invisible hand': that each individual in pursuing only his own selfish good was led, as if by an invisible hand, to achieve the best good of all, so that any interference with free competition by the state was almost certain to be injurious.

That's a very far cry from what Smith really said or meant. Though with some leniency towards Samuelson we should note that he goes on to criticise Smith for saying what in fact he didn't say:

This unguarded conclusion has done almost as much harm as good in the past century and a half, especially since too often it is all that some of our leading citizens remember, 30 years later, of their college course in economics.

This distortion of Smith's intent is discussed in great detail in a paper by Gavin Kennedy (Emeritus Professor, Heriot-Watt University, Edinburgh).¹ In it he set out his position:

I shall argue that Smith had no 'theory' of invisible hands and that he showed no inclination to treat it as anything more than an isolated, though well-known, 18th century literary metaphor. Significantly, and contrary to the assertions of the modern consensus, he gave the invisible hand no role in his theory of competitive markets in Books I and II of *Wealth of Nations*. Such roles given to it since the 1950s rely solely on assertions and interpolations by modern economists, which are not supported by Smith's texts.

¹ https://econjwatch.org/file_download/252/2009-05-kennedy-watchpad.pdf

Kennedy makes a very important point. Smith did not use the phrase in connection with competitive markets, yet this is the arena in which neoliberals proclaim its magical properties, and falsely cite Smith as their authority to do so.

Adam Smith's 'invisible hand' was never intended by him to represent selfishness as a force for good as neoliberals claim. Its use in that context is a complete distortion of what Smith said and meant and indeed stood for. Adam Smith was a deeply moral man. This is what he said about selfishness: 'All for ourselves, and nothing for other people, seems, in every age of the world, to have been the vile maxim of the masters of mankind' (Smith 1776 Book III Chapter IV).

His statement above shows that he was well aware of the limitations of markets and of people's tendency to exploit others whenever they see an opportunity to do so.

Neoliberals have attempted, without success, for well over a hundred years, to prove that unfettered markets lead to the best outcomes for everyone. Their claim is that they are maximally efficient - meaning that they create the greatest wealth for any given input of resources; and that they tend towards equilibrium - meaning that once they have reached the point of maximum efficiency they remain at that point. In fact these two claims are closely linked. If an unfettered market maximises efficiency then by its own operation it must have moved towards that point from a less efficient point, say because state control had been applied (causing inefficiency) and was then removed, allowing the market to work its magic. Once maximum efficiency is achieved the market must, on its own, ensure that it remains maximised, otherwise it moves to a less efficient state and the claim to maximise efficiency therefore no longer holds.

In simple terms the argument is that unfettered markets create the biggest pie. The shares in the pie might be unequal and some might say unfair, but overall even the smallest share of the unequally shared pie will be bigger than it would have been in any other system of markets. In any other system the shares might be equal, or unequal but fair, but the smallest share will be smaller than with unfettered markets because the overall size of the pie is smaller.

Milton Friedman, probably the most respected and influential of all neoliberal economists, radically opened up the scope for allowable 'proofs' of neoliberalism by making a quite extraordinary statement in a paper in 1953:

Truly important and significant hypotheses will be found to have "assumptions" that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions (in this sense). The reason is simple. A hypothesis is important if it "explains" much by little, that is, if it abstracts the common and crucial elements from the mass of complex and detailed circumstances surrounding the phenomena to be explained and permits valid predictions on the basis of them alone. (Essays in Positive Economics, 1953, p14, published by the University of Chicago Press.)

His point was that realistic assumptions are unnecessary for a good theory; all that matters is its ability to make accurate predictions. But how do you assess the ability of a theory to make predictions? The only way is to carry out experiments that can be repeated for all to see, testing real-world outcomes against predictions of the theory for as many different circumstances as the theory encompasses. Economics, in contrast to a

hard science like physics, isn't like that. It is a field in which realistic experiments are impossible, because the factors that influence people's actions are so vast and so changeable that there is no possibility of repeating any particular set of circumstances. Therefore we can't come to any reliable judgement of an economic theory's predictive success whose assumptions are 'wildly inaccurate descriptive representations of reality'. The best we can hope for is to develop theories whose assumptions are as accurate and representative as possible of reality, and whose reasoning aligns with known relationships and observations. Failing that then we must show that the effects of things the theory ignores will be insignificant. Even then we are wise to tread cautiously, because it is so easy to ignore aspects that turn out to be significant, especially in a field that involves human behaviour.

Friedman's statement was very unfortunate because subsequent neoliberal theorists felt they could safely ignore realism in making assumptions. Unsurprisingly, in spite of what Friedman might have thought, theories with inaccurate assumptions aren't any good at making predictions (Buchanan 2013 pp92-96, Keen 2011 pp158-163 and Orrell 2010 pp113-118).

Perhaps the greatest moment for neoliberals in their search for the elusive proof of the efficacy of unfettered markets was when Arrow and Debreu² created a model³ in 1954 that showed that in a **complete market**⁴ (where everything is available now including all possible contracts for future asset exchanges in all circumstances) with no transaction costs, perfect competition, perfect information, no economies of scale, and no time (all transactions occur in a single instant without any follow-on transactions), there exists a set of prices for which aggregate supply equals aggregate demand for everything.

It proves that in these circumstances, which all admit are very far removed from any real-world situation (see Schlefer 2012 pp11-15 for a good discussion of these assumptions, but note that Friedman has told us that we don't need to worry about unrealistic assumptions), there exists a single point that represents equilibrium. What it doesn't show is any tendency towards equilibrium - there is no mechanism other than pure chance by which the market will find this equilibrium point, and even if it does there is no tendency for it to remain at that point. Therefore it can't make any claim to stability or to maximise efficiency. Nevertheless it was a great moment, and held the tantalising prospect that further work might be able to make the assumptions more realistic and find a mechanism to move towards equilibrium. It is known as a **general equilibrium model** - 'general' because it takes account of all markets.

Sadly, or more appropriately inevitably, further work didn't allow the assumptions to become more realistic. In fact the more work that was done the worse things became for the model. In 1960 Herbert Scarf⁵ of Yale University showed that such an economy could be unstable, and by the early 1970s after yet more work, some of it done by Gerard Debreu, it was concluded by MIT theorist Franklin Fisher that any last forlorn hope of proving stability had been eliminated (Schlefer 2012 p14). However, in spite of that

² https://en.wikipedia.org/wiki/Arrow%E2%80%93Debreu_model

³ A model is something that purports to represent reality, in this case using mathematics.

⁴ https://en.wikipedia.org/wiki/Complete_market

⁵ https://en.wikipedia.org/wiki/Herbert_Scarf

setback, assumptions can be invented to ensure that the Arrow-Debreu model is stable. One possibility is to assume that all goods are **gross substitutes** for each other. In other words if the price of one product rises then people will buy less of it and buy a substitute instead, and there are always substitutes because ultimately, according to the assumption, everything is substitutable for everything else. For example if the price of butter goes up then people will buy margarine instead, which is quite plausible, but for *all* products to be gross substitutes *for every other good* requires that if the price of say petrol goes up then when all other close substitutes have also become too dear than people will buy cars instead - not plausible at all (Schlefer 2012 pp14-15).

Further support for neoliberalism came when Eugene Fama set out his Efficient Markets Hypothesis (EMH), discussed and criticised earlier in chapter 29, and later when Robert Lucas⁶ extended the theory of Rational Expectations⁷ to the aggregate economy in the 1970s. This theory assumes that people know the long-term effects of any government action so they take their own actions to counter it, rendering all government action economically impotent, and also assumes that irrational behaviour on the part of any individual cancels out for the economy as a whole. These assumptions aren't supported by observation: the first claims that increased government spending is met by an equivalent amount of private saving, for which there is no evidence and indeed was clearly shown to be false after the Second World War, and the second denies the herd behaviour that is so well known in financial markets. However it is illuminating to read what Lucas says about assumptions underlying classical and neoliberal economics. He claims that the assumptions are 'artificial, abstract, patently unreal'. He insists that 'progress in economic thinking means getting better and better abstract, analogue models, not better verbal observations about the real world'. The rationale underlying this argument is that these unrealistic assumptions make the problem more tractable. With the aid of a computer the analyst can then predict the future (quoted in Davidson 2009 p41). At first sight this seems wholly at odds with common sense, but in fairness he also said: "Theory ought to be tested against facts. Its aim is to construct 'a fully articulate artificial economy which behaves through time so as to imitate closely the time series behaviour of actual economies'⁸". In expressing these claims he is strongly reflecting Friedman's thinking discussed above.

In effect Lucas' approach is to devise an economic model that seems to behave as the real economy does without worrying about the validity of its underlying assumptions, and use it to make predictions about the real economy. This is a very dangerous approach and wouldn't be tolerated in engineering or any of the hard sciences, where the questions 'Why?' and 'How?' must be answered before there can be any confidence in a model or a theory. However in engineering and the hard sciences we can usually devise experiments to test theories, whereas we can't in economics. How far dare we rely on a

⁶ https://en.wikipedia.org/wiki/Robert_Lucas_Jr.

⁷ The rational expectations theory is an economic idea that the people make choices based on their rational outlook, available information and past experiences. The theory suggests that the current expectations in the economy are equivalent to what people think the future state of the economy will become. This contrasts with the idea that government policy influences people's decisions. - taken from <http://www.investopedia.com/terms/r/rationaltheoryofexpectations.asp>

⁸ cited in <http://www.economics-ejournal.org/economics/discussionpapers/2010-28/file>

model whose outputs seem to reflect real-world economic events but whose inputs bear no relationship to the behaviour of real-world people? Not much I would suggest. Steve Keen takes issue with Lucas' theory, demonstrating its invalidity at some length (Keen 2011 pp247-253).

More general but equally unrealistic models, based on Arrow and Debreu's work, have been developed, including incorporation of Lucas' rational expectations theory, and have culminated in what are known as Dynamic Stochastic General Equilibrium (DSGE) models, applied the world over by central banks and economic forecasting organisations to predict market behaviour and determine policy. The fact that such models did seem to reflect real economic events, as they did during the Great Moderation prior to the 2008 crash, was merely temporary. The 2008 crash marked a very sharp point of departure between neoliberal models, which predicted continued stability, and the real world, which showed its instability in the most dramatic fashion.

The fact that gross substitution, as well as other equally unrealistic assumptions, are necessary for stability in unfettered markets, completely undermines the neoliberal claim that they are efficient, stable, and lead to universal benefits.

You might think that that would have been the end of the matter; it certainly would have been for a theory in physics or in any other hard science, but not for neoliberal economics. It and its claims remain intact and in fact have gone from strength to strength from then on. DSGE models, being based on general equilibrium and gross substitution, were known to rest on very shaky foundations since the work of the 1960s and 1970s, and since 2008 have been discredited completely, but nevertheless it is still felt better to have a model that doesn't work than no model at all. *Here we are completely lost somewhere in London without a map. But hey, no worries, we have a map of Birmingham so let's use that, after all any map is better than no map at all - right?* The fact that the 2008 crash wasn't anticipated was due to reliance on DSGE modelling, which claimed that such an event was impossible (Buchanan 2013 pp187-189), but in spite of that these models are still used in directing economic policy.

In fact it is far better to use no model (*or map*) than one that is known not to work, because a flawed model gives a dangerous illusion of control. It directs policy confidently towards a completely inappropriate destination. At least if we acknowledge that we have no reliable guide we are cautious, taking gentle steps and being ready to retrace them quickly if they give signs that they are making things worse. This is what Nobel laureate Robert Solow wrote in 2010 about using macroeconomic models to predict the behaviour of the economy:

I do not think that the currently popular DSGE models pass the smell test. They take it for granted that the whole economy can be thought about as if it were a single, consistent person or dynasty carrying out a rationally designed, long-term plan, occasionally disturbed by unexpected shocks, but adapting to them in a rational, consistent way. I do not think that this picture passes the smell test. The protagonists of this idea make a claim to respectability by asserting that it is founded on what we know about microeconomic behavior, but I think that this claim is generally phony. The advocates no doubt believe what they say, but they

seem to have stopped sniffing or to have lost their sense of smell altogether.⁹

This statement is all the more notable because Solow was one of the authors of neoclassical growth theory, from which DSGE models were derived. He completely disowns the offspring from his work (Keen 2011 p257).

Even in spite of the 2008 crash, and having known since the 1970s that general equilibrium models don't work and therefore disprove the central claims of neoliberalism, those models and neoliberalism are not only still alive but thriving. It is truly astonishing. Can anyone really wonder why economies are in such a mess?

In his usual very thorough style Steve Keen completely demolishes DSGE modelling in his book - Keen 2011 pp257-264.

The claims of neoliberalism have no foundation in theory, fly in the face of reason, and don't work in practice. Economies can't hope to prosper or to benefit society until neoliberalism is relegated to history as a disastrous cul-de-sac in the evolution of society and civilisation.

Neoliberalism is a doctrine of absolutism. It claims that *all* markets should be unfettered, and whether people deny it or not it has been shown to be false. However this must not be taken to mean that *all* markets should be fettered. That would be to make the opposite mistake and descend into USSR style communism - another absolutist doctrine. What we should recognise is that while most product markets operate best with little external control there are others that require extensive control, and in some cases the state should make provision directly. These aspects are discussed in detail in chapter 30.

⁹ A prepared statement for the House Committee on Science and Technology Subcommittee on Investigations and Oversight, entitled "Building a Science of Economics for the Real World". July 20, 2010. Available at <http://www2.econ.iastate.edu/classes/econ502/tesfatsion/Solow.StateOfMacro.CongressionalTestimony.July2010.pdf>

81 The Prize that Keynes Offered to Us

Keynes told us what governments can do for society, but we misunderstood what he said - to our great cost.

Keynes' insights in recognising the differences between individual players in the economy and the economy as a whole, expressed as the paradox of thrift and the paradox of real wages, have already been discussed in chapters 16 and 35. Here we explore the basis of those insights and the government policies that flowed from them, and then how they were overturned.

Keynes set out his insights in his *General Theory* (Keynes 1936).

This is what Paul Samuelson said about it:

Herein lies the secret of the *General Theory*. It is a badly written book, poorly organized; any layman who, beguiled by the author's previous reputation, bought the book was cheated of his five shillings. It is not well suited for classroom use. It is arrogant, bad-tempered, polemical, and not overly generous in its acknowledgements. It abounds in mares' nests or confusions. In it the Keynesian system stands out indistinctly, as if the author were hardly aware of its existence or cognizant of its properties; and certainly he is at his worst when expounding its relations to its predecessors. Flashes of insight and intuition intersperse tedious algebra. An awkward definition suddenly gives way to an unforgettable cadenza. When finally mastered, its analysis is found to be obvious and at the same time new. In short, it is a work of genius.¹

Samuelson's criticism makes for amusing reading but it does Keynes a severe disservice. The work is in many places difficult to read and digest, but that's because Keynes was at pains to develop his revolutionary theories in terms of existing economic methods and in full knowledge of prevailing economic thought. His task was to persuade economists to abandon prevailing mistaken ideas and assumptions and to accept his new theories. It is hard to see how he could have achieved those objectives with less rigour or detail. As Keynes himself pointed out the main difficulty for economists lay in unlearning what they had accepted as fact for almost two hundred years. Once that major obstacle was overcome the new theories were relatively easy to understand.

Sadly many economists weren't prepared to make the investment required to understand Keynes' work, preferring instead to base their understanding on what others said about it. The way it happened is described in the next chapter. This was a tragedy because in economic terms the *General Theory* really is gold dust. It demolishes the whole basis of classical and its offspring neoclassical economics, and with that basis gone neoliberalism could never have been born. It was its challenging nature that led economists to misunderstand its core principles, and thereby leave the door open to the

¹ The Impact Of The *General Theory*. *Econometrica*, July 1946. Retrieved from <http://falkenblog.blogspot.co.uk/2012/12/samuelson-on-keynes.html>

re-emergence of classical ideas that it should have killed off for good. Those ideas were modified only slightly in their new clothing as neoliberal economics, and the world and its peoples have suffered untold damage as a result.

Tragically Keynes died in 1946 so he was unable to see how his theories were implemented and to correct the misunderstandings that arose.

Keynes exposed the errors in classical economics, errors that claimed markets as supreme and governments ineffective at best and harmful otherwise. Far from being ineffective, Keynes showed that governments are uniquely placed to solve economic crises, in particular the Great Depression which was still doing great harm when he wrote his General Theory. As a result of Keynes' insights and in spite of the misunderstandings the world enjoyed almost thirty years of progress and increasing levels of prosperity with high levels of employment for all of society. The 'Golden Age' is discussed in more detail in chapter 83.

How did Keynes' theory differ from classical economics?

Keynes' General Theory refuted the core axioms of classical economics. These were as follows:

i. The neutrality of money:

This claims that money is no more than an intermediary in the process of bartering one good or service for another. I might sell a week's labour for £400 then use it to pay rent for my house, buy food, clothes, heating, entertainment and so on. In effect I bartered my labour for the things that I spent the money on. The money came into my hands and went out again, and played no role in the barter other than to make the process more convenient. Given neutrality, increases or decreases in the quantity of money have no effect on real variables in the economy such as jobs and production, and also wages and prices after correcting for inflation. A doubling or halving of the money supply causes a doubling or halving of all prices and wages, and the economy continues as before.

Keynes showed that far from being neutral, money has a direct and often damaging effect on the economy because not only can it be used in exchange, it can also be used to store value, which takes it out of circulation. This is the basis of Keynes' 'paradox of thrift' discussed in chapters 13, 15 and 16.

ii. The gross substitution axiom:

This was discussed in the last chapter. It is a necessary condition in classical economics because it is what makes markets stable - they automatically tend towards equilibrium, and this tendency represents a central tenet of classical economics. In brief: as demand for a particular product increases, its price increases, but with gross substitution this price increase causes demand to spill over into substitute products, whose prices haven't yet increased. As those prices increase so demand spills over into yet other products, thereby spreading out demand over a wider range of products and smoothing out both demand and price increases for any individual product. This property provides a self-limiting effect on both demand and price increases - negative feedback in engineering terms (see chapter 34) - and as already discussed negative feedback provides a stabilising effect.

The particular context that Keynes attacked was the classical economic claim that any

other product could substitute for money that was wanted for savings purposes. The substitution claim related to money being taken out of circulation as savings, thereby making it scarce and raising its price - the interest rate. As money became dearer, rather than pay more in interest in order to save it, people would switch to saving other products instead. This would have the effect of increasing demand for those other products, thereby increasing their production, and at the same time limit demand for money and thereby limit the rise in its price. This mechanism automatically compensated for any tendency to take money out of circulation. It created demand for money substitute products which required labour to produce, so all available labour was always employed (unless workers were stubborn and refused to work at the prevailing wage rate) in producing all producible goods and services. This is one of the assumptions underlying Say's Law - see chapter 35. Note that in an economy where money can be produced by the population, as it could in the simple economy when jewellery was used as money - see chapter 12, any increase in demand for money will be matched by an increased supply, so scarcity and any associated price increase won't arise.

Keynes rejected this axiom, pointing out that people increased their savings at times of uncertainty because of income insecurity, when they feared for the future, and would not generally be induced to save other products because they couldn't be confident that those other products would keep their monetary value as money would. People's commitments are usually set out in monetary terms, so they have to be sure that anything saved will retain its monetary value so as to be able to meet those commitments, and nothing other than money has that property. There would not be a spill-over effect, instead spending would drop, causing production to drop, and unemployment to rise as a result. This loss of income would further exacerbate the drop in spending, causing a downward spiral - positive feedback in engineering terms - and instability. Indeed this was exactly the situation at the time Keynes wrote his General Theory - in the midst of the Great Depression.

iii. The ergodic axiom:

This maintains that in economics the future behaves as the past in terms of event probabilities. It regards the economy as a roulette wheel, where all the probabilities of every possible outcome can be calculated, and although we don't know how the roulette wheel economy works we don't need to because we can calculate all the probabilities from past experience. This assumption makes economics tractable mathematically. All risks can be calculated and insured against, so a prudent company can protect itself from any expectable disturbance to the economy. This is the thinking that lay behind the financial markets in the run up to the 2008 crash. All risks were known and properly hedged, so nothing could possibly go wrong...

Keynes argued that the economy does not behave in that way. There are uncertainties for which probabilities are unknowable - events such as natural disasters, wars, or prices of commodities many years hence, for which there is no basis at all for calculation of their probabilities. The same applies to financial markets, where wild swings - booms and busts - occur on a regular basis, and are clear for all to see. He argued that the real world knew about such uncertainties, even if classical economists didn't, and reacted to them in ways that classical economists couldn't explain. It was future uncertainty that invalidated the gross substitution axiom, and it invalidated the ergodic

axiom too. In particular business investment is driven by waves of optimism and pessimism about the future. There is no way that business people can know what the return will be on new wealth creating investments when that return materialises - or not - over tens of years. Keynes described these waves as 'animal spirits'. They were the real drivers of investment decisions, not the cold logic of applied probability theory. Keynes himself never used the term 'ergodic' because it wasn't in common use in his day, but the axiom was still present and understood by Keynes, and he refuted it.

Keynes also pointed out that future uncertainty explains **liquidity preference** - the phenomenon whereby people and businesses often prefer to hold money in spite of good returns being offered for other assets such as bonds and equities. This didn't make sense to traditional economists who believed that people should always opt for the best expected return by assessing risk and reward for all available assets. Keynes explained the reason: that money always retains its value and therefore its liquidity, it is the most liquid of all assets, and in an uncertain world, barring high inflation, it is the only thing that is always secure. Inflation isn't a problem when people are hanging on to their money; at those times it is deflation that threatens the economy. He pointed out that real economic transactions, especially those that take place over longish periods of time such as the construction of buildings, are agreed by means of contracts expressed in fixed money terms. In other words a buyer will contract with a supplier to pay a fixed sum of money, due on completion of the supply. Such fixed money contracts had always been puzzle to classical economists because they implied that money had a greater importance than they wished to ascribe to it. They felt that transactions should be based either on wealth or on money values after correction for inflation (real money values), so that a long-term contract might be expressed as the buyer paying the market value of a building (or market value less 5% or whatever the builder would agree to) when it was completed, or on the current value of say £200,000 after correction for inflation when the building was completed. They considered that fixed money contracts represented a somewhat quaint social or traditional phenomenon, rather than an economic one. Keynes explained that fixed money contracts were indeed an economic phenomenon, and a very sensible one in a world of uncertainties. Buyers didn't know whether or not they would have enough money to pay for buildings at the time of their completion if the contract was expressed in terms of market value or real money value, because they were uncertain. They could make provision to have a fixed sum of money available and to keep that in preference to potentially better paying assets because the value of money was known whereas the value in money terms of other assets or money itself after inflation wasn't. The difference to a buyer could be the difference between economic survival and bankruptcy, so it mattered greatly. The little that was foregone in terms of return on other assets was a small price to pay to be sure of being able to pay an obligation when it fell due. Liquidity preference also plays a major part in the bank lending market, which was discussed in chapter 52.

Without the above axioms classical economics and its offspring were dead. Keynes' work should have relegated them to footnotes in history. In demolishing classical economics' core axioms Keynes showed that the behaviour of economies as a whole was quite different from, and often in opposition to, the behaviour of individual economic players. The paradoxes that emerged - paradox of thrift and real wage paradox - have already been discussed (in chapters 16 and 35 respectively), and were a direct result of

Keynes' insights and analysis.

In presenting his work Keynes unwittingly founded the new discipline of macroeconomics - the study of the economy as a whole, putting all that had gone before and considered until then to be all of economics into the subcategory of microeconomics - the study of individual participants.

Steve Keen, one of several economists who did see the 2008 crisis coming, has continued where Keynes left off. If Keynes left classical economics in ruins Keen has left it in a state of pulverised rubble. He has devoted an entire book to the task (Keen 2011). Keen examines each of neoliberalism's² main articles of faith and systematically and thoroughly demolishes them. Even things like the famous downward sloping demand curve and upward sloping supply curve - practically the hallmarks of all things classical since Alfred Marshall's time - are forced to give way under Keen's remorseless onslaught. He leaves no neoliberal stone uncrushed. For those who wish to understand better the nature of neoliberal teaching and why it's so wrong I heartily recommend Keen's book. Like Keynes, Keen is another economist vilified by neoliberals for his views, and who can blame them? A man of Keen's intellect and analytical skills is a very dangerous enemy to those true to the faith of neoliberalism. Keen and other economists who have the courage to speak out against the mainstream of their own profession are worthy of great admiration.

² Keen refers to it as neoclassical economics.

82 How the Prize Went Unrecognised

Keynes wrote his book (Keynes 1936) as a result of the Great Depression, and especially the failure of classical economics to explain the high levels of unemployment and dire poverty that came with it. He proposed ending it by massive government spending on wealth creating investment, the immediate spending rapidly bringing down current unemployment and the investment promoting future economic growth.

In the event the government did embark on a massive round of spending, and it did indeed bring down unemployment, but not because of anything that Keynes said or wrote. It was to mobilise for the Second World War. The war cured the depression, and because economics was focused on the war and its after-effects it wasn't until after the war that Keynes' work began to bear fruit. That fruit was initially in the US, because the UK was deeply in debt and Keynes was kept busy in negotiations with the US for an Anglo-American loan to allow reconstruction. The effects of Bretton Woods (see chapter 67) and the loan negotiations exhausted him, and tragically for economics and for all of us he died in 1946 at the age of 62.

The manner in which the General Theory was taken up in the US was curious. Economists had copies of the book, but because of the intellectual challenge that it presented it wasn't well understood or even read. Two people who had attended Keynes lectures at Cambridge on his theory prior to the book's publication, Lorie Tarshis and Robert Bryce, moved to the US and were eagerly sought out as experts on the subject. Tarshis wrote an introductory textbook in 1947 (Tarshis 1947) which was initially very popular in US universities, but it was branded as preaching economic socialist heresy. One critic attacked the book as communist inspired. This was the time of the McCarthy communist witch hunts and accusations of communist sympathy were sufficient to persuade universities to drop the book.

Paul Samuelson, an economics professor at MIT, was also writing a Keynes textbook at this time and took warning from the Tarshis experience, calling his work 'Neoclassical Synthesis Keynesianism', i.e. a synthesis of neoclassical and Keynesian principles. This made it much less open to attack on the grounds of communist heresy. At the same time he had been writing another book, 'The Foundations of Economic Analysis', in which he incorporated the three axioms that Keynes had refuted. His synthesis also incorporated these axioms, treating Keynes theory as a special short-term case of the more general long-term neoclassical theory. This treatment was a travesty! It re-introduced all that Keynes had been at pains to reject. Samuelson's textbook became the best-selling economic textbook of all time with over four million copies sold and was translated into 41

¹ The principal reference for this chapter is Paul Davidson's paper 'Post World War II politics and Keynes's aborted revolutionary economic theory' *Economia e Sociedade*, Campinas, v. 17, Numero especial, p. 549-566 568, dez. 2008, available at http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-06182008000400002

languages.² Many thousands of students using Samuelson's textbook thought they were learning Keynes' theory, but sadly they weren't.

Samuelson learned what he knew of Keynes' work from Bryce when he was undertaking post graduate research at Harvard for his PhD. Samuelson had read the General Theory but couldn't understand it, and in the end gave up the attempt, relying instead on what he had learned from Bryce. Bryce had written an essay on Keynes' theory from his own lecture notes, without having read the General Theory, and his essay was used as the basis of discussions and presentations at Harvard. It isn't clear therefore whether or not Samuelson even knew that his textbook contradicted Keynes so thoroughly, he probably didn't.

However it was Samuelson's textbook that saved a version of Keynesianism, albeit a highly corrupted version, from the McCarthy purges, and gave a theoretical foundation to the heavy post-war government economic interventions across the developed world, with dramatically positive effects on jobs, productivity and growth. Both Samuelson's and Keynes' policy prescriptions were similar in the circumstances that then prevailed, Samuelson's based on what he saw as temporary short-term economic imperatives that would in due course play out and become unnecessary, and Keynes' based on a permanent change in economic understanding.

Samuelson can be credited with winning the battle against classical thinking, but his misunderstandings must take the blame for losing the war.

² https://en.wikipedia.org/wiki/Paul_Samuelson

83 *The Golden Age of Capitalism*

This began soon after the Second World War and lasted until the mid-1970s. It was an unprecedented period of growth in wealth creation and standard of living throughout the world, and all due to the adoption of Keynesian-style policies - albeit missing aspects that were destined to bite eventually.

In the UK and US it became known as the 'Golden Age of Capitalism', in France as the 'Trente Glorieuses', in Germany the 'Wirtschaftswunder', and as the 'Economic Miracle' in Japan, Belgium and Italy. A speech in 1957 by Prime Minister Harold MacMillan captures the spirit of the age perfectly:

Let us be frank about it: most of our people have never had it so good. Go round the country, go to the industrial towns, go to the farms and you will see a state of prosperity such as we have never had in my lifetime - nor indeed in the history of this country.¹

Skidelsky provides a discussion and comparison of the golden age from 1951 to 1973 (1951 was chosen as the start to allow a few years of post-war adjustment) to the Washington Consensus period from 1980 to 2009, with 1973 to 1980 (oil price spike and misunderstood Keynesian bite-back years) being a transitional period² (Skidelsky 2010 pp113-123). His findings are reproduced below in table 83.1.

He suggests the high global growth during the golden age was especially impressive as during that period the global economy was dominated by the West. It was only in the last few decades of the twentieth century that the emerging-market 'miracle' economies contributed to global growth yet it was still lower in the later period. It is also impressive because the Washington Consensus period included the explosive growth in banking and financial trading, all of which added to recorded GDP, though in reality all that was largely double counting (see chapter 27 and chapter 36 section 36.1).

The golden age was also a time of unusual global financial stability, with crises far less frequent than before or after - see chapter 50 figure 50.1.

Skidelsky sums up the comparison in the following way:

...the comparison between the Bretton Woods and Washington Consensus years shows that the former had less unemployment, higher growth, lower exchange rate volatility and lower inequality. (Skidelsky 2010 p123)

His analysis shows that even a flawed version of Keynesian economics outperformed neoliberalism on every front that really mattered.

¹ https://en.wikipedia.org/wiki/Post%E2%80%93World_War_II_economic_expansion

² Figures are tabulated in the above article for global growth and unemployment, with the Washington Consensus unemployment figure for France extracted from the graph in Skidelsky's book (the figure itself isn't given in the book though all the others are).

Average Values	Golden Age	Washington Consensus
Global growth	4.8%	3.2%
Growth in GDP per capita (US)	2.2%	1.9%
Growth in GDP per capita (Germany)	4.9%	1.8%
Growth in GDP per capita (UK)	2.5%	2.1%
Growth in GDP per capita (France)	4.0%	1.6%
Growth in GDP per capita (Japan)	8.0%	2.0%
Unemployment (US)	4.8%	6.1%
Unemployment (Germany)	3.1%	7.5%
Unemployment (UK)	1.6%	7.4%
Unemployment (France)	1.2%	9.5%
Inflation	3.9%	3.2%
Global economic recessions (using IMF's definition)	0	5

Table 83.1

Remember also that after the war Britain was in a genuinely dire state - much of industry had been turned over to wartime production, vast areas of towns and cities lay in ruins, food and other essentials were in short supply, vast numbers of troops were returning from around the world hoping to find work, and we were deeply in debt to the US. It seemed inevitable that there would be economic depression on a gigantic scale. So what did Attlee's Labour Government do? Embark on a severe programme of spending cuts in the hope of reducing debts? No, with great determination and courage it did precisely the opposite. It set up the NHS; it nationalised 20% of British industry including coal, railways, road transport, the BoE, civil aviation, electricity, gas and steel; it expanded the welfare state; it embarked on a massive programme of social housing construction; it greatly expanded the number of schools; it put people to work on an unprecedented scale; and all at a time when many said Britain was bankrupt - see chapter 90 section 90.1 for an example that shows how this policy plays out in a simplified economy. Although many of these actions were desperately needed many others weren't necessary. My point here is not to defend them all but to highlight the very high costs involved when it seemed that they were unaffordable. Our debts shot up massively but within a relatively short time the growth that was fostered brought down the relative size of the debt. These aspects are discussed in chapter 88.

The table reveals another factor that colours people's recollection of the two periods. During the golden age growth was significantly better in absolute terms in all countries than it was during the Washington Consensus period, but during the golden age the UK and US performed worse in relative growth terms than France, Germany and Japan, whereas during the Washington Consensus period they performed better than France and Germany and similar to Japan. The reasons aren't clear and are still debated. However because of this difference many people in the UK and US regard their countries as having performed badly in the golden age and well later, albeit in relative terms, and therefore see 1980 onwards as a success and prior to 1980 as a failure. Needless to say this represents a very distorted view.

The golden age saw real incomes in most developed countries more than double (Quiggin 2010 p7). Figure 83.1 shows US data from 1945 to 2013, which is typical of the developed world. It was a time of rising real prosperity. The change point is clearly seen

after the last peak just before 1980, after which, in the neoliberal era, median³ incomes changed very little.

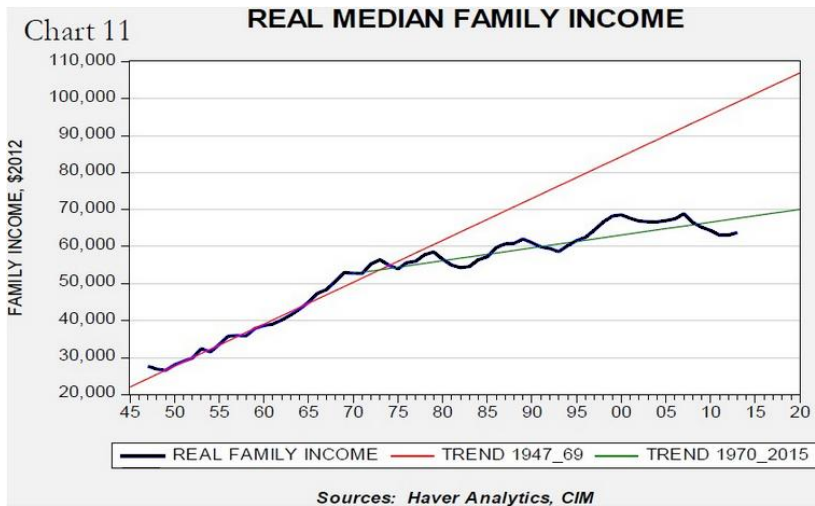


Figure 83.1 Real US median family income growth 1945 - 2013 expressed in 2012 dollars. Retrieved from <http://www.valuwalk.com/2014/12/key-issues-fomc-might-face-2015/2/>

For a first-hand account of how it all felt to someone who had lived through the deprivations of the Great Depression I recommend Harry Smith's book - 'Harry's Last Stand' (Smith 2014). Harry Smith was a child in the depression years of the 1930s, fought in the RAF during the Second World War, and remembers so well how Attlee's welfare state transformed the lives of ordinary people. It is a deeply moving story that should be compulsory reading. Although it's a short book it contains a very powerful message.

³ Median income is a better measure than average income because it isn't distorted by a few people who earn vast amounts. The median is the income at which there are equal numbers of people earning more and less. Take ten people, one of whom earns £70 per week, one £80, one £90 and so on up to the ninth who earns £150 per week, but the tenth earns £10,000 per week. The average income is £1,099 per week, which is completely unrepresentative of everyone - far more than nine out of ten and far less than the tenth. The median income however is £115 per week, where 5 people earn less and five earn more, and is much more representative of the majority.

84 Stagflation and the Unravelling of Corrupted Keynesianism

The Golden Age came to an end in the early 1970s after almost thirty years. The first bombshell was the abandonment by US President Nixon of the link between the US dollar and gold which had been established at the Bretton Woods negotiations in 1944. This became known as the 'Nixon Shock'. The US dollar had come under increasing pressure as the US created more and more dollars to stimulate production to fight the Vietnam war, until it was evident to all that there were far more US dollars in circulation, and in particular in foreign central banks, than could be repaid in US gold. The story is told in more detail in chapter 67. A few attempts to re-establish the link were made but failed, and in 1973 further attempts were abandoned. That led to turmoil in international markets as they struggled to adjust to floating exchange rates - a new phenomenon never before experienced. All currencies lost considerable value against real wealth, commodities in particular, and as a result there was very high inflation. Particularly hard hit were economies that depended on imports as much of their spending had to be diverted abroad to pay for them. As the dollar plummeted so did revenues from commodities priced in dollars, especially oil. In retaliation OPEC embargoed supplies to countries that supported Israel in the Yom Kippur War, including the US, the UK and others, causing oil prices to quadruple in those countries.¹ Most goods have to be transported and transport depends on oil, so the price of all goods rose substantially and a further, more severe, round of inflation for those countries was inevitable.

When the price of oil (and other essential imports) rises, money that was formerly spent in the domestic economy and used to provide an income for domestic producers is spent abroad instead so domestic incomes are lost. Therefore domestic production drops, especially for non-essential products, and workers are laid off, further weakening domestic spending which itself lowers production in a vicious downward spiral. This has exactly the same effect as excess domestic saving, explained in chapter 15. This, at the same time as rising inflation caused by rising import prices (which the domestic economy is unable to influence) is **stagflation** - stagnation coupled with inflation.

It is quite striking to recall the double irony where:

- i. The Nixon shock and subsequent dollar depreciation and oil price rise were due to not having heeded Keynes' advice during the Bretton Woods conference - see chapter 67 section 67.2. Keynes had foreseen the dangers of not having an international currency and of making debtor countries responsible for trade imbalances, and his International Clearing Union coupled with a common international currency would have avoided them. As it was the US was so strong that it was able to insist on retaining the dollar as the de-facto international currency.
- ii. Keynes' advice in his General Theory (Keynes 1936) was misunderstood

¹ https://en.wikipedia.org/wiki/1973_oil_crisis

and led to the abandonment of the corrupted policies when they failed to work - as they were bound to do in the circumstances that prevailed - when stagflation raised its head in the 1970s.

The circumstances (Nixon shock and all that followed) that caused stagflation were due to having ignored Keynes at Bretton Woods, and the response was ineffective because Keynes' General Theory had been misunderstood. These twin failures are deeply tragic because they opened the door to neoliberalism and all the horrors that have since flowed from it.

The great man really did his best for us. He offered us the keys to both national and global prosperity. Tragically we didn't take the trouble to understand properly what he told us about national prosperity, and as for global prosperity we turned him down flat. Even worse, we added insult to injury by blaming him for all the mayhem that emerged as a result of our misunderstanding and ignoring him!

The corrupted version of Keynesianism held that stagnation and inflation can't both occur at the same time. It held that stagnation is caused by insufficient demand, which causes deflation, the cure for which is heavy government expenditure to increase demand, which brings down unemployment, after which it can cause inflation but only when there is full employment. Governments continued to borrow and pour in new money in an attempt to cure stagnation, but all it did was fuel inflation without relieving stagnation. Adherents of the corrupted Keynesian faith were at a loss.

There are four points to make here:

Firstly, although the policies applied were based on Keynes' work, they failed to reflect faithfully what Keynes really advised, especially in the stagflation period, when domestic stagnation was not caused by a lack of aggregate demand but by spending being diverted abroad to pay for oil.

Secondly, both inflation and government borrowing started to decline significantly after 1975 and the economy began to improve, especially after a loan from the IMF in 1976, not all of which was needed. However another big oil price rise in 1979 triggered further inflation which undid the benefits that were starting to materialise.

Thirdly, Keynes died in 1946 aged only 62, exhausted after his strenuous efforts at Bretton Woods and in negotiating the Anglo-American loan in 1946. Had he lived longer it is likely that he would have corrected the mistakes that were made in implementing his ideas and might well have prevented the neoliberals from seizing power.

Fourthly, in spite of all the potentially damaging factors production and average living standards rose in the UK during the decade² as shown in Figure 84.1. Note that this was before banking and financial trading began their meteoric rise so GDP didn't include as much double counting as later. The chart also clearly shows the impact on GDP of the 1973 and 1979 oil price rises.

² <http://econ.economicshelp.org/2010/02/economy-of-1970s.html> and <http://econ.economicshelp.org/2009/08/how-bad-was-1970s-economy.html>

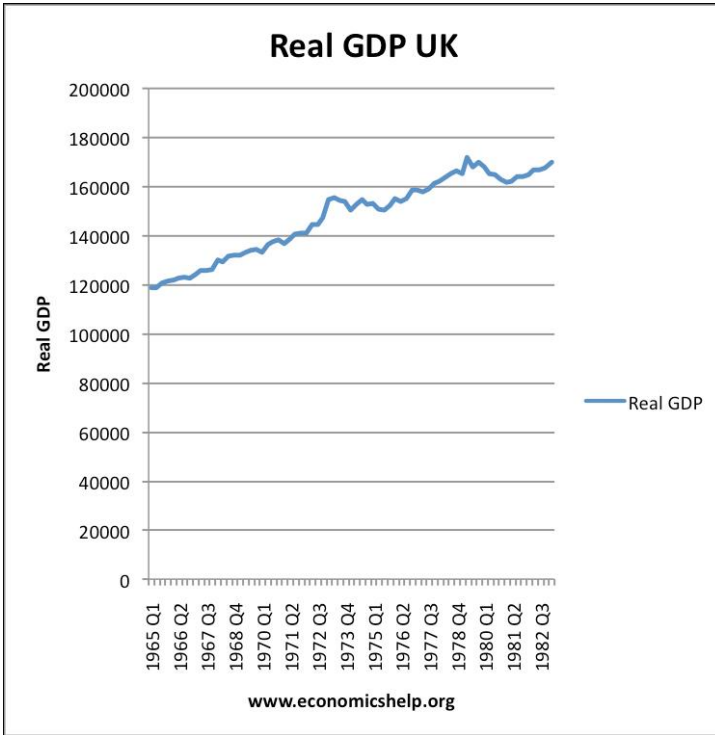


Figure 84.1: In spite of stagflation there was still growth during the 1970s. Source: *Economics Help website by Tejvan Pettinger, retrieved from <http://econ.economicshelp.org/2009/08/how-bad-was-1970s-economy.html>*

During all this time the neoclassicals hadn't gone away, they remained as an unorthodox school of thought, led initially by Friedrich Hayek and the Austrian School of Economics and later by Milton Friedman, who used the term 'neoliberal' for his economic philosophy³. They seized their chance, explaining stagflation as the inevitable consequence of heavy state interference in the market, the distortion of which was always bound, sooner or later, to end in crisis. This view found strong favour with right-wing politicians who were sick of witnessing the continuing rise in trades union power and their abuse of it to bully governments into bigger and bigger pay rises, and also in the UK the humiliation of seeing the Labour Government go cap in hand to the IMF in 1976 seeking a loan to help with the severe balance of payments problems that had arisen.

The election of Margaret Thatcher in the UK in 1979 and Ronald Reagan in the US in 1981 marked the beginning of the switch to neoliberalism as orthodox economics.

³ Friedman wrote an influential paper in 1951 entitled 'Neo-Liberalism and its Prospects', available at http://digitalcollections.hoover.org/images/Collections/2016c21/Farmanud_02_17_1951.pdf

85 So What Would Keynes have Recommended to Cure Stagflation?

We'll never know for sure of course but it is possible to make an educated guess based on what Keynes said and wrote.

Keynes is regarded as having recommended government expenditure as an easy and painless way to promote economic growth. In fact the General Theory makes it clear that such action is advised only for stagnation caused by a widespread lack of demand - people able and willing to work but can't find jobs, no jobs because employers can't sell products, products won't sell because customers have no money, and customers have no money because they don't have jobs. In these circumstances government spending is the equivalent of lubricating a dry engine - it starts to run healthily again.

The stagnation of the early 1970s wasn't of that kind. It was caused by a severe reduction in domestic spending because of much more foreign spending - on oil and other essential commodities. In those circumstances domestic productivity with respect to foreign productivity had fallen - domestic wealth was suddenly worth less in terms of foreign wealth in the form of oil and other commodities. The country was therefore worse off than it was before, and the standard of living had to fall sufficiently to match its new lower domestic income. This is an instance where the whole economy *does* behave like an individual - recall chapter 63: 'The key to understanding international trade is to recognise that a single country trading with the rest of the world is very much like a single person trading with other people'. A country dependent on essential foreign imports whose cost has risen is just like an individual dependent on food when the cost of food has risen. There is less income left over for other things so many of those other things must be foregone to compensate.

An economic philosophy that thinks it can cure the problem by more government spending is mistaken. If the economy is an engine then the problem isn't lack of lubrication, it's that much of the engine's output power has been diverted abroad so there is less power available to drive the domestic economy. Pouring in more lubricant in these circumstances is futile. Nevertheless that's what the neoclassical synthesis Keynesians recommended and that's what governments did. Unsurprisingly (now that we know what was going on) the additional government spending merely served to ratchet up prices even more. Additional money made some people better able to afford the higher prices, especially in the public sector and other industries where trades unions were strong, so where suppliers were able to they raised prices to pay the wages. Where they weren't able to raise prices - generally for less essential products - they absorbed costs or went out of business. As a result inflation took off, reaching 26% in 1975 in the UK.¹ Oil prices in the period rose of course along with other inflated prices as the value of money

¹ See the downloadable table at

<http://www.theguardian.com/news/datablog/2009/mar/09/inflation-economics>

fell. Much of the national income therefore continued to go abroad and government action in pouring money into the domestic economy was powerless to stop it.

However production and average living standards still grew during the decade in the UK in spite of these setbacks (see figure 8.4.1 in the last chapter), but some people suffered much more than others. Those in industries producing non-essentials, which are what people cut back on when they have less money to spend, were affected badly due to layoffs and wages that failed to keep up with inflation, whereas employees of essential product industries with strong unions and public employees generally kept their jobs and good wages. Trades unions were able to demand pay rises to compensate for inflation; so much government spending went on maintaining the standard of living of those in secure employment rather than on creating new jobs for those out of work. This did nothing to help those in most need, it made the disparity in income between employed and unemployed even worse as well as fuelling inflation. A more appropriate strategy would have been to absorb as many as possible of the unemployed in state-sponsored work in order to improve their situation (chapter 100 section 100.2 lists some suggestions), and to limit pay rises to the already employed in order to allow their situation to degrade. If managed well that would have cured both inflation² and stagnation, and shared the inevitable pain more equitably.

Keynes' General Theory applies only when there is stagnation due to inadequate demand, and only in a closed economy when stimulation creates wealth within the same economy. In economies trading internationally other factors must be taken into account. As was mentioned earlier Keynes recognised this in his submission to the government setting out his proposals for the Bretton Woods conference in 1942:³

If, indeed, we lack the productive capacity to maintain our standard of life, then a reduction in this standard is not avoidable.

Clearly he was well aware of the implications of a drop in productive capacity as happens when essential import prices rise.

It is understood now that there are two distinct types of inflation, both of which arise when demand exceeds supply. One is when supply stays the same but demand increases. This is what happens when the money supply increases with no spare capacity. Supply stays the same because the economy is working at its maximum capacity but there is more money to spend, perhaps because of tax cuts or because the government is spending more heavily, or because strong unions have forced up the wages of employees and employers borrow to pay them. This is known as **demand-pull inflation** - buyers are bidding prices up because they have the money so their willingness to buy is greater than sellers' willingness to sell, until equilibrium is reached at a higher price. In effect the excess demand is 'pulling inflation up'. The other occurs when demand stays the same but supply falls, and is quite different in its effects. It happens when supply is restricted for some reason: perhaps there is a shortage of raw materials; or, as in this case, a major

² One-off rises in import prices would cease to impact on inflation after one year since inflation is calculated on a year to year basis.

³ Repeated from chapter 68. See 'The Keynes Plan' (A) para 12, at http://www.elibrary.imf.org/staticfiles/IMF_History/IMF_45-65_vol3.pdf

supplier deliberately restricts output to force a price rise, as did OPEC with oil in 1973, see chapter 67 subsection 67.4.1. The effect is that essential goods or services have risen in price and are forced on buyers, who have no choice but to pay the higher prices. Buyers are 'willing' to pay more in an economic sense, but not because they have more money to spend, their willingness comes from having no choice. This is known as **cost-push inflation** - in effect 'costs are pushed' onto a resentful public. It was cost-push inflation that caused the economic downturn in the 1970s, and the downturn that caused unemployment, and those factors together caused stagflation, which is perfectly understandable (Hahnel 2014 p168). If cost-push inflation is assumed to be demand-pull inflation (or if the difference isn't acknowledged) then there is a mystery - how can the public have more money and more willingness to buy when many are unemployed and receiving much less money? The failed policies that followed caused the death of (corrupted) Keynesian economics when Keynes himself would have known what was happening and why. Neoliberals still hold Keynes in contempt because of stagflation, even though the factors that were at work are now so much better understood.

There are also two corresponding types of deflation, both of which arise when supply exceeds demand. One is when supply stays the same but demand falls. This is what happens when a shock of some sort causes widespread insecurity and people cut back on spending, pay down debts and decline to take out new loans. As far as I know neither type of deflation has a name so let's call this type **inadequate-demand deflation**. Here demand is deficient, leaving an oversupply of unsold products that are lowered in price in an effort to unload the excess stock. Suppliers also lay workers off so as to reduce production to match the lower demand, and make even more people hard up, in a vicious circle. People still need and want things but either don't wish to buy them or can't afford them, even at the lower prices, this is a bad situation. The second is when demand stays the same but supply increases. Let's call this **overproduction deflation**. It occurs when production is so high that it outstrips the prevailing level of demand, causing an oversupply of products that suppliers offer at lower prices in order to tempt buyers. This is what has been happening for many years in the technological sector where electronic and electrical goods have become cheaper over time. People already have everything they need and much of what they want, but they find that they can afford yet more things, and demand then increases to match supply at the new lower price. This is a good situation, at least as far as consumers are concerned, though it isn't so good for the environment - see chapter 7.

Failure to recognise these different forms of inflation and deflation lead to inappropriate economic recommendations and government policies - tragically inappropriate in the early 1970s.

86 Control of the Economy

All economies must be managed by the state and its agents; the only question is to what extent. Even the most laissez-faire economies are subject to the rule of law, which establishes property rights, legally binding ownership conditions and obligations, contract enforcement and so on. The aim of such control in a democracy is, or should be, the orderly conduct of transactions in a manner that benefits society as a whole.

A well-controlled economy would be stable and treat everyone fairly, and the majority of every rank in society would be content to live and work within it.

When compared against this list of attributes the current UK economy fails on every count, and other countries don't fare much better. After ten thousand years of civilisation this is quite astonishing. It shows that either we don't understand economics at all or economics and democracy have been subverted to benefit special interests at society's expense.

Particle physics has the Large Hadron Collider; astronomy and cosmology have the Hubble telescope; fusion research has ITER; meteorology has vast arrays of supercomputers; and there are major research facilities in operation in all other areas of scientific endeavour. What does economics have? A number of often biased think-tanks; academics working in university departments; several Nobel Memorial Prize winning experts who spend much of their time attacking other Nobel Memorial Prize winning experts; and DSGE models that simplify the economic system to the point where it dangerously misleads policy rather than informs it. Given the enormous impact of the economics discipline there is a desperate need for accurate information on which to base policy. It's very strange that so little effort goes into understanding how economies behave and what the real causes and effects are in different circumstances. Nowhere does there appear to be a major effort to really understand what is going on and to develop accurate and usable models rather than elegant and useless models. Where is the BIG PUSH for economic understanding? Economics as a discipline is still in the dark ages.

A glimmer of hope lies in the fact that physicists are now becoming interested in the study of economics as an example of a complex environment. In economics, individuals - billions of them - interact with each other, not at all independently as perfect markets require (see chapter 34) but with avid attention paid to other individuals and their activities, and significant outcomes emerge from that morass of interacting individuals.

For years neoliberal economists have suffered from 'physics envy',¹ willing and moulding their subject into what they hoped would be as hard a science as physics. Wouldn't it be a sweet irony if in the end economics is taken over by physicists, whose rich array of mathematical tools and algorithms is so well suited to the

¹ https://en.wikipedia.org/wiki/Physics_envy

study of complex interacting systems? (Buchanan 2013 pp215-217)

86.1 State levers of economic control

There are two main policy tools available:

- i. **fiscal policy** - applied by the government. This aims to influence the economy by varying the quantity of money available to government and how it is spent;
- ii. **monetary policy** - applied by the BoE. This aims to influence the economy by varying the price (interest rate) of money and its overall quantity in the economy.

Beyond these and in extreme circumstances the government can take whatever action it sees fit and direct others state bodies to take action as it requires.

With regard to fiscal policy government money comes from taxation or borrowing (bond issue). Government spending can be directed at whatever the government decides and can persuade parliament to approve, subject to existing legal commitments. Changes are normally announced in budgets. The purpose of fiscal policy is to satisfy government spending plans, most of which represent fulfilment of much earlier fiscal policies. Fiscal policies are normally directed at making significant economic changes rather than day to day economic management, though emergency measures such as the bank bailout in 2008 can be taken at very short notice.

In implementing fiscal policy the government decides what it needs to spend and raises the money by taxation and borrowing. Often spending plans are disrupted by costly unexpected events, and when they happen it is borrowing that must increase because it is much more difficult to increase taxation at short notice. Examples of unexpected events include sudden rises in unemployment, natural disasters, external threats, and major changes in world markets.

There is another way for the government to raise money and that is direct creation and allocation to government by the BoE. Under current legislation this is prohibited, although there are ways round it. It was discussed in chapter 55.

Monetary policy is the day to day economic control mechanism. The BoE normally implements it, though in exceptional circumstances discussions will be held with the treasury and government and ultimately government makes the decisions. The BoE has just one target, the annual rate of inflation in terms of the Consumer Prices Index (CPI), which on government instruction it is required to keep as close as possible to 2%. If the rate drops to 1% or less or rises to 3% or more then the BoE must write an open letter to the chancellor explaining why and setting out its plans to bring it back to 2%. 2% rather than zero is targeted because a positive rate is better for the economy in that it implies a slight excess of money which keeps people spending and businesses investing, and allows a margin for nominal pay rises while keeping real wages stable. It also maintains a comfortable margin away from the danger of a **liquidity trap**, which occurs when interest rates are very low or zero and still there is little appetite for borrowing, when the liquidity of money is prized above other assets because of deflation or the fear of it. This is what happened in 2008 when in desperation quantitative easing was resorted to by the BoE - see next chapter.

Knowing that the BoE will try to keep inflation under control and knowing the target rate gives people and businesses confidence that it won't spiral upwards or downwards out of control in the future. If it was targeted at zero then there would be less incentive to spend and invest because money wouldn't lose its value over time, in fact if it dipped below zero (deflation) then spending and investment would drop substantially because retained cash would increase in value over time without any risk. Deflation can be very damaging to an economy so it is wise to keep the rate comfortably away from that.

In attempting to control inflation the BoE has two main levers: the bank rate - the interest rate that the BoE charges commercial banks to borrow BoE reserves; and open market operations - buying and selling government bonds and sometimes other debt instruments in the open market.

If inflation rises without import prices having risen substantially then it implies that too much money is being created and lent by commercial banks and buyers are using it to bid prices up, causing demand-pull inflation. In response the BoE can increase the bank rate in the hope that commercial banks will increase their interest rates so that the demand for loans will drop, existing loans will be paid back sooner, and the quantity of money will drop bringing inflation back down. If inflation falls the opposite happens. The BoE reduces the bank rate in the hope of stimulating lending and spending in order to bring inflation back up. Bank rate changes are supplemented and reinforced by open market operations, generally undertaken frequently as a fine-tuning mechanism to align representative (i.e. similarly risk-free) market rates with the bank rate. If market rates are tending too high then the BoE buys bonds and creates an increased demand which increases their price, and because bonds pay a fixed interest based on their nominal value the real interest rate they pay falls, hopefully bringing market rates back into alignment.² However as already seen the free movement of capital severely limits the effectiveness of these measures - see chapter 70.

To show just how blunt the monetary tools are, and noting that their aim is to control inflation by moving bank rate in the appropriate direction, consider the situation when there is full employment and inflation is starting to move higher, so the BoE raises the bank rate to lower it, and banks respond by raising their rates. The expectation is that debtors are made worse off by having to pay more in interest so they have less to spend, lowering demand and lowering inflation, which is the objective. Asset prices also fall to match their rates of return to the new higher rate offered by banks, so investors are worse off and spend less, again lowering demand and lowering inflation. All as expected so far,

² Government bonds or gilts are issued with two characteristics: a maturity date and a fixed rate of interest (known as the 'coupon') related to the nominal value, which by convention is £100. The nominal value often bears little relationship to the actual buying or selling price at any point in time, which varies according to the prevailing interest rate and expectations of interest rate and inflation changes in the remaining time before maturity. During market trading the price of the bond is inversely related to the real investment return, known as the yield, which is the return that will be earned if held to maturity. Supply and demand determine the price at any instant, so if demand rises the price rises and the yield falls and vice versa. The BoE's operations are described in the 'Red Book', at

<http://www.bankofengland.co.uk/markets/Documents/money/publications/redbook.pdf>

but there are potentially conflicting factors that can have the opposite effect. For example:

- i. savers' interest rates go up giving them more money to spend, boosting demand and raising inflation;
- ii. higher interest makes investment in the UK by foreigners more attractive, strengthening the currency and making raw material imports less expensive and boosting production. Higher production with full employment creates demand for workers so wages rise, giving people more to spend so inflation rises;
- iii. higher interest rates increase business costs, so producers raise prices to pass on the costs to customers, raising inflation by doing so.

In economics the law of unintended consequences is particularly active.

What happens overall depends on spending patterns and relative numbers of savers and borrowers, on the ratio of imports bought for production and consumption, on business constraints that determine whether companies can raise prices or have to absorb the higher costs, and on the severity of the underlying causes of the inflationary or deflationary forces.

Having said all that these are just some of the complexities involved, because in a real economy everything affects everything else to varying degrees, depending on prevailing circumstances, so tweaking one input can have very different effects, not only on the targeted output but on other outputs as well (Jackson and Dyson 2012 Chapter 3 pp106-108).

Fiscal and monetary control levers are very imprecise, especially in volatile times. Fiscal levers tend to be blunt, slow acting, often don't work as expected and have many unwanted and unexpected side effects. Monetary levers as we have seen are very loosely linked to the parameters that they aim to control, and many external disrupting factors intervene to thwart their best intentions.

The standard state levers of economic control are most effective when the economy least needs control, and least effective when the economy most needs control.

This was made very evident in the 2008 crisis, when standard measures went out of the window and desperate measures were put in place by both the government and the BoE.

87 The Government Response to the 2008 Crash and its Aftermath

The 2008 crash was the most severe financial crisis since the Great Depression of the 1930s. Its causes were discussed in detail in chapter 54. The government under Gordon Brown acted immediately, and because of Brown's international standing and influence other governments around the world were persuaded to take similar action. Because of this the worst effects, which could have been devastating - as bad as or even worse than those of the Great Depression - were avoided.

Gordon Brown and Alistair Darling (Chancellor of the Exchequer) deserve great credit for the rapid, decisive and courageous actions that they took in October 2008, but that credit should be tempered somewhat by the fact that under New Labour financial regulation continued to be scaled back and weakened and that contributed significantly to the crash. However let's not be too judgemental - Brown acknowledged mistakes in a speech at the Institute for New Economic Thinking's annual conference in 2011:

We know in retrospect what we missed. We set up the Financial Services Authority (FSA) believing that the problem would come from the failure of an individual institution," he said. "So we created a monitoring system which was looking at individual institutions. That was the big mistake. We didn't understand how risk was spread across the system, we didn't understand the entanglements of different institutions with the other and we didn't understand even though we talked about it just how global things were, including a shadow banking system as well as a banking system. That was our mistake, but I'm afraid it was a mistake made by just about everybody who was in the regulatory business.¹

A bank rescue package totalling an unprecedented £500 billion was put in place, consisting of short-term loans and guarantees, and up to £50 billion of investment in the worst affected banks. The aim was to stabilise the British banking system, save the payments system, and help restore market confidence. In this it was successful.

Whilst we should applaud the scope and depth of these measures we should at the same time deplore their necessity. They were only needed because of the stranglehold that banks - companies operating purely for private profit - have over the economy. No other company or individual could expect such treatment. Owners of profitable businesses who ran out of ready money to pay creditors and had to sack a loyal workforce, and hard-working people who through no fault of their own lost their homes or jobs or both, were forced to suffer financial hardship, shame and indignity. There was no bailout for them. But banks are special, banks manage the economy's money, and as a reward they are allowed to gamble with it, taking one-sided risks in which they get to keep all the winnings but when they can't afford their losses they are paid by the taxpayer. It's a reward that is thoroughly undeserved. But we shouldn't blame the banks. Who

¹ [https://en.wikipedia.org/wiki/Big_Bang_\(financial_markets\)](https://en.wikipedia.org/wiki/Big_Bang_(financial_markets))

wouldn't take advantage of a situation like that? It is the system that allows it that is to blame, and it is society that has been seduced into maintaining it.

We can conjure up money for banks, but not for anything or anyone else, however needy or deserving. The enormous bailout wasn't the end of the matter, the economy was shrinking after the crash for want of money. People were cutting back on spending and paying down debt as they always do during hard times, and these actions severely damage an economy as was shown in chapter 16. There was a real danger of a deflationary spiral. It is somewhat ironic that after the reckless bank policy of 'lend as much as possible to anyone' their policy became 'lend to no-one'. Yet the economy depends on banks to create the debts that create the money that the economy needs in order to function (recall that the economy needs money and to have money means we must have debt, see chapter 39) - another stranglehold - so the banks had to be persuaded to lend. They can't be forced because they are private companies (even RBS and Lloyds TSB which were effectively nationalised were still permitted to operate as private companies). To help persuade them the BoE pumped in £375 billion of new reserves by quantitative easing. Monetarist theory claims that lack of money is the only thing that prevents investment, so the BoE's action made sense in that context. Keynes of course knew better, claiming that confidence in the future and general optimism (animal spirits) is what drives investment, and when this is present money is demanded and supplied by banks to enhance their profits. If money isn't supplied then it prevents investment, so it is a necessary but not sufficient condition, but it isn't ever denied when confidence is high because confidence infects both borrowers and lenders. When confidence is low that too infects everyone, so borrowers aren't to be found and banks don't want to lend. The BoE effectively replenished the banks' stocks of reserves in the expectation that they would increase lending, but confidence was low so they were reluctant to lend and potential borrowers were reluctant too. The banks therefore kept the reserves for their own financial security.

A particularly embarrassing episode following the 2008 crash was having to watch the government - believing that there would be borrowers if only the banks would lend - being reduced to cajoling the very banks that had caused the disaster into lending more to small businesses and individuals in the hope of stimulating the economy.² They wouldn't of course given the low level of confidence, which quantitative easing did nothing to improve.³ Quantitative easing in effect put the monetarist theory to the test after 2008 and it failed.

This episode demonstrated very clearly the relative powers of government and banks:

- i. it was bankers that brought about the crisis by their own actions;
- ii. the government provided massive funding and guarantees to recapitalise and safeguard the banks;
- iii. the BoE engaged in a gigantic quantitative easing programme in which it

² <https://www.theguardian.com/politics/2010/nov/01/david-cameron-difficulties-banks-lend-more>

³ Nevertheless in 2010, while the productive economy was being starved of cash, banks still managed to pull together £11 billion to finance the takeover of Cadbury by Kraft, because they were sure of a good return on that deal (Meacher 2013 p183).

pumped £375 billion into the economy, all of which supported banks' balance sheets as reserves; and

- iv. bankers were permitted to keep drawing massive bonuses, even in nationalised banks.

All this begs an obvious question: if the economy needs banking to save it, and banking needs government to save it, why can't government save the economy directly and bypass banks? The answer is that it can but it won't because of its faith in private bank money creation. What could have happened is for the BoE to have handed the money to government to spend directly in the economy, preferably on long-term investment projects. That would have created spending rather than reserves for banks and windfall profits for the wealthy.⁴ It would certainly have stimulated the economy and generated renewed confidence. It would also have required far less than £375 billion because it would all have been spent in the real economy (MNW) instead of being tied up in financial investments (MEA), and as a result would have been multiplied up because of the income multiplier - see chapters 16 and 17.

The plain and very unpalatable fact is that the economy as it stands is dependent on banks, and bank bosses know and exploit this fact to the full.

Nevertheless the worst effects of the potential depression were averted by quantitative easing disrupting the usual transfers between money spent on existing assets (MEA) and money spent on new wealth (MNW) - see chapter 23. Less money flowed from MNW to MEA because fewer people were able to save, but more money flowed from MEA to MNW for two reasons. Firstly there was vastly more MEA as quantitative easing bought bonds from investors whose money was largely MEA; and secondly the greatly increased demand for bonds caused the returns on all asset investments to fall significantly so fewer good investments were available.

If the economy suffers a drop in private debt as it did when people paid down existing debts and failed to take up new ones (helped by banks' reluctance to lend in spite of quantitative easing) then the corresponding money supply drops too unless the public sector increases its debts, and that is what it did. This is shown in figure 87.1. Note that this figure does not give actual debt as an absolute percentage of GDP because it has been rebased to 100% in year 2000, whereas in 2000 in absolute terms it was about 30% of GDP. Figure 87.3 gives absolute percentages.

⁴ The BoE's buying of bonds created massive demand for them, increasing their price and thereby increasing the value of all bondholders' bonds, and as bonds become dearer so too did equities and other financial assets, the bulk of which are held by the wealthy.



Figure 87.1: Public (government) and private debt after the 2008 crash. Source: UK chart on p26 of 2015 McKinsey report at <http://www.mckinsey.com/global-themes/employment-and-growth/debt-and-not-much-deleveraging>

Although public sector debt grew much more than private sector debt shrank this did not mean that there was more money in the economy, because most public sector debt was incurred by borrowing from investors who supplied existing money rather than newly created money. However there was more spending:

- i. new money was created when banks bought government debt (see chapter 44), so to that extent there was new money and some of it became available for spending; and
- ii. government borrowed by selling bonds to investors and this transferred money that wasn't being economically used (MEA and MNU - see chapter 23) and spent it.⁵

Together those factors were able to avoid the stagnation that would have occurred without them.

Figure 87.2 shows overall GDP growth returning after 2009 indicating that increased spending was having a beneficial effect, notwithstanding all the flaws in GDP measurement - see chapter 27.

Beginning in 2010 the main thrust of government action has been to try to reduce the **budget deficit** - the annual excess of government spending over tax revenue. A deficit increases the **national debt**, which is the total amount of money owed by the UK government. The opposite is a **budget surplus**, which reduces the national debt. In this it was successful, in that debt growth slowed after 2010 as figure 87.3 shows, but as the aggregate debt was still increasing there was still spending, which helped the economy. The approach taken is austerity - cutting public expenditure - which is ironic as the attempt to cut expenditure is precisely what is not wanted when the government hope to promote economic growth. Austerity is discussed in more detail in chapter 90.

⁵ It wasn't all spent however because much of it was used to recapitalise the banks so that remained as reserves.

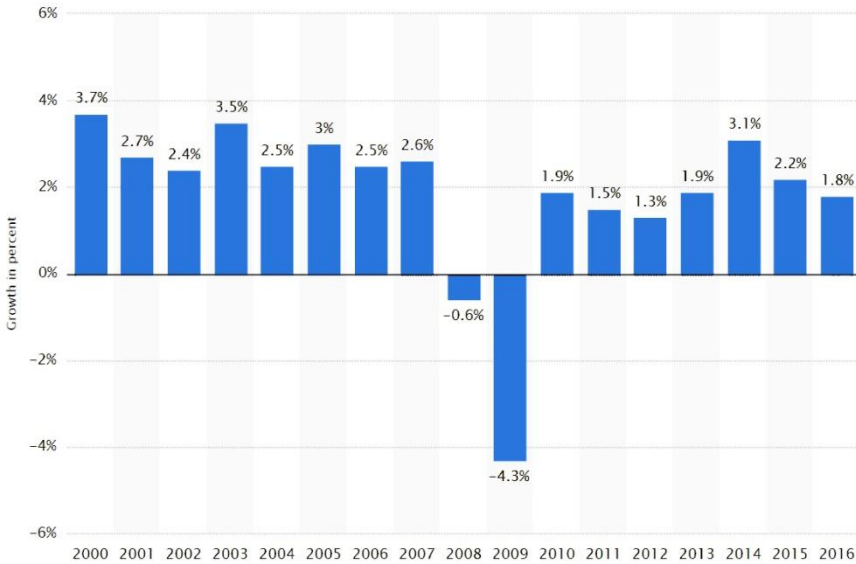


Figure 87.2: UK GDP Growth from 2000 to 2016. Source: The Statistics Portal, retrieved from <https://www.statista.com/statistics/281734/gdp-growth-in-the-uk/>



Figure 87.3: National debt figures up to 2016. Source: The UK Public Spending website by Christopher Chantrill, retrieved from http://www.ukpublicspending.co.uk/uk_national_debt_chart.html

At the time of writing (June 2017) household debt is again rising faster than incomes, prompting the BoE to issue a warning to banks to hold more capital against potential

defaults.⁶ Car loans and credit card debts are rising fastest, with all the corresponding spending driving economic growth. It indicates optimism amongst households for the future in that borrowers expect to have the means to repay loans with interest, but it increases vulnerability and instability because a slowdown - which is bound to occur sooner or later - will make debts harder to repay and increase the rate of slowdown. It's a boom phase in yet another cycle of boom and bust, where the economy serves the interests of banks rather than banks serving the interests of the economy.

⁶ <http://www.bankofengland.co.uk/publications/Pages/fsr/2017/jun.aspx>

88 Government Debt, Misleading Information, and Misplaced Ideology

Government debt (also known as public or national debt) can be presented in different ways to give different impressions.

If the government wants to frighten people into accepting that the national debt is out of control and must be paid down as a major priority it shows a chart similar to Figure 88.1, and points out with complete truth that the debt is considerably higher now than it has ever been.

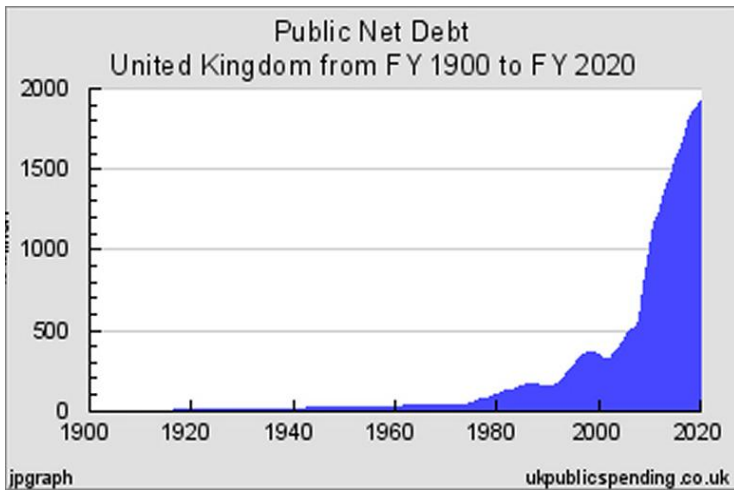


Figure 88.1: Public debt from 1900 in £billions. Source: *The UK Public Spending website* by Christopher Chantrill, chart 4.01 at http://www.ukpublicspending.co.uk/debt_history

This does look very alarming, but it fails to allow for the size of the economy. The relevant measures are ones that relate the size of the debt and the amount of interest to be paid to the size of national income. *If I tell you that I owe £100,000 then the only way that you can know whether it's significant or not is to compare it with my annual income. If I earn £10,000 per year then I'm probably in trouble, but if I earn £1,000,000 per year then it's a mere trifle.*

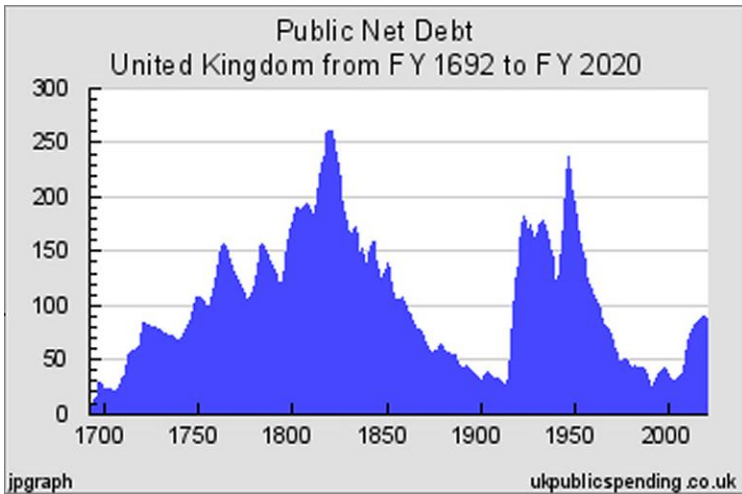


Figure 88.2: Public debt from 1692 relative to national income (GDP). Source: *The UK Public Spending website by Christopher Chantrell, chart 4.02 at http://www.ukpublicspending.co.uk/debt_history*

Figure 88.2 shows the national debt in relation to national income (GDP) since 1692, with the highest levels during and after major wars. There's a lot wrong with GDP as has been discussed (see chapter 27), but it's good enough for current purposes. This shows that we are not at all in a desperate situation. It is true that the debt is growing because of continuing deficits, but fear that the debt will soon become unsustainable is completely misplaced for two reasons. Firstly, as the chart shows, the level of debt has been very much higher in the past, especially after the Second World War, and secondly, rates of interest are low and Figure 88.3, the repayment chart, shows that we are paying less now in interest relative to GDP than at almost any time since 1900.

The data that underlies figure 88.1, available at Christopher Chantrell's site at <http://www.ukpublicspending.co.uk/downloads/ukgs.php?codes=NDEBT&units=m>, also shows that but for short periods we have almost never paid down any debt since records began, and then only by relatively small amounts. Alarmist reports that the debt is higher now than it has ever been can be seen for what they are - empty. The debt has *always* been higher than it was before - apart from a few short periods. Figure 88.3 - interest payable in terms of GDP - also shows the argument that says we must pay down the national debt to avoid burdening future generations to be completely unfounded - they are less burdened by the current debt than at almost any time since 1900.

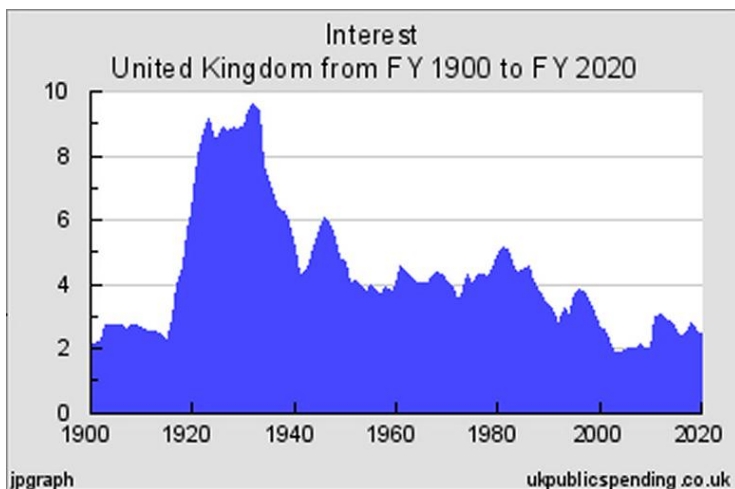


Figure 88.3: Public debt interest payments from 1900. Source: *The UK Public Spending website by Christopher Chantrill, chart 4.04 at http://www.ukpublicspending.co.uk/debt_history*

Another factor is the £375 billion quantitative easing injection into the economy by the BoE. They did it by buying bonds, the vast majority of which were government bonds. So of the £1,600 billion national debt £375 billion of it is owed to the BoE - the state owes itself £375 billion. Interest payments on this debt are returned to the treasury by the BoE, less a small amount for administration. That's almost 25% of the national debt wiped out at a stroke! It's almost laughable - the government is cutting public spending to shave a billion here or a billion there off the deficit, and along comes the BoE and slices £375 billion off the national debt without cutting any spending at all! Little is said about that however, the national debt is still counted as £1,600 billion, and the government is still cutting public spending, especially that which benefits the poorest in society.

In attempting to get the debt to GDP ratio down we can cut borrowing by cutting spending, we can increase GDP, or we can do both together. But in trying to cut spending the paradox of thrift raises its head. It has been shown that with spare capacity in the economy it is increased spending that absorbs it and generates growth - see chapter 17, so if the public are not spending sufficiently then the only alternative is for the government to spend. In other words, attempting to cut government spending when the public aren't spending is precisely the wrong thing to do. Rather than generating growth it causes decline, so GDP falls and debt to GDP rises - see chapter 90. Lack of spending by the public is indicated in figure 87.1, which shows that private debt declined significantly after 2008, reflecting the public's preference to use its money to pay off existing debts rather than spend it, and its unwillingness to take on new debts. It is picking up again now (2017) as mentioned in the last chapter. However, in spite of the government's strong preference not to spend, it is still spending, as evidenced by continuing deficits, and that spending is allowing some growth albeit at low levels. The right course of action, as Keynes showed during the Great Depression, is for heavy government spending when there is low demand coupled with high levels of

unemployment so as to get people back into work, creating and trading surplus wealth, and growing the economy - hopefully sustainably - as a result. The increase in deficits during the spending is soon overtaken by increased GDP, so that the debt to GDP ratio drops.¹

In contrast to today's level of debt that after the Second World War reached almost 250% of GDP, but it was reduced to 50% of GDP by 1970, not by paying any of it off, but by economic growth averaging 3% per year and inflation averaging 4% per year (Turner 2016 p222). The way to rid ourselves of high levels of national debt is to grow out of it, by creating and trading good wealth - see chapter 7, and to tolerate stable but higher levels of inflation than are currently regarded as desirable. The time for paying down government debt is during booms, and the only good reason for doing so is to slow down a racing economy. At any other time a drop in government debt must be matched by an increase in private debt, to avoid the money supply shrinking and the economy with it. After the war our debts increased dramatically but so too did employment - people were working and producing new wealth on a vast scale. The impact on GDP was rapid. By growing GDP the debt ratio was down to about 100% in 1960, and that was without even paying anything off the debt itself - its significance in relation to national income fell dramatically but the debt expressed in pounds didn't. This is the appropriate way to reduce the national debt, not by paying it off but by swamping it. However we should recall that the US helped Britain considerably at that time, providing a loan of \$3.75 billion in 1946 at 2% per year², and also providing \$2.8 billion as a gift under the Marshall Plan between 1948 and 1951.³ The loan added to the national debt but not the gift, which represented about 2.6% of the UK's national debt at that time so although it helped significantly it couldn't be considered decisive in the recovery

However we must take account of the effect of inflation. Although this erodes the real value of debt over time debt to GDP is still the relevant measure because it gives a snapshot of the relevance of the debt with respect to national income at any point in time. After the very high debt to GDP ratio of almost 250% after the war, by 1970 it had dropped to about 50%, but without the inflationary contribution it would have been about 164%.⁴ This shows that although inflation was the biggest factor nevertheless the debt ratio still fell significantly because of economic growth.⁵

The borrowing situation at present (February 2017) is particularly good. The interest on long-term gilts of 20 or 30 years' duration is less than 2% per year, meaning that with inflation averaging 2% or more per year over that time (not an unreasonable assumption given the BoE remit to keep it to 2%) the government can borrow money at a negative real interest rate, i.e. better than free! (It could get it free anyway if it wanted - see chapter

¹ A good commentary on the significance and history of the national debt is presented by Robert Neild of Cambridge University at <http://www.res.org.uk/view/articlesjan12Correspondence.html>

² https://en.wikipedia.org/wiki/Anglo-American_loan

³ https://en.wikipedia.org/wiki/Marshall_Plan

⁴ Using Turner's figures of 3% for growth and 4% for inflation a total drop of 200% becomes $3/7 \times 200\%$ excluding inflation, which is a drop of 86%, leaving a debt to GDP ratio of 164%.

⁵ Useful data available at <https://www.measuringworth.com/>

55). Also, unlike a variable-rate mortgage, once a government has sold a bond the interest on it is fixed for the duration. It could therefore abandon austerity, borrow heavily to fund long-term investments, create high levels of new employment with increased tax revenues and lower benefits, and watch wealth creation mushroom with so many more people working - good wealth with minimal resource depletion and environmental impact. National income would rise, and would be boosted even more by the income multiplier. In due course the investments themselves would also generate additional revenue, giving a further boost to national income. The debt that was incurred to do all this would soon be swallowed by the rising tide of prosperity. Chapter 90 section 90.1 gives an example of how this policy plays out in a simplified economy.

All this is possible merely by recognising that prosperity comes from the creation of wealth, and that comes from people working. Once people are working they have money to spend, and spending is what maintains and grows the economy. All that is needed to spark the virtuous circle into life is money, to lubricate the machine that generates the wealth that all can enjoy. The government, on behalf of the society they represent, can and should provide the necessary lubrication, but instead they are doing all they can to remove lubrication. It's a tragic situation fuelled by a deeply flawed neoliberal ideology.

In 2010 a paper was published by Reinhart and Rogoff⁶ purporting to show that national debt to GDP levels in excess of 90% seriously damage growth in both advanced and emerging economies. This paper gained widespread publicity and was used to justify harsh austerity policies in many countries following the 2008 crash. However in 2013 several errors in their analysis were discovered that completely discredited it, in particular it was shown that the data underlying their analysis did not support the conclusions that were drawn. I mention this because of the paper's great significance in influencing government policy, and because of its fame and widespread citation. Paul Krugman provides a very thorough demolition in an article titled 'How the Case for Austerity Has Crumbled'.⁷

Nevertheless there are limits to government debt, but they can't be expressed simply as a limiting value of debt to GDP. The critical factor is willingness on the part of investors to buy government debt, and willingness depends on confidence that the debt will be honoured. The less willing the investors the higher the rate of interest that must be offered to tempt them to buy. But the higher the interest the higher the proportion of national income that must be devoted to paying it, which makes it even less likely that the debt will be honoured. When a country reaches this stage more debt is needed in order to fund the repayments on earlier debt, and the end - default - becomes ever more clearly unavoidable. It's like a sinking ship. As water is taken on board it makes the ship heavier so it sinks lower in the water, and as it does so water leaks in at an ever faster rate. The point of no return for the ship comes when the inflow of water overwhelms the capacity of the bilge pumps to pump it out. The point of no return for an economy comes when earlier debt interest payments can only be made by taking on new debts. This situation is dire indeed, but there is an early warning device, and it's the interest rate that must be

⁶ <http://www.nber.org/papers/w15639.pdf>

⁷ <http://www.nybooks.com/articles/2013/06/06/how-case-austerity-has-crumbled/>

offered to investors over and above the risk free interest rate⁸ that prevails in the world economy. When this begins to rise as more debt is taken on then it's a sign that investors are starting to become nervous - the ship is sitting lower in the water.

The things that determine investor confidence include expectations of future inflation; government stability; track record of earlier debt repayment; reason for the debt (wealth creating investment far better than consumption); balance of payments situation (heavy importers and light exporters penalised); integrity of state officials (corrupt officials can't be trusted); size and rate of increase/decrease of annual deficits; average tax rates (the lower the more leeway to increase revenue for repayment); and so on. It's not a simple matter and investors weigh all these things and more in deciding whether and at what interest rate they are prepared to invest. The UK is clearly in a strong position on the measures that count most heavily - for example it has never defaulted on a debt in 300 years. Certainly investors are not showing any signs of nervousness given the low yield they are prepared to accept even for very long-term bonds.⁹

All the above discussion assumes, as does the prevailing view, that apart from taxation governments can only raise money by borrowing. It does so in order to show that even with that view the imperative of paying down debt is misplaced. The truth is that governments don't have to borrow; the state can create its own money and government debt can be anything or nothing at the government's discretion. This is discussed further in the next chapter and in chapters 55 and 100.

⁸ i.e. the rate offered by country that is regarded as completely secure.

⁹ Bloomberg is currently quoting 1.77% yield on 30 year government bonds (February 2017).

89 Why Do Governments Go into Debt?

Why do governments borrow money instead of raising adequate taxes? The answer is political - taxation is unpopular and risks losing votes, whereas borrowing only hurts future taxpayers so current voters don't feel it. In fact in normal times borrowing is more expensive than taxation because interest on the debt is payable as well as the original amount borrowed.

Why do governments borrow money instead of creating it for themselves? The answer is again political. Governments through the ages have created (i.e. printed) their own money, and like a drug printing money can soon become addictive. At first the new money is completely free - it has spending power but costs nothing except some paper and ink (modern money doesn't even cost that). But as more and more is printed, once all the immediately available spare capacity is used up, the amount of money in the economy outstrips the value of transactions that it is needed for so its value diminishes as buyers bid prices up. Inflation fuelled by government money creation can run out of control as it did in Germany in 1923 and Zimbabwe in 2008. As a result of these incidents a government that creates its own money is regarded internationally with suspicion. So ingrained is this fear of government-created money that only a very brave or a very foolish economist would dare suggest it. Nevertheless there are powerful arguments in favour of government-created money. There is very little reason, now that all potential dangers are so well understood, to fear that the government of a developed country cannot create money in a responsible manner, Positive Money have set out the basis for this very clearly and dealt with all arguments in detail (Jackson and Dyson 2012 Part 2). The proposals are summarised herein in chapter 55. In contrast the prevailing view accepts that banks can and indeed should create money, that they should charge interest on it and use it for their own benefit, and that governments should not.

For the above reasons governments much prefer to raise money by issuing bonds, which come with a declared interest rate and a redemption date, and are sold on the open market, firstly (usually) by auction to institutional investors such as insurance companies, pension funds, unit trust managers, banks and so on, but thereafter they are available on the secondary market for anyone to buy and sell.

The reason for government borrowing is that it is claimed to take existing money from investors and use it to spend back into the economy. In that way the money supply isn't affected and inflation won't arise as it is feared it would do if it created money itself and spent it - though we know that wouldn't happen until all spare capacity had been used up. As has already been shown (in chapter 44) this isn't completely true because bonds bought by banks - and banks buy significant quantities of bonds - are bought by creating new bank money. This is a very neat and lucrative trick that banks are allowed to indulge in.

The contrast between governments and banks is quite stark - governments won't create money because of inflation fears, yet banks are permitted to create money

without regard to anything except their own profit.

When a bond reaches its maturity date it is repaid, though in order to repay it a new bond is usually issued to take its place. This is known as 'rolling over the debt', and is what ordinary people often do when they can't or don't wish to repay debt principal - provided that the current lender agrees or some other lender is willing to take over the debt.

The difference between the amount borrowed and paid back by government in a given period is a budget deficit if new borrowing exceeds repayment and a budget surplus if repayment exceeds new borrowing. Also because government spending equals tax revenue plus new borrowing minus repayment a budget deficit arises if spending exceeds tax revenue, and a budget surplus if tax revenue exceeds spending. The total borrowing that is outstanding at any time is the national debt, which grows when there is a budget deficit and shrinks when there is a budget surplus.

90 Austerity - A Cure for Excessive Government Debt?

It is easy to think that too much debt requires the cutting of expenditure, because that is exactly what you or I should do if we found ourselves in those circumstances. But my income is completely independent of my expenditure, so cutting my expenditure without affecting my income significantly improves my situation. For the government, income and expenditure are not independent - expenditure directly affects national income.

Imagine a population that only produces potatoes, eating most and saving enough to plant the following year. The government levies potato taxes and also borrows potatoes, to feed those who don't grow their own and to supply growers who don't have enough to plant. One day the government finds itself heavily in potato debt, what should it do? It might try austerity - it uses its potato supply to pay off the debt. As a result those who were repaid in potatoes gorge themselves, those who would have been fed by the government's potato supply are reduced to begging for potatoes, and growers who relied on government stocks don't have enough to plant. The following year fewer potatoes are produced because fewer were planted, so even more people go hungry and even fewer are again available to plant. It gets worse every year until those who don't grow potatoes have starved to death leaving the few remaining growers with enough to eat and enough to plant for the following year - stability is restored with no government debt and most of the population dead. On the other hand it might borrow even more potatoes, feeding those who need feeding as in earlier years but supplying a lot more for planting. The following year there are many more potatoes so the tax yield is higher and that is used again to increase production the following year without any more borrowing but without paying off any of the debt, and so on. After several years the country is awash with potatoes, everyone is well fed, the debt is still as it was but as a proportion of potatoes produced it is tiny and could be paid off easily if that was the government's wish. *Which do you think is the best approach?*

The policy of austerity, which became very popular in the UK after the 2008 crash, is applied by governments in response to the perceived problem of high government deficits that naturally occur in recessions and depressions as tax revenues shrink and public benefits expand. At these times wealth creation has faltered because people are fearful of future uncertainties. Money is taken out of circulation by both the public and businesses as spending is reduced, savings increased, loans repaid and new borrowing cut back. Less spending means less demand for goods and services, so manufacturers and suppliers have unsold stock and unwanted services, and in response lay workers off to cut production to match the reduced level of demand. Tax revenues drop in response to reduced company profits and fewer workers paying tax, and government spending increases to pay more unemployment and other benefits as people become more heavily dependent on welfare.

With reduced income and increased expenditure the government, advised by

neoliberals and strongly favouring their policies, acts as though it was an individual in the economy, where money is earned and spent, and spending more than is earned is a recipe for disaster. It sees itself as having three main options:

- i. borrowing more to fund the increased spending - which makes the deficit bigger and enlarges the national debt;
- ii. raising more tax to fund the increased spending - which creates an additional burden on already hard-pressed households and workers; or
- iii. austerity - reducing spending wherever possible to compensate for the other increases.

Reduced spending manifests particularly in lower payments to welfare claimants and to local authorities, both of which hit the worse off more than the better off because they are the people most dependent on welfare and local authority support. Budgets for government spending departments are also cut back leading to employee layoffs and delayed or cancelled government-sponsored investment projects. Cancelled projects that were designed to provide environmental protection are particularly damaging for future prospects.

The choice is often a mixture of all three, but mostly (i) compensated for by (iii). (i) because increased borrowing is generally more palatable than increased taxation although it is still taxpayers (albeit future taxpayers) that pay the bill and the bill is normally higher because interest payments normally exceed inflation; and (iii) because it is relatively easy for governments to apply as it is supported by prevailing neoliberal economic theory and it pushes the problem onto others - in spite of politicians' hand-wringing declarations of having to make tough decisions. *Those decisions are tough for the people who depend on benefits and government and local authority jobs - those on the receiving end of the decisions - not for the government that makes them.*

Paul Mason's anger is clear in his words:

Seven years on, the system has been stabilised. By running government debts close to 100 per cent of GDP, and by printing money worth around a sixth of the world's output, America, Britain, Europe and Japan injected a shot of adrenaline to counteract the seizure. They saved the banks by burying their bad debt; some of it was written off, some assumed as sovereign debt, some buried inside entities made safe simply by central banks staking their credibility on them.

Then through austerity programmes, they transferred the pain away from people who'd invested money stupidly, punishing instead welfare recipients, public sector workers, pensioners and, above all, future generations. In the worst-hit countries, the pension system has been destroyed, the retirement age is being hiked so that those currently leaving university will retire at seventy, and education is being privatised so that graduates will face a lifetime of high debt. Services are being dismantled and infrastructure projects put on hold. (Mason 2016 p4)

Austerity is sold by the government to the public as a necessary period of having to do without, brought on by an earlier period when we all 'lived beyond our means'. In spite of most people not having noticed that they were living beyond their means - because they weren't - the logic is nevertheless accepted because that is exactly what individuals and families have to do if they are faced with these same circumstances. The

government applies it by reducing expenditure as far as possible to minimise the additional borrowing, but there is a major difference in what different people have to do without. The people least responsible for the crash - those most dependent on welfare and government sponsored work - have to do without the necessities of life, whereas those who were responsible - bankers and shadow bankers - have to do without nothing except perhaps a few investments. It is the poor who are being made to pay for their recklessness.

What austerity represents is an attempt to apply thrift to the economy as a whole, and as Keynes showed in the 1930s, in spite of this policy seeming to make sense it doesn't work. Simply put everyone in an economy supports everyone else, spending is necessary to pay the wages of producers, and wages are used to provide the means to spend. Money circulates continuously between spenders and earners, and earners are able to create wealth which is then bought and consumed by spenders, and so it goes on like a smoothly running engine. This cycle has been interrupted by the circumstances that brought on the recession in the first place; in effect lubrication has been lost, increasing internal friction and causing the engine to run more slowly. When the government applies austerity then its effect is to remove even more lubrication, causing the engine to run more slowly than ever, which is precisely what is NOT wanted. What is wanted, as Keynes amply demonstrated, is for the government to put *more* money into circulation to undo the damage done by its being taken out by the general public. The need is for the government to spend to make up for the lack of spending by the public, in effect to replace the lost lubrication so that the engine can run at its proper speed again. This is the 'paradox of thrift', where thrift is a virtue for an individual or family and enables them to bring earning and spending back into alignment, but it is not a virtue for an economy as a whole as explained above and in chapters 15 and 16.

In a radio talk in 1933 Keynes argued:

...you will never balance the Budget through measures which reduce the national income. The Chancellor would simply be chasing his own tail! The only chance of balancing the Budget in the long run is to bring things back to normal, and so avoid the enormous charges arising out of unemployment.¹

Keynesian thinking was applied after the Second World War when it led to an unprecedented level of growth across the world. This growth allowed government debts to be reduced significantly as tax revenues increased because of the increased level of economic activity. Tragically Keynes fell out of favour in the 1970s because of rampant inflation which was inappropriately blamed on Keynesian policies. Keynesian policy and its demise are discussed in more detail in chapters 81 and 82.

Neoliberalism holds that government spending can't bring more money into circulation because whether it is raised by borrowing or by taxation it is just moving existing money from one place to another, so increased government spending means reduced spending by whoever had the money before - known as **crowding out**. However those who had the money before *weren't spending it*, that was what caused the recession in the first place, so government taking money that wasn't being spent and spending it *does* put money back into circulation. As explained above much of the money raised by

¹ <http://touchstoneblog.org.uk/2012/05/deficit-reduction-vs-growth-a-false-choice/>

selling bonds transfers unproductive money (MEA and MNU - see chapter 23) to productive money (MNW), which brings unproductive money back into circulation, and when banks buy bonds new money is created, both effects benefiting the economy.

An objection to additional government spending is that it makes the deficit even worse, in that even more money has to be borrowed at a time when government income is shrinking, which seems exactly the wrong thing to do. Nevertheless (ignoring for now that governments don't even need to be in this situation at all - both deficits and the national debt need not exist - see chapter 100 section 100.5) deficits should be increased to bring the economy back to full capacity as soon as possible, especially when interest rates are low which makes the cost of borrowing low. What happens is that the increased government spending acts as a 'pump primer', the injected money being used to increase budgets for government spending departments, initiate national investment projects such as flood defences, housebuilding, power stations, environmental sustainability, transport and so on. The injected money passes round the loop creating more and more wealth at each pass, and as more people are employed and company profits increase taxes rise, and the additional taxes provide the income for more but diminishing government support if it is needed, the whole forming a virtuous self-reinforcing circle as indicated in figure 90.1.

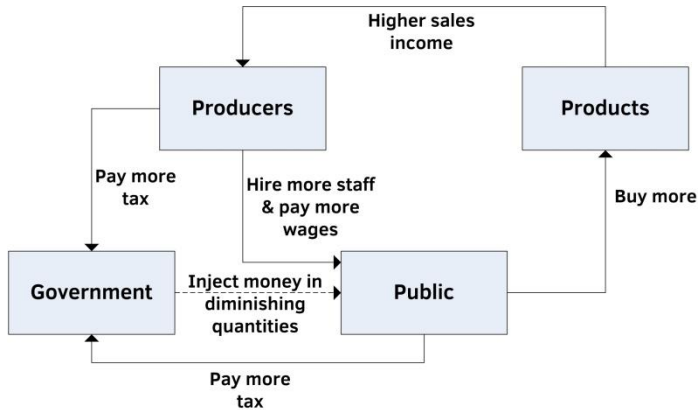


Figure 90.1: Government pump-priming sets in motion a virtuous circle of rising prosperity.

Austerity can only be successful as a policy if the economy as a whole has the characteristics of an individual or family. For example if much of an economy's income is derived from exports, then that income is not reduced when domestic expenditure is cut back. Nevertheless even this form of austerity won't be successful at times of world recession when all countries try to apply austerity at the same time, because exports will be harder to sell in a world market that is cutting back on imports. All austerity achieves in these circumstances is to damage wealth creation in all countries that contribute to the world economy.

In spite of everything that has been said an economy can still grow even with austerity if society as a whole spends more on wealth creation than the government spending reductions, but that growth will be very much slower than it would be without austerity. In these circumstances and with the deepest irony the government that imposed austerity

claims that it has worked!

In a recession or depression what is needed is to create more wealth, and as has been seen wealth can only be created provided that it has somewhere to go - see chapter 16. Wealth must be traded, which relies on people spending in order to consume it. Therefore governments should make sure that people who spend their money have more to spend, and should spend more themselves, preferably on long-term national investment projects that benefit the economy in the future. Austerity does the opposite, cutting back on government spending which takes money away from those who would spend it, and limiting investment for the future, both of which severely limit wealth creation.

Recall what was said in chapter 3 that the basis of civilisation consists simply of people working in co-operation to do and make things for others. Austerity makes them stop.

Joseph Stiglitz is very clear about it:

Another way to consider the merits of austerity is to look at history. History shows that austerity has almost never worked, and theory explains why we shouldn't be surprised by this. Recessions are caused by *lack of demand*-total demand is less than what the economy is capable of producing. When the government cuts back on spending, demand is lowered even more, and unemployment increases. (Stiglitz 2012 Chapter 8)

In situations where the problem is not enough wealth creation, austerity cuts back even further the wealth creation that there is. Austerity kills the spending goose that lays the wealth creating golden eggs.

To see this mathematically recall the expenditure equation from chapter 26:

$$Y = C + I + G + (X - M)$$

This says that GDP (denoted by Y) = private consumption spending + private investment spending + government spending (excluding transfer payments) + excess of exports over imports. All governments want Y to grow or at least stay the same, but austerity means that G has been reduced. Therefore to keep Y at least constant means that C + I + (X - M) must increase by at least the same amount. Now C + I = private spending, and in a recession that has dropped in terms of both consumption (people are consuming less) and investment (firms are investing less because they fear that the output won't be sold). It was this drop in spending that caused the recession in the first place. That only leaves (X - M), the excess of exports over imports must increase enough to compensate for both the drop in G and the drop in C + I. That's not going to happen because it requires private investment in new export productive capacity, and as we know private investment has dropped. Therefore:

The only possible effect of austerity at a time of recession is to reduce production, thereby increasing the pain felt by the population - suffered most by those with least.

To expand briefly on what was said earlier; austerity is another example of confusing

prudence for an individual with prudence for the economy. How often have we heard government proclaim that we must live within our means or there will be trouble? This means that the economy as a whole must act as though it was a family on a fixed income, where spending more than that income does indeed lead to trouble. The income of an economy - the national income - is not fixed in the way a family's income is, it can be expanded by taking up the spare capacity that exists within the economy, and that is done by increased spending on new production. Reducing spending of course does the opposite.

Finally, as mentioned earlier and examined in chapters 55 and 100, if the government required the central bank to take full control of the money supply as indeed it could, then there would be much smaller recessions and quite possibly none at all, and the question of excessive government debt wouldn't even arise.

For a very full discussion and debunking of the austerity myth, and the damage that it has caused around the world, I recommend Mark Blyth's book - 'Austerity: The History of a Dangerous Idea' (Blyth 2013). Blyth's book exposes all the flaws in the theory.

For a harrowing glimpse of what austerity feels like to those who suffer its worst effects I recommend Mary O'Hara's book 'Austerity Bites' (O'Hara, Mary 2014). In it she tells the stories of real people who suffer dreadfully on low incomes that are being savagely cut even more. They are forced to struggle for all the necessities of life and their children don't understand why they have to go without toys and games that they see other children enjoying. As a result they are easy prey for the payday lenders and loan sharks who profit from hardship and misery.

However having said all that we should be mindful of the effects of international trade and free capital movement in limiting the government's ability to control the economy as discussed in chapters 68, 70 and 74. Increased government spending causes more to be imported and less to be exported, so some of the spending leaks abroad without being recycled in stimulating the domestic economy. A knock-on effect of this is that the currency depreciates which attracts foreign investment, setting up problems for the future when investment returns are repatriated to the foreign country. To counter these effects some of the spending should be targeted at stimulating export industries in order to maintain a balance between imports and exports in the face of increased pressure to import. This will ensure that the effects on currency value and net capital movement will be minimal. Sadly the current policy is largely to ignore trade imbalance as was discussed in chapter 68.

90.1 An experiment to examine the effects of austerity

Let's see how austerity and its opposite play out in a simplified economy. Although simplified this economy is still quite complex because it has to have enough interacting elements to make its behaviour realistic enough to provide a valid test.

In our economy the currency is the 'Token', abbreviated to 'T', where one Token is worth one unit of wealth - abbreviated to 'W'. Everyone takes part in making decisions of a social nature, so the government in this economy is the population. There are 37 people

in all, 20 working full time, each creating 100 units of wealth each year, 10 people working half time but wishing they worked full time, each creating 50 units of wealth each year, 5 people unemployed wishing they had a job, and 2 people who create wealth themselves, employ all the other workers, and are also investors who lend money to society. In this economy all employment is provided privately though that which is for social needs is funded publicly from taxation and borrowing. We don't have banks creating and destroying money, and no-one indulges in wealth extraction. These activities just make things more complex without changing the basic dynamics. Additionally it is a closed economy with no external trading, whereas the real economy does trade externally and that can change the dynamics as was discussed above, though measures can be applied to limit its effects.

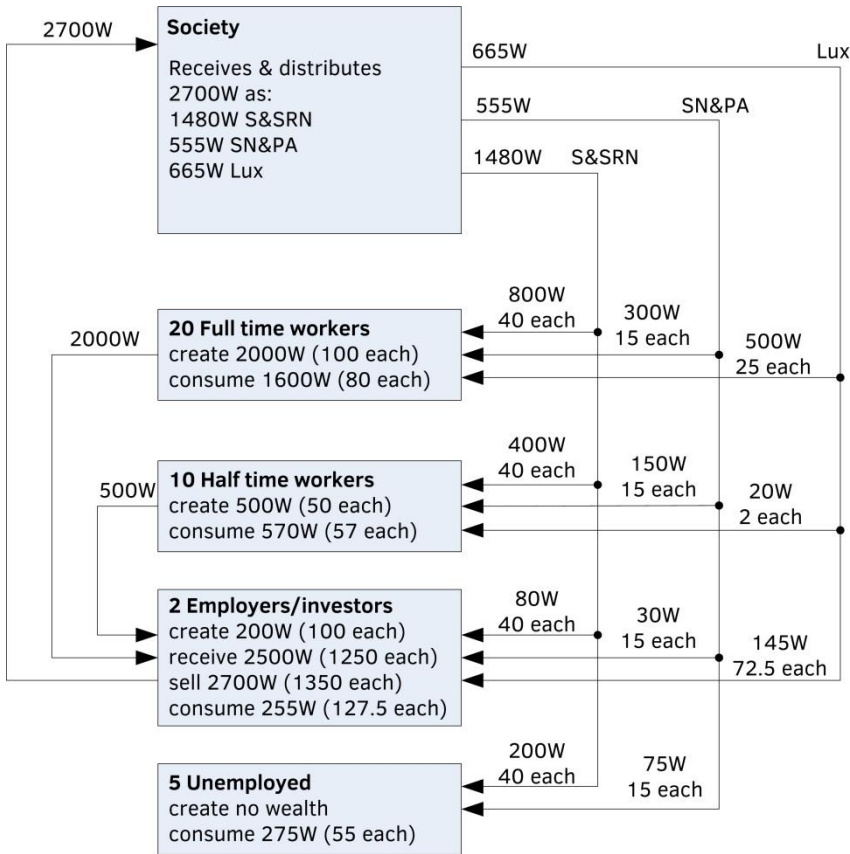


Figure 90.2: Wealth diagram for this simplified economy - 2700 wealth units (W) produced and consumed every year.

The economy creates 2,700W (wealth units) each year, in the form of survival and self-respect needs (abbreviated to S&SRN - 1480W/yr.), social needs and public amenities (abbreviated to SN&PA - 555W/yr.), and luxuries (everything in excess of S&SRN and SN&PA, abbreviated to Lux - 665W/yr.). The wealth flows are indicated in figure 90.2.

The corresponding money flow diagram is similar in many respects but here the effects of taxation, borrowing, interest and benefits can be shown - see figure 90.3.

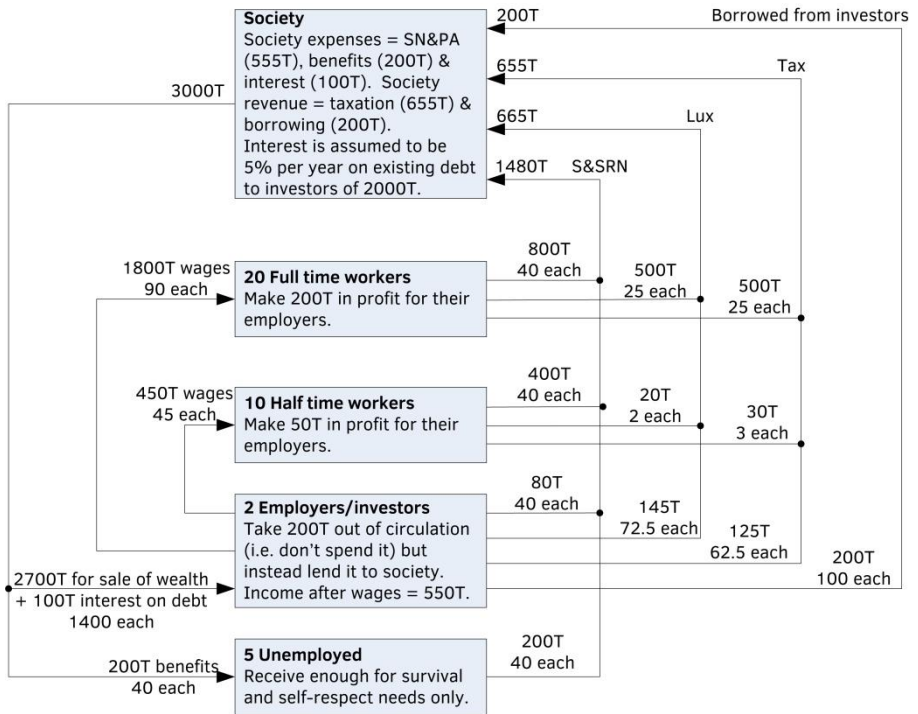


Figure 90.3: Simplified economy money flow diagram, money consists of tokens (T), where one token buys one wealth unit (W).

Note here that the employers receive 250T in unearned income (profit from the sale of wealth) in addition to their earned income of 200T. Of this they don't spend 200T on wealth for themselves, instead they lend it to society. Society borrows 200T and pays 100T in interest, which is assumed to consist of 5%/yr. on a total debt of 2000T. Note also that the 200T in benefits and 100T in interest are transfer payments (see chapter 26), nothing is received back in return for these payments. On the above diagram they are shown as being recycled through society for clarity, but in effect they are given by taxpayers to the unemployed and investors.

In this economy people find that they have to keep borrowing every year, which starts to worry everyone apart from the investors. They decide that they are living beyond their means and must cut back on spending in order to stop the debt escalating, so they resolve not to borrow anything in future years. To do so they cut back on benefits by 50T, and cut back on SN&PA by cutting the pay of public sector workers and money spent on social infrastructure, saving 150T, making savings of 200T in all so there is no need to borrow - austerity has solved the problem - or so they think!

However, since the unemployed spent all their money on wealth, and since 150T less is spent on SN&PA, 200T worth of wealth is not produced that was produced, so the incomes of those who produced it drops. A way to resolve the situation is shown in

figure 90.4, which shows the steady state after the initial perturbations have settled down.

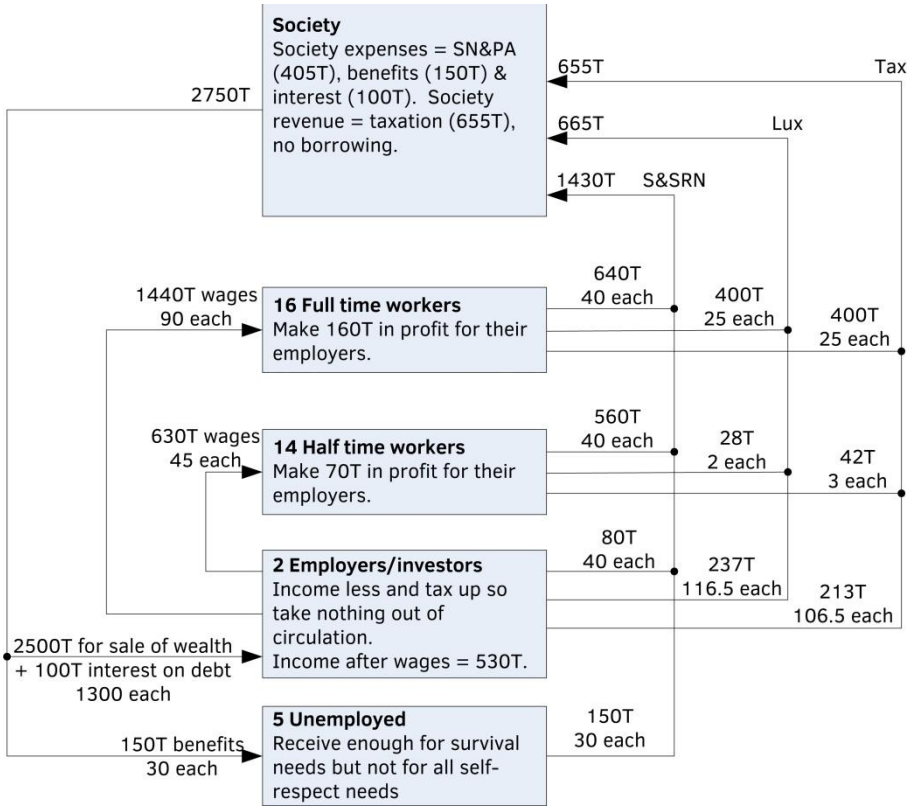


Figure 90.4: Money flow diagram with austerity applied to cut down borrowing.

The corresponding (simplified) wealth diagram is shown in figure 90.5.

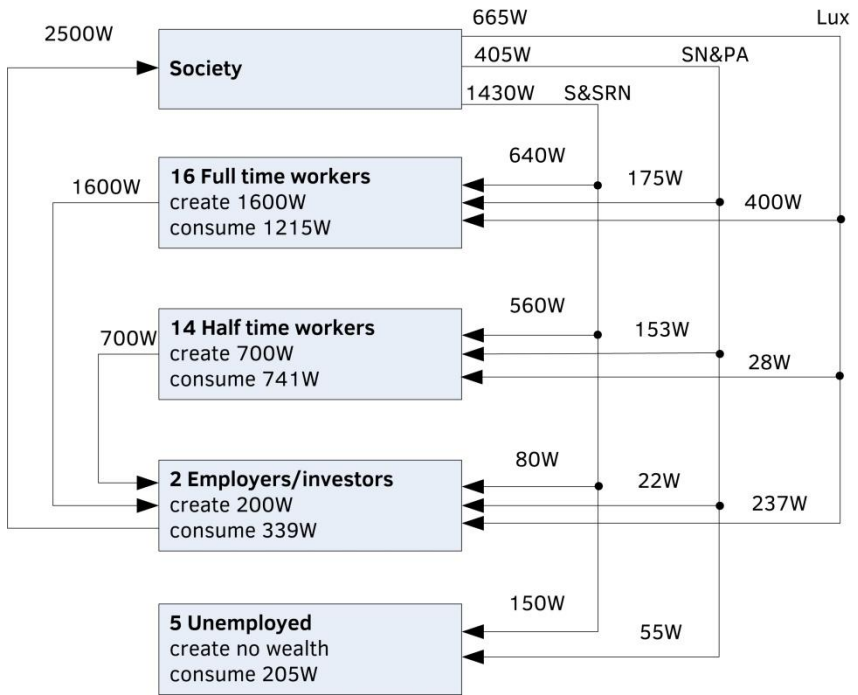


Figure 90.5: Wealth diagram with austerity and no borrowing.

Here four workers who were fully employed have been reduced to half time working since only 2500 wealth units are now needed instead of 2700. Their incomes drop correspondingly so they are considerably worse off. Since incomes have dropped but the same tax is needed it is taken from those deemed best able to bear it, the employers/investors, so their tax bill goes up by 88T. Also their profit on the sale of wealth has dropped by 20T so they are worse off too. They don't bother to save anything but spend more on luxuries to compensate. The unemployed are also worse off because now they can't even meet all their self-respect needs. Who wins? No-one. Who loses? Eleven of the thirty-seven people.

Austerity works by making the population worse off, both here and in a real economy.

Now let's go back to the population worrying about the increasing debt, but instead of reducing spending they think a bit more deeply about the problem. Firstly they recognise that all are better off the more wealth is created, so they resolve to create as much wealth as possible - everyone should work full time. Secondly they realise that all wealth created must be paid for, so there must be as much spending as there is wealth creation, so they resolve to borrow more to fund the greater wealth creation. Thirdly they see that whenever anyone has money that isn't spent (i.e. saved), then that money is taken out of circulation, and that same amount of money must be found from somewhere or the wealth that it would have bought won't be bought, and wealth creation will drop and people will lose employment. Therefore any money saved will be borrowed and spent so as to keep it in circulation. The initial increased borrowing fuels

greater wealth creation and employment, but as it takes effect taxes go up and benefits go down, so the excess borrowing soon declines until it only needs to compensate for money taken out of circulation so as to maintain full employment. Figure 90.6 shows the situation in a steady state after the initial perturbations have settled down. The corresponding (simplified) wealth diagram is shown in figure 90.7.

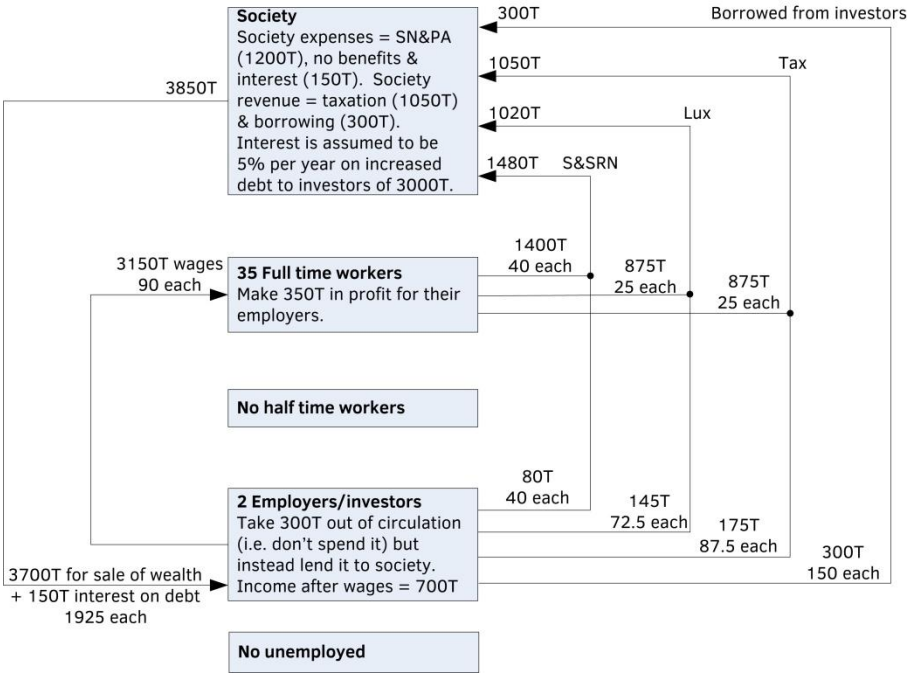


Figure 90.6: Money flow diagram with full employment and enough money created by society to compensate for money taken out of circulation.

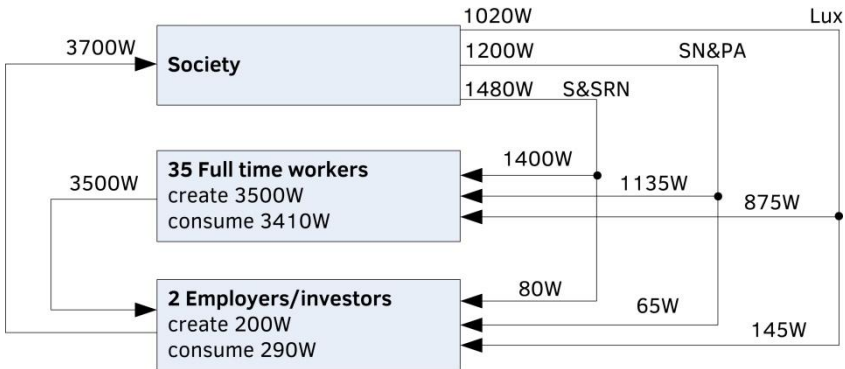


Figure 90.7: Wealth diagram with full employment

Here everyone is working full time so all the half time workers and unemployed are considerably better off; 645W more SN&PA is created so everyone benefits from that; the employers/investors have 50T more in income but pay 50T more in tax so they are no

better and no worse off. Who loses? No-one. Who wins? Fifteen of the thirty-seven people have more income and everyone benefits from more social spending. In this regime 1000W more wealth is created than in the original regime, and 1200W more than with austerity.

The moral is:

It's overall wealth creation that makes people better off, money is merely the facilitator that brings it about. Governments should aim to maximise good wealth creation.

It may seem odd that in this regime society only uses its additional money to create SN&PA, but luxuries have increased too. Why is that? It's because with everyone earning more there is more demand for luxuries, so the employers/investors recognise that it's profitable to employ people to produce them.

Spending works by making the population better off, both here and in a real economy, provided that there is spare capacity available.

However this isn't yet the end of the story. In the potato economy when the economy was awash with potatoes the debt could be paid off easily. Here, although the economy is awash with wealth, the debt isn't a wealth debt it's a money debt, so to pay it off requires more money. What we didn't consider was where the economy's money came from. When more was needed we merely assumed that the investors had a stock of unused money available for borrowing, but where did it come from? *If you wondered about that then award yourself a gold star!* If it was saved from a fixed stock of money it would have wrecked the economy just as the simple economy was wrecked in chapter 13 when money was saved. Money always has to be created. Here, without banks, the economy itself must have created the money, so it could have created enough extra money to allow for full production – spending it into the economy instead of borrowing it. In a real economy where banks create money the government can borrow more and spend more in order to increase wealth creation, then when full production is achieved use the additional taxes to pay off the debt if that is what is wanted. In real terms however the size of the debt diminishes as national income increases without having to pay any of it off, as happened after the Second World War - discussed in chapter 88. The downside of borrowing bank created money of course is that taxpayers have to pay interest on it as an undeserved subsidy to banks (see chapter 48), so the best approach is to have society create the required money. That way there's no interest to pay, no growing debt, and no inflation because the created money merely keeps up with created wealth. This of course is Positive Money's proposed way forward that was summarised in chapter 55.²

² <http://positivemoney.org/our-proposals/>

91 Privatisation of Public Industries and Services

The objective of private enterprise is to make a private profit, whereas the objective of public service is to serve the public. These two objectives could hardly be more different, yet neoliberal philosophy holds that private enterprise is better than public service in terms of overall social benefit, in spite of all the many additional costs that it incurs - private profits, regulation, equity premium losses (explained later), advertising, marketing, legal and other administrative fees for arranging and underwriting the transfer, negative externalities, and exorbitant management salaries, especially in large companies.¹ That's a very tall order indeed, but so deeply embedded is belief in it that it has been strongly supported by all UK governments since Margaret Thatcher came to power in 1979.²

The basis of this philosophy is belief in the universal benevolence of the 'invisible hand' that Paul Samuelson thought Adam Smith had enthused about in 1776 even though he hadn't - see chapter 80. In short it is that the pursuit of self-interest achieves more for society than does public spirit, *and makes a profit into the bargain*. If that were true then it would be a sad reflection on human nature but we would be foolish to ignore it. Happily for human nature but sadly for society the facts don't bear it out. Often when public services are privatised jobs are cut, labour contracts are redrafted to reduce wages and employee security, consumer prices rise and long-term investment is abandoned as the pursuit of short-term profits rule the day.

Also if a privatised essential public service supplier gets into trouble or simply decides to walk away then the government has to step in because government must guarantee essential services and cannot delegate that responsibility - private companies take the profits but the state keeps the risk.

Nevertheless it must be acknowledged that when the Thatcher Government came to power many public enterprises and services were in a bad state, as indeed were many private companies. Complacency and poor service had become commonplace in public industries and services, unions had too much power and abused it; strikes were frequent and prolonged, as was intimidation and even violence against non-striking and non-union workers. The triggers for major unrest were firstly the Nixon shock in 1971 and then the oil price spike in 1973. In 1974 there was rationing of electricity because of the miners' strike when much of industry had to shut down for three days a week and households were reduced to using candles for lighting in the evenings.³ In 1976 came a financial crisis involving a devaluation of sterling and a humiliating request for a loan

¹ Andrew Simms of the New Economics Foundation examined this belief in a 2013 paper and showed how false it was. See

https://b3cdn.net/nefoundation/78cfe0444c38b5b9do_3hm6iyth8.pdf

² https://en.wikipedia.org/wiki/List_of_privatizations

³ https://en.wikipedia.org/wiki/Three-Day_Week

from the IMF.⁴ In 1978 and 1979 came the public sector strikes of the 'winter of discontent', when piles of rotting rubbish piled up in the streets, corpses had to be stored because gravediggers were on strike, and many hospitals admitted emergency patients only because of a strike of ancillary workers. It was a time when trades unions were effectively at war with the Labour Government.⁵

It was a thoroughly miserable time that I remember well. People were heartily sick of it.

This episode shows that abuse of power is certainly not confined to one segment of society. It is a human characteristic and must be recognised as such. Wherever there is power there is a strong inclination to abuse it, which must be held in check by well-defined responsibilities, transparency and accountability.⁶

Something had to be done and the Thatcher Government did it. Amongst many other things labour reforms were enacted to limit the power of unions to abuse their position and existing nationalisation plans were scrapped and privatisation started. These things were widely supported at the time, and with good reason. A strong government with clear direction and determination to set the country on a unified course was welcomed after years of bitter, costly and debilitating disputes.

As a response to the prevailing circumstances it seemed sensible and refreshing. At first it appeared to be driven by pragmatism and common sense, but somewhere along the way ideology took over. Nationalised industries were bad not because some of their managements were complacent or because some provided poor services, but *because they were nationalised*. State control was bad not because in some cases it interfered with the smooth running of industry or because sometimes it added layers of unnecessary bureaucracy, but *because state control was bad*. The watchword was 'freedom', where the state was seen as its opposite. The US under Ronald Reagan was forging ahead on the same path at the same time.

In the 1970s the pendulum had indeed swung too far towards monopolistic control and union power, but in correcting the problems ideologically rather than pragmatically it was allowed to swing much further in the opposite direction, to the point where neoliberals - 'evangelists for freedom' - were empowered and enriched enough to go about systematically capturing and dominating not just the UK government but governments and international institutions around the world. They aren't about to let the pendulum swing back without a long and bitter fight, and to help prevent it they have promoted and championed international financial markets and multinational corporations whose power now exceeds that of many governments.

The original motivation for privatisation was to turn monopolistic, uncompetitive state enterprises over to private ownership. It was to create an army of small shareholders with a direct and personal stake in British industry so as to take control from unaccountable bureaucrats and expose it to the competition of the marketplace. Did it succeed? Before Margaret Thatcher came to power almost 40% by value of shares in

⁴ <http://www.nationalarchives.gov.uk/cabinetpapers/themes/sterling-devalued-imf-loan.htm>

⁵ https://en.wikipedia.org/wiki/Winter_of_Discontent

⁶ <http://www.transparency-initiative.org/about/definitions>

British companies was owned by individuals. By 1981 it was less than 30%, and by 2014 it was less than 12%.⁷ Former state-owned enterprises are now predominantly owned by a few very big companies, and with great irony many privatised industries are now owned by foreign state-owned bodies.⁸ Thatcher's twin dreams of massively expanding stakeholder democracy together with destruction of state monopolies ended with shrinking of stakeholder democracy and expansion of private monopolies.

To quote Michael Meacher:

They [privatised industries] creatively manufacture profit from existing provision rather than produce new goods and services. The record of outsourcing and privatisation is that it regularly reduces service quality while not delivering on promised savings. Even where it does make some savings, it is almost always at the expense of the pay and conditions of low-paid workers, despite the supposed TUPE (Transfer of Undertakings Protection of Employment) safeguards, which are elaborately circumvented. At the same time the public service ethos is undermined, the morale and professionalism of key employees eroded, administration and transaction costs inflated and public accountability lost. (Meacher 2013 p191)

The emphasis, as in all large publicly quoted companies in the UK and US, is on short-term gains, even at the expense of long-term viability - see chapter 61. Therefore long-term investment all but disappears, and still has to be provided or funded by the state.

9.1.1 If private is always better than public then what is the magic ingredient that makes it so?

Perhaps it's the employees? It seems very unlikely to be them because their concerns are pay and conditions, working atmosphere, fair treatment, personal pride in the job, professionalism and so on, rather than whether their employer is a public or private company. In fact to employees it would seem more likely for them to prefer to work for the public good rather than to increase the wealth of private owners. There really is a public service ethos. All my working life was spent in the public service, and serving the public good was high on my list of motivations for doing what I hope was a good job, and I know it was too for my colleagues.⁹ So no, it's not likely to be the employees. The danger with privatisations is that as company focus moves from public service to profit employee focus follows suit. Public service is no longer the company's main priority so in time it ceases to be the employees' main priority.

Perhaps it's the owners? For smaller companies the owners are generally the managers, and they are certainly motivated to make the business a success and make it as efficient and profitable as possible because their own money is at risk. Small company

⁷ Section 6 of

<https://www.ons.gov.uk/economy/investmentpensionsandtrusts/bulletins/ownershipofukquote/dshares/2015-09-02>

⁸ <http://www.independent.co.uk/news/business/news/revealed-how-the-world-gets-rich-from-privatising-british-public-services-9874048.html>

⁹ See Crouch 2016 Chapter 3 and <https://www.theguardian.com/society/2003/oct/01/publicvoices>

owners probably are more motivated and imaginative than managers of public companies, *so let's concede that small private companies might well have a significant edge over public companies.* However most of the major privatisations were in the past and became big companies as soon as they were privatised by floating on the stock market. Most privatisations at the current time are public services, where owner-managed companies are too small to be involved. So small company owners might be the ones to do a better job, but privatisation excludes them.

So what about the owners of big companies? Perhaps they hold the key to efficiency? They are very rarely managers themselves; they employ others to manage the business for them. Big companies normally trade their shares on stock exchanges so their owners are shareholders, and there may be many thousands of them, but only shareholders that are long-term investors - not many in modern times - care much about the company for its own sake, and they don't have much say in the matter. The vast majority of shareholders buy shares in the hope of capital gains - they hope that the share price will rise, and if it does then they offload them as soon as they think the rise has peaked. If the share price drops then they sell quickly to minimise losses. What they are doing is competing against each other. As was mentioned earlier, the average period of time for which a company share is held is just twenty two seconds.¹⁰ That's because most trading is done by computers using high-frequency-trading algorithms, so I think it's fair to say that owners of big companies care little or nothing about the company itself, and I'm sure the computers don't care much either. The owners aren't therefore in a position to influence company performance individually, though their collective behaviour motivates the managers to do what they can to keep the share price up, which generates a short-term rather than a long-term focus that is often at odds with the long-term prospects and sometimes even the viability of the company - see chapter 61. Owners of big companies seem unlikely therefore to hold the key to efficiency.

Can it be the managers? In the case of very large companies managers very much prefer to work for private owners, not because they want to make the owners wealthy but because they have excellent opportunities to make themselves wealthy. This is known as the **agency problem** and is discussed in chapter 93. For reasons discussed above managers serve the interests of owners when they adopt a short-term approach and their own rewards are aligned with that approach, so they must be ruthless in increasing short-term profitability. When they have done all they can to take as much as possible from customers or any public funding body they do what they can to cut costs, and since the workforce normally represents the major cost to a company, especially a service company, that means squeezing the workforce. They keep them as insecure as possible so they won't agitate for more pay or better conditions, and at the same time drive down the wage bill by zero-hours contracts and extensive part-time working. If they are able to make any cost savings for the public purse - very unlikely given all their extra costs (private profits, regulation, equity premium losses etc.) - it is at the expense of the workforce in terms of poor conditions and high levels of stress, so any possible social benefit arising from reduced costs is greatly exceeded by social disbenefits to the workforce. Not all private companies operate this way of course; the worst offenders are

¹⁰ <http://www.telegraph.co.uk/finance/personalfinance/investing/9021946/How-long-does-the-average-share-holding-last-Just-22-seconds.html>

those employing people with little bargaining power. Bargaining power increases with scarcity of skills, so as skill levels increase so generally do rewards and working conditions.

The answer to the question is that there is an ingredient that makes some private companies better than public, but it's one that isn't available in privatisations.

The key factor that creates the highest motivation to business success is when owners are also managers and their own money is at risk for the long term. These are small businesses. No other enterprise, public or private, can aspire to this level of motivation.

This is what brings out the most intensity in devotion to business success. But it only applies for small owner-managed businesses which aren't involved in privatisations. We have to conclude therefore that privatisations have no magic ingredient, private is not always better than public for privatisations. There is no doubt that some public services, or, more correctly, some people in public service organisations, are slow, inefficient, unhelpful and bureaucratic, but so are some people in private organisations. If the work of staff at all levels is properly monitored and efficiency, helpfulness and so on recognised and rewarded, then those characteristics will flourish, if not then their opposites set in. The key is proper alignment of incentives for all employees with the objectives and performance of the organisation, whether public or private.

The relationships between good management, organisational structure and efficiency are well understood and can be applied in any organisation. In particular the example set by senior management and their enthusiasm (or lack of it) for the work of the organisation, especially their willingness to study and learn from other successful organisations, are pivotal in establishing a positive culture, whether it is owned publicly or privately.

Perhaps the best example of state dynamism and proper alignment of incentives is provided by the Second World War. I'm not aware of anyone having suggested that free and unfettered markets provide the best outcome when a country is involved in total war, but why not if the invisible hand is so universal in its beneficial effects? Why should a major threat to society be any different to any other set of circumstances? Nevertheless it is and is accepted as such - thankfully. The state funded all military and associated activities, and devotion to duty was at its peak. What stands out very clearly is that the alignment of incentives of individuals and the organisation - in this case the country as a whole - was as near perfect as it is possible to be. Innovation and inventiveness were at the forefront of activities, with very many significant developments in communications, intelligence, medicine, aircraft, shipping, power systems, transport, weaponry and so on, many also having found uses during peacetime. I doubt that anyone could seriously claim these achievements to be inferior to what the unfettered market could have achieved.

91.2 The ideological about-turn towards privatisation

While public industry and services needed a good shake-up after the horrors of the 1970s, the problems were largely fallout from the Nixon shock and the massive oil price rises, which left the UK significantly poorer than it was before the all the knock-on price

increases took their toll. There was bound to be pain after such events, though it could have been shared much more evenly than it was, and if the situation had been explained better then at least some of the industrial strife might have been avoided. The solution of wholesale privatisation represented an extreme one-size-fits-all reaction to a series of tractable problems. Rather than investigating the nature of the problems in each separate industry where they appeared and applying corrective measures appropriate to the specific problems, or at least experimenting with different potential measures in different areas and implementing the best, the basic problem was assumed to be the state itself, and the solution to take the state out of the picture. It was a very simplistic and naive conclusion to reach, driven wholly by ideology. Indeed there would undoubtedly have been instances where privatisation was an appropriate solution, especially where there was little or no social benefit, but there is a vanishingly small probability that it was the best solution in all cases.

One of the biggest privatisation costs of all is one that is almost never mentioned or its impact analysed. The IMF, which noted in 2000 that there had been few studies of the question, apparently did not feel that the lack of any empirical evidence should qualify their recommendations in favour of privatisation. In fact there is a sound economic reason why privatisation of a state industry is very unlikely to lead to cost savings without significant loss of quality, or to benefit society as a whole, and it is known as the **equity premium**, explained by John Quiggin (Quiggin 2010 pp188-193). This is the additional return that investors demand from equities - company investments - over the return that they demand from government bonds. They demand a higher return because company shares are riskier than bonds - there is a higher chance that they will lose their money.¹¹ This imposes a major cost on the state from privatisation, which is best illustrated by an example.

Let's say that a state enterprise generates a profit of £100 million per year. At 1.3% bond interest that profit pays the interest on just over £7.6 billion worth of national debt (1.3% of £7.6 billion = £98.8 million). Now let's privatise it. Investors will demand a 5% return on their investment, and the return is £100 million, so it's unlikely that they will pay more than £2 billion (5% of £2 billion = £100 million). The government can use this money to pay off £2 billion worth of national debt, but it now has £5.6 billion of unfunded debt (on which it must pay 1.3% in interest - £72.8 million per year) whereas before the sale all the interest was paid by the state enterprise. In other words the

¹¹ The equity premium is often known as the equity premium puzzle, because its magnitude can't be explained on the basis of the standard asset pricing model. However to my mind that says more about the asset pricing model than it does about investor behaviour which is driven by the great difference that they feel about (i) losing money - the risk of buying a bad investment, and (ii) failing to gain money - the risk of failing to buy a good investment. The standard asset pricing model treats these as equal, but although failing to buy a good investment is regrettable, buying a bad investment really hurts. People are naturally cautious, and that caution manifests as a tendency to value safe investments more than risky investments. They will only risk losing money if the average reward for doing so significantly exceeds the average reward for safe investments. They therefore put a lower value on stocks relative to bonds than they would if they regarded (i) and (ii) equally. Over the last 116 years, after correcting for inflation, on average equities returned 5.0% and government bonds 1.3% - this shows the difference very clearly - see <http://monevator.com/uk-historical-asset-class-returns/>

privatisation of this enterprise now costs society £72.8 million extra per year, which must be taken from taxation and represents a severe social disbenefit.

Perhaps investors know that there is great potential for increasing the profit so they are willing to pay more than £2 billion. To be willing to pay £7.6 billion - so the state breaks even on the sale - the profit must be £380 million - i.e. almost 4 times the current profit. That seems unlikely, and besides, investors are cautious, so even if they expect to increase the profit to this extent they know that there is a high risk that their expectations will fall short, so they won't pay the full equivalent of the expected increase. It also begs the question that if investors can see such potential why can't the state take advantage of it?

In addition privatisations are usually sold at knock-down prices to be sure of attracting sufficient investors, and the financial services sector also takes a significant slice of the proceeds for managing the process.

The equity premium is one of the biggest costs of privatisation and private finance initiatives, but it is hardly ever mentioned or analysed.

What is of concern is overall social benefit or disbenefit. Companies buying up former public industries often do so knowing that they can cut costs drastically by cutting jobs and making remaining employees work under much harsher contracts, or by selling off prime sites and other assets (asset stripping). By these means they can increase ownership benefits by reducing workforce and/or social benefits. Society as a whole often loses, not only financially via the public purse but also because the overall disbenefit to workers and others is much greater than the overall benefit to owners. Privatisations aren't win/win transactions where both sides gain in terms of use value (see chapter 2), they are financial transactions - in effect bets - where what one side wins the other loses. In the vast majority of cases the investors win and society loses.

91.3 Contrived competition

A number of UK privatisations involve contrived competition in otherwise monopolistic suppliers of essential products and services such as energy, water and essential transport. Here the most powerful element of competition - the ability of new entrants to join the supply side of the market very easily, thereby giving buyers real choice - is missing. The competition that has been contrived is for there to be a limited number of suppliers, sometimes bidding for fixed term contracts which they then hold monopolistically for the contract duration. Prevention of overcharging and poor service quality is attempted by the presence of a regulator, but all this does is set up cat-and-mouse games between suppliers and regulator, suppliers seeking, with great financial incentive, to circumvent existing regulations for their own gain, and regulators seeking, with little or no financial incentive, to prevent them.

The fact that a regulator is required to protect customers from overcharging and poor service quality in privatised companies shows that there is no real competition, because if there was that would provide the required protection. Service price and quality would be set by customers choosing suppliers who met their expectations and rejecting those who didn't.

Suppliers also have no incentive to pay for long-term investments, which must still be funded by the state, and where there are public subsidies they have every incentive to exaggerate costs and play down profits so as to maximise them. Such situations can't be regarded as true private operations in any meaningful sense.

The mere fragmentation of a monopoly only changes it into a cartel, which is very unlikely in itself to be of any benefit to society. Unless a change is made that makes it much easier for new suppliers to enter the market then little or no social benefit will materialise. If such a change can't be made then the only way that society can benefit is for the state to supply the product or service itself.

The benefits of market competition only occur when new suppliers can easily enter the market so that buyers have real choice. They don't occur merely because there is more than one supplier, though they are widely believed by privatisation supporters to do so.

John Quiggin has examined privatisations in some detail (Quiggin 2010 Chapter 5), and found that in very few cases was there any social benefit. There were two cases in Australia where the state did make a profit, but these were during bubble phases of the stock market and the buyers subsequently sold at a loss. He also examined several cases where privatisations were proposed but didn't go ahead. These cases allowed a direct comparison of returns both with privatisation (with the sale price estimated), and without, and in all cases continued public ownership clearly exceeded any benefit that society would have obtained from selling the assets. Overall he found that not only was there a net financial loss from privatisation in most cases, but that workers were mostly made worse off and consumers neither gained nor lost in most cases. Therefore overall there was a net social loss.

In his book 'The State We Need' Michael Meacher has exposed the false claim that private is always better than public by detailing many and spectacular failures of privatised industries (Meacher 2013 Chapter 12), and a great deal of information is readily available on the web by searching for example: 'rail privatisation failure'; 'water privatisation failure'; 'energy privatisation failure', 'council outsourcing failure', 'NHS outsourcing failure' etc. Meacher also cites studies by government and independent experts which conclude that the private sector not only doesn't have innate efficiency advantages but also delivers poorer performance (Meacher 2013 p285).

A very good account of the impact and effects of major privatisations is given by James Meek (Meek 2014). He discusses in detail the privatisation of mail, railways, water, electricity, health and housing.

The above arguments might seem to imply that all enterprises should be run by the state, but that is certainly not the case. The former USSR demonstrated that very clearly! Where there is either no significant social need or the conditions for a fair market - see chapter 30 - can be met then private supply for profit together with genuine competition are the most powerful forces available in driving down costs and driving up quality.¹² On

¹² The Independent published a well-balanced article on the pros and cons of privatisation in July 2015 - see <http://www.independent.co.uk/voices/privatisation-is-not-good-or-bad-in-itself-rather-there-are-good-and-bad-privatisations-10417396.html>

this basis I can see no reason (unless there's a strategic reason that escapes me) for the state to run airlines or road services, be involved in travel agencies, hotels, ferry services, car production, sugar production, catering and many more industries that were in public hands in the UK before 1980. Having said that however current legislation strongly favours employers over employees, so workers who suddenly find themselves at the mercy of private employers, many of whom are ruthless in their treatment of employees in spite of the TUPE Regulations, suffer considerable stress and hardship after enjoying much better conditions under state control. With fairer and more balanced labour legislation and genuine security for those losing jobs there would be less pain and real social benefit from privatisation where industries meet one or both of the above conditions - no significant social need or fair market conditions met.

91.4 Corruption in public bodies

A common complaint against public bodies is that they are open to corruption, where people in authority abuse their position, and these complaints are certainly not without foundation. The answer is to make it difficult or impossible for corruption to take root, rather than assuming that corruption must be an inherent feature of public organisations so the only answer is to make them all private. After all the private sector has plenty of corruption itself as many sections of this book testify, and let's not forget that every bribe that a public official accepts comes from a private source - the private sector is just as involved. The tendency comes with human nature but can only flourish where there is information hiding. In fact corruption is easier to control, or should be, in public bodies because there is much less need for confidentiality - there are no competitors trying to steal information. The private sector is full of commercial confidentialities, so information hiding is normal. Nevertheless the dangers are acknowledged, and chapter 100 section 100.1 proposes measures to counter them, along with other dangers that come with state control including complacency and inefficiency.

92 Public Private Partnerships (PPP), Private Finance Initiatives (PFI), and Outsourcing

These are all similar in nature, in that the state and private investors jointly participate in what were or would have been former state enterprises. PPP is the generic term for all forms of joint participation.

PFI is applied when capital is needed for construction of buildings or infrastructure, private investors putting up all or most of the capital cost and usually also maintaining the assets and operating the facilities. The theory is that the private sector takes on all the project risks during the term of the contract, and the state benefits from avoiding all up-front costs and knowing at the outset what the ongoing costs will be. The state, at national or local level, pays in the form of regular fees to cover rent, interest and services for the duration of the contract. The question of who owns the assets at the end of the contract is determined in the contract. In some contracts the assets revert to the state, in others they remain in the ownership of the contractor, and in yet others the state has the option of buying the assets.¹

Outsourcing is the term used when services are operated privately that were formerly operated publicly.

By the mid-1990s most of the big state-owned enterprises had already been privatised, so for continued movement along this path other opportunities had to be sought. PPP answered the purpose, allowing new and replacement state projects to be privatised as well.

Private Finance Initiatives are used for infrastructure and building projects such as roads, bridges, railways, tram networks, hospitals, schools, prisons, police stations, government offices, social housing and so on. The annual payments are at private sector commercial rates, which are considerably higher than would be payable in government bond interest if the government instead borrowed the money to fund the investments and paid for the services itself.² It's as if I, with an impeccable credit history, persuade my neighbour, with a poor credit history, to buy a house on mortgage for me to live in, and I pay enough in rent to cover the interest on my neighbour's high-interest mortgage together with a generous profit to make it worth her trouble. I would of course be far better off taking out a low-interest mortgage of my own.

The real reason for these arrangements is not cost effectiveness; it is to hide what is in reality borrowing (by the state from the private sector) by hiding it from the national accounting balance sheet, whereas public borrowing would be visible. The reason this matters is political and not economic. When the Labour Government came to power in 1997 Gordon Brown as Chancellor was at pains to show that Labour could be trusted with the country's finances, so he set up two 'fiscal rules'. The first was the 'sustainable

¹ <http://www.david-morrison.org.uk/pfi/pfi.htm> see 'Who Owns PFI Assets?'

² See 'equity premium', explained in the last chapter.

investment rule', which required that the national debt be maintained below 40% of GDP, and the second was the 'golden rule', that over the economic cycle the government would borrow only to invest and not to fund current spending. These represented very severe and entirely self-inflicted constraints on the government's ability to spend. Therefore, to allow money to be spent without increasing the debt, he latched on to the PFI idea first thought up by the Conservatives under John Major in 1992. Ironically this was vehemently attacked by Labour at the time, future Chancellor of the Exchequer, Alistair Darling, warning that:

apparent savings now could be countered by the formidable commitment on revenue expenditure in years to come.³

How right he was! In 2012 there were over 700 PFI contracts in place worth £54 billion of capital cost, with total committed taxpayer repayments of over £300 billion - more than five and a half times the capital cost!⁴

Peter Hain describes the process:

Since the start of the 1990s the short-term 'sweat the assets' approach to investment characteristic of City private equity and hedge funds has well and truly infected Britain's public sector. This is hardly surprising in view of the way that public investment has increasingly been financed since then through the Private Finance Initiative (PFI). Much as 'off-balance sheet' jiggery-pokery and other 'creative accounting' allowed banks to get away with false impressions of their true financial position, so private financing of public sector projects via PFI created misleading presentations of the public accounts by understating the true liabilities of the public sector. It did so by artificially excluding from the Public Sector Borrowing Requirement (PSBR) the public sector's obligation to pay back private debt incurred as part of PFI projects. A corresponding obligation to repay public debt would have counted in the PSBR. (Hain 2015 Chapter 11)

Debt hiding seems a particularly pointless and counter-productive exercise. The reason big debts are feared is because of the associated commitment to repay them with interest. With PFI the debt might be hidden but the commitment is still present in the form of ongoing 'service fees' to cover rent, interest and services, and the commitment is certainly not hidden. If the government fear that increased levels of debt will discourage future bond investors, then those investors will be just as discouraged - probably more so - by the ongoing high level of commitments whether or not they accompany a government debt. If I want a bank loan then the bank isn't merely interested in my existing debts, it also wants to know about all my financial commitments, and bond investors are the same. The effects of PFI wouldn't have fooled the opposition either because they had thought it up, but being their invention they were in no position to point out the damage it would cause. So what is it for? It seems likely to be driven purely by ideology - by a deep-seated faith in the inherent goodness of all things private and the inherent badness of all things public. The truth is that there is no shortage of willingness to buy government debt and there hasn't been since 1694 (Murphy 2015 p87). Investor

³ see Brooks 2013 pp209-210 and also

<https://www.theguardian.com/commentisfree/2007/sep/04/comment.politics>

⁴ <https://www.theguardian.com/news/datablog/2012/jul/05/pfi-contracts-list>

willingness to buy government debt is high because of all the many individuals, companies and countries that are cash-rich and seeking a secure, liquid and interest-paying home for it. In point of fact the government doesn't even need to go into debt at all, as discussed in chapter 100 section 100.5.

The use of PFI contracts for NHS hospitals and medical facilities is particularly worrying. It commits the NHS to ongoing payments that have nothing to do with the provision of health services. Several NHS Trusts are already in financial trouble, and this seems likely to get worse, much worse, over time, with the PFI element of costs expected to peak in 2030.⁵ The state must of course guarantee NHS services, so it is on the hook for those payments. 'Back door privatisation' of the NHS is not restricted to buildings and their maintenance; it also now includes substantial outsourcing of services, many of which have caused severe problems.⁶

To see how good privatised healthcare is we have the example of the US. There healthcare costs are almost double, at 16% of GDP, than public service costs, at 9% of GDP in the UK⁷, yet quality of service, according to the Commonwealth Fund, is poor. This is what was stated in their 2014 report 'Mirror, Mirror on the Wall':

The United States health care system is the most expensive in the world, but comparative analyses consistently show the U.S. underperforms relative to other countries on most dimensions of performance. Among the 11 nations studied in this report-Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States-the U.S. ranks last, as it did in prior editions of Mirror, Mirror. The United Kingdom ranks first, followed closely by Switzerland.⁸

That's hardly a sound basis for modelling the UK healthcare system on that of the US. One of the original stated aims of privatisation in the NHS was to give local groups of medical practitioners opportunities to take control from central bureaucracy. However, most contracts have been awarded instead to large corporations, many with headquarters in other European countries or the US (Crouch 2016 pp102-103). So much for 'local control'. The situation has been examined in detail in several books and on many websites. A search on 'NHS budgets and PFI' brings them up in hundreds.

A similar outsourcing situation exists for care homes, children's homes, prisons, young offenders institutions, schools, job-centres and many more. Private suppliers are relatively few in number, each operating several or many privatised services. Competition in the true sense of new suppliers being easily able to enter the market doesn't exist, and so embedded are the few big suppliers - G4S, Atos, Capita and Serco - that they have now become 'too big to fail', the country has become so dependent on them that failure would

⁵ <http://www.telegraph.co.uk/news/nhs/11748960/The-PFI-hospitals-costing-NHS-2bn-every-year.html>

⁶ <http://nhsforsale.info/database/what-s-the-impact.html>

⁷ <http://www.kingsfund.org.uk/projects/nhs-in-a-nutshell/health-care-spending-compared>

⁸ http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf

create devastating turbulence in the many areas that they control.⁹

This is extremely worrying. It was pointed out in chapter 30 that the government can't offload the responsibility for provision of these services, however much it might like to, because if or when the private supplier fails the government must deal with the fallout.

The private sector takes all the profits when the going is smooth, but the public sector picks up all the costs when the going gets rough.

The skill of these private companies lies not in providing the services that they bid for, in fact they have no experience and no real interest in these areas, it is in winning government contracts - how to bid and how to develop contacts with government officials and politicians (Crouch 2016 p104). Furthermore a government that is driven by ideology has a deep stake in the success of these ventures, so for their reputation's sake they have a strong incentive to downplay any inefficiencies and inadequate service quality issues, and to provide support as necessary to maintain the illusion of public benefit.

In most of these cases the recipient of the service has little or no say. The private supplier's primary concern is reaping as much profit as possible and to do so they cut costs as far as they can. Service quality represents a significant element in those costs so they have every incentive to minimise it. The payer - local authority or government - has as their primary concern minimising costs. They are much less concerned about service quality because they have off-loaded that responsibility (or they think they have) onto the private supplier. Therefore quality of service is not a primary concern of either party, and those whose concern it is - the recipients and society as a whole - are not parties to the contracts that are drawn up. Each contract includes metrics for service quality, but at best metrics provide a very crude and limited means of quantifying a multi-dimensional attribute such as quality, many features of which are unquantifiable. *How do you measure the value of a cuddle from a kind and sympathetic carer to a distressed child?*

Skilful hands find ways of saving costs by minimising activities that aren't subject to measured criteria and by meeting measured criteria while ignoring their underlying spirit.

In public hands the supplier's primary concern is balancing quality of service (social benefit) with social cost, the incentive to drive down quality doesn't exist.

What all these outsourcing privatisations do achieve of course is to provide very lucrative safe investments for investors.

Official reports have been highly critical. A Public Accounts Committee report¹⁰ stated:

In the present public expenditure climate there are legitimate concerns being

⁹ 'The Shadow State', report by Social Enterprise UK in 2012 at <https://www.socialenterprise.org.uk/the-shadow-state-a-report-about-outsourcing-of-public-services>

¹⁰ Public Accounts Committee 44th Report - Lessons from PFI and other projects, at <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmpubacc/1201/120102.htm>

expressed about the continuing financial cost of PFI for public organizations such as NHS Trusts. Some of government's case for using PFI has not been based on robust analysis, but on ill-founded comparisons and invalid assumptions. On individual projects, the costs and benefits identified in business cases need to be revisited after contracts are signed and periodically thereafter, to inform future procurement decisions.

A treasury select committee report in 2011¹¹ stated:

Private finance has always been more expensive than government borrowing, but since the financial crisis the difference between the costs has widened significantly. The cost of capital for a typical PFI project is currently over 8%-double the long term government gilt rate of approximately 4%. The difference in finance costs means that PFI projects are significantly more expensive to fund over the life of a project. This represents a significant cost to taxpayers.

For a detailed review of PPP schemes I can't recommend highly enough George Monbiot's book 'Captive State' (Monbiot 2001). Reading it will do your blood pressure no good at all but it will lay bare the extraordinary lengths to which both local and central government go to to keep private interests happy, all the while being thoroughly exploited by them at immense cost to society and especially to the people the projects are intended to serve. It exposes the deception, secrecy, cover ups, arm twisting, corruption, and the complete subordination of local people's needs to the wishes of big business, all to funnel society's limited resources into private hands.¹²

An excellent report entitled 'Why Public-Private Partnerships Don't Work: The Many Advantages of the Public Alternative' by David Hall¹³ for the Public Services International Research Unit at the University of Greenwich states:

It is the culmination of thirty years' experience with and assessment of privatisation, in countries both rich and poor. It demystifies the shadowy PPP processes, most of which hide behind confidential negotiations to protect commercial secrecy. There are no public consultations, lots of false promises, and incredibly complex contracts, all designed to protect corporate profits. There is also a fair amount of bribery, as privatisation contracts can be extremely valuable.

PPPs are used to conceal public borrowing, while providing long-term state guarantees for profits to private companies. Private sector corporations must maximise profits if they are to survive. This is fundamentally incompatible with protecting the environment and ensuring universal access to quality public services.

The Introduction to this book alluded to the fact that society is being deprived of the productive resources that it needs because more and more of those resources are

¹¹ 17th Report - Private Finance Initiative published 19/08/2011

<http://www.publications.parliament.uk/pa/cm201012/cmsselect/cmtreasy/146/14602.htm>

¹² Reviews available at <http://www.monbiot.com/2003/10/01/captive-state-the-corporate-takeover-of-britain/>

¹³ http://www.world-psi.org/sites/default/files/rapport_eng_56pages_a4_lr.pdf

controlled by private interests for their own benefit. This is what was said:

In unfair markets, of which there are many (see chapter 29), private control does precisely what you would expect - it takes resources that could benefit everyone and hands them to private interests for their own benefit. In consequence the supply of resources that society needs - for services that normally incur an immediate cost but don't make an immediate profit - is drying up more and more. This shows up most clearly in poor countries, but it also affects rich countries too. In the UK the National Health Service is increasingly unable to cope, the police, prison service, social services, schools and local councils are chronically underfunded, and care for the elderly has been in crisis for a long time. The longer the current system persists the worse it will become. What we are witnessing is the fabric of society breaking down.

However in apparent contradiction we see that public spending has broadly kept up with GDP during the neoliberal era - see Figure 92.1 - though the decline since 2010 is quite marked. Given this we should expect public services to be broadly able to maintain standards, but it is increasingly evident that they can't.

I believe that this reflects the fact that an increasing proportion of public spending now goes to pay private service providers through PFI, PPP and outsourcing, and those providers are concerned much more with cutting costs and taking as much as possible from the public purse than with providing services. What this chart indicates I believe is the increasingly poor value for money that society receives from private suppliers.

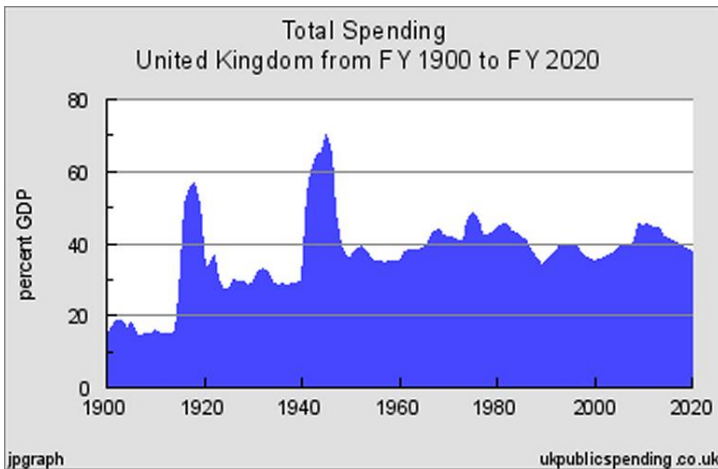


Figure 92.1 Total UK public spending from 1900 to the present with estimated spend to 2020. Source: *The UK Public Spending website by Christopher Chantrill, retrieved from http://www.ukpublicspending.co.uk/spending_history*

PPP is encountered again in discussing tax avoidance, a skill that society's private partners have honed to perfection - see chapter 95.

Post script: Just as this book was being finalised news broke of the devastating fire in Grenfell Tower, North Kensington. An inquiry is yet to establish contributing causes but it seems likely that the drive to save money coupled with management structures

involving extensive privatisation will lie close to the heart of the tragedy.

Robert Peston's words are particularly germane:

One reason why the Grenfell Tower tragedy has shaken so many of us is because it exposes so much of what's wrong with the way this place has been run for years. We'll have to wait for a forensic examination of all the many decisions that turned a series of risks into an appalling catastrophe. But although the trigger may still be unclear, it is reasonable to identify a number of underlying causes. Part of the background is austerity that has been particularly acute for local government. But austerity seems to have become particularly toxic in a system where responsibility for vital safety decisions is so diffuse: we have ministers in charge of regulations, councillors funding an arms-length management company, and a management company placing a refurbishment contract with the cheapest bidder. lax or light touch regulation only becomes fatal in a system - such as we have - designed to drive down costs and save money, not to put the safety of people first. It is a system in which those working for all the interconnected bodies that made the refurbishment decisions and gave the wrong safety advice to tenants are able to say - as if that makes it alright - 'we followed the rules'... (ITV news website, 16 June 2017.¹⁴)

¹⁴ <http://www.itv.com/news/2017-06-16/grenfell-tower-tragedy-shames-us-all/>

93 Private Company Management and the Agency Problem

Appointing a manager is potentially very dangerous for owners of a company because managers have immense authority and power - indeed that is why they are appointed. If they are competent then they can work wonders, but if not then they can inflict very severe damage. If an owner is also a manager then there is no conflict of interest, the owner's interest is served when the company does well so the owner manages in such a way as to promote company prosperity. Appointed managers' principal interests are served when they are well paid for their role as managers, but whether or not the company does well is of lesser importance. Company and management interests are not aligned therefore as they are with an owner-manager. This known as the **agency problem**. As a result the manager pays great attention to the contract of employment, trying to ensure that it is as favourable as possible. The owners also pay great attention to the contract, trying to ensure that they can rid themselves of a bad manager as soon as it becomes apparent. The amount of money in terms of salary and bonuses paid to the manager together with a severance package as a contingency against poor performance are usually of much less concern to the owners than they are to the manager, because they will be swamped many times over by successful performance. On the other hand the ability to sack a bad manager at short notice is of great concern to owners whereas it is of less concern to a manager provided that the remuneration and severance terms are good. Therefore management contracts usually contain conditions of generous remuneration along with rapid contract termination.

As companies become bigger they are often floated on the stock market, making the agency problem even worse because the owners are thereafter shareholders who are largely speculators (see chapter 61), whose interests are served by short-term share price performance rather than long-term business success. When a company is floated on a stock market the management structure is already in place, along with a board of directors. There are legal requirements and codes of conduct for governance of publicly quoted companies, designed to ensure that shareholders' interests are properly looked after, and that sufficient transparency and accountability are embodied to ensure that corrupt practices cannot occur. Nevertheless the current focus on share price performance - driven by short-term speculators seeking returns from share price rises rather than long-term investors seeking returns from dividends - has had a strong influence on managers so that long-term success of the company has become of lesser concern than short-term performance. This has had detrimental effects on long-term investment and aggregate wealth creation, because wealth creation, especially over the long term, and short-term share price performance, are not closely aligned, and can often be in conflict. This problem is discussed in more detail in chapter 61.

Particularly damaging social effects arise when managers are appointed for their skills in ruthless cost cutting, normally by redundancies and harsh treatment of remaining employees who have no say in the running of the company even though their livelihood

and quality of life depend on it and its work atmosphere. Such managers are significantly helped by current labour laws that strongly favour employers over employees. They are paid very high salaries and bonuses, often running into £millions, because high salaries for the few impose insignificant costs on a large company whereas cutting employee salaries and benefits has a major impact on profits. It also has a major impact on staff stress levels and family life but these don't matter because they don't appear on balance sheets or in profit and loss accounts. Although such practices lead to financial benefit for the company, at least in the short-term, it is at the expense of social harm because of the financial and emotional costs imposed on staff and their families.¹ The short-term share price imperative places a high premium on ruthlessness. The agency problem, originally manifesting as separating managers' interests from owners' interests, has by this stage turned into a social problem, where managers' and owners' interests are better aligned in that both want good short-term share price performance, but those interests are completely out of line with society's interests, in terms of long-term wealth generation and workforce conditions of service.

Once in post successful managers and directors continually enhance their massive salaries and bonuses by generous recommendations from remuneration boards. These boards consist of people from other companies in similar positions. All such people are riding the same gravy train so they operate on a 'you-scratch-my-back-and-I'll-scratch-yours' basis.² Pay rise recommendations must be periodically approved by shareholders, and although some small shareholders might object, the big shareholders - pension fund managers, unit trust and hedge fund managers and so on - are themselves managers rather than owners and also riding the same train, so it's very unusual for them to raise any objections. The result is stratospheric pay for senior managers of very large firms. All moderation has been swept aside by neoliberal philosophy where 'greed is good' and 'every man for himself' are the rules that apply. Nowhere are massive pay increases more evident than in the banking and financial trading sectors. Profits soared after deregulation, albeit on the back of enormous risk-taking and wealth extraction, and because of weak and complicit shareholders company managers and boards were able to capture much of those profits for themselves and favoured staff. High pay for senior managers of large companies matters not only because it is divisive in itself but because it encourages and is reflected in large pay rises for other top earners - lawyers, accountancy chiefs and even senior civil servants - on the basis that they deploy skills of a similar standard so they deserve similar pay.

¹ The connection between neoliberalism and social harm is well documented. A few references are as follows: <http://www.truth-out.org/opinion/item/40064-neoliberalism-is-killing-us-economic-stress-as-a-driver-of-global-depression-and-suicide>, <http://theconversation.com/neoliberal-epidemics-the-spread-of-austerity-obesity-stress-and-inequality-46416>, and <https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/socialjusticecriminaljusticeweb.pdf>

² <http://www.leftfutures.org/2014/11/inequality-is-booming-top-pay-needs-a-ceiling/>

CEO-to-worker compensation ratio

In the 350 publicly owned US firms with the largest revenue each year.

20 times larger annual compensation

CEO **\$819,000**
WORKER **\$39,500**

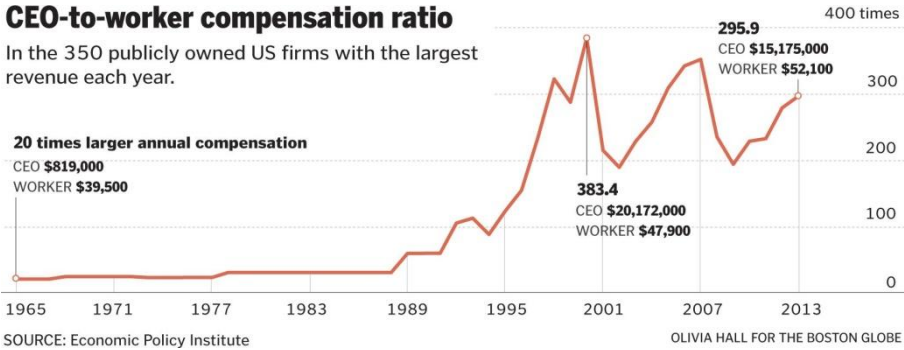


Figure 93.1: Average Chief Executive to worker pay ratio for the top 350 companies in the US. Retrieved from the Boston Globe website

<https://www.bostonglobe.com/business/2014/10/25/growing-effort-limit-ceo-pay/1VKKZCuZMkXJvaQRmUb4RN/story.html>

Figure 93.1 shows how the ratio between Chief Executive and average pay in the US has risen steeply since 1989. Ratios for the UK are provided by the High Pay Centre and summarised in their 2016 publication 'The State of Pay'.³ This shows that although the UK lags the US the ratio is still very high at 183 times the median worker's pay for FTSE100 CEOs in 2014.

³ <http://highpaycentre.org/files/The State of Pay 2015.pdf>

94 Perhaps the State is Not Quite as Useless as We Thought

The neoliberal argument is that the state is slow, inefficient, incompetent, unresponsive, unable to run successful businesses and weighed down by bureaucracy. Unfettered markets are in every way superior.

If that's the case then we can expect to find strong evidence in the many state enterprises that exist around the world, and especially in the US, which is the world's strongest supporter of neoliberalism. What we find is quite the opposite. The US state is particularly innovative and dynamic, as shown with great force by Mariana Mazzucato in her book 'The Entrepreneurial State', subtitled 'Debunking Public vs Private Sector Myths' (Mazzucato 2014). Reading her book was a revelation. She cites (amongst many others) the case of Google, a company world famous for innovation, where the algorithm that led to its successful search engine was funded by a public sector National Science Foundation grant (Mazzucato 2014 p27). More significant is the case of Apple, a US company that epitomises all that is best about the unfettered market. It has invented the immensely successful iPhone, iPad, iPod Touch, the Mac range of computers, Apple watch, Apple TV, music software and much, much more. Or has it? It is certainly credited with inventing these things, and it has undoubtedly been at the forefront of innovation, but who developed the underlying technology used in all these products? Apple? No, it was the US and other states, either in house or by funding and collaboration with private companies:

- Microprocessors - developed by US Defense Advanced Research Projects Agency (DARPA).
- Dynamic random-access memory - DARPA.
- Hard disk drives - US Department of Energy (DoE), DARPA.
- Liquid crystal displays - US National Institutes of Health (NIH), US National Science Foundation (NSF), US Department of Defense (DoD).
- Lithium-ion batteries - DoE.
- Digital signal processing - US Army Research Office.
- The internet - DARPA.
- Web technologies HTTP and HTML - European Organisation for Nuclear Research (CERN).
- Cellular technology and networks - US Military.
- Global positioning system (GPS) - DoD.
- Click-wheel navigation - UK Royal Radar Establishment (RRE), CERN.
- Multi-touch screens - DoE, US Central Intelligence Agency (CIA), NSF,

DoD.

- Artificial intelligence with voice interface (aka Apple's SIRI) - DARPA.

(Mazzucato 2014 pp99-116)

In addition most of the really innovative new drugs come from publicly funded laboratories, though people think that pharmaceutical companies develop them (Mazzucato 2014 p72).

Other notable state enterprises by the US and others include space research and exploration; nanotechnology; biotechnology; clean energy; fusion technology; aeronautical technologies; information technology; nuclear power; life sciences; computing technology and many more. A paper in 2011 by Fred Block and Matthew Keller identified that between 1971 and 2006 no fewer than 77 out of the most important 88 innovations (rated by R&D Magazine's annual awards) had been fully dependent on US Federal research support, especially, but not only in their early phases - and those innovations exclude information technology (Mazzucato 2014 p70). Additionally US state funding of university R&D stood at 60% in 2012, compared with private industry funding of 6%.¹ Let's not forget either that the US public sector put men on the moon in under ten years.

The US state in particular is the major driving force in both carrying out and funding early research into potentially valuable scientific and technological areas - areas that are far too risky and uncertain in terms of future profits for private industry to fund (Mazzucato 2014 p29). When potential value becomes clearer the state continues to drive and fund development. All this necessarily includes abortive work on things that turn out not to be of value - that is the nature of high risk ventures as every entrepreneur knows. Yet the private sector is quick to point out such failures as the state being 'unable to pick winners' (Mazzucato 2014 p12).

The US state is at the forefront of research, invention and development, but UK and European states are also heavily involved, often in collaboration with other countries. In the UK we have many government scientific research institutes², and extensive support for universities and other bodies through the research and facilities councils.³

When state funded innovations are exploited by companies like Apple the state doesn't demand a return, which is a pity because it is entitled to do so given that it took all the early risks, but instead allows the companies to make massive profits for themselves. It is particularly contemptible therefore for such companies to do all they can to avoid paying tax. Not only are they deliberately withholding from society a return of any significance on what it has invested for their very substantial benefit, but they are also doing their best to prevent the state from funding future innovations (Mazzucato 2014 p18).

Even worse is the global trend of criticising and diminishing the importance of the state - accepted even by the state itself - where it is seen as a slow, lumbering beast, full of inertia and able only to manage basic tasks, and private industry as a dynamic and

¹ <http://www.aaas.org/page/rd-colleges-and-universities>

² https://en.wikipedia.org/wiki/List_of_UK_government_scientific_research_institutes

³ https://en.wikipedia.org/wiki/Research_Councils_UK

innovative force. Although nothing could be further from the truth this distortion is in danger of becoming self-fulfilling. The more the state is denigrated the fewer the bright people who want to serve in it, and the less able it is to deliver innovation (Mazzucato 2014 p3). Sadly this is already having an effect. DARPA, NIH and others have already seen their budgets cut in the wake of the 2008 crisis in the now popular belief that cutting those budgets will spur private investment (Mazzucato 2014 p14). There are due to be \$95 billion of cuts to federal R&D spending between 2013 and 2021. The effect of these cuts can only be to damage future technological prospects. The same happens in the UK as state sponsored research budgets have been cut back significantly and repeatedly since the 2008 crash.⁴

The conventional neoliberal view is that the role of governments is to maintain basic market infrastructure such as law, order and property rights, and to correct market failures - to intervene only when it is clear that markets have failed to live up to their ideals, such as in the 2008 financial crash. In this view when the source of failure has been dealt with market forces will thereafter allocate resources in the most efficient manner enabling the economy to grow. But that view forgets that markets are blind, they only follow what market participants choose to do. For example energy companies prefer to invest in oil extraction than in clean energy because that provides the best return. How can the market take account of social and environmental concerns? This isn't market failure, it's how markets work (Mazzucato 2014 p5). To rely on markets to solve efficiently the major problems that confront society in the immediate future - climate change, poverty, youth unemployment, ageing populations, inequality and so on - is naive. In these the state must lead by creating and shaping new essential product and service markets, while regulating existing ones. These new markets won't emerge spontaneously from the natural operation of market forces, they result from public-sector decision making and deliberate action (Mazzucato 2014 p6).

A particularly noteworthy example of market forces favouring short-term benefits against the long-term interests of society is industries' love of **share buybacks** - when a company uses its cash to buy its own shares, thereby increasing the value of those shares (because the same overall company worth is divided into fewer shares). This is fuelled by managers being rewarded on share price performance and is a very easy way to increase share prices without requiring any increase in company performance.⁵ The pharmaceutical industry is a major supporter of this technique, which is quite remarkable considering that it exists by investing in the development of new products to sell in the marketplace, yet it claims that it can't find anything worth investing in! Mazzucato gives several examples where considerably more of a company's profits have been used in this way than in new product R&D (Mazzucato 2014 p33). What is happening is that as the state funds more and more pharmaceutical R&D the companies themselves fund less and less, but enrich their shareholders and management in the process. See also chapter 31.

⁴ <https://www.theguardian.com/science/occams-corner/2015/mar/13/science-vital-uk-spending-research-gdp>

⁵ The excuse usually given is that the company can't find anything worth investing in so it invests in itself. But it isn't investing in the sense of developing new future productive capacity, it is merely giving money back to its shareholders in the form of an increased share price, and doing the management a lot of good too, which is the real reason.

95 Render unto Society... Taxation

Taxation may be unpopular, but it is necessary if society is to have the things it needs. It will always be unpopular, but unpopularity can be minimised if it is both fair and be seen to be fair, with all members of society paying what society considers to be their fair share.

Sadly taxation is anything but fair. It has become so complex and specialised that the UK tax code now runs to 17,000 pages¹, more than trebling in size in only the last twenty years. This means that only very specialised accountants and lawyers have any hope of understanding it, and their ranks have swelled as the tax code has mushroomed.

Why is UK tax so complex? It originated with a judgement made in 1869 by Lord Cairns, who decided that a person was only subject to tax if the duty to pay was explicitly stated in tax law. In other words the duty rested on the strict letter of the law and not on the intent of the law, however clear that intent (Murphy 2015 pp111-112). Now that doesn't sound unreasonable, but the English language, even legal English, consists of words that are understood by common usage rather than by strict definition, so the 'letter of the law' contains ambiguities and inconsistencies, even when a reasonable interpretation of the law is clear. With this judgement in place therefore a skilled person is able to contrive an interpretation that favours a particular view, and if that view is in a potential taxpayer's favour then there is no tax to pay. When such interpretations are found they are known as loopholes, and amendments are called for that plug them. The trouble is that the amendments are also crafted in words with the same weaknesses, so even if the original loophole is successfully plugged there are opportunities to find new loopholes, and so it goes on, and on, and on. The lengths to which people and businesses are prepared to go, with 'expert' assistance, is quite astonishing, and even more astonishing is the fact that HMRC and government are prepared to go to great lengths to help them! Richard Brooks has documented in great detail very many such cases in his book 'The Great Tax Robbery' (Brooks 2013).

A particularly distasteful practice is where accountants from the big four accountancy firms are seconded to HMRC to assist in drafting tax legislation, then go back to their firms and advise clients how to exploit loopholes in legislation that they helped to write. Margaret Hodge, chair of the public accounts committee, in investigating the problem said the actions of the accountancy firms were tantamount to a scam and represented a "ridiculous conflict of interest" which must be stopped. "The large accountancy firms are in a powerful position in the tax world and have an unhealthily cosy relationship with government," she said, calling for the Treasury to stop accepting their staff to draw up new tax laws.²

¹ <https://www.theguardian.com/commentisfree/2015/feb/13/britain-tax-code-17000-pages-long-dog-whistle-very-rich>

² Margaret Hodge's comments at

There are similarities between tax regulation and machine control. With machine control systems there are often found to be limitations or flaws, especially with complex software control, and corrections are required known informally as 'patches'. These sometimes do the job satisfactorily but often they introduce other unintended effects that then need to be 'patched' as well. In bad cases there are patches on patches on patches, and this is the stage when further patching tends to be counterproductive - the rate of increase of new unwanted effects is higher than the rate of correction of earlier unwanted effects, and the only sensible solution is to redesign the system from scratch with a more comprehensive specification and more extensive testing and commissioning. The UK tax system passed that point many years ago, and what's worse, the elements (taxpayers) being regulated are actively trying to circumvent the regulations, at least machines don't do that.

If society wants a tax code that is both fair and seen to be fair, what we have is a complete mess. It is opaque other than in its main underlying principles, and is applied very unequally.

Another form of unfairness is in how officialdom appears to regard the seriousness of various crimes associated with taxation and benefit claims. A table of prosecution rates is listed in table 95.1, taken from Brooks 2013 (all figures approximate):

Crime	Annual prosecutions	Annual cost in lost revenue	Prosecutions per £1 billion of fraud
Offshore tax evasion	0	£ billions	0
Evasion of direct taxes (e.g. income tax)	30	Officially £5.5 billion but unofficially £40 billion or more	Officially 5 but unofficially less than 1
Evasion of indirect taxes (e.g. VAT & customs duties)	350	£7 billion	50
Tax credit fraud	60	£400 million	150
Benefit fraud	9000	£1 billion	9000

Table 95.1

Theft by the poor appears to warrant the full force of the law whereas theft by the rich and better off is treated with much more leniency, in spite of the fact that it costs the public purse so much more (Brooks 2013 pp12-13 & pp204-205).

Taxation law attempts to take from society that which government thinks is fair, but what gets taken is anything but fair. Firstly there are the evaders - people who hide at least some of their income from HMRC and therefore pay less tax than they should. Evaders are breaking the law, and if they are caught they have to pay, usually also with a fine, and are sometimes (but not often as the above table shows) brought to court in more serious cases. Evasion is practised by all sectors of society. Secondly there are the avoiders - people who exploit loopholes, usually with the assistance of 'tax efficiency experts' - accountants and lawyers who have made it their job to seek out and advise on the exploitation of loopholes. Avoidance is practised by the unscrupulous rich and large

<https://www.theguardian.com/business/2013/apr/26/accountancy-firms-knowledge-treasury-avoid-tax> and the follow-up report at <http://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/news/report-tax-avoidance-the-role-of-large-accountancy-firms-follow-up/>

companies, especially multinationals, who can afford to pay the huge fees charged by the 'experts' out of their avoided tax. The boundary between evasion and avoidance is very ill-defined, much avoidance is really evasion and illegal. Peter Hain explains:

Tax loopholes and tax havens have allowed illegal tax evasion to pose as legal tax avoidance for too long. Tax Research UK has estimated that a massive £47 billion annually is lost from tax avoidance and tax planning by companies like Amazon, Starbucks, Vodafone and Goldman Sachs, and super-wealthy individuals, some of whom base themselves in places like Monaco to avoid spending too many days at their homes in the UK to qualify for UK taxes. (Hain 2015 Chapter 12)

What all these people do, including the advisers, is cheat the rest of society. Governments largely take the tax that they wish to take, so if some don't or won't pay then the rest who do must make up the difference. The non-payers 'free-ride' on the rest of society, taking all the social benefits that are offered without contributing to them.

Nowhere are cat and mouse games more evident than in tax avoidance. Teams of accountants and lawyers devote their working lives to advising companies and rich individuals how to cheat society out of its due, and all are paid very big salaries for doing so. There are no morals, no consciences, no sense of fairness, it is only money that matters. If anyone still thinks that *laissez-faire* is best for everyone then tax avoidance shows it up as the enemy of society that it is.

A major problem is the light in which taxation is regarded. Ever since the Thatcher Government came to power governments have taken the view that private individuals and companies are better than governments in deciding what to spend money on, so they have sought to minimise their own impact on society and maximise that of private interests. They have therefore taken an apologetic approach to their duty to tax, seeing it as a necessary evil to be minimised as far as possible. If the government believes that it shouldn't take tax then it's no wonder that people believe they shouldn't pay it. A common view is 'Why should I give money to the government when I know better than they do what to do with it?' Sadly modern governments share that view.

The truth is that taxation is necessary to give us the society and civilisation that we want to live in. Communal benefits must be paid for, and governments must raise the money from society and spend it on society's behalf. Individuals and companies certainly know better than government what they want to spend their money on for their own consumption, but they don't have a proper grasp of what society needs, and even if they did they wouldn't spend their own money on it. So as an argument for low taxation it makes no sense at all. Let's never lose sight of the fact that many people's and especially children's lives depend on taxation.

Tax isn't a necessary evil to be imposed on a resentful public, it's an essential good to be raised from society in order to pay for civilisation (Brooks 2013 p10).

People often regard tax as the government's money, but it isn't, it's society's money, and the government is its custodian, with what should be a proud duty to spend it for the good of society as a whole - to buy with it a good civilisation that all members of society love to live in.

Tax evasion currently takes about three or four times as much out of collectable tax as does avoidance (Murphy 2015 proo), but given the will both can be reduced very

considerably. Evasion is strongly linked to avoidance, in that when ordinary people see rich individuals and multinational corporations avoiding tax then they recognise the gross unfairness in a system that is loaded against them. As a result they don't see why they should have to pay either (Brooks 2013 p251). The argument that the rich and big corporations 'aren't doing anything illegal' doesn't wash with the general public, it's unfairness that causes anger, not whether something is legal or not. In any case many forms of tax avoidance can't be described as legal, they just haven't been tested in court. Of course there will always be some tax evasion, whether or not the system is fair, but the corrosive effect of tax avoidance on tax evasion would disappear if it was eliminated.

Surprisingly there are some very simple things that could be done to stop avoidance, and cut down evasion to a fraction of what it is now. With these out of the way the government could either raise more money from tax and less from borrowing, or could reduce the general level of contributions from those who have always paid their fair share.

95.1 How to stop tax avoidance

Incorporate a general anti-avoidance principle into law such that if financial arrangements have been set up solely or mainly for the purpose of avoiding tax, without there being any other significant economic purpose, then those arrangements are to be ignored in determining tax liability.

Such a principle has long been advocated by Richard Murphy.³ In fact a Private Member's Bill to this effect was presented to parliament by Michael Meacher in 2012⁴, but it was defeated by Conservative filibustering.⁵

This might well be enough to stop most of the avoidance but I suspect that many would still be willing to take a chance, given that the penalty for failure is merely to have to pay the proper tax. I would go further and apply criminal sanctions with custodial sentences available for anyone trying to get away with tax avoidance on the above basis. I feel certain that after a few directors had been sent to jail for a few months, with widespread publicity, avoidance would stop almost completely. *I doubt there'd be much fun in being a fat cat in jail!*

There is in place a general anti-tax avoidance rule (GAAR) which was incorporated in Part 5 of the Finance Act 2013.⁶ This is a move in the right direction but it is very limited. Instead of a principle it sets out specific 'tax-avoidance abuses', and only relates to them and not to other tax-avoidance measures. It is complex and difficult to prove, and HMRC can't act directly but only after referring a case to a review panel for its opinion.

Austin Mitchell raised some very pertinent objections in advance of the legislation⁷, and Richard Murphy commented in his blog: "The reality is that this GAAR will stop a

³ <http://www.taxresearch.org.uk/Blog/2012/06/20/why-we-need-a-genuine-general-anti-avoidance-principle-to-beat-tax-abuse-2/>

⁴ <http://services.parliament.uk/bills/2012-13/generalantitaxavoidanceprinciple.html>

⁵ <http://www.michaelmeacher.info/weblog/2013/09/private-members-bill-to-to-end-tax-avoidance-blocked-by-time-wasting-tory-filibuster/>

⁶ <http://www.legislation.gov.uk/ukpga/2013/29/part/5/enacted>

⁷ <http://www.taxresearch.org.uk/Blog/2013/06/12/gaar-needs-growth/>

handful of the most extreme tax planning cases a year, and that is it." (see the reference relating to why we need a genuine anti-avoidance principle on Richard Murphy's blog).

Transparency is also a strong tax avoidance deterrent. At present there are strong confidentiality provisions for taxpayers, including businesses, which benefit avoiders immensely. Wrongdoing by big businesses, especially when it disadvantages ordinary people who are their customers, can be curbed by its being exposed to public scrutiny. Big business will go a long way to avoid embarrassment and boycotting by customers, so they should not be protected by laws that encourage wrongdoing. Even if there is a case for personal taxpayer confidentiality, and to me even that seems very doubtful, I can see no case for business confidentiality. It should be part of normal account disclosure provisions which should include much more than just tax information. They should require companies to disclose who they are, what other companies they own or have business associations with and what they are, where they operate, what business is carried out, what income and profit is generated in what countries, and what tax is paid in each country. The light of day is a strong disinfectant (Murphy 2015 Chapter 5 and p151).

95.2 How to minimise tax evasion

I doubt that evasion will ever stop completely but I feel sure that it could be reduced very substantially. It came as a shock to me when I discovered that successive governments regard HMRC as a spending department, when in fact it is the only significant revenue-raising department that the government has. In keeping with this belief the government has reduced staffing from 105,000 in 2005 to 68,000 five years later (Brooks 2013 p257), then to about 55,000 in 2015 (Murphy 2015 pp120-121), and thousands more are due to go as local offices are closed.⁸

The fact is that tax evasion and avoidance can only be tackled if there are staff to do it, and a report in 2014 by the Association of Revenue and Customs (ARC - HMRCs union for senior managers and professionals) stated:

Compliance work costs around £1.1 billion per year and returns £20.7 billion in additional taxes that would not otherwise have been collected. By any measure, this work is remarkably cost effective. Even at a conservative estimate an ARC member earning £50,000 per annum can generate additional yield of over £1.5 million each year; a return on investment of 3000%. Put another way, over a four year period, just twenty-five typical ARC members would be needed to pay for the delivery of a major hospital for the NHS; that's 24 Wards or 800 much needed beds.⁹

Therefore the first thing to do is treat HMRC as what it really is, a revenue-raising department, and staff it appropriately for the work it has to do. In fact it would make good sense to award bonuses for the amount of tax recovered. Bonuses work well in private industry so why not in public service? The second is to apply criminal sanctions as well as fining evaders. If HMRC is staffed appropriately it will have the resources to

⁸ <http://www.theguardian.com/politics/2015/nov/12/hmrc-staff-braced-for-thousands-of-job-cuts-if-tax-offices-close>

⁹ <http://www.fda.org.uk/nmsruntime/saveasdialog.aspx?IID=8589&SID=9660>

take many more people to court, and knowing that they are much more likely to be caught will discourage many more from even attempting evasion.

Theft from society should be seen as a deeply offensive and criminal act, and dealt with by the full force of the law.

Brooks gives extensive information about the devious tricks that private companies involved in private finance initiatives (PFI) get up to to avoid paying tax. They are happy to take taxpayers money in ongoing rents and fees but aren't so keen on paying their own share (Brooks 2013 pp210-222).

96 *What is a Fair Taxation System?*

It is surely fair to take from each the same relative amount of wealth entitlement. Relative in this sense means causing the same level of deprivation. Tax should never prevent a person from having all their needs met, so with respect to income tax the minimum income standard (MIS)¹ (£17,100 in 2015 for a single person) should be the level that is free of tax. Above that level income tax should be progressive, meaning that it is related to ability to pay, so the higher the income the higher the proportion (i.e. not just the amount) of tax that is paid, because the ability to pay increases more than in proportion to increasing income (as indicated by the savings rate vs income chart in chapter 20, figure 20.5). Adam Smith agreed with this approach:

It is not very unreasonable that the rich should contribute to the public expense, not only in proportion to their revenue, but something more than in that proportion. (Smith 1776)

Taxes such as VAT that are payable at the same rate by everyone hit those with least wealth hardest, and as a result are the most unfair and except for products that are harmful should be scrapped. Taxation provides a good means of deterring purchase of harmful products, so such products should be taxed at a level that provides an appropriate level of deterrence. There would be a major difference between earned and unearned income, unearned income being taxed more heavily and more progressively than earned income, in contrast to the current system which perversely favours unearned over earned income (Murphy 2015 p172).

The wealthy are keen to point out that they pay the most tax, but what they are referring to is income tax, not total tax, and income tax only accounts for 27% of total tax (Murphy 2015 p29). In fact the tax taken from all income brackets of society is loaded against the poorest - *how's that for fairness?* - see figure 96.1.

¹ <https://www.jrf.org.uk/report/minimum-income-standard-uk-2015>

Perceived and actual tax distribution

Proportion of gross household income taken in tax for all households, 2011/2012

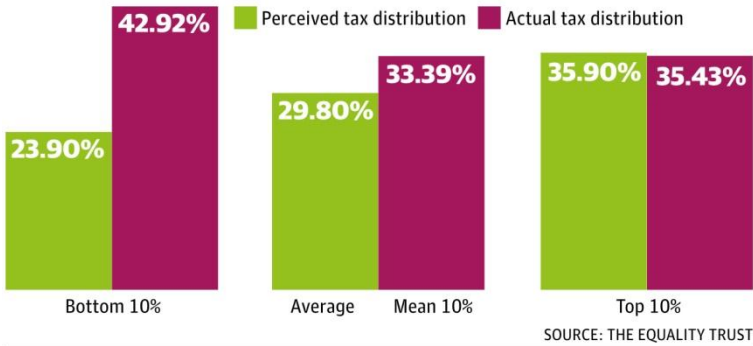


Figure 96.1: The poorest 10% pay the most tax as a proportion of their gross income, much more than people think they pay. Retrieved from <https://www.theguardian.com/money/2014/jun/16/british-public-wrong-rich-poor-tax-research> taken from a report 'Unfair and Unclear: The Effects and Perceptions of the UK Tax System', June 2014, by the Equality Trust, at <https://www.equalitytrust.org.uk/unfair-and-unclear-effects-and-perceptions-uk-tax-system>

A chart from that report, reproduced in figure 96.2 shows how the tax system has been loaded against the poor except for a very brief interval in 1978 and 1984 - 1986.

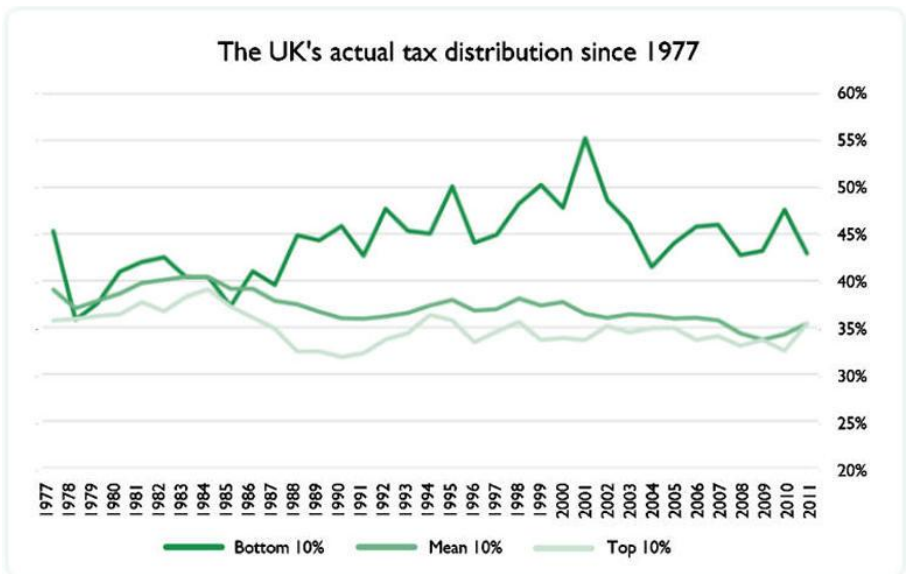


Figure 96.2: Proportions of gross income paid by the top, middle and bottom income brackets since 1977. Source - Figure 4 from the Equality Trust's report cited above

An objection to these sorts of charts is that many of the lowest paid are on benefits, so

tax taken from them is only taking back what the state has given in the first place. This misses the point that everyone needs an income in order to live, and everyone in the lowest income bracket has to struggle regardless of where their low income has come from. Taking a large part of it away in tax makes their struggle even harder. The objection implies that people don't deserve even their low income if some of it comes from benefits. Do we really want to punish the poorest in society? Very regrettably many of the hardest neoliberals who press for the welfare state to be dismantled seem to want exactly that, and even more regrettably government ministers listen to them and respond favourably.

Benefits for the lowest paid are not earned, but we should recognise that neither are the investment returns for the highest paid, they flow to them from the rest of society without them having to do anything, and they certainly aren't struggling. People enjoying sufficient such returns that they don't have to work are known as **rentiers**. They are the people who Churchill criticised heavily in connection with land values - see later in this chapter. The same applies for capital gains, though in that case there must be allowance for capital losses because capital gains can and do sometimes evaporate. Today most rentiers also work, though they don't have to, and that tends to disguise what is happening, their overall income often being regarded by themselves and others as no more than just reward for their work. It seems appropriate to expect that work should pay, and that hard work should pay well, but it seems less appropriate to expect that investment ownership should pay so well that those owners should be spared the need to work, whether or not they do work. In a world where there is so much poverty and so much needed to secure the long-term future it seems only right that there should be limits to the rewards available from investment ownership. Society as a whole can't afford to allow individual wealth accumulation on so massive a scale as we have allowed so far. We all have just a single life to lead, so any excess wealth over that which can be used to make that life secure, comfortable and happy - let's call that a **fair reward** - is surplus to requirements, and should be returned to the society that created it by an appropriate tax regime. Part of that fair reward is to allow for a secure and comfortable retirement during the years after useful work can be done, and for that an appropriate quantity of investment accumulation is appropriate provided that it is used for pension provision. Later, in chapter 100 section 100.2, a conditional state income is proposed, so pension provision will be less essential but still available to supplement that income.

Having society take back wealth in excess of a fair reward will seem very unjust to many, so let's consider further what the justification is. Money - wealth entitlement - is only useful if used to buy wealth, and it is wealth consumption that makes our lives enjoyable - the more wealth consumed the more enjoyable our lives. But enjoyment and consumed wealth don't increase at the same rate, as is evident from the fact that the more wealth we have the more that wealth is tied up in investments and the more of our income that is used to buy investments. When consumption reaches the point of sufficiency, which is different for every person, the excess is invested, and it is invested initially for pension purposes, and thereafter because we don't have any other use for it. We enjoy the feeling of having wealth, and having that wealth keep its value and hopefully grow over time, but what is it for? Perhaps it's for our children and their children, but we only need to cater for their security because they won't have it without having wealth. If society caters for everyone's security, as I believe it should, then that

reason loses its force. Perhaps if we are very wealthy and enjoy an extravagant lifestyle we invest so that our children can also enjoy extravagant lifestyles, and that's a good reason except for the fact that we as a society can't yet afford it. An extravagant lifestyle for the few means a struggling lifestyle for the many, a desperate lifestyle for the poor, and a bleak outlook for everyone as resources are depleted and climate change really begins to bite. If we get our house in order now, as I believe we can and indeed must, then we can all enjoy both security for the long term and eventually extravagant lifestyles - if that's what we want.

The only way to get our house in order is for society's agent, the government, working in the best interests of society, to ensure that it is put in order, and the means to do that are provided by taxation. The unfettered market certainly won't do it, it does the opposite. The argument that I know better what to spend my money on than the government loses validity the more money I have, because when I start buying investments I delegate that responsibility to investment managers, and what they do with it is to serve their own interests first and mine second. Society's interests never get a look in.

Another way to look at it is that investment returns are appropriate if making the investment deprives the owner of some kind of benefit. I live in a house, so if I decide to rent it out and live in a caravan then the rent is no more than fair compensation for that deprivation - my life is a lot less comfortable while living in a caravan. However if I have twenty houses, live in one and rent the other nineteen, then what am I deprived of? Nothing, my life goes on as it did before. The same applies with money. If I have a small amount and lend it instead of buying something that I would like and could reasonably be expected to have then the interest is fair compensation. If I have so much money that any that I lend is only diverted from some other existing asset investment then again I am not deprived of anything. The same applies for all investments beyond those necessary for a comfortable retirement.

The more important point is that while most of the world's wealth is owned by individuals rather than by humanity as a whole, those individuals also own most of the world's productive capacity, so they have control over how it is used and what new wealth is created. Therefore the bulk of the world's production is not available to improve the lot of humanity, it is used to improve the lot of those individuals. Also in all cases where wealth is accumulated it is society that does the work that creates it, the owners don't have a fraction of the capacity to create it without the help of society, so society deserves a fair return from that work.

Now we know that Smith's 'invisible hand' and all the other beliefs of neoliberals and their like-minded brothers and sisters down the ages - designed to convince us that humanity benefits when individuals are enriched - are devoid of any credibility; there can be no justification for maintaining the status quo. We are seeing the results of all this right now with a health service that can't cope, elderly care that is hopelessly inadequate, local authorities that can't maintain services, schools suffering from chronic underfunding, transport systems that are breaking down, prisons that are out of control, disabled people having to manage without essentials, increasing numbers of homeless people², food banks required to feed hungry families - even working families, and so on.

² Quiggin observes: "Homelessness is almost entirely a phenomenon of the era of market liberalism.

Society is paying a very heavy price for having enriched the few, and that price will only get heavier the longer that enrichment continues. Depriving social needs of resources shows up in increasing levels of anxiety and poor health, both of which restrict people's ability to work productively. Devoting more resources to social needs represents good investment. Anxiety and poor health are the enemies of high productivity so the healthier people are and the more they know that they will be secure at all stages in life the less anxiety they suffer, the higher their productivity, and the lower their demands on the NHS and social care services.

We should also recognise that progressive taxation represents a much smaller loss to them than the gain enjoyed by society - for society as a whole there is a net gain. To see why this is so consider a small economy with two groups of people, one group enjoying net incomes of £100,000 each per year and the other group £5,000 each per year. Both groups contain the same number of people. If £2,000 per year is taken from each high earner and spent on things of social benefit - things that benefit everyone equally - then the high earners each suffer a 1% loss (£2,000 lost but £1,000 regained in social benefit), and the low earners each benefit by 20% (nothing lost but £1,000 gained in social benefit), which represents a net gain for the population as a whole of 9.5%.³ This is a simple illustration of course but shows how society as a whole stands to gain considerably from progressive taxation. Doing the opposite, as trickle-down has persuaded us to do, does the opposite - there is a net loss for the population as a whole that damages society immensely - as evidenced by the desperate situation faced by practically all social facilities and services.

All the above reasons provide the justification for progressive tax on income and on investment accumulation because when people invest their money in quantities greater than required to provide a fair pension they don't need that money, or the wealth entitlement that it represents.

First let's consider earned income - income from wealth creation, for the selling of labour or talent. As mentioned the minimum income standard (MIS) will be free of tax, with due allowances for children and other dependants, and above that it will be progressive, with bands beginning quite gently and increasing steadily up to say four times MIS (£70,000 in 2015), then more steeply up to thirty times (£500,000 in 2015), at which point only a few percent will be untaxed. I would contend that no-one can claim a need for an after-tax income of more than £500,000 per year, especially now when social needs are so pressing. At the same time such a tax regime would retain the motivation to work hard and innovate for the vast majority - I can't imagine anyone well down on the income scale being put off working harder or pursuing a promising business idea because the effective earning limit is £500,000. It wouldn't even discourage the very highest paid when others are subject to same limit because it's relative reward that motivates and demotivates people, not absolute reward - see chapter 99.

Let's not forget the very high rates of taxation after the Second World War, when the

During the decades of full employment, homelessness was confined to a tiny population of transients, mostly older males with mental health and substance abuse problems." (Quiggin 2010 p155)

³ Half the population suffer 1% loss but the other half enjoy 20% gain, so the whole population together enjoy an average gain of $-(1/2 \times 1)\% + (1/2 \times 20)\% = 9.5\%$.

top rate in the UK was around 90%. This didn't stop real wealth growth because wealth grew more than at almost any other time - see chapter 83. The fact that it didn't shows that the people taxed at high rates weren't deprived because they weren't spending their money, so high tax wasn't any real hardship.

Next let's consider unearned income and capital gains, accepting that earlier capital losses can be allowed against such gains. There need be no bottom limit that is untaxed for unearned income, because such income is always additional to earned income (or benefit income for those unable to work), which does have a bottom limit. In fact since investment accumulation, as discussed, is only fair so far as it allows for a good pension, the tax rate could be flat up to the amount that will give that good pension, the actual amount varying with age and already accumulated wealth. Thereafter the tax rate should progress steeply. When a pension is drawn, which it can be above a certain age, although it is still unearned income it will be treated as earned income and added to any existing earned income. Income from speculation will be unearned income.

These proposals might seem harsh but other recommendations will provide all members of society with security - see chapter 100 section 100.2, so there will be no need to accumulate investments for security purposes.

Businesses will be taxed as a fair proportion of the profits they make in the country in which they do business. There will be no tax havens or special treatment. In time, and with international agreement to avoid setting up unfair competition with other countries, it should be possible to dispense with business taxes altogether, because all business income returns to individuals as earned or unearned income, and individuals will pay tax fairly on that income.

Inheritance poses a particular problem in that it is the main means by which wealth stays with the wealthy (Piketty 2014 Chapter 11), which is bad for society, but at the same time it is normal and appropriate that people should wish to ensure the security and comfort of their offspring. It is a contentious issue but the above arrangements will reduce problems associated with inheritance. While they remain however an appropriate approach seems to be not to tax wealth or money when it is given, but to tax it when it is received. It can then be lumped together with other unearned income and perhaps spread over several years to avoid a high one-year spike in tax, again allowing for the purchase of investments for pension purposes. An effect of this would be to have much less tax taken overall when an inheritance is shared between many beneficiaries than when shared between few or all given to just one, which seems fair. The current inheritance tax system is perverse in that it permits the wealthiest to escape it altogether by setting up elaborate trusts and offshore havens that the less wealthy can't afford.

If we have the courage to reshape market rules as proposed by Reich (see chapter 98) then the distribution of new wealth will be much more equitable to begin with, and there will be correspondingly less need for taxation to be the principal means of redistributing wealth. Taxation rules can then concentrate on raising society's money in a fair manner, rather than being distracted by having to rely on taxation as a blunt instrument in righting market wrongs.

A thought-provoking system is one based on unimproved land values. At root is the recognition that the value of unimproved land (land deemed to be in the state it was in when humans first discovered it) never changes as a result of the activities of the landowner but from the activities of other people - by society. Such activities include the

provision of transport, shops, schools, workplaces, utilities etc., and the land value rises in relation to its proximity to these facilities. A case can be made therefore that taxes should be payable based on the economic rental value of unimproved land. This system, popularised by Henry George⁴, had a lot to recommend it at the time it was proposed. It is naturally progressive in that the wealthiest people and businesses own the most desirable land, and land, unlike many other assets, can't be sent abroad to avoid the tax. Also it creates a strong incentive to develop desirable land because tax is payable on it whether or not it produces any income, so very few would leave land idle in such circumstances. The point about land being unimproved is important, because a person, say a farmer, who by his or her own efforts improves the fertility and ability to cultivate land shouldn't be penalised by increased taxes for applying those efforts, which benefit not just the farmer but the whole of society. The same applies for a developer who erects residential or commercial properties on the land. In all cases tax due is on land in its unimproved state, so land that has been improved is taxed at the same rate as land that hasn't. Applied in its most extreme form there would be no need for any other taxes.

This is what Churchill said in 1909 when championing the People's Budget⁵:

Roads are made, streets are made, services are improved, electric light turns night into day, water is brought from reservoirs a hundred miles off in the mountains - and all the while the landlord sits still. Every one of those improvements is effected by the labour and cost of other people and the taxpayers. To not one of those improvements does the land monopolist, as a land monopolist, contribute, and yet by every one of them the value of his land is enhanced. He renders no service to the community, he contributes nothing to the general welfare, he contributes nothing to the process from which his own enrichment is derived ... the unearned increment on the land is reaped by the land monopolist in exact proportion, not to the service, but to the disservice done.

As Churchill, Adam Smith and many others have pointed out; those who own land skim wealth from everyone else, without exertion or enterprise. They 'levy a toll upon all other forms of wealth and every form of industry'. A land value tax would recoup this toll.⁶ Nowadays however wealth takes many more forms than just land, so a land tax on its own would unfairly penalise owners of land compared to owners of other types of wealth. What is needed ideally is a wealth tax.⁷ This has been championed by many and perhaps most recently by Thomas Piketty (Piketty 2014 Chapter 15). Piketty points out the difficulties while there is free movement of capital, but with appropriate restrictions (see chapter 74) it becomes much more practicable. It ensures that tax is paid by those most able to bear it, and with this there is no need for any other tax. It should be the tax system that we progress towards in stages over several years.

Currently we have the perverse situation where wealth creating activities are taxed more heavily than non wealth-creating activities, and that's even without cheating. Even

⁴ https://en.wikipedia.org/wiki/Henry_George

⁵ https://en.wikipedia.org/wiki/People's_Budget

⁶ <https://www.theguardian.com/commentisfree/2013/jan/21/i-agree-with-churchill-shirkers-tax>

⁷ https://en.wikipedia.org/wiki/Wealth_tax

worse, when a graduate is repaying a loan, the marginal overall tax rate can approach 50% of a relatively low salary, yet a 50% rate for people earning more than £150,000 is resisted fiercely. Worse again is the overlap of work and benefits, where marginal rates of 80% are possible. Similar inconsistencies arise in VAT, pensions, housing and the environment. The most polluting transport fuels - cargo ship bunker fuels and commercial aviation fuels - are exempt from tax, which makes it cost effective to transport goods round the world when in many cases they can be produced locally, and to fly people round the world for unnecessary pleasure and business purposes. Even worse again is that excessive consumption beyond the planet's capacity isn't taxed at all (Murphy 2015 pp171-177). In short the current tax system is completely perverse.

97 Inequality: The Driving Force that Lies Behind it

The ambition of people to better themselves is a basic human characteristic. It drives us ever onwards as individuals and drives society forwards when we co-operate. However it also carries dangers in that an individual places much more emphasis on bettering him or herself than avoiding harm to others in the pursuit of that betterment. Therefore as well as encouraging people to better themselves society must take account of the harm that can be done and impose rules that prevent it as far as possible.

A major source of danger is that there is a strong positive feedback mechanism at work whereby those who improve their situation enhance their power to improve further. This is bargaining power, discussed in the Introduction and in the next chapter. Similarly a person who becomes disadvantaged has even less power so their situation soon deteriorates further, especially in the face of competition - which all transactions are - with the more powerful. This characteristic, along with wealth accretion and wealth extraction, drives inequality, which is the strong tendency for wealth to migrate to the already wealthy. Piketty analysed this tendency mathematically and named it the 'Fundamental Force for Divergence: $r > g$ '. Here 'r' is the annual return produced by all forms of wealth or money generating investments (referred to by Piketty as 'return to capital', where 'capital' in Piketty's terminology includes, for ease of analysis, all forms of wealth that generate a flow of income - capital goods, property, loanable funds, etc.), and g is the annual growth of the economy - which is the same as growth in national income. Piketty's evidence shows that the normal return to capital lies between 4% and 5%, and the normal economic growth rate for developed countries is between 1% and 1.5%, so there is a huge gap (Piketty 2014 Chapter 10).

If the return to capital exceeds economic growth then wealth accumulates to the already wealthy by virtue of the non-wealthy creating new wealth but the already wealthy becoming entitled to it.

While this is not immediately obvious it can be explained as follows:

The simplest way to explain it is by reasoning. If the share of national income going to the wealthy (holders of investments, here called capital) increases by a bigger factor than the increase in national income, then the share going to everyone else must increase by a smaller factor, and since the return to capital this year increases the stock of capital for next year, the share will be even more next year for the wealthy and even less for everyone else. Therefore the amount (as well as the share) of national income going to the wealthy gets bigger each year, and the same applies regardless of the factor increase in national income, which can be positive (income grows), zero (income remains constant) or negative (income shrinks). At any point in time, regardless of the rate of wealth creation, there is a given quantity of wealth in the world. The more that is owned by the few the more the many have to borrow it from them and pay for it in rent and interest. The rent and interest further add to the wealth and wealth entitlement of the few, and so

it goes on - and on - and on. This is what neoliberalism has given us. This is shown diagrammatically in figure 97.1 for mechanisms that create wealth. Similar outcomes occur for mechanisms that transfer wealth entitlement - i.e. lending and renting, and mechanisms that extract wealth.

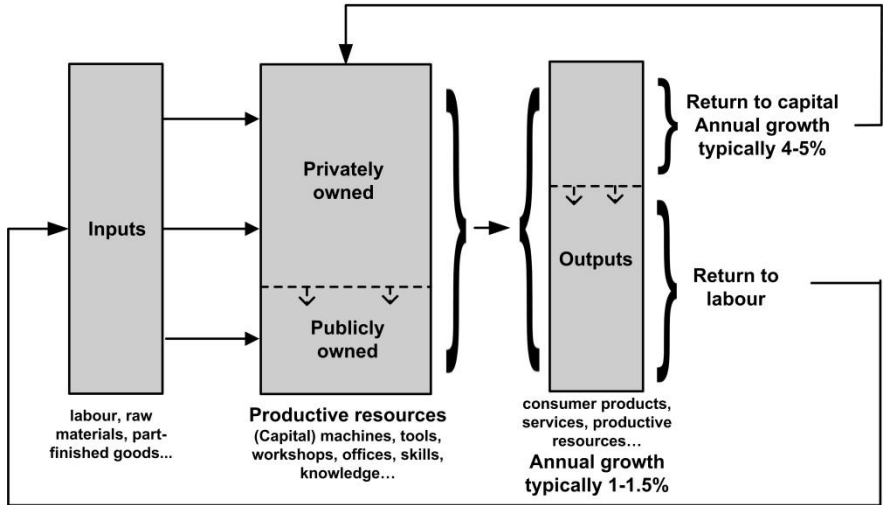


Figure 97.1: Return to capital growing faster than national income continually increases privately owned capital and therefore return to capital in future years

Have you ever played that wonderful board game 'Monopoly' and been lucky enough to find yourself with almost all the property? Whenever that's happened to me (not often) I don't want the game to stop because taking money from the others is so much fun. But the more money I have the less they have, so their ability to pay me rapidly diminishes and they start to go bankrupt. 'No, no, there's no need for that' I tell them, 'I'll lend you some money so you can stay in the game. You never know, you might even win!' So the game goes on a bit longer and soon I have all the money again, but now the other players seem to prefer a cup of tea and a chocolate biscuit instead of another loan. Monopoly is great fun but it's only a game. Sadly it works just the same way in real life, except that in real life borrowers must pay interest on money borrowed from those who own all the wealth and even worse, they can't stop the game. And the nice thing is (nice for the rich that is), the bigger the share of national income that they take the smaller the share that poorer people take so there is a continuing supply of people needing to borrow.

More rigorously we can deduce it mathematically. If the economy as a whole grows by factor g then national income (and therefore new wealth) has increased by that factor over what it was last year. Let's call last year's total income T , so that this year's total is $(1 + g)T$. At the same time the wealthy, without having to do any work, have increased their capital by factor r over what it was last year - assuming that all the return is spent acquiring new capital. Let's call last year's total capital C , so that this year's total is $(1 + r)C$. In other words the wealthy have taken rC from this year's growth in income gT , leaving $(gT - rC)$ for everyone else. *If the economy hadn't grown at all then the wealthy*

would still have taken rC from the national income, and the rest would have suffered a drop in income of the same amount. This year's capital wealth is $(1 + r)C$, and this year's total income is $(1 + g)T$, so the ratio of capital to total income this year is $(1 + r)C / (1 + g)T$, whereas last year it was C/T . Now if $r > g$ then $(1 + r) > (1 + g)$, so the ratio is bigger this year than last year - so a bigger share and therefore a bigger amount of national income has gone to the wealthy than it did last year, and as long as r remains greater than g both the share and the amount will continue to get bigger still every year - provided that the excess rC is used to buy additional capital rather than being spent on consumption.

Another feature of this process is that not only do the wealthy pull ahead of the non-wealthy, the very wealthy pull ahead of the wealthy, the very very wealthy pull ahead of the very wealthy, and so on all the way up the scale.

There are two reasons. Firstly those with most capital get the biggest return. Someone with twice the capital of someone else gets twice the return, so they can buy twice as much capital the following year and so on. Secondly, although the rate of growth of capital 'r' is the same for all capital, not all capital owners invest their income in capital at the same rate. Recall from chapter 20 that the higher a person's income the more they invest.

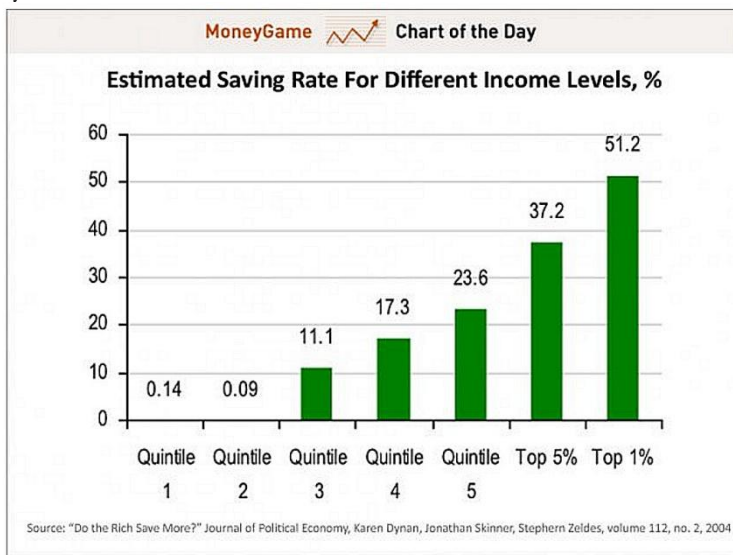


Figure 97.2: The extent to which people save (invest) more as they become richer. Copied from figure 20.5 in chapter 20. Reproduced from *Business Insider*, March 1 2013, 'Rich People Really Love To Save Their Money' by Sam Ro¹, taken from data published in the *Journal of Political Economy* Vol 112, No 2, 2004 (table 3 column 2), 'Do the Rich Save More?' by Karen Dynan, Jonathan Skinner and Stephen Zeldes²

The chart from that chapter is copied as figure 97.2. It is given in terms of income

¹ <http://www.businessinsider.com/chart-savings-rate-by-income-level-2013-3?IR=T>

² <https://www.dartmouth.edu/~jskinner/documents/DynanKEDoTheRich.pdf>

rather than capital, but at high levels of capital a person's income is closely related to capital because it is capital that delivers the bulk of their income. Therefore the amount of national income taken by those with the most capital grows fastest, so the more they pull away in terms of total wealth from everyone else, including all those who are wealthy but less wealthy than themselves.

Note that the above discussion doesn't take account of taxation. The more that tax is progressive (meaning that increasingly wealthy people pay more not just in amount but in proportion to their wealth) then the more redistribution there is of income from the wealthy to the non-wealthy and the slower the rise in inequality.

At first sight it appears that this process can continue indefinitely as long as the wealthy buy more capital with their increasing share each year, but it can't, because the return on capital is produced mainly by the non-wealthy, and their capacity to produce more and more is limited. When the stage is reached (not that it ever will be) when the non-wealthy are working for as long and as hard as they are able and returning all their surplus wealth and also their self-respect needs (see chapter 6) to the wealthy, keeping only their own survival needs, then they have become slaves and can produce no more. Also at that stage, only the wealthy can afford to buy all the outputs beyond the non-wealthy's survival needs, and they can't possibly use all that output.

A steady state with negligible overall growth existed for very many years before the industrial revolution, when land was by far the main factor of production, and the return on land remained steady at about 5% per year (Piketty 2014 Chapter 1). At that time, once all land apart from common land³ was owned, the steady state was maintained by the return on capital being spent by the landowners. Also in the steady state the non-wealthy were pushed to work as hard as they were able for as small a share of income as possible without damaging the capital return.

All the above discussion is based on aggregate effects and behaviours. In the real economy there is and always has been an almost infinite range of individual wealth, and an equal range of individual behaviours in terms of amounts spent on new capital and on consumption. Fortunes are gained and lost, poor people become wealthy and wealthy people become poor, and so on.

During and after the industrial revolution the scope for acquiring more capital grew immensely. Capital was no longer just or even mainly land, but encompassed all forms of industrial production. Initially people were attracted from the land because of much better pay in industry, but as they lost access to land they lost the ability to provide for themselves, and became dependent on industrial employment to survive. At the same time the population and therefore the workforce also grew significantly as more food was available from mechanised farming. Laws and regulations restricting employers' powers were very few, so exploitation of workers was rife and the income gap between rich and poor widened until the First World War, after which it began to narrow and continued to do so until 1980, after which it again began to widen - see figure 97.3. Income gap narrowing resulted from legislation that favoured workers, and widening resulted from the repealing of much of that legislation.

What we are seeing now is a transition state, where the higher share of national income that was gained by the non-wealthy up to 1980 is falling back again. On average

³ Common land was sold during the enclosures - see <https://en.wikipedia.org/wiki/Enclosure>

the economy remains in growth (that's if we accept GDP as representing growth and there are very good reasons for rejecting it - see chapter 27), but that can only continue as long as the falling share of income to the non-wealthy isn't translated into falling demand. This has so far been avoided by:

- i. people working longer hours to compensate for less pay in order to maintain standards of living;
- ii. both partners in a household working (long gone are the days when a single breadwinner could feed and house an entire family, now even some families with both partners in paid work depend on food banks and benefits);
- iii. increasing levels of private debt as access to credit became easier - credit cards, 'easy terms' purchase finance, and online personal loans⁴; and
- iv. developments in technology and production techniques.

Clearly there is a limit to how far measures other than developments in technology and production techniques can maintain growth in the face of falling incomes, and when that limit is reached, as discussed earlier, growth will fall back and a stable state will be re-established with the rich and non-rich as sharply divided as they were before the First World War.

One of the hardest and often overlooked things about poverty is not being able to give to others, especially to children at Christmas and on their birthdays. Children don't understand why they can't have the things they see other children enjoying and that often tempts poor people into high levels of debt and why payday lending is so profitable.

Increasing inequality has reached a level where workers are stressed, exhausted, and chronically short of both time and money so they have no spare mental capacity to question the system they are trapped in.

In the same way that rich people take wealth from all bands of poorer people, rich businesses take wealth from all bands of poorer businesses by the same wealth attraction process. In the case of businesses it manifests as economies of scale that stifle competition - see chapter 75.

The cost of inequality is human misery on an appalling scale - anxiety, stress, ill health and all that go with them - inflicted on those who struggle and often fail to make ends meet. But those costs don't appear on any company balance sheet, though their effects appear all too visibly on the NHS balance sheet.⁵

Figures 97.3 and 97.4 show the incomes of the top 1% and bottom 99% since 1915.

⁴ Debt take-up was interrupted after the crash of 2008 as people paid down debt in fear of the future, but it is picking up again from 2014 - see chart A27 in

<http://www.bankofengland.co.uk/publications/Documents/fsr/2016/fsr16nov5.ppt>

⁵ See <http://inequality.org/inequality-health/>

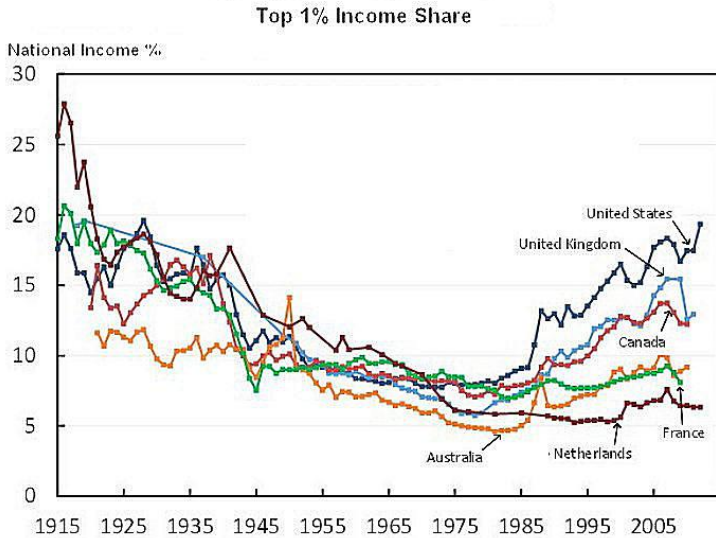


Figure 97.3 (repeated from chapter 20): Source *World Top Incomes Database*, Council of Economic Advisers (CEA) within the Executive Office of the President of the United States. Retrieved from http://www.policy-network.net/pno_detail.aspx?ID=4691&title=Global+lessons+on+inclusive+growth

We have reached the stage now where the annual income of the richest 100 people is enough to end global poverty four times over⁶, the richest 62 people own the same wealth as the poorest half of the world's population, and the richest 1% owns more wealth than the remaining 99%.⁷

⁶ <https://www.oxfam.org/en/pressroom/pressreleases/2013-01-19/annual-income-richest-100-people-enough-end-global-poverty-four>

⁷ <https://www.theguardian.com/business/2016/jan/18/richest-62-billionaires-wealthy-half-world-population-combined> and https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp210-economy-one-percent-tax-havens-180116-en_o.pdf

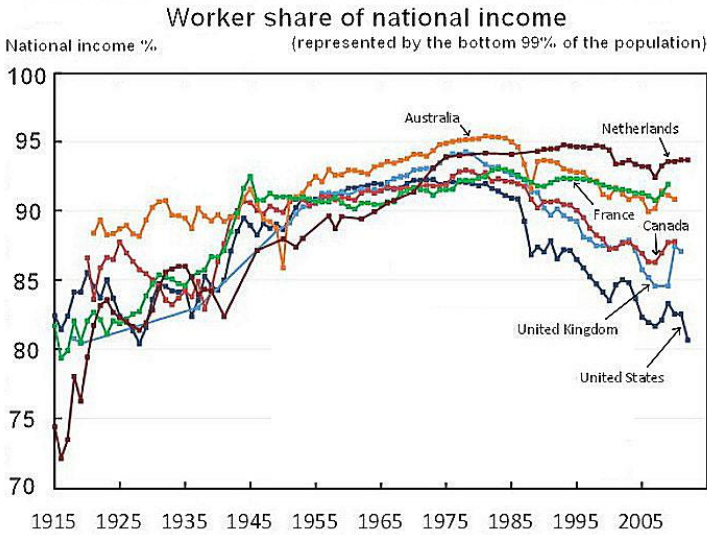


Figure 97.4 (repeated from chapter 20): derived from the above for bottom 99%

The following table, taken from the Guardian article referenced above, shows the growth in inequality in terms of how the number of people owning the same amount of wealth as the poorest half of the population has dropped since 2010.

2010	388
2011	177
2012	159
2013	92
2014	80
2015	62

Table 97.1

The impact of inequality is far wider than commonly understood. It is to be expected that richer people do better than poorer people, but in a country where there is wide inequality *everyone* suffers in terms of health and social problems. Richard Wilkinson and Kate Pickett have carried out very extensive research and documented it in their book 'The Spirit Level' (Wilkinson and Pickett 2009).

In summary, in more unequal countries (and more unequal states in the US), they find:

- more mental illness;
- higher infant mortality rates;
- more homicides;
- higher imprisonment rates;
- higher teenage birth rates;

- lower social mobility;
- less trust;
- more drug dependency and alcoholism;
- lower life expectancy;
- more obesity;
- lower educational scores;

They further show that neither health nor social problems are related to national income per head, so the same differences are seen in countries with similar levels of inequality regardless of absolute levels of national income.

Figure 97.5 summarises the findings, showing clearly the difference between more unequal countries (UK, US and Portugal) and more equal countries (Japan and Scandinavian countries).

Health and social problems are worse in more unequal countries

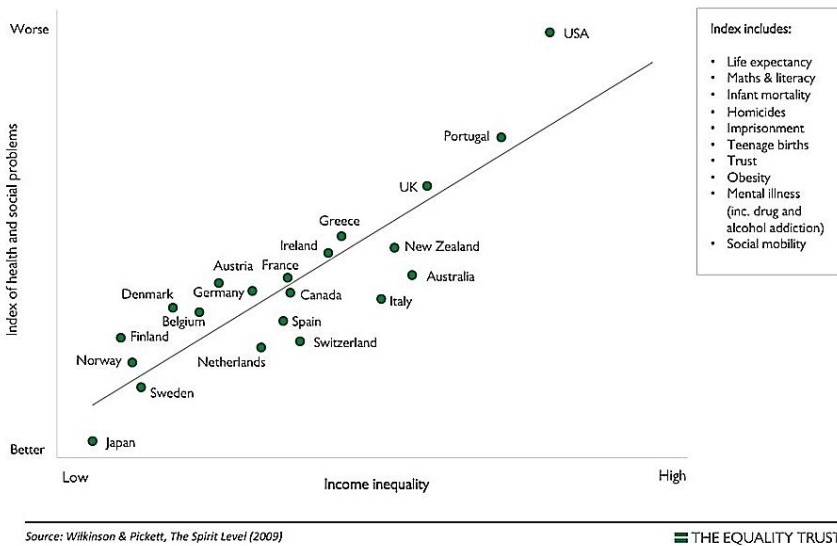


Figure 97.5: A combined index of health and social problems vs inequality. Source: The Equality Trust website - *Spirit Level Slides* - at <https://www.equalitytrust.org.uk/about-inequality/spirit-level>

Inequality has reached such a pitch that even in the US those in extreme poverty - living on \$2 per day or less - has doubled since 1996. Stiglitz is very blunt about it:

An increasingly large number of Americans can barely meet the necessities of life. These individuals are said to be in poverty. The fraction of those in poverty was 15.1 percent in 2010, up from 12.5 percent in 2007. And our discussion above should have made clear how low the standard of living is of those at that threshold. At the very bottom, by 2011 the number of American families in *extreme poverty*-

living on two dollars a day per person or less, the measure of poverty used by the World Bank for developing countries-had doubled since 1996, to 1.5 billion. The "poverty gap," which is the percentage by which the mean income of a country's poor falls below the official poverty line, is another telling statistic. At 37 percent, the United States is one of the worst-ranking countries in the Organization for Economic Cooperation and Development (OECD), the "club" of the more developed countries, in the same league as Spain (40 percent), Mexico (38.5 percent), and Korea (36.6 percent). (Stiglitz 2012 Chapter 1)

The UK seems to be no better. In April 2016 a Joseph Rowntree Foundation study⁸ found that 1.25 million people, including over 300,000 children, are destitute, destitution being the most severe form of poverty when a person can't afford the basic essentials they need to eat, keep clean and stay warm and dry.

⁸ <https://www.jrf.org.uk/press/destitute-uk>

98 How the Wealthy Deploy their Formidable Bargaining Power

From 1980 onwards the wealthy have been able to capture an increasing share of national income, and the non-wealthy have suffered greatly from their decreasing share. The broad mechanisms have already been discussed but the ways in which bargaining power is deployed are set out in great detail in Robert Reich's book 'Saving Capitalism: For the Many, Not the Few' (Reich 2016). In summary - *a summary can't possibly do justice to the comprehensive and well-argued case that he sets out, I strongly recommend reading it in full* - he examines the rules that govern economic transactions and shows how:

Bit by bit but with devastating cumulative effect wealthy interests have enhanced their control over the world economy for their own benefit, including manoeuvring governments into changing rules to favour those interests at the expense of everyone else.

This is rent-seeking¹. To cite a few examples:

- intense lobbying by corporations, backed by massive funding, ensure that theirs are the loudest voices heard by government; Who funds lobbying for the poor and disadvantaged? Do they not deserve to be heard?
- generous campaign funding for favourably disposed politicians and promises of future lucrative jobs to encourage support from those in authority, especially government officials and senior regulators;
- strong backing for government action in: (i) changing tax law to favour unearned income over earned income; (ii) reducing funding for enforcement agencies and levying light penalties for infringement; (iii) weakening employee rights and strengthening employer rights; (iv) minimising the welfare state to keep workers insecure so they won't dare complain at harsh conditions; (v) bailing out banks during crises and quantitative easing to maintain the status quo and to give the already rich substantial windfall gains;
- multinationals threatening to move their business elsewhere thereby manoeuvring governments into allowing taxation and regulation regimes that are favourable to their interests - promoting the 'race to the bottom';
- negotiating with authorities in secret meetings to promote decisions that favour wealth power on matters that have significant public impact e.g.

¹ <https://en.wikipedia.org/wiki/Rent-seeking>

intellectual property rights;

- funding biased (but posing as independent) experts to offer advice to news media and decision makers that favours wealth interests;
- outsourcing of labour to poor countries, both to reduce costs and to keep domestic workers pliant;
- reducing (in real terms) hourly rates for workers, especially low paid workers;
- having access to armies of skilled lawyers to protect wealth power against real or potential threats from those without the means to mount effective challenges;
- coercing employees into accepting contract terms that prevent access to litigation;
- media barons failing to report measures taken by wealth power to enhance its share of national income and focusing on stories that divert public indignation onto things with much less economic impact such as cheating on benefits; and many more.

Wealth power doesn't want a free market, it wants a rigged market, and it is getting it.²

Reich's book is based on the current US situation but the UK is similar.

These things are manifestations of the use of bargaining power by the unscrupulous wealthy to further their wealth and power - the freedom conflict once again. It confers control over corporations, media, local and national government. All elected representatives now have to court wealth, and seem to accept that it must be that way. This is how democracy has been undermined.

The fact that wealth power sets the rules means it is able to extract more and more wealth from ordinary people, not only in the banking and financial trading sectors (see Part 2), but in all other sectors where wealth power is involved, which is everywhere.

The net effect is that ordinary people create the wealth but the wealthy are the ones entitled to an ever increasing share of it.

A very enlightening and disturbing talk by James B Glattfelder entitled 'Who controls the World?'³ shows how heavily networked the world is in terms of interlinked businesses and their owners. The network analysis he describes focuses on multinational corporations (he calls them transnational corporations - TNCs) because as has been seen in chapter 75 these corporations effectively control the world. His analysis reveals that only 737 people control 80% of the value of all multinational companies, and of those 146 control 40% of that value. That represents a staggering concentration of power in the world, all by unelected people whose only accountability is to themselves.

² <http://www.advisor.ca/news/economic/the-markets-rigged-says-former-top-u-s-official-191280>

³ <https://www.youtube.com/watch?v=NgbqXsA6zQs>

Not only is it profoundly unjust that so few people control the economy and everyone's lives along with it, it is also very dangerous. There can be no security when control over the earth's resources and its future are directed to serve the interests of a tiny minority.

However, having said all that, it would be too easy to blame the wealthy for using their wealth and power to further their own interests, they are only doing what everyone does when they are presented with opportunities to do so. It is human nature to better oneself regardless of where one sits in the wealth hierarchy and regardless of harm to others.

It is the responsibility of governments to serve the whole of society, and not favour the interests of small sectors of society at the expense of the rest. Whether they realise it or not, by doing so they have surrendered democracy. Governments have the power to retake control and re-establish democracy, but so far they have lacked the will and perhaps also the courage to do so.

See Murphy 2011 'The Courageous State: Rethinking Economics, Society and the Role of Government', especially Part 3.

99 *Wealth as an Inappropriate Measure of Success*

It was argued in chapter 9 that one of the big drivers for wealth accumulation is the psychological need for security, wherever one sits in the wealth hierarchy. But as discussed, that need is a moving target; however much we have we still want more because we believe that with more we shall feel secure. Therefore that provides no reason for high absolute levels of wealth.

Another major driver is success, which today is largely measured in terms of accumulated wealth. Wealth allows success to be widely recognised. Listen to how most very wealthy people talk about themselves and it very soon becomes evident that it is success that matters far more to them than wealth for its own sake. Certainly the very wealthy enjoy the trappings of wealth - palatial mansions, fast cars, yachts, jets and so on - but I suggest that for them what is much more important is that these things are the very visible trappings of success.

However success is always measured in relation to other people, so relative wealth and incomes are far more important than absolute levels of wealth and incomes. There is no need therefore for so much wealth and income to accrue to the already wealthy for them to have what they really want - visible success.¹ Hence this too provides no reason for high absolute levels of wealth.

What is needed is for success - real success - to be measured and recognised in terms of what individuals have done for others. When people are asked to write their own epitaphs they rarely seek to emphasise what they have taken from the world, preferring instead to emphasise what they have given to the world - to show how the world is a better place for their having lived - because that is the true measure of a person's worth. I suggest that along with society returning excess unearned income to itself by taxation it also recognises publicly the service that those paying the tax have done in benefiting society. A useful measure might be the value in terms of consumed wealth of a year of an average person's life in the country in which tax is paid. A certificate could record the number of such years or fractions of a year bought by a taxpayer each year, as an indication of the good that has been done for others. These would mount up as the years passed, with perhaps bronze, silver and gold medals awarded for very significant levels of social benefit. People might well come to see tax as something to celebrate, perhaps even paying more than strictly necessary - *that was a tongue-in-cheek suggestion but you never know!*

Success matters far more to wealthy people than wealth, so society should recognise - publicly - that serving the public good is the highest form of personal success.

¹ <http://www.telegraph.co.uk/news/science/science-news/3315638/Relative-wealth-makes-you-happier.html>

The NHS Blood and Transplant Service works because people are naturally public spirited. Blood donors aren't paid (*though the tea and biscuit - two if you're cheeky - are always welcome*). They see it as a very worthwhile public service, and a certificate is given for each donation as a small token of that service. That's how taxation should and could be regarded, and it is no less lifeblood to those whose lives depend on it.

100 A Manifesto for a Kind World

Well, our exploration has taken us far and wide, and much of the journey has been very uncomfortable. Are you still on the bus? I hope so.

What have we learned? I believe that we've learned a great deal, certainly enough to draw an outline for a better, fairer and sustainable world. My aim throughout has been to show how the current economic system works, how it misleads us into serving the interests of the unscrupulous wealthy while telling us that we are helping ourselves. We really can't continue as we are, though wealth power is doing all it can to have us do exactly that. We are driving towards catastrophe, the only questions are when and how it will unfold. We managed to take some of the sting out of the 2008 financial crisis, but the next one is building as we speak, and it's unlikely that we'll have the means to take much if any of the sting out of that one. That isn't even the worst of it. We are continuing to abuse the environment. So far it has been a faithful and protective servant, but if we haven't already reached the limits of its capacity we are very close, and when we do it will turn on us to become a ferocious and merciless master.

I believe that our only hope lies in widespread understanding of what is happening and why. We are riding on a runaway train and the vast majority of us don't understand how it works. Those whose hands are at the controls believe that we should go faster; we must remove them before they kill us all. While we remain in ignorance we have no hope.

What follows are some proposals set out in the style of a manifesto, reflecting my own and others' ideas and hopes. Implementing them won't be straightforward of course, the law of unintended consequences can be relied upon to kick in and do its best to scupper any new initiatives, so constant vigilance and a readiness to make changes when necessary will be required.

100.1 Members of a civilised society deserve good governance

The first requirement is for society to be free to elect its own agent - the government, and for that agent to be accountable to the society that it serves. All means by which wealth power is able to influence government as set out in chapter 98 will be removed. The government will listen to all in society with a legitimate reason to talk to government, and the reason will determine the attention that is given, not wealth. All such conversations will be recorded and made publicly available, as will the reason for the degree of attention that is deemed appropriate by government.

Civilisation must be genuinely democratic, so government's hands must not be tied. Therefore capital controls will be re-established because free capital movement completely undermines government authority as was shown in chapter 74. This will be done unilaterally initially, but the UK will use its influence to persuade other countries of

its benefits, and will encourage the setting up of an updated Keynes' ICU as discussed in chapter 76 section 76.1 - to establish what Bretton Woods should have established, but failed because Keynes was overruled.

Government will use its power to regulate markets as discussed in chapter 30, and establish freedom thresholds that prevent private interests from taking control. The state will make provision for all society's needs that the market is incapable of meeting.

However, this degree of regulation and state control carries with it an increased likelihood of corruption, abuse of power, complacency and inefficiency. There are bodies and mechanisms already in place to limit these dangers but they are somewhat fragmented and uncoordinated, so a possible way forward might be a Department for Probity, Efficiency and Good Management. It will be proactive in overseeing all state functions and reactive in hearing complaints from anyone with a grievance. It will have appropriate powers to intervene where necessary. All in authority will be required to justify and document all important decisions and judgements, and that documentation will be available publicly and open to challenge, or if personal confidentiality is required then available at least to those affected. Transparency and accountability are the enemies of all forms of misuse of power. Anyone in authority found guilty of any kind of abuse of their position will face very stiff penalties.

100.2 Members of a civilised society deserve security

Once free of external constraints the government will be free to deal with the needs of society, and perhaps the most basic need is for security. Everyone strives for security, and that striving is what motivates much of what people do. People also run businesses, and much of what they do in business has exactly the same motivation. The private business world is very competitive, cut-throat even. It is a very raw, harsh, merciless, dangerous place to live, and security is bought by being the biggest, or the strongest, or the smartest, or the most ruthless. Much of what private business does has been severely criticised in this book and elsewhere, but let's recognise the unpalatable fact that *private businesses have to behave this way in order to survive*. Everything that private business does is devoted to the single aim of making money, because money means security, and more money means more security. Regardless of what businesses say, treating customers pleasantly isn't motivated by pleasantness, it makes more money. Being cruel to competitors isn't motivated by cruelty, it makes more money. Creating high quality goods and services isn't motivated by a passion for quality; it makes more money, and so on. We shouldn't blame private businesses for any of their business practices any more than we should blame a cat for killing a bird. It's the world they live in and it's what they do. The private business world is very much like the natural world, where the fittest live and the rest die - and they die in enormous numbers.¹ Security for one's own business is usually enhanced by the insecurity of competing businesses, so no business regrets a competing business shutting down, indeed it is a cause for celebration. In business there really is no room for sentiment.

Having recognised and acknowledged all that we can also recognise that we don't

¹ The UK average before the 2008 crash was about 13,000 business failure per year, rising to over 15,000 afterwards - https://en.wikipedia.org/wiki/United_Kingdom_insolvency_law

want the rest of the world to be like the private business world, however much neoliberals try to persuade us that the private business world is the perfect world.

So let's recognise that in a civilised society all people are entitled to security, and let's recognise too that only society itself in the form of the state can provide it.

The security that people crave is the ability to have their needs met when they don't have the means to pay for them.

The state will end unemployment by providing employment to anyone of working age who is able to work but not already employed. Here 'already employed' means carrying out work that is socially useful whether currently paid or not, such as caring for someone, bringing up children, working as a volunteer in a field that has social benefit, or undertaking some other activity that benefits society. Work provided by the state will include all those things and others that are socially useful such as all forms of social need investment; improvement of public spaces; providing assistance to public bodies where they need it; supporting the upbringing of children - see section 100.3; providing respite care for family carers; patrolling streets and public areas to deter and report criminal and anti-social behaviour; work that helps counter environmental risks; providing information and advice; running courses in anything of educational value or interest; doing odd jobs, shopping, cleaning and helping around the house for those unable to do things for themselves; befriending the lonely; supporting people who want to start their own businesses; and staffing properly all the current public services that are chronically under-resourced. It will utilise where possible any skills that the person already has and provide additional training where new skills can be used to benefit society. Anyone able to work but in any way disabled will have employment that is suited to their abilities. Anyone unable to work full time or during normal working hours will be required to work only when they can. The scope is vast. There is so much that needs to be done and so many people willing and able to do it, but they are prevented by the prevailing unfettered market philosophy that thinks it can do everything and make a profit, whereas in reality market participants have no interest in these sorts of things - nor can they afford to have, they have troubles enough of their own. The type and extent of work will be suited to the capabilities of the individuals concerned.

Unemployed people have to spend their time doing *something*. How much better is it that they should spend that time doing something of benefit to others than not?

It will give those formerly unemployed the self-respect that comes from carrying out a useful function, they will develop a sense of pride in their community, and communities where at present hardly anyone has a job and where crime and drug dealing thrive will become a thing of the past. Above all it will avoid the unforgivable waste of so many people not working when there is so much work that needs to be done. In providing employment businesses require a specific business benefit and an instant or early profit for the work done, so there's a big hurdle to jump - employer benefit must exceed employment cost. Work for society on the other hand has widely defined benefits, it only needs to provide a socially useful function and profit doesn't come into it. Unemployment represents a waste of useful resources coupled with support payments from society, so provision of any form of socially beneficial work eliminates that waste

and gives society a return for its payments - there is no hurdle.

The current excuse for benefit and welfare cuts - that it forces people back to work, is given without any corresponding offer of appropriate work, and bedroom taxes to force people out of what is claimed to be inappropriate accommodation are applied without any alternative accommodation being made available. The government approach seems to be: 'here's a new problem for you to solve, but you'll get little help from us in solving it, and if you can't solve it then you and your children will suffer very severe hardship, possibly losing your home and your family being forcibly split up, with all the heartache and anguish that it causes for all of you.' How deeply unjust is that? The reality of the situation was portrayed in Ken Loach's moving film 'I Daniel Blake'.² Anyone watching that would surely feel deep frustration and anger at such an inhuman system. Social security was intended to help those down on their luck, not to be withheld as a punishment for desperately poor people who miss an appointment - even when their missing it is unavoidable. This is the common practice of sanctioning³, and is no less than state-imposed cruelty.

Charities that work to save lives - human or animal, or carry out life-saving research, or have any objective associated with human or animal welfare, will be absorbed into state employment as above and funded sufficiently to achieve the objectives required. Overseas charities are discussed below in section 100.10. All these things will no longer have to depend on philanthropy. There will still be charitable status for non-profit organisations promoting such things as culture, heritage, sports and recreation, and other special interest groups and activities.

A basic state income equivalent to the living wage will also be provided, payable at the rates recommended by the Joseph Rowntree Foundation⁴, to all people in work as well as those not able to work or over retirement age. Existing private employment income may be reduced to take account of it, thereby helping businesses.⁵ State employment for skilled, arduous or otherwise unattractive work will attract additional payments. Those with disabilities who have additional needs will have those needs met. The only ones denied the basic income will be those able to work and not already doing something useful, and who either refuse to do so without good reason or who already have sufficient income without having to work. Those without sufficient income will be paid enough (or have an existing income made up) to cover their survival and basic self-respect needs, but significantly less than others who are willing to do useful work.

By these means all will have financial security and be free from the worry of making ends meet or making adequate provision for children. No-one need rely on food banks

² <https://www.theguardian.com/commentisfree/2016/oct/22/i-am-daniel-blake-millions-like-me-jack-monroe-ken-loach>

³ <http://www.npi.org.uk/publications/social-security-and-welfare-reform/rise-sanctioning-great-britain/>

⁴ <https://www.jrf.org.uk/report/minimum-income-standard-uk-2015>

⁵ Businesses paying minimum wages might expect to employ people free of charge, but that won't be the case. Most such jobs are stressful or unpleasant in other ways, so to prevent staff from walking out they will have to offer better terms, conditions and pay, and those improvements represent a significant social benefit and should be easily affordable from the savings.

or be driven into the hands of loan sharks or payday lenders, who will hopefully very soon become extinct - and good riddance. It will allow people who are prepared to do unpleasant jobs in private industry to be paid at a higher rate, because they will no longer have to accept whatever work is available at whatever pay just because they are desperate and lack the skills to be offered better jobs. A knock-on effect will be that employers will have to improve working conditions wherever possible in order to attract staff, whereas when they don't need to they often don't bother. They will have the means to do so from the savings made from the state paying every working person the living wage. It will allow all existing benefits and the state pension to be scrapped.

In such a civilisation there will be less need for debt, but it will still be required, especially for business start-ups and expansion, so measures will be introduced to mitigate the potentially damaging effects that debts can have as discussed in chapter 53 section 53.2.

These measures will also help businesses, because they can remain free from legislation that many wish to see in place to hinder them from ridding themselves of unsuitable staff. The usual approach is to make businesses carry the responsibility of providing job security, but that can often impose a very unfair burden as it is impossible to assess someone effectively on the basis of a suitability assessment however thorough it tries to be. In the new system everyone will have job security. Also businesses don't want to create jobs, they much prefer to shed jobs - as discussed in chapter 20 - because jobs represent the biggest business cost and employees are often troublesome. They want to expand production of course where demand warrants it, but not by creating jobs except as a last resort. With continuing advances in automation the situation is made even worse, so while we continue to depend on private employers to provide jobs they will become ever scarcer and people ever more desperate.

Why do employers prefer automation to employment when there is a choice? Because taking on staff represents a considerable gamble. A good, responsible employee who works hard in the interests of the business, who strives to understand the business in detail, who is resourceful and has enough common sense to recognise what needs doing and does it, who identifies problems and brings them to management's attention along with well thought-out solutions and action plans to fix them, is an absolute delight. But for every one of them there are ten mediocre ones with no initiative and little common sense (*as my old boss used to say 'sadly common sense is a good deal less common than we'd like it to be'*), and two or three that work against the business by such things as sheer laziness; carelessness; frequent unwarranted absenteeism - usually at the very worst time for the business; bypassing of safety procedures; failing to follow instructions; undermining of authority; or theft. Employees spend too much time talking; they go off sick at the worst times; they are always complaining; they are never satisfied; their work is inconsistent; they allow domestic problems to distract them; they stop work when problems arise that they could easily solve for themselves; they're forgetful; they're touchy; they won't accept instructions or advice; they don't learn, even from their own mistakes; they waste time; they need toilet breaks, cigarette breaks, tea breaks, lunch breaks, holidays, maternity and paternity leave; they can only work a limited number of hours at a stretch; they do the things that interest them rather than things that need doing; they cover up or blame others for mistakes; and so on. Not only that, they are very expensive. *All this is a gross exaggeration of course but you will recognise a lot of truth in*

it. If the state makes it difficult for a business to rid itself of poor staff then it suffers the double blow of having to pay wages and needing a job done that isn't being done properly. Jobs are bad news for a business, and with good reason. Poor staff can and do finish businesses that with good staff would be successful.

Businesses face massive risks as has already been discussed, so they need an accommodating environment as possible and the state will do all it can to provide it. Businesses need security just as individuals do, and security for a business is provided not only by easy hiring and firing but also by forgiving insolvency laws - we shall be kind to people who fail in business because we depend on their trying to succeed.

Financial protection for individuals is a social requirement so society will provide it. When employees are dismissed there will be transitional arrangements to provide for the period between jobs, during which their former pay will decline progressively to the level of pay for their new job - which there will always be because the state will provide it if no-one else will. Similarly major commitments such as mortgages and rents will also include provision for state assistance during temporary periods between jobs or sickness.

Wealth whose creation threatens sustainability will have its production processes changed for processes that are sustainable. Where wealth created is purely for indulgences then it will be cut back considerably but not eliminated, because people need to have some recreation and enjoyment, they make life worthwhile. Efficient indulgences - those that give a lot of pleasure for little productive wealth use - will remain, whereas inefficient indulgences - extravagant indulgences that society can't afford - will go. This will require very substantial investment in sustainable production and more efficient recycling of limited resources, and the wealth that these new processes create will be more expensive than before. Expensive that is to suppliers and buyers - the environmental benefits will of course greatly outweigh the costs - see chapter 7.

A country such as the UK, which is heavily dependent on imported products, will do all it can to become as self-sufficient as possible in the basic needs of the population, or have contingency plans and facilities in place ready to deploy at relatively short notice. This is to build national security for the forthcoming political unrest as resources become increasingly scarce and climate change becomes an unarguable and terrifying fact of life. This is at least as important as national defence. In the circumstances that seem increasingly inevitable it is bad policy to depend for essentials on foreign supply. At best we shall only ever be second in the queue if the worst happens - other countries will and indeed should always put their own populations first. This isn't to say that we shall discourage international trade, quite the opposite in fact. We shall continue to trade with other countries, it is just that we shall minimise our dependence on other countries to supply our needs. In the same vein we shall cut our foreign investments and cut foreign investments in the UK as detailed in the last part of chapter 68.

100.3 Members of a civilised society deserve a good start in life

We shall recognise that children and young people are our only hope for the future, and that a good future depends on their becoming fully co-operating and contributing members of society. They are at least as important to society as they are to their parents, so society will provide for their needs. Physical needs will be provided by appropriate allowances as mentioned above, and educational needs will be provided free of charge

and to the highest standards by the state, including all socially useful subjects, both vocational and academic. University tuition fees will be scrapped along with all private ownership of or involvement in national educational facilities. Private education won't in itself be outlawed, but will be required to provide all the same benefits as public education, including the absence of tuition fees. It seems doubtful that there will be any willingness to provide it in these circumstances.

The state will monitor and oversee the care of all children, especially when very young, to ensure that they receive the love, attention and direction that they need in order to develop into caring and responsible adults. This will be regarded as intrusive by many, but care of the young is too important to take any chances with. There have been too many deeply harrowing cases of children neglected, hurt and even killed by their carers; and all too frequent cases where gangs of children deeply hostile to society and its values roam the streets, causing damage on a massive scale. These things have to stop. It will be done in a way that is helpful and supportive rather than judgemental, by compassionate people who are skilled in forming bonds of friendship with both children and carers, and who will come to be seen by them as friends. They will be knowledgeable about all forms of help, advice and support that are available, including matters of health and any special needs. They will be able to arrange respite care for family carers who are hard-pressed or suffering from stress.

Children are the voiceless and vote-less losers in a society where their primary carers work long hours to scratch a basic standard of living for their families from whatever is left after the demands of rentiers are met, because rentier demands always have priority over all else. Some working carers must choose between food for themselves and food for their children, and in these tragic cases go hungry much of the time. A healthy society needs all its members to look back on their childhood with love and happiness, not with memories of anxiety they couldn't understand and short-tempered carers they were powerless to placate. A good civilisation will value and nurture its children.

All children will have the same opportunities for development and learning, regardless of background, and education will include life skills such as interacting co-operatively with others; dealing with emotions; resolving differences; managing money; caring for babies and young children; caring for pets; enjoying and preserving nature; summoning help in emergencies; applying first aid; and so on, as well as traditional academic and vocational subjects. Importantly children will be taught how to reason and how to evaluate objectively their own opinions and those of others. Very surprisingly education currently neglects these vital skills, yet the ability to use one's own mind as an analytical tool is one of the greatest of human attributes.

100.4 Members of a civilised society deserve good healthcare

The National Health Service will be staffed and funded so as to be fully effective, and will be supported by associated facilities such as convalescent and care homes, all provided by the state.

All members of society are entitled to good quality healthcare without wealth discrimination, so private provision will be scrapped.

The fact that people are living longer is generally regarded as a problem in that more require healthcare, but a longer life means the ability to create more wealth, and part of

that wealth buys healthcare and old-age care.

100.5 Members of a civilised society deserve reliable money

The state will take upon itself the responsibility for creating money. The way it will work and the means to migrate to it have been set out very clearly by Positive Money⁶, and they are summarised in chapter 55. Although this might sound outlandish there have been and still are many highly respected and prominent economists who were and are in favour.⁷ In particular Martin Wolf⁸ discusses the issue very supportively in his book (Wolf 2014 pp209-213). Importantly the government will not create money itself, but will delegate the responsibility to the BoE which will set up a new Money Creation Committee for the purpose, with its terms of reference set by government and agreed by parliament based on the committee's expert judgement of the needs of the economy at the time. New money created in this way will be handed to the government to spend in the economy. By these means inflation will be brought under very much tighter control and the business cycle will be much less volatile. Financial crises will be a thing of the past for the general public. Speculators and lenders/borrowers will in all probability still get into serious trouble as they always have done, but now they will be on their own, they can no longer rely on society to bail them out because the normal functioning of society will be insulated from their activities.

In emergencies or when major long-term state investment is required the government will be able to borrow money without interest from the BoE, which will create the additional money as required to be paid back later either from taxation or by the BoE deducting it from the money they would ordinarily create on an ongoing basis. The same will apply for day to day variations in government money requirements.

If it is necessary to take money out of the economy the BoE can stop creating new money temporarily or the government can spend less than it raises from taxation, or if a lot of money needs to be taken out at short notice (though it's hard to see why this should happen with the new system in place) the BoE will have the power to issue bonds with the right to buy them back at any time.

Serious consideration will be given to dispensing with cash⁹ because cash transactions are at the root of a great deal of crime and tax evasion. There is little need for cash now that electronic transactions are so easy, but there are arguments both for and against it. Better control of and information about transactions makes crime and terrorism much more difficult - to my mind these are by far the stronger arguments, but state knowledge of people's transactions carries the danger of abuse.

All organisations involved in managing money, whether public or private, will operate transparently to strictly defined criteria and all personnel will be fully accountable for their decisions and judgements. This is necessary because fraud is so

⁶ See Jackson and Dyson 2012 and also <http://positivemoney.org/our-proposals/>

⁷ See <http://positivemoney.org/2016/12/sovereign-money-an-introduction/>

⁸ Chief economics commentator at the Financial Times, London. He was awarded the CBE in 2000 for services to financial journalism.

⁹ https://en.wikipedia.org/wiki/Cashless_society

lucrative, so it must be correspondingly hard to commit without detection.

Commercial banks will no longer enjoy the enormously profitable privilege of creating money, which at present gives them so much power. They will still be able to lend money, but it will be pre-existing state money that they lend, like other lenders without banking licences do now. Importantly they will be prevented from allowing more than one person access to the same money, which is the original fraud committed by early goldsmiths on which all modern banking is based - see chapter 39. If lending for business purposes turns out to be too restricted in the new system then the BoE can lend money to commercial banks to lend on to businesses whose function is approved as having social value. They will be prohibited from using this money for other forms of lending.

Many object to these proposals by claiming that banks will merely create other financial instruments that are as good as money, known as 'near-monies' (based on debts), which behave just like money, and therefore bypass state money. All such near-monies are contracts, and it is always possible that the counterparty (the person or organisation that must honour the contract) will default. Indeed it should be clear to all after the 2008 crash that 'near-money' only deserves its name while the economy is functioning normally. As soon as there is a downturn then its true character quickly reveals itself. It isn't nearly money at all, and in the case of CDOs and MBSs it became practically worthless - due to counterparty default or merely the fear of default. In a downturn the only thing that is as good as money is money itself.¹⁰ Money is unique in an economy in that its value is guaranteed by the state. Currently bank money is in effect guaranteed by the state - a completely unjustifiable burden on society - so bank money is as good as state money (notes and coins). In the new civilisation the state won't guarantee the value of anything other than state money and state debts. Banks can create whatever they like, and people can buy and sell them just as they wish, but come the downturn (not this time in the whole economy but in terms of confidence in banks' financial instruments), then those left holding them will lose their money, and banks might well go bankrupt, but society as a whole won't be affected

The national debt will be reduced as far as is deemed prudent by not rolling over maturing bonds. It could be eliminated completely but there will very likely need to be some remaining so that investors who prefer to hold government bonds can still do so. These bonds are valued because of their security and guaranteed interest payments - especially by pension funds - though there will be less need for pension funds because all private pensions will be in addition to the basic state income which provides the base level of security that people require. However the reformed tax system will ensure that those who don't benefit from the national debt don't pay towards it either, otherwise it transfers wealth entitlement from poor to rich as it does now.

100.6 Members of a civilised society deserve fair taxation

All revenue needed to run civilisation in addition to newly created money will be collected by taxation as discussed in chapter 96. The system will be simple, fair, and

¹⁰ Short-dated government bonds are normally as liquid as money, but just like money their liquidity comes from the state guarantee. Banks aren't able to create them.

transparency will ensure that it is seen to be fair. Tax avoidance will be stopped and evasion minimised. Tax havens will be shut down and there will be no special treatment or deals with particular businesses. All tax returns will be on public record, and tax authorities will have access to everyone's and all companies' bank accounts.

Companies will have to declare all subsidiary companies and parent/subsidiary relationships and money flows, and consideration will be given to withdrawing the right for a company to own another company, because that opens up great scope for concealing business dealings.

Since tax will be the primary means to re-allocate wealth in society's best interests those paying it will be publicly recognised as providing a vital public service, as discussed in chapter 99.

Tax accountants will see a major change in the nature of their work, and will no doubt have very much less work to do. At present they advise clients and businesses how to avoid tax, and with all the complexity and loopholes there is vast scope for doing so. The New Economics Foundation report 'A Bit Rich: Calculating the Real Value to Society of Different Professions'¹¹, found that tax accountants topped the list of professions they examined for destroying value for society. For every £1 they generated society lost £47 of value. This isn't really surprising because the whole purpose of their work is to deprive society of its rightful due. The results from this report are tabulated in chapter 36.

100.7 Members of a civilised society deserve responsible businesses

The directors of large companies will have a legal duty to balance the interests of all stakeholders for the good of society as a whole, rather than just the interests of themselves and shareholders. Environmental Full Cost Accounting will be a requirement for all businesses and activities - private and public - as discussed in chapter 7, and sustainable environmental and social standards will be established and enforced.

Patents, copyrights and other intellectual property privileges will be reconsidered with respect to the balance required between encouraging new work and delaying widespread take-up. An element of monopoly is needed to encourage the development of new inventions and ideas, but society is harmed by monopolies that last longer than necessary to achieve sufficient encouragement. Big business intellectual property privileges will be subject to time limitations in the usual way, but with much shorter duration. Small businesses and individuals might be better served by allowing a monopoly until a limiting profit or revenue has been earned, perhaps also in conjunction with a limiting time.

All private finance initiatives, public-private partnerships and outsourcing contracts will be ended, and all private businesses that have a significant impact on society will be regulated or nationalised as discussed in detail in chapters 30 and 31.

The state will have the courage to stand up to multinationals and other big corporations. All favours enjoyed by them over smaller businesses will be scrapped, and they will be taxed (until international agreement allows all businesses to be exempt from

¹¹ Released 14 December 2009 and available at http://neweconomics.org/2009/12/a-bit-rich/?sf_action=get_results&sf_s=city+workers&post_date=01012009+31122009

tax - see chapter 96) and subject to regulation appropriate to society's interests. Threats to 'take business away from the UK' will be met with the response 'you must do as you see fit, and so must we'. This will have two effects:

- i. other countries will likely soon follow suit as they recognise that corporations depend much more heavily on countries than countries depend on them; and
- ii. corporations trade wherever there are markets to trade in. It would be foolish to abandon a still very profitable market just because it isn't as profitable as it used to be, and even if the managers wanted to the shareholders would in all probability prevent them. In fact one or two might try this trick in the hope of making an example of the UK, but the vacuum they left would very soon be filled by other traders, in all probability other corporations that realised the game was up.

Bully appeasement has never worked; all it does is make the bully want more - and more - and more. Remember Winston Churchill's remark: "An appeaser is one who feeds a crocodile, hoping it will eat him last."¹²

There will be no secret meetings between multinationals and public bodies, all will be recorded and exposed to public scrutiny. All subversive means of influencing those in authority will be removed, and all UK health, safety, welfare laws and human rights standards will apply in any foreign country in which a UK company does business, as will minimum incomes in terms of purchasing power parity¹³. See also chapters 75, 76 and especially section 76.3.

Punishments for criminal activity will no longer be levied on companies; they will be levied on individuals and sufficient to make the perpetrators bitterly regret having committed the crime.

100.8 Members of a civilised society deserve decent housing

A major social housing programme will be initiated to provide decent housing for everyone that needs a home, the rents being affordable from the basic state income. The current completely unsatisfactory bed and breakfast and private rented accommodation arrangements that enrich private landlords at great cost to society will be scrapped.

The relentless rise in house prices will stop, driven as it is by new bank money and banks' preference for lending against property. Excessive house prices are regarded by house owners as a good thing, but they aren't because they seriously disadvantage the young and make people's homes targets for speculation. Supply of new housing will be stepped up to meet demand, as discussed in chapter 61 section 61.1. In this way in due course property prices will fall back to what ordinary people, and especially first-time

¹² <http://www.azquotes.com/quote/56309>

¹³ To illustrate how unjust the current system is consider bringing poor country workers to the UK to do the same work, but have them subject to the same - very much lower - standards as applied in their own country. I hope that would be intolerable to most people, but what's the difference? They would be working for our companies wherever they were located, why should location justify lower standards? (Rodrik 2012 p192)

buyers, can afford.

100.9 Members of a civilised society deserve honesty

All wealth extraction activities will be stopped as far as possible. In particular banking and financial trading will be completely restructured as discussed above in section 100.5 and in chapters 55 and 60. Speculation will be discouraged and investment encouraged as discussed in chapter 61 section 61.1.

Ratchet services, where they are useful to society, will be taken over by the state or operated on a not-for-profit basis, and where they don't they will be prohibited. Advertising that seeks to persuade by any form of selective information, deception, exaggeration or other form of distortion, psychological manipulation or emotional appeal - see Akerlof & Shiller 2015 Chapter 3 - will be prohibited. It is all based on dishonesty in that I use my talents to manipulate you into serving my and my clients' interests while pretending to serve yours. It also serves no purpose other than to enrich advertisers and those who publish and broadcast adverts. It claims to help the economy by encouraging spending, but the spending it encourages is of the self-indulgent kind, which diverts potentially useful productive capacity into much less useful production. In current world circumstances we can't afford to have productive capacity misallocated in this way - see chapter 7. But, you may ask: What about free newspapers, commercial TV and those lovely glossy magazines that would cost so much more without all the adverts? We would be worse off without them, surely? Really? If people want what newspapers, TV and magazines have to offer then they will pay for them on the basis of their content as for any other product, without subsidies from advertising. Free newspapers, free TV, advert-subsidised magazines, free phone apps and all the rest that rely on advertising aren't free at all; they are all paid for by consumers, and they pay heavily. It is far better for people to pay for what they want directly. Advertising is a costly business, employing talented and highly paid production staff and actors, and using expensive equipment. None of it is necessary; it is extremely wasteful of people's time and effort, all devoted to extracting wealth from others. Prohibition will end all the insidious ratcheting effects of such adverts that cost producers and their customers so much. At the same time and more importantly it will free up an army of currently wasted and high quality talent for useful wealth creation - the spare capacity available from this source is enormous. So established has the subject area become that universities offer courses in advertising and there is even a recognised science of consumer psychology - all directed at making dishonesty respectable. In the new civilisation adverts will still be permitted, but they will be restricted to undistorted factual information only. Such adverts are useful and helpful, they seek to inform, not to deceive.

Another damaging effect of persuasive advertising is to distort the market. Indeed that is one of its main aims. A producer of poor quality highly priced goods can succeed with good advertising over a producer of high quality lower priced goods with poor advertising. That does society no good at all.

This is a quotation from the New Economics Foundation report 'A Bit Rich: Calculating the Real Value to Society of Different Professions', 14 December 2009¹⁴:

¹⁴ This is the report referred to in section 100.6, available at <http://neweconomics.org/2009/12/a->

Although the role of an advertising executive has high status, the impact of the industry has always been a point of controversy. It encourages high consumer spending and indebtedness. It can create insatiable aspirations, fuelling feelings of dissatisfaction, inadequacy and stress. In our economic model we estimate the share of social and environmental damage caused by overconsumption that is attributable to advertising. *For a salary of between £50,000 and £12 million, top advertising executives destroy £11 of value for every pound in value they generate.* [Italics in the report]

The state will take over the excellent work of the Consumers' Association¹⁵ and make its publications and comparisons available to all free of charge online and at cost for printed material. There will be corresponding state-provided information for capital goods and services. Comprehensive factual information will be provided about capability, attributes, price, quality, durability, robustness and so on, for all offered products, with corresponding relevant information for services. Images and videos will be provided where they are helpful. In this way buyers can make choices based on reliable information without being manipulated into bad deals or persuaded to buy something they don't need. Information will be provided by producers or suppliers, for which they will pay a fee and fund all associated testing. There will be heavy penalties for deliberately supplying false or misleading information. This will help society and honest producers immensely. Society will benefit from readily available honest information and its strong effect of strengthening good producers and weakening poor producers, and producers will benefit from losing the great millstone of heavy advertising and marketing costs. The fees they pay for listings and testing will be tiny compared with the savings.

100.10 Members of poor foreign countries deserve our help

Our planet is too small to allow any longer the limited, nationalistic outlook of each country for itself. We need a global vision that encompasses the whole world and everyone and everything in it, and it is the responsibility of the developed world to make that vision a reality. We won't achieve it unless one rich country has the courage to show the way. If the UK can muster that courage then I hope and trust that others will follow, especially when they see how much the UK benefits from generosity - recall section 67.2.1: 'The miraculous power of gifts'.

Those who lack survival needs will be given them by transfer from those who have them or are able to produce them, and at the same time they will be given the wherewithal first to create sufficient wealth to become self-sufficient in all that they need, and then to create surplus wealth. We that have abundance must be prepared to forego temporarily many of our indulgences in order that others may consume needs, especially survival needs.

The answer to reducing poverty is not charity, where we give poor people money or goods in meagre and inconsistent amounts, but to take responsibility for and see through to completion their empowerment to create their own wealth. They have just as much wealth creating capacity as anyone else, they just need the tools, skills and environment

bit-rich/?sf_action=get_results&sf_s=city+workers&post_date=01012009+31122009

¹⁵ <http://www.which.co.uk/about-which/company-info/what-is-which/>

where it can materialise, and make ALL OF US better off in the process. Their inability to create the wealth that they could represents a tragic waste. And that isn't the only waste. The more people there are who understand all the intricacies of medicine, technology and science, the more insights, ingenuity and innovation will emerge. How many potential geniuses has the world created who died in infancy or lived lives so deprived that their talents were stifled? The same applies for potentially great artists, musicians, poets, authors and others. How much enrichment have we gone without? We don't miss what we've never had of course, but we are diminished nonetheless.

The UK isn't capable of curing world poverty on its own, but we could pick one of the poorest countries that we are capable of helping on our own, perhaps a former British colony that we exploited, and make it our business to raise its people out of poverty and into profitable employment, and stay the course until they are well on the way to the level of developed country prosperity. The way to do it is by gifts and low or zero interest loans, as described in chapter 76 section 76.2, as well as practical hands-on help. There are many overseas charities already working in these areas and their UK workers and volunteers will be brought into state employment as for UK charities described above in section 100.2. Those people have the skills and abilities required to make a real difference, and will be able to administer and manage the support that the UK is able to offer. Where temporary specialist support is needed in setting up and operating more complex businesses this will be provided. Investment for profit in poor countries by UK residents will be outlawed because its aim is to take more from the poor than it gives. Where the objectives are too big for a single country to cope with the UK will work in conjunction with other countries willing to assist.

A particularly shameful fact is that many poor countries would be able to feed their own people but for rich countries and rich companies forcing them to export food to repay unrepayable debts with interest, and engaging in tax avoidance and exploitation of poor regulation structures - see chapters 62, 73 and 76. The UK can and will forgive all poor country debts owed to the UK and make all forms of exploitation of poor countries by UK companies illegal.

Intellectual property held by rich countries will be made available to poor countries at no or very little cost. For essentials, medicines and health products there will be no charge for associated intellectual property. The aim is to have these countries create as much wealth as they are capable of as quickly as possible, so anything that causes delays or hindrances will be recognised and removed.

These aims are of course easy to state but require a major shift in perspective to bring about. They are of course idealistic, but unless someone is prepared to make a start the world isn't going to change, and it has to change if we - all of us - are to have a future.

The imperative is to work together as a global community for the benefit of all and for the security of future generations and their environment. This must be led by those who have the most and produce the most - the developed world - and it requires just one developed country to set the example for others to follow.

100.11 That's all very well but who's going to pay for it all?

This is an obvious question to ask but I hope that anyone who has read this far

recognises how inappropriate it is. It is the wrong question because as has hopefully by now been clearly shown, money, which is only symbolic, never needs to be a problem. The right question is how can we be sure of our ability to create sustainably all the wealth required for everyone to live a decent life? In other words do we have the skills, technology, raw materials, available labour and above all willingness to achieve it? With full employment and everyone creating wealth according to their abilities, with all the talent and effort that is released from people who have been busily extracting wealth from others, with all the productive capacity that wealth power has commandeered for its own purposes returned to society for society's purposes, and with extravagant self-indulgence done away with, I feel certain that there will be plenty of resources to create the wealth needed for everyone to live well, to counter environmental threats, and to transform developing countries into developed countries. All that is missing is one essential ingredient - willingness.

Let's just get on with it!

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Contents in Detail

Preface

What is it that humanity seeks to achieve?
What kind of world have we humans created?
Review of massive wealth disparities and impotence in the face of environmental dangers.
The book represents an exploration of concerns.
The central role that economics plays in all our lives.
The source of most of the gross economic injustices.
The impact of modern economic thought.
An engineer's perspective.
The dramatic change that has occurred over my lifetime.

Introduction

The book sets down what I have learned.
Wealth inequalities and the reasons why wealth accumulates.
The two messages of modern economics (neoliberalism) that support wealth accumulation - free market utopia and trickle-down.
Inability of authorities to protect us from inequality excesses.
The purpose of the book is not to lay blame on anyone or anything other than the system itself.
The struggle between freedom and control - the freedom conflict.
Modern economics legitimises unscrupulous behaviour.
The work of Thomas Piketty exposes the flaws in modern economics.
The results of almost forty years of neoliberalism.

Part 1: The Machinery of Civilisation: Wealth, Money and Exchange

1 What Do We Mean by Wealth and Money?

Commonplace but embody aspects that are shrouded in mystery.
Confusion between wealth and money.
Wealth has inherent value.
Money is merely symbolic, it represents entitlement to wealth but is treated as though it had real substance.
Making money regarded as equivalent to creating wealth - an example of the money/wealth confusion.
Money and associated entitlements to wealth are capable of manipulation by smart operators to their advantage.
Money's wonderful qualities - and dangerous qualities.
UK industry allowed to decline in favour of financial services - the money/wealth confusion again.

1.1 Contracts

Nature and examples of contracts.

2 The Most Fundamental Element of Economics - the Transaction

Nature and types of transaction.

Nature of value - use value (usefulness) and exchange value (worth in money terms).

Wealth doesn't change just because its exchange value changes.

Confusion between exchange value and wealth - danger when regard a rapid rise in exchange value as a rise in wealth.

Mark-to-market and historic cost accounting.

Win/win potential of trade - provided that both sides have the same information.

A transaction is a competition - we want to avoid being exploited but we want to exploit others. This is the basic economic problem and much of the book is devoted to it.

The problem arises at the level of individuals so the solution must lie at a higher level, the level of society, to impose rules that engender fairness.

Neoliberals regards the higher level as the market itself, which they believe is always better, even for imperfect markets, than any rules that society can impose.

Part 1a: Wealth

3 The Source of Civilisation - Surplus Wealth, Specialisation and Trade

What surplus wealth is and where it comes from.

The first surplus wealth came with agriculture.

These three elements have given us every material possession we have that isn't part of the natural world.

They have also created the vast majority of the human population!

Surplus wealth, specialisation and trade are the basis of civilisation, and consist simply of people working in co-operation to do and make things for others.

Specialisation fosters innovation (efficiency), tool making (technology), and the desire to understand materials and how they and the natural world behave (science).

With good sense we can make a sustainable and secure world that is a joy for everyone to live in.

4 A Simple Economy

Introduction to factors of production.

Three workers move up from subsistence to surplus wealth using technology - knives and wheelbarrows.

An interesting question: Should knives and wheelbarrows be included in the wealth that benefits the three workers?

Gross Domestic Product - the main measure of real-world wealth production - includes factors of production.

Material wellbeing is not the same as happiness or contentment.

Another interesting question: Who creates the surplus wealth - just workers or knives and wheelbarrows as well?

Surplus wealth is also surplus time, and can be taken as more material wealth or as more leisure.

Without innovation surplus wealth can only come from working longer hours.

5 Ethical and Social Considerations

Economics evolved from political economy which originated in moral philosophy - the study of right and wrong.

Jeavons and Marshall attempted to make it into an objective science.

Economics should be tailored to the kind of society we want.

Hard and soft science approaches and attitudes.

Danger to everyone of desperate people driven by hatred.

Exchange value is all that matters to hard science schools, a person who can't afford something can't have it, even if their life depends on it. Such people lie outside the realm

of economics and must depend on charity if they are to live.

A more wholesome purpose for economics.

Soft science approach to humanitarian needs.

6 Needs and Wants

Needs encompass survival needs - keep us alive and allow children to be raised; self-respect needs - maintain our dignity; and social needs - keep society as a whole secure. Wants comprise everything we desire in addition to our needs.

Social needs: countering environmental threats, sustainability and defence.

Neoliberalism makes no distinction between needs and wants but their relative possession greatly affects bargaining positions.

Milton Friedman quotations about the dangers of coercion, but the freedom to coerce is enjoyed by the unscrupulous wealthy and supported by neoliberals.

Unequal bargaining power recognised in English law.

7 Good and Bad Wealth Creation and Use

The nature of tradable surplus wealth doesn't matter; an economy will flourish provided that there is enough, regardless of what it consists of.

BUT the nature of surplus wealth matters with respect to the *kind* of economy that flourishes.

Market freedom has determined what is produced - whatever people want and can pay for is produced.

Free markets are blind, they just follow demand whatever it is and wherever it comes from.

A market is merely a forum for controlled exchange, so something must exercise control, currently it is exercised by those with the most freedom - the unscrupulous wealthy.

Society must invest in social needs and individuals must consume products manufactured sustainably if we are to have a future.

A review of the kinds of indulgent wealth that can be dispensed with in order to release productive capacity for good wealth creation.

Whether we need more wealth - growth - to achieve the desired ends remains to be seen, but if we do then there is plenty of spare capacity.

The neoliberal approach has set us on a collision course with nature. Only strong and courageous governments can steer us away from self-indulgence towards security and sustainability.

7.1 The dangerous growth fixation

It is taken for granted that what we all need is economic growth.

The economy is *driven* to grow and grow.

There are several reasons, most of which arise because of debt.

Growth is bad news when it is unsustainable, but the question is hardly ever asked.

The concept of the planet's 'carrying capacity'.

We should aspire to meet our needs with as little resource depletion and as little pollution as possible.

8 Requirements for Wealth Creation

Before all land was claimed we had an empty world, where land and resources were there for the taking. In an empty world people can support themselves, but when all land is claimed, non-landowners depend on others for employment.

Now all forms of productive capital are owned, so employment is vitally important.

Employers won't provide employment unless their own interests are served by it. It creates a very unequal partnership.

9 The Natural Tendency for Wealth to Accumulate

Wealth is like matter, wealth attracts wealth because wealth producing assets are themselves forms of wealth.

With sufficient wealth a person can buy wealth producing assets and enjoy the return without the need to work.
 Saleable assets are much more likely to be existing assets rather than new wealth creating assets.
 Tendency reinforced by bargaining positions and wealth extraction.
 Overall, new wealth migrates towards existing wealth, and owners of the greatest quantities of existing wealth enjoy the highest rates of migration.
 Thomas Piketty has shown that the neoliberal view that markets ensure widespread distribution of wealth to be badly mistaken.
 A simple experiment that illustrates the phenomenon.
 Everyone feels insecure no matter how wealthy, that is a major driver for always wanting more, more wealth = more security.
 Social security is a benefit for everyone.
 Relative wealth matters far more than absolute wealth.
 More equal societies fare better for everyone on every front.

Part 1b: Money

10 Characteristics of Money

The most misunderstood element in all of economics.
 Requirement for something to function as money.
 Unfortunately it is able to act as a store of value.
 Money can be exchanged for many things, but it always stays as money.
 Money's role in the economy is that of a lubricant - it allows things to happen that without it wouldn't happen.
 A government in control of its own economy can never be limited by money, though it usually thinks it is.
 Money is mistakenly thought to be the power to create wealth.

11 Types of Money

Commodity money - gold, silver and copper coins - this money has inherent value.
 Fiat money - money whose value is what the government says it is. It has little or no inherent value.
 Credit money - the most common form being bank money. This is the most difficult to understand as it consists merely of a 'promise to pay', it is an IOU from the bank.
 By far the biggest proportion of money in circulation is bank money - about 97%.
 Bank money is created and destroyed by banks as people take out and repay loans.

12 How Much Money Does an Economy Need?

Return to three-person economy to see how they can use money and how much they need.
 The quantity of money needed by a society is determined by the value and frequency of transactions it wishes to carry out.
 Inflation and deflation in the simple economy.
 If money can be made by the participants of an economy its availability is self-correcting, but not otherwise.

13 A Fixed Money Supply in the Simple Three-Person Economy

When money can't be made by the participants it behaves very differently.
 A fixed money supply is fine as long as it is sufficient to service all required transactions and it continues to circulate.
 The effect of saving with a fixed money supply.
 In an economy with a fixed amount of money a one-off reduction in spending causes a continuing reduction in productivity.

The 'paradox of thrift' first recognised by Keynes.

14 Money in the Real Economy

Although much more complex there are important similarities - saving has the same effect, and the required quantity and rate of spend are the same - enough to service all required transactions.

Although it is the same money that circulates round an economy it is new wealth that is created and exchanged in each transaction. A simple story illustrates how it works.

What is really happening is that we are all working for each other, and money is the lubricant that makes it possible.

It is important to separate spending on new wealth creation from spending on existing wealth transfer. Only the first adds to total wealth and therefore benefits the economy.

How wealth can appear to be created by exploitation.

Controlling the money supply in a real economy, given the way the system works, is very difficult indeed.

This is a very peculiar situation; money is a human invention but behaves as though it was a natural phenomenon. It could be so much better.

15 The Effect of Too Little Money - Preliminary Discussion

The economic effect of saving in a more complex economy.

Saving money regarded as saving wealth - money/wealth confusion again.

When spending drops the economy declines until production matches the new lower level of spending.

Spending cutbacks lead to unsold stock and unsold services.

Saving wealth is fine, saving money isn't.

This reasoning shows why the gold standard was a poor basis for an economy, gold is limited so it can't naturally keep pace with growth in trade.

16 The Effect of Too Little Money - How the Situation Plays Out in the Real Economy

Start with full employment and analyse what happens when people fear for the future.

There is an uneven reduction in spending, non-essential spending going first and essential spending being maintained.

The first round of spending cuts causes loss of income for producers leading to more spending cuts.

The overall effect is magnified by repeated spending cuts, a phenomenon known as the income multiplier.

The extent depends on the original severity and effectiveness of government efforts to stem the decline.

Unused productive capacity is known as spare capacity.

Neoclassical economists thought that labour supply and demand should match at a wage rate corresponding to full employment, but Keynes showed that it could match at any level.

Wealth sale is every bit as important as wealth creation, because it provides the destination for created wealth, and without a destination wealth creation soon stops.

In order for the economy to function properly wealth must be traded and used at the same rate at which it is created.

17 The Effect of Additional Money in a Depressed Economy

Start with a depressed economy, introduce more money, and see what happens.

In a growing economy there is a redistribution of prices as the demand for non-essentials and for better forms of essentials increases, and prices follow.

The income multiplier now works in our favour.

Only the government has the capacity to introduce enough money to make up for the loss of private spending.

If sufficient it leads to 'Animal Spirits' - a major boost to confidence in the private sector that

encourages producers to expand production. If successful this grows the economy until all spare capacity is used up.

But, after a major recession or depression there can be structural unemployment, requiring retraining and often relocation to find new jobs. Structural unemployment requires targeted spending and can take many years to be effective.

The new distribution is reflected in the share prices of companies producing essentials (known as defensive stocks) and non-essentials (known as cyclical stocks). A shrinking economy sees a rise in defensive stocks and vice versa for cyclical stocks, and the opposite for a growing economy.

The above phenomenon is well known as the business cycle, and the fact that it exists shows that there is poor control over the economy.

18 The Effect of Too Much Money

The effect of injecting more money with full employment (no spare capacity).

Price and wage rises ripple through economy until all is as it was but with higher prices and wages.

If the injection is a one-off then there will be a one off blip in inflation, but if sustained then there will be sustained inflation.

If it is sustained then people spend more quickly to be rid of their money before it depreciates, so transactions increase but this is a bad way to grow the economy.

The effect of inflation on debts is to transfer wealth from savers to borrowers.

Overall there is a correct amount of money for full employment.

Inflation is different for every product depending on supply and demand, property and assets have their own rates which don't appear in RPI and CPI because they aren't counted.

19 Economic Growth

We have already discussed the dangerous growth fixation in chapter 7. This chapter focuses on the factors that promote growth because many depend on it to lift them out of poverty.

Additional spending can bring growth but only if there is spare capacity, otherwise it causes inflation.

In the absence of existing spare capacity, innovation, efficiency improvements, advances in technology, working longer hours or growth in the working population are needed to create it.

An analysis of new spare capacity without and with an increase in the money supply.

An increase in the price of existing assets is not economic growth.

20 The Great Trickle-Down Deception and its Implications

Spending is vital to the health of an economy, so we need to know who spends what to see who to encourage and not.

As people have more wealth their spending moves up from needs to luxuries and then to investments.

The traditional view of investment is that it is good for job creation, making the overall economy bigger, and more jobs means that wealth trickles-down to the newly employed.

This belief is used to justify ever increasing income and investment returns for the already well paid, and those associated economic policies that promote it.

20.1 How the trickle-down fantasy is supposed to work

An analysis of what happens if the rich do spend all their excess income on job creation.

The result is that the rich create jobs even when it makes them less money than not creating jobs - it doesn't happen.

A person is only employed as long as the employer profits from their labour.

20.2 The fantasy exposed

The rich don't use all their excess income to set up or expand businesses.

There are many more investment opportunities available than setting up or expanding businesses.

New businesses are set up by entrepreneurs, many of whom aren't rich.

The employment conflict - people want jobs but potential employers don't want to provide them.

Why the theory sounds so plausible - it's the money/wealth confusion again.

20.3 The impact on employment and national income shares

Reasons why employers don't want to create jobs.

The non-accelerating inflation rate of unemployment (NAIRU).

Shares of national income from 1915 and real wage of workers from 1950 - charts confirm that trickle down doesn't work.

There is no wealth trickling down, but plenty hoovering up!

There is very great income inequality, but wealth inequality is even higher.

20.4 What do the wealthy spend their money on?

There are two forms of investment, but unfortunately only one word for both. These are wealth creating investments and existing asset investments.

A chart that shows how much more people save (invest) as they become better off.

Saving money in banks doesn't help the economy.

Why existing asset investment is harmful to the economy.

20.5 What do the non-wealthy spend their money on?

So whose spending does benefit the economy? Poorer people - they are the people to whom we should be generous because their spending is on new wealth and that drives the economy.

A note of caution about imports.

21 Lessons to be Drawn from the Foregoing Money Supply Analysis

Summary of main conclusions.

The analysis shows that those who control the money supply - banks - have immense power.

Banks' allegiance is not to the public, like all private businesses it is only to themselves.

There is nothing to stop the government and central bank from taking control of the money supply.

22 Waste, What it is and What it isn't

Waste is very different for individuals and for the economy.

For the economy money is never wasted but wealth can be.

For the economy an enormous source of waste is unemployed people. It isn't missed because the wealth they could create isn't seen.

Benefit of follies.

Wealth extractors are not usefully employed.

'Zombie' industries are beneficial if there is no alternative.

New enterprises that turn out to be failures are also helpful, they still represent spending and they are merely the other side of the coin to success. We should forgive failures because otherwise enterprise is discouraged.

A throwaway society is not the answer.

Fashion encourages waste; advertising (insofar as it seeks to persuade rather than to inform) encourages waste and is itself largely wasteful. Asset stripping is often extremely wasteful.

The neoliberal doctrine is bound to cause waste.

Best is a mixed economy where the satisfaction of needs is recognised as more important than the satisfaction of wants.

A summary of things that are wasteful for the economy.

23 Transactions that Help the Economy and Transactions that Don't

The simple equation that relates the quantity of money to the number of transactions in an economy.

Use of the simple three-person economy to illustrate the equation.

Discussion of the equation parameters - money supply (M), velocity of money (V), number of transactions (T) and average price (P).

The rate of spend is MV , not M in isolation.

The equation doesn't say what happens when variables change.

The quantity theory of money, the 'long run' and Keynes' quotation.

A discussion of the relative independence of the variables and what happens when independent variables change.

Inflation and hyperinflation.

The effects of spending money on new wealth and existing assets.

The effect of existing asset spending is often ignored, leading to misunderstandings and bad policies.

Richard Werner's Quantity Theory of Credit.

A review of the income multiplier in the light of this analysis.

The effect of spending on imported goods.

The significance of average prices is not their absolute values but how they change over time.

24 The Economic Impact of Money Spent on New Wealth and on Existing Assets

The foregoing analysis shows that it is the rate of spend on new wealth that is important.

Money spent on new wealth (MNW) is money that is circulating in the productive economic loop.

Movement of money between different forms of spending and money buffers.

Money transferred from a productive buffer to an unproductive buffer degrades the economy, and vice versa.

Bank of England injection of £375 billion into economy after the 2008 crash - quantitative easing - filled unproductive buffers so had little impact. Much better to have targeted it at spenders.

A very relevant quantity for an economy is its Wealth Creating Capacity (WCC). How it links to the ideal quantity of money in the form of MNW.

25 The Puzzle of Investment and Saving

The source of confusion.

Economic definitions and how they differ from plain English definitions.

Saving = investment because of the definitions used.

How can hoarding money be investment? It is because unsold stock counts as investment.

A list of the ways in which money can go out of circulation.

Good investment and bad investment.

Bank saving - the important issue is the totality of bank money, does it expand or contract?

26 Measuring Economic Performance

National Income Accounts.

Definition of terms to be used in the measurements.

Development of the expenditure and income equations and the savings identity.

Separation into good and bad (transient) saving.

The mathematical version of the paradox of thrift.

Measuring material wellbeing.

Diagram showing national money circulation and wealth distribution.

27 Shortcomings of Gross Domestic Product as a Measure of Wealth Creation

The purpose of national accounting is to give an indication of how the country is performing economically.

GDP has become the single most important measure - taken to represent overall national wealth creation.

There are many significant shortcomings in this measure, which taken together render it very misleading:

Part 1c: Exchange

28 Markets, Supply and Demand

What the market is.

The neoliberal view - leave everything to the motivational power of money. The dangers of that approach.

Three types of market discussed - ideal free, unfettered free, and fair.

29 Unfettered Free Markets and Fair Markets

An unfettered free market is a logical impossibility.

How 'unfettered' proponents have moved their position over time.

Negative effects on non-participants.

Participants are allowed the freedom to distort the market.

Common examples of market distortions.

Economies of scale disfavour supply competition - it allows massive corporations to emerge.

Many products don't lend themselves to competition, public utilities and public benefit products - positive externalities.

The market freedom vs market control debate is a smokescreen to hide what is really going on (Reich 2016).

Governments set market rules but private interests persuade governments to favour those interests.

A list of laws and institutions that wouldn't be needed if unfettered markets really worked.

Fair markets and the conditions that are required.

The more that fair market conditions fail to be met and the more harm that the unfairness can cause the more regulation is necessary.

The more that fair market conditions are met, the more the market provides a mechanism that operates automatically, efficiently and cheaply, and delivers very substantial benefits for all.

The USSR experience of trying to exercise full control.

The mistake is in believing that all markets should be unfettered.

The Efficient Markets Hypothesis (EMH).

In spite of everything the unfettered market lobby still believe that all market problems arise because markets are too fettered!

30 Which Markets Should be State-Controlled and to What Extent?

Common sense turns out to be a very good guide.

The degree of control should relate to the extent of harm or exploitation, a market that isn't fair but can do little harm or has limited scope for exploitation requires little or no control.

30.1 - 30.5 Discussion of fair market conditions from chapter 29 and measures required.

All else should be supplied privately because markets will then be sufficiently fair and a fair market is the most efficient and responsive way to match supply to demand.

Extensive evidence that markets and governments are strongly positively correlated.

31 The Pharmaceutical Industry

Nowhere is private industry's promotion of self-interest more evident than in the pharmaceutical industry.

It regularly distorts research findings to support sales, and hides results that could harm profits.

Fines for illegal activity are levied regularly, and regarded merely as a business expense by the companies.

The principle of punishment, which fails miserably in this case.

But this is what private companies do, we shouldn't blame them, we shouldn't allow them that level of control.

The case for state control of the pharmaceutical industry is overwhelming.

Society pays for drugs however they are produced, but when they are produced privately it pays for all the associated costs - advertising, marketing, incentives for medical staff, manipulation of regulators, lobbying of governments - and it gets drugs that aren't needed and often cause massive harm.

Benefits of state control.

32 Rationed Markets, Efficiency, Competition and Incentives

Rationing is so common a feature of markets that it deserves special attention.

Why markets become rationed and how they are inefficient.

Discussion of rationing by demand and by supply, and their effects on bargaining positions.

Rationing explains why priceless air is free and decorative diamonds are expensive.

Exchange value depends only on levels of supply and demand, and not on usefulness or time and effort that have gone into making the product.

Rationing is a prominent feature of the business cycle.

Benefits of bigger markets.

The relationship between time/effort and exchange value is efficiency, and efficiency is at the heart of wealth creation.

Competition (real competition, not contrived competition) in a private enterprise environment promotes efficiency and lack of competition stifles it.

It all comes down to incentives - people respond to incentives.

Neoliberalism elevates one incentive above all else - money, discussion of its effects.

33 Asset Bubbles and their Collapse - Induced Market Rationing

Asset and product prices are expected to reflect underlying value, but are also affected by expectations of future value, when if positive buyers are in a hurry but sellers are reluctant, so prices rise rapidly.

This creates a market that is rationed by supply.

The 'greater fool theory' and property bubbles discussed.

The opposite happens when a bubble starts to collapse, or when a fall in value is expected without a bubble.

34 Dependencies between Buyers and Sellers

There is an additional condition for markets to work predictably - independence.

Types of dependence discussed.

Three markets in particular don't meet this condition - bank lending, labour and financial asset markets.

Discussion of dependencies, negative and positive feedback and their characteristics.

The point is laboured because feedback has important and often unrecognised consequences in economics.

Bank lending (chapter 52) and financial asset (chapter 57) markets both suffer from positive feedback with resulting instability; labour markets suffer from negative feedback with resulting stability at low levels of employment.

35 Labour Markets

The neoclassical assumption regarding supply and demand for labour and the puzzle of unemployment.

Keynes' solved the puzzle by realising that the key factor in a depressed economy is not inadequate supply but inadequate demand, caused by workers also being spenders. He showed that the labour market could settle at any level, where full employment represented just one level of many - a special case, where the general case was unemployment.

He set out his insights in his great work known as 'The General Theory'.

The General Theory relates only to a closed economy, so there is an impact from imports and exports in an open economy.

These aspects are discussed together with their effect in reducing the income multiplier, and the harm that can be done to the balance of trade.

A review of how different real wages can arise.

Part 2 Wealth Extraction: Banking, Financial Trading and Other Extracting Sectors

36 Introduction to Part 2

Remarks not aimed at individuals who work in the sectors targeted. My aim is the sectors themselves.

Explanation of wealth extraction.

Two types: collective exploitation - ratchet services, tax avoidance and rent-seeking; and individual exploitation.

The harm that wealth extraction does.

36.1 Wealth extraction misinterpreted as production

37 Banking and Financial Trading

The misleading claim to create wealth.

Banking as an intermediate service, financial trading isn't even that.

Paul Volcker's quotations.

But, society needs banking and financial trading services.

Part 2a Money Magic: Banking

Focus on retail banking, difference between investment and retail banking.

Integration since 1980's deregulation.

38 A Brief History of Banking

Goldsmiths were the first bankers.

Use of gold receipts as money.

Lucrative fraud practised by early goldsmiths.

Banking sector grew from these beginnings, no longer fraud as legal if have licence, but still just as lucrative.

39 Modern Banking - Creation of Money and of Debt

Greater rigour and oversight now, but still creates and destroys money in the same way.

Common misunderstandings of how banks work - intermediation and fractional reserve.

Banks work by credit creation.

Two forms of state-guaranteed money: cash and reserves.

Easier to understand as bank IOUs.

Destruction of money more harmful than creation.

39.1 Banks don't lend money

Banks not deprived of anything when they 'lend' money.

Banks can't use the money in our accounts for anything that benefits them, but it is still put at risk.

Money is anything that is immediately available for spending.

39.2 Just what is this stuff called bank money?

The only money that banks recognise as having real value is state-guaranteed money.

Each bank has its own particular form of bank money which never leaves that bank.

Four aspects of bank money.

Cash is real money, bank money is pretend money.

How the pretence is maintained.

The quantity of money an economy needs and the quantity it gets are determined by two completely unrelated factors.

40 The Contradictions of Modern Banking

Banks portray themselves as dependable and strong, but operate on shaky foundations.

Basis of banking, borrow short and lend long - a hazardous business.

Banks' fear of insolvency, why and how to avoid it.

In practical terms they are always insolvent.

The contradiction at the heart of banking.

41 The Bank of England (BoE)

Brief history - Charles II and William Paterson, Great Monetary Settlement.

Ordinary banks became customers of the BoE, which became the lender of last resort.

Settlement between banks is made in BoE money - reserves, which never leave the BoE.

Settlement systems.

BoE nationalised by Attlee's gov't in 1946.

42 If Banks Can Create Money How Can They Go Broke?

Seems odd, but bank money is a debt owed by the bank, it is not an asset.

Two problems - maintaining solvency and managing cash flow.

Banks have the ability to borrow from each other and the BoE, provided that they are solvent.

43 Banks' Balance Sheets

Balance sheets explained - purpose, mechanism, conventions.

Transactions, giving and receiving accounts, net positive and negative balances, zero sum.

Owner separate from business, owner equity account, business solvent if equity positive.

Confusion about bank accounts.

Bank liquid and illiquid assets and liabilities.

44 Transactions, and their Effect on Bank Balance Sheets

Consider bank and government transactions with respect to balance sheet aspects and money creation.

How bank money comes into and goes out of existence.

i) Bank loan to a borrower with an account at the lending bank.

ii) Bank loan to a borrower with an account at another bank.

iii) A borrower with an account at the lending bank repays a loan.

iv) A borrower with an account at a bank other than the lending bank repays a loan.

v) A borrower pays interest on a loan.

vi) A bank pays an employee's salary.

vii) A bank buys office equipment.

viii) A bank pays a dividend to its shareholders.

ix) A customer withdraws cash from an ATM.

x) A customer pays cash into a bank account.

xi) A customer repays a bank loan with cash.

xii) A borrower defaults on a loan repayment.

xiii) A bank buys a government bond (gilt) directly from the government (the primary market).

xiv) A bank buys a government bond (gilt) on the secondary market.

- xv) A non-bank company buys a gilt on the primary market.
- xvi) The government repays a gilt owned by a bank on maturity.
- xvii) The government repays a gilt owned by someone other than a bank on maturity.

45 Why Can't Banks Be Allowed to Fail Like Any Other Business?

Bankruptcy for a non-bank business - solvency, insolvency and bankruptcy, creditors can force bankruptcy.

Banks are not the same as other businesses, society depends on banks.

Review of current accounts, transfer of reserves for interbank transfers, danger of contagion.

Government options and how it weighs them and what it does, taxpayer picks up the final bill.

Why should banks - private businesses - be allowed to jeopardise a public service?

Radical and effective measures are examined in chapter 55.

46 If Banks Are So Profitable and Protected Why Don't We Start Our Own Bank?

Difficulties involved, first hurdle is obtaining a banking licence.

Assume have a licence, start up and await our first borrower.

Have to be competitive, eventually we need to borrow more reserves, but for that we need collateral - problem.

We needed a lot more equity to begin with.

Digression on reserves in and out balancing even with a small market share, but very volatile.

Until we have enough current accounts we need enough equity to fund all loans.

Review of people who are able to set up banks.

Large market share vital, hence seek new current accounts and seek to amalgamate/take over other banks.

Free competition completely absent for banks, even if we ignore the difficulties in obtaining a banking licence.

Why not buy shares in banks? That doesn't work either.

Much of bank profit goes to directors and senior managers - the agency problem.

47 What is it that Makes Banks Different from Other Companies?

What does a banking licence confer that prevents other businesses from creating money?

Richard Werner's explanation.

Client money rules and what they mean for client security - client is not a creditor.

Difference for a bank, client is a creditor.

No legal basis for permitting money to be created.

How the accounting trick works.

48 Who Really Does the Lending When Banks 'Lend' Money?

Lending costs - opportunity cost, cost of default risk and cost of inflation risk.

What is meant by lending and how it is that banks don't lend anything.

A review of the events involved in bank lending.

If we take money out of the picture we see what is really happening.

The final twist - it is society that lends the wealth, but the bank that gets the interest.

An example of a simple economy to illustrate the mechanics.

With a large economy lent wealth is never missed, but society is deprived of it nonetheless.

In effect society's loss is a subsidy to the banks.

48.1 Why didn't we notice that we were being deprived of wealth whenever someone took on a bank debt?

An examination of this question opens up the possibility of a solution to many of the world's most pressing problems.

A few mental exercises to help us see what is really happening.

Bank money allows us to use up spare capacity and avoid the waste that it represents.

In effect we are able to turn tokens into wealth - we have realised the alchemist's dream!

Bypass banks altogether and have the BoE create money and give it - not lend it - to poor countries.

The UK benefits as well as the poor countries - as long as there is spare capacity to be absorbed.

Already have an example in the US Marshall Plan after the war - when everyone including the US benefited enormously.

It has to stop when all the spare capacity has been used up, but there is more available than we think.

49 What is the Bank's Service and How Much is it Worth?

Banks perform an important service.

Entitled to default risk premium, in effect a component of interest.

Entitled to administration fees and cash flow management charge, as a component of interest.

Above that baseline, any excess is profit.

Free market philosophy as applied to banks is inappropriate.

50 The Moral Hazard at the Heart of Banking and the Damage it Causes

Moral hazard explanation.

James Robertson's questions and answers.

Cost of the 2008 crisis and other subsidies.

50.1 What changed?

Review of events that changed banks from probity to greed and their effects.

Banks not likely to be profitable if all costs are properly financed.

2008 crash demonstrated the extent of society's dependence on banks and vulnerability to their activities.

Resistance by the sector to any restrictions.

How lack of restrictions leads to more risk taking.

Effective criminal punishments should be applied to directors for wrongdoing.

Banks' involvement in Wall Street crash.

Basel III accords strengthened after the crash, but unlikely to provide a cure.

Minor crashes and crises and the damage they cause.

Banking crises chart from Wikipedia (Reinhart and Rogoff).

Banking characteristics.

51 The Rate of Interest and its Effect on the Economy

Discussion of rates available.

Real and nominal rates.

'Ideal' interest rate. Supply and demand view, but ignores positive feedback which makes for instability.

Role of BoE and supposed effect of varying the bank rate in controlling inflation.

Knut Wicksell theory of the natural rate and the effects of lower and higher rates.

Wicksell's is a good theory but it depends on other things remaining the same, which they never do.

Difficulty in measurement of the natural rate.

52 The Bank Lending Market and the Business Cycle

52.1 Preamble

Supply of money, demand for money, and the interest rate.

Keynes' liquidity preference explanation.

Quantity decided by risk, not demand, banks have control over both supply and demand.

52.2 Positive feedback and instability

Bank and borrower are not independent, they are linked by the bank's creditworthiness assessment.

Boom and bust caused by positive feedback.

Good explanation in a YouTube video by Ray Dalio.

53 Debts, Constructive and Destructive

History of debt.

Debt allows trading to be spread across time.

Four uses of debt: wealth creating, existing asset investment, luxury consumption and basic consumption.

Benefits and disbenefits of these uses.

Dangers of high levels of debt.

53.1 The increasing debt spiral

Self-limitation in traditional lending.

Banks found a clever way around the self-limitation prior to the 2008 crash.

53.2 Taking control of individual private debts

The damaging effects of private debts on individuals and the need to mitigate those effects.

A suggestion for how better control might be applied.

54 The Role Played by Destructive Debts in the Run-Up to the 2008 Crash

Indebtedness expanded explosively before 2008, and made a severe crash inevitable.

Economic (DSGE) models unable to predict the crash - they ignore much of the financial system.

Securitisation was the trigger.

54.1 The investors who wanted to own the debts:

Inequality climbed after 1980 so plenty of money available for investment by the wealthy.

Asset price increases and reduced returns.

54.2 Those who made the debts available to investors:

Big-bang deregulation and increased opportunities for innovation.

The four bright ideas that led to the crash.

A plethora of derivatives - MBSs, CMOs, CDOs, and CDSs.

Non-bank lending, shadow banks and immense complexity.

The 'near money' illusion.

54.3 The borrowers who funded everything:

Need increasing number of borrowers at the bottom to keep the whole machine working.

The clever supercharged 'hoover-up' phenomenon and how it worked.

Why there was a debt explosion without a corresponding money supply explosion.

The impact of the debts on the wealthy and non-wealthy.

A comparison with the period after the Second World War up to the early 1980s.

The most damaging instance ever seen of throwing the baby out with the bathwater - neoliberalism took over.

Inequality is a natural effect of unfettered markets, deliberate action by governments is necessary to avoid it.

54.4 The inevitable crash happened - and came as a complete surprise

It was a world-class cunning plan!

It was bound to crash eventually - four ways in which it could happen.

In the event it was none of above - discussion of the reason.

The belief that all the innovation allowed risks to be borne by those most able to bear them.

The crash exposed the hollowness of that belief, and while the party lasted the real-life risks to ordinary people increased dramatically.

55 Better Systems

The banking system demands radical change, the only questions are when and how.

So far all that has been proposed is an increased level of regulation.

The big incentives for bankers to circumvent regulations and small incentives for regulators

to regulate effectively.

55.1 Nationalise the banks

Advantages and disadvantages.

55.2 Abolish pretend money

This is the Positive Money proposal and has a great deal to recommend it.

A summary of the proposals and how they would work.

Part 2b: Asset Juggling: Financial Trading

56 The Evolution of Modern Trading

Before the 1980s banking and financial trading were based on relationships.

Today have anonymous markets, finance dominated by trading.

The changes accelerated after 1980 because of extensive deregulation, profitability increased dramatically.

Derivative history.

The range of derivatives has mushroomed in recent years, discussion of the different types.

The size of the derivative market and the dangers that they carry.

57 Financial Asset Markets

Volatility and instability are easily seen.

Discussion of what's happening in relation to underlying value.

Emotional involvement - fear and greed - and the positive feedback they engender.

Margin trading amplifies the volatility and instability.

Bank lending subject to positive feedback so this added to market positive feedback leads to explosive behaviour, as the crash of 2008 demonstrated.

It would be all right if only the players themselves were affected, but banks drag everyone into it.

Derivatives created to extend financial markets.

The normal behaviour of supply and demand doesn't apply; it leads to bubbles and their collapse.

Ability of big players and insiders to cheat.

The dreadful waste of talented people's time and efforts.

Property is also a financial asset, and the effect of this on ordinary people who want property to live in.

58 Pooled Investment Funds

Basic types of financial asset.

Active and passive management.

Boost with the migration of pensions from defined benefit to defined contribution schemes.

Claims by fund providers and how they fool people.

Handsome rewards and incentives for managers, some are good such as Warren Buffet, but most are not.

Buffet's \$1 million bet.

Fees are a proportion of fund capital rather than gain, so fund managers and providers don't take any risks.

Hedge fund rewards and how simple leverage is used to give the impression of genius.

59 Wealth Extraction by Fund Providers, Managers and Others

Ways in which fees are taken from pooled investments.

Overall charges for active funds.

Example of fees on effective growth rates for well and poorly performing funds.

An estimate of the real value of fund provider services.

Rework of the examples based on more reasonable charges.

Overall wealth extraction is in the region of the cost of the NHS.

60 How Can Wealth Extraction Be Eliminated from Financial Trading?

Wealth extraction is exploitation, and can never be justified, so what can be done about it?

The role of advertising.

Investment growth is not the same as economic growth though it is linked to it.

At its heart investing is a simple business.

Three things in which to invest - equities, debt and hardware.

The single thing that an investor needs to specify, or be advised on, is the risk that he or she wishes to take.

Appropriate strategies can be worked out for particular investment aims.

It would be relatively easy for the state to sponsor a range of non-profit funds covering all risk levels.

Investments by ordinary people and especially pensions are far too important to be exposed to free-to-exploit market forces.

61 Speculation and Investment

No consensus on the difference, all prefer to be seen as investors.

There is a much more important difference - speculators focus on price changes, investors focus on ongoing financial return.

The great majority of traders are speculators.

Warren Buffet must be the best example of an investor.

Investors are good for the economy, they focus on long-term profitability, speculators are bad for the economy, they focus on the short term, often at the expense of long-term viability.

Performance is geared to speculation because speculators are in the majority.

Maximisation of wealth creation can only be achieved by taking good care of long-term performance.

As might be expected banks are heavily involved in all of this activity, the speculation tail is wagging the wealth creating dog.

When heavy selling occurs real damage can be done.

Governments can suffer similarly if their bonds or currencies are sold heavily.

61.1 Discouraging speculation

For all these reasons speculation needs to be tamed and controlled.

Something much more substantial is needed that favours investors over speculators.

The basic problem is one of inertia mismatch. Companies have high inertia but money movement has almost no inertia.

The neoliberal view of efficient capital allocation is dangerous, companies are like machines and capital is like lubrication, draining lubrication destroys the machine, draining capital destroys the company.

Governments and whole economies have even more inertia than companies.

The mechanism we need is one that ties capital more closely to wealth creation - some ideas to start the ball rolling.

Part 3: Globalisation: the Good, the Bad and the Very Ugly

62 Preamble to Part 3

A brutal arena.

UNICEF figures for the plight of poor country populations, especially children.

Exploitation of poor countries by the unscrupulous rich.

63 Introduction to Part 3

The key to understanding is to recognise that a single country trading with the rest of the

world is very much like a single person trading with other people.

Absence of international institutions with the power to regulate the global economy for the benefit of all.

International organisations with power use it to benefit rich countries.

International trade has a very long history.

Growth in international trade regarded as a recent phenomenon but great freedom enjoyed before WWI.

WWI put an end to that freedom.

For most of its history world trade depended on gold as the medium of exchange.

64 A Brief History of World Trade

Early history - from 16th to and including the 18th century - mercantilism.

Adam Smith was a sharp critic of mercantilism and its passion for the accumulation of gold.

Birth of classical economics and its spread.

World trade took off in the 19th century when transport and communication technology improved.

Towards the end of WWII the Bretton Woods conference (July 1944) set the scene for international trade until the 'Nixon Shock' in 1971.

Thereafter trade was forced to use floating currencies.

65 Basic Considerations

65.1 Advantages and disadvantages

Bigger markets, more specialisation, more choice.

Dependence on external markets can backfire.

Problems with trade imbalances.

65.2 Totality of world trade

Sum of world trade always zero.

65.3 Trade balance

Not necessary to maintain a balance with every trading partner separately.

65.4 Currency and wealth

A particular currency can only be used to buy wealth from those who accept that currency.

65.5 Excess imports and borrowing

Example of two desert islands trading with each other.

With fiat currencies a country that imports more than it exports must borrow the difference from the exporting country.

65.6 Types of currency exchange

Floating and non-floating currencies.

65.7 Currency values

How currencies and trade commodities are tied together.

Role of arbitrage.

65.8 Self-correcting imbalances

Tendency to self-correct, provided that either a common currency is used or currencies are freely exchanged.

65.9 Domestic and international prices

Exchange rates reflect international wealth values, but domestic values can differ considerably.

Purchasing power parity measurements.

65.10 Reserve Currencies

Explanation and distribution.

US dollar is the major reserve currency.

66 International Trade Theory

Surplus wealth, specialisation and trade are just as beneficial in international trade.

Smith's theory of absolute advantage.

Ricardo's theory of comparative advantage and its long list of assumptions.

Assumptions examined and the theory rejected.

The long-term effects on poor countries that are forced to trade on the basis of the theory.

If a poor country wishes to become a rich country then it cannot do so by trading on the basis of comparative advantage.

Ricardo's theory of comparative advantage underpins the neoliberal approach to international trade.

Neoliberalism ignores all the flawed assumptions and enforces its doctrines on poor countries through the IMF, the WTO and the World Bank.

67 Major Developments in International Trade

67.1 Prior to the Bretton Woods (1944) agreement

Trading with gold made domestic and international trade the same.

Problems after WWI.

67.2 The Bretton Woods proposals and agreement:

Review of the conference and reasons for it.

Keynes' proposals in detail and the US rejection.

67.2.1 The miraculous power of gifts.

US aid to Europe and Asia after the Second World War and its effects.

67.3 The Bretton Woods era - 1945 to 1973

Growth, stability and prosperity for all.

It contained the seeds of its own destruction, the US couldn't maintain the gold standard.

The Triffin Dilemma.

67.4 Post Bretton Woods - floating exchange rates 1973 - present

67.4.1 Aftermath of the Bretton Woods failure.

Immediate effects of floating exchange rates.

The coming of stagflation.

67.4.2 Floating exchange rates.

Analogy of people in a single country trading without a common currency.

Factors that influence the exchange rate.

Foreign exchange speculation and its rise to dominance.

Damaging effects of speculation and volatility in rates.

Why do we put up with this tortuous system? It was never designed to be this way.

One reason is that international agreement is required to change it, but another is that it is strongly supported by the neoliberal doctrine and by the financial community.

68 The Dangers of Overspending in the International Market

The UK situation and the dangers of excess importing.

68.1 Some think that trade deficits don't matter

US situation with respect to China.

Gross foreign investment in the UK and gross UK investment abroad and the dangers they carry.

69 Balance of Payments (BoP) Accounts

An explanation of what they consist of and how they work.

70 International Wealth and Money

A review of how the quantity of money in circulation affects a closed economy.

In an open economy, apart from reserve currencies, hardly any domestic currency enters or leaves the country.

Currency exchange and its effects on the value of the currency.

How government actions to control the economy are undermined in an open economy.

Keynes' understanding of open economies and their dangers, and how his proposals would have avoided them.

71 Reserve Currencies and their Impact

Reserve currencies do leave the home country.

US dollar retained its position as the favoured reserve currency.

Reasons why countries keep reserves in foreign currencies.

Effects of currencies being weak and strong.

China's situation with respect to international trade, especially with the US.

The mutual dependency between the US and China and its dangers for both.

72 Europe and the Euro

Adoption of the euro represented the beginning of a dangerous experiment.

The situation is similar to a single country without a government.

Reasons for adoption were both economic and political.

European central bank (ECB) and individual country central banks.

Each member country is free to issue and sell its own bonds.

At the beginning all went well.

Things fell apart after the 2008 crash.

In spite of 2008 crash there are reasons to believe that the underlying structure is unsound.

73 International Neoliberalism and the Damage it has Done

When floating exchange rates began the IMF's role was over, but it quickly re-invented itself.

IMF has turned its founding principles on their head.

After the 1973 and 1979 oil price rises oil-rich countries found themselves awash with dollars, so they banked much of the money in western banks.

Those banks in turn needed somewhere to lend to and developing countries seemed ideal.

In the 1980s interest rates were raised dramatically and had a devastating effect on debtor countries.

Much and sometimes all of the original loans were spirited away in 'capital flight'.

73.1 The Unholy Trinity - The IMF, World Bank and WTO

Discussion of each.

73.2 The Washington Consensus

Discussion of the basis and rejection by its founder.

The harsh and destructive policies that followed, all in the name of support.

The case of Chile where it appeared to succeed.

73.3 The historic free trade myth

The story and the truth.

The need for nurturing of industry in developing countries.

73.4 The impact on poor countries of rapid capital movement

Much worse than in rich countries.

The need to match capital movement with the inertia of industry.

73.5 International finance and the 2008 crash

International finance amplifies inequality both within and between countries and destroys the wealth creating capacity that it depends on.

The most devastating consequences are suffered by the populations of poor countries.

74 Free Capital Movement and the Death of Democracy

Free capital movement ushered in after the collapse of the Bretton Woods agreement.

Damage to poor countries already discussed, but it also damages rich countries.

Many benefits are cited for free capital movement, but recognition of the harm it does is becoming more widespread.

The crux of the matter is that all economies depend on the circulation of money.

Three policies that can't all operate at the same time - the impossible trinity.

The effects and extent of gambling in the foreign exchange market.

Rodrik's Political Trilemma of the World Economy - he shows that it isn't just monetary control that is sacrificed to the markets, it is democracy.

Rodrik is right and we need to face the major problem that emerges from his insight.

75 The Overwhelming Power of Multinational Corporations (MNCs)

Critics of MNCs who claim that they now rule the world have a strong case.

They have colossal financial power, strong enough to bully governments.

The major proliferation occurred since restrictions on capital movement were relaxed.

A few cases, taken from Chang 2008 serve to illustrate how MNCs use their power.

MNCs are also very adept at avoiding tax. Governments claim to be indignant but take little action.

Ideally international agreements on proper account disclosure and taxation would counter the transfer of power from governments to MNCs.

MNCs have a major competitive advantage over smaller businesses.

MNCs are bullies, and as with all bullies the way to deal with them is to stand up to them.

Perhaps the greatest advantage that an MNC is able to take is that of cheap labour in poor countries.

Monbiot's list of recommendations for limiting MNC power and influence.

But - the freedom conflict is in operation for all businesses, including multinationals.

76 A Way Forward

76.1 Adopt an updated Keynes' Bretton Woods proposal.

Fortunately there is a way out, Keynes' Bretton Woods proposal updated for the modern world.

76.2 Stop exploiting poor countries and relieve them of debts

Poor country debt write-offs and cessation of exploitation.

The confusion between making money and creating wealth.

An example of the UK BoE creating and giving or lending say £50 billion to a poor country.

76.3 Curb the power of multinationals

MNCs should have their power to bully governments and to exploit poor countries taken away.

Monbiot's recommendations for curbing the power of MNCs in more detail.

76.4 A final word on Keynes and his treatment at the hands of neoliberals

Bertrand Russell's comment about Keynes' intellect.

Humanity has benefited immensely by taking to heart the wise words of great people down the ages.

We need to re-recognise Keynes as the genius that he was, and research everything he said and wrote.

The world would be very different if only we had heeded his advice.

Part 4: Society and Civilisation.

77 Introduction to Part 4

Everyone is proud to live in a civilised country.

Neoliberal view.

Nature of private suppliers - but have to operate in the way they do.

Wrong to blame suppliers, blame neoliberalism.

Society must pay for things that benefit the whole of society.

Alternative is privileged and non-privileged people.

Neoliberalism leads to a divided society.

Government is society's agent.

Free movement of capital has taken away government powers
 Distrust increased as love affair with finance blossomed.
 What we need is one person one vote, not one pound one vote.

78 Surplus Wealth and Civilisation

Surplus wealth has given humanity abundance.
 But who should create the wealth and who should enjoy it are political questions.
 Throughout history people have wanted to enjoy surplus wealth but have others create it.
 Democratic societies should allocate shares of wealth as little unfairly as is tolerable to society.
 Different schools of economic thought have very different views.
 A regime that allocates the biggest share to a particular sector is strongly supported by that sector.
 The current UK neoliberal regime is a manipulative regime.
 Those with the most power have the loudest voices

78.1 Who gets the shares?

Four contenders for shares of newly created wealth: workers, business owners, rentiers and society.
 Discussion of each and their shares.
 For analytical purposes shares are split between worker (labour) and capital (owners and rentiers).

79 What Are the Duties of a Democratic Government?

To serve the interests of the whole of society.
 Main duties are to protect its citizens against both external and internal threats.
 Many hard-line neoliberals disagree with the need for a welfare state.
 Governments since 2010 have at best been half-hearted about maintaining the welfare state.
 Beveridge's five giants and the means to defeat them.
 Arguments rage as to how government should maintain a functioning economy.
 Neoliberals believe that governments should take a back seat, but in spite of being unable to find a mechanism to support their beliefs their faith is undimmed.
 Others believe that governments have a vital role to play.

80 Market Freedom or Market Control?

Spectrum of freedom and control.
 In principle in a democracy all citizens have equal freedoms.
 Dismantling of the welfare state leads to faster migration of wealth from poor to rich.
 With markets the state sets the operating environment and must do so.
 Question is not should markets be free from state control or controlled by the state, but how much freedom should the state allow market participants?
 Neoliberal beliefs, discussion of failure to prove their case.
 Milton Friedman's view of assumptions.
 Economic models and their failings.
 Mustn't make the opposite mistake of thinking that all markets should be controlled.

81 The Prize that Keynes Offered to Us

Keynes told us what governments can do for society, but we misunderstood what he said - to our great cost.
 Discussion of the basis of Keynes' insights and the government policies that flowed from them.
 Keynes showed that governments were uniquely placed to solve economic crises.
 Because of Keynes the world enjoyed almost thirty years of progress and increasing levels of prosperity.
 Keynes' General Theory refuted the three basic axioms of classical economics - neutrality of money, gross substitution and the ergodic axiom

Without these axioms classical economics and its offspring neoclassical and neoliberal economics were dead.

Keynes established a new discipline of economics - macroeconomics.

Steve Keen continued where Keynes left off in demolishing what intellectual credibility still remained in neoliberalism.

82 How the Prize Went Unrecognised

Keynes wrote his book as a result of the Great Depression, and made proposals for ending it.

In the event it was mobilisation for WWII that ended it.

The manner in which the General Theory was taken up in the US.

Paul Samuelson's role.

It was Samuelson's textbook that saved a version of Keynesianism, it won the battle but lost the war.

83 The Golden Age of Capitalism

Its duration.

Skidelsky's comparison with Washington Consensus period.

A period of unusual stability.

Britain in dire straits after war, but prosperity followed because of the courage of the Attlee Government.

Everything changed after 1980.

Harry Smith's first-hand account of living through the depression, WWII, and the coming of the welfare state, and how it felt at the time.

84 Stagflation and the Unravelling of Corrupted Keynesianism

How Golden Age came to an end.

The Nixon shock and then the oil price rise, and how they were linked.

The double irony of Keynes being overruled at Bretton Woods and then being misunderstood.

Corrupted Keynesianism held that stagnation and inflation couldn't both occur at the same time, but they did.

Discussion of the main factors involved at the time.

Neoliberals, then an unorthodox school of thought, seized their chance, explaining stagflation as the inevitable consequence of heavy state interference in the market.

Neoliberalism found favour with right-wing politicians.

The election of Thatcher and Reagan marked the beginning of the switch to neoliberalism.

85 So What Would Keynes have Recommended to Cure Stagflation?

We'll never know, but can make an educated guess based on what Keynes said and wrote.

Stagnation of the early 1970s was not due to inadequate demand, it was high import prices.

This is an instance where the whole economy does behave like an individual.

An economic philosophy that thinks it can cure this kind of problem by more government spending is mistaken.

The lubrication analogy is not applicable here.

Nevertheless production and average living standards still rose during the decade.

Some pain was essential, but it should have been shared more equitably.

Keynes' quote makes clear his understanding.

Demand-pull and cost-push inflation.

Inadequate-demand deflation and overproduction deflation.

86 Control of the Economy

All economies must be managed by the state and its agents, the only question is to what extent?

Attributes of a well-controlled economy.

UK fails on every count.

After ten thousand years of civilisation this is quite astonishing.

Other fields of study have large facilities for improving understanding, but economics has nothing similar, even though its impact on people's lives is greater than any of the others.

Physicists may yet take over.

86.1 State levers of economic control

Levers discussed - fiscal policy and monetary policy.

Danger of the liquidity trap.

Bank rate and open market operations.

Blunt tools, examples of opposing and unquantifiable effects.

The law of unintended consequences.

State levers most effective when least need them and vice versa - very evident in 2008.

87 The Government Response to the 2008 Crash and its Aftermath

Rapid, decisive and courageous actions taken in October 2008.

Applaud the scope and depth of measures but deplore their necessity.

Only banks can expect rescue, no other sector of the economy is treated in this way.

The economy was shrinking rapidly, there was a real danger of a deflationary spiral.

Demonstrates the strength of government belief in private bank money creation.

Embarrassment of watching government try to cajole banks into lending.

Discussion of money transfers and their effect on the economy.

Private and public debt and their linkage.

Beginning in 2010 the main thrust of government action has been to try to reduce the budget deficit.

88 Government Debt, Misleading Information, and Misplaced Ideology

Government (national) debt can be presented in different ways to give different impressions.

We are not at all in a desperate situation.

The £375 billion quantitative easing injection reduced the debt by that amount, but that is never mentioned.

Means to get debt to GDP ratio down.

The time for paying down government debt is during booms.

Keynes' advice and its effects after WWII.

The current borrowing situation is good.

Need to recognise that prosperity comes from the creation of wealth, and that comes from people working.

Government should provide money - lubrication, but instead it is removing it.

Impact of a flawed paper by Reinhart & Rogoff in 2010.

Limits to government debt.

Things that determine investor confidence.

Governments don't have to borrow at all.

89 Why Do Governments Go into Debt?

Why do governments borrow money instead of raising adequate taxes? The answer is political.

Why do governments borrow money instead of creating it for themselves? The answer is again political.

Government borrowing is claimed to take existing money from investors to avoid the creation of new money.

Bond maturity and rollover.

Difference between that borrowed and paid back is the budget deficit or surplus.

Also a budget deficit arises if spending exceeds tax revenue, and a budget surplus if vice versa.

Total borrowing outstanding at any time is the national debt.

90 Austerity - A Cure for Excessive Government Debt?

Easy to think too much debt requires cutting of expenditure, because that is what you or I should do, but for the economy it is very different.

Analogy of a potato-growing economy.

Reasons for and effects of austerity.

Austerity sold as a necessary period of having to do without, brought on by having 'lived beyond our means'.

Accepted by large sections of the public.

Austerity attempts to apply thrift to the economy as a whole, which doesn't work.

Keynes' quote.

Keynesian thinking was applied after WWII.

Neoliberalism view - crowding out of private spending.

Objection to additional spending is that it makes the deficit even worse.

Deeply ironic that governments don't need to borrow any money at all.

Austerity only successful if economy as a whole has the characteristics of an individual or family.

An economy can still grow even with austerity, provided that there is spending.

In a recession or depression what is needed is to create more wealth.

Austerity kills the spending goose that lays the wealth creating golden eggs.

Mathematical analysis.

90.1 An experiment to examine the effects of austerity

The effects on a simplified economy of firstly attempting austerity and then spending.

91 Privatisation of Public Industries and Services

Private and public objectives, extra costs for private over public, embedded belief that private better.

Belief based on invisible hand, ruthlessness of private approach, long-term investment disappears.

Government must step in for failure of privatised essential services.

Country in a bad state when Thatcher came to power, in large part due to the power of trades unions.

It was a miserable time which I remember well.

Something had to be done and major reforms were undertaken - with public support.

Pragmatism at first then ideology - state ownership bad, private ownership good.

The pendulum swung much further in the opposite direction.

Thatcher's original objectives, failed to achieve what she wanted.

Meacher quote, emphasis on short-term gains, long-term investment still funded by state.

91.1 If private always better than public what is the magic ingredient?

Review of the various players, only small business owners have any advantage.

No magic ingredient, but need to ensure incentives aligned whether public or private.

Wartime experience.

91.2 The ideological about-turn towards privatisation

A shake-up was needed in the 1970s due to fallout from the Nixon and oil shocks, but privatisation was a one-size-fits-all approach.

Equity premium discussion.

Main concern is social benefit or disbenefit, privatisation benefits owners but not often society.

91.3 Contrived competition

Contrived competition in monopolistic industries.

Quiggin review, very few gave social benefit.

Meacher review of failures.

91.4 Corruption in public bodies

Common complaint is that public bodies are subject to corruption.

Some truth but so are private bodies.

How to minimise corruption.

Arguments seem to imply that all enterprises should be run by the state - but not so.

92 **Public Private Partnerships (PPP), Private Finance Initiatives (PFI), and Outsourcing**

Descriptions of the terms.

PFI discussion and real political reasons for it.

Debt hiding is a pointless exercise.

Use in NHS particularly worrying due to ongoing commitment and state guaranteeing services. NHS privatisation also includes outsourcing.

US healthcare example.

Outsourcing in care homes and children's homes etc., problems of private suppliers of social services.

Government can't offload responsibility for these services because they can't be allowed to fail. If the provider fails then the government has to step in.

Service recipient has no say in the matter. Metrics at best are very crude.

Official reports highly critical.

George Monbiot's book 'Captive State' (Monbiot 2001) and report by David Hall.

93 **Private Company Management and the Agency Problem**

Managers have immense authority and power.

Agency problem.

Directors' responsibilities.

Focus on share price performance has had a strong influence on managers.

Asset stripping.

Managers and board members often appointed for their skills in ruthless cost cutting.

Managers and directors enhance salaries by generous remuneration boards.

Growth in ratio of CEO pay to average employee pay.

94 **Perhaps the State is Not Quite as Useless as We Thought?**

The neoliberal argument - that unfettered markets are in every way superior to state control.

If that's the case then we can expect to find strong evidence. What we find is quite the opposite.

US particularly innovative and dynamic, as shown with great force by Mariana Mazzucato.

List of technologies developed publicly.

US state major driving force in both carrying out and funding early research in areas of high potential value.

State funded innovations are exploited by companies like Apple, but the state doesn't demand a return.

It is contemptible for such companies to do all that they can to avoid paying tax.

Even worse is the global trend of criticising and diminishing the importance of the state.

Self-fulfilling dangers of state denigration.

Conventional neoliberal view of limited state involvement.

Share buybacks by companies to boost share price and avoid constructive investment.

95 **Render unto Society... Taxation**

Tax is necessary if society is to have the things that it needs.

UK system so complex and specialised that the tax code now runs to 17,000 pages.

Why is UK tax so complex?

If society wants a tax code that is both fair and seen to be fair, what we have is a complete mess.

Indication of how officialdom regards the seriousness of various crimes - very much more serious if committed by the poor.

What gets taken in tax is anything but fair - evaders and avoiders.

Thatcher Government took an apologetic approach to tax, seeing it as a necessary evil to be minimised.

Tax isn't a necessary evil, to be imposed on a resentful public, it's an essential good, to be raised from society in order to pay for civilisation.

Tax is society's money, and the government is its custodian.

Unfairness prompts people to evade.

95.1 How to stop tax avoidance

Incorporate an anti-avoidance principle and apply criminal sanctions with custodial sentences.

There is a general anti-tax avoidance rule, but is very limited.

Transparency is also a strong tax avoidance deterrent.

95.2 How to minimise tax evasion

Doubtful that evasion will ever stop but could be reduced very substantially if HMRC is staffed properly.

96 What is a Fair Taxation System?

Take from each so that the level of deprivation is the same.

Major difference between unearned and earned income.

Chart showing proportion of tax paid by different income brackets, the poorest pay most.

Discussion of investment accumulation and acknowledgement that acceptable for reasonable pension purposes.

Justification for society taking back income that is in excess of a fair reward.

Suggestions for taxing earned and unearned income, business tax and inheritance.

If we reshape the rules as proposed in Reich 2016 then there will be less need for taxation to be the main means of redistribution.

A good system is an unimproved land tax. A modernised version would levy tax based on overall wealth - with this there would be no need for any other tax.

Currently perverse situation where wealth creating activities are taxed more heavily than rentier returns.

Very high marginal rates for students and benefit claimants.

97 Inequality: The Driving Force that Lies Behind it

An individual places much more emphasis on bettering him or herself than avoiding harm to others.

Strong positive feedback mechanism in wealth attracting more wealth.

Piketty's 'Fundamental Force for Divergence: $r > g$ ' explained and discussed.

Monopoly game and how it works in real life.

The very rich also take from the rich and so on all the way up the scale.

What limits the process? Discussion of the steady state.

The industrial revolution vastly expanded the scope for acquiring capital.

We are now in transition state, going back to how things were before WWI.

How falling demand has been avoided so far.

Effect of poverty on not being able to give children presents, leads people into the hands of loan sharks.

Neoliberalism seeks to keep workers stressed, exhausted, and chronically short of both time and money so they have no spare mental capacity to question the system they are trapped in.

The cost is misery on huge scale.

Charts of changes in income distribution since 1915.

The annual income of the richest 100 people is enough to end global poverty four times over, the richest 62 people own the same wealth as the poorest half of the world's population,

and the richest 1% owns more wealth than the remaining 99%.

The impact of inequality and how more equal societies fare better on every front.

98 How the Wealthy Deploy their Formidable Bargaining Power

Robert Reich's book (Reich 2016) explains.

Bit by bit but with devastating cumulative effect wealth power has manoeuvred governments into changing existing rules to favour itself at the expense of everyone else.

Examples cited.

Wealth power doesn't want a free market, it wants a rigged market, and it is getting it.

The net effect is that ordinary people create the wealth but the wealthy are the ones entitled to an ever increasing share of it.

Glattfelder talk 'Who controls the world?' The results of his analysis are alarming.

It's too easy to blame the wealthy; governments should serve the interests of the whole of society.

99 Wealth as an Inappropriate Measure of Success

Discussion of the very wealthy's need for measures of success, trappings also indicate success.

Relative wealth and success more important than absolute values.

Success should be related to helping others, and recognised as such.

Success matters far more to wealthy people than wealth, so society should recognise - publicly - that serving the public good is the highest form of personal success.

Good example of the NHS blood transfusion service.

100 A Manifesto for a Kind World

A review of where we have got to in our exploration and what we can do with our knowledge.

100.1 Members of a civilised society deserve good governance

Society must be free to elect its own agent - the government, and for that agent to be accountable only to the electorate.

All means by which wealth power is able to influence government will be removed.

The government will listen to all in society with a legitimate reason to talk to government, and the reason will determine the attention that is given, not wealth.

Capital controls will be re-established because free capital movement completely undermines government authority.

Government will use its power to regulate society as it should be regulated, with effective freedom thresholds.

Increased potential for corruption and abuse of power - need to address these dangers.

100.2 Members of a civilised society deserve security

Once free of external constraints the government will be free to deal with the needs of society, and perhaps the most basic need is for security.

Good reasons for businesses to behave ruthlessly, but society doesn't want to live in the world that business lives in.

The security that people crave is the ability to have their needs met when they don't have the means to pay for them.

State to provide employment.

State to provide a basic income.

These measures will also help businesses. Businesses face massive risks so they need as accommodating an environment as possible and the state should do all it can to provide it.

Wealth whose creation threatens sustainability should have its production processes changed for processes that are sustainable.

The UK should do all it can to become as self-sufficient as possible in the basic needs of the population

We should continue to trade with other countries, but we shouldn't *depend* on other countries to supply our needs.

The UK should cut its foreign investments and cut foreign investments in the UK.

100.3 Members of a civilised society deserve a good start in life

Society will provide for the needs of children, both physical and educational.

The state will monitor and oversee the care of all children, especially when very young.

All children will have the same opportunities for development and learning.

100.4 Members of a civilised society deserve good healthcare

The National Health Service will be staffed and funded so as to be fully effective.

Longer life means more wealth created, and part of that wealth provides the healthcare and old-age care that is needed.

100.5 Members of a civilised society deserve reliable money

The state will take upon itself the responsibility for creating money.

All organisations involved in managing money, whether public or private, will operate transparently to strictly defined criteria.

Commercial banks will no longer enjoy the enormously profitable privilege of creating money. They will still be able to lend money, but it will be pre-existing state money that they lend, like other lenders without a banking licence do now.

Importantly, they will be prevented from allowing more than one person access to the same money.

Discussion of 'near-money'.

The national debt will be reduced as far as is deemed prudent.

100.6 Members of a civilised society deserve fair taxation

All revenue needed to run civilisation in addition to newly created money will be collected by taxation, which will be fair, and transparency will ensure that it is seen to be fair.

Tax avoidance will be stopped and evasion minimised.

Tax havens will be shut down and there will be no special treatment or deals with particular businesses.

All tax returns and correspondence will be put on public record, and tax authorities will have access to everyone's and all companies' bank accounts.

Companies will have to declare all subsidiary companies and parent/subsidiary relationships and money flows.

Consideration will be given to withdrawing the right for a company to own another company, because that opens up great scope for concealing business dealings.

Government will be able to borrow money without interest from the BoE for specific purposes, to be paid back later.

Money can be taken out of the economy when necessary.

Consideration will be given to dispensing with cash.

Those paying tax should be publicly recognised as providing a vital public service.

100.7 Members of a civilised society deserve responsible businesses

Large companies will be required to take proper account of the interests of all stakeholders.

Intellectual property privileges will be reconsidered.

All private finance initiatives and public-private partnerships will be ended, and all private businesses that have significant impact on society will be regulated or nationalised.

The state will have the courage to stand up to multinationals and other big corporations.

There will be no secret meetings between multinationals and public bodies, all will be recorded and exposed to public scrutiny.

All UK health, safety, welfare laws and human rights standards will apply in any foreign country in which a UK company does business, as will minimum incomes in terms of purchasing power parity

100.8 Members of a civilised society deserve decent housing

A major social housing programme will be initiated.

The relentless rise in house prices will stop.

100.9 Members of a civilised society deserve honesty

All wealth extraction activities will be stopped as far as possible.

Ratchet services, where they provide services that are useful to society, will be taken over by the state or operated on a not-for-profit basis, and where they don't they will be prohibited.

Advertising that seeks to persuade by any form of selective information, deception, exaggeration or other form of distortion, psychological manipulation or emotional appeal will be prohibited.

The state will take over the excellent work of the Consumers' Association and make its publications and comparisons available to all free of charge online and at cost for printed material.

100.10 Members of poor foreign societies deserve our help

We need a global vision that encompasses the whole world and everyone and everything in it.

Discussion of how we should help.

The UK could and should forgive all poor country debts owed to the UK.

These aims are easy to state but require a major shift in perspective to bring about.

100.11 That's all very well but who's going to pay for it all?

This is an obvious but inappropriate question.

It is the wrong question because money never needs to be a problem.

The right question is: How can we be sure of being able to create all the wealth required for everyone to live a decent life?

Discussion of how we can.

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