Capitalistic Musings

1st EDITION

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Economics - Psychology's Neglected Branch

By: Dr. Sam Vaknin

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It is impossible to describe any human action if one does not refer to the meaning the actor sees in the stimulus as well as in the end his response is aiming at.
Ludwig von Mises

Economics - to the great dismay of economists - is merely a branch of psychology. It deals with individual behaviour and with mass behaviour. Many of its practitioners sought to disguise its nature as a social science by applying complex mathematics where common sense and direct experimentation would have yielded far better results.

The outcome has been an embarrassing divorce between economic theory and its subjects.

The economic actor is assumed to be constantly engaged in the rational pursuit of self interest. This is not a realistic model - merely a useful approximation. According to this latter day - rational - version of the dismal science, people refrain from repeating their mistakes systematically. They seek to optimize their preferences. Altruism can be such a preference, as well.

Still, many people are non-rational or only nearly rational in certain situations. And the definition of "self-interest" as the pursuit of the fulfillment of preferences is a tautology.

The theory fails to predict important phenomena such as "strong reciprocity" - the propensity to "irrationally" sacrifice resources to reward forthcoming collaborators and punish free-riders. It even fails to account for simpler forms of apparent selflessness, such as reciprocal altruism (motivated by hopes of reciprocal benevolent treatment in the future).

Even the authoritative and mainstream 1995 "Handbook of Experimental Economics", by John Hagel and Alvin Roth (eds.) admits that people do not behave in accordance with the predictions of basic economic theories, such as the standard theory of utility and the theory of general equilibrium. Irritatingly for economists, people change their preferences mysteriously and irrationally. This is called "preference reversals".

Moreover, people's preferences, as evidenced by their choices and decisions in carefully controlled experiments, are inconsistent. They tend to lose control of their actions or procrastinate because they place greater importance (i.e., greater "weight") on the present and the near future than on the far future. This makes most people both irrational and unpredictable.

Either one cannot design an experiment to rigorously and validly test theorems and conjectures in economics - or something is very flawed with the intellectual pillars and models of this field.

Neo-classical economics has failed on several fronts simultaneously. This multiple failure led to despair and the re-examination of basic precepts and tenets.

Consider this sample of outstanding issues:

Unlike other economic actors and agents, governments are accorded a special status and receive special treatment in economic theory. Government is alternately cast as a saint, seeking to selflessly maximize social welfare - or as the villain, seeking to perpetuate and increase its power ruthlessly, as per public choice theories.

Both views are caricatures of reality. Governments indeed seek to perpetuate their clout and increase it - but they do so mostly in order to redistribute income and rarely for self-enrichment.

Economics also failed until recently to account for the role of innovation in growth and development. The discipline often ignored the specific nature of knowledge industries (where returns increase rather than diminish and network effects prevail). Thus, current economic thinking is woefully inadequate to deal with information monopolies (such as Microsoft), path dependence, and pervasive externalities.

Classic cost/benefit analyses fail to tackle very long term investment horizons (i.e., periods). Their underlying assumption - the opportunity cost of delayed consumption - fails when applied beyond the investor's useful economic life expectancy. People care less about their grandchildren's future than about their own. This is because predictions concerned with the far future are highly uncertain and investors refuse to base current decisions on fuzzy "what ifs".

This is a problem because many current investments, such as the fight against global warming, are likely to yield results only decades hence. There is no effective method of cost/benefit analysis applicable to such time horizons.

How are consumer choices influenced by advertising and by pricing? No one seems to have a clear answer. Advertising is concerned with the dissemination of information. Yet it is also a signal sent to consumers that a certain product is useful and qualitative and that the advertiser's stability, longevity, and profitability are secure. Advertising communicates a long term commitment to a winning product by a firm with deep pockets. This is why patrons react to the level of visual exposure to advertising - regardless of its content.

Humans may be too multi-dimensional and hyper-complex to be usefully captured by econometric models. These either lack predictive powers or lapse into logical fallacies, such as the "omitted variable bias" or "reverse causality". The former is concerned with important variables unaccounted for - the latter with reciprocal causation, when every cause is also caused by its own effect.

These are symptoms of an all-pervasive malaise. Economists are simply not sure what precisely constitutes their subject matter. Is economics about the construction and testing of models in accordance with certain basic assumptions? Or should it revolve around the mining of data for emerging patterns, rules, and "laws"?

On the one hand, patterns based on limited - or, worse, non-recurrent - sets of data form a questionable foundation for any kind of "science". On the other hand, models based on assumptions are also in doubt because they are bound to be replaced by new models with new, hopefully improved, assumptions.

One way around this apparent quagmire is to put human cognition (i.e., psychology) at the heart of economics. Assuming that being human is an immutable and knowable constant - it should be amenable to scientific treatment. "Prospect theory", "bounded rationality theories", and the study of "hindsight bias" as well as other cognitive deficiencies are the outcomes of this approach.

To qualify as science, economic theory must satisfy the following cumulative conditions:

a. ***All-inclusiveness (anamnetic)*** – It must encompass, integrate, and incorporate all the facts known about economic behaviour.

b. ***Coherence*** – It must be chronological, structured and causal. It must explain, for instance, why a certain economic policy leads to specific economic outcomes - and why.

c. ***Consistency*** – It must be self-consistent. Its sub-"units" cannot contradict one another or go against the grain of the main "theory". It must also be consistent with the observed phenomena, both those related to economics and those pertaining to non-economic human behaviour. It must adequately cope with irrationality and cognitive deficits.

d. ***Logical compatibility*** – It must not violate the laws of its internal logic and the rules of logic "out there", in the real world.

e. ***Insightfulness*** – It must cast the familiar in a new light, mine patterns and rules from big bodies of data ("data mining"). Its insights must be the inevitable conclusion of the logic, the language, and the evolution of the theory.

f. ***Aesthetic*** – Economic theory must be both plausible and "right", beautiful (aesthetic), not cumbersome, not awkward, not discontinuous, smooth, and so on.

g. ***Parsimony*** – The theory must employ a minimum number of assumptions and entities to explain the maximum number of observed economic behaviours.

h. ***Explanatory Powers*** – It must explain the behaviour of economic actors, their decisions, and why economic events develop the way they do.

i. ***Predictive (prognostic) Powers*** – Economic theory must be able to predict future economic events and trends as well as the future behaviour of economic actors.

j. ***Prescriptive Powers*** – The theory must yield policy prescriptions, much like physics yields technology. Economists must develop "economic technology" - a set of tools, blueprints, rules of thumb, and mechanisms with the power to change the " economic world".

k. ***Imposing*** – It must be regarded by society as the preferable and guiding organizing principle in the economic sphere of human behaviour.

l. ***Elasticity*** – Economic theory must possess the intrinsic abilities to self organize, reorganize, give room to emerging order, accommodate new data comfortably, and avoid rigid reactions to attacks from within and from without.

Many current economic theories do not meet these cumulative criteria and are, thus, merely glorified narratives.

But meeting the above conditions is not enough. Scientific theories must also pass the crucial hurdles of testability, verifiability, refutability, falsifiability, and repeatability. Yet, many economists go as far as to argue that no experiments can be designed to test the statements of economic theories.

It is difficult - perhaps impossible - to test hypotheses in economics for four reasons.

a. ***Ethical*** – Experiments would have to involve human subjects, ignorant of the reasons for the experiments and their aims. Sometimes even the very existence of an experiment will have to remain a secret (as with double blind experiments). Some experiments may involve unpleasant experiences. This is ethically unacceptable.

b. ***Design Problems*** - The design of experiments in economics is awkward and difficult. Mistakes are often inevitable, however careful and meticulous the designer of the experiment is.

c. ***The Psychological Uncertainty Principle*** – The current mental state of a human subject can be (theoretically) fully known. But the passage of time and, sometimes, the experiment itself, influence the subject and alter his or her mental state - a problem known in economic literature as "time inconsistencies". The very processes of measurement and observation influence the subject and change it.

d. ***Uniqueness*** – Experiments in economics, therefore, tend to be unique. They cannot be repeated even when the SAME subjects are involved, simply because no human subject remains the same for long. Repeating the experiments with other subjects casts in doubt the scientific value of the results.

d. ***The undergeneration of testable hypotheses*** – Economic theories do not generate a sufficient number of hypotheses, which can be subjected to scientific testing. This has to do with the fabulous (i.e., storytelling) nature of the discipline.

In a way, economics has an affinity with some private languages. It is a form of art and, as such, it is self-sufficient and self-contained. If certain structural, internal constraints and requirements are met – a statement in economics is deemed to be true even if it does not satisfy external (scientific) requirements. Thus, the standard theory of utility is considered valid in economics despite overwhelming empirical evidence to the contrary - simply because it is aesthetic and mathematically convenient.

So, what are economic "theories" good for?

Economic "theories" and narratives offer an organizing principle, a sense of order, predictability, and justice. They postulate an inexorable drive toward greater welfare and utility (i.e., the idea of progress). They render our chaotic world meaningful and make us feel part of a larger whole. Economics strives to answer the "why's" and "how's" of our daily life. It is dialogic and prescriptive (i.e., provides behavioral prescriptions). In certain ways, it is akin to religion.

In its catechism, the believer (let's say, a politician) asks: "Why... (and here follows an economic problem or behaviour)".

The economist answers:

"The situation is like this not because the world is whimsically cruel, irrational, and arbitrary - but because ... (and here follows a causal explanation based on an economic model). If you were to do this or that the situation is bound to improve".

The believer feels reassured by this explanation and by the explicit affirmation that there is hope providing he follows the prescriptions. His belief in the existence of linear order and justice administered by some supreme, transcendental principle is restored.

This sense of "law and order" is further enhanced when the theory yields predictions which come true, either because they are self-fulfilling or because some real "law", or pattern, has emerged. Alas, this happens rarely. As "The Economist" notes gloomily, economists have the most disheartening record of failed predictions - and prescriptions.

Return

The Misconception of Scarcity

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

My love as deep; the more I give to thee,
The more I have, for both are infinite.

(William Shakespeare, Romeo and Juliet, Act 2, Scene 2)

Are we confronted merely with a bear market in stocks - or is it the first phase of a global contraction of the magnitude of the Great Depression? The answer overwhelmingly depends on how we understand scarcity.

It will be only a mild overstatement to say that the science of economics, such as it is, revolves around the Malthusian concept of scarcity. Our infinite wants, the finiteness of our resources and the bad job we too often make of allocating them efficiently and optimally - lead to mismatches between supply and demand. We are forever forced to choose between opportunities, between alternative uses of resources, painfully mindful of their costs.

This is how the perennial textbook "Economics" (seventeenth edition), authored by Nobel prizewinner Paul Samuelson and William Nordhaus, defines the dismal science:

"Economics is the study of how societies use scarce resources to produce valuable commodities and distribute them among different people".

The classical concept of scarcity - unlimited wants vs. limited resources - is lacking. Anticipating much-feared scarcity encourages hoarding which engenders the very evil it was meant to fend off. Ideas and knowledge - inputs as important as land and water - are not subject to scarcity, as work done by Nobel laureate Robert Solow and, more importantly, by Paul Romer, an economist from the University of California at Berkeley, clearly demonstrates. Additionally, it is useful to distinguish natural from synthetic resources.

The scarcity of most natural resources (a type of "external scarcity") is only theoretical at present. Granted, many resources are unevenly distributed and badly managed. But this is man-made ("internal") scarcity and can be undone by Man. It is truer to assume, for practical purposes, that most natural resources - when not egregiously abused and when freely priced - are infinite rather than scarce. The anthropologist Marshall Sahlins discovered that primitive peoples he has studied had no concept of "scarcity" - only of "satiety". He called them the first "affluent societies".

This is because, fortunately, the number of people on Earth is finite - and manageable - while most resources can either be replenished or substituted. Alarmist claims to the contrary by environmentalists have been convincingly debunked by the likes of Bjorn Lomborg, author of "The Skeptical Environmentalist".

Equally, it is true that manufactured goods, agricultural produce, money, and services are scarce. The number of industrialists, service providers, or farmers is limited - as is their life span. The quantities of raw materials, machinery and plant are constrained. Contrary to classic economic teaching, human wants are limited - only so many people exist at any given time and not all them desire everything all the time. But, even so, the demand for man-made goods and services far exceeds the supply.

Scarcity is the attribute of a "closed" economic universe. But it can be alleviated either by increasing the supply of goods and services (and human beings) - or by improving the efficiency of the allocation of economic resources. Technology and innovation are supposed to achieve the former - rational governance, free trade, and free markets the latter.

The telegraph, the telephone, electricity, the train, the car, the agricultural revolution, information technology and, now, biotechnology have all increased our resources, seemingly ex nihilo. This multiplication of wherewithal falsified all apocalyptic Malthusian scenarios hitherto. Operations research, mathematical modeling, transparent decision making, free trade, and professional management - help better allocate these increased resources to yield optimal results.

Markets are supposed to regulate scarcity by storing information about our wants and needs. Markets harmonize supply and demand. They do so through the price mechanism. Money is, thus, a unit of information and a conveyor or conduit of the price signal - as well as a store of value and a means of exchange.

Markets and scarcity are intimately related. The former would be rendered irrelevant and unnecessary in the absence of the latter. Assets increase in value in line with their scarcity - i.e., in line with either increasing demand or decreasing supply. When scarcity decreases - i.e., when demand drops or supply surges - asset prices collapse. When a resource is thought to be infinitely abundant (e.g., air) - its price is zero.

Armed with these simple and intuitive observations, we can now survey the dismal economic landscape.

The abolition of scarcity was a pillar of the paradigm shift to the "new economy". The marginal costs of producing and distributing intangible goods, such as intellectual property, are negligible. Returns increase - rather than decrease - with each additional copy. An original software retains its quality even if copied numerous times. The very distinction between "original" and "copy" becomes obsolete and meaningless. Knowledge products are "non-rival goods" (i.e., can be used by everyone simultaneously).

Such ease of replication gives rise to network effects and awards first movers with a monopolistic or oligopolistic position. Oligopolies are better placed to invest excess profits in expensive research and development in order to achieve product differentiation. Indeed, such firms justify charging money for their "new economy" products with the huge sunken costs they incur - the initial expenditures and investments in research and development, machine tools, plant, and branding.

To sum, though financial and human resources as well as content may have remained scarce - the quantity of intellectual property goods is potentially infinite because they are essentially cost-free to reproduce. Plummeting production costs also translate to enhanced productivity and wealth formation. It looked like a virtuous cycle.

But the abolition of scarcity implied the abolition of value. Value and scarcity are two sides of the same coin. Prices reflect scarcity. Abundant products are cheap. Infinitely abundant products - however useful - are complimentary. Consider money. Abundant money - an intangible commodity - leads to depreciation against other currencies and inflation at home. This is why central banks intentionally foster money scarcity.

But if intellectual property goods are so abundant and cost-free - why were distributors of intellectual property so valued, not least by investors in the stock exchange? Was it gullibility or ignorance of basic economic rules?

Not so. Even "new economists" admitted to temporary shortages and "bottlenecks" on the way to their utopian paradise of cost-free abundance. Demand always initially exceeds supply. Internet backbone capacity, software programmers, servers are all scarce to start with - in the old economy sense.

This scarcity accounts for the stratospheric erstwhile valuations of dotcoms and telecoms. Stock prices were driven by projected ever-growing demand and not by projected ever-growing supply of asymptotically-free goods and services. "The Economist" describes how WorldCom executives flaunted the cornucopian doubling of Internet traffic every 100 days. Telecoms predicted a tsunami of clients clamoring for G3 wireless Internet services. Electronic publishers gleefully foresaw the replacement of the print book with the much heralded e-book.

The irony is that the new economy self-destructed because most of its assumptions were spot on. The bottlenecks were, indeed, temporary. Technology, indeed, delivered near-cost-free products in endless quantities. Scarcity was, indeed, vanquished.

Per the same cost, the amount of information one can transfer through a single fiber optic swelled 100 times. Computer storage catapulted 80,000 times. Broadband and cable modems let computers communicate at 300 times their speed only 5 years ago. Scarcity turned to glut. Demand failed to catch up with supply. In the absence of clear price signals - the outcomes of scarcity - the match between the two went awry.

One innovation the "new economy" has wrought is "inverse scarcity" - unlimited resources (or products) vs. limited wants. Asset exchanges the world over are now adjusting to this harrowing realization - that cost free goods are worth little in terms of revenues and that people are badly disposed to react to zero marginal costs.

The new economy caused a massive disorientation and dislocation of the market and the price mechanism. Hence the asset bubble. Reverting to an economy of scarcity is our only hope. If we don't do so deliberately - the markets will do it for us, mercilessly.

Return

The Roller Coaster Market

On Volatility and Risk

By: Dr. Sam Vaknin

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Volatility is considered the most accurate measure of risk and, by extension, of return, its flip side. The higher the volatility, the higher the risk - and the reward. That volatility increases in the transition from bull to bear markets seems to support this pet theory. But how to account for surging volatility in plummeting bourses? At the depths of the bear phase, volatility and risk increase while returns evaporate - even taking short-selling into account.

"The Economist" has recently proposed yet another dimension of risk:

"The Chicago Board Options Exchange's VIX index, a measure of traders' expectations of share price gyrations, in July reached levels not seen since the 1987 crash, and shot up again (two weeks ago) ... Over the past five years, volatility spikes have become ever more frequent, from the Asian crisis in 1997 right up to the World Trade Centre attacks. Moreover, it is not just price gyrations that have increased, but the volatility of volatility itself. The markets, it seems, now have an added dimension of risk."

Call-writing has soared as punters, fund managers, and institutional investors try to eke an extra return out of the wild ride and to protect their dwindling equity portfolios. Naked strategies - selling options contracts or buying them in the absence of an investment portfolio of underlying assets - translate into the trading of volatility itself and, hence, of risk. Short-selling and spread-betting funds join single stock futures in profiting from the downside.

Market - also known as beta or systematic - risk and volatility reflect underlying problems with the economy as a whole and with corporate governance: lack of transparency, bad loans, default rates, uncertainty, illiquidity, external shocks, and other negative externalities. The behavior of a specific security reveals additional, idiosyncratic, risks, known as alpha.

Quantifying volatility has yielded an equal number of Nobel prizes and controversies. The vacillation of security prices is often measured by a coefficient of variation within the Black-Scholes formula published in 1973. Volatility is implicitly defined as the standard deviation of the yield of an asset. The value of an option increases with volatility. The higher the volatility the greater the option's chance during its life to be "in the money" - convertible to the underlying asset at a handsome profit.

Without delving too deeply into the model, this mathematical expression works well during trends and fails miserably when the markets change sign.

There is disagreement among scholars and traders whether one should better use historical data or current market prices - which include expectations - to estimate volatility and to price options correctly.

From "The Econometrics of Financial Markets" by John Campbell, Andrew Lo, and Craig MacKinlay, Princeton University Press, 1997:

"Consider the argument that implied volatilities are better forecasts of future volatility because changing market conditions cause volatilities (to) vary through time stochastically, and historical volatilities cannot adjust to changing market conditions as rapidly. The folly of this argument lies in the fact that stochastic volatility contradicts the assumption required by the B-S model - if volatilities do change stochastically through time, the Black-Scholes formula is no longer the correct pricing formula and an implied volatility derived from the Black-Scholes formula provides no new information."

Black-Scholes is thought deficient on other issues as well. The implied volatilities of different options on the same stock tend to vary, defying the formula's postulate that a single stock can be associated with only one value of implied volatility. The model assumes a certain - geometric Brownian - distribution of stock prices that has been shown to not apply to US markets, among others.

Studies have exposed serious departures from the price process fundamental to Black-Scholes: skewness, excess kurtosis (i.e., concentration of prices around the mean), serial correlation, and time varying volatilities. Black-Scholes tackles stochastic volatility poorly.

The formula also unrealistically assumes that the market dickers continuously, ignoring transaction costs and institutional constraints. No wonder that traders use Black-Scholes as a heuristic rather than a price-setting formula.

Volatility also decreases in administered markets and over different spans of time. As opposed to the received wisdom of the random walk model, most investment vehicles sport different volatilities over different time horizons. Volatility is especially high when both supply and demand are inelastic and liable to large, random shocks. This is why the prices of industrial goods are less volatile than the prices of shares, or commodities.

But why are stocks and exchange rates volatile to start with? Why don't they follow a smooth evolutionary path in line, say, with inflation, or interest rates, or productivity, or net earnings?

To start with, because economic fundamentals fluctuate - sometimes as wildly as shares. The Fed has cut interest rates 11 times in the past 12 months down to 1.75 percent - the lowest level in 40 years. Inflation gyrated from double digits to a single digit in the space of two decades. This uncertainty is, inevitably, incorporated in the price signal.

Moreover, because of time lags in the dissemination of data and its assimilation in the prevailing operational model of the economy - prices tend to overshoot both ways. The economist Rudiger Dornbusch, who died last month, studied in his seminal paper, "Expectations and Exchange Rate Dynamics", published in 1975, the apparently irrational ebb and flow of floating currencies.

His conclusion was that markets overshoot in response to surprising changes in economic variables. A sudden increase in the money supply, for instance, axes interest rates and causes the currency to depreciate. The rational outcome should have been a panic sale of obligations denominated in the collapsing currency. But the devaluation is so excessive that people reasonably expect a rebound - i.e., an appreciation of the currency - and purchase bonds rather than dispose of them.

Yet, even Dornbusch ignored the fact that some price twirls have nothing to do with economic policies or realities, or with the emergence of new information - and a lot to do with mass psychology. How else can we account for the crash of October 1987? This goes to the heart of the undecided debate between technical and fundamental analysts.

As Robert Shiller has demonstrated in his tomes "Market Volatility" and "Irrational Exuberance", the volatility of stock prices exceeds the predictions yielded by any efficient market hypothesis, or by discounted streams of future dividends, or earnings. Yet, this finding is hotly disputed.

Some scholarly studies of researchers such as Stephen LeRoy and Richard Porter offer support - other, no less weighty, scholarship by the likes of Eugene Fama, Kenneth French, James Poterba, Allan Kleidon, and William Schwert negate it - mainly by attacking Shiller's underlying assumptions and simplifications. Everyone - opponents and proponents alike - admit that stock returns do change with time, though for different reasons.

Volatility is a form of market inefficiency. It is a reaction to incomplete information (i.e., uncertainty). Excessive volatility is irrational. The confluence of mass greed, mass fears, and mass disagreement as to the preferred mode of reaction to public and private information - yields price fluctuations.

Changes in volatility - as manifested in options and futures premiums - are good predictors of shifts in sentiment and the inception of new trends. Some traders are contrarians. When the VIX or the NASDAQ Volatility indices are high - signifying an oversold market - they buy and when the indices are low, they sell.

Chaikin's Volatility Indicator, a popular timing tool, seems to couple market tops with increased indecisiveness and nervousness, i.e., with enhanced volatility. Market bottoms - boring, cyclical, affairs - usually suppress volatility. Interestingly, Chaikin himself disputes this interpretation. He believes that volatility increases near the bottom, reflecting panic selling - and decreases near the top, when investors are in full accord as to market direction.

But most market players follow the trend. They sell when the VIX is high and, thus, portends a declining market. A bullish consensus is indicated by low volatility. Thus, low VIX readings signal the time to buy. Whether this is more than superstition or a mere gut reaction remains to be seen.

It is the work of theoreticians of finance. Alas, they are consumed by mutual rubbishing and dogmatic thinking. The few that wander out of the ivory tower and actually bother to ask economic players what they think and do - and why - are much derided. It is a dismal scene, devoid of volatile creativity.

Return

The Friendly Trend

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

The authors of a paper published by NBER on March 2000 and titled "The Foundations of Technical Analysis" - Andrew Lo, Harry Mamaysky, and Jiang Wang - claim that:

"Technical analysis, also known as 'charting', has been part of financial practice for many decades, but this discipline has not received the same level of academic scrutiny and acceptance as more traditional approaches such as fundamental analysis.

One of the main obstacles is the highly subjective nature of technical analysis - the presence of geometric shapes in historical price charts is often in the eyes of the beholder. In this paper we offer a systematic and automatic approach to technical pattern recognition ... and apply the method to a large number of US stocks from 1962 to 1996..."

And the conclusion:

" ... Over the 31-year sample period, several technical indicators do provide incremental information and may have some practical value."

These hopeful inferences are supported by the work of other scholars, such as Paul Weller of the Finance Department of the university of Iowa. While he admits the limitations of technical analysis - it is a-theoretic and data intensive, pattern over-fitting can be a problem, its rules are often difficult to interpret, and the statistical testing is cumbersome - he insists that "trading rules are picking up patterns in the data not accounted for by standard statistical models" and that the excess returns thus generated are not simply a risk premium.

Technical analysts have flourished and waned in line with the stock exchange bubble. They and their multi-colored charts regularly graced CNBC, the CNN and other market-driving channels. "The Economist" found that many successful fund managers have regularly resorted to technical analysis - including George Soros' Quantum Hedge fund and Fidelity's Magellan. Technical analysis may experience a revival now that corporate accounts - the fundament of fundamental analysis - have been rendered moot by seemingly inexhaustible scandals.

The field is the progeny of Charles Dow of Dow Jones fame and the founder of the "Wall Street Journal". He devised a method to discern cyclical patterns in share prices. Other sages - such as Elliott - put forth complex "wave theories". Technical analysts now regularly employ dozens of geometric configurations in their divinations.

Technical analysis is defined thus in "The Econometrics of Financial Markets", a 1997 textbook authored by John Campbell, Andrew Lo, and Craig MacKinlay:

"An approach to investment management based on the belief that historical price series, trading volume, and other market statistics exhibit regularities - often ... in the form of geometric patterns ... that can be profitably exploited to extrapolate future price movements."

A less fanciful definition may be the one offered by Edwards and Magee in "Technical Analysis of Stock Trends":

"The science of recording, usually in graphic form, the actual history of trading (price changes, volume of transactions, etc.) in a certain stock or in 'the averages' and then deducing from that pictured history the probable future trend."

Fundamental analysis is about the study of key statistics from the financial statements of firms as well as background information about the company's products, business plan, management, industry, the economy, and the marketplace.

Economists, since the 1960's, sought to rebuff technical analysis. Markets, they say, are efficient and "walk" randomly. Prices reflect all the information known to market players - including all the information pertaining to the future. Technical analysis has often been compared to voodoo, alchemy, and astrology - for instance by Burton Malkiel in his seminal work, "A Random Walk Down Wall Street."

The paradox is that technicians are more orthodox than the most devout academic. They adhere to the strong version of market efficiency. The market is so efficient, they say, that nothing can be gleaned from fundamental analysis. All fundamental insights, information, and analyses are already reflected in the price. This is why one can deduce future prices from past and present ones.

Jack Schwager, sums it up in his book "Schwager on Futures: Technical Analysis", quoted by Stockcharts.com, :

"One way of viewing it is that markets may witness extended periods of random fluctuation, interspersed with shorter periods of nonrandom behavior. The goal of the chartist is to identify those periods (i.e. major trends)."

Not so, retort the fundamentalists. The fair value of a security or a market can be derived from available information using mathematical models - but is rarely reflected in prices. This is the weak version of the market efficiency hypothesis.

The mathematically convenient idealization of the efficient market, though, has been debunked in numerous studies. These are efficiently summarized in Craig McKinlay and Andrew Lo's tome "A Non-random Walk Down Wall Street" published in 1999.

Not all markets are strongly efficient. Most of them sport weak or "semi-strong" efficiency. In some markets, a filter model - one that dictates the timing of sales and purchases - could prove useful. This is especially true when the equilibrium price of a share - or of the market as a whole - changes as a result of externalities.

Substantive news, change in management, an oil shock, a terrorist attack, an accounting scandal, an FDA approval, a major contract, or a natural, or man-made disaster - all cause share prices and market indices to break the boundaries of the price band that they have occupied. Technical analysts identify these boundaries and trace breakthroughs and their outcomes in terms of prices.

Technical analysis may be nothing more than a self-fulfilling prophecy, though. The more devotees it has, the stronger it affects the shares or markets it analyses. Investors move in herds and are inclined to seek patterns in the often bewildering marketplace. As opposed to the assumptions underlying the classic theory of portfolio analysis - investors do remember past prices. They hesitate before they cross certain numerical thresholds.

But this herd mentality is also the Achilles heel of technical analysis. If everyone were to follow its guidance - it would have been rendered useless. If everyone were to buy and sell at the same time - based on the same technical advice - price advantages would have been arbitraged away instantaneously. Technical analysis is about privileged information to the privileged few - though not too few, lest prices are not swayed.

Studies cited in Edwin Elton and Martin Gruber's "Modern Portfolio Theory and Investment Analysis" and elsewhere show that a filter model - trading with technical analysis - is preferable to a "buy and hold" strategy but inferior to trading at random. Trading against recommendations issued by a technical analysis model and with them - yielded the same results. Fama-Blum discovered that the advantage proffered by such models is identical to transaction costs.

The proponents of technical analysis claim that rather than forming investor psychology - it reflects their risk aversion at different price levels. Moreover, the borders between the two forms of analysis - technical and fundamental - are less sharply demarcated nowadays. "Fundamentalists" insert past prices and volume data in their models - and "technicians" incorporate arcana such as the dividend stream and past earnings in theirs.

It is not clear why should fundamental analysis be considered superior to its technical alternative. If prices incorporate all the information known and reflect it - predicting future prices would be impossible regardless of the method employed. Conversely, if prices do not reflect all the information available, then surely investor psychology is as important a factor as the firm's - now oft-discredited - financial statements?

Prices, after all, are the outcome of numerous interactions among market participants, their greed, fears, hopes, expectations, and risk aversion. Surely studying this emotional and cognitive landscape is as crucial as figuring the effects of cuts in interest rates or a change of CEO?

Still, even if we accept the rigorous version of market efficiency - i.e., as Aswath Damodaran of the Stern Business School at NYU puts it, that market prices are "unbiased estimates of the true value of investments" - prices do react to new information - and, more importantly, to anticipated information. It takes them time to do so. Their reaction constitutes a trend and identifying this trend at its inception can generate excess yields. On this both fundamental and technical analysis are agreed.

Moreover, markets often over-react: they undershoot or overshoot the "true and fair value". Fundamental analysis calls this oversold and overbought markets. The correction back to equilibrium prices sometimes takes years. A savvy trader can profit from such market failures and excesses.

As quality information becomes ubiquitous and instantaneous, research issued by investment banks discredited, privileged access to information by analysts prohibited, derivatives proliferate, individual participation in the stock market increases, and transaction costs turn negligible - a major rethink of our antiquated financial models is called for.

The maverick Andrew Lo, a professor of finance at the Sloan School of Management at MIT, summed up the lure of technical analysis in lyric terms in an interview he gave to Traders.com's "Technical Analysis of Stocks and Commodities", quoted by Arthur Hill in Stockcharts.com:

"The more creativity you bring to the investment process, the more rewarding it will be. The only way to maintain ongoing success, however, is to constantly innovate. That's much the same in all endeavors. The only way to continue making money, to continue growing and keeping your profit margins healthy, is to constantly come up with new ideas."

Return

The Merits of Inflation

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

In a series of speeches designed to defend his record, Alan Greenspan, until recently an icon of both the new economy and stock exchange effervescence, reiterated the orthodoxy of central banking everywhere. His job, he repeated disingenuously, was confined to taming prices and ensuring monetary stability. He could not and, indeed, would not second guess the market. He consistently sidestepped the thorny issues of just how destabilizing to the economy the bursting of asset bubbles is and how his policies may have contributed to the froth.

Greenspan and his ilk seem to be fighting yesteryear's war against a long-slain monster. The obsession with price stability led to policy excesses and disinflation gave way to deflation - arguably an economic ill far more pernicious than inflation. Deflation coupled with negative savings and monstrous debt burdens can lead to prolonged periods of zero or negative growth. Moreover, in the zealous crusade waged globally against fiscal and monetary expansion - the merits and benefits of inflation have often been overlooked.

As economists are wont to point out time and again, inflation is not the inevitable outcome of growth. It merely reflects the output gap between actual and potential GDP. As long as the gap is negative - i.e., whilst the economy is drowning in spare capacity - inflation lies dormant. The gap widens if growth is anemic and below the economy's potential. Thus, growth can actually be accompanied by deflation.

Indeed, it is arguable whether inflation was subdued - in America as elsewhere - by the farsighted policies of central bankers. A better explanation might be overcapacity - both domestic and global - wrought by decades of inflation which distorted investment decisions. Excess capacity coupled with increasing competition, globalization, privatization, and deregulation - led to ferocious price wars and to consistently declining prices.

Quoted by "The Economist", Dresdner Kleinwort Wasserstein noted that America's industry is already in the throes of deflation. The implicit price deflator of the non-financial business sector has been -0.6 percent in the year to the end of the second quarter of 2002. Germany faces the same predicament. As oil prices surge, their inflationary shock will give way to a deflationary and recessionary aftershock.

Depending on one's point of view, this is a self-reinforcing virtuous - or vicious cycle. Consumers learn to expect lower prices - i.e., inflationary expectations fall and, with them, inflation itself.

The intervention of central banks only hastened the process and now it threatens to render benign structural disinflation - malignantly deflationary.

Should the USA reflate its way out of either an impending double dip recession or deflationary anodyne growth?

It is universally accepted that inflation leads to the misallocation of economic resources by distorting the price signal. Confronted with a general rise in prices, people get confused. They are not sure whether to attribute the surging prices to a real spurt in demand, to speculation, inflation, or what. They often make the wrong decisions.

They postpone investments - or over-invest and embark on preemptive buying sprees. As Erica Groshen and Mark Schweitzer have demonstrated in an NBER working paper titled "Identifying inflation's grease and sand effects in the labour market", employers - unable to predict tomorrow's wages - hire less.

Still, the late preeminent economist James Tobin went as far as calling inflation "the grease on the wheels of the economy". What rate of inflation is desirable? The answer is: it depends on whom you ask. The European Central Bank maintains an annual target of 2 percent. Other central banks - the Bank of England, for instance - proffer an "inflation band" of between 1.5 and 2.5 percent. The Fed has been known to tolerate inflation rates of 3-4 percent.

These disparities among essentially similar economies reflect pervasive disagreements over what is being quantified by the rate of inflation and when and how it should be managed.

The sin committed by most central banks is their lack of symmetry. They signal visceral aversion to inflation - but ignore the risk of deflation altogether. As inflation subsides, disinflation seamlessly fades into deflation. People - accustomed to the deflationary bias of central banks - expect prices to continue to fall. They defer consumption. This leads to inextricable and all-pervasive recessions.

Inflation rates - as measured by price indices - fail to capture important economic realities. As the Boskin commission revealed in 1996, some products are transformed by innovative technology even as their prices decline or remain stable. Such upheavals are not encapsulated by the rigid categories of the questionnaires used by bureaus of statistics the world over to compile price data. Cellular phones, for instance, were not part of the consumption basket underlying the CPI in America as late as 1998. The consumer price index in the USA may be overstated by one percentage point year in and year out, was the startling conclusion in the commission's report.

Current inflation measures neglect to take into account whole classes of prices - for instance, tradable securities. Wages - the price of labor - are left out. The price of money - interest rates - is excluded. Even if these were to be included, the way inflation is defined and measured today, they would have been grossly misrepresented.

Consider a deflationary environment in which stagnant wages and zero interest rates can still have a - negative or positive - inflationary effect. In real terms, in deflation, both wages and interest rates increase relentlessly even if they stay put. Yet it is hard to incorporate this "downward stickiness" in present-day inflation measures.

The methodology of computing inflation obscures many of the "quantum effects" in the borderline between inflation and deflation. Thus, as pointed out by George Akerloff, William Dickens, and George Perry in "The Macroeconomics of Low Inflation" (Brookings Papers on Economic Activity, 1996), inflation allows employers to cut real wages.

Workers may agree to a 2 percent pay rise in an economy with 3 percent inflation. They are unlikely to accept a pay cut even when inflation is zero or less. This is called the "money illusion". Admittedly, it is less pronounced when compensation is linked to performance. Thus, according to "The Economist", Japanese wages - with a backdrop of rampant deflation - shrank 5.6 percent in the year to July as company bonuses were brutally slashed.

Economists in a November 2000 conference organized by the ECB argued that a continent-wide inflation rate of 0-2 percent would increase structural unemployment in Europe's arthritic labor markets by a staggering 2-4 percentage points. Akerloff-Dickens-Perry concurred in the aforementioned paper. At zero inflation, unemployment in America would go up, in the long run, by 2.6 percentage points. This adverse effect can, of course, be offset by productivity gains, as has been the case in the USA throughout the 1990's.

The new consensus is that the price for a substantial decrease in unemployment need not be a sizable rise in inflation. The level of employment at which inflation does not accelerate - the non-accelerating inflation rate of unemployment or NAIRU - is susceptible to government policies.

Vanishingly low inflation - bordering on deflation - also results in a "liquidity trap". The nominal interest rate cannot go below zero. But what matters are real - inflation adjusted - interest rates. If inflation is naught or less - the authorities are unable to stimulate the economy by reducing interest rates below the level of inflation.

This has been the case in Japan in the last few years and is now emerging as a problem in the USA. The Fed - having cut rates 11 times in the past 14 months and unless it is willing to expand the money supply aggressively - may be at the end of its monetary tether. The Bank of Japan has recently resorted to unvarnished and assertive monetary expansion in line with what Paul Krugman calls "credible promise to be irresponsible".

This may have led to the sharp devaluation of the yen in recent months. Inflation is exported through the domestic currency's depreciation and the lower prices of export goods and services. Inflation thus indirectly enhances exports and helps close yawning gaps in the current account. The USA with its unsustainable trade deficit and resurgent budget deficit could use some of this medicine.

But the upshots of inflation are fiscal, not merely monetary. In countries devoid of inflation accounting, nominal gains are fully taxed - though they reflect the rise in the general price level rather than any growth in income. Even where inflation accounting is introduced, inflationary profits are taxed.

Thus inflation increases the state's revenues while eroding the real value of its debts, obligations, and expenditures denominated in local currency. Inflation acts as a tax and is fiscally corrective - but without the recessionary and deflationary effects of a "real" tax.

The outcomes of inflation, ironically, resemble the economic recipe of the "Washington consensus" propagated by the likes of the rabidly anti-inflationary IMF. As a long term policy, inflation is unsustainable and would lead to cataclysmic effects. But, in the short run, as a "shock absorber" and "automatic stabilizer", low inflation may be a valuable counter-cyclical instrument.

Inflation also improves the lot of corporate - and individual - borrowers by increasing their earnings and marginally eroding the value of their debts (and savings). It constitutes a disincentive to save and an incentive to borrow, to consume, and, alas, to speculate. "The Economist" called it "a splendid way to transfer wealth from savers to borrowers."

The connection between inflation and asset bubbles is unclear. On the one hand, some of the greatest fizz in history occurred during periods of disinflation. One is reminded of the global boom in technology shares and real estate in the 1990's. On the other hand, soaring inflation forces people to resort to hedges such as gold and realty, inflating their prices in the process. Inflation - coupled with low or negative interest rates - also tends to exacerbate perilous imbalances by encouraging excess borrowing, for instance.

Still, the absolute level of inflation may be less important than its volatility. Inflation targeting - the latest fad among central bankers - aims to curb inflationary expectations by implementing a consistent and credible anti-inflationary as well as anti-deflationary policy administered by a trusted and impartial institution, the central bank.

Return

The Benefits of Oligopolies

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

The Wall Street Journal has recently published an elegiac list:

"Twenty years ago, cable television was dominated by a patchwork of thousands of tiny, family-operated companies. Today, a pending deal would leave three companies in control of nearly two-thirds of the market. In 1990, three big publishers of college textbooks accounted for 35% of industry sales. Today they have 62% ... Five titans dominate the (defense) industry, and one of them, Northrop Grumman ... made a surprise (successful) $5.9 billion bid for (another) TRW ... In 1996, when Congress deregulated telecommunications, there were eight Baby Bells. Today there are four, and dozens of small rivals are dead. In 1999, more than 10 significant firms offered help-wanted Web sites. Today, three firms dominate."

Mergers, business failures, deregulation, globalization, technology, dwindling and more cautious venture capital, avaricious managers and investors out to increase share prices through a spree of often ill-thought acquisitions - all lead inexorably to the congealing of industries into a few suppliers. Such market formations are known as oligopolies. Oligopolies encourage customers to collaborate in oligopsonies and these, in turn, foster further consolidation among suppliers, service providers, and manufacturers.

Market purists consider oligopolies - not to mention cartels - to be as villainous as monopolies. Oligopolies, they intone, restrict competition unfairly, retard innovation, charge rent and price their products higher than they could have in a perfect competition free market with multiple participants. Worse still, oligopolies are going global.

But how does one determine market concentration to start with?

The Herfindahl-Hirschmann index squares the market shares of firms in the industry and adds up the total. But the number of firms in a market does not necessarily impart how low - or high - are barriers to entry. These are determined by the structure of the market, legal and bureaucratic hurdles, the existence, or lack thereof of functioning institutions, and by the possibility to turn an excess profit.

The index suffers from other shortcomings. Often the market is difficult to define. Mergers do not always drive prices higher. University of Chicago economists studying Industrial Organization - the branch of economics that deals with competition - have long advocated a shift of emphasis from market share to - usually temporary - market power. Influential antitrust thinkers, such as Robert Bork, recommended to revise the law to focus solely on consumer welfare.

These - and other insights - were incorporated in a theory of market contestability. Contrary to classical economic thinking, monopolies and oligopolies rarely raise prices for fear of attracting new competitors, went the new school. This is especially true in a "contestable" market - where entry is easy and cheap.

An Oligopolistic firm also fears the price-cutting reaction of its rivals if it reduces prices, goes the Hall, Hitch, and Sweezy theory of the Kinked Demand Curve. If it were to raise prices, its rivals may not follow suit, thus undermining its market share. Stackleberg's amendments to Cournot's Competition model, on the other hand, demonstrate the advantages to a price setter of being a first mover.

In "Economic assessment of oligopolies under the Community Merger Control Regulation, in European Competition law Review (Vol 4, Issue 3), Juan Briones Alonso writes:

"At first sight, it seems that ... oligopolists will sooner or later find a way of avoiding competition among themselves, since they are aware that their overall profits are maximized with this strategy. However, the question is much more complex. First of all, collusion without explicit agreements is not easy to achieve. Each supplier might have different views on the level of prices which the demand would sustain, or might have different price preferences according to its cost conditions and market share. A company might think it has certain advantages which its competitors do not have, and would perhaps perceive a conflict between maximising its own profits and maximizing industry profits.

Moreover, if collusive strategies are implemented, and oligopolists manage to raise prices significantly above their competitive level, each oligopolist will be confronted with a conflict between sticking to the tacitly agreed behaviour and increasing its individual profits by 'cheating' on its competitors. Therefore, the question of mutual monitoring and control is a key issue in collusive oligopolies."

Monopolies and oligopolies, went the contestability theory, also refrain from restricting output, lest their market share be snatched by new entrants. In other words, even monopolists behave as though their market was fully competitive, their production and pricing decisions and actions constrained by the "ghosts" of potential and threatening newcomers.

In a CRIEFF Discussion Paper titled "From Walrasian Oligopolies to Natural Monopoly - An Evolutionary Model of Market Structure", the authors argue that: "Under decreasing returns and some fixed cost, the market grows to 'full capacity' at Walrasian equilibrium (oligopolies); on the other hand, if returns are increasing, the unique long run outcome involves a profit-maximising monopolist."

While intellectually tempting, contestability theory has little to do with the rough and tumble world of business. Contestable markets simply do not exist. Entering a market is never cheap, nor easy. Huge sunk costs are required to counter the network effects of more veteran products as well as the competitors' brand recognition and ability and inclination to collude to set prices.

Victory is not guaranteed, losses loom constantly, investors are forever edgy, customers are fickle, bankers itchy, capital markets gloomy, suppliers beholden to the competition. Barriers to entry are almost always formidable and often insurmountable.

In the real world, tacit and implicit understandings regarding prices and competitive behavior prevail among competitors within oligopolies. Establishing a reputation for collusive predatory pricing deters potential entrants. And a dominant position in one market can be leveraged into another, connected or derivative, market.

But not everyone agrees. Ellis Hawley believed that industries should be encouraged to grow because only size guarantees survival, lower prices, and innovation. Louis Galambos, a business historian at Johns Hopkins University, published a 1994 paper titled "The Triumph of Oligopoly". In it, he strove to explain why firms and managers - and even consumers - prefer oligopolies to both monopolies and completely free markets with numerous entrants.

Oligopolies, as opposed to monopolies, attract less attention from trustbusters. Quoted in the Wall Street Journal on March 8, 1999, Galambos wrote: "Oligopolistic competition proved to be beneficial ... because it prevented ossification, ensuring that managements would keep their organizations innovative and efficient over the long run."

In his recently published tome "The Free-Market Innovation Machine - Analysing the Growth Miracle of Capitalism", William Baumol of Princeton University, concurs. He daringly argues that productive innovation is at its most prolific and qualitative in oligopolistic markets. Because firms in an oligopoly characteristically charge above-equilibrium (i.e., high) prices - the only way to compete is through product differentiation. This is achieved by constant innovation - and by incessant advertising.

Baumol maintains that oligopolies are the real engines of growth and higher living standards and urges antitrust authorities to leave them be. Lower regulatory costs, economies of scale and of scope, excess profits due to the ability to set prices in a less competitive market - allow firms in an oligopoly to invest heavily in research and development. A new drug costs c. $800 million to develop and get approved, according to Joseph DiMasi of Tufts University's Center for the Study of Drug Development, quoted in The wall Street Journal.

In a paper titled "If Cartels Were Legal, Would Firms Fix Prices", implausibly published by the Antitrust Division of the US Department of Justice in 1997, Andrew Dick demonstrated, counterintuitively, that cartels are more likely to form in industries and sectors with many producers. The more concentrated the industry - i.e., the more oligopolistic it is - the less likely were cartels to emerge.

Cartels are conceived in order to cut members' costs of sales. Small firms are motivated to pool their purchasing and thus secure discounts. Dick draws attention to a paradox: mergers provoke the competitors of the merging firms to complain. Why do they act this way?

Mergers and acquisitions enhance market concentration. According to conventional wisdom, the more concentrated the industry, the higher the prices every producer or supplier can charge. Why would anyone complain about being able to raise prices in a post-merger market?

Apparently, conventional wisdom is wrong. Market concentration leads to price wars, to the great benefit of the consumer. This is why firms find the mergers and acquisitions of their competitors worrisome. America's soft drink market is ruled by two firms - Pepsi and Coca-Cola. Yet, it has been the scene of ferocious price competition for decades.

"The Economist", in its review of the paper, summed it up neatly:

"The story of America's export cartels suggests that when firms decide to co-operate, rather than compete, they do not always have price increases in mind. Sometimes, they get together simply in order to cut costs, which can be of benefit to consumers."

The very atom of antitrust thinking - the firm - has changed in the last two decades. No longer hierarchical and rigid, business resembles self-assembling, nimble, ad-hoc networks of entrepreneurship superimposed on ever-shifting product groups and profit and loss centers.

Competition used to be extraneous to the firm - now it is commonly an internal affair among autonomous units within a loose overall structure. This is how Jack "neutron" Welsh deliberately structured General Electric. AOL-Time Warner hosts many competing units, yet no one ever instructs them either to curb this internecine competition, to stop cannibalizing each other, or to start collaborating synergistically. The few mammoth agencies that rule the world of advertising now host a clutch of creative boutiques comfortably ensconced behind Chinese walls. Such outfits often manage the accounts of competitors under the same corporate umbrella.

Most firms act as intermediaries. They consume inputs, process them, and sell them as inputs to other firms. Thus, many firms are concomitantly consumers, producers, and suppliers. In a paper published last year and titled "Productive Differentiation in Successive Vertical Oligopolies", that authors studied:

"An oligopoly model with two brands. Each downstream firm chooses one brand to sell on a final market. The upstream firms specialize in the production of one input specifically designed for the production of one brand, but they also produce he input for the other brand at an extra cost. (They concluded that) when more downstream brands choose one brand, more upstream firms will specialize in the input specific to that brand, and vice versa. Hence, multiple equilibria are possible and the softening effect of brand differentiation on competition might not be strong enough to induce maximal differentiation" (and, thus, minimal competition).

Both scholars and laymen often mix their terms.

Competition does not necessarily translate either to variety or to lower prices. Many consumers are turned off by too much choice. Lower prices sometimes deter competition and new entrants. A multiplicity of vendors, retail outlets, producers, or suppliers does not always foster competition. And many products have umpteen substitutes. Consider films - cable TV, satellite, the Internet, cinemas, video rental shops, all offer the same service: visual content delivery.

And then there is the issue of technological standards. It is incalculably easier to adopt a single worldwide or industry-wide standard in an oligopolistic environment. Standards are known to decrease prices by cutting down R&D expenditures and systematizing components.

Or, take innovation. It is used not only to differentiate one's products from the competitors' - but to introduce new generations and classes of products. Only firms with a dominant market share have both the incentive and the wherewithal to invest in R&D and in subsequent branding and marketing.

But oligopolies in deregulated markets have sometimes substituted price fixing, extended intellectual property rights, and competitive restraint for market regulation. Still, Schumpeter believed in the faculty of "disruptive technologies" and "destructive creation" to check the power of oligopolies to set extortionate prices, lower customer care standards, or inhibit competition.

Linux threatens Windows. Opera nibbles at Microsoft's Internet Explorer. Amazon drubbed traditional booksellers. eBay thrashes Amazon. Bell was forced by Covad Communications to implement its own technology, the DSL broadband phone line.

Barring criminal behavior, there is little that oligopolies can do to defend themselves against these forces. They can acquire innovative firms, intellectual property, and talent. They can form strategic partnerships. But the supply of innovators and new technologies is infinite - and the resources of oligopolies, however mighty, are finite. The market is stronger than any of its participants, regardless of the hubris of some, or the paranoia of others.

Return

Moral Hazard and the Survival Value of Risk

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

Also Read:

The Business of Risk

Risk transfer is the gist of modern economies. Citizens pay taxes to ever expanding governments in return for a variety of "safety nets" and state-sponsored insurance schemes. Taxes can, therefore, be safely described as insurance premiums paid by the citizenry. Firms extract from consumers a markup above their costs to compensate them for their business risks.

Profits can be easily cast as the premiums a firm charges for the risks it assumes on behalf of its customers - i.e., risk transfer charges. Depositors charge banks and lenders charge borrowers interest, partly to compensate for the hazards of lending - such as the default risk. Shareholders expect above "normal" - that is, risk-free - returns on their investments in stocks. These are supposed to offset trading liquidity, issuer insolvency, and market volatility risks.

The reallocation and transfer of risk are booming industries. Governments, capital markets, banks, and insurance companies have all entered the fray with ever-evolving financial instruments. Pundits praise the virtues of the commodification and trading of risk. It allows entrepreneurs to assume more of it, banks to get rid of it, and traders to hedge against it. Modern risk exchanges liberated Western economies from the tyranny of the uncertain - they enthuse.

But this is precisely the peril of these new developments. They mass manufacture moral hazard. They remove the only immutable incentive to succeed - market discipline and business failure. They undermine the very fundaments of capitalism: prices as signals, transmission channels, risk and reward, opportunity cost. Risk reallocation, risk transfer, and risk trading create an artificial universe in which synthetic contracts replace real ones and third party and moral hazards replace business risks.

Moral hazard is the risk that the behaviour of an economic player will change as a result of the alleviation of real or perceived potential costs. It has often been claimed that IMF bailouts, in the wake of financial crises - in Mexico, Brazil, Asia, and Turkey, to mention but a few - created moral hazard.

Governments are willing to act imprudently, safe in the knowledge that the IMF is a lender of last resort, which is often steered by geopolitical considerations, rather than merely economic ones. Creditors are more willing to lend and at lower rates, reassured by the IMF's default-staving safety net. Conversely, the IMF's refusal to assist Russia in 1998 and Argentina this year - should reduce moral hazard.

The IMF, of course, denies this. In a paper titled "IMF Financing and Moral Hazard", published June 2001, the authors - Timothy Lane and Steven Phillips, two senior IMF economists - state:

"... In order to make the case for abolishing or drastically overhauling the IMF, one must show ... that the moral hazard generated by the availability of IMF financing overshadows any potentially beneficial effects in mitigating crises ... Despite many assertions in policy discussions that moral hazard is a major cause of financial crises, there has been astonishingly little effort to provide empirical support for this belief."

Yet, no one knows how to measure moral hazard. In an efficient market, interest rate spreads on bonds reflect all the information available to investors, not merely the existence of moral hazard. Market reaction is often delayed, partial, or distorted by subsequent developments.

Moreover, charges of "moral hazard" are frequently ill-informed and haphazard. Even the venerable Wall Street Journal fell in this fashionable trap. It labeled the Long Term Capital Management (LTCM) 1998 salvage - "$3.5 billion worth of moral hazard". Yet, no public money was used to rescue the sinking hedge fund and investors lost most of their capital when the new lenders took over 90 percent of LTCM's equity.

In an inflationary turn of phrase, "moral hazard" is now taken to encompass anti-cyclical measures, such as interest rates cuts. The Fed - and its mythical Chairman, Alan Greenspan - stand accused of bailing out the bloated stock market by engaging in an uncontrolled spree of interest rates reductions.

In a September 2001 paper titled "Moral Hazard and the US Stock Market", the authors - Marcus Miller, Paul Weller, and Lei Zhang, all respected academics - accuse the Fed of creating a "Greenspan Put". In a scathing commentary, they write:

"The risk premium in the US stock market has fallen far below its historic level ... (It may have been) reduced by one-sided intervention policy on the part of the Federal Reserve which leads investors into the erroneous belief that they are insured against downside risk ... This insurance - referred to as the Greenspan Put - (involves) exaggerated faith in the stabilizing power of Mr. Greenspan."

Moral hazard infringes upon both transparency and accountability. It is never explicit or known in advance. It is always arbitrary, or subject to political and geopolitical considerations. Thus, it serves to increase uncertainty rather than decrease it. And by protecting private investors and creditors from the outcomes of their errors and misjudgments - it undermines the concept of liability.

The recurrent rescues of Mexico - following its systemic crises in 1976, 1982, 1988, and 1994 - are textbook examples of moral hazard. The Cato Institute called them, in a 1995 Policy Analysis paper, "palliatives" which create "perverse incentives" with regards to what it considers to be misguided Mexican public policies - such as refusing to float the peso.

Still, it can be convincingly argued that the problem of moral hazard is most acute in the private sector. Sovereigns can always inflate their way out of domestic debt. Private foreign creditors implicitly assume multilateral bailouts and endless rescheduling when lending to TBTF or TITF ("too big or too important to fail") countries. The debt of many sovereign borrowers, therefore, is immune to terminal default.

Not so with private debtors. In remarks made by Gary Stern, President of the Federal Reserve Bank of Minneapolis, to the 35th Annual Conference on Bank Structure and Competition, on May 1999, he said:

"I propose combining market signals of risk with the best aspects of current regulation to help mitigate the moral hazard problem that is most acute with our largest banks ... The actual regulatory and legal changes introduced over the period-although positive steps-are inadequate to address the safety net's perversion of the risk/return trade-off."

This observation is truer now than ever. Mass-consolidation in the banking sector, mergers with non-banking financial intermediaries (such as insurance companies), and the introduction of credit derivatives and other financial innovations - make the issue of moral hazard all the more pressing.

Consider deposit insurance, provided by virtually every government in the world. It allows the banks to pay to depositors interest rates which do not reflect the banks' inherent riskiness. As the costs of their liabilities decline to unrealistic levels -banks misprice their assets as well. They end up charging borrowers the wrong interest rates or, more common, financing risky projects.

Badly managed banks pay higher premiums to secure federal deposit insurance. But this disincentive is woefully inadequate and disproportionate to the enormous benefits reaped by virtue of having a safety net. Stern dismisses this approach:

"The ability of regulators to contain moral hazard directly is limited. Moral hazard results when economic agents do not bear the marginal costs of their actions. Regulatory reforms can alter marginal costs but they accomplish this task through very crude and often exploitable tactics. There should be limited confidence that regulation and supervision will lead to bank closures before institutions become insolvent. In particular, reliance on lagging regulatory measures, restrictive regulatory and legal norms, and the ability of banks to quickly alter their risk profile have often resulted in costly failures."

Stern concludes his remarks by repeating the age-old advice: caveat emptor. Let depositors and creditors suffer losses. This will enhance their propensity to discipline market players. They are also likely to become more selective and invest in assets which conform to their risk aversion.

Both outcomes are highly dubious. Private sector creditors and depositors have little leverage over delinquent debtors or banks. When Russia - and trigger happy Russian firms - defaulted on their obligations in 1998, even the largest lenders, such as the EBRD, were unable to recover their credits and investments.

The defrauded depositors of BCCI are still chasing the assets of the defunct bank as well as litigating against the Bank of England for allegedly having failed to supervise it. Discipline imposed by depositors and creditors often results in a "run on the bank" - or in bankruptcy. The presumed ability of stakeholders to discipline risky enterprises, hazardous financial institutions, and profligate sovereigns is fallacious.

Asset selection within a well balanced and diversified portfolio is also a bit of a daydream. Information - even in the most regulated and liquid markets - is partial, distorted, manipulative, and lagging. Insiders collude to monopolize it and obtain a "first mover" advantage.

Intricate nets of patronage exclude the vast majority of shareholders and co-opt ostensible checks and balances - such as auditors, legislators, and regulators. Enough to mention Enron and its accountants, the formerly much vaunted Andersen.

Established economic theory - pioneered by Merton in 1977 - shows that, counterintuitively, the closer a bank is to insolvency, the more inclined it is to risky lending. Nobuhiko Hibara of Columbia University demonstrated this effect convincingly in the Japanese banking system in his November 2001 draft paper titled "What Happens in Banking Crises - Credit Crunch vs. Moral Hazard".

Last but by no means least, as opposed to oft-reiterated wisdom - the markets have no memory. Russia has egregiously defaulted on its sovereign debt a few times in the last 100 years. Only four years ago it thumbed its nose with relish at tearful foreign funds, banks, and investors.

Yet, it is now besieged by investment banks and a horde of lenders begging it to borrow at concessionary rates. The same goes for Mexico, Argentina, China, Nigeria, Thailand, other countries, and the accident-prone banking system in almost every corner of the globe.

In many places, international aid constitutes the bulk of foreign currency inflows. It is severely tainted by moral hazard. In a paper titled "Aid, Conditionality and Moral Hazard", written by Paul Mosley and John Hudson, and presented at the Royal Economic Society's 1998 Annual Conference, the authors wrote:

"Empirical evidence on the effectiveness of both overseas aid and the 'conditionality' employed by donors to increase its leverage suggests disappointing results over the past thirty years ... The reason for both failures is the same: the risk or 'moral hazard' that aid will be used to replace domestic investment or adjustment efforts, as the case may be, rather than supplementing such efforts."

In a May 2001 paper, tellingly titled "Does the World Bank Cause Moral Hazard and Political Business Cycles?" authored by Axel Dreher of Mannheim University, he responds in the affirmative:

"Net flows (of World Bank lending) are higher prior to elections ... It is shown that a country's rate of monetary expansion and its government budget deficit (are) higher the more loans it receives ... Moreover, the budget deficit is shown to be larger the higher the interest rate subsidy offered by the (World) Bank."

Thus, the antidote to moral hazard is not this legendary beast in the capitalistic menagerie, market discipline. Nor is it regulation. Nobel Prize winner Joseph Stiglitz, Thomas Hellman, and Kevin Murdock concluded in their 1998 paper - "Liberalization, Moral Hazard in Banking, and Prudential Regulation":

"We find that using capital requirements in an economy with freely determined deposit rates yields ... inefficient outcomes. With deposit insurance, freely determined deposit rates undermine prudent bank behavior. To induce a bank to choose to make prudent investments, the bank must have sufficient franchise value at risk ... Capital requirements also have a perverse effect of increasing the bank's cost structure, harming the franchise value of the bank ... Even in an economy where the government can credibly commit not to offer deposit insurance, the moral hazard problem still may not disappear."

Moral hazard must be balanced, in the real world, against more ominous and present threats, such as contagion and systemic collapse. Clearly, some moral hazard is inevitable if the alternative is another Great Depression. Moreover, most people prefer to incur the cost of moral hazard. They regard it as an insurance premium.

Depositors would like to know that their deposits are safe or reimbursable. Investors would like to mitigate some of the risk by shifting it to the state. The unemployed would like to get their benefits regularly. Bankers would like to lend more daringly. Governments would like to maintain the stability of their financial systems.

The common interest is overwhelming - and moral hazard seems to be a small price to pay. It is surprising how little abused these safety nets are - as Stephane Pallage and Christian Zimmerman of the Center for Research on Economic Fluctuations and Employment in the University of Quebec note in their paper "Moral Hazard and Optimal Unemployment Insurance".

Martin Gaynor, Deborah Haas-Wilson, and William Vogt, cast in doubt the very notion of "abuse" as a result of moral hazard in their NBER paper titled "Are Invisible Hands Good Hands?":

"Moral hazard due to health insurance leads to excess consumption, therefore it is not obvious that competition is second best optimal. Intuitively, it seems that imperfect competition in the healthcare market may constrain this moral hazard by increasing prices. We show that this intuition cannot be correct if insurance markets are competitive.

A competitive insurance market will always produce a contract that leaves consumers at least as well off under lower prices as under higher prices. Thus, imperfect competition in healthcare markets can not have efficiency enhancing effects if the only distortion is due to moral hazard."

Whether regulation and supervision - of firms, banks, countries, accountants, and other market players - should be privatized or subjected to other market forces - as suggested by the likes of Bert Ely of Ely & Company in the Fall 1999 issue of "The Independent Review" - is still debated and debatable. With governments, central banks, or the IMF as lenders and insurer of last resort - there is little counterparty risk.

Private counterparties are a whole different ballgame. They are loth and slow to pay. Dismayed creditors have learned this lesson in Russia in 1998. Investors in derivatives get acquainted with it in the 2001-2 Enron affair. Mr. Silverstein is being agonizingly introduced to it in his dealings with insurance companies over the September 11 World Trade Center terrorist attacks.

We may more narrowly define moral hazard as the outcome of asymmetric information - and thus as the result of the rational conflicts between stakeholders (e.g., between shareholders and managers, or between "principals" and "agents"). This modern, narrow definition has the advantage of focusing our moral outrage upon the culprits - rather than, indiscriminately, upon both villains and victims.

The shareholders and employees of Enron may be entitled to some kind of safety net - but not so its managers. Laws - and social norms - that protect the latter at the expense of the former, should be altered post haste. The government of a country bankrupted by irresponsible economic policies should be ousted - its hapless citizens may deserve financial succor. This distinction between perpetrator and prey is essential.

The insurance industry has developed a myriad ways to cope with moral hazard. Co-insurance, investigating fraudulent claims, deductibles, and incentives to reduce claims are all effective. The residual cost of moral hazard is spread among the insured in the form of higher premiums. No reason not to emulate these stalwart risk traders. They bet their existence of their ability to minimize moral hazard - and hitherto, most of them have been successful.

Return

The Business of Risk

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

Risk transfer is the gist of modern economies. Citizens pay taxes to ever expanding governments in return for a variety of "safety nets" and state-sponsored insurance schemes. Taxes can, therefore, be safely described as insurance premiums paid by the citizenry. Firms extract from consumers a markup above their costs to compensate them for their business risks.

Profits can be easily cast as the premiums a firm charges for the risks it assumes on behalf of its customers - i.e., risk transfer charges. Depositors charge banks and lenders charge borrowers interest, partly to compensate for the hazards of lending - such as the default risk. Shareholders expect above "normal" - that is, risk-free - returns on their investments in stocks. These are supposed to offset trading liquidity, issuer insolvency, and market volatility risks.

In his recent book, "When all Else Fails: Government as the Ultimate Risk Manager", David Moss, an associate professor at Harvard Business School, argues that the all-pervasiveness of modern governments is an outcome of their unique ability to reallocate and manage risk.

He analyzes hundreds of examples - from bankruptcy law to income security, from flood mitigation to national defense, and from consumer protection to deposit insurance. The limited liability company shifted risk from shareholders to creditors. Product liability laws shifted risk from consumers to producers.

And, we may add, over-generous pension plans shift risk from current generations to future ones. Export and credit insurance schemes - such as the recently established African Trade Insurance Agency or the more veteran American OPIC (Overseas Private Investment Corporation), the British ECGD, and the French COFACE - shift political risk from buyers, project companies, and suppliers to governments.

Risk transfer is the traditional business of insurers. But governments are in direct competition not only with insurance companies - but also with the capital markets. Futures, forwards, and options contracts are, in effect, straightforward insurance policies.

They cover specific and narrowly defined risks: price fluctuations - of currencies, interest rates, commodities, standardized goods, metals, and so on. "Transformer" companies - collaborating with insurance firms - specialize in converting derivative contracts (mainly credit default swaps) into insurance policies. This is all part of the famous Keynes-Hicks hypothesis.

As Holbrook Working proved in his seminal work, hedges fulfill other functions as well - but even he admitted that speculators assume risks by buying the contracts. Many financial players emphasize the risk reducing role of derivatives. Banks, for instance, lend more - and more easily - against hedged merchandise.

Hedging and insurance used to be disparate activities which required specialized skills. Derivatives do not provide perfect insurance due to non-eliminable residual risks (e.g., the "basis risk" in futures contracts, or the definition of a default in a credit derivative). But as banks and insurance companies merged into what is termed, in French, "bancassurance", or, in German, "Allfinanz" - so did their hedging and insurance operations.

In his paper "Risk Transfer between Banks, Insurance Companies, and Capital Markets", David Rule of the Bank of England flatly states:

"At least as important for the efficiency and robustness of the international financial system are linkages through the growing markets for risk transfer. Banks are shedding risks to insurance companies, amongst others; and life insurance companies are using capital markets and banks to hedge some of the significant market risks arising from their portfolios of retail savings products ... These interactions (are) effected primarily through securitizations and derivatives. In principle, firms can use risk transfer markets to disperse risks, making them less vulnerable to particular regional, sectoral, or market shocks.

Greater inter-dependence, however, raises challenges for market participants and the authorities: in tracking the distribution of risks in the economy, managing associated counterparty exposures, and ensuring that regulatory, accounting, and tax differences do not distort behavior in undesirable ways."

If the powers of government are indeed commensurate with the scope of its risk transfer and reallocation services - why should it encourage its competitors? The greater the variety of insurance a state offers - the more it can tax and the more perks it can lavish on its bureaucrats. Why would it forgo such benefits? Isn't it more rational to expect it to stifle the derivatives markets and to restrict the role and the product line of insurance companies?

This would be true only if we assume that the private sector is both able and willing to insure all risks - and thus to fully substitute for the state.

Yet, this is patently untrue. Insurance companies cover mostly "pure risks" - loss yielding situations and events. The financial markets cover mostly "speculative risks" - transactions that can yield either losses or profits. Both rely on the "law of large numbers" - that in a sufficiently large population, every event has a finite and knowable probability. None of them can or will insure tiny, exceptional populations against unquantifiable risks. It is this market failure which gave rise to state involvement in the business of risk to start with.

Consider the September 11 terrorist attacks with their mammoth damage to property and unprecedented death toll.

According to "The Economist", in the wake of the atrocity, insurance companies slashed their coverage to $50 million per airline per event. EU governments had to step in and provide unlimited insurance for a month. The total damage, now pegged at $60 billion - constitutes one quarter of the capitalization of the entire global reinsurance market.

Congress went even further, providing coverage for 180 days and a refund of all war and terrorist liabilities above $100 million per airline. The Americans later extended the coverage until mid-May. The Europeans followed suit. Despite this public display of commitment to the air transport industry, by January this year, no re-insurer agreed to underwrite terror and war risks. The market ground to a screeching halt. AIG was the only one to offer, last March, to hesitantly re-enter the market. Allianz followed suit in Europe, but on condition that EU governments act as insurers of last resort.

Even avowed paragons of the free market - such as Warren Buffet and Kenneth Arrow - called on the Federal government to step in. Some observers noted the "state guarantee funds" - which guarantee full settlement of policyholders' claims on insolvent insurance companies in the various states. Crop failures and floods are already insured by federal programs.

Other countries - such as Britain and France - have, for many years, had arrangements to augment funds from insurance premiums in case of an unusual catastrophe, natural or man made. In Israel, South Africa, and Spain, terrorism and war damages are indemnified by the state or insurance consortia it runs. Similar schemes are afoot in Germany.

But terrorism and war are, gratefully, still rarities. Even before September 11, insurance companies were in the throes of a frantic effort to reassert themselves in the face of stiff competition offered by the capital markets as well as by financial intermediaries - such as banks and brokerage houses.

They have invaded the latter's turf by insuring hundreds of billions of dollars in pools of credit instruments, loans, corporate debt, and bonds - quality-graded by third party rating agencies. Insurance companies have thus become backdoor lenders through specially-spun "monoline" subsidiaries.

Moreover, most collateralized debt obligations - the predominant financial vehicle used to transfer risks from banks to insurance firms - are "synthetic" and represent not real loans but a crosscut of the issuing bank's assets. Insurance companies have already refused to pay up on specific Enron-related credit derivatives - claiming not to have insured against a particular insurance events. The insurance pertained to global pools linked and overall default rates - they protested.

This excursion of the insurance industry into the financial market was long in the making. Though treated very differently by accountants - financial folk see little distinction between an insurance policy and equity capital. Both are used to offset business risks.

To recoup losses incurred due to arson, or embezzlement, or accident - the firm can resort either to its equity capital (if it is uninsured) or to its insurance. Insurance, therefore, serves to leverage the firm's equity. By paying a premium, the firm increases its pool of equity.

The funds yielded by an insurance policy, though, are encumbered and contingent. It takes an insurance event to "release" them. Equity capital is usually made immediately and unconditionally available for any business purpose. Insurance companies are moving resolutely to erase this distinction between on and off balance sheet types of capital. They want to transform "contingent equity" to "real equity".

They do this by insuring "total business risks" - including business failures or a disappointing bottom line. Swiss Re has been issuing such policies in the last 3 years. Other insurers - such as Zurich - move into project financing. They guarantee a loan and then finance it based on their own insurance policy as a collateral.

Paradoxically, as financial markets move away from "portfolio insurance" (a form of self-hedging) following the 1987 crash on Wall Street - leading insurers and their clients are increasingly contemplating "self-insurance" through captives and other subterfuges.

The blurring of erstwhile boundaries between insurance and capital is most evident in Alternative Risk Transfer (ART) financing. It is a hybrid between creative financial engineering and medieval mutual or ad hoc insurance. It often involves "captives" - insurance or reinsurance firms owned by their insured clients and located in tax friendly climes such as Bermuda, the Cayman Islands, Barbados, Ireland, and in the USA: Vermont, Colorado, and Hawaii.

Companies - from manufacturers to insurance agents - are willing to retain more risk than ever before. ART constitutes less than one tenth the global insurance market according to "The Economist" - but almost one third of certain categories, such as the US property and casualty market, according to an August 2000 article written by Albert Beer of America Re. ART is also common in the public and not for profit sectors.

Captive.com counts the advantages of self-insurance:

"The alternative to trading dollars with commercial insurers in the working layers of risk, direct access to the reinsurance markets, coverage tailored to your specific needs, accumulation of investment income to help reduce net loss costs, improved cash flow, incentive for loss control, greater control over claims, underwriting and retention funding flexibility, and reduced cost of operation."

Captives come in many forms: single parent - i.e., owned by one company to whose customized insurance needs the captive caters, multiple parent - also known as group, homogeneous, or joint venture, heterogeneous captive - owned by firms from different industries, and segregated cell captives - in which the assets and liabilities of each "cell" are legally insulated. There are even captives for hire, known as "rent a captive".

The more reluctant the classical insurance companies are to provide coverage - and the higher their rates - the greater the allure of ART. According to "The Economist", the number of captives established in Bermuda alone doubled to 108 last year reaching a total of more than 4000. Felix Kloman of Risk Management Reports estimated that $21 billion in total annual premiums were paid to captives in 1999.

The Air Transport Association and Marsh, an insurer, are in the process of establishing Equitime, a captive, backed by the US government as an insurer of last resort. With an initial capital of $300 million, it will offer up to $1.5 billion per airline for passenger and third party war and terror risks.

Some insurance companies - and corporations, such as Disney - have been issuing high yielding CAT (catastrophe) bonds since 1994. These lose their value - partly or wholly - in the event of a disaster. The money raised underwrites a reinsurance or a primary insurance contract.

According to an article published by Kathryn Westover of Strategic Risk Solutions in "Financing Risk and Reinsurance", most CATs are issued by captive Special Purpose Vehicles (SPV's) registered in offshore havens. This did not contribute to the bonds' transparency - or popularity.

An additional twist comes in the form of Catastrophe Equity Put Options which oblige their holder to purchase the equity of the insured at a pre-determined price. Other derivatives offer exposure to insurance risks. Options bought by SPV's oblige investors to compensate the issuer - an insurance or reinsurance company - if damages exceed the strike price. Weather derivatives have taken off during the recent volatility in gas and electricity prices in the USA.

The bullish outlook of some re-insurers notwithstanding, the market is tiny - less than $1 billion annually - and illiquid. A CATs risk index is published by and option contracts are traded on the Chicago Board of Trade (CBOT). Options were also traded, between 1997 and 1999, on the Bermuda Commodities Exchange (BCE).

Risk transfer, risk trading and the refinancing of risk are at the forefront of current economic thought. An equally important issue involves "risk smoothing". Risks, by nature, are "punctuated" - stochastic and catastrophic. Finite insurance involves long term, fixed premium, contracts between a primary insurer and his re-insurer. The contract also stipulates the maximum claim within the life of the arrangement. Thus, both parties know what to expect and - a usually well known or anticipated - risk is smoothed.

Yet, as the number of exotic assets increases, as financial services converge, as the number of players climbs, as the sophistication of everyone involved grows - the very concept of risk is under attack. Value-at-Risk (VAR) computer models - used mainly by banks and hedge funds in "dynamic hedging" - merely compute correlations between predicted volatilities of the components of an investment portfolio.

Non-financial companies, spurred on by legislation, emulate this approach by constructing "risk portfolios" and keenly embarking on "enterprise risk management (ERM)", replete with corporate risk officers. Corporate risk models measure the effect that simultaneous losses from different, unrelated, events would have on the well-being of the firm.

Some risks and losses offset each others and are aptly termed "natural hedges". Enron pioneered the use of such computer applications in the late 1990's - to little gain it would seem. There is no reason why insurance companies wouldn't insure such risk portfolios - rather than one risk at a time. "Multi-line" or "multi-trigger" policies are a first step in this direction.

But, as Frank Knight noted in his seminal "Risk, Uncertainty, and Profit", volatility is wrongly - and widely - identified with risk. Conversely, diversification and bundling have been as erroneously - and as widely - regarded as the ultimate risk neutralizers. His work was published in 1921.

Guided by VAR models, a change in volatility allows a bank or a hedge fund to increase or decrease assets with the same risk level and thus exacerbate the overall hazard of a portfolio. The collapse of the star-studded Long Term Capital Management (LTCM) hedge fund in 1998 is partly attributable to this misconception.

In the Risk annual congress in Boston two years ago, Myron Scholes of Black-Scholes fame and LTCM infamy, publicly recanted, admitting that, as quoted by Dwight Cass in the May 2002 issue of Risk Magazine: "It is impossible to fully account for risk in a fluid, chaotic world full of hidden feedback mechanisms." Jeff Skilling of Enron publicly begged to disagree with him.

Last month, in the Paris congress, Douglas Breeden, dean of Duke University's Fuqua School of Business, warned that - to quote from the same issue of Risk Magazine:

" 'Estimation risk' plagues even the best-designed risk management system. Firms must estimate risk and return parameters such as means, betas, durations, volatilities and convexities, and the estimates are subject to error. Breeden illustrated his point by showing how different dealers publish significantly different prepayment forecasts and option-adjusted spreads on mortgage-backed securities ... (the solutions are) more capital per asset and less leverage."

Yet, the Basle committee of bank supervisors has based the new capital regime for banks and investment firms, known as Basle 2, on the banks' internal measures of risk and credit scoring. Computerized VAR models will, in all likelihood, become an official part of the quantitative pillar of Basle 2 within 5-10 years.

Moreover, Basle 2 demands extra equity capital against operational risks such as rogue trading or bomb attacks. There is no hint of the role insurance companies can play ("contingent equity"). There is no trace of the discipline which financial markets can impose on lax or dysfunctional banks - through their publicly traded unsecured, subordinated debt.

Basle 2 is so complex, archaic, and inadequate that it is bound to frustrate its main aspiration: to avert banking crises. It is here that we close the circle. Governments often act as reluctant lenders of last resort and provide generous safety nets in the event of a bank collapse.

Ultimately, the state is the mother of all insurers, the master policy, the supreme underwriter. When markets fail, insurance firm recoil, and financial instruments disappoint - the government is called in to pick up the pieces, restore trust and order and, hopefully, retreat more gracefully than it was forced to enter.

Return

Global Differential Pricing

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

Also Read:

The Revolt of the Poor

Last April, the World Health Organization (WHO), the World Trade Organization (WTO), the Norwegian Foreign Ministry, and the US-based Global Health Council held a 3-days workshop about "Pricing and Financing of Essential Drugs" in poor countries. Not surprisingly, the conclusion was:

"... There was broad recognition that differential pricing could play an important role in ensuring access to existing drugs at affordable prices, particularly in the poorest countries, while the patent system would be allowed to continue to play its role in providing incentives for research and development into new drugs."

The 80 experts, who attended the workshop, proposed to reconcile these two, apparently contradictory, aspirations by introducing different prices for drugs in low-income and rich countries. This could be achieved bilaterally, between companies and purchasers, patent holders and manufacturers, global suppliers and countries - or through a market mechanism.

According to IMS Health, poor countries are projected to account for less than one quarter of pharmaceutical sales this year. Of every $100 spent on medicines worldwide - 42 are in the USA, 25 in Europe, 11 in Japan, 7.5 in Latin America and the Caribbean, 5 in China and South East Asia, less than 2 in East Europe and India each, about 1 in Africa and the Commonwealth of Independent States (CIS) each.

Vaccines, contraceptives, and condoms are already subject to cross-border differential pricing. Lately, drug companies, were forced to introduce multi-tiered pricing following court decisions, or agreements with the authorities. Brazilians and South Africans, for instance, pay a fraction of the price paid in the West for their anti-retroviral AIDS medication.

Even so, the price of a typical treatment is not affordable. Foreign donors, private foundations - such as the Bill and Melissa Gates Foundation - and international organizations had to step in to cover the shortfall.

The experts acknowledged the risk that branded drugs sold cheaply in a poor country might end up being smuggled into and consumed in a much richer ones.

Less likely, industrialized countries may also impose price controls, using poor country prices as benchmarks. Other participants, including dominant NGO's, such as Oxfam and Medecins Sans Frontieres, rooted for a reform of the TRIPS agreement - or the manufacturing of generic alternatives to branded drugs.

The "health safeguards" built into the Trade-related Aspects of Intellectual Property Rights (TRIPS) convention allow for compulsory licensing - manufacturing a drug without the patent holder's permission - and for parallel imports - importing a drug from another country where it is sold at a lower price - in case of an health emergency.

Aware of the existence of this Damocles sword, the European Union and the trans-national pharmaceutical lobby have come out last May in favor of "global tiered pricing".

In its 2001 Human Development Report (HDR), the United Nations Development Program (UNDP) called to introduce differential rich versus poor country pricing for "essential high-tech products" as well. The Health GAP Coalition commented on the report:

"On the issue of differential pricing, the Report notes that, while an effective global market would encourage different prices in different countries for products such as pharmaceuticals, the current system does not. With high-tech products, where the main cost to the seller is usually research rather than production, such tiered pricing could lead to an identical product being sold in poor countries for just one-tenth-or one-hundredth- the price in Europe or the United States.

But drug companies and other technology producers fear that knowledge about such discounting could lead to a demand for lower prices in rich countries as well. They have tended to set global prices that are unaffordable for the citizens of poor countries (as with many AIDS drugs).

'Part of the battle to establish differential pricing must be won through consumer education. The citizens of rich countries must understand that it is only fair for people in developing countries to pay less for medicines and other critical technology products.' - stated Ms. Sukaki Fukuda-Parr" the lead author of the Report.

Public declarations issued in Havana, Cuba, in San Jose, Costa Rica in the late 1990's touted the benefits of free online scholarship for developing countries. The WHO and the Open Society Institute initiated HINARI - Health InterNetwork Access to Research Initiative. Peter Suber, the publisher of the "Free Online Scholarship" newsletter, summarizes the initiative thus:

"Under the program, the world's six largest publishers of biomedical journals have agreed to three-tiered pricing. For countries in the lowest tier (GNP per capita below $1k), online subscriptions are free of charge. For countries in the middle tier (GNP per capita between $1k and $3k), online subscriptions will be discounted by an amount to be decided this June. Countries in the top tier pay full price.

The six participating publishers are Blackwell Synergy, Elsevier Science Direct, Harcourt IDEAL, Springer Link, Wiley Interscience, and Wolters Kluwer. The subscriptions are given to universities and research institutions, not to individuals. But they are identical in scope to the subscriptions received by institutions paying the full price."

Of 500 bottom-tier eligible institutions, more than 200 have already signed up. Additional publishers have joined this 3-5 years program and most biomedical journals are already on offer. Mid-tier pricing will be declared by January next year. HINARI will probably be expanded to cover other scientific disciplines.

Authors from developing countries also benefit from the spread of free online scholarship coupled with differential pricing. "Best of Science", for example, a free, peer-reviewed, online science journal subsists on fees paid by the authors. It charges authors from developing countries less.

But differential pricing is unlikely to be confined to scholarly journals. Already, voices in developing countries demand tiered pricing for Western textbooks sold in emerging economies. Quoted in the Free Online Scholarship newsletter, Lai Ting-ming of the Taipei Times criticized, on March 26, "western publishers for selling textbooks to third world students at first world prices. There is a "textbook pricing crisis" in developing countries, which is most commonly solved by illicit photocopying."

Touchingly, the issue of the dispossessed within rich country societies was raised by two African Special Rapporteurs in a report submitted last year to the UN sub-Commission on Human Rights and titled "Globalization and its Impact on the Full Enjoyment of Human Rights". It said:

" ... The emphasis on R & D investment conveniently omits mention of the fact that some of the financing for this research comes from public sources; how then can it be justifiably argued that the benefits that derive from such investment should accrue primarily to private interests? Lastly, the focus on differential pricing between (rich and poor) countries omits consideration of the fact that there are many people within developed countries who are also unable to afford the same drugs. This may be on account of an inaccessible or inhospitable health care system (in terms of cost or an absence of adequate social welfare mechanisms), or because of racial, gender, sexual orientation or other forms of discrimination."

Differential pricing is often confused with dynamic pricing.

Bob Gressens of Moai Technologies and Christopher Brousseau of Accenture define dynamic pricing, in their paper "The Value Propositions of Dynamic Pricing in Business-to-Business E-Commerce" as: "... The buying and selling of goods and services in markets where prices are free to move in response to supply and demand conditions."

This is usually done through auctions or requests for quotes or tenders. Dynamic pricing is most often used in the liquidation of surplus inventories and for e-sourcing.

Nor is differential pricing entirely identical with non-linear pricing. In the real world, prices are rarely fixed. Some prices vary with usage - "pay per view" in the cable TV industry, or "pay per print" in scholarly online reference. Other prices combine a fixed element (e.g., a subscription fee) with a variable element (e.g., payment per broadband usage). Volume discounts, sales, cross-selling, three for the price of two - are all examples of non-linear pricing. Non-linear pricing is about charging different prices to different consumers - but within the same market.

Hal Varian of the School of Information Management and Systems at the University of California in Berkeley summarizes the treatment of "Price Discrimination" in A. C. Pigou's seminal 1920 tome, "The Economics of Welfare":

"First-degree price discrimination means that the producer sells different units of output for different prices and these prices may differ from person to person. This is sometimes known as the case of perfect price discrimination.

Second-degree price discrimination means that the producer sells different units of output for different prices, but every individual who buys the same amount of the good pays the same price.

Thus prices depend on the amount of the good purchased, but not on who does the purchasing. A common example of this sort of pricing is volume discounts.

Third-degree price discrimination occurs when the producer sells output to different people for different prices, but every unit of output sold to a given person sells for the same price. This is the most common form of price discrimination, and examples include senior citizens' discounts, student discounts, and so on."

Varian evaluates the contribution of each of these practices to economic efficiency in a 1996 article published in "First Monday":

"First-degree price discrimination yields a fully efficient outcome, in the sense of maximizing consumer plus producer surplus.

Second-degree price discrimination generally provides an efficient amount of the good to the largest consumers, but smaller consumers may receive inefficiently low amounts. Nevertheless, they will be better off than if they did not participate in the market. If differential pricing is not allowed, groups with small willingness to pay may not be served at all.

Third-degree price discrimination increases welfare when it encourages a sufficiently large increase in output. If output doesn't increase, total welfare will fall. As in the case of second-degree price discrimination, third-degree price discrimination is a good thing for niche markets that would not otherwise be served under a uniform pricing policy.

The key issue is whether the output of goods and services is increased or decreased by differential pricing."

Strictly speaking, global differential pricing is none of the above. It involves charging different prices in different markets, in accordance with the purchasing power of the local clientele (i.e., their willingness and ability to pay) - or in deference to their political and legal clout.

Differential prices are not set by supply and demand and, therefore, do not fluctuate. All the consumers within each market are charged the same - prices vary only across markets. They are determined by the manufacturer in each and every market separately in accordance with local conditions.

A March 2001 WHO/WTO background paper titled "More Equitable Pricing for Essential Drugs" discovered immense variations in the prices of medicines among different national markets. But, surprisingly, these price differences were unrelated to national income.

Even allowing for price differentials, the one-month cost of treatment of Tuberculosis in Tanzania was the equivalent of 500 working hours - compared to 1.4 working hours in Switzerland. The price of medicines in poor countries - from Zimbabwe to India - was clearly higher than one would have expected from income measures such as GDP per capita or average wages. Why didn't drug prices adjust to reflect indigenous purchasing power?

According to the Paris-based International Chamber of Commerce (ICC), differential pricing is also - perhaps mostly - influenced by other considerations such as: transportation costs, disparate tax and customs regimes, cost of employment, differences in property rights and royalties, local safety and health standards, price controls, quality of internal distribution systems, the size of the order, the size of the market, and so on.

Differential pricing was made possible by the application of mass manufacturing to the knowledge society. Many industries, both emerging ones, like telecommunications, or information technology - and mature ones, like airlines, or pharmaceuticals - defy conventional pricing theory. They involve huge sunk and fixed costs - mainly in research and development and plant.

But the marginal cost of each and every manufactured unit is identical - and vanishingly low. Beyond a certain quantitative threshold returns skyrocket and revenues contribute directly to the bottom line.

Consider software applications. The first units sold cover the enormous fixed and sunk costs of authoring the software and the machine tools used in the manufacturing process. The actual production ("variable" or "marginal") cost of each unit is a mere few cents - the wholesale price of the diskettes or CD-ROM's consumed. Thus, after having achieved breakeven, sales revenues translate immediately to gross profits.

This bifurcation - the huge fixed costs versus the negligible marginal costs - vitiates the rule: "set price at marginal cost". At which marginal cost? To compensate for the sunk and fixed costs, the first "marginal units" must carry a much higher price tag than the last ones.

Hal Varian studied this problem. His conclusions:

"(i) Efficient pricing in such environments will typically involve prices that differ across consumers and type of service; (ii) producers will want to engage in product and service differentiation in order for this differential pricing to be feasible; and, (iii) differential pricing will arise naturally as a result of profit seeking by firms. It follows that differential pricing can generally be expected to contribute to economic efficiency."

Differential pricing is also the outcome of globalization. As brands become ubiquitous and as the information superhighway renders prices comparable and transparent - different markets react differently to price signals. In impoverished countries, differential pricing was introduced illegally where manufacturers insisted on rigid, rich-world, price lists.

Piracy of intellectual property, for instance, is a form of coercive (and illegal) differential pricing. The existence of thriving rip-off markets proves that, at the right prices, demand is rife (demand elasticity). Both piracy and differential pricing may be spreading to scholarly publishing and other form of intellectual property such as software, films, music, and e-books.

Consumers are divided on the issue of multi-tiered pricing tailored to fit the customer's purchasing power. Not surprisingly, rich world buyers are apprehensive. They feel that differential pricing is a form of hidden subsidy, or a kind of "third world tax".

On September 2000, Amazon.com conducted a unique poll - this time among customers - regarding differential pricing (actually, non-linear pricing) - showing different prices to different users on the same book.

Forty two percent of all respondents though it was "discrimination" and "should stop" - but a surprising 31 percent regarded it as "a valid use of data mining". A quarter said it is "OK, if explained to users". The comments were telling:

"I work over 80 hours a week. As a small business owner, I may make good money, but does that mean I should be charged more than unmotivated individuals who are broke because they don't want to work more than 30 hours a week. I don't think so ... Should (preferred) customers disappear in (the) off-line world? Should Gold Cards or Platinum Cards disappear? ...

The interesting thing is that discrimination of pricing is very common in the insurance industry - the basis for actuarial work and in airlines - based on load factors. The key is the pricing available to groups of customers with similar profiles ... Simple supply and demand, competition from other suppliers should offset ... A dangerous policy to implement ... As a consumer I don't necessarily like it, (unless I get a lower price!). However, economically speaking, (think of a monopolist's MR curve) the ideal is to have each person pay the maximum amount that they are willing to pay."

Return

The Disruptive Engine

Innovation and the Capitalistic Dream

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

On 18 June business people across the UK took part in Living Innovation 2002. The extravaganza included a national broadcast linkup from the Eden Project in Cornwall and satellite-televised interviews with successful innovators.

Innovation occurs even in the most backward societies and in the hardest of times. It is thus, too often, taken for granted. But the intensity, extent, and practicality of innovation can be fine-tuned. Appropriate policies, the right environment, incentives, functional and risk seeking capital markets, or a skillful and committed Diaspora - can all enhance and channel innovation.

The wrong cultural context, discouraging social mores, xenophobia, a paranoid set of mind, isolation from international trade and FDI, lack of fiscal incentives, a small domestic or regional market, a conservative ethos, risk aversion, or a well-ingrained fear of disgracing failure - all tend to stifle innovation.

Product Development Units in banks, insurers, brokerage houses, and other financial intermediaries churn out groundbreaking financial instruments regularly.

Governments - from the United Kingdom to New Zealand - set up "innovation teams or units" to foster innovation and support it. Canada's is more than two decades old.

The European Commission has floated a new program dubbed INNOVATION and aimed at the promotion of innovation and encouragement of SME participation. Its goals are:

"(The) promotion of an environment favourable to innovation and the absorption of new technologies by enterprises;

Stimulation of a European open area for the diffusion of technologies and knowledge;

Supply of this area with appropriate technologies."

But all these worthy efforts ignore what James O'Toole called in "Leading Change" - "the ideology of comfort and the tyranny of custom." The much quoted Austrian economist, Joseph Schumpeter coined the phrase "creative destruction". Together with its twin - "disruptive technologies" - it came to be the mantra of the now defunct "New Economy".

Schumpeter seemed to have captured the unsettling nature of innovation - unpredictable, unknown, unruly, troublesome, and ominous. Innovation often changes the inner dynamics of organizations and their internal power structure. It poses new demands on scarce resources.

It provokes resistance and unrest. If mismanaged - it can spell doom rather than boom.

Satkar Gidda, Sales and Marketing Director for SiebertHead, a large UK packaging design house, was quoted in "The Financial Times" last week as saying:

"Every new product or pack concept is researched to death nowadays - and many great ideas are thrown out simply because a group of consumers is suspicious of anything that sounds new ... Conservatism among the buying public, twinned with a generation of marketing directors who won't take a chance on something that breaks new ground, is leading to super-markets and car showrooms full of me-too products, line extensions and minor product tweaks."

Yet, the truth is that no one knows why people innovate. The process of innovation has never been studied thoroughly - nor are the effects of innovation fully understood.

In a new tome titled "The Free-Market Innovation Machine", William Baumol of Princeton University claims that only capitalism guarantees growth through a steady flow of innovation:

"... Innovative activity-which in other types of economy is fortuitous and optional-becomes mandatory, a life-and-death matter for the firm."

Capitalism makes sure that innovators are rewarded for their time and skills. Property rights are enshrined in enforceable contracts.

In non-capitalist societies, people are busy inventing ways to survive or circumvent the system, create monopolies, or engage in crime.

But Baumol fails to sufficiently account for the different levels of innovation in capitalistic countries. Why are inventors in America more productive than their French or British counterparts - at least judging by the number of patents they get issued?

Perhaps because oligopolies are more common in the US than they are elsewhere. Baumol suggests that oligopolies use their excess rent - i.e., profits which exceed perfect competition takings - to innovate and thus to differentiate their products. Still, oligopolistic behavior does not sit well with another of Baumol's observations: that innovators tend to maximize their returns by sharing their technology and licensing it to more efficient and profitable manufacturers. Nor can one square this propensity to share with the ever more stringent and expansive intellectual property laws that afflict many rich countries nowadays.

Very few inventions have forced "established companies from their dominant market positions" as the "The Economist" put it recently. Moreover, most novelties are spawned by established companies. The single, tortured, and misunderstood inventor working on a shoestring budget in his garage - is a mythical relic of 18th century Romanticism.

More often, innovation is systematically and methodically pursued by teams of scientists and researchers in the labs of mega-corporations and endowed academic institutions.

Governments - and, more particularly the defense establishment - finance most of this brainstorming. the Internet was invented by DARPA - a Department of Defense agency - and not by libertarian intellectuals.

A recent report compiled by PricewaterhouseCoopers from interviews with 800 CEO's in the UK, France, Germany, Spain, Australia, Japan and the US and titled "Innovation and Growth: A Global Perspective" included the following findings:

"High-performing companies - those that generate annual total shareholder returns in excess of 37 percent and have seen consistent revenue growth over the last five years - average 61 percent of their turnover from new products and services. For low performers, only 26 percent of turnover comes from new products and services."

Most of the respondents attributed the need to innovate to increasing pressures to brand and differentiate exerted by the advent of e-business and globalization. Yet a full three quarters admitted to being entirely unprepared for the new challenges.

Two good places to study routine innovation are the design studio and the financial markets.

Tom Kelly, brother of founder David Kelly, studies, in "The Art of Innovation", the history of some of the greater inventions to have been incubated in IDEO, a prominent California-based design firm dubbed "Innovation U." by Fortune Magazine. These include the computer mouse, the instant camera, and the PDA. The secret of success seems to consist of keenly observing what people miss most when they work and play.

Robert Morris, an Amazon reviewer, sums up IDEO's creative process:

- Understand the market, the client, the technology, and the perceived constraints on the given problem;

- Observe real people in real-life situations;

- Literally visualize new-to-the- world concepts AND the customers who will use them;

- Evaluate and refine the prototypes in a series of quick iterations;

- And finally, implement the new concept for commercialization.

This methodology is a hybrid between the lone-inventor and the faceless corporate R&D team. An entirely different process of innovation characterizes the financial markets. Jacob Goldenberg and David Mazursky postulated the existence of Creativity Templates. Once systematically applied to existing products, these lead to innovation.

Financial innovation is methodical and product-centric. The resulting trade in pioneering products, such as all manner of derivatives, has expanded 20-fold between 1986 and 1999, when annual trading volume exceeded 13 trillion dollar.

Swiss Re Economic Research and Consulting had this to say in its study, Sigma 3/2001:

"Three types of factors drive financial innovation: demand, supply, and taxes and regulation. Demand driven innovation occurs in response to the desire of companies to protect themselves from market risks ... Supply side factors ... include improvements in technology and heightened competition among financial service firms. Other financial innovation occurs as a rational response to taxes and regulation, as firms seek to minimize the cost that these impose."

Financial innovation is closely related to breakthroughs in information technology. Both markets are founded on the manipulation of symbols and coded concepts. The dynamic of these markets is self-reinforcing. Faster computers with more massive storage, speedier data transfer ("pipeline"), and networking capabilities - give rise to all forms of advances - from math-rich derivatives contracts to distributed computing. These, in turn, drive software companies, creators of content, financial engineers, scientists, and inventors to a heightened complexity of thinking. It is a virtuous cycle in which innovation generates the very tools that facilitate further innovation.

The eminent American economist Robert Merton - quoted in Sigma 3/2001 - described in the Winter 1992 issue of the "Journal of Applied Corporate Finance" the various phases of the market-buttressed spiral of financial innovation thus:

"1. In the first stage ... there is a proliferation of standardised securities such as futures. These securities make possible the creation of custom-designed financial products ...

2. In the second stage, volume in the new market expands as financial intermediaries trade to hedge their market exposures.

3. The increased trading volume in turn reduces financial transaction costs and thereby makes further implementation of new products and trading strategies possible, which leads to still more volume.

4. The success of these trading markets then encourages investments in creating additional markets, and the financial system spirals towards the theoretical limit of zero transaction costs and dynamically complete markets."

Financial innovation is not adjuvant. Innovation is useless without finance - whether in the form of equity or debt. Schumpeter himself gave equal weight to new forms of "credit creation" which invariably accompanied each technological "paradigm shift". In the absence of stock options and venture capital - there would have been no Microsoft or Intel.

It would seem that both management gurus and ivory tower academics agree that innovation - technological and financial - is an inseparable part of competition. Tom Peters put it succinctly in "The Circle of Innovation" when he wrote: "Innovate or die." James Morse, a management consultant, rendered, in the same tome, the same lesson more verbosely: "The only sustainable competitive advantage comes from out-innovating the competition."

The OECD has just published a study titled "Productivity and Innovation". It summarizes the orthodoxy, first formulated by Nobel prizewinner Robert Solow from MIT almost five decades ago:

"A substantial part of economic growth cannot be explained by increased utilisation of capital and labour. This part of growth, commonly labelled "multi-factor productivity, represents improvements in the efficiency of production. It is usually seen as the result of innovation by best-practice firms, technological catch-up by other firms, and reallocation of resources across firms and industries."

The study analyzed the entire OECD area. It concluded, unsurprisingly, that easing regulatory restrictions enhances productivity and that policies that favor competition spur innovation. They do so by making it easier to adjust the factors of production and by facilitating the entrance of new firms - mainly in rapidly evolving industries.

Pro-competition policies stimulate increases in efficiency and product diversification. They help shift output to innovative industries. More unconventionally, as the report diplomatically put it: "The effects on innovation of easing job protection are complex" and "Excessive intellectual property rights protection may hinder the development of new processes and products."

As expected, the study found that productivity performance varies across countries reflecting their ability to reach and then shift the technological frontier - a direct outcome of aggregate innovative effort.

Yet, innovation may be curbed by even more all-pervasive and pernicious problems. "The Economist" posed a question to its readers in the December 2001`issue of its Technology Quarterly:

Was "technology losing its knack of being able to invent a host of solutions for any given problem ... (and) as a corollary, (was) innovation ... running out of new ideas to exploit."

These worrying trends were attributed to "the soaring cost of developing high-tech products ... as only one of the reasons why technological choice is on the wane, as one or two firms emerge as the sole suppliers. The trend towards globalisation-of markets as much as manufacturing-was seen as another cause of this loss of engineering diversity ... (as was the) the widespread use of safety standards that emphasise detailed design specifications instead of setting minimum performance requirements for designers to achieve any way they wish.

Then there was the commoditisation of technology brought on largely by the cross-licensing and patent-trading between rival firms, which more or less guarantees that many of their products are essentially the same ... (Another innovation-inhibiting problem is that) increasing knowledge was leading to increasing specialisation - with little or no cross- communication between experts in different fields ...

... Maturing technology can quickly become de-skilled as automated tools get developed so designers can harness the technology's power without having to understand its inner workings.

The more that happens, the more engineers closest to the technology become incapable of contributing improvements to it. And without such user input, a technology can quickly ossify."

The readers overwhelmingly rejected these contentions. The rate of innovation, they asserted, has actually accelerated with wider spread education and more efficient weeding-out of unfit solutions by the marketplace. "... Technology in the 21st century is going to be less about discovering new phenomena and more about putting known things together with greater imagination and efficiency."

Many cited the S-curve to illuminate the current respite. Innovation is followed by selection, improvement of the surviving models, shake-out among competing suppliers, and convergence on a single solution. Information technology has matured - but new S-curves are nascent: nanotechnology, quantum computing, proteomics, neuro-silicates, and machine intelligence.

Recent innovations have spawned two crucial ethical debates, though with accentuated pragmatic aspects. The first is "open source-free access" versus proprietary technology and the second revolves around the role of technological progress in re-defining relationships between stakeholders.

Both issues are related to the inadvertent re-engineering of the corporation. Modern technology helped streamline firms by removing layers of paper-shuffling management. It placed great power in the hands of the end-user, be it an executive, a household, or an individual.

It reversed the trends of centralization and hierarchical stratification wrought by the Industrial Revolution. From microprocessor to micropower - an enormous centrifugal shift is underway. Power percolates back to the people.

Thus, the relationships between user and supplier, customer and company, shareholder and manager, medium and consumer - are being radically reshaped. In an intriguing spin on this theme, Michael Cox and Richard Alm argue in their book "Myths of Rich and Poor - Why We are Better off than We Think" that income inequality actually engenders innovation. The rich and corporate clients pay exorbitant prices for prototypes and new products, thus cross-subsidising development costs for the poorer majority.

Yet the poor are malcontented. They want equal access to new products. One way of securing it is by having the poor develop the products and then disseminate them free of charge. The development effort is done collectively, by volunteers. The Linux operating system is an example as is the Open Directory Project which competes with the commercial Yahoo!

The UNDP's Human Development Report 2001 titled "Making new technologies work for human development" is unequivocal. Innovation and access to technologies are the keys to poverty-reduction through sustained growth. Technology helps reduce mortality rates, disease, and hunger among the destitute.

"The Economist" carried last December the story of the agricultural technologist Richard Jefferson who helps "local plant breeders and growers develop the foods they think best ... CAMBIA (the institute he founded) has resisted the lure of exclusive licences and shareholder investment, because it wants its work to be freely available and widely used." This may well foretell the shape of things to come.

Return

Governments and Growth

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

Also Read:

The Washington Consensus - I. The IMF

It is a maxim of current economic orthodoxy that governments compete with the private sector on a limited pool of savings. It is considered equally self-evident that the private sector is better, more competent, and more efficient at allocating scarce economic resources and thus at preventing waste. It is therefore thought economically sound to reduce the size of government - i.e., minimize its tax intake and its public borrowing - in order to free resources for the private sector to allocate productively and efficiently.

Yet, both dogmas are far from being universally applicable.

The assumption underlying the first conjecture is that government obligations and corporate lending are perfect substitutes. In other words, once deprived of treasury notes, bills, and bonds - a rational investor is expected to divert her savings to buying stocks or corporate bonds.

It is further anticipated that financial intermediaries - pension funds, banks, mutual funds - will tread similarly. If unable to invest the savings of their depositors in scarce risk-free - i.e., government - securities - they will likely alter their investment preferences and buy equity and debt issued by firms.

Yet, this is expressly untrue. Bond buyers and stock investors are two distinct crowds. Their risk aversion is different. Their investment preferences are disparate. Some of them - e.g., pension funds - are constrained by law as to the composition of their investment portfolios. Once government debt has turned scarce or expensive, bond investors tend to resort to cash. That cash - not equity or corporate debt - is the veritable substitute for risk-free securities is a basic tenet of modern investment portfolio theory.

Moreover, the "perfect substitute" hypothesis assumes the existence of efficient markets and frictionless transmission mechanisms. But this is a conveniently idealized picture which has little to do with grubby reality. Switching from one kind of investment to another incurs - often prohibitive - transaction costs. In many countries, financial intermediaries are dysfunctional or corrupt or both. They are unable to efficiently convert savings to investments - or are wary of doing so.

Furthermore, very few capital and financial markets are closed, self-contained, or self-sufficient units. Governments can and do borrow from foreigners. Most rich world countries - with the exception of Japan - tap "foreign people's money" for their public borrowing needs. When the US government borrows more, it crowds out the private sector in Japan - not in the USA.

It is universally agreed that governments have at least two critical economic roles. The first is to provide a "level playing field" for all economic players. It is supposed to foster competition, enforce the rule of law and, in particular, property rights, encourage free trade, avoid distorting fiscal incentives and disincentives, and so on. Its second role is to cope with market failures and the provision of public goods. It is expected to step in when markets fail to deliver goods and services, when asset bubbles inflate, or when economic resources are blatantly misallocated.

Yet, there is a third role. In our post-Keynesian world, it is a heresy. It flies in the face of the "Washington Consensus" propagated by the Bretton-Woods institutions and by development banks the world over. It is the government's obligation to foster growth.

In most countries of the world - definitely in Africa, the Middle East, the bulk of Latin America, central and eastern Europe, and central and east Asia - savings do not translate to investments, either in the form of corporate debt or in the form of corporate equity.

In most countries of the world, institutions do not function, the rule of law and properly rights are not upheld, the banking system is dysfunctional and clogged by bad debts. Rusty monetary transmission mechanisms render monetary policy impotent.

In most countries of the world, there is no entrepreneurial and thriving private sector and the economy is at the mercy of external shocks and fickle business cycles. Only the state can counter these economically detrimental vicissitudes.

Often, the sole engine of growth and the exclusive automatic stabilizer is public spending. Not all types of public expenditures have the desired effect. Witness Japan's pork barrel spending on "infrastructure projects". But development-related and consumption-enhancing spending is usually beneficial.

To say, in most countries of the world, that "public borrowing is crowding out the private sector" is wrong. It assumes the existence of a formal private sector which can tap the credit and capital markets through functioning financial intermediaries, notably banks and stock exchanges.

Yet, this mental picture is a figment of economic imagination. The bulk of the private sector in these countries is informal. In many of them, there are no credit or capital markets to speak of. The government doesn't borrow from savers through the marketplace - but internationally, often from multilaterals.

Outlandish default rates result in vertiginously high real interest rates. Inter-corporate lending, barter, and cash transactions substitute for bank credit, corporate bonds, or equity flotations. As a result, the private sector's financial leverage is minuscule. In the rich West $1 in equity generates $3-5 in debt for a total investment of $4-6. In the developing world, $1 of tax-evaded equity generates nothing. The state has to pick up the slack.

Growth and employment are public goods and developing countries are in a perpetual state of systemic and multiple market failures.

Rather than lend to businesses or households - banks thrive on arbitrage. Investment horizons are limited. Should the state refrain from stepping in to fill up the gap - these countries are doomed to inexorable decline.

Return

The Distributive Justice of the Market

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

Also Read

The Principal-Agent Conundrum

The Green-Eyed Capitalist

The Misconception of Scarcity

The public outcry against executive pay and compensation followed disclosures of insider trading, double dealing, and outright fraud. But even honest and productive entrepreneurs often earn more money in one year than Albert Einstein did in his entire life. This strikes many - especially academics - as unfair. Surely Einstein's contributions to human knowledge and welfare far exceed anything ever accomplished by sundry businessmen? Fortunately, this discrepancy is cause for constructive jealousy, emulation, and imitation. It can, however, lead to an orgy of destructive and self-ruinous envy.

Entrepreneurs recombine natural and human resources in novel ways. They do so to respond to forecasts of future needs, or to observations of failures and shortcomings of current products or services. Entrepreneurs are professional - though usually intuitive - futurologists. This is a valuable service and it is financed by systematic risk takers, such as venture capitalists. Surely they all deserve compensation for their efforts and the hazards they assume?

Exclusive ownership is the most ancient type of such remuneration. First movers, entrepreneurs, risk takers, owners of the wealth they generated, exploiters of resources - are allowed to exclude others from owning or exploiting the same things. Mineral concessions, patents, copyright, trademarks - are all forms of monopoly ownership. What moral right to exclude others is gained from being the first?

Nozick advanced Locke's Proviso. An exclusive ownership of property is just only if "enough and as good is left in common for others". If it does not worsen other people's lot, exclusivity is morally permissible. It can be argued, though, that all modes of exclusive ownership aggravate other people's situation. As far as everyone, bar the entrepreneur, are concerned, exclusivity also prevents a more advantageous distribution of income and wealth.

Exclusive ownership reflects real-life irreversibility. A first mover has the advantage of excess information and of irreversibly invested work, time, and effort.

Economic enterprise is subject to information asymmetry: we know nothing about the future and everything about the past. This asymmetry is known as "investment risk". Society compensates the entrepreneur with one type of asymmetry - exclusive ownership - for assuming another, the investment risk.

One way of looking at it is that all others are worse off by the amount of profits and rents accruing to owner-entrepreneurs. Profits and rents reflect an intrinsic inefficiency. Another is to recall that ownership is the result of adding value to the world. It is only reasonable to expect it to yield to the entrepreneur at least this value added now and in the future.

In a "Theory of Justice" (published 1971, p. 302), John Rawls described an ideal society thus:

"(1) Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all. (2) Social and economic inequalities are to be arranged so that they are both: (a) to the greatest benefit of the least advantaged, consistent with the just savings principle, and (b) attached to offices and positions open to all under conditions of fair equality of opportunity. "

It all harks back to scarcity of resources - land, money, raw materials, manpower, creative brains. Those who can afford to do so, hoard resources to offset anxiety regarding future uncertainty. Others wallow in paucity. The distribution of means is thus skewed.

"Distributive justice" deals with the just allocation of scarce resources.

Yet, even the basic terminology is somewhat fuzzy. What constitutes a resource? what is meant by allocation? Who should allocate resources - Adam Smith's "invisible hand", the government, the consumer, or business? Should it reflect differences in power, in intelligence, in knowledge, or in heredity? Should resource allocation be subject to a principle of entitlement? Is it reasonable to demand that it be just - or merely efficient? Are justice and efficiency antonyms?

Justice is concerned with equal access to opportunities. Equal access does not guarantee equal outcomes, invariably determined by idiosyncrasies and differences between people. Access leveraged by the application of natural or acquired capacities - translates into accrued wealth. Disparities in these capacities lead to discrepancies in accrued wealth.

The doctrine of equal access is founded on the equivalence of Men. That all men are created equal and deserve the same respect and, therefore, equal treatment is not self evident. European aristocracy well into this century would have probably found this notion abhorrent. Jose Ortega Y Gasset, writing in the 1930's, preached that access to educational and economic opportunities should be premised on one's lineage, up bringing, wealth, and social responsibilities.

A succession of societies and cultures discriminated against the ignorant, criminals, atheists, females, homosexuals, members of ethnic, religious, or racial groups, the old, the immigrant, and the poor.

Communism - ostensibly a strict egalitarian idea - foundered because it failed to reconcile strict equality with economic and psychological realities within an impatient timetable.

Philosophers tried to specify a "bundle" or "package" of goods, services, and intangibles (like information, or skills, or knowledge). Justice - though not necessarily happiness - is when everyone possesses an identical bundle. Happiness - though not necessarily justice - is when each one of us possesses a "bundle" which reflects his or her preferences, priorities, and predilections. None of us will be too happy with a standardized bundle, selected by a committee of philosophers - or bureaucrats, as was the case under communism.

The market allows for the exchange of goods and services between holders of identical bundles. If I seek books, but detest oranges - I can swap them with someone in return for his books. That way both of us are rendered better off than under the strict egalitarian version.

Still, there is no guarantee that I will find my exact match - a person who is interested in swapping his books for my oranges. Illiquid, small, or imperfect markets thus inhibit the scope of these exchanges. Additionally, exchange participants have to agree on an index: how many books for how many oranges? This is the price of oranges in terms of books.

Money - the obvious "index" - does not solve this problem, merely simplifies it and facilitates exchanges. It does not eliminate the necessity to negotiate an "exchange rate". It does not prevent market failures. In other words: money is not an index.

It is merely a medium of exchange and a store of value. The index - as expressed in terms of money - is the underlying agreement regarding the values of resources in terms of other resources (i.e., their relative values).

The market - and the price mechanism - increase happiness and welfare by allowing people to alter the composition of their bundles. The invisible hand is just and benevolent. But money is imperfect. The aforementioned Rawles demonstrated (1971), that we need to combine money with other measures in order to place a value on intangibles.

The prevailing market theories postulate that everyone has the same resources at some initial point (the "starting gate"). It is up to them to deploy these endowments and, thus, to ravage or increase their wealth. While the initial distribution is equal - the end distribution depends on how wisely - or imprudently - the initial distribution was used.

Egalitarian thinkers proposed to equate everyone's income in each time frame (e.g., annually). But identical incomes do not automatically yield the same accrued wealth. The latter depends on how the income is used - saved, invested, or squandered. Relative disparities of wealth are bound to emerge, regardless of the nature of income distribution.

Some say that excess wealth should be confiscated and redistributed. Progressive taxation and the welfare state aim to secure this outcome. Redistributive mechanisms reset the "wealth clock" periodically (at the end of every month, or fiscal year). In many countries, the law dictates which portion of one's income must be saved and, by implication, how much can be consumed.

This conflicts with basic rights like the freedom to make economic choices.

The legalized expropriation of income (i.e., taxes) is morally dubious. Anti-tax movements have sprung all over the world and their philosophy permeates the ideology of political parties in many countries, not least the USA. Taxes are punitive: they penalize enterprise, success, entrepreneurship, foresight, and risk assumption. Welfare, on the other hand, rewards dependence and parasitism.

According to Rawles' Difference Principle, all tenets of justice are either redistributive or retributive. This ignores non-economic activities and human inherent variance. Moreover, conflict and inequality are the engines of growth and innovation - which mostly benefit the least advantaged in the long run. Experience shows that unmitigated equality results in atrophy, corruption and stagnation. Thermodynamics teaches us that life and motion are engendered by an irregular distribution of energy. Entropy - an even distribution of energy - equals death and stasis.

What about the disadvantaged and challenged - the mentally retarded, the mentally insane, the paralyzed, the chronically ill? For that matter, what about the less talented, less skilled, less daring? Dworkin (1981) proposed a compensation scheme. He suggested a model of fair distribution in which every person is given the same purchasing power and uses it to bid, in a fair auction, for resources that best fit that person's life plan, goals and preferences.

Having thus acquired these resources, we are then permitted to use them as we see fit. Obviously, we end up with disparate economic results. But we cannot complain - we were given the same purchasing power and the freedom to bid for a bundle of our choice.

Dworkin assumes that prior to the hypothetical auction, people are unaware of their own natural endowments but are willing and able to insure against being naturally disadvantaged. Their payments create an insurance pool to compensate the less fortunate for their misfortune.

This, of course, is highly unrealistic. We are usually very much aware of natural endowments and liabilities - both ours and others'. Therefore, the demand for such insurance is not universal, nor uniform. Some of us badly need and want it - others not at all. It is morally acceptable to let willing buyers and sellers to trade in such coverage (e.g., by offering charity or alms) - but may be immoral to make it compulsory.

Most of the modern welfare programs are involuntary Dworkin schemes. Worse yet, they often measure differences in natural endowments arbitrarily, compensate for lack of acquired skills, and discriminate between types of endowments in accordance with cultural biases and fads.

Libertarians limit themselves to ensuring a level playing field of just exchanges, where just actions always result in just outcomes. Justice is not dependent on a particular distribution pattern, whether as a starting point, or as an outcome. Robert Nozick "Entitlement Theory" proposed in 1974 is based on this approach.

That the market is wiser than any of its participants is a pillar of the philosophy of capitalism. In its pure form, the theory claims that markets yield patterns of merited distribution - i.e., reward and punish justly. Capitalism generate just deserts. Market failures - for instance, in the provision of public goods - should be tackled by governments. But a just distribution of income and wealth does not constitute a market failure and, therefore, should not be tampered with.

Return

The Myth of the Earnings Yield

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

Also Read:

The Friendly Trend

Models of Stock Valuation

Portfolio Management Theory and Technical Analysis Lecture Notes

In American novels, well into the 1950's, one finds protagonists using the future stream of dividends emanating from their share holdings to send their kids to college or as collateral. Yet, dividends seemed to have gone the way of the hoolah hoop. Few companies distribute erratic and ever-declining dividends. The vast majority don't bother. The unfavorable tax treatment of distributed profits may have been the cause.

The dwindling of dividends has implications which are nothing short of revolutionary. Most of the financial theories we use to determine the value of shares were developed in the 1950's and 1960's, when dividends were in vogue. They invariably relied on a few implicit and explicit assumptions:

1. That the fair "value" of a share is closely correlated to its market price;

2. That price movements are mostly random, though somehow related to the aforementioned "value" of the share. In other words, the price of a security is supposed to converge with its fair "value" in the long term;

3. That the fair value responds to new information about the firm and reflects it - though how efficiently is debatable. The strong efficiency market hypothesis assumes that new information is fully incorporated in prices instantaneously.

But how is the fair value to be determined?

A discount rate is applied to the stream of all future income from the share - i.e., its dividends. What should this rate be is sometimes hotly disputed - but usually it is the coupon of "riskless" securities, such as treasury bonds. But since few companies distribute dividends - theoreticians and analysts are increasingly forced to deal with "expected" dividends rather than "paid out" or actual ones.

The best proxy for expected dividends is net earnings. The higher the earnings - the likelier and the higher the dividends. Thus, in a subtle cognitive dissonance, retained earnings - often plundered by rapacious managers - came to be regarded as some kind of deferred dividends.

The rationale is that retained earnings, once re-invested, generate additional earnings. Such a virtuous cycle increases the likelihood and size of future dividends. Even undistributed earnings, goes the refrain, provide a rate of return, or a yield - known as the earnings yield. The original meaning of the word "yield" - income realized by an investor - was undermined by this Newspeak.

Why was this oxymoron - the "earnings yield" - perpetuated?

According to all current theories of finance, in the absence of dividends - shares are worthless. The value of an investor's holdings is determined by the income he stands to receive from them. No income - no value. Of course, an investor can always sell his holdings to other investors and realize capital gains (or losses). But capital gains - though also driven by earnings hype - do not feature in financial models of stock valuation.

Faced with a dearth of dividends, market participants - and especially Wall Street firms - could obviously not live with the ensuing zero valuation of securities. They resorted to substituting future dividends - the outcome of capital accumulation and re-investment - for present ones. The myth was born.

Thus, financial market theories starkly contrast with market realities.

No one buys shares because he expects to collect an uninterrupted and equiponderant stream of future income in the form of dividends.

Even the most gullible novice knows that dividends are a mere apologue, a relic of the past. So why do investors buy shares? Because they hope to sell them to other investors later at a higher price.

While past investors looked to dividends to realize income from their shareholdings - present investors are more into capital gains. The market price of a share reflects its discounted expected capital gains, the discount rate being its volatility. It has little to do with its discounted future stream of dividends, as current financial theories teach us.

But, if so, why the volatility in share prices, i.e., why are share prices distributed? Surely, since, in liquid markets, there are always buyers - the price should stabilize around an equilibrium point.

It would seem that share prices incorporate expectations regarding the availability of willing and able buyers, i.e., of investors with sufficient liquidity. Such expectations are influenced by the price level - it is more difficult to find buyers at higher prices - by the general market sentiment, and by externalities and new information, including new information about earnings.

The capital gain anticipated by a rational investor takes into consideration both the expected discounted earnings of the firm and market volatility - the latter being a measure of the expected distribution of willing and able buyers at any given price. Still, if earnings are retained and not transmitted to the investor as dividends - why should they affect the price of the share, i.e., why should they alter the capital gain?

Earnings serve merely as a yardstick, a calibrator, a benchmark figure. Capital gains are, by definition, an increase in the market price of a security. Such an increase is more often than not correlated with the future stream of income to the firm - though not necessarily to the shareholder. Correlation does not always imply causation. Stronger earnings may not be the cause of the increase in the share price and the resulting capital gain. But whatever the relationship, there is no doubt that earnings are a good proxy to capital gains.

Hence investors' obsession with earnings figures. Higher earnings rarely translate into higher dividends. But earnings - if not fiddled - are an excellent predictor of the future value of the firm and, thus, of expected capital gains. Higher earnings and a higher market valuation of the firm make investors more willing to purchase the stock at a higher price - i.e., to pay a premium which translates into capital gains.

The fundamental determinant of future income from share holding was replaced by the expected value of share-ownership. It is a shift from an efficient market - where all new information is instantaneously available to all rational investors and is immediately incorporated in the price of the share - to an inefficient market where the most critical information is elusive: how many investors are willing and able to buy the share at a given price at a given moment.

A market driven by streams of income from holding securities is "open". It reacts efficiently to new information. But it is also "closed" because it is a zero sum game. One investor's gain is another's loss.

The distribution of gains and losses in the long term is pretty even, i.e., random. The price level revolves around an anchor, supposedly the fair value.

A market driven by expected capital gains is also "open" in a way because, much like less reputable pyramid schemes, it depends on new capital and new investors. As long as new money keeps pouring in, capital gains expectations are maintained - though not necessarily realized.

But the amount of new money is finite and, in this sense, this kind of market is essentially a "closed" one. When sources of funding are exhausted, the bubble bursts and prices decline precipitously. This is commonly described as an "asset bubble".

This is why current investment portfolio models (like CAPM) are unlikely to work. Both shares and markets move in tandem (contagion) because they are exclusively swayed by the availability of future buyers at given prices. This renders diversification inefficacious. As long as considerations of "expected liquidity" do not constitute an explicit part of income-based models, the market will render them increasingly irrelevant.

Return

Immortality and Mortality in the Economic Sciences

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

The noted economist, Julian Simon, once quipped: "Because we can expect future generations to be richer than we are, no matter what we do about resources, asking us to refrain from using resources now so that future generations can have them later is like asking the poor to make gifts to the rich."

Roberto Calvo Macias, a Spanish author and thinker, once wrote that it is impossible to design a coherent philosophy of economics not founded on our mortality. The Grim Reaper permeates estate laws, retirement plans, annuities, life insurance and much more besides.

The industrial revolution taught us that humans are interchangeable by breaking the process of production down to minute - and easily learned - functional units. Only the most basic skills were required. This led to great alienation. Motion pictures of the period ("Metropolis", "Modern Times") portray the industrial worker as a nut in a machine, driven to the verge of insanity by the numbing repetitiveness of his work.

As technology evolved, training periods have lengthened, and human capital came to outweigh the physical or monetary kinds. This led to an ongoing revolution in economic relations. Ironically, dehumanizing totalitarian regimes, such as fascism and communism, were the first to grasp the emerging prominence of scarce and expensive human capital among other means of production. What makes humans a scarce natural resource is their mortality.

Though aware of their finitude, most people behave as though they are going to live forever. Economic and social institutions are formed to last. People embark on long term projects and make enduring decisions - for instance, to invest money in stocks or bonds - even when they are very old.

Childless octogenarian inventors defend their fair share of royalties with youthful ferocity and tenacity. Businessmen amass superfluous wealth and collectors bid in auctions regardless of their age. We all - particularly economists - seem to deny the prospect of death.

Examples of this denial abound in the dismal science:

Consider the invention of the limited liability corporation. While its founders are mortals – the company itself is immortal. It is only one of a group of legal instruments - the will and the estate, for instance - that survive a person's demise. Economic theories assume that humans - or maybe humanity - are immortal and, thus, possessed of an infinite horizon.

Valuation models often discount an infinite stream of future dividends or interest payments to obtain the present value of a security.

Even in the current bear market, the average multiple of the p/e - price to earnings - ratio is 45. This means that the average investor is willing to wait more than 60 years to recoup his investment (assuming capital gains tax of 35 percent).

Standard portfolio management theory explicitly states that the investment horizon is irrelevant. Both long-term and short-term magpies choose the same bundle of assets and, therefore, the same profile of risk and return. As John Campbell and Luis Viceira point in their "Strategic Asset Allocation", published this year by Oxford University Press, the model ignores future income from work which tends to dwindle with age. Another way to look at it is that income from labor is assumed to be constant - forever!

To avoid being regarded as utterly inane, economists weigh time. The present and near future are given a greater weight than the far future. But the decrease in weight is a straight function of duration. This uniform decline in weight leads to conundrums. "The Economist" - based on the introduction to the anthology "Discounting and Intergenerational Equity", published by the Resources for the Future think tank - describes one such predicament:

"Suppose a long-term discount rate of 7 percent (after inflation) is used, as it typically is in cost-benefit analysis. Suppose also that the project's benefits arrive 200 years from now, rather than in 30 years or less. If global GDP grew by 3 percent during those two centuries, the value of the world's output in 2200 will be $8 quadrillion ... But in present value terms, that stupendous sum would be worth just $10 billion. In other words, it would not make sense ... to spend any more than $10 billion ... today on a measure that would prevent the loss of the planet's entire output 200 years from now."

Traditional cost-benefit analysis falters because it implicitly assumes that we possess perfect knowledge regarding the world 200 years hence - and, insanely, that we will survive to enjoy ad infinitum the interest on capital we invest today. From our exalted and privileged position in the present, the dismal science appears to suggest, we judge the future distribution of income and wealth and the efficiency of various opportunity-cost calculations. In the abovementioned example, we ask ourselves whether we prefer to spend $10 billion now - due to our "pure impatience" to consume - or to defer present expenditures so as to consume more 200 years hence!

Yet, though their behavior indicates a denial of imminent death - studies have demonstrated that people intuitively and unconsciously apply cost-benefit analyses to decisions with long-term outcomes. Moreover, contrary to current economic thinking, they use decreasing utility rates of discount for the longer periods in their calculations. They are not as time-consistent as economists would have them be.

They value the present and near future more than they do the far future. In other words, they take their mortality into account.

This is supported by a paper titled "Doing it Now or Later", published in the March 1999 issue of the American Economic Review. In it the authors suggest that over-indulgers and procrastinators alike indeed place undue emphasis on the near future. Self-awareness surprisingly only exacerbates the situation: "why resist? I have a self-control problem. Better indulge a little now than a lot later."

But a closer look exposes an underlying conviction of perdurability.

The authors distinguish sophisticates from naifs. Both seem to subscribe to immortality. The sophisticate refrains from procrastinating because he believes that he will live to pay the price. Naifs procrastinate because they believe that they will live to perform the task later. They also try to delay overindulgence because they assume that they will live to enjoy the benefits. Similarly, sophisticated folk overindulge a little at present because they believe that, if they don't, they will overindulge a lot in future. Both types believe that they will survive to experience the outcomes of their misdeeds and decisions.

The denial of the inevitable extends to gifts and bequests. Many economists regard inheritance as an accident. Had people accepted their mortality, they would have consumed much more and saved much less. A series of working papers published by the NBER in the last 5 years reveals a counter-intuitive pattern of intergenerational shifting of wealth.

Parents gift their off-spring unequally. The richer the child, the larger his or her share of such largesse. The older the parent, the more pronounced the asymmetry. Post-mortem bequests, on the other hand, are usually divided equally among one's progeny.

The avoidance of estate taxes fails to fully account for these patterns of behavior. A parental assumption of immortality does a better job. The parent behaves as though it is deathless. Rich children are better able to care for ageing and burdensome parents. Hence the uneven distribution of munificence. Unequal gifts - tantamount to insurance premiums - safeguard the rich scions' sustained affection and treatment. Still, parents are supposed to love their issue equally. Hence the equal allotment of bequests.

Return

The Agent-Principal Conundrum

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

In the catechism of capitalism, shares represent the part-ownership of an economic enterprise, usually a firm. The value of shares is determined by the replacement value of the assets of the firm, including intangibles such as goodwill. The price of the share is determined by transactions among arm's length buyers and sellers in an efficient and liquid market. The price reflects expectations regarding the future value of the firm and the stock's future stream of income - i.e., dividends.

Alas, none of these oft-recited dogmas bears any resemblance to reality. Shares rarely represent ownership. The float - the number of shares available to the public - is frequently marginal. Shareholders meet once a year to vent and disperse. Boards of directors are appointed by management - as are auditors. Shareholders are not represented in any decision making process - small or big.

The dismal truth is that shares reify the expectation to find future buyers at a higher price and thus incur capital gains. In the Ponzi scheme known as the stock exchange, this expectation is proportional to liquidity - new suckers - and volatility. Thus, the price of any given stock reflects merely the consensus as to how easy it would be to offload one's holdings and at what price.

Another myth has to do with the role of managers. They are supposed to generate higher returns to shareholders by increasing the value of the firm's assets and, therefore, of the firm. If they fail to do so, goes the moral tale, they are booted out mercilessly. This is one manifestation of the "Principal-Agent Problem". It is defined thus by the Oxford Dictionary of Economics:

"The problem of how a person A can motivate person B to act for A's benefit rather than following (his) self-interest."

The obvious answer is that A can never motivate B not to follow B's self-interest - never mind what the incentives are. That economists pretend otherwise - in "optimal contracting theory" - just serves to demonstrate how divorced economics is from human psychology and, thus, from reality.

Managers will always rob blind the companies they run. They will always manipulate boards to collude in their shenanigans. They will always bribe auditors to bend the rules. In other words, they will always act in their self-interest. In their defense, they can say that the damage from such actions to each shareholder is minuscule while the benefits to the manager are enormous. In other words, this is the rational, self-interested, thing to do.

But why do shareholders cooperate with such corporate brigandage?

In an important Chicago Law Review article whose preprint was posted to the Web a few weeks ago - titled "Managerial Power and Rent Extraction in the Design of Executive Compensation" - the authors demonstrate how the typical stock option granted to managers as part of their remuneration rewards mediocrity rather than encourages excellence.

But everything falls into place if we realize that shareholders and managers are allied against the firm - not pitted against each other. The paramount interest of both shareholders and managers is to increase the value of the stock - regardless of the true value of the firm. Both are concerned with the performance of the share - rather than the performance of the firm. Both are preoccupied with boosting the share's price - rather than the company's business.

Hence the inflationary executive pay packets. Shareholders hire stock manipulators - euphemistically known as "managers" - to generate expectations regarding the future prices of their shares. These snake oil salesmen and snake charmers - the corporate executives - are allowed by shareholders to loot the company providing they generate consistent capital gains to their masters by provoking persistent interest and excitement around the business. Shareholders, in other words, do not behave as owners of the firm - they behave as free-riders.

The Principal-Agent Problem arises in other social interactions and is equally misunderstood there. Consider taxpayers and their government. Contrary to conservative lore, the former want the government to tax them providing they share in the spoils.

They tolerate corruption in high places, cronyism, nepotism, inaptitude and worse - on condition that the government and the legislature redistribute the wealth they confiscate. Such redistribution often comes in the form of pork barrel projects and benefits to the middle-class.

This is why the tax burden and the government's share of GDP have been soaring inexorably with the consent of the citizenry. People adore government spending precisely because it is inefficient and distorts the proper allocation of economic resources. The vast majority of people are rent-seekers. Witness the mass demonstrations that erupt whenever governments try to slash expenditures, privatize, and eliminate their gaping deficits. This is one reason the IMF with its austerity measures is universally unpopular.

Employers and employees, producers and consumers - these are all instances of the Principal-Agent Problem. Economists would do well to discard their models and go back to basics. They could start by asking:

Why do shareholders acquiesce with executive malfeasance as long as share prices are rising?

Why do citizens protest against a smaller government - even though it means lower taxes?

Could it mean that the interests of shareholders and managers are identical? Does it imply that people prefer tax-and-spend governments and pork barrel politics to the Thatcherite alternative?

Nothing happens by accident or by coercion. Shareholders aided and abetted the current crop of corporate executives enthusiastically. They knew well what was happening. They may not have been aware of the exact nature and extent of the rot - but they witnessed approvingly the public relations antics, insider trading, stock option resetting , unwinding, and unloading, share price manipulation, opaque transactions, and outlandish pay packages. Investors remained mum throughout the corruption of corporate America. It is time for the hangover.

Return

The Green-Eyed Capitalist

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

Conservative sociologists self-servingly marvel at the peaceful proximity of abject poverty and ostentatious affluence in American - or, for that matter, Western - cities. Devastating riots do erupt, but these are reactions either to perceived social injustice (Los Angeles 1995) or to political oppression (Paris 1968). The French Revolution may have been the last time the urban sans-culotte raised a fuss against the economically enfranchised.

This pacific co-existence conceals a maelstrom of envy. Behold the rampant Schadenfreude which accompanied the antitrust case against the predatory but loaded Microsoft. Observe the glee which engulfed many destitute countries in the wake of the September 11 atrocities against America, the epitome of triumphant prosperity. Witness the post-World.com orgiastic castigation of avaricious CEO's.

Envy - a pathological manifestation of destructive aggressiveness - is distinct from jealousy.

The New Oxford Dictionary of English defines envy as:

"A feeling of discontented or resentful longing aroused by someone else's possessions, qualities, or luck ... Mortification and ill-will occasioned by the contemplation of another's superior advantages".

Pathological envy - the fourth deadly sin - is engendered by the realization of some lack, deficiency, or inadequacy in oneself. The envious begrudge others their success, brilliance, happiness, beauty, good fortune, or wealth. Envy provokes misery, humiliation, and impotent rage.

The envious copes with his pernicious emotions in five ways:

1. They attack the perceived source of frustration in an attempt to destroy it, or "reduce it" to their "size". Such destructive impulses often assume the disguise of championing social causes, fighting injustice, touting reform, or promoting an ideology.

2. They seek to subsume the object of envy by imitating it. In extreme cases, they strive to get rich quick through criminal scams, or corruption. They endeavor to out-smart the system and shortcut their way to fortune and celebrity.

3. They resort to self-deprecation. They idealize the successful, the rich, the mighty, and the lucky and attribute to them super-human, almost divine, qualities. At the same time, they humble themselves. Indeed, most of this strain of the envious end up disenchanted and bitter, driving the objects of their own erstwhile devotion and adulation to destruction and decrepitude.

4. They experience cognitive dissonance. These people devalue the source of their frustration and envy by finding faults in everything they most desire and in everyone they envy.

5. They avoid the envied person and thus the agonizing pangs of envy.

Envy is not a new phenomenon. Belisarius, the general who conquered the world for Emperor Justinian, was blinded and stripped of his assets by his envious peers. I - and many others - have written extensively about envy in command economies. Nor is envy likely to diminish.

In his book, "Facial Justice", Hartley describes a post-apocalyptic dystopia, New State, in which envy is forbidden and equality extolled and everything enviable is obliterated. Women are modified to look like men and given identical "beta faces". Tall buildings are razed.

Joseph Schumpeter, the prophetic Austrian-American economist, believed that socialism will disinherit capitalism. In "Capitalism, Socialism, and Democracy" he foresaw a conflict between a class of refined but dirt-poor intellectuals and the vulgar but filthy rich businessmen and managers they virulently envy and resent. Samuel Johnson wrote: "He was dull in a new way, and that made many people think him great." The literati seek to tear down the market economy which they feel has so disenfranchised and undervalued them.

Hitler, who fancied himself an artist, labeled the British a "nation of shopkeepers" in one of his bouts of raging envy. Ralph Reiland, the Kenneth Simon professor of free enterprise at Robert Morris University, quotes David Brooks of the "weekly Standard", who christened this phenomenon "bourgeoisophobia":

"The hatred of the bourgeoisie is the beginning of all virtue' - wrote Gustav Flaubert. He signed his letters "Bourgeoisophobus" to show how much he despised 'stupid grocers and their ilk ... Through some screw-up in the great scheme of the universe, their narrow-minded greed had brought them vast wealth, unstoppable power and growing social prestige."

Reiland also quotes from Ludwig van Mises's "The Anti-Capitalist Mentality":

"Many people, and especially intellectuals, passionately loathe capitalism. In a society based on caste and status, the individual can ascribe adverse fate to conditions beyond his control. In ... capitalism ... everybody's station in life depends on his doing ... (what makes a man rich is) not the evaluation of his contribution from any `absolute' principle of justice but the evaluation on the part of his fellow men who exclusively apply the yardstick of their personal wants, desires and ends ... Everybody knows very well that there are people like himself who succeeded where he himself failed. Everybody knows that many of those he envies are self-made men who started from the same point from which he himself started. Everybody is aware of his own defeat. In order to console himself and to restore his self- assertion, such a man is in search of a scapegoat.

He tries to persuade himself that he failed through no fault of his own. He was too decent to resort to the base tricks to which his successful rivals owe their ascendancy. The nefarious social order does not accord the prizes to the most meritorious men; it crowns the dishonest, unscrupulous scoundrel, the swindler, the exploiter, the `rugged individualist.'"

In "The Virtue of Prosperity", Dinesh D'Souza accuses prosperity and capitalism of inspiring vice and temptation. Inevitably, it provokes envy in the poor and depravity in the rich.

With only a modicum of overstatement, capitalism can be depicted as the sublimation of jealousy. As opposed to destructive envy - jealousy induces emulation. Consumers - responsible for two thirds of America's GDP - ape role models and vie with neighbors, colleagues, and family members for possessions and the social status they endow. Productive and constructive competition - among scientists, innovators, managers, actors, lawyers, politicians, and the members of just about every other profession - is driven by jealousy.

The eminent Nobel prize winning British economist and philosopher of Austrian descent, Friedrich Hayek, suggested in "The Constitution of Liberty" that innovation and progress in living standards are the outcomes of class envy. The wealthy are early adopters of expensive and unproven technologies. The rich finance with their conspicuous consumption the research and development phase of new products. The poor, driven by jealousy, imitate them and thus create a mass market which allows manufacturers to lower prices.

But jealousy is premised on the twin beliefs of equality and a level playing field. "I am as good, as skilled, and as talented as the object of my jealousy." - goes the subtext - "Given equal opportunities, equitable treatment, and a bit of luck, I can accomplish the same or more."

Jealousy is easily transformed to outrage when its presumptions - equality, honesty, and fairness - prove wrong. In a paper recently published by Harvard University's John M. Olin Center for Law and titled "Executive Compensation in America: Optimal Contracting or Extraction of Rents?", the authors argue that executive malfeasance is most effectively regulated by this "outrage constraint":

"Directors (and non-executive directors) would be reluctant to approve, and executives would be hesitant to seek, compensation arrangements that might be viewed by observers as outrageous."

Return

The Case of the Compressed Image

By: Sam Vaknin, Ph.D.

Also published by United Press International (UPI)

Also Read:

The Disruptive Engine - Innovation

Forgent Networks from Texas wants to collect a royalty every time someone compresses an image using the JPEG algorithm. It urges third parties to negotiate with it separate licensing agreements. It bases its claim on a 17 year old patent it acquired in 1997 when VTel, from which Forgent was spun-off, purchased the San-Jose based Compression Labs.

The patent pertains to a crucial element in the popular compression method. The JPEG committee of ISO - the International Standards Organization - threatens to withdraw the standard altogether. This would impact thousands of software and hardware products.

This is only the latest in a serious of spats. Unisys has spent the better part of the last 15 years trying to enforce a patent it owns for a compression technique used in two other popular imaging standards, GIF and TIFF.

BT Group sued Prodigy, a unit of SBC Communications, in a US federal court, for infringement of its patent of the hypertext link, or hyperlink - a ubiquitous and critical element of the Web. Dell Computer has agreed with the FTC to refrain from enforcing a graphics patent having failed to disclose it to the standards committee in its deliberations of the VL-bus graphics standard.

"Wired" reported yesterday that the Munich Upper Court declared "deep linking" - posting links to specific pages within a Web site - in violation the European Union "Database Directive". The directive copyrights the "selection and arrangement" of a database - even if the content itself is not owned by the database creator. It explicitly prohibits hyperlinking to the database contents as "unfair extraction". If upheld, this would cripple most search engines. Similar rulings - based on national laws - were handed down in other countries, the latest being Denmark.

Amazon sued Barnes and Noble - and has since settled out of court in March - for emulating its patented "one click purchasing" business process. A Web browser command to purchase an item generates a "cookie" - a text file replete with the buyer's essential details which is then lodged in Amazon's server. This allows the transaction to be completed without a further confirmation step.

A clever trick, no doubt. But even Jeff Bezos, Amazon's legendary founder, expressed doubts regarding the wisdom of the US Patent Office in granting his company the patent. In an open letter to Amazon's customers, he called for a rethinking of the whole system of protection of intellectual property in the Internet age.

In a recently published discourse of innovation and property rights, titled "The Free-Market Innovation Machine", William Baumol of Princeton University claims that only capitalism guarantees growth through a steady flow of innovation. According to popular lore, capitalism makes sure that innovators are rewarded for their time and skills since property rights are enshrined in enforceable contracts.

Reality is different, as Baumol himself notes. Innovators tend to maximize their returns by sharing their technology and licensing it to more efficient and profitable manufacturers. This rational division of labor is hampered by the increasingly more stringent and expansive intellectual property laws that afflict many rich countries nowadays. These statutes tend to protect the interests of middlemen - manufacturers, distributors, marketers - rather than the claims of inventors and innovators.

Moreover, the very nature of "intellectual property" is in flux. Business processes and methods, plants, genetic material, strains of animals, minor changes to existing technologies - are all patentable. Trademarks and copyright now cover contents, brand names, and modes of expression and presentation. Nothing is safe from these encroaching juridical initiatives. Intellectual property rights have been transformed into a myriad pernicious monopolies which threaten to stifle innovation and competition.

Intellectual property - patents, content libraries, copyrighted material, trademarks, rights of all kinds - are sometimes the sole assets - and the only hope for survival - of cash-strapped and otherwise dysfunctional or bankrupt firms.

Both managers and court-appointed receivers strive to monetize these properties and patent-portfolios by either selling them or enforcing the rights against infringing third parties.

Fighting a patent battle in court is prohibitively expensive and the outcome uncertain. Potential defendants succumb to extortionate demands rather than endure the Kafkaesque process. The costs are passed on to the consumer. Sony, for instance already paid Forgent an undisclosed amount in May. According to Forgent's 10-Q form, filed on June 17, 2002, yet another, unidentified "prestigious international" company, parted with $15 million in April.

In commentaries written in 1999-2000 by Harvard law professor, Lawrence Lessig, for "The Industry Standard", he observed:

"There is growing skepticism among academics about whether such state-imposed monopolies help a rapidly evolving market such as the Internet. What is "novel," "nonobvious" or "useful" is hard enough to know in a relatively stable field. In a transforming market, it's nearly impossible..."

The very concept of intellectual property is being radically transformed by the onslaught of new technologies.

The myth of intellectual property postulates that entrepreneurs assume the risks associated with publishing books, recording records, and inventing only because - and where - the rights to intellectual property are well defined and enforced. In the absence of such rights, creative people are unlikely to make their works accessible to the public. Ultimately, it is the public which pays the price of piracy and other violations of intellectual property rights, goes the refrain.

This is untrue. In the USA only few authors actually live by their pen. Even fewer musicians, not to mention actors, eke out subsistence level income from their craft. Those who do can no longer be considered merely creative people. Madonna, Michael Jackson, Schwarzenegger and Grisham are businessmen at least as much as they are artists.

Intellectual property is a relatively new notion. In the near past, no one considered knowledge or the fruits of creativity (artwork, designs) as 'patentable', or as someone's 'property'. The artist was but a mere channel through which divine grace flowed. Texts, discoveries, inventions, works of art and music, designs - all belonged to the community and could be replicated freely. True, the chosen ones, the conduits, were revered. But they were rarely financially rewarded.

Well into the 19th century, artists and innovators were commissioned - and salaried - to produce their works of art and contrivances.

The advent of the Industrial Revolution - and the imagery of the romantic lone inventor toiling on his brainchild in a basement or, later, a garage - gave rise to the patent. The more massive the markets became, the more sophisticated the sales and marketing techniques, the bigger the financial stakes - the larger loomed the issue of intellectual property.

Intellectual property rights are less about the intellect and more about property. In every single year of the last decade, the global turnover in intellectual property has outweighed the total industrial production of the world. These markets being global, the monopolists of intellectual products fight unfair competition globally. A pirate in Skopje is in direct rivalry with Bill Gates, depriving Microsoft of present and future revenue, challenging its monopolistic status as well as jeopardizing its competition-deterring image.

The Open Source Movement weakens the classic model of property rights by presenting an alternative, viable, vibrant, model which does not involve over-pricing and anti-competitive predatory practices. The current model of property rights encourages monopolistic behavior, non-collaborative, exclusionary innovation (as opposed, for instance, to Linux), and litigiousness. The Open Source movement exposes the myths underlying current property rights philosophy and is thus subversive.

But the inane expansion of intellectual property rights may merely be a final spasm, threatened by the ubiquity of the Internet as they are. Free scholarly online publications nibble at the heels of their pricey and anticompetitive offline counterparts.

Electronic publishing poses a threat - however distant - to print publishing. Napster-like peer to peer networks undermine the foundations of the music and film industries. Open source software is encroaching on the turf of proprietary applications. It is very easy and cheap to publish and distribute content on the Internet, the barriers to entry are virtually nil.

As processors grow speedier, storage larger, applications multi-featured, broadband access all-pervasive, and the Internet goes wireless - individuals are increasingly able to emulate much larger scale organizations successfully. A single person, working from home, with less than $2000 worth of equipment - can publish a Webzine, author software, write music, shoot digital films, design products, or communicate with millions and his work will be indistinguishable from the offerings of the most endowed corporations and institutions.

Obviously, no individual can yet match the capital assets, the marketing clout, the market positioning, the global branding, the sales organization, and the distribution network of the likes of Sony, or Microsoft. In an age of information glut, it is still the marketing, the media campaign, the distribution, and the sales that determine the economic outcome.

This advantage, however, is also being eroded, albeit glacially.

The Internet is essentially a free marketing and - in the case of digital goods - distribution channel. It directly reaches 200 million people all over the world. Even with a minimum investment, the likelihood of being seen by surprisingly large numbers of consumers is high.

Various business models are emerging or reasserting themselves - from ad sponsored content to packaged open source software.

Many creative people - artists, authors, innovators - are repelled by the commercialization of their intellect and muse. They seek - and find - alternatives to the behemoths of manufacturing, marketing and distribution that today control the bulk of intellectual property. Many of them go freelance. Indie music labels, independent cinema, print on demand publishing - are omens of things to come.

This inexorably leads to disintermediation - the removal of middlemen between producer or creator and consumer. The Internet enables niche marketing and restores the balance between the creative genius and the commercial exploiters of his product. This is a return to pre-industrial times when artisans ruled the economic scene.

Work mobility increases in this landscape of shifting allegiances, head hunting, remote collaboration, contract and agency work, and similar labour market trends. Intellectual property is likely to become as atomized as labor and to revert to its true owners - the inspired folks. They, in turn, will negotiate licensing deals directly with their end users and customers.

Capital, design, engineering, and labor intensive goods - computer chips, cruise missiles, and passenger cars - will still necessitate the coordination of a massive workforce in multiple locations. But even here, in the old industrial landscape, the intellectual contribution to the collective effort will likely be outsourced to roving freelancers who will maintain an ownership stake in their designs or inventions.

This intimate relationship between creative person and consumer is the way it has always been. We may yet look back on the 20th century and note with amazement the transient and aberrant phase of intermediation - the Sony's, Microsoft's, and Forgent's of this world.

Return

The Fabric of Economic Trust

By: Dr. Sam Vaknin

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Economics acquired its dismal reputation by pretending to be an exact science rather than a branch of mass psychology. In truth it is a narrative struggling to describe the aggregate behavior of humans. It seeks to cloak its uncertainties and shifting fashions with mathematical formulae and elaborate econometric computerized models.

So much is certain, though - that people operate within markets, free or regulated, patchy or organized. They attach numerical (and emotional) values to their inputs (work, capital) and to their possessions (assets, natural endowments). They communicate these values to each other by sending out signals known as prices.

Yet, this entire edifice - the market and its price mechanism - critically depends on trust. If people do not trust each other, or the economic "envelope" within which they interact - economic activity gradually grinds to a halt. There is a strong correlation between the general level of trust and the extent and intensity of economic activity.

Trust is not a monolithic quantity. There are a few categories of economic trust.

Some forms of trust are akin to a public good and are closely related to governmental action or inaction, the reputation of the state and its institutions, and its pronounced agenda. Other types of trust are the outcomes of kinship, ethnic origin, personal standing and goodwill, corporate brands and other data generated by individuals, households, and firms.

I. Trust in the playing field

To transact, people have to maintain faith in a relevant economic horizon and in the immutability of the economic playing field or "envelope". Put less obscurely, a few hidden assumptions underlie the continued economic activity of market players.

They assume, for instance, that the market will continue to exist for the foreseeable future in its current form. That it will remain inert - unhindered by externalities like government intervention, geopolitical upheavals, crises, abrupt changes in accounting policies and tax laws, hyperinflation, institutional and structural reform and other market-deflecting events and processes.

They further assume that their price signals will not be distorted or thwarted on a consistent basis thus skewing the efficient and rational allocation of risks and rewards. Insider trading, stock manipulation, monopolies, hoarding - all tend to consistently but unpredictably distort price signals and, thus, deter market participation.

Market players take for granted the existence and continuous operation of institutions - financial intermediaries, law enforcement agencies, courts. It is important to note that market players prefer continuity and certainty to evolution, however gradual and ultimately beneficial. A venal bureaucrat is a known quantity and can be tackled effectively. A period of transition to good and equitable governance can be more stifling than any level of corruption and malfeasance. This is why economic activity drops sharply whenever institutions are reformed.

II. Trust in other players

Market players assume that other players are (generally) rational, that they have intentions, that they intend to maximize their benefits and that they are likely to act on their intentions in a legal (or rule-based), rational manner.

III. Trust in market liquidity

Market players assume that other players possess or have access to the liquid means they need in order to act on their intentions and obligations. They know, from personal experience, that idle capital tends to dwindle and that the only way to, perhaps, maintain or increase it is to transact with others, directly or through intermediaries, such as banks.

IV. Trust in others' knowledge and ability

Market players assume that other players possess or have access to the intellectual property, technology, and knowledge they need in order to realize their intentions and obligations.

This implicitly presupposes that all other market players are physically, mentally, legally and financially able and willing to act their parts as stipulated, for instance, in contracts they sign.

The emotional dimensions of contracting are often neglected in economics. Players assume that their counterparts maintain a realistic and stable sense of self-worth based on intimate knowledge of their own strengths and weaknesses. Market participants are presumed to harbor realistic expectations, commensurate with their skills and accomplishments. Allowance is made for exaggeration, disinformation, even outright deception - but these are supposed to be marginal phenomena.

When trust breaks down - often the result of an external or internal systemic shock - people react expectedly. The number of voluntary interactions and transactions decreases sharply. With a collapsed investment horizon, individuals and firms become corrupt in an effort to shortcut their way into economic benefits, not knowing how long will the system survive. Criminal activity increases.

People compensate with fantasies and grandiose delusions for their growing sense of uncertainty, helplessness, and fears. This is a self-reinforcing mechanism, a vicious cycle which results in under-confidence and a fluctuating self esteem. They develop psychological defence mechanisms.

Cognitive dissonance ("I really choose to be poor rather than heartless"), pathological envy (seeks to deprive others and thus gain emotional reward), rigidity ("I am like that, my family or ethnic group has been like that for generations, there is nothing I can do"), passive-aggressive behavior (obstructing the work flow, absenteeism, stealing from the employer, adhering strictly to arcane regulations) - are all reactions to a breakdown in one or more of the four aforementioned types of trust. Furthermore, people in a trust crisis are unable to postpone gratification. They often become frustrated, aggressive, and deceitful if denied. They resort to reckless behavior and stopgap economic activities.

In economic environments with compromised and impaired trust, loyalty decreases and mobility increases. People switch jobs, renege on obligations, fail to repay debts, relocate often. Concepts like exclusivity, the sanctity of contracts, workplace loyalty, or a career path - all get eroded. As a result, little is invested in the future, in the acquisition of skills, in long term savings. Short-termism and bottom line mentality rule.

The outcomes of a crisis of trust are, usually, catastrophic:

Economic activity is much reduced, human capital is corroded and wasted, brain drain increases, illegal and extra-legal activities rise, society is polarized between haves and haves-not, interethnic and inter-racial tensions increase. To rebuild trust in such circumstances is a daunting task. The loss of trust is contagious and, finally, it infects every institution and profession in the land. It is the stuff revolutions are made of. Return

Scavenger Economies,

Predator Economies

By: Dr. Sam Vaknin

The national economies of the world can be divided to the scavenger and the predator types. The former are parasitic economies which feed off the latter. The relationship is often not that of symbiosis, where two parties maintain a mutually beneficial co-existence. Here, one economy feeds off others in a way, which is harmful, even detrimental to the hosts. But this interaction - however undesirable - is the region's only hope.

The typology of scavenger economies reveals their sources of sustenance:

Conjunctural - These economies feed off historical or economic conjunctures or crises. They position themselves as a bridge between warring or conflicting parties. Switzerland rendered this service to Nazi Germany (1933-1945), Macedonia and Greece to Serbia (1992 to the present), Cyprus aided and abetted Russia (1987 to the present), Jordan for Iraq (1991 to the present), and now, Montenegro acts the part for both Serbia and Kosovo. These economies consist of smuggling, siege breaking, contraband, arms trade and illegal immigration.

They benefit economically by violating both international and domestic laws and by providing international outcasts and rogues with alternative routes of supply, and with goods and services.

Criminal - These economies are infiltrated by criminal gangs or suffused with criminal behaviour. Such infiltration is two phased: the properly criminal phase and the money laundering one. In the first phase, criminal activities yield income and result in wealth accumulation. In the second one, the money thus generated is laundered and legitimized. It is invested in legal, above-board activities. The economy of the USA during the 19th century and in the years of prohibition was partly criminal. It is reminiscent of the Russian economy in the 1990s, permeated by criminal conduct as it is. Russians often compare their stage of capitalist evolution to the American "Wild West".

Piggyback Service Economies - These are economies, which provide predator economies with services. These services are aimed at re-establishing economic equilibrium in the host (predator) economies. Tax shelters are a fine example of this variety. In many countries taxes are way too high and result in the misallocation of economic resources. Tax shelters offer a way of re-establishing the economic balance and re-instating a regime of efficient allocation of resources. These economies could be regarded as external appendages, shock absorbers and regulators of their host economies. They feed off market failures, market imbalances, arbitrage opportunities, shortages and inefficiencies. Many post-Communist countries have either made the provision of such services a part of their economic life or are about to do so.

Free zones, off shore havens, off shore banking and transshipment ports proliferate, from Macedonia to Archangelsk.

Aid Economies - Economies that derive most of their vitality from aid granted them by donor countries, multilateral aid agencies and NGOs. Many of the economies in transition belong to this class. Up to 15% of their GDP is in the form of handouts, soft loans and technical assistance. Rescheduling is another species of financial subsidy and virtually all CEE countries have benefited from it. The dependence thus formed can easily deteriorate into addiction. The economic players in such economies engage mostly in lobbying and in political manoeuvring - rather than in production.

Derivative or Satellite Economies - These are economies, which are absolutely dependent upon or very closely correlated with other economies. This is either because they conduct most of their trade with these economies, or because they are a (marginal) member of a powerful regional club (or aspire to become one), or because they are under the economic (or geopolitical or military) umbrella of a regional power or a superpower. Another variant is the single-commodity or single-goods or single-service economies. Many countries in Africa and many members of the OPEC oil cartel rely on a single product for their livelihood. Russia, for instance, is heavily dependent on proceeds from the sale of its energy products. Most Montenegrins derive their livelihood, directly or indirectly, from smuggling, bootlegging and illegal immigration. Drugs are a major "export" earner in Macedonia and Albania.

Copycat Economies - These are economies that are based on legal or (more often) illegal copying and emulation of intellectual property: patents, brandnames, designs, industrial processes, other forms of innovation, copyrighted material, etc. The prime example is Japan, which constructed its whole mega-economy on these bases. Both Bulgaria and Russia are Meccas of piracy. Though prosperous for a time, these economies are dependent on and subject to the vicissitudes of business cycles. They are capital sensitive, inherently unstable and with no real long term prospects if they fail to generate their own intellectual property. They reflect the volatility of the markets for their goods and are overly exposed to trade risks, international legislation and imports. Usually, they specialize in narrow segments of manufacturing which only increases the precariousness of their situation.

The Predator Economies can also be classified:

Generators of Intellectual Property - These are economies that encourage and emphasize innovation and progress. They reward innovators, entrepreneurs, non-conformism and conflict. They spew out patents, designs, brands, copyrighted material and other forms of packaged human creativity. They derive most of their income from licensing and royalties and constitute one of the engines driving globalization. Still, these economies are too poor to support the complementary manufacturing and marketing activities. Their natural counterparts are the "Industrial Bases". Within the former Eastern Bloc, Russia, Poland, Hungary and Slovenia are, to a limited extent, such generators. Israel is such an economy in the Middle East.

Industrial Bases - These are economies that make use of the intellectual property generated by the former type within industrial processes. They do not copy the intellectual property as it is. Rather, they add to it important elements of adaptation to niche markets, image creation, market positioning, packaging, technical literature, combining it with other products or services, designing and implementing the whole production process, market (demand) creation, improvement upon the originals and value added services. These contributions are so extensive that the end products, or services can no longer to be identified with the originals, which serve as mere triggers. Again, Poland, Hungary, Slovenia (and to a lesser extent, Croatia) come to mind.

Consumer Oriented Economies - These are Third Wave (Alvin Toffler's term), services, information and knowledge driven economies. The over-riding set of values is consumer oriented. Wealth formation and accumulation are secondary. The primary activities are concerned with fostering markets and maintaining them. These "weightless" economies concentrate on intangibles: advertising, packaging, marketing, sales promotion, education, entertainment, servicing, dissemination of information, knowledge formation, trading, trading in symbolic assets (mainly financial), spiritual pursuits, and other economic activities which enhance the consumer's welfare (pharmaceuticals, for instance). These economies are also likely to sport a largish public sector, most of it service oriented. No national economy in CEE qualifies as "Consumer Oriented", though there are pockets of consumer-oriented entrepreneurship within each one.

The Trader Economies - These economies are equivalent to the cardiovascular system. They provide the channels through which goods and services are exchanged. They do this by trading or assuming risks, by providing physical transportation and telecommunications, and by maintaining an appropriately educated manpower to support all these activities. These economies are highly dependent on the general health of international trade. Many of the CEE economies are Trader economies. The openness ratio (trade divided by GDP) of most CEE countries is higher than the G7 countries'. Macedonia, for instance, has a GDP of 3.6 Billion US dollars and exports and imports of c. 2 billion US dollars. These are the official figures. Probably, another 0.5 billion Us dollars in trade go unreported. additionally, it has one of the lowest weighted customs rate in the world. Openness to trade is an official policy, actively pursued.

These economies are predatory in the sense that they engage in zero-sum games. A contract gained by a Slovenian company - is a contract lost by a Croatian one. Luckily, in this last decade, the economic cake tended to grow and the sum of zero sum games was more welfare to all involved. These vibrant economies - the hope of benighted and blighted regions - are justly described as "engines" because they pull all other (scavenger) economies with them. They are not likely to do so forever. But their governments have assimilated the lessons of the 1930s. Protectionism is bad for everyone involved - especially for economic engines. Openness to trade, protection of property rights and functioning institutions increase both the number and the scope of markets.

Return

Notes on the Economics of Game Theory

By: Dr. Sam Vaknin

Consider this:

Could Western management techniques be successfully implemented in the countries of Central and Eastern Europe (CEE)? Granted, they have to be adapted, modified and cannot be imported in their entirety. But their crux, their inalienable nucleus – can this be transported and transplanted in CEE? Theory provides us with a positive answer. Human agents are the same everywhere and are mostly rational. Practice begs to differ. Basic concepts such as the money value of time or the moral and legal meaning of property are non existent. The legal, political and economic environments are all unpredictable. As a result, economic players will prefer to maximize their utility immediately (steal from the workplace, for instance) – than to wait for longer term (potentially, larger) benefits. Warrants (stock options) convertible to the company's shares constitute a strong workplace incentive in the West (because there is an horizon and they increase the employee's welfare in the long term). Where the future is speculation – speculation withers. Stock options or a small stake in his firm, will only encourage the employee to blackmail the other shareholders by paralysing the firm, to abuse his new position and will be interpreted as immunity, conferred from above, from the consequences of illegal activities.

The very allocation of options or shares will be interpreted as a sign of weakness, dependence and need, to be exploited. Hierarchy is equated with slavery and employees will rather harm their long term interests than follow instructions or be subjected to criticism – never mind how constructive. The employees in CEE regard the corporate environment as a conflict zone, a zero sum game (in which the gains by some equal the losses to others). In the West, the employees participate in the increase in the firm's value. The difference between these attitudes is irreconcilable.

Now, let us consider this:

An entrepreneur is a person who is gifted at identifying the unsatisfied needs of a market, at mobilizing and organizing the resources required to satisfy those needs and at defining a long-term strategy of development and marketing. As the enterprise grows, two processes combine to denude the entrepreneur of some of his initial functions. The firm has ever growing needs for capital: financial, human, assets and so on. Additionally, the company begins (or should begin) to interface and interact with older, better established firms. Thus, the company is forced to create its first management team: a general manager with the right doses of respectability, connections and skills, a chief financial officer, a host of consultants and so on. In theory – if all our properly motivated financially – all these players (entrepreneurs and managers) will seek to maximize the value of the firm. What happens, in reality, is that both work to minimize it, each for its own reasons. The managers seek to maximize their short-term utility by securing enormous pay packages and other forms of company-dilapidating compensation.

The entrepreneurs feel that they are "strangled", "shackled", "held back" by bureaucracy and they "rebel". They oust the management, or undermine it, turning it into an ineffective representative relic. They assume real, though informal, control of the firm. They do so by defining a new set of strategic goals for the firm, which call for the institution of an entrepreneurial rather than a bureaucratic type of management. These cycles of initiative-consolidation-new initiative-revolution-consolidation are the dynamos of company growth. Growth leads to maximization of value. However, the players don't know or do not fully believe that they are in the process of maximizing the company's worth. On the contrary, consciously, the managers say: "let's maximize the benefits that we derive from this company, as long as we are still here." The entrepreneurs-owners say: "we cannot tolerate this stifling bureaucracy any longer. We prefer to have a smaller company – but all ours." The growth cycles forces the entrepreneurs to dilute their holdings (in order to raise the capital necessary to finance their initiatives). This dilution (the fracturing of the ownership structure) is what brings the last cycle to its end. The holdings of the entrepreneurs are too small to materialize a coup against the management. The management then prevails and the entrepreneurs are neutralized and move on to establish another start-up. The only thing that they leave behind them is their names and their heirs.

We can use Game Theory methods to analyse both these situations.

Wherever we have economic players bargaining for the allocation of scarce resources in order to attain their utility functions, to secure the outcomes and consequences (the value, the preference, that the player attaches to his outcomes) which are right for them – we can use Game Theory (GT).

A short recap of the basic tenets of the theory might be in order.

GT deals with interactions between agents, whether conscious and intelligent – or Dennettic. A Dennettic Agent (DA) is an agent that acts so as to influence the future allocation of resources, but does not need to be either conscious or deliberative to do so. A Game is the set of acts committed by 1 to n rational DA and one a-rational (not irrational but devoid of rationality) DA (nature, a random mechanism). At least 1 DA in a Game must control the result of the set of acts and the DAs must be (at least potentially) at conflict, whole or partial. This is not to say that all the DAs aspire to the same things. They have different priorities and preferences. They rank the likely outcomes of their acts differently. They engage Strategies to obtain their highest ranked outcome. A Strategy is a vector, which details the acts, with which the DA will react in response to all the (possible) acts by the other DAs. An agent is said to be rational if his Strategy does guarantee the attainment of his most preferred goal. Nature is involved by assigning probabilities to the outcomes. An outcome, therefore, is an allocation of resources resulting from the acts of the agents. An agent is said to control the situation if its acts matter to others to the extent that at least one of them is forced to alter at least one vector (Strategy).

The Consequence to the agent is the value of a function that assigns real numbers to each of the outcomes. The consequence represents a list of outcomes, prioritized, ranked. It is also known as an ordinal utility function. If the function includes relative numerical importance measures (not only real numbers) – we call it a Cardinal Utility Function.

Games, naturally, can consist of one player, two players and more than two players (n-players). They can be zero (or fixed) - sum (the sum of benefits is fixed and whatever gains made by one of the players are lost by the others). They can be nonzero-sum (the amount of benefits to all players can increase or decrease). Games can be cooperative (where some of the players or all of them form coalitions) – or non-cooperative (competitive). For some of the games, the solutions are called Nash equilibria. They are sets of strategies constructed so that an agent which adopts them (and, as a result, secures a certain outcome) will have no incentive to switch over to other strategies (given the strategies of all other players). Nash equilibria (solutions) are the most stable (it is where the system "settles down", to borrow from Chaos Theory) – but they are not guaranteed to be the most desirable. Consider the famous "Prisoners' Dilemma" in which both players play rationally and reach the Nash equilibrium only to discover that they could have done much better by collaborating (that is, by playing irrationally). Instead, they adopt the "Paretto-dominated", or the "Paretto-optimal", sub-optimal solution. Any outside interference with the game (for instance, legislation) will be construed as creating a NEW game, not as pushing the players to adopt a "Paretto-superior" solution.

The behaviour of the players reveals to us their order of preferences. This is called "Preference Ordering" or "Revealed Preference Theory". Agents are faced with sets of possible states of the world (=allocations of resources, to be more economically inclined). These are called "Bundles". In certain cases they can trade their bundles, swap them with others. The evidence of these swaps will inevitably reveal to us the order of priorities of the agent. All the bundles that enjoy the same ranking by a given agent – are this agent's "Indifference Sets". The construction of an Ordinal Utility Function is, thus, made simple. The indifference sets are numbered from 1 to n. These ordinals do not reveal the INTENSITY or the RELATIVE INTENSITY of a preference – merely its location in a list. However, techniques are available to transform the ordinal utility function – into a cardinal one.

A Stable Strategy is similar to a Nash solution – though not identical mathematically. There is currently no comprehensive theory of Information Dynamics. Game Theory is limited to the aspects of competition and exchange of information (cooperation). Strategies that lead to better results (independently of other agents) are dominant and where all the agents have dominant strategies – a solution is established. Thus, the Nash equilibrium is applicable to games that are repeated and wherein each agent reacts to the acts of other agents. The agent is influenced by others – but does not influence them (he is negligible). The agent continues to adapt in this way – until no longer able to improve his position. The Nash solution is less available in cases of cooperation and is not unique as a solution. In most cases, the players will adopt a minimax strategy (in zero-sum games) or maximin strategies (in nonzero-sum games).

These strategies guarantee that the loser will not lose more than the value of the game and that the winner will gain at least this value. The solution is the "Saddle Point".

The distinction between zero-sum games (ZSG) and nonzero-sum games (NZSG) is not trivial. A player playing a ZSG cannot gain if prohibited to use certain strategies. This is not the case in NZSGs. In ZSG, the player does not benefit from exposing his strategy to his rival and is never harmed by having foreknowledge of his rival's strategy. Not so in NZSGs: at times, a player stands to gain by revealing his plans to the "enemy". A player can actually be harmed by NOT declaring his strategy or by gaining acquaintance with the enemy's stratagems. The very ability to communicate, the level of communication and the order of communication – are important in cooperative cases. A Nash solution:

1. is not dependent upon any utility function;
2. it is impossible for two players to improve the Nash solution (=their position) simultaneously (=the Paretto optimality);
3. is not influenced by the introduction of irrelevant (not very gainful) alternatives; and
4. is symmetric (reversing the roles of the players does not affect the solution).

The limitations of this approach are immediately evident. It is definitely not geared to cope well with more complex, multi-player, semi-cooperative (semi-competitive), imperfect information situations.

Von Neumann proved that there is a solution for every ZSG with 2 players, though it might require the implementation of mixed strategies (strategies with probabilities attached to every move and outcome). Together with the economist Morgenstern, he developed an approach to coalitions (cooperative efforts of one or more players – a coalition of one player is possible). Every coalition has a value – a minimal amount that the coalition can secure using solely its own efforts and resources. The function describing this value is super-additive (the value of a coalition which is comprised of two sub-coalitions equals, at least, the sum of the values of the two sub-coalitions). Coalitions can be epiphenomenal: their value can be higher than the combined values of their constituents. The amounts paid to the players equal the value of the coalition and each player stands to get an amount no smaller than any amount that he would have made on his own. A set of payments to the players, describing the division of the coalition's value amongst them, is the "imputation", a single outcome of a strategy. A strategy is, therefore, dominant, if: (1) each player is getting more under the strategy than under any other strategy and (2) the players in the coalition receive a total payment that does not exceed the value of the coalition. Rational players are likely to prefer the dominant strategy and to enforce it. Thus, the solution to an n-players game is a set of imputations. No single imputation in the solution must be dominant (=better). They should all lead to equally desirable results. On the other hand, all the imputations outside the solution should be dominated. Some games are without solution (Lucas, 1967).

Auman and Maschler tried to establish what is the right payoff to the members of a coalition. They went about it by enlarging upon the concept of bargaining (threats, bluffs, offers and counter-offers). Every imputation was examined, separately, whether it belongs in the solution (=yields the highest ranked outcome) or not, regardless of the other imputations in the solution. But in their theory, every member had the right to "object" to the inclusion of other members in the coalition by suggesting a different, exclusionary, coalition in which the members stand to gain a larger payoff. The player about to be excluded can "counter-argue" by demonstrating the existence of yet another coalition in which the members will get at least as much as in the first coalition and in the coalition proposed by his adversary, the "objector". Each coalition has, at least, one solution.

The Game in GT is an idealized concept. Some of the assumptions can – and should be argued against. The number of agents in any game is assumed to be finite and a finite number of steps is mostly incorporated into the assumptions. Omissions are not treated as acts (though negative ones). All agents are negligible in their relationship to others (have no discernible influence on them) – yet are influenced by them (their strategies are not – but the specific moves that they select – are). The comparison of utilities is not the result of any ranking – because no universal ranking is possible. Actually, no ranking common to two or n players is possible (rankings are bound to differ among players). Many of the problems are linked to the variant of rationality used in GT. It is comprised of a clarity of preferences on behalf of the rational agent and relies on the people's tendency to converge and cluster around the right answer / move.

This, however, is only a tendency. Some of the time, players select the wrong moves. It would have been much wiser to assume that there are no pure strategies, that all of them are mixed. Game Theory would have done well to borrow mathematical techniques from quantum mechanics. For instance: strategies could have been described as wave functions with probability distributions. The same treatment could be accorded to the cardinal utility function. Obviously, the highest ranking (smallest ordinal) preference should have had the biggest probability attached to it – or could be treated as the collapse event. But these are more or less known, even trivial, objections. Some of them cannot be overcome. We must idealize the world in order to be able to relate to it scientifically at all. The idealization process entails the incorporation of gross inaccuracies into the model and the ignorance of other elements. The surprise is that the approximation yields results, which tally closely with reality – in view of its mutilation, affected by the model.

There are more serious problems, philosophical in nature.

It is generally agreed that "changing" the game can – and very often does – move the players from a non-cooperative mode (leading to Paretto-dominated results, which are never desirable) – to a cooperative one. A government can force its citizens to cooperate and to obey the law. It can enforce this cooperation. This is often called a Hobbesian dilemma. It arises even in a population made up entirely of altruists. Different utility functions and the process of bargaining are likely to drive these good souls to threaten to become egoists unless other altruists adopt their utility function (their preferences, their bundles).

Nash proved that there is an allocation of possible utility functions to these agents so that the equilibrium strategy for each one of them will be this kind of threat. This is a clear social Hobbesian dilemma: the equilibrium is absolute egoism despite the fact that all the players are altruists. This implies that we can learn very little about the outcomes of competitive situations from acquainting ourselves with the psychological facts pertaining to the players. The agents, in this example, are not selfish or irrational – and, still, they deteriorate in their behaviour, to utter egotism. A complete set of utility functions – including details regarding how much they know about one another's utility functions – defines the available equilibrium strategies. The altruists in our example are prisoners of the logic of the game. Only an "outside" power can release them from their predicament and permit them to materialize their true nature. Gauthier said that morally-constrained agents are more likely to evade Paretto-dominated outcomes in competitive games – than agents who are constrained only rationally. But this is unconvincing without the existence of an Hobesian enforcement mechanism (a state is the most common one). Players would do better to avoid Paretto dominated outcomes by imposing the constraints of such a mechanism upon their available strategies. Paretto optimality is defined as efficiency, when there is no state of things (a different distribution of resources) in which at least one player is better off – with all the other no worse off. "Better off" read: "with his preference satisfied". This definitely could lead to cooperation (to avoid a bad outcome) – but it cannot be shown to lead to the formation of morality, however basic. Criminals can achieve their goals in splendid cooperation and be content, but that does not make it more moral.

Game theory is agent neutral, it is utilitarianism at its apex. It does not prescribe to the agent what is "good" – only what is "right". It is the ultimate proof that effort at reconciling utilitarianism with more deontological, agent relative, approaches are dubious, in the best of cases. Teleology, in other words, in no guarantee of morality.

Acts are either means to an end or ends in themselves. This is no infinite regression. There is bound to be an holy grail (happiness?) in the role of the ultimate end. A more commonsense view would be to regard acts as means and states of affairs as ends. This, in turn, leads to a teleological outlook: acts are right or wrong in accordance with their effectiveness at securing the achievement of the right goals. Deontology (and its stronger version, absolutism) constrain the means. It states that there is a permitted subset of means, all the other being immoral and, in effect, forbidden. Game Theory is out to shatter both the notion of a finite chain of means and ends culminating in an ultimate end – and of the deontological view. It is consequentialist but devoid of any value judgement.

Game Theory pretends that human actions are breakable into much smaller "molecules" called games. Human acts within these games are means to achieving ends but the ends are improbable in their finality. The means are segments of "strategies": prescient and omniscient renditions of the possible moves of all the players. Aside from the fact that it involves mnemic causation (direct and deterministic influence by past events) and a similar influence by the utility function (which really pertains to the future) – it is highly implausible.

Additionally, Game Theory is mired in an internal contradiction: on the one hand it solemnly teaches us that the psychology of the players is absolutely of no consequence. On the other, it hastens to explicitly and axiomatically postulate their rationality and implicitly (and no less axiomatically) their benefit-seeking behaviour (though this aspect is much more muted). This leads to absolutely outlandish results: irrational behaviour leads to total cooperation, bounded rationality leads to more realistic patterns of cooperation and competition (coopetition) and an unmitigated rational behaviour leads to disaster (also known as Paretto dominated outcomes).

Moreover, Game Theory refuses to acknowledge that real games are dynamic, not static. The very concepts of strategy, utility function and extensive (tree like) representation are static. The dynamic is retrospective, not prospective. To be dynamic, the game must include all the information about all the actors, all their strategies, all their utility functions. Each game is a subset of a higher level game, a private case of an implicit game which is constantly played in the background, so to say. This is a hyper-game of which all games are but derivatives. It incorporates all the physically possible moves of all the players. An outside agency with enforcement powers (the state, the police, the courts, the law) are introduced by the players. In this sense, they are not really an outside event which has the effect of altering the game fundamentally. They are part and parcel of the strategies available to the players and cannot be arbitrarily ruled out. On the contrary, their introduction as part of a dominant strategy will simplify Game theory and make it much more applicable. In other words: players can choose to compete, to cooperate and to cooperate in the formation of an outside agency.

There is no logical or mathematical reason to exclude the latter possibility. The ability to thus influence the game is a legitimate part of any real life strategy. Game Theory assumes that the game is a given – and the players have to optimize their results within it. It should open itself to the inclusion of game altering or redefining moves by the players as an integral part of their strategies. After all, games entail the existence of some agreement to play and this means that the players accept some rules (this is the role of the prosecutor in the Prisoners' Dilemma). If some outside rules (of the game) are permissible – why not allow the "risk" that all the players will agree to form an outside, lawfully binding, arbitration and enforcement agency – as part of the game? Such an agency will be nothing if not the embodiment, the materialization of one of the rules, a move in the players' strategies, leading them to more optimal or superior outcomes as far as their utility functions are concerned. Bargaining inevitably leads to an agreement regarding a decision making procedure. An outside agency, which enforces cooperation and some moral code, is such a decision making procedure. It is not an "outside" agency in the true, physical, sense. It does not "alter" the game (not to mention its rules). It IS the game, it is a procedure, a way to resolve conflicts, an integral part of any solution and imputation, the herald of cooperation, a representative of some of the will of all the players and, therefore, a part both of their utility functions and of their strategies to obtain their preferred outcomes. Really, these outside agencies ARE the desired outcomes.

Once Game Theory digests this observation, it could tackle reality rather than its own idealized contraptions.

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Knowledge and Power

By: Dr. Sam Vaknin

"Knowledge is Power" goes the old German adage. But power, as any schoolboy knows, always has negative and positive sides to it. Information exhibits the same duality: properly provided, it is a positive power of unequalled strength. Improperly disseminated and presented, it is nothing short of destructive. The management of the structure, content, provision and dissemination of information is, therefore, of paramount importance to a nation, especially if it is in its infancy (as an independent state).

Information has four dimensions and five axes of dissemination, some vertical and some horizontal.

The four dimensions are:

1. ***Structure*** – information can come in various physical forms and poured into different kinds of vessels and carriers. It can be continuous or segmented, cyclical (periodic) or punctuated, repetitive or new, etc. The structure often determines what of the information (if at all) will be remembered and how. It encompasses not only the mode of presentation, but also the modules and the rules of interaction between them (the hermeneutic principles, the rules of structural interpretation, which is the result of spatial, syntactic and grammatical conjunction).

2. ***Content –*** This incorporates both ontological and epistemological elements. In other words: both "hard" data, which should, in principle, be verifiable through the employment of objective, scientific, methods – and "soft" data, the interpretation offered with the hard data. The soft data is a derivative of a "message", in the broader sense of the term. A message comprises both world-view (theory) and an action and direction-inducing element.

3. ***Provision –*** The intentional input of structured content into information channels. The timing of this action, the quantities of data fed into the channels, their qualities – all are part of the equation of provision.

4. ***Dissemination –*** More commonly known as media or information channels. The channels which bridge between the information providers and the information consumers. Some channels are merely technical and then the relevant things to discuss would be technical: bandwidth, noise to signal ratios and the like. Other channels are metaphorical and then the relevant determinants would be their effectiveness in conveying content to targeted consumers.

In the economic realm, there are five important axes of dissemination:

1. ***From Government to the Market*** – the Market here being the "Hidden Hand", the mechanism which allocates resources in adherence to market signals (for instance, in accordance with prices).

The Government intervenes to correct market failures, or to influence the allocation of resources in favour or against the interests of a defined group of people. The more transparent and accountable the actions of the Government, the less distortion in the allocation of resources and the less resulting inefficiency. The Government should declare its intentions and actions in advance whenever possible, then it should act through public, open tenders, report often to regulatory and legislative bodies and to the public and so on. The more information provided by this major economic player (the most dominant in most countries) – the more smoothly and efficaciously the Market will operate. The converse, unfortunately, is also true. The less open the government, the more latent its intents, the more shadowy its operations – the more cumbersome the bureaucracy, the less functioning the market.

2. ***From Government to the Firms*** – The same principles that apply to the desirable interaction between Government and Market, apply here. The Government should disseminate information to firms in its territory (and out of it) accurately, equitably and speedily. Any delay or distortion in the information, or preference of one recipient over another – will thwart the efficient allocation of economic resources.

3. ***From Government to the World*** – The "World" here being multilateral institutions, foreign governments, foreign investors, foreign competitors and the economic players in general providing that they are outside the territory of the information disseminating Government. Again, any delay, or abstention in the dissemination of information as well as its distortion (disinformation and misinformation) will result in economic outcomes worse that could have been achieved by a free, prompt, precise and equitable (=equally available) dissemination of said information. This is true even where commercial secrets are involved! It has been proven time and again that when commercial information is kept secret – the firm (or Government) that keeps it hidden is HARMED. The most famous examples are Apple (which kept its operating system a well-guarded secret) and IBM (which did not), Microsoft (which kept its operating system open to developers of software) and other software companies (which did not). Recently, Netscape has decided to provide its source code (the most important commercial secret of any software company) free of charge to application developers. Synergy based on openness seemed to have won over old habits. A free, unhampered, unbiased flow of information is a major point of attraction to foreign investors and a brawny point with the likes of the IMF and the World Bank. The former, for instance, lends money more easily to countries, which maintain a reasonably reliable outflow of national statistics.

4. ***From Firms to the World*** – The virtues of corporate transparency and of the application of the properly revealing International Accounting Standards (IAS, GAAP, or others) need no evidencing. Today, it is virtually impossible to raise money, to export, to import, to form joint ventures, to obtain credits, or to otherwise collaborate internationally without the existence of full, unmitigated disclosure. The modern firm (if it wishes to interact globally) must open itself up completely and provide timely, full and accurate information to all. This is a legal must for public and listed firms the world over (though standards vary). Transparent accounting practices, clear ownership structure, available track record and historical performance records – are sine qua non in today's financing world.

5. ***From Firms to Firms*** – This is really a subset of the previous axis of dissemination. Its distinction is that while the former is concerned with multilateral, international interactions – this axis is more inwardly oriented and deals with the goings-on between firms in the same territory. Here, the desirability of full disclosure is even stronger. A firm that fails to provide information about itself to firms on its turf, will likely fall prey to vicious rumours and informative manipulations by its competitors.

Positive information is characterized by four qualities:

1. ***Transparency –*** Knowing the sources of the information, the methods by which it was obtained, the confirmation that none of it was unnecessarily suppressed (some would argue that there is no "necessary suppression") – constitutes the main edifice of transparency. The datum or information can be true, but if it is not perceived to be transparent – it will not be considered reliable. Think about an anonymous (=non-transparent) letter versus a signed letter – the latter will be more readily relied upon (subject to the reliability of the author, of course).

2. ***Reliability –*** is the direct result of transparency. Acquaintance with the source of information (including its history) and with the methods of its provision and dissemination will determine the level of reliability that we will attach to it. How balanced is it? Is the source prejudiced or in any way an interested, biased, party? Was the information "force-fed" by the Government, was the media coerced to publish it by a major advertiser, was the journalist arrested after the publication? The circumstances surrounding the datum are as important as its content. The context of a piece of information is of no less consequence that the information contained in it. Above all, to be judged reliable, the information must "reflect" reality. I mean reflection not in the basic sense: a one to one mapping of the reflected. I intend it more as a resonance, a vibration in tune with the piece of the real world that it relates to.

People say: "This sounds true" and the word "sounds" should be emphasized.

3. ***Comprehensiveness –*** Information will not be considered transparent, nor will it be judged reliable if it is partial. It must incorporate all the aspects of the world to which it relates, or else state explicitly what has been omitted and why (which is tantamount to including it, in the first place). A bit of information is embedded in a context and constantly interacts with it. Additionally, its various modules and content elements consistently and constantly interact with each other. A missing part implies ignorance of interactions and epiphenomena, which might crucially alter the interpretation of the information. Partiality renders information valueless. Needless to say, that I am talking about RELEVANT parts of the information. There are many other segments of it, which are omitted because their influence is negligible (the idealization process), or because it is so great that they are common knowledge.

4. ***Organization –*** This, arguably, is the most important aspect of information. It is what makes information comprehensible. It includes the spatial and temporal (historic) context of the information, its interactions with its context, its inner interactions, as we described earlier, its structure, the rules of decision (grammar and syntax) and the rules of interpretation (semantics, etc.) to be applied. A worldview is provided, a theory into which the information fits. Embedded in this theory, it allows for predictions to be made in order to falsify the theory (or to prove it).

> Information cannot be understood in the absence of such a worldview. Such a worldview can be scientific, or religious – but it can also be ideological (Capitalism, Socialism), or related to an image which an entity wishes to project. An image is a theory about a person or a group of people. It is both supported by information – and supports it. It is a shorthand version of all the pertinent data, a stereotype in reverse.

There is no difference in the application of these rules to information and to interpretation (which is really information that relates to other information instead of relating to the World). Both categories can be formal and informal. Formal information is information that designates itself as such (carries a sign: "I am information"). It includes official publications by various bodies (accountants, corporations, The Bureau of Statistics, news bulletins, all the media, the Internet, various databases, whether in digitized format or in hard copy).

Informal information is information, which is not permanently captured or is captured without the intention of generating formal information (=without the pretence: "I am information"). Any verbal communication belongs here (rumours, gossip, general knowledge, background dormant data, etc.).

The modern world is glutted by information, formal and informal, partial and comprehensive, out of context and with interpretation. There are no conceptual, mental, or philosophically rigorous distinctions today between information and what it denotes or stands for.

Actors are often mistaken for their roles, wars are fought on television, fictitious TV celebrities become real. That which has no information presence might as well have no real life existence. An entity – person, group of people, a nation – which does not engage in structuring content, providing and disseminating it – actively engages, therefore, in its own, slow, disappearance.

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Market Impeders and

Market Inefficiencies

By: Dr. Sam Vaknin

Even the most devout proponents of free marketry and hidden hand theories acknowledge the existence of market failures, market imperfections and inefficiencies in the allocation of economic resources. Some of these are the results of structural problems, others of an accumulation of historical liabilities. But, strikingly, some of the inefficiencies are the direct outcomes of the activities of "non bona fide" market participants. These "players" (individuals, corporations, even larger economic bodies, such as states) act either irrationally or egotistically (too rationally).

What characterizes all those "market impeders" is that they are value subtractors rather than value adders. Their activities generate a reduction, rather than an increase, in the total benefits (utilities) of all the other market players (themselves included). Some of them do it because they are after a self interest which is not economic (or, more strictly, financial). They sacrifice some economic benefits in order to satisfy that self interest (or, else, they could never have attained these benefits, in the first place). Others refuse to accept the self interest of other players as their limit. They try to maximize their benefits at any cost, as long as it is a cost to others. Some do so legally and some adopt shadier varieties of behaviour. And there is a group of parasites – participants in the market who feed

off its very inefficiencies and imperfections and, by their very actions, enhance them.

A vicious cycle ensues: the body economic gives rise to parasitic agents who thrive on its imperfections and lead to the amplification of the very impurities that they prosper on.

We can distinguish six classes of market impeders:

1. ***Crooks and other illegal operators.*** These take advantage of ignorance, superstition, greed, avarice, emotional states of mind of their victims – to strike. They re-allocate resources from (potentially or actually) productive agents to themselves. Because they reduce the level of trust in the marketplace – they create negative added value. (See: "The Shadowy World of International Finance" and "The Fabric of Economic Trust").

2. ***Illegitimate operators*** include those treading the thin line between legally permissible and ethically inadmissible. They engage in petty cheating through misrepresentations, half-truths, semi-rumours and the like. They are full of pretensions to the point of becoming impostors. They are wheeler-dealers, sharp-cookies, Daymon Ranyon characters, lurking in the shadows cast by the sun of the market. Their impact is to slow down the economic process through disinformation and the resulting misallocation of resources. They are the sand in the wheels of the economic machine.

3. The ***"not serious" operators***. These are people too hesitant, or phobic to commit themselves to the assumption of any kind of risk. Risk is the coal in the various locomotives of the economy, whether local, national, or global. Risk is being assumed, traded, diversified out of, avoided, insured against. It gives rise to visions and hopes and it is the most efficient "economic natural selection" mechanism. To be a market participant one must assume risk, it in an inseparable part of economic activity. Without it the wheels of commerce and finance, investments and technological innovation will immediately grind to a halt. But many operators are so risk averse that, in effect, they increase the inefficiency of the market in order to avoid it. They act as though they are resolute, risk assuming operators. They make all the right moves, utter all the right sentences and emit the perfect noises. But when push comes to shove – they recoil, retreat, defeated before staging a fight. Thus, they waste the collective resources of all that the operators that they get involved with. They are known to endlessly review projects, often change their minds, act in fits and starts, have the wrong priorities (for an efficient economic functioning, that is), behave in a self defeating manner, be horrified by any hint of risk, saddled and surrounded by every conceivable consultant, glutted by information. They are the stick in the spinning wheel of the modern marketplace.

4. The former kind of operators obviously has a character problem. Yet, there is a more problematic species: those suffering from ***serious psychological problems***, personality disorders, clinical phobias, psychoneuroses and the like. This human aspect of the economic realm has, to the best of my knowledge, been neglected before. Enormous amounts of time, efforts, money and energy are expended by the more "normal" – because of the "less normal" and the "eccentric". These operators are likely to regard the maintaining of their internal emotional balance as paramount, far over-riding economic considerations. They will sacrifice economic advantages and benefits and adversely affect their utility outcome in the name of principles, to quell psychological tensions and pressures, as part of obsessive-compulsive rituals, to maintain a false grandiose image, to go on living in a land of fantasy, to resolve a psychodynamic conflict and, generally, to cope with personal problems which have nothing to do with the idealized rational economic player of the theories. If quantified, the amounts of resources wasted in these coping manoeuvres is, probably, mind numbing. Many deals clinched are revoked, many businesses started end, many detrimental policy decisions adopted and many potentially beneficial situations avoided because of these personal upheavals.

5. ***Speculators and middlemen*** are yet another species of parasites. In a theoretically totally efficient marketplace – there would have been no niche for them. They both thrive on information failures.

The first kind engages in arbitrage (differences in pricing in two markets of an identical good – the result of inefficient dissemination of information) and in gambling. These are important and blessed functions in an imperfect world because they make it more perfect. The speculative activity equates prices and, therefore, sends the right signals to market operators as to how and where to most efficiently allocate their resources. But this is the passive speculator. The "active" speculator is really a market rigger. He corners the market by the dubious virtue of his reputation and size. He influences the market (even creates it) rather than merely exploit its imperfections. Soros and Buffet have such an influence though their effect is likely to be considered beneficial by unbiased observers. Middlemen are a different story because most of them belong to the active subcategory. This means that they, on purpose, generate market inconsistencies, inefficiencies and problems – only to solve them later at a cost extracted and paid to them, the perpetrators of the problem. Leaving ethical questions aside, this is a highly wasteful process. Middlemen use privileged information and access – whereas speculators use information of a more public nature. Speculators normally work within closely monitored, full disclosure, transparent markets. Middlemen thrive of disinformation, misinformation and lack of information. Middlemen monopolize their information – speculators share it, willingly or not. The more information becomes available to more users – the greater the deterioration in the resources consumed by brokers of information. The same process will likely apply to middlemen of goods and services.

We are likely to witness the death of the car dealer, the classical retail outlet, the music records shop. For that matter, inventions like the internet is likely to short-circuit the whole distribution process in a matter of a few years.

6. The last type of market impeders is well known and is the only one to have been tackled – with varying degrees of success by governments and by legislators worldwide. These are the ***trade restricting arrangements***: monopolies, cartels, trusts and other illegal organizations. Rivers of inks were spilled over forests of paper to explain the pernicious effects of these anti-competitive practices (see: "Competition Laws"). The short and the long of it is that competition enhances and increases efficiency and that, therefore, anything that restricts competition, weakens and lessens efficiency.

What could anyone do about these inefficiencies? The world goes in circles of increasing and decreasing free marketry. The globe was a more open, competitive and, in certain respects, efficient place at the beginning of the 20th century than it is now. Capital flowed more freely and so did labour. Foreign Direct Investment was bigger. The more efficient, "friction free" the dissemination of information (the ultimate resource) – the less waste and the smaller the lebensraum for parasites. The more adherence to market, price driven, open auction based, meritocratic mechanisms – the less middlemen, speculators, bribers, monopolies, cartels and trusts.

The less political involvement in the workings of the market and, in general, in what consenting adults conspire to do that is not harmful to others – the more efficient and flowing the economic ambience is likely to become.

This picture of "laissez faire, laissez aller" should be complimented by even stricter legislation coupled with effective and draconian law enforcement agents and measures. The illegal and the illegitimate should be stamped out, cruelly. Freedom to all – is also freedom from being conned or hassled. Only when the righteous freely prosper and the less righteous excessively suffer – only then will we have entered the efficient kingdom of the free market.

This still does not deal with the "not serious" and the "personality disordered". What about the inefficient havoc that they wreak? This, after all, is part of what is known, in legal parlance as: "force majeure".

Note

There is a raging debate between the "rational expectations" theory and the "prospect theory". The former - the cornerstone of rational economics - assumes that economic (human) players are rational and out to maximize their utility (see: "The Happiness of Others", "The Egotistic Friend" and "The Distributive Justice of the Market"). Even ignoring the fuzzy logic behind the ill-defined philosophical term "utility" - rational economics has very little to do with real human being and a lot to do with sterile (though mildly useful) abstractions. Prospect theory builds on behavioural research in modern psychology which demonstrates that people are more loss averse than gain seekers (utility maximizers).

Other economists have succeeded to demonstrate irrational behaviours of economic actors (heuristics, dissonances, biases, magical thinking and so on).

The apparent chasm between the rational theories (efficient markets, hidden hands and so on) and behavioural economics is the result of two philosophical fallacies which, in turn, are based on the misapplication and misinterpretation of philosophical terms.

The first fallacy is to assume that all forms of utility are reducible to one another or to money terms. Thus, the values attached to all utilities are expressed in monetary terms. This is wrong. Some people prefer leisure, or freedom, or predictability to expected money. This is the very essence of risk aversion: a trade off between the utility of predictability (absence or minimization of risk) and the expected utility of money. In other words, people have many utility functions running simultaneously - or, at best, one utility function with many variables and coefficients. This is why taxi drivers in New York cease working in a busy day, having reached a pre-determined income target: the utility function of their money equals the utility function of their leisure.

How can these coefficients (and the values of these variables) be determined? Only by engaging in extensive empirical research. There is no way for any theory or "explanation" to predict these values. We have yet to reach the stage of being able to quantify, measure and numerically predict human behaviour and personality (=the set of adaptive traits and their interactions with changing circumstances).

That economics is a branch of psychology is becoming more evident by the day. It would do well to lose its mathematical pretensions and adopt the statistical methods of its humbler relative.

The second fallacy is the assumption underlying both rational and behavioural economics that human nature is an "object" to be analysed and "studied", that it is static and unchanged. But, of course, humans change inexorably. This is the only fixed feature of being human: change. Some changes are unpredictable, even in deterministic principle. Other changes are well documented. An example of the latter class of changes in the learning curve. Humans learn and the more they learn the more they alter their behaviour. So, to obtain any meaningful data, one has to observe behaviour in time, to obtain a sequence of reactions and actions. To isolate, observe and manipulate environmental variables and study human interactions. No snapshot can approximate a video sequence where humans are concerned.

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Financial Crises, Global Capital Flows and The International Financial Architecture

By: Dr. Sam Vaknin

The recent upheavals in the world financial markets were quelled by the immediate intervention of both international financial institutions such as the IMF and of domestic ones in the developed countries, such as the Federal Reserve in the USA. The danger seems to have passed, though recent tremors in South Korea, Brazil and Taiwan do not augur well. We may face yet another crisis of the same or a larger magnitude momentarily.

What are the lessons that we can derive from the last crisis to avoid the next?

The first lesson, it would seem, is that short term and long term capital flows are two disparate phenomena with very little in common. The former is speculative and technical in nature and has very little to do with fundamental realities. The latter is investment oriented and committed to the increasing of the welfare and wealth of its new domicile. It is, therefore, wrong to talk about "global capital flows". There are investments (including even long term portfolio investments and venture capital) – and there is speculative, "hot" money.

While "hot money" is very useful as a lubricant on the wheels of liquid capital markets in rich countries – it can be destructive in less liquid, immature economies or in economies in transition.

The two phenomena should be accorded a different treatment. While long term capital flows should be completely liberalized, encouraged and welcomed – the short term, "hot money" type should be controlled and even discouraged. The introduction of fiscally-oriented capital controls (as Chile has implemented) is one possibility. The less attractive Malaysian model springs to mind. It is less attractive because it penalizes both the short term and the long term financial players. But it is clear that an important and integral part of the new International Financial Architecture MUST be the control of speculative money in pursuit of ever higher yields. There is nothing inherently wrong with high yields – but the capital markets provide yields connected to economic depression and to price collapses through the mechanism of short selling and through the usage of certain derivatives. This aspect of things must be neutered or at least countered.

The second lesson is the important role that central banks and other financial authorities play in the precipitation of financial crises – or in their prolongation. Financial bubbles and asset price inflation are the result of euphoric and irrational exuberance – said the Chairman of the Federal Reserve Bank of the United States, the legendary Mr. Greenspun and who can dispute this? But the question that was delicately side-stepped was: WHO is responsible for financial bubbles?

Expansive monetary policies, well timed signals in the interest rates markets, liquidity injections, currency interventions, international salvage operations – are all co-ordinated by central banks and by other central or international institutions. Official INACTION is as conducive to the inflation of financial bubbles as is official ACTION. By refusing to restructure the banking system, to introduce appropriate bankruptcy procedures, corporate transparency and good corporate governance, by engaging in protectionism and isolationism, by avoiding the implementation of anti competition legislation – many countries have fostered the vacuum within which financial crises breed.

The third lesson is that international financial institutions can be of some help – when not driven by political or geopolitical considerations and when not married to a dogma. Unfortunately, these are the rare cases. Most IFIs – notably the IMF and, to a lesser extent, the World Bank – are both politicized and doctrinaire. It is only lately and following the recent mega-crisis in Asia, that IFIs began to "reinvent" themselves, their doctrines and their recipes. This added conceptual and theoretical flexibility led to better results. It is always better to tailor a solution to the needs of the client. Perhaps this should be the biggest evolutionary step:

That IFIs will cease to regard the countries and governments within their remit as inefficient and corrupt beggars, in constant need of financial infusions. Rather they should regard these countries as CLIENTS, customers in need of service. After all, this, exactly, is the essence of the free market – and it is from IFIs that such countries should learn the ways of the free market.

In broad outline, there are two types of emerging solutions. One type is market oriented – and the other, interventionist. The first type calls for free markets, specially designed financial instruments (see the example of the Brady bonds) and a global "laissez faire" environment to solve the issue of financial crises. The second approach regards the free markets as the SOURCE of the problem, rather than its solution. It calls for domestic and where necessary international intervention and assistance in resolving financial crises.

Both approaches have their merits and both should be applied in varying combinations on a case by case basis.

Indeed, this is the greatest lesson of all:

There are NO magic bullets, final solutions, right ways and only recipes. This is a a trial and error process and in war one should not limit one's arsenal. Let us employ all the weapons at our disposal to achieve the best results for everyone involved.

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I. War and the Business Cycle

II. New Paradigms, Old Cycles

By: Dr. Sam Vaknin

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Governments and Growth

I. War and the Business Cycle

Peace activists throughout the world accuse the American administration of profit-motivated warmongering. More sophisticated types remind us that it was the second world war - rather than President Franklin Delano Roosevelt's New Deal - that ended the Great Depression. "Wag the Dog" is a battle cry in Europe implying that the United States is provoking yet another conflict in Iraq to restart its stalled economy and take the collective mind off an endless stream of corporate sleaze.

In the wake of the previous Gulf war, in the Spring 1991 issue of the Brookings Review, a venerable American economist, George Perry, wrote:

"Wars have usually been good for the U.S. economy. Traditionally they bring with them rising output, low unemployment and full use of industrial capacity as military demands add to normal economic activity." According to Perry, writing long before the dotcom euphoria and slump, war is counter-cyclical.

The National Bureau of Economic Research (NBER) Business Cycle Dating Committee tends to support this view. The strongest expansions were registered during and after major crises - the Civil War, the first and second world wars, the Korea War, throughout most of the conflict in Vietnam and immediately following Operation Desert Storm, the previous skirmish in Iraq.

In the wake of September 11, US military spending is already up one tenth and poised to continue its uptrend. Defense contractors and service industries, concentrated across the southern USA stand to undoubtedly benefit after a lean decade following the unwinding of the Cold War. GDP may grow by 0.6 percent this year based on $50 billion in war-related expenditures, project DRI-WEFA for MSN's Money Central.

This is an unrealistic price tag. According to the Cato Institute, Operation Desert Storm cost $80 billion (in 2002 dollars), the bulk of which was covered by grateful allies. This war may be more protracted, less decisive and its costs are likely to be borne exclusively by the United States. Postwar reconstruction in Iraq will dwarf these outlays, even allowing for extra revenues from enhanced oil production.

DRI-WEFA present a worst case scenario in which GDP falls by 2.2% over two quarters, the Fed Funds rate ratchets up to 6% to staunch inflation, and unemployment peaks at 7.8%. Recovery is unlikely in the first 18 months of this nightmarish script.

On the minus side, the budget deficit has already ballooned, crowding out lending to the private sector, stoking inflation and threatening to reverse the downtrend in interest rates. Edward Yardeni of Prudential has demonstrated how inflation has followed every single military conflict since 1800. Ultimately, taxes are likely to rise as well.

Yet, that war impacts the timing and intensity of the business cycle is by no means universally accepted.

In an International Finance Discussion Paper titled "Money, Politics and the Post-war Business Cycle" and published by the Board of Governors of the Federal Reserve system in November 1996, the authors, Jon Faust and John Irons, sweepingly dismiss "political effects on the economy". "If they exist" - they add - "they are small and difficult to measure with confidence."

David Andolfatto, from the Department of Economics of Simon Fraser University in British Columbia, Canada, in his "U.S. Military Spending and the Business Cycle" dated October 2001, quotes an email sent to him by one of his students:

"I heard someone say that the US government tends to ‘find themselves in war’ every time they are in a recession. This person also claimed that the increased government expenditures on war pulled the US out of each of the last few recession they’ve been in. Furthermore, this person said that the ‘military industry’ is one of the biggest industries in the US, which is why greater government expenditures on war always pull the US out of recessions ... the boom the US had in the last decade was in large part attributed to all their considerable military effort ..."

Andolfatto then proceeds to demolish this conspiratorial edifice. Military spending per adult in the USA has remained constant at $2000 between 1947-2000. It actually declined precipitously from 15 percent of gross domestic product during the Korea War to 4-5 percent today. Military buildups - with the exception of the Gulf War - mostly happen during peacetime.

During the Unites States' recent spate of unprecedented prosperity in the 1990s, military layouts actually shrank. When they did expand in 1978-1987, the economy endured at least one serious recession (1979-1983). In reality, changes in military expenditures lag changes in GDP. Surprisingly, mathematical analysis reveals that GDP growth does not respond measurably to unexpected surges in military spending. Rather, military budgets swell when GDP suddenly increases.

But this is a minority view. Even economists who dispute the economic schools of shock-driven cycles admit that war does affect the economy. Theoretically, at least, government spending, investment decisions and consumer confidence should be affected.

Jonas Fischer at the Chicago Federal Reserve Bank claims that real business cycle models cannot account for the response to fiscal shocks of real wages and hours worked, unless they unrealistically assume that marginal income tax rates are constant and that increased government purchases are financed in a specific manner.

In any case, war, or a commensurate military buildup, do cause expansionary deficit-financed government purchases, employment, output and nonresidential investment to rise while real wages, residential investment and consumption fall. This is compatible with the predictions of neo-classical business cycle models.

There are longer-term effects. According to Martin Eichenbaum from Northwestern University, productivity in the manufacturing sector declines - though it rises in the private sector as a whole. Ultimately, the production of durable goods contracts and interest rates, having initially dropped, end up rising. Marginal income tax rates tend to mount post conflict.

Consumers and investors are inclined to postpone big-ticket decisions in times of uncertainty. Hence the adverse reaction of the capital markets to the recent crisis over Iraqi disarmament. With the exception of the Gulf War and the Cuban Missile Crisis, the Dow Jones Industrial Average has always crumbled in the face of hostilities, only to skyrocket when the situation stabilized and certainty was restored.

The DJIA went down 12 percent when the Korean War broke in 1953 - only to reverse the entire loss and climb yet another 18 percent in the following 3 months. After September 11, 2001 it plunged 14 percent and then clawed back the shortfall and soared an extra 21 percent by the yearend.

After the first victorious day in Operation Desert Storm, stocks surged by 4.6 percent on Jan. 17, 1991, by another 7 percent in the following 30 days and by a total of 25 percent in the next 2 years. According to Ned Davis Research, quoted by USA Today, the Dow has risen on average by c. 15 percent in the year after every triumphant excursion by America's military. Messier conflict, though - like the Vietnam War - induce no exuberance, it seems.

The Gulf War was preceded by a brief recession in the United States. The Dow lost one fifth of its value. Unemployment soared. House prices fell and so did retail sales. When the war erupted, business in shopping malls, car dealerships and airlines ground to a halt. The spike in oil prices added to their woes.

But the recession lasted merely nine months and ended officially a month before the actual invasion of Kuwait by Iraq. It was followed by the longest expansion on record. It affected both sides of the Atlantic. This, despite the fact that the economy was in bad shape long before Saddam's antics. Interest rates stood at about 8 percent, inflation was running at double the current rate and President George Bush Sr. raised taxes rather than lower them, as his son has done.

Was the quiver in 1991-2 induced by the war in Iraq - or by the contraction of defense and aviation industries following the end of the Cold War? Probably the latter.

But talking about a uniform trend in a country as vast as the United States is misleading. As Knight Kiplinger, editor-in-chief of the Kiplinger Letter notes, regions and industries in the USA have endured recessions even as the entire economy boomed.

So, is war good for business?

Depends on which economist you happen to ask. Some would say that war reflates the economy, re-ignites the economic engine, generates employment, increases consumption, innovation and modernization. Others, that it is merely a blip. The truth is out there but don't count on the dismal science to reveal it.

II. New Paradigms, Old Cycles

The looming war in Iraq is a timely reminder of the fleeting nature of economic fads.

Until recently, the very existence of business (trade) cycles was called into question by the devotees of the New Economy. It took a looming global recession to convince wild-eyed optimists that old cycles are more reliable guides than any new paradigm. Even now, three years later and still in the throes of a meltdown of capital and real markets on both sides of the Atlantic, the voguish belief in the demise of pre-1990s economics is alive and well.

Consider inflation.

Even conservative voices, such as The Economist reassure us that consumer price inflation is dead and that policymakers should concentrate on the risk of deflation brought on by asset disinflation.

Central bankers - particularly Alan Greenspan the mythical Chairman of the Federal Reserve - are castigated for adhering to outmoded schools of thought and for fighting the last war (against inflation), or the wrong one (artificially perking up the stock markets).

The Economist was among the most consistent and persistent critics of the New Economy. Yet, by preaching that certain economic phenomena - notably inflation - are "over" it has joined, unwittingly, a growing camp of "revisionist" economists who spot the demise of the business cycle.

As recapped by Victor Zarnowitz, the research director of the Foundation for International Business and Economic Research in New-York, the optimists believed that downsizing, new technologies, inventory control, the predominance of the services sector, deregulation, better government and globalization have rendered boom and bust a thing of the past.

They tended to tone down the roles of earnings, inventories, investment and credit, the drivers of the "now defunct" classical business cycle. They also largely ignored the interplay between different sectors of the economy and between entwined national economies - continuous interactions which determines inventory planning, the level of wages and pricing. The purported connection between the money supply and output was largely discounted as unproven.

The consensus now, though, is that the cycle is alive and well, though it is less volatile and more subdued. Economies spend less time in recession than they used to until 1980.

The cycle is still susceptible, though, to exogenous shocks, such as war, or an abrupt increase in the price of oil. Bursting asset bubbles, if they become more frequent in the future due to financial liberalization, globalization and unbridled credit growth, may restore past volatility, though.

Another ominous phenomenon is the synchronization of recessions and expansions across continents. According to the International Monetary Fund, gross capital flows has exceeded $7.5 trillion globally in 2000 - four times the amount of money sloshing around in 1990. Foreign portfolio assets doubled as a percentage of household assets.

The ratio of merchandise exports to world output has long exceeded its 1913 level, the previous record year. Such unhindered exchange exerts similar influences on countries as far apart as Germany, the United states, Argentina and Singapore - all in the throes of a concurrent recession.

Still, expansions continue to be restricted by the increase in population, net investment and, importantly, technological innovation. The downside is also limited by population increase, government policy on income support and investment. The economy fluctuates to adjust itself to these constraints. The business cycle is a symptom of this process of adaptation.

The waxing and waning of credit made available by alternately over-optimistic and over-cautious financial intermediaries plays a crucial part. Fiscal policy - which affects investment and employment - also matters as do foreign trade, monetary policies and the reaction of the financial markets.

The business cycle typically passes through seven phases correlated with the fluctuations in the output gap - the difference between an economy's actual and potential gross domestic product. Cycles are self-perpetuating, though they can be hastened by exogenous shocks, such as a precipitous rise in oil prices or a protracted military campaign. They can also be smoothed or ameliorated by the operation of automatic fiscal stabilizers and appropriate counter-cyclical government policies.

Centuries of cumulative experience allow us to identify these stages better than ever before, though timing them with any accuracy is still impossible. They are based on the shifting balance between the emotions of greed and fear - as immutable as human nature itself.

Every economic cycle invariably starts with inflation. The previous sequence having ended – and the new one just begun – the environment is mired in uncertainty. In the wake of a recession, often coupled with deflation, goods and services are (absolutely) scarce and money is (relatively) abundant.

When too much money chases few products, the general price level rises. But this constant and ubiquitous increase (known as "inflation") is also the outcome of mass psychology. Households and firms compensate for the aforementioned high degree of uncertainty (that is, of risk) by raising the prices they charge. Market signals are thus garbled by psychological noise and uncertainty increases. It is a vicious cycle: inflation brought on by uncertainty only serves to enhance it.

Ignorant of the appropriate or optimal equilibrium price level, everyone is trying to stay ahead of perceived economic threats and instabilities by increasing the risk premiums that they demand from their customers. On their part, consumers are willing to pay more today to avoid even higher prices tomorrow.

Inflation appears to be a kind of market pathology, or a market failure. But the psychological underpinnings of inflation have been thoroughly dissected in the last few decades. It is the source and dynamics of economic uncertainty that remain obscure.

Inflation disguises the suboptimal and inefficient economic performance of firms and of the economy as a whole. "Paper" profits make up for operational losses. The incentives to innovate, modernize, and enhance productivity suffer. Economic yardsticks and benchmarks are distorted and prevent meaningful analyses and well-founded decision making.

Inflation leads to technological and economic stagnation. Pecuniary aspects are emphasized while industrial and operational ones are neglected. Financial assets are preferred to investments in machinery, infrastructure, research and development, or marketing. This often yields stagflation – zero or negative growth, coupled with inflation.

In an effort to overcome the pernicious effects of inflation, governments liberalize, deregulate and open their economies to competition. This forces firms to innovate and streamline. Efficiency, innovation, entrepreneurship, productivity and competitiveness are the buzzwords of this phase.

As trade barriers fall, cross border capital flows and investments increase, productivity gains and new products are introduced. The upward price spiral is halted and contained. The same amount of money buys better, more reliable products, with added functionality.

The rise in real incomes results in increased demand. The same dose of working capital generates more production. This is technological deflation. It is beneficial to the economy in that it frees economic resources and encourages their efficient allocation.

Increased consumption (both public and private) coupled with a moderate asset price inflation prevent an outright downward spiral in the general price level (monetary deflation). Moreover, as Jeffrey Miron demonstrated in his book, "The Economics of Seasonal Cycles", output growth causes a surge in money supply.

These conflicting influences allow inflation to remain within a sustainable "band". This transitory phase - from hyperinflation or high inflation to a more supportable plateau - is known as "disinflation". It usually lasts one or two decades.

Various studies have shown that the revolutions in knowledge, communications and transportation technologies have shortened both the cycle and every stage in it. This is attributed to the more rapid dissemination and all-pervasive character of contemporary information.

The values of important parameters such as the equilibrium general price level and other gauges of expectations (such as equity prices) are all determined by data. The more information is available more readily – the more efficient the markets and the shorter and the speedier the business cycles. This enhances the false perception that modern markets are inherently unstable. Yet, rapid cycling does not necessarily imply instability. On the contrary, the faster the adjustments in the marketplace – the more efficient the mechanism is.

The psychological wellbeing and reassurance brought on by disinflation generate demand for assets, especially yielding ones (such as real estate or equities). The more certain the future value of streams of income, the more frequently people transact and the more valuable assets become.

Assets store expectations regarding future values. An assets bubble is created when the current value (i.e. price) of money is low compared to its certain future value. This is the case when prices are stable or decreasing. Stock exchanges and real estate then balloon in irrational exuberance out of proportion to their intrinsic (or book) value.

All asset bubbles burst in the end. This is the fifth phase. It signifies the termination of the bull part of the cycle. Asset prices collapse precipitously. There are no buyers – only sellers. Firms find it impossible to raise money because their obligations (commercial paper and bonds) are not in demand. A credit crunch ensues. Investment halts.

The bursting of an assets bubble generates asset price deflation. The "wealth effect" is replaced with a "thrift effect". This adversely affects consumption, inventories, sales, employment and other important angles of the real economy.

The deflationary phase, on the other hand, is usually much shorter. People do not expect it to last. They fully anticipate inflation. But though not assured of low prices, they are so preoccupied with economic survival that they become strongly risk averse. While in times of inflation people are looking for ways to protect the value of their money – in times of deflation people are in pursuit of mere livelihood. A dangerous "stability" sets in. People invest in land, cash and, the more daring, in bonds. Banks do the same. Growth grinds to a halt and then reverses.

If not countered by monetary and fiscal means – a lowering of interest rates, a fiscal Keynesian stimulus, an increase in money supply targets – a monetary deflation might set in.

Full-fledged deflations are rare. Outright or growth recessions, business slumps, credit crunches, slowdowns - are more common. But a differentiated or discriminatory deflation is more common. It strikes only certain sectors of the economy or certain territories.

A monetary deflation - whether systemic or specific to certain industries - is pernicious. Due to reversed expectations (that prices will continue to go down), people postpone their consumption and spending. Real interest rates skyrocket because in an environment of negative inflation, even a zero interest rate is high in real terms. This is known as a "liquidity trap".

Investment and production slump and inventories shoot up, further depressing prices. The decline in output is accompanied by widespread bankruptcies and by a steep increase in unemployment. The real value of debt increases ("debt deflation"). Coupled with declining asset prices, deflation leads to bank failures as a result of multiple debts gone sour. It is a self- perpetuating state of affairs and it calls for the implementation of the seventh and last phase of the cycle: reflation.

The market's failure, at this stage, is so rampant that all the mechanisms of self-balancing and allocation are rendered dysfunctional. State intervention is needed in order to restart the economy. The authorities need to inject money through a fiscal stimulus, to embark on a monetary expansion, to lower interest rates, to firmly support the financial system and to provide tax and other incentives to consume and to import.

Unfortunately, these goals are best achieved militarily. War reflates the economy, re-ignites the economic engine, generates employment, increases consumption, innovation and modernization.

Still, with or without war, people sense the demise of an old cycle and the imminent commencement of a new one, fraught with uncertainty. They rush to buy things. Because the recessionary economy is just recovering from deflation – there aren't usually many things to buy. A lot of money chasing few goods – this is the recipe for inflation. Back to phase one.

But the various phases of the cycle are not only affected by psychology – they affect it.

During periods of inflation people are willing to hazard. They demand to be compensated for the risk of inflation through higher yields (returns, profits) on financial instruments. Yet, higher returns inevitably and invariably imply higher risks. Thus, people are forced to offset or mitigate one type of risk (inflation) with another (credit or investment risk).

Paradoxically, the inflationary segment of the business cycle is an interval of certainty. That inflation will persist is a safe bet. People tend to adhere to doctrinaire schools of economics. Based on the underlying and undeniable certainty of ever-worsening conditions, the intellectual elite and decision-makers resort to peremptory, radical, rigid and sometimes coercive solutions backed by ideologies disguised as "scientific knowledge".

Communism is a prime example, of course – but so is the "Free Market" variant of capitalism, known as the "Washington Consensus", practiced by the IMF and by central bankers in the West.

O'Neill's Free Dinner

America's Current Account Deficit

By: Dr. Sam Vaknin

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Only four months ago, the IMF revised its global growth figures upward. It has since recanted but at the time its upbeat Managing Director, Horst Koehler, conceded defeat in a bet he made with America's outspoken and ever-exuberant Treasury Secretary, Paul O'Neill. He promised to treat him to a free dinner.

Judging by his economic worldview, O'Neill is a great believer in free dinners. Nowhere is this more evident than in his cavalier public utterances regarding America's current account deficit. As opposed to other, smaller countries, America's deficits have far reaching consequences and constitute global, rather than domestic, imbalances. The more integrated in the global marketplace a country is - the harsher the impact of American profligacy on its economy.

In a paper dated October 2001 and titled "The International Dollar Standard and Sustainability of the US Current Account Deficit", the author, Ronald McKinnon of Stanford University, concluded:

"Because the world is on a dollar standard, the United States is unique in having a virtually unlimited international line of credit which is largely denominated in its own currency, i.e., dollars. In contrast, foreign debtor countries must learn to live with currency mismatches where their banks' and other corporate international liabilities are dollar denominated but their assets are denominated in the domestic currency. As these mismatches cumulate, any foreign country is ultimately forced to repay its debts in order to avoid a run on its currency. But however precarious and over-leveraged the financing of individual American borrowers—including American banks, which intermediate such borrowing internationally—might be, they are invulnerable to dollar devaluation. In effect, America's collective current-account deficits are sustainable indefinitely."

In another paper, with Paul Davidson of the University of Tennessee, the authors went as far as suggesting that America's interminable deficit maintains the liquidity of the international trading system. A reduction in the deficit, by this logic, would lead to a global liquidity crunch.

Others cling to a mirror image of this argument. An assortment of anti-globalizers, non-governmental organizations, think tanks, and academics have accused the USA of sucking dry the pools of international savings painstakingly generated by the denizens of mostly developing countries. Technically, this is true. US Treasury bonds and notes compete on scarce domestic savings with businesses in countries from Japan to Russia and trounce them every time.

Savers - and governments - prefer to channel their funds to acquire US government obligations - dollar bills, T-bills, T-notes, equities, corporate bonds, and government bonds - rather than invest in their precarious domestic private sector. The current account deficit - at well over 4 percent of American GDP - absorbs 6 percent of global gross savings and a whopping three quarters of the world's non-domestic savings flows. By the end of last year, foreign investors held $1.7 trillion in US stocks, $1.2 trillion each in corporate debt and treasury obligations - 12 percent, 24 percent, and 42 percent of the outstanding quantities of these securities, respectively.

The November 2000 report of the Trade Deficit Review Commission, appointed by Congress in 1998, concluded that America's persistent trade deficit was brought on by - as Cato Institute's Daniel Griswold summarizes it - "high trade barriers abroad, predatory import pricing, declining competitiveness of core U.S. industries and low wages and poor working conditions in less-developed countries (as well as low) levels of national savings, (high rates of) investment, and economic growth - and exchange rate movements."

Griswold noted, though, that "during years of rising deficits, the growth of real GDP (in the USA) averaged 3.5% per year, compared to 2.6% during years of shrinking deficits ... the unemployment rate has, on average, fallen by 0.4% (compared to a similar rise) ... manufacturing output grew an average of 4.6% a year ... (compared to an) average growth rate of one percent ... poverty rate fell an average of 0.2% from the year before ... (compared to a rise of) an average of 0.3%."

A less sanguine Kenneth Rogoff, the IMF's new Chief Economist wrote in "The Economist" in April: "When countries run sustained current-account deficits up in the range of 4 and 5% of GDP, they eventually reverse, and the consequences, particularly in terms of the real exchange rate, can be quite significant."

Rogoff alluded to the surreal appreciation of the dollar in the last few years. This realignment of exchange rates rendered imports to the USA seductively cheap and led to "unsustainable" trade and current account deficits. The IMF concluded, in its "World Economic Outlook", published on September 25, that America's deficit serves to offset - actually, finance - increased consumption and declining private savings rather than productive investment.

Greenspan concurred earlier this year in "USA Today": "Countries that have gone down this path invariably have run into trouble, and so would we." An International Finance Discussion Paper released by the Fed in December 2000 found, as "The Economist" put it, that "deficits usually began to reverse when they exceeded 5% of GDP. And this adjustment was accompanied by an average fall in the nominal exchange rate of 40%, along with a sharp slowdown in GDP growth."

Never before has the current account deficit continued to expand in a recession. Morgan Stanley predict an alarming shortfall of 6 percent of GDP by the end of next year. The US is already the world's largest debtor having been its largest creditor only two decades ago.

Such a disorientating swing has been experienced only by Britain following the Great War. In five years, US net obligations to the rest of the world will grow from one eighth of its GDP in 1997 to two fifths of a much larger product, according to Goldman Sachs. By 2006, a sum of $2 billion dollars per day would be required to cover this yawning shortfall.

Rogoff - and many other scholars - foresee a sharp contraction in American growth, consumption and, consequently, imports coupled with a depreciation in the dollar's exchange rate against the currencies of its main trading partners. In the absence of offsetting demand from an anemic Europe and a deflation-struck Japan, an American recession may well translate into a global depression. Only in 2003, the unwinding of these imbalances is projected by the IMF to shave 3 percentage points off America's growth rate.

But are the twin - budget and current account - deficits the inevitable outcomes of American fiscal dissipation and imports run amok - or a simple reflection of America's unrivalled attractiveness to investors, traders, and businessmen the world over?

Echoing Nigel Lawson, Britain's chancellor of the exchequer in the 1980's, O'Neill is unequivocal. The current deficit is not worrisome. It is due to a "stronger relative level of economic activity in the United States" - he insisted in a speech he gave this month to Vanderbilt University's Owen Business School. Foreigners want to invest in the US more than anywhere else. The current account deficit - a mere accounting convention - simply encapsulates this overwhelming allure.

This is somewhat disingenuous. In the last three years, most of the net inflows of foreign capital into the spendthrift US are in the form of debt to be repaid. This mounting indebtedness did not increase the stock of income-producing capital. Instead, it was shortsightedly and irresponsibly expended in an orgy of unbridled consumption.

For the first time in a long time, America's savings rate turned negative. Americans borrowed at home and abroad to embark on a fervid shopping spree. Even worse, the part of the deficit that was invested rather than consumed largely went to finance the dotcom boom turned bust. Wealth on unimaginable scale was squandered in this fraud-laced bubble. America's much hyped productivity growth turned out to have been similar to Europe's over the last decade.

Luckily for the US - and the rest of the world - its fiscal stance during the Clinton years has been impeccable and far stronger than Europe's, let alone Japan's. The government's positive net savings - the budget surplus - nicely balanced the inexorable demand by households and firms for foreign goods and capital. This is why this fiscal year's looming budget deficit - c. $200 billion - provokes such heated debate and anxiety.

Is there a growing reluctance of foreigners to lend to the US and to finance its imports and investment needs? To judge by the dollar's slump in world markets, yes. But a recent spate of bad economic news in Europe and Japan may restore the global appetite for dollar-denominated assets.

This would be a pity and a blessing. On the one hand, only a flagging dollar can narrow the trade deficit by rendering American exports more competitive in world markets - and imports to the USA more expensive than their domestic imperfect substitutes. But, as the late Rudi Dornbusch pointed out in August 2001:

"There are two kinds of Treasury Secretaries those like Robert Rubin who understand that a strong dollar helps get low interest rates and that the low rates make for a long and broad boom. And (those) like today's Paul O'Neil. They think too much about competitiveness and know too little about capital markets ...

Secretary of the Treasury Paul O'Neil, comes from manufacturing and thinks like a manufacturer (who) have a perspective on the economy that is from the rabbit hole up. They think a weak dollar is good for exports and a hard dollar hurts sales and market share. Hence they wince any time they face a strong dollar and have wishy-washy answers to any dollar policy question."

The truth, as usual, is somewhere in the middle. Until recently, the dollar was too strong - as strong, in trade-related terms, as it was in the 1980's. Fred Bergsten, head of the Institute for International Economics, calculated in his testimony to the Senate Banking Committee on May 1, that America's trade deficit soars by $10 billion for every percentage rise in the dollar's exchange rate.

American manufacturers shifted production to countries with more competitive terms of trade - cheaper manpower and local inputs. The mighty currency encouraged additional - mostly speculative- capital flows into dollar-denominated assets, exacerbating the current account deficit.

A strong dollar keeps the lid on inflation - mainly by rendering imports cheaper. It, thus, provides the central bank with more leeway to cut interest rates. Still, the strength of the dollar is only one of numerous inputs - and far from being the most important one - in the monetary policy. Even a precipitous drop in the dollar is unlikely to reignite inflation in an economy characterized by excess capacity, falling prices, and bursting asset bubbles.

A somewhat cheaper dollar, the purported - but never proven - "wealth effect" of crumbling stock markets, the aggressive reduction in interest rates, and the wide availability of easy home equity financing should conspire to divert demand from imports to domestic offerings. Market discipline may yet prove to be a sufficient and efficient cure.

But, the market's self-healing powers aside, can anything be done - can any policy be implemented - to reverse the deteriorating balance of payments?

In a testimony he gave to the Senate in May, O'Neill proffered one of his inimitable metaphors:

"All the interventions that have been modeled would do damage to the U.S. economy if we decided to reduce the size of the current account deficit. And so I don't find it very appealing to say that we are going to cut off our arm because some day we might get a disease in it."

This, again, is dissimulation. This administration - heated protestations to the contrary notwithstanding - resorted to blatant trade protectionism in a belated effort to cope with an avalanche of cheap imports. Steel quotas, farm and export subsidies, all manner of trade remedies failed to stem the tide of national red ink.

The dirty secret is that everyone feeds off American abandon. A sharp drop in its imports - or in the value of the dollar - can spell doom for more than one country and more than a couple of industries. The USA being the global economy's sink of last resort - absorbing one quarter of world trade - other countries have an interest to maintain and encourage American extravagance. Countries with large exports to the USA are likely to reacts with tariffs, quotas, and competitive devaluations to any change in the status quo. The IMF couches the awareness of a growing global addiction in its usual cautious terms:

"The possibility of an abrupt and disruptive adjustment in the U.S. dollar remains a concern, for both the United States and the rest of the world ... The question is not whether the U.S. deficit will be sustained at present levels forever - it will not - but more when and how the eventual adjustment takes place ... While this would likely be manageable in the short term it could adversely affect the sustainability of recovery later on."

Another embarrassing truth is that a strong recovery in Europe or Japan may deplete the pool of foreign capital available to the USA. German and Japanese Investors may prefer to plough their money into a re-emergent Germany, or a re-awakening Japan - especially if the dollar were to plunge. America requires more than $1 billion a day to maintain its current levels of government spending, consumption, and investment.

There is another - much hushed - aspect of American indebtedness. It provides other trading blocks and countries - for example, Japan and the oil producing countries - with geopolitical leverage over the United States and its policies. America - forced to dedicate a growing share of its national income to debt repayment - is "in growing hock" to its large creditors.

Last month, Arab intellectuals and leaders called upon their governments to withdraw their investments in the USA. This echoed of the oil embargo of yore. Ernest Preeg of the Manufacturers Alliance was quoted by the Toronto Star as saying: "China, for example, could blackmail the United States by threatening to dump its vast holdings of U.S. dollars, forcing up U.S. interest rates and undermining the U.S. stock market. Chinese military officials, he claimed, had included this kind of tactic in their studies of non-conventional defence strategies."

These scenarios are disparaged by analysts who point out that America's current account deficit is mostly in private hands. Households and firms should be trusted to act rationally and, in aggregate, repay their debts. Still, it should not be forgotten that the Asian crisis of 1997-8 was brought on by private profligacy. Firms borrowed excessively, spent inanely, and invested unwisely.

Governments ran surpluses. As the IMF puts it: "To err is human and this is as true of private sector investors as anyone else."

Return

Anarchy as an Organizing Principle

By: Dr. Sam Vaknin

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The recent spate of accounting fraud scandals signals the end of an era. Disillusionment and disenchantment with American capitalism may yet lead to a tectonic ideological shift from laissez faire and self regulation to state intervention and regulation. This would be the reversal of a trend dating back to Thatcher in Britain and Reagan in the USA. It would also cast some fundamental - and way more ancient - tenets of free-marketry in grave doubt.

Markets are perceived as self-organizing, self-assembling, exchanges of information, goods, and services. Adam Smith's "invisible hand" is the sum of all the mechanisms whose interaction gives rise to the optimal allocation of economic resources. The market's great advantages over central planning are precisely its randomness and its lack of self-awareness.

Market participants go about their egoistic business, trying to maximize their utility, oblivious of the interests and action of all, bar those they interact with directly. Somehow, out of the chaos and clamor, a structure emerges of order and efficiency unmatched. Man is incapable of intentionally producing better outcomes. Thus, any intervention and interference are deemed to be detrimental to the proper functioning of the economy.

It is a minor step from this idealized worldview back to the Physiocrats, who preceded Adam Smith, and who propounded the doctrine of "laissez faire, laissez passer" - the hands-off battle cry. Theirs was a natural religion. The market, as an agglomeration of individuals, they thundered, was surely entitled to enjoy the rights and freedoms accorded to each and every person. John Stuart Mill weighed against the state's involvement in the economy in his influential and exquisitely-timed "Principles of Political Economy", published in 1848.

Undaunted by mounting evidence of market failures - for instance to provide affordable and plentiful public goods - this flawed theory returned with a vengeance in the last two decades of the past century. Privatization, deregulation, and self-regulation became faddish buzzwords and part of a global consensus propagated by both commercial banks and multilateral lenders.

As applied to the professions - to accountants, stock brokers, lawyers, bankers, insurers, and so on - self-regulation was premised on the belief in long-term self-preservation. Rational economic players and moral agents are supposed to maximize their utility in the long-run by observing the rules and regulations of a level playing field.

This noble propensity seemed, alas, to have been tampered by avarice and narcissism and by the immature inability to postpone gratification. Self-regulation failed so spectacularly to conquer human nature that its demise gave rise to the most intrusive statal stratagems ever devised.

In both the UK and the USA, the government is much more heavily and pervasively involved in the minutia of accountancy, stock dealing, and banking than it was only two years ago.

But the ethos and myth of "order out of chaos" - with its proponents in the exact sciences as well - ran deeper than that. The very culture of commerce was thoroughly permeated and transformed. It is not surprising that the Internet - a chaotic network with an anarchic modus operandi - flourished at these times.

The dotcom revolution was less about technology than about new ways of doing business - mixing umpteen irreconcilable ingredients, stirring well, and hoping for the best. No one, for instance, offered a linear revenue model of how to translate "eyeballs" - i.e., the number of visitors to a Web site - to money ("monetizing"). It was dogmatically held to be true that, miraculously, traffic - a chaotic phenomenon - will translate to profit - hitherto the outcome of painstaking labor.

Privatization itself was such a leap of faith. State owned assets - including utilities and suppliers of public goods such as health and education - were transferred wholesale to the hands of profit maximizers. The implicit belief was that the price mechanism will provide the missing planning and regulation. In other words, higher prices were supposed to guarantee an uninterrupted service. Predictably, failure ensued - from electricity utilities in California to railway operators in Britain.

The simultaneous crumbling of these urban legends - the liberating power of the Net, the self-regulating markets, the unbridled merits of privatization - inevitably gave rise to a backlash.

The state has acquired monstrous proportions in the decades since the Second world War. It is about to grow further and to digest the few sectors hitherto left untouched. To say the least, these are not good news. But we libertarians - proponents of both individual freedom and individual responsibility - have brought it on ourselves by thwarting the work of that invisible regulator - the market.

Return

Narcissism in the Boardroom

By: Dr. Sam Vaknin

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Part I

Part II

The perpetrators of the recent spate of financial frauds in the USA acted with callous disregard for both their employees and shareholders - not to mention other stakeholders. Psychologists have often remote-diagnosed them as "malignant, pathological narcissists".

Narcissists are driven by the need to uphold and maintain a false self - a concocted, grandiose, and demanding psychological construct typical of the narcissistic personality disorder. The false self is projected to the world in order to garner "narcissistic supply" - adulation, admiration, or even notoriety and infamy. Any kind of attention is usually deemed by narcissists to be preferable to obscurity.

The false self is suffused with fantasies of perfection, grandeur, brilliance, infallibility, immunity, significance, omnipotence, omnipresence, and omniscience. To be a narcissist is to be convinced of a great, inevitable personal destiny.

The narcissist is preoccupied with ideal love, the construction of brilliant, revolutionary scientific theories, the composition or authoring or painting of the greatest work of art, the founding of a new school of thought, the attainment of fabulous wealth, the reshaping of a nation or a conglomerate, and so on. The narcissist never sets realistic goals to himself. He is forever preoccupied with fantasies of uniqueness, record breaking, or breathtaking achievements. His verbosity reflects this propensity.

Reality is, naturally, quite different and this gives rise to a "grandiosity gap". The demands of the false self are never satisfied by the narcissist's accomplishments, standing, wealth, clout, sexual prowess, or knowledge. The narcissist's grandiosity and sense of entitlement are equally incommensurate with his achievements.

To bridge the grandiosity gap, the malignant (pathological) narcissist resorts to shortcuts. These very often lead to fraud.

The narcissist cares only about appearances. What matters to him are the facade of wealth and its attendant social status and narcissistic supply. Witness the travestied extravagance of Tyco's Denis Kozlowski. Media attention only exacerbates the narcissist's addiction and makes it incumbent on him to go to ever-wilder extremes to secure uninterrupted supply from this source.

The narcissist lacks empathy - the ability to put himself in other people's shoes. He does not recognize boundaries - personal, corporate, or legal. Everything and everyone are to him mere instruments, extensions, objects unconditionally and uncomplainingly available in his pursuit of narcissistic gratification.

This makes the narcissist perniciously exploitative. He uses, abuses, devalues, and discards even his nearest and dearest in the most chilling manner. The narcissist is utility- driven, obsessed with his overwhelming need to reduce his anxiety and regulate his labile sense of self-worth by securing a constant supply of his drug - attention. American executives acted without compunction when they raided their employees' pension funds - as did Robert Maxwell a generation earlier in Britain.

The narcissist is convinced of his superiority - cerebral or physical. To his mind, he is a Gulliver hamstrung by a horde of narrow-minded and envious Lilliputians. The dotcom "new economy" was infested with "visionaries" with a contemptuous attitude towards the mundane: profits, business cycles, conservative economists, doubtful journalists, and cautious analysts.

Yet, deep inside, the narcissist is painfully aware of his addiction to others - their attention, admiration, applause, and affirmation. He despises himself for being thus dependent. He hates people the same way a drug addict hates his pusher. He wishes to "put them in their place", humiliate them, demonstrate to them how inadequate and imperfect they are in comparison to his regal self and how little he craves or needs them.

The narcissist regards himself as one would an expensive present, a gift to his company, to his family, to his neighbours, to his colleagues, to his country. This firm conviction of his inflated importance makes him feel entitled to special treatment, special favors, special outcomes, concessions, subservience, immediate gratification, obsequiousness, and lenience.

It also makes him feel immune to mortal laws and somehow divinely protected and insulated from the inevitable consequences of his deeds and misdeeds.

The self-destructive narcissist plays the role of the "bad guy" (or "bad girl"). But even this is within the traditional social roles cartoonishly exaggerated by the narcissist to attract attention. Men are likely to emphasise intellect, power, aggression, money, or social status. Narcissistic women are likely to emphasise body, looks, charm, sexuality, feminine "traits", homemaking, children and childrearing.

Punishing the wayward narcissist is a veritable catch-22.

A jail term is useless as a deterrent if it only serves to focus attention on the narcissist. Being infamous is second best to being famous - and far preferable to being ignored. The only way to effectively punish a narcissist is to withhold narcissistic supply from him and thus to prevent him from becoming a notorious celebrity.

Given a sufficient amount of media exposure, book contracts, talk shows, lectures, and public attention - the narcissist may even consider the whole grisly affair to be emotionally rewarding. To the narcissist, freedom, wealth, social status, family, vocation - are all means to an end. And the end is attention. If he can secure attention by being the big bad wolf - the narcissist unhesitatingly transforms himself into one. Lord Archer, for instance, seems to be positively basking in the media circus provoked by his prison diaries.

The narcissist does not victimise, plunder, terrorise and abuse others in a cold, calculating manner. He does so offhandedly, as a manifestation of his genuine character. To be truly "guilty" one needs to intend, to deliberate, to contemplate one's choices and then to choose one's acts. The narcissist does none of these.

Thus, punishment breeds in him surprise, hurt and seething anger. The narcissist is stunned by society's insistence that he should be held accountable for his deeds and penalized accordingly. He feels wronged, baffled, injured, the victim of bias, discrimination and injustice. He rebels and rages.

Depending upon the pervasiveness of his magical thinking, the narcissist may feel besieged by overwhelming powers, forces cosmic and intrinsically ominous. He may develop compulsive rites to fend off this "bad", unwarranted, persecutory influences.

The narcissist, very much the infantile outcome of stunted personal development, engages in magical thinking. He feels omnipotent, that there is nothing he couldn't do or achieve if only he sets his mind to it. He feels omniscient - he rarely admits to ignorance and regards his intuitions and intellect as founts of objective data.

Thus, narcissists are haughtily convinced that introspection is a more important and more efficient (not to mention easier to accomplish) method of obtaining knowledge than the systematic study of outside sources of information in accordance with strict and tedious curricula. Narcissists are "inspired" and they despise hamstrung technocrats

To some extent, they feel omnipresent because they are either famous or about to become famous or because their product is selling or is being manufactured globally. Deeply immersed in their delusions of grandeur, they firmly believe that their acts have - or will have - a great influence not only on their firm, but on their country, or even on Mankind. Having mastered the manipulation of their human environment - they are convinced that they will always "get away with it". They develop hubris and a false sense of immunity.

Narcissistic immunity is the (erroneous) feeling, harboured by the narcissist, that he is impervious to the consequences of his actions, that he will never be effected by the results of his own decisions, opinions, beliefs, deeds and misdeeds, acts, inaction, or membership of certain groups, that he is above reproach and punishment, that, magically, he is protected and will miraculously be saved at the last moment. Hence the audacity, simplicity, and transparency of some of the fraud and corporate looting in the 1990's. Narcissists rarely bother to cover their traces, so great is their disdain and conviction that they are above mortal laws and wherewithal.

What are the sources of this unrealistic appraisal of situations and events?

The false self is a childish response to abuse and trauma. Abuse is not limited to sexual molestation or beatings. Smothering, doting, pampering, over-indulgence, treating the child as an extension of the parent, not respecting the child's boundaries, and burdening the child with excessive expectations are also forms of abuse.

The child reacts by constructing false self that is possessed of everything it needs in order to prevail: unlimited and instantaneously available Harry Potter-like powers and wisdom. The false self, this Superman, is indifferent to abuse and punishment. This way, the child's true self is shielded from the toddler's harsh reality.

This artificial, maladaptive separation between a vulnerable (but not punishable) true self and a punishable (but invulnerable) false self is an effective mechanism. It isolates the child from the unjust, capricious, emotionally dangerous world that he occupies. But, at the same time, it fosters in him a false sense of "nothing can happen to me, because I am not here, I am not available to be punished, hence I am immune to punishment".

The comfort of false immunity is also yielded by the narcissist's sense of entitlement. In his grandiose delusions, the narcissist is sui generis, a gift to humanity, a precious, fragile, object. Moreover, the narcissist is convinced both that this uniqueness is immediately discernible - and that it gives him special rights. The narcissist feels that he is protected by some cosmological law pertaining to "endangered species".

He is convinced that his future contribution to others - his firm, his country, humanity - should and does exempt him from the mundane: daily chores, boring jobs, recurrent tasks, personal exertion, orderly investment of resources and efforts, laws and regulations, social conventions, and so on.

The narcissist is entitled to a "special treatment": high living standards, constant and immediate catering to his needs, the eradication of any friction with the humdrum and the routine, an all-engulfing absolution of his sins, fast track privileges (to higher education, or in his encounters with bureaucracies, for instance). Punishment, trusts the narcissist, is for ordinary people, where no great loss to humanity is involved.

Narcissists are possessed of inordinate abilities to charm, to convince, to seduce, and to persuade. Many of them are gifted orators and intellectually endowed. Many of them work in in politics, the media, fashion, show business, the arts, medicine, or business, and serve as religious leaders.

By virtue of their standing in the community, their charisma, or their ability to find the willing scapegoats, they do get exempted many times. Having recurrently "got away with it" - they develop a theory of personal immunity, founded upon some kind of societal and even cosmic "order" in which certain people are above punishment.

But there is a fourth, simpler, explanation. The narcissist lacks self-awareness. Divorced from his true self, unable to empathise (to understand what it is like to be someone else), unwilling to constrain his actions to cater to the feelings and needs of others - the narcissist is in a constant dreamlike state.

To the narcissist, his life is unreal, like watching an autonomously unfolding movie. The narcissist is a mere spectator, mildly interested, greatly entertained at times. He does not "own" his actions. He, therefore, cannot understand why he should be punished and when he is, he feels grossly wronged.

So convinced is the narcissist that he is destined to great things - that he refuses to accept setbacks, failures and punishments. He regards them as temporary, as the outcomes of someone else's errors, as part of the future mythology of his rise to power/brilliance/wealth/ideal love, etc. Being punished is a diversion of his precious energy and resources from the all-important task of fulfilling his mission in life.

The narcissist is pathologically envious of people and believes that they are equally envious of him. He is paranoid, on guard, ready to fend off an imminent attack. A punishment to the narcissist is a major surprise and a nuisance but it also validates his suspicion that he is being persecuted. It proves to him that strong forces are arrayed against him.

He tells himself that people, envious of his achievements and humiliated by them, are out to get him. He constitutes a threat to the accepted order. When required to pay for his misdeeds, the narcissist is always disdainful and bitter and feels misunderstood by his inferiors.

Cooked books, corporate fraud, bending the (GAAP or other) rules, sweeping problems under the carpet, over-promising, making grandiose claims (the "vision thing") - are hallmarks of a narcissist in action. When social cues and norms encourage such behavior rather than inhibit it - in other words, when such behavior elicits abundant narcissistic supply - the pattern is reinforced and become entrenched and rigid. Even when circumstances change, the narcissist finds it difficult to adapt, shed his routines, and replace them with new ones. He is trapped in his past success. He becomes a swindler.

But pathological narcissism is not an isolated phenomenon. It is embedded in our contemporary culture. The West's is a narcissistic civilization. It upholds narcissistic values and penalizes alternative value-systems. From an early age, children are taught to avoid self-criticism, to deceive themselves regarding their capacities and attainments, to feel entitled, and to exploit others.

As Lilian Katz observed in her important paper, "Distinctions between Self-Esteem and Narcissism: Implications for Practice", published by the Educational Resources Information Center, the line between enhancing self-esteem and fostering narcissism is often blurred by educators and parents.

Both Christopher Lasch in "The Culture of Narcissism" and Theodore Millon in his books about personality disorders, singled out American society as narcissistic. Litigiousness may be the flip side of an inane sense of entitlement.

Consumerism is built on this common and communal lie of "I can do anything I want and possess everything I desire if I only apply myself to it" and on the pathological envy it fosters.

Not surprisingly, narcissistic disorders are more common among men than among women. This may be because narcissism conforms to masculine social mores and to the prevailing ethos of capitalism. Ambition, achievements, hierarchy, ruthlessness, drive - are both social values and narcissistic male traits. Social thinkers like the aforementioned Lasch speculated that modern American culture - a self-centred one - increases the rate of incidence of the narcissistic personality disorder.

Otto Kernberg, a notable scholar of personality disorders, confirmed Lasch's intuition: "Society can make serious psychological abnormalities, which already exist in some percentage of the population, seem to be at least superficially appropriate."

In their book ***"Personality Disorders in Modern Life"***, Theodore Millon and Roger Davis state, as a matter of fact, that pathological narcissism was once the preserve of "the royal and the wealthy" and that it "seems to have gained prominence only in the late twentieth century". Narcissism, according to them, may be associated with "higher levels of Maslow's hierarchy of needs ... Individuals in less advantaged nations .. are too busy trying (to survive) ... to be arrogant and grandiose".

They - like Lasch before them - attribute pathological narcissism to "a society that stresses individualism and self-gratification at the expense of community, namely the United States."

They assert that the disorder is more prevalent among certain professions with "star power" or respect. "In an individualistic culture, the narcissist is 'God's gift to the world'. In a collectivist society, the narcissist is 'God's gift to the collective'".

Millon quotes Warren and Caponi's ***"The Role of Culture in the Development of Narcissistic Personality Disorders in America, Japan and Denmark":***

"Individualistic narcissistic structures of self-regard (in individualistic societies) ... are rather self-contained and independent ... (In collectivist cultures) narcissistic configurations of the we-self ... denote self-esteem derived from strong identification with the reputation and honor of the family, groups, and others in hierarchical relationships."

Still, there are malignant narcissists among subsistence farmers in Africa, nomads in the Sinai desert, day laborers in east Europe, and intellectuals and socialites in Manhattan. Malignant narcissism is all-pervasive and independent of culture and society. It is true, though, that the ***way*** pathological narcissism manifests and is experienced is dependent on the particulars of societies and cultures.

In some cultures, it is encouraged, in others suppressed. In some societies it is channeled against minorities - in others it is tainted with paranoia. In collectivist societies, it may be projected onto the collective, in individualistic societies, it is an individual's trait.

Yet, can families, organizations, ethnic groups, churches, and even whole nations be safely described as "narcissistic" or "pathologically self-absorbed"? Can we talk about a "corporate culture of narcissism"?

Human collectives - states, firms, households, institutions, political parties, cliques, bands - acquire a life and a character all their own. The longer the association or affiliation of the members, the more cohesive and conformist the inner dynamics of the group, the more persecutory or numerous its enemies, competitors, or adversaries, the more intensive the physical and emotional experiences of the individuals it is comprised of, the stronger the bonds of locale, language, and history - the more rigorous might an assertion of a common pathology be.

Such an all-pervasive and extensive pathology manifests itself in the behavior of each and every member. It is a defining - though often implicit or underlying - mental structure. It has explanatory and predictive powers. It is recurrent and invariable - a pattern of conduct melding distorted cognition and stunted emotions. And it is often vehemently denied.

Return

Is Education a Public Good?

By: Dr. Sam Vaknin

I. Public Goods, Private Goods

Contrary to common misconceptions, public goods are not "goods provided by the public" (read: by the government). Public goods are sometimes supplied by the private sector and private goods - by the public sector. It is the contention of this essay that technology is blurring the distinction between these two types of goods and rendering it obsolete.

Pure public goods are characterized by:

I. ***Nonrivalry*** - the cost of extending the service or providing the good to another person is (close to) zero.

Most products are rivalrous (scarce) - zero sum games. Having been consumed, they are gone and are not available to others. Public goods, in contrast, are accessible to growing numbers of people without any additional marginal cost. This wide dispersion of benefits renders them unsuitable for private entrepreneurship. It is impossible to recapture the full returns they engender. As Samuelson observed, they are extreme forms of positive externalities (spillover effects).

II. ***Nonexcludability*** - it is impossible to exclude anyone from enjoying the benefits of a public good, or from defraying its costs (positive and negative externalities). Neither can anyone willingly exclude himself from their remit.

III. ***Externalities*** - public goods impose costs or benefits on others - individuals or firms - outside the marketplace and their effects are only partially reflected in prices and the market transactions. As Musgrave pointed out (1969), externalities are the other face of nonrivalry.

The usual examples for public goods are lighthouses - famously questioned by one Nobel Prize winner, Ronald Coase, and defended by another, Paul Samuelson - national defense, the GPS navigation system, vaccination programs, dams, and public art (such as park concerts).

It is evident that public goods are not necessarily provided or financed by public institutions. But governments frequently intervene to reverse market failures (i.e., when the markets fail to provide goods and services) or to reduce transaction costs so as to enhance consumption or supply and, thus, positive externalities. Governments, for instance, provide preventive care - a non-profitable healthcare niche - and subsidize education because they have an overall positive social effect.

Moreover, pure public goods do not exist, with the possible exception of national defense. Samuelson himself suggested [Samuelson, P.A **-** Diagrammatic Exposition of a Theory of Public Expenditure - Review of Economics and Statistics, 37 (1955), 350-56]:

"... Many - though not all - of the realistic cases of government activity can be fruitfully analyzed as some kind of a blend of these two extreme polar cases" (p. 350) - mixtures of private and public goods. (Education, the courts, public defense, highway programs, police and fire protection have an) ***"element of variability in the benefit that can go to one citizen at the expense of some other citizen"*** (p. 356).

From Pickhardt, Michael's paper titled ***"Fifty Years after Samuelson's 'The Pure Theory of Public Expenditure': What Are We Left With?"***:

"... It seems that rivalry and nonrivalry are supposed to reflect this "element of variability" and hint at a continuum of goods that ranges from wholly rival to wholly nonrival ones. In particular, Musgrave (1969, p. 126 and pp. 134-35) writes:

'The condition of non-rivalness in consumption (or, which is the same, the existence of beneficial consumption externalities) means that the same physical output (the fruits of the same factor input) is enjoyed by both A and B. This does not mean that the same subjective benefit must be derived, or even that precisely the same product quality is available to both. (...) Due to non-rivalness of consumption, individual demand curves are added vertically, rather than horizontally as in the case of private goods".

"The preceding discussion has dealt with the case of a pure social good, i.e. a good the benefits of which are wholly non-rival. This approach has been subject to the criticism that this case does not exist, or, if at all, applies to defence only; and in fact most goods which give rise to private benefits also involve externalities in varying degrees and hence combine both social and private good characteristics' ".

II. The Transformative Nature of Technology

It would seem that knowledge - or, rather, technology - is a public good as it is nonrival, nonexcludable, and has positive externalities. The New Growth Theory (theory of endogenous technological change) emphasizes these "natural" qualities of technology.

The application of Intellectual Property Rights (IPR) alters the nature of technology from public to private good by introducing excludability, though not rivalry. Put more simply, technology is "expensive to produce and cheap to reproduce". By imposing licensing demands on consumers, it is made exclusive, though it still remains nonrivalrous (can be copied endlessly without being diminished).

Yet, even encumbered by IPR, technology is transformative. It converts some public goods into private ones and vice versa.

Consider highways - hitherto quintessential public goods. The introduction of advanced "on the fly" identification and billing (toll) systems reduced transaction costs so dramatically that privately-owned and operated highways are now common in many Western countries. This is an example of a public good gradually going private.

Books reify the converse trend - from private to public goods. Print books - undoubtedly a private good - are now available online free of charge for download. Online public domain books are a nonrivalrous, nonexcludable good with positive externalities - in other words, a pure public good.

III. Is Education a Public Good?

Education used to be a private good with positive externalities. Thanks to technology and government largesse it is no longer the case. It is being transformed into a nonpure public good.

Technology-borne education is nonrivalrous and, like its traditional counterpart, has positive externalities. It can be replicated and disseminated virtually cost-free to the next consumer through the Internet, television, radio, and on magnetic media. MIT has recently placed 500 of its courses online and made them freely accessible. Distance learning is spreading like wildfire. Webcasts can host - in principle - unlimited amounts of students.

Yet, all forms of education are exclusionary, at least in principle. It is impossible to exclude a citizen from the benefits of his country's national defense, or those of his county's dam. It is perfectly feasible to exclude would be students from access to education - both online and offline.

This caveat, however, equally applies to other goods universally recognized as public. It is possible to exclude certain members of the population from being vaccinated, for instance - or from attending a public concert in the park.

Other public goods require an initial investment (the price-exclusion principle demanded by Musgrave in 1959, does apply at times). One can hardly benefit from the weather forecasts without owning a radio or a television set - which would immediately tend to exclude the homeless and the rural poor in many countries. It is even conceivable to extend the benefits of national defense selectively and to exclude parts of the population, as the Second World War has taught some minorities all too well.

Nor is strict nonrivalry possible - at least not simultaneously, as Musgrave observed (1959, 1969). Our world is finite - and so is everything in it. The economic fundament of scarcity applies universally - and public goods are not exempt. There are only so many people who can attend a concert in the park, only so many ships can be guided by a lighthouse, only so many people defended by the army and police. This is called "crowding" and amounts to the exclusion of potential beneficiaries (the theories of "jurisdictions" and "clubs" deal with this problem).

Nonrivalry and nonexcludability are ideals - not realities. They apply strictly only to the sunlight. As environmentalists keep warning us, even the air is a scarce commodity. Technology gradually helps render many goods and services - books and education, to name two - asymptotically nonrivalrous and nonexcludable.

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Also Read

The Misconception of Scarcity

The Demise of the Work Ethic

By: Sam Vaknin

"When work is a pleasure, life is a joy! When work is a duty, life is slavery."
Maxim Gorky (1868-1936), Russian novelist, author, and playright

Airplanes, missiles, and space shuttles crash due to lack of maintenance, absent-mindedness, and pure ignorance. Software support personnel, aided and abetted by Customer Relationship Management application suites, are curt (when reachable) and unhelpful. Despite expensive, state of the art supply chain management systems, retailers, suppliers, and manufacturers habitually run out of stocks of finished and semi-finished products and raw materials. People from all walks of life and at all levels of the corporate ladder skirt their responsibilities and neglect their duties.

Whatever happened to the work ethic? Where is the pride in the immaculate quality of one's labor and produce?

Both dead in the water. A series of earth-shattering social, economic, and technological trends converged to render their jobs loathsome to many - a tedious nuisance best avoided.

1. ***Job security*** is a thing of the past. Itinerancy in various McJobs reduces the incentive to invest time, effort, and resources into a position that may not be yours next week. Brutal layoffs and downsizing traumatized the workforce and produced in the typical workplace a culture of obsequiousness, blind obeisance, the suppression of

independent thought and speech, and avoidance of initiative and innovation. Many offices and shop floors now resemble prisons.

2. ***Outsourcing and offshoring*** of back office (and, more recently, customer relations and research and development) functions sharply and adversely effected the quality of services from helpdesks to airline ticketing and from insurance claims processing to remote maintenance. Cultural mismatches between the (typically Western) client base and the offshore service department (usually in a developing country where labor is cheap and plenty) only exacerbated the breakdown of trust between customer and provider or supplier.

3. The populace in developed countries are addicted to ***leisure time***. Most people regard their jobs as a necessary evil, best avoided whenever possible. Hence phenomena like the permanent temp - employees who prefer a succession of temporary assignments to holding a proper job. The media and the arts contribute to this perception of work as a drag - or a potentially dangerous addiction (when they portray raging and abusive workaholics).

4. The other side of this dismal coin is ***workaholism*** - the addiction to work. Far from valuing it, these addicts resent their dependence. The job performance of the typical workaholic leaves a lot to be desired. Workaholics are fatigued, suffer from ancillary addictions, and short attention spans. They frequently abuse substances, are narcissistic and destructively competitive (being driven, they are incapable of team work).

5. The ***depersonalization of manufacturing*** - the intermediated divorce between the artisan/worker and his

client - contributed a lot to the indifference and alienation of the common industrial worker, the veritable "anonymous cog in the machine".

Not only was the link between worker and product broken - but the bond between artisan and client was severed as well. Few employees know their customers or patrons first hand. It is hard to empathize with and care about a statistic, a buyer whom you have never met and never likely to encounter. It is easy in such circumstances to feel immune to the consequences of one's negligence and apathy at work. It is impossible to be proud of what you do and to be committed to your work - if you never set eyes on either the final product or the customer! Charlie Chaplin's masterpiece, "Modern Times" captured this estrangement brilliantly.

6. Many former employees of mega-corporations abandon the rat race and establish their own businesses - ***small and home enterprises***. Undercapitalized, understaffed, and outperformed by the competition, these fledging and amateurish outfits usually spew out shoddy products and lamentable services - only to expire within the first year of business.

7. Despite decades of advanced notice, ***globalization*** caught most firms the world over by utter surprise. Ill-prepared and fearful of the onslaught of foreign competition, companies big and small grapple with logistical nightmares, supply chain calamities, culture shocks and conflicts, and rapacious competitors. Mere survival (and opportunistic managerial plunder) replaced client satisfaction as the prime value.

8. The decline of the ***professional guilds*** on the one hand and the trade unions on the other hand greatly reduced worker self-discipline, pride, and peer-regulated quality control. Quality is monitored by third parties or compromised by being subjected to Procrustean financial constraints and concerns.

The investigation of malpractice and its punishment are now at the hand of vast and ill-informed bureaucracies, either corporate or governmental. Once malpractice is exposed and admitted to, the availability of malpractice insurance renders most sanctions unnecessary or toothless. Corporations prefer to bury mishaps and malfeasance rather than cope with and rectify them.

9. The quality of one's work, and of services and products one consumed, used to be guaranteed. One's personal idiosyncrasies, eccentricities, and problems were left at home. Work was sacred and one's sense of self-worth depended on the satisfaction of one's clients. You simply didn't let your personal life affect the standards of your output.

This strict and useful separation vanished with the rise of the malignant-narcissistic variant of ***individualism***. It led to the emergence of idiosyncratic and fragmented standards of quality. No one knows what to expect, when, and from whom. Transacting business has become a form of psychological warfare. The customer has to rely on the goodwill of suppliers, manufacturers, and service providers - and often finds himself at their whim and mercy. "The client is always right" has gone the way of the dodo. "It's my (the supplier's or provider's) way or the highway" rules supreme.

This uncertainty is further exacerbated by the pandemic eruption of mental health disorders - 15% of the population are severely pathologized according to the latest studies. Antisocial behaviors - from outright crime to pernicious passive-aggressive sabotage - once rare in the workplace, are now abundant.

The ethos of teamwork, tempered collectivism, and collaboration for the greater good is now derided or decried. Conflict on all levels has replaced negotiated compromise and has become the prevailing narrative. Litigiousness, vigilante justice, use of force, and "getting away with it" are now extolled. Yet, conflicts lead to the misallocation of economic resources. They are non-productive and not conducive to sustaining good relations between producer or provider and consumer.

10. ***Moral relativism*** is the mirror image of rampant individualism. Social cohesion and discipline diminished, ideologies and religions crumbled, and anomic states substituted for societal order. The implicit contracts between manufacturer or service provider and customer and between employee and employer were shredded and replaced with ad-hoc negotiated operational checklists. Social decoherence is further enhanced by the anonymization and depersonalization of the modern chain of production (see point 5 above).

Nowadays, people facilely and callously abrogate their responsibilities towards their families, communities, and nations. The mushrooming rate of divorce, the decline in personal thrift, the skyrocketing number of personal bankruptcies, and the ubiquity of venality and corruption both corporate and political are examples of such

dissipation. No one seems to care about anything. Why should the client or employer expect a different treatment?

11. The ***disintegration of the educational systems*** of the West made it difficult for employers to find qualified and motivated personnel. Courtesy, competence, ambition, personal responsibility, the ability to see the bigger picture (synoptic view), interpersonal aptitude, analytic and synthetic skills, not to mention numeracy, literacy, access to technology, and the sense of belonging which they foster - are all products of proper schooling.

12. ***Irrational beliefs***, pseudo-sciences, and the occult rushed in to profitably fill the vacuum left by the crumbling education systems. These wasteful preoccupations encourage in their followers an overpowering sense of fatalistic determinism and hinder their ability to exercise judgment and initiative. The discourse of commerce and finance relies on unmitigated rationality and is, in essence, contractual. Irrationality is detrimental to the successful and happy exchange of goods and services.

Also Read

The Labour Divide - I. Employment and Unemployment

The Labour Divide - II. Migration and Brain Drain

The Labour Divide - III. Entrepreneurship and Workaholism

Foreign Direct Investments (FDI) - Pros and Cons

Based on a lecture given at the Euro College Student Union Business Forum, Kumanovo, Macedonia, May 3, 2007

By: Sam Vaknin, Ph.D.

The role of foreign direct investment (FDI) in promoting growth and sustainable development has never been substantiated. There isn't even an agreed definition of the beast. In most developing countries, other capital flows - such as remittances - are larger and more predictable than FDI and ODA (Official Development Assistance).

Several studies indicate that domestic investment projects have more beneficial trickle-down effects on local economies. Be that as it may, close to two-thirds of FDI is among rich countries and in the form of mergers and acquisitions (M&A). All said and done, FDI constitutes a mere 2% of global GDP.

FDI does not automatically translate to net foreign exchange inflows. To start with, many multinational and transnational "investors" borrow money locally at favorable interest rates and thus finance their projects. This constitutes unfair competition with local firms and crowds the domestic private sector out of the credit markets, displacing its investments in the process.

Many transnational corporations are net consumers of savings, draining the local pool and leaving other entrepreneurs high and dry. Foreign banks tend to collude in this reallocation of financial wherewithal by

exclusively catering to the needs of the less risky segments of the business scene (read: foreign investors).

Additionally, the more profitable the project, the smaller the net inflow of foreign funds. In some developing countries, profits repatriated by multinationals exceed total FDI. This untoward outcome is exacerbated by principal and interest repayments where investments are financed with debt and by the outflow of royalties, dividends, and fees. This is not to mention the sucking sound produced by quasi-legal and outright illegal practices such as transfer pricing and other mutations of creative accounting.

Moreover, most developing countries are no longer in need of foreign exchange. "Third and fourth world" countries control three quarters of the global pool of foreign exchange reserves. The "poor" (the South) now lend to the rich (the North) and are in the enviable position of net creditors. The West drains the bulk of the savings of the South and East, mostly in order to finance the insatiable consumption of its denizens and to prop up a variety of indigenous asset bubbles.

Still, as any first year student of orthodox economics would tell you, FDI is not about foreign exchange. FDI encourages the transfer of management skills, intellectual property, and technology. It creates jobs and improves the quality of goods and services produced in the economy. Above all, it gives a boost to the export sector.

All more or less true. Yet, the proponents of FDI get their causes and effects in a tangle. FDI does not foster growth and stability. It follows both. Foreign investors are attracted to success stories, they are drawn to countries

already growing, politically stable, and with a sizable purchasing power.

Foreign investors of all stripes jump ship with the first sign of contagion, unrest, and declining fortunes. In this respect, FDI and portfolio investment are equally unreliable. Studies have demonstrated how multinationals hurry to repatriate earnings and repay inter-firm loans with the early harbingers of trouble. FDI is, therefore, partly pro-cyclical.

What about employment? Is FDI the panacea it is made out to be?

Far from it. Foreign-owned projects are capital-intensive and labor-efficient. They invest in machinery and intellectual property, not in wages. Skilled workers get paid well above the local norm, all others languish. Most multinationals employ subcontractors and these, to do their job, frequently haul entire workforces across continents. The natives rarely benefit and when they do find employment it is short-term and badly paid. M&A, which, as you may recall, constitute 60-70% of all FDI are notorious for inexorably generating job losses.

FDI buttresses the government's budgetary bottom line but developing countries invariably being governed by kleptocracies, most of the money tends to vanish in deep pockets, greased palms, and Swiss or Cypriot bank accounts. Such "contributions" to the hitherto impoverished economy tend to inflate asset bubbles (mainly in real estate) and prolong unsustainable and pernicious consumption booms followed by painful busts.

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The Economics of Expectations

By: Sam Vaknin, Ph.D.

Economies revolve around and are determined by "anchors": stores of value that assume pivotal roles and lend character to transactions and economic players alike. Well into the 19 century, tangible assets such as real estate and commodities constituted the bulk of the exchanges that occurred in marketplaces, both national and global. People bought and sold land, buildings, minerals, edibles, and capital goods. These were regarded not merely as means of production but also as forms of wealth.

Inevitably, human society organized itself to facilitate such exchanges. The legal and political systems sought to support, encourage, and catalyze transactions by enhancing and enforcing property rights, by providing public goods, and by rectifying market failures.

Later on and well into the 1980s, symbolic representations of ownership of real goods and property (e.g, shares, commercial paper, collateralized bonds, forward contracts) were all the rage. By the end of this period, these surpassed the size of markets in underlying assets. Thus, the daily turnover in stocks, bonds, and currencies dwarfed the annual value added in all industries combined.

Again, Mankind adapted to this new environment. Technology catered to the needs of traders and speculators, businessmen and middlemen. Advances in telecommunications and transportation followed inexorably. The concept of intellectual property rights was

introduced. A financial infrastructure emerged, replete with highly specialized institutions (e.g., central banks) and businesses (for instance, investment banks, jobbers, and private equity funds).

We are in the throes of a third wave. Instead of buying and selling assets one way (as tangibles) or the other (as symbols) - we increasingly trade in expectations (in other words, we transfer risks). The markets in derivatives (options, futures, indices, swaps, collateralized instruments, and so on) are flourishing.

Society is never far behind. Even the most conservative economic structures and institutions now strive to manage expectations. Thus, for example, rather than tackle inflation directly, central banks currently seek to subdue it by issuing inflation targets (in other words, they aim to influence public expectations regarding future inflation).

The more abstract the item traded, the less cumbersome it is and the more frictionless the exchanges in which it is swapped. The smooth transmission of information gives rise to both positive and negative outcomes: more efficient markets, on the one hand - and contagion on the other hand; less volatility on the one hand - and swifter reactions to bad news on the other hand (hence the need for market breakers); the immediate incorporation of new data in prices on the one hand - and asset bubbles on the other hand.

Hitherto, even the most arcane and abstract contract traded was somehow attached to and derived from an underlying tangible asset, no matter how remotely. But this linkage may soon be dispensed with. The future may

witness the bartering of agreements that have nothing to do with real world objects or values.

In days to come, traders and speculators will be able to generate on the fly their own, custom-made, one-time, investment vehicles for each and every specific transaction. They will do so by combining "off-the-shelf", publicly traded components. Gains and losses will be determined by arbitrary rules or by reference to extraneous events. Real estate, commodities, and capital goods will revert to their original forms and functions: bare necessities to be utilized and consumed, not speculated on.

Corruption and Transparency

By: Dr. Sam Vaknin

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I. The Facts

Just days before a much-awaited donor conference, the influential International Crisis Group (ICG) recommended to place all funds pledged to Macedonia under the oversight of a "corruption advisor" appointed by the European Commission. The donors ignored this and other recommendations. To appease the critics, the affable Attorney General of Macedonia charged a former Minister of Defense with abuse of duty for allegedly having channeled millions of DM to his relatives during the recent civil war. Macedonia has belatedly passed an anti-money laundering law recently - but failed, yet again, to adopt strict anti-corruption legislation.

In Albania, the Chairman of the Albanian Socialist Party, Fatos Nano, was accused by Albanian media of laundering $1 billion through the Albanian government. Pavel Borodin, the former chief of Kremlin Property, decided not appeal his money laundering conviction in a Swiss court. The Slovak daily "Sme" described in scathing detail the newly acquired wealth and lavish lifestyles of formerly impoverished HZDS politicians. Some of them now reside in refurbished castles. Others have swimming pools replete with wine bars.

Pavlo Lazarenko, a former Ukrainian prime minister, is detained in San Francisco on money laundering charges.

His defense team accuses the US authorities of "selective prosecution".

They are quoted by Radio Free Europe as saying:

"The impetus for this prosecution comes from allegations made by the Kuchma regime, which itself is corrupt and dedicated to using undemocratic and repressive methods to stifle political opposition ... (other Ukrainian officials) including Kuchma himself and his closest associates, have committed conduct similar to that with which Lazarenko is charged but have not been prosecuted by the U.S. government".

The UNDP estimated, in 1997, that, even in rich, industrialized, countries, 15% of all firms had to pay bribes. The figure rises to 40% in Asia and 60% in Russia.

Corruption is rife and all pervasive, though many allegations are nothing but political mud-slinging. Luckily, in countries like Macedonia, it is confined to its rapacious elites: its politicians, managers, university professors, medical doctors, judges, journalists, and top bureaucrats. The police and customs are hopelessly compromised. Yet, one rarely comes across graft and venality in daily life. There are no false detentions (as in Russia), spurious traffic tickets (as in Latin America), or widespread stealthy payments for public goods and services (as in Africa).

It is widely accepted that corruption retards growth by deterring foreign investment and encouraging brain drain. It leads to the misallocation of economic resources and distorts competition. It depletes the affected country's endowments - both natural and acquired. It demolishes the

tenuous trust between citizen and state. It casts civil and government institutions in doubt, tarnishes the entire political class, and, thus, endangers the democratic system and the rule of law, property rights included.

This is why both governments and business show a growing commitment to tackling it. According to Transparency International's "Global Corruption Report 2001", corruption has been successfully contained in private banking and the diamond trade, for instance.

Hence also the involvement of the World Bank and the IMF in fighting corruption. Both institutions are increasingly concerned with poverty reduction through economic growth and development. The World Bank estimates that corruption reduces the growth rate of an affected country by 0.5 to 1 percent annually. Graft amounts to an increase in the marginal tax rate and has pernicious effects on inward investment as well.

The World Bank has appointed last year a Director of Institutional Integrity - a new department that combines the Anti-Corruption and Fraud Investigations Unit and the Office of Business Ethics and Integrity. The Bank helps countries to fight corruption by providing them with technical assistance, educational programs, and lending.

Anti-corruption projects are an integral part of every Country Assistance Strategy (CAS). The Bank also supports international efforts to reduce corruption by sponsoring conferences and the exchange of information. It collaborates closely with Transparency International, for instance.

At the request of member-governments (such as Bosnia-Herzegovina and Romania) it has prepared detailed country corruption surveys covering both the public and the private sectors. Together with the EBRD, it publishes a corruption survey of 3000 firms in 22 transition countries (BEEPS - Business Environment and Enterprise Performance Survey). It has even set up a multilingual hotline for whistleblowers.

The IMF made corruption an integral part of its country evaluation process. It suspended arrangements with endemically corrupt recipients of IMF financing. Since 1997, it has introduced policies regarding misreporting, abuse of IMF funds, monitoring the use of debt relief for poverty reduction, data dissemination, legal and judicial reform, fiscal and monetary transparency, and even internal governance (e.g., financial disclosure by staff members).

Yet, no one seems to agree on a universal definition of corruption. What amounts to venality in one culture (Sweden) is considered no more than hospitality, or an expression of gratitude, in another (France, or Italy). Corruption is discussed freely and forgivingly in one place - but concealed shamefully in another. Corruption, like other crimes, is probably seriously under-reported and under-penalized.

Moreover, bribing officials is often the unstated policy of multinationals, foreign investors, and expatriates. Many of them believe that it is inevitable if one is to expedite matters or secure a beneficial outcome. Rich world governments turn a blind eye, even where laws against such practices are extant and strict.

In his address to the Inter-American Development Bank on March 14, President Bush promised to "reward nations that root out corruption" within the framework of the Millennium Challenge Account initiative. The USA has pioneered global anti-corruption campaigns and is a signatory to the 1996 IAS Inter-American Convention against Corruption, the Council of Europe's Criminal Law Convention on Corruption, and the OECD's 1997 anti-bribery convention. The USA has had a comprehensive "Foreign Corrupt Practices Act" since 1977.

The Act applies to all American firms, to all firms - including foreign ones - traded in an American stock exchange, and to bribery on American territory by foreign and American firms alike. It outlaws the payment of bribes to foreign officials, political parties, party officials, and political candidates in foreign countries. A similar law has now been adopted by Britain.

Yet, "The Economist" reports that the American SEC has brought only three cases against listed companies until 1997. The US Department of Justice brought another 30 cases. Britain has persecuted successfully only one of its officials for overseas bribery since 1889. In the Netherlands bribery is tax deductible. Transparency International now publishes a name and shame Bribery Payers Index to complement its 91-country strong Corruption Perceptions Index.

Many rich world corporations and wealthy individuals make use of off-shore havens or "special purpose entities" to launder money, make illicit payments, avoid or evade taxes, and conceal assets or liabilities. According to Swiss authorities, more than $40 billion are held by Russians in

its banking system alone. The figure may be 5 to 10 times higher in the tax havens of the United Kingdom.

In a survey it conducted last month of 82 companies in which it invests, "Friends, Ivory, and Sime" found that only a quarter had clear anti-corruption management and accountability systems in place.

Tellingly only 35 countries signed the 1997 OECD "Convention on Combating Bribery of Foreign Public Officials in International Business Transactions" - including four non-OECD members: Chile, Argentina, Bulgaria, and Brazil. The convention has been in force since February 1999 and is only one of many OECD anti-corruption drives, among which are SIGMA (Support for Improvement in Governance and Management in Central and Eastern European countries), ACN (Anti-Corruption Network for Transition Economies in Europe), and FATF (the Financial Action Task Force on Money Laundering).

Moreover, The moral authority of those who preach against corruption in poor countries - the officials of the IMF, the World Bank, the EU, the OECD - is strained by their ostentatious lifestyle, conspicuous consumption, and "pragmatic" morality.

II. **What to Do? What is Being Done?**

Two years ago, I proposed a taxonomy of corruption, venality, and graft. I suggested this cumulative definition:

a. The withholding of a service, information, or goods that, by law, and by right, should have been provided or divulged.

b. The provision of a service, information, or goods that, by law, and by right, should not have been provided or divulged.

c. That the withholding or the provision of said service, information, or goods are in the power of the withholder or the provider to withhold or to provide AND That the withholding or the provision of said service, information, or goods constitute an integral and substantial part of the authority or the function of the withholder or the provider.

d. That the service, information, or goods that are provided or divulged are provided or divulged against a benefit or the promise of a benefit from the recipient and as a result of the receipt of this specific benefit or the promise to receive such benefit.

e. That the service, information, or goods that are withheld are withheld because no benefit was provided or promised by the recipient.

There is also what the World Bank calls "State Capture" defined thus:

"The actions of individuals, groups, or firms, both in the public and private sectors, to influence the formation of laws, regulations, decrees, and other government policies to their own advantage as a result of the illicit and non-transparent provision of private benefits to public officials."

We can classify corrupt and venal behaviors according to their outcomes:

a. **Income Supplement** - Corrupt actions whose sole outcome is the supplementing of the income of the provider without affecting the "real world" in any manner.

b. **Acceleration or Facilitation Fees** - Corrupt practices whose sole outcome is to accelerate or facilitate decision making, the provision of goods and services or the divulging of information.

c. **Decision Altering (State Capture) Fees** - Bribes and promises of bribes which alter decisions or affect them, or which affect the formation of policies, laws, regulations, or decrees beneficial to the bribing entity or person.

d. **Information Altering Fees** - Backhanders and bribes that subvert the flow of true and complete information within a society or an economic unit (for instance, by selling professional diplomas, certificates, or permits).

e. **Reallocation Fees** - Benefits paid (mainly to politicians and political decision makers) in order to affect the allocation of economic resources and material wealth or the rights thereto. Concessions, licenses, permits, assets privatized, tenders awarded are all subject to reallocation fees.

To eradicate corruption, one must tackle both giver and taker.

History shows that all effective programs shared these common elements:

a. The persecution of corrupt, high-profile, public figures, multinationals, and institutions (domestic and foreign). This demonstrates that no one is above the law and that crime does not pay.

b. The conditioning of international aid, credits, and investments on a monitored reduction in corruption levels. The structural roots of corruption should be tackled rather than merely its symptoms.

c. The institution of incentives to avoid corruption, such as a higher pay, the fostering of civic pride, "good behavior" bonuses, alternative income and pension plans, and so on.

d. In many new countries (in Asia, Africa, and Eastern Europe) the very concepts of "private" versus "public" property are fuzzy and impermissible behaviors are not clearly demarcated. Massive investments in education of the public and of state officials are required.

e. Liberalization and deregulation of the economy. Abolition of red tape, licensing, protectionism, capital controls, monopolies, discretionary, non-public, procurement. Greater access to information and a public debate intended to foster a "stakeholder society".

f. Strengthening of institutions: the police, the customs, the courts, the government, its agencies,

the tax authorities - under time limited foreign management and supervision.

Awareness to corruption and graft is growing - though it mostly results in lip service. The Global Coalition for Africa adopted anti-corruption guidelines in 1999. The otherwise opaque Asia Pacific Economic Cooperation (APEC) forum is now championing transparency and good governance. The UN is promoting its pet convention against corruption.

The G-8 asked its Lyon Group of senior experts on transnational crime to recommend ways to fight corruption related to large money flows and money laundering. The USA and the Netherlands hosted global forums on corruption - as will South Korea next year. The OSCE is rumored to respond with its own initiative, in collaboration with the US Congressional Helsinki Commission.

The south-eastern Europe Stability Pact sports its own Stability Pact Anti-corruption Initiative (SPAI). It held its first conference in September 2001 in Croatia. More than 1200 delegates participated in the 10th International Anti-Corruption Conference in Prague last year. The conference was attended by the Czech prime minister, the Mexican president, and the head of the Interpol.

The most potent remedy against corruption is sunshine - free, accessible, and available information disseminated and probed by an active opposition, uncompromised press, and assertive civic organizations and NGO's. In the absence of these, the fight against official avarice and criminality is doomed to failure. With them, it stands a chance.

Corruption can never be entirely eliminated - but it can be restrained and its effects confined. The cooperation of good people with trustworthy institutions is indispensable. Corruption can be defeated only from the inside, though with plenty of outside help. It is a process of self-redemption and self-transformation. It is the real transition.

Note - The Psychology of Corruption

Most politicians bend the laws of the land and steal money or solicit bribes because they need the funds to support networks of patronage. Others do it in order to reward their nearest and dearest or to maintain a lavish lifestyle when their political lives are over.

But these mundane reasons fail to explain why some officeholders go on a rampage and binge on endless quantities of lucre. All rationales crumble in the face of a Mobutu Sese Seko or a Saddam Hussein or a Ferdinand Marcos who absconded with billions of US dollars from the coffers of Zaire, Iraq, and the Philippines, respectively.

These inconceivable dollops of hard cash and valuables often remain stashed and untouched, moldering in bank accounts and safes in Western banks. They serve no purpose, either political or economic. But they do fulfill a psychological need. These hoards are not the megalomaniacal equivalents of savings accounts. Rather they are of the nature of compulsive collections.

Erstwhile president of Sierra Leone, Momoh, amassed hundreds of video players and other consumer goods in vast rooms in his mansion. As electricity supply was

intermittent at best, his was a curious choice. He used to sit among these relics of his cupidity, fondling and counting them insatiably.

While Momoh relished things with shiny buttons, people like Sese Seko, Hussein, and Marcos drooled over money. The ever-heightening mountains of greenbacks in their vaults soothed them, filled them with confidence, regulated their sense of self-worth, and served as a love substitute. The balances in their bulging bank accounts were of no practical import or intent. They merely catered to their psychopathology.

These politicos were not only crooks but also kleptomaniacs. They could no more stop thieving than Hitler could stop murdering. Venality was an integral part of their psychological makeup.

Kleptomania is about acting out. It is a compensatory act. Politics is a drab, uninspiring, unintelligent, and, often humiliating business. It is also risky and rather arbitrary. It involves enormous stress and unceasing conflict. Politicians with mental health disorders (for instance, narcissists or psychopaths) react by decompensation. They rob the state and coerce businessmen to grease their palms because it makes them feel better, it helps them to repress their mounting fears and frustrations, and to restore their psychodynamic equilibrium. These politicians and bureaucrats "let off steam" by looting.

Kleptomaniacs fail to resist or control the impulse to steal, even if they have no use for the booty. According to the Diagnostic and Statistical Manual IV-TR (2000), the bible of psychiatry, kleptomaniacs feel "pleasure, gratification, or relief when committing the theft." The good book

proceeds to say that " ... (T)he individual may hoard the stolen objects ...".

As most kleptomaniac politicians are also psychopaths, they rarely feel remorse or fear the consequences of their misdeeds. But this only makes them more culpable and dangerous.

Also Read:

Straf - Corruption in the CEE

Money Laundering in a Changed World

Workaholism, Leisure and Pleasure

By: Dr. Sam Vaknin

The official working week in France has being reduced to 35 hours a week (though the French are now tinkering with it). In most countries in the world, it is limited to 45 hours a week. The trend during the last century seems to be unequivocal: less work, more play.

Yet, what may be true for blue collar workers or state employees – is not necessarily so for white collar members of the liberal professions. It is not rare for these people – lawyers, accountants, consultants, managers, academics – to put in 80 hour weeks. The phenomenon is so widespread and its social consequences so damaging that it acquired the unflattering nickname: workaholism, a combination of the words "work" and "alcoholism". Family life is disrupted, intellectual horizons narrow, the consequences to the workaholic's health are severe: fat, lack of exercise, stress take their toll. Classified as "alpha" types, workaholics suffer three times as many heart attacks as their peers.

But what are the social and economic roots of this phenomenon?

Put succinctly, it is the result of the blurring borders and differences between work and leisure. The distinction between these two types of time – the one dedicated to labour and the one spent in the pursuit of one's interests – was so clear for thousands of years that its gradual disappearance is one of the most important and profound social changes in human history.

A host of other shifts in the character of the work and domestic environments of humans converged to produce this momentous change.

Arguably the most important was the increase in labour mobility and the fluid nature of the very concept of work and the workplace. The transitions from agricultural to industrial, then to the services and now to the information and knowledge societies, each, in turn, increased the mobility of the workforce. A farmer is the least mobile. His means of production are fixed, his produce was mostly consumed locally because of lack of proper refrigeration, preservation and transportation methods. A marginal group of people became nomad-traders. This group exploded in size with the advent of the industrial revolution. True, the bulk of the workforce was still immobile and affixed to the production floor. But raw materials and the finished products travelled long distances to faraway markets. Professional services were needed and the professional manager, the lawyer, the accountant, the consultant, the trader, the broker – all emerged as both the parasites of the production processes and the indispensable oil on its cogs.

Then came the services industry. Its protagonists were no longer geographically dependent. They rendered their services to a host of "employers" in a variety of ways and geographically spread. This trend accelerated today, at the beginning of the information and knowledge revolution. Knowledge is not locale-bound. It is easily transferable across boundaries. Its ephemeral quality gives it a-temporal and non-spatial qualities. The location of the participants in the economic interactions of this new age are geographically transparent.

These trends converged with an increase of mobility of people, goods and data (voice, visual, textual and other). The twin revolutions of transportation and of telecommunications really reduced the world to a global village. Phenomena like commuting to work and multinationals were first made possible. Facsimile messages, electronic mail, other modem data transfers, the Internet broke not only physical barriers – but also temporal ones. Today, virtual offices are not only spatially virtual – but also temporally so. This means that workers can collaborate not only across continents but also across time zones. They can leave their work for someone else to continue in an electronic mailbox, for instance.

These last technological advances precipitated the fragmentation of the very concepts of "work" and "workplace". No longer the three Aristotelian dramatic unities. Work could be carried out in different places, not simultaneously, by workers who worked part time whenever it suited them best, Flexitime and work from home replaced commuting as the preferred venue (much more so in the Anglo-Saxon countries, but they have always been the pioneering harbingers of change). This fitted squarely into the social fragmentation which characterizes today's world: the disintegration of previously cohesive social structures, such as the nuclear (not to mention the extended) family. This was all neatly wrapped in the ideology of individualism which was presented as a private case of capitalism and liberalism. People were encouraged to feel and behave as distinct, autonomous units. The perception of individuals as islands replaced the former perception of humans as cells in an organism.

This trend was coupled with – and enhanced by – the unprecedented successive annual rises in productivity and increases in world trade. These trends were brought about by new management techniques, new production technology, innovative inventory control methods, automatization, robotization, plant modernization, telecommunications (which facilitates more efficient transfers of information), even new design concepts. But productivity gains made humans redundant. No amount of retraining could cope with the incredible rate of technological change. The more technologically advanced the country – the higher its structural unemployment (attributable to changes in the very structure of the market) went.

In Western Europe, it shot up from 5-6% of the workforce to 9% in one decade. One way to manage this flood of ejected humans was to cut the workweek. Another was to support a large population of unemployed. The third, more tacit, way was to legitimize leisure time. Whereas the Jewish and Protestant work ethics condemned idleness in the past – they now started encouraging people to "self fulfil", pursue habits and non-work related interests and express the whole of their personality.

This served to blur the historical differences between work and leisure. They were both commended now by the mores of our time. Work became less and less structured and rigid – formerly, the main feature of leisure time. Work could be pursued – and to an ever growing extent, was pursued – from home. The territorial separation between "work-place" and "home turf" was essentially eliminated. The emotional leap was only a question of time. Historically, people went to work because they had to – and all the rest was designated

"pleasure". Now, both were pleasure – or torture – or mixture. Some people began to enjoy their work so much that it fulfilled for them the functions normally reserved to leisure time. They are the workaholics. Others continued to hate work – but felt disoriented in the new, leisure enriched environment. They were not qualified or trained to deal with excess time, lack of framework, no clear instructions what to do, when, with whom and to what.

Socialization processes and socialization agents (the State, parents, educators, employers) were not geared – nor did they regard it as being their responsibility – to train the populace to cope with free time and with the baffling and dazzling variety of options.

Economies and markets can be classified using many criteria. Not the least of them is the work-leisure axis. Those societies and economies that maintain the old distinction between (hated) work and (liberating) leisure – are doomed to perish or, at best, radically lag behind. This is because they will not have developed a class of workaholics big enough to move the economy ahead.

And this is the Big Lesson: it takes workaholics to create, maintain and expand capitalism. As opposed to common beliefs (held by the uninitiated) – people, mostly, do not engage in business because they are looking for money (the classic profit motive). They do what they do because they like the Game of Business, its twists and turns, the brainstorming, the battle of brains, subjugating markets, the ups and downs, the excitement. All this has nothing to do with pure money. It has everything to do with psychology. True, the meter by which success is measured in the world of money is money – but very fast it is transformed into an abstract meter, akin to the monopoly

money. It is a symbol of shrewdness, wit, foresight and insight.

Workaholics identify business with pleasure. They are the embodiment of the pleasure principle. They make up the class of the entrepreneurs, the managers, the businessmen. They are the movers, the shakers, the pushers, the energy. Without them, we have socialist economies, where everything belongs to everyone and, actually to none. In these economies of "collective ownership" people go to work because they have to, they try to avoid it, to sabotage the workplace, they harbour negative feelings. Slowly, they wither and die (professionally) – because no one can live long in hatred and deceit. Joy is an essential ingredient.

And this is the true meaning of capitalism: the abolition of work and leisure and the pursuit of both with the same zeal and satisfaction. Above all, the (increasing) liberty to do it whenever, wherever, with whomever you choose. Unless and until the Homo East Europeansis changes his set of mind – there will be no real transition. Because transition happens in the human mind much before it takes form in reality. It is no use to dictate, to legislate, to finance, to cajole, to offer – the human being must change first. It was Marx (a devout non-capitalist) who said: it is consciousness that determines reality. How right was he. Witness the USA and witness the miserable failure of communism.

Nation Branding and Place Marketing

By: Dr. Sam Vaknin

I. The Marketing Plan

In the decades since World War II, economics prowess replaced military power as the crucial geopolitical determinant. The resilience of a country is measured by its inflows of foreign investment and by the balance of its current account - not by the number of its tanks and brigades.

Inevitably, polities the world over - regions, states, countries, and multinational clubs - behave as only commercial businesses once did. They actively market themselves, their relative advantages, their history and culture, their endowments and assets, their mentality and affiliations. In short, they aggressively promote their brand names ("brands" throughout this article).

To cast countries in the role of brands implies that they act as "producers" to some "consumers" out there. But what do countries - as distinct from firms - produce? And who are the consumers enticed by said statal brand placement and regional location marketing? And how does the process of exchange take place - who gives what to whom and where?

Few governments know the answers to these economically crucial questions. Ministers of finance and industry the world over religiously repeat the mantras of "attracting foreign direct investment" and "encouraging entrepreneurship". They recite the list of advantages proffered by their country to the lucky investor, manager, scientist, expatriate, or businessman. But they lack a deep understanding of the process and meaning of nation branding.

Few countries - Britain being the notable exception in the past decade - conduct serious market research and bang heads together in think tanks or inter-ministerial committees to redesign the national brand. Even fewer maintain long-term, sustained branding campaigns supported by proper advertising. Only recently did a few pioneering polities hire the services of nation branding experts. None has in place the equivalent of a corporate "brand manager".

One of the critical mistakes of countries the world over is the self-centered lack of emphasis on customer satisfaction. Meeting and exceeding the "client's" expectations is merely an afterthought - rather than the axis around which the planning, evaluation, control, and revision of the marketing mix revolve. At best, countries concentrate on concluding specific transactions instead of

on the development and cultivation of long-term relationships with their "clients".

It is as though countries arrogantly refuse to acknowledge their dependence on the goodwill of individuals and firms the world over. The traditional and impregnable supremacy of the sovereign nation-state has gone the way of the dodo - but decision-makers still have to be appraised of this startling development. Most countries - and nowadays there is a surfeit of sovereigns - are nothing more than bit players in the global marketplace. It takes getting used to. Many politicians mentally equate self-marketing with humiliating mendicancy.

Instead, decision makers should hire marketing (and, more specifically, brand name) experts to prepare a thorough and comprehensive place marketing and nation branding plan for them:

Strategic Marketing Analysis

I. Identify what needs and whose needs can the country meet and satisfy. What preference groups (of investors, for instance) or even market niches (e.g., stem cell scientists) should be targeted to optimize economic outcomes?

II. Compile databases of past clients of the state, its resources, offerings, laws, regulations, international treaties, and economic opportunities (e.g., state companies to be privatized). These allow for micro-branding (or segment branding as opposed to mass branding): tweaking the national brand to suit the preferences, likes, dislikes, and wishes of specific target groups, down to single, important, individuals.

III. Position the country in relation to its competitors, emphasizing its natural and human endowments and its relative advantages. The process of positioning aims to identify the nation with an image, perception, concept, or trait which capture its essence and further its appeal to the clients it had identified in stage I above (investors, other countries, diplomats, scientists, and so on). Great care should be taken to align the positioning messages with realities on the ground. Anything perceived by the preference groups as being a lie or an exaggeration will backfire.

IV. Marketing is about optimal allocation of resources in view of objectives and opportunities.

The classic STP model calls for:

I. ***Segmentation*** - Identify potential customers - for instance, foreign direct investors, or expatriates and the diaspora.

II. ***Targeting*** - Concentrate on those "clients" you can serve most effectively, to whom you are most valuable and thus can "charge" the most for your offerings

III. ***Positioning*** - Communicate effectively the main benefits you offer to the targeted group.

The marketing mix comprises 4 P's which are perfectly applicable to nations as they are to businesses:

Product - Your "products" as a country being tax incentives, infrastructure, natural endowments, human resources, a geographic vantage point, helpful laws and regulations (or absence thereof), etc.

Price - Demonstrate a relative or absolute advantage in terms of return on investment

Place - Facilitate the unhindered exchange of goods, services, and capital (tax holidays, free processing zones, no red tape, double taxation treaties and free trade agreements with other countries, etc.)

Promotion - The advertising and dissemination of news and information, lobbying, public relations, media campaigns, etc.

But what products do countries offer and market and how are they tailored to the needs of specific market segments?

II. The Product

What products do countries offer and market and how are they tailored to the needs of specific market segments?

In a marketing mix, the first and foremost element is the product. No amount of savvy promotion and blitz advertising can disguise the shortcomings of an inferior offering.

Contrary to entrenched misinformation, the role of marketing precedes the development of the product. The marketer gathers information regarding the expectations of the target market (the customers). In the case of a country, its clients are its citizens, investors (both foreign and domestic), tourists, export destinations, multilateral organizations (the international community), non-governmental organizations (NGOs), and neighboring nations-states.

The marketer communicates to statal decision-makers what features and benefits does each of these disparate groups desire and suggests how to reconcile their competing and often contradictory needs, interests, preferences, priorities, and wishes.

The marketer or brand manager then proceeds to participate in the design of the country's "products": its branding and public relations campaigns both within and without its borders, its investment laws and regulations, the development and presentation of its tourist attractions, the trumpeting of the competitive or unique qualities of its export products, the tailoring and monitoring of its mutually-beneficial relationships with neighbors, NGOs, and international organizations.

In designing its "products" and, thus, in acquiring a brand name, a country makes use of and leverages several factors:

1. Natural Endowments

The country's history, geographical location, tourism sites, climate, national "mentality" (hard working, forward looking, amicable, peaceful, etc.)

2. Acquired Endowments, Public Goods, and Externalities

Level of education, knowledge of foreign languages, quality of infrastructure, the court, banking, and public health systems

3. Risk Mitigation

International standing and the resolution of extant conflicts (political risk), the country's laws, regulations, and favorable international treaties, its credit history, insurance available to investors and exporters

4. Economic Prowess

Growth promoting policies, monetary stability, access to international credit, the emergence of new industries

Governments can influence many of these factors. Granted, there is little they can do about the country's past history or climate - but pretty much all the rest is up for grabs. Aided by input from its brand managers and marketers, a country can educate its population to meet the requirements of investors and exporters. It can improve infrastructure, reform the court system, pass growth-promoting laws, cut down red tape, support monetary stability, resolve conflicts with the international community and so on.

It is important to understand that the "products" and brand name of a country are not God-given, unalterable quantities. They can and should be tailored to optimize the results of the marketing and branding campaigns.

Maintaining the country's brand name and promoting its products are ongoing tasks - not one off assignments. They require a constant infusion of financial and human resources to conduct research and development to evaluate the shifting sentiments of the country's clients. States and regions are no different to corporate entities. They, too, must gauge and study their markets and customers at every turn and respond with alacrity.

Exactly like commercial outfits, political entities seek to extract a price for their offerings and products. Increasingly, the price they can obtain is settled by highly efficient global markets in perceptions, goods, and services. As competition stiffens and the number of state-players increases, the barriers to entry become more formidable.

III. The Price

A product's price reflects the shifting balance between supply and demand (scarcity) as well as the value of inputs, the product's quality, and its image as conveyed and fostered by marketing and advertising campaigns (positioning). Price is, therefore, a packet of compressed information exchanged between prospective buyers and interested sellers.

In principle, countries "price" themselves no differently.

But, first, we should see how the price mechanism comes into play in the global marketplace of sovereigns and their offerings.

The "price" of a country is comprised of two elements:

(i) The average (internal rate of) return on investments in its infrastructure, human capital, goods, and services - adjusted for (ii) The risks associated with doing business there.

The first component takes into account the costs of conducting business in the territory - everything from outlays on inputs to taxation. The second component considers the country's political risk, volatility (as

measured, for instance, by fluctuations in the prices of its financial assets and obligations), quality of governance, transparency or lack thereof, dysfunctional institutions, stability of policies and legislation, and other hazards.

A country should strive to maximize it price and, thus, create an aura of quality and prosperity. "Selling oneself cheap" communicates desperation and compromised standards. The way to attract investors, tourists, and other clients is to project a kind of "promised land" but without resorting to exaggerations, confabulations, or outright lies.

The message should be relayed both directly (though not obtrusively) and subtly (though not incomprehensibly or deviously). The country should enumerate and emphasize its natural and human endowments, capital stock and infrastructure, favorable tax and regulative regime, political stability, good governance, transparency, functioning institutions, and so on. It should also appear to be substantial, sophisticated, forward-looking, pleasant, welcoming and so forth.

As an increasing number of people around the world "buy" the country's self-perception (where it stands now) and its vision (about its future) - its price keeps climbing and its value is enhanced.

It is much debated whether countries should engage in negative marketing and discount pricing. "Negative marketing" is the disparagement of sovereign competitors and their products and services which are comparable to the country's own offerings or substitute for them. Discount pricing is the strategy of providing at a discount products and services identical to those offered by the country's sovereign competitors.

An example of negative marketing would be to point to a neighboring country's uneducated and expensive labor as a reason not to do business there. An example of discount pricing is to offer tax holidays and rent-free facilities to a relocating multinational.

From my experiences, both practices diminish the country's perceived value and hence, its price. In the long run, the damage to its image far outweighs any dubious economic benefits engendered by these unsavory practices.

Still, some countries are geographically disadvantaged. Recent studies have shown that being landlocked or having a tropical climate carry a hefty price tag in terms of reduced economic growth. These unfavorable circumstances can be described as "natural discounts" to a country's price.

What can be done to overcome such negative factor endowments?

IV. The Place

Some countries are geographically disadvantaged. Recent studies have demonstrated how being landlocked or having a tropical climate carry a hefty price tag in terms of reduced economic growth. These unfavorable circumstances can be described as "natural discounts" to a country's price.

What can be done to overcome such negative factor endowments?

In classical microeconomics, the element of "place" in the marketing plan used to refer to the locus of delivery of the product or service. Well into the 19th century, the "place" was identical to the region where the product was manufactured or the service rendered. In other words, textiles weaved in India were rarely sold in Britain. American accountants were unlikely to practice in Russia. Distribution was a local affair and networks of dissemination and marketing were geographically confined.

A host of historical and technological developments drastically altered the scene and frayed the straitjacket of geography.

The violent disintegration of the old system of geopolitical alliances led to the formation of massive, multiplayer trading blocs within which and among which the movement of goods and, increasingly, services is friction-free.

The vast increase in the world's population - matched by the exponential rise in purchasing power - created a global marketplace of unprecedented wealth and a corresponding hunger for goods and services. The triumph of liberal capitalism compounded this beneficial effect.

The advent of mass media, mass transport, and mass communications reduced transaction costs and barriers to entry. The world shrank to become a veritable "global village".

The value of knowledge (processed information) has fast risen to surpass that of classical (physical) goods and services. Information has some of the properties of a

public good (for instance, nonrivalry) - coupled with all the incentives of a private good (e.g., profit-making).

Thus, the very nature of distribution had been irrevocably changed. The distribution channel, the path from producer to consumer (in our case, from country to foreign investor or tourist, for example) is less encumbered by topography than it used to be.

Even the poorest, most remote, landlocked, arid, and disadvantaged country can nowadays leverage air flight, the Internet, television, cell phones, and other miracles of technology to promote itself and its unique offerings (knowledge, plant and animal species, scenery, history, minerals, cheap and educated manpower, cuisine, textiles, software, and so on).

The key to success is in a mix of both direct and indirect marketing. Nowadays, countries can (and do) appeal directly to consumers (ads targeted at tourists or road shows aimed at investors). They present themselves and what they have to offer, circumventing brokers and agents of all kinds (disintermediation). Still, they should not fail to cultivate more traditional marketing channels such as investment banks, travel agents, multilateral organizations, or trade associations.

With many of the physical obstacles to marketing removed in the last few decades, with the very concept of "place" rendered obsolete, promotion emerged as the most critical facet of nation branding and place marketing.

V. Promotion, Sales, Public Relations, Marketing, and Advertising

Advantages have to be communicated to potential customers if they are not to remain unrealized potentials. Moreover, communication alone - the exchange of information - is not enough. Clients have to be influenced and motivated to visit a country, invest in it, or trade with it.

This is where promotion comes in. Not to be confused with marketing, it is concerned with setting up a trained sales force, and with advertising, sales, and public relations.

We deal with sales forces at length in our next installment. Suffice to say, at this stage, that poor countries will be hard pressed to cater to the pecuniary needs of high-level and, therefore, expensive, salespersons. Setting up a body of volunteers under the supervision, guidance, and training of seasoned sales personnel maybe a more suitable solution.

Advertising is a different ballgame. There is no substitute for a continued presence in the media. The right mix of paid ads and sponsored promotions of products, services, and ideas can work miracles for a country's image as a preferred destination.

Clever, targeted, advertising also ties in with sales promotion. Together they provide the customer with both motivation and incentive to "buy" what the country has on offer. Brand switching is common in the global arena. Investors and tourists, let alone exporters and importers, are fickle and highly mobile. This inherent disloyalty is a boon to new and emerging markets.

An interesting and related question is whether countries constitute similar or dissimilar brands. In other words, are countries interchangeable (fungible) as investment, tourism, and trade destinations? Is cost the only determining factor? If countries are, indeed, mere variants on given themes, acquiring and sustaining permanent market shares (inducing a market shift) may prove to be a problem.

The answer is that the issue is largely irrelevant. Specialization and brand differentiation may be crucial inside countries - in domestic markets - but, they are not very important in the global arena.

Why is that?

Because the global marketplace is far less fractionated than national markets. Niche investors, off-the-beaten-track tourists, and boutique traders are rarities. Multinationals, organized package tours, and commodity traders rule the Earth and they have pretty similar tastes and uniform demands. Catering to these tastes and demands makes or breaks the external sector of a country's economy.

Enter public relations.

While advertising and sales promotion try to access and influence the masses - public relations focuses on opinion-leaders, decision-makers, first-movers, and tipping points. Public relations is also concerned with the country's partners, suppliers, and investors. It directly appeals to major tour operators, foreign legislators, multinationals, and important non-government organizations (NGOs), as well as regional and international forums.

As the name implies, public relations is about follow-up (monitoring) and relationships. This is especially true in the country's dealings with the news media and with specialized publications. Press conferences, presentations, contests, road shows, one-on-one meetings or briefings, seminars, lobbying, and community events - are all tools of the twin trades of marketing public relations and image management.

A recent offshoot of the discipline of public relations - which may be of particular relevance and importance where countries are concerned - is crisis management. Public awareness of crises - from civil wars to environmental disasters - can be manipulated within limits of propriety and veracity. Governments would do well to appoint "public policy and image advisors" to tackle the periodic flare-ups that are an inevitable part of the political and the economic dimensions of an increasingly complex world.

Yet, even governments are bottom-line orientated nowadays. How should a country translate its intangible assets into dollars and cents (or euros)?

VI. The Sales Force and Marketing Implementation Oversight

How should a country translate its intangible assets into dollars and cents (or euros)?

Enter its Sales force and marketing intermediaries.

Even poor countries should allocate funds to train and maintain a skilled sales force and pay its wages, expenses, and perks. Salespeople are the human face of the country's

promotion efforts. They tailor to individual listeners (potential customers) the message the country wishes to convey about itself, its advantages, and its prospects.

As their title implies, salespersons personalize the sales pitch and enliven the sales process. They are as indispensable in mass-attendance road shows and in retail marketing (e.g., of tourism packages) as they are in one-on-one meetings with important decision-makers and investors.

The country's sales force should be trained to make presentations, respond to queries and objections, close deals, and cope with account growth. Its work should be tightly integrated with other promotional efforts such as mass mailings, telemarketing, media releases, and direct offers. Sales personnel should work hand in hand with marketing intermediaries such as travel agents, financial firms, investment funds, and corporate buyers.

Marketing intermediaries are at least as crucial to the country's success as its sales force. They are trusted links to investors, tourists, businessmen, and other "clients". They constitute repositories of expertise as well as venues of communication, both formal and informal. Though usually decried by populist and ignorant politicians, their role in smoothing the workings of the marketplace is crucial. Countries should nurture and cultivate brokers and go-betweens.

A marketing expert - preferably a former salesperson with relevant experience in the field - should head the country's marketing implementation oversight board or committee. The Marketing Implementation Oversight Board should include representatives of the various state bureaucracies,

the country's branding and advertising consultants and agents, its sales force - and collaborating marketing intermediaries.

This body's task is to harmonize and coordinate the country's various efforts at branding, advertising, publicity, and promotion. It is the state's branding headquarters and should enjoy wide supervisory as well as executive powers.

In other words, marketing implementation is about ensuring that the country's message is both timely (synergetic) and coherent and, thus, both credible (consistent) and efficient. Scarce resources are better allocated and deployed if the left hand consults the right one before it moves.

But how can a country judge the efficacy of its attempts to brand or re-brand itself and, consequently, to attract customers?

VII. Marketing Implementation, Evaluation, and Control

How can a country (region, state, city, municipality, or other polity) judge the efficacy of its attempts to brand or re-brand itself and, consequently, to attract customers (investors, tourism operators, bankers, traders, and so on)?

Marketing is not a controlled process in an insulated lab. It is prone to mishaps, last minute changes, conceptual shifts, political upheavals, the volatility of markets, and, in short, to the vagaries of human nature and natural disasters. Some marketing efforts are known to have backfired. Others have yielded lukewarm results.

Marketing requires constant fine tuning and adjustments to reflect and respond to the kaleidoscopic environment of our times.

But maximum benefits (under the circumstances) are guaranteed if the client (the country, for instance) implements a rigorous Marketing Implementation, Evaluation, and Control (MIEV) plan.

The first task is to set realistic quantitative and qualitative interim and final targets for the marketing program - and then to constantly measure its actual performance and compare it to the hoped for outcomes. Even nation branding and place marketing require detailed projections of expenditures vs. income (budget and pr-forma financial statements) for monitoring purposes.

The five modules of MIEV are:

1. Annual plan control

This document includes all the government's managerial objectives and (numerical) goals. It is actually a breakdown of the aforementioned pro-forma financial statements into monthly and quarterly figures of "sales" (in terms of foreign direct investment, income from tourism, trade figures, etc.) and profitability.

It comprises at least five performance gauging tools:

I. ***Sales analysis*** (comparing sales targets to actual sales and accounting for discrepancies).

II. ***Market-share analysis*** (comparing the country's "sales" with those of its competitors). The country should

also compare its own sales to the total sales in the global market and to sales within its "market segment" (neighboring countries, countries which share its political ambience, same-size countries, etc.).

III. ***Expense-to-sales analysis*** demonstrates the range of costs - both explicit and hidden (implicit) - of achieving the country's sales goals.

IV. ***Financial analysis*** calculates various performance ratios such as profits to sales (profit margin), sales to assets (asset turnover), profits to assets (return on assets), assets to worth (financial leverage), and, finally, profits to worth (return on net worth of infrastructure).

V. ***Customer satisfaction*** is the ultimate indicator of tracking goal achievement. The country should actively seek, facilitate, and encourage feedback, both positive and negative by creating friendly and ubiquitous complaint and suggestion systems. Frequent satisfaction and customer loyalty surveys should form an integral part of any marketing drive.

Regrettably, most acceptable systems of national accounts sorely lack the ability to cope with place marketing and nation branding campaigns. Intangibles such as enhanced reputation or investor satisfaction are excluded. There is no clear definition as to what constitute the assets of a country, its "sales", or its "profits".

2. Profitability control

There is no point in squandering scarce resources on marketing efforts that guarantee nothing except name

recognition. Sales, profits, and expenditures should count prominently in any evaluation (and re-evaluation) of on-going campaigns. The country needs to get rid of prejudices, biases, and misconceptions and clearly identify what products and consumer groups yield the most profits (have the highest relative earnings-capacity). Money, time, and manpower should be allocated to cater to the needs and desires of these top-earners.

3. Efficiency control

The global picture is important. An overview of the marketing and sales efforts and their relative success (or failure) is crucial. But a micro-level analysis is indispensable. What is the sales force doing, where, and how well? What are the localized reactions to the advertising, sales promotion, and distribution drives? Are there appreciable differences between the reactions of various market niches and consumer types?

4. Strategic control

The complement of efficiency control is strategic control. It weighs the overall and long-term marketing plan in view of the country's basic data: its organization, institutions, strengths, weaknesses, and market opportunities. It is recommended to compare the country's self-assessment (marketing-effectiveness rating review) with an analysis prepared by an objective third party.

The marketing-effectiveness rating review incorporates privileged information such as input and feedback from the country's "customers" (investors, tourist operators, traders, bankers, etc.), internal reports regarding the

adequacy and efficiency of the country's marketing information, operations, strengths, strategies, and integration (of various marketing, branding, and sales tactics).

5. Marketing audit

The marketing audit is, in some respects, the raw material for the strategic control. Its role is to periodically make sure that the marketing plan emphasizes the country's strengths in ways that are compatible with shifting market sentiments, current events, fashions, preferences, needs, and priorities of relevant market players. This helps to identify marketing opportunities and new or potential markets.

The Encyclopedia Britannica (2005 edition) describes the marketing audit thus:

"... (I)t covers all aspects of the marketing climate (unlike a functional audit, which analyzes one marketing activity), looking at both macro-environment factors (demographic, economic, ecological, technological, political, and cultural) and micro- or task-environment factors (markets, customers, competitors, distributors, dealers, suppliers, facilitators, and publics). The audit includes analyses of the company's marketing strategy, marketing organization, marketing systems, and marketing productivity. It must be systematic in order to provide concrete conclusions based on these analyses. To ensure objectivity, a marketing audit is best done by a person, department, or organization that is independent of the company or marketing program. Marketing audits should be done not only when the

value of a company's current marketing plan is in question; they must be done periodically in order to isolate and solve problems before they arise."

VIII. The Psychology and Demographics of the Consumer

The country's "customers" are its investors, tourists, traders, market intermediaries, NGOs, and office-holders in other countries and in multilateral institutions. Understanding their psychology and demographics is crucial. Their interactions with one another take place in a complex environment, affected by governments, social forces, cultural factors, and markets.

The country must clearly identify its clientele: who are they, what motivates them, what do they do and buy (and how, where and when), what are their decision-making processes and priorities, who influences these and how. It is important to remember that people and institutions buy goods and services to satisfy needs. Nation branding is tantamount to casting the country as the superior if not exclusive answer to those needs it can cater to or even create.

The country's brand manager would do well to analyze the purchasing process: how, when, and where transactions are concluded. Understanding consumption and investment habits and patterns allows for better targeting and education of relevant market segments in order to influence and alter the behavior of target customers.

The brand manager must distinguish consumer customers from business customers and from institutional customers.

Consumer customers purchase goods and services from the country for their own consumption. Tourists are consumer customers.

Business customers buy goods and services from the country on behalf of third parties. Tour operators are business customers.

Institutional customers assemble information about the country and analyze it in order to make or to influence political and credit decisions. Banks, governments, NGOs, and lenders evaluate and finance tourism projects based on such data.

Business customers operate on a large scale and are, therefore, less numerous and less dispersed than consumer customers. Consequently, it is easier to foster long-term and close relationships with them. But, being dependent as they are on end-users, theirs is a volatile, demand-driven market. Moreover, business customers are tough negotiators (though some of them seek quality rather than price advantage).

To attract these movers and shakers, the country's brand manager must constantly monitor the global economy as well as the economies of the nation's main partners. Everything, from monetary policy to regulatory and fiscal developments affect purchasing and investment decisions.

The Encyclopedia Britannica 2005 Edition mentions some additional considerations:

"... Organizational factors, which include the objectives, policies, procedures, structures, and systems that characterize any particular company... Interpersonal

factors are more salient among business customers, because the participants in the buying process—perhaps representing several departments within a company—often have different interests, authority, and persuasiveness. Furthermore, the factors that affect an individual in the business buying process are related to the participant's role in the organization. These factors include job position, risk attitudes, and income."

Consumer customers are the hardest to predict and "manipulate" because they are influenced not merely by hard-nosed intelligence - but also by rumors, age, education, stage in one's life-cycle, occupation, lifestyle, self-conception, past experiences, pecuniary circumstances, personal predilections and prejudices, as well as by a variety of cultural and social factors such as one's values, perceptions, preferences, one's status, reference groups, family, and role models. Thus, the customer's idiosyncratic background largely determines the economic outcome.

It is here that branding has an often decisive role. The more costly, infrequent, and risky the purchase, the higher the consumer's emotional involvement in the buying task. The more differentiated the country's brand, the less the anxiety provoked by the need to commit resources irrevocably.

NGOs - The Self-Appointed Altruists

By: Dr. Sam Vaknin

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Their arrival portends rising local prices and a culture shock. Many of them live in plush apartments, or five star hotels, drive SUV's, sport $3000 laptops and PDA's. They earn a two figure multiple of the local average wage. They are busybodies, preachers, critics, do-gooders, and professional altruists.

Always self-appointed, they answer to no constituency. Though unelected and ignorant of local realities, they confront the democratically chosen and those who voted them into office. A few of them are enmeshed in crime and corruption. They are the non-governmental organizations, or NGO's.

Some NGO's - like Oxfam, Human Rights Watch, Medecins Sans Frontieres, or Amnesty - genuinely contribute to enhancing welfare, to the mitigation of hunger, the furtherance of human and civil rights, or the curbing of disease. Others - usually in the guise of think tanks and lobby groups - are sometimes ideologically biased, or religiously-committed and, often, at the service of special interests.

NGO's - such as the International Crisis Group - have openly interfered on behalf of the opposition in the last parliamentary elections in Macedonia. Other NGO's have done so in Belarus and Ukraine, Zimbabwe and Israel, Nigeria and Thailand, Slovakia and Hungary - and even in

Western, rich, countries including the USA, Canada, Germany, and Belgium.

The encroachment on state sovereignty of international law - enshrined in numerous treaties and conventions - allows NGO's to get involved in hitherto strictly domestic affairs like corruption, civil rights, the composition of the media, the penal and civil codes, environmental policies, or the allocation of economic resources and of natural endowments, such as land and water. No field of government activity is now exempt from the glare of NGO's. They serve as self-appointed witnesses, judges, jury and executioner rolled into one.

Regardless of their persuasion or modus operandi, all NGO's are top heavy with entrenched, well-remunerated, extravagantly-perked bureaucracies. Opacity is typical of NGO's. Amnesty's rules prevent its officials from publicly discussing the inner workings of the organization - proposals, debates, opinions - until they have become officially voted into its Mandate. Thus, dissenting views rarely get an open hearing.

Contrary to their teachings, the financing of NGO's is invariably obscure and their sponsors unknown. The bulk of the income of most non-governmental organizations, even the largest ones, comes from - usually foreign - powers. Many NGO's serve as official contractors for governments.

NGO's serve as long arms of their sponsoring states - gathering intelligence, burnishing their image, and promoting their interests. There is a revolving door between the staff of NGO's and government bureaucracies the world over. The British Foreign Office finances a host

of NGO's - including the fiercely "independent" Global Witness - in troubled spots, such as Angola. Many host governments accuse NGO's of - unwittingly or knowingly - serving as hotbeds of espionage.

Very few NGO's derive some of their income from public contributions and donations. The more substantial NGO's spend one tenth of their budget on PR and solicitation of charity. In a desperate bid to attract international attention, so many of them lied about their projects in the Rwanda crisis in 1994, recounts "The Economist", that the Red Cross felt compelled to draw up a ten point mandatory NGO code of ethics. A code of conduct was adopted in 1995. But the phenomenon recurred in Kosovo.

All NGO's claim to be not for profit - yet, many of them possess sizable equity portfolios and abuse their position to increase the market share of firms they own. Conflicts of interest and unethical behavior abound.

Cafedirect is a British firm committed to "fair trade" coffee. Oxfam, an NGO, embarked, three years ago, on a campaign targeted at Cafedirect's competitors, accusing them of exploiting growers by paying them a tiny fraction of the retail price of the coffee they sell. Yet, Oxfam owns 25% of Cafedirect.

Large NGO's resemble multinational corporations in structure and operation. They are hierarchical, maintain large media, government lobbying, and PR departments, head-hunt, invest proceeds in professionally-managed portfolios, compete in government tenders, and own a variety of unrelated businesses. The Aga Khan Fund for Economic Development owns the license for second mobile phone operator in Afghanistan - among other

businesses. In this respect, NGO's are more like cults than like civic organizations.

Many NGO's promote economic causes - anti-globalization, the banning of child labor, the relaxing of intellectual property rights, or fair payment for agricultural products. Many of these causes are both worthy and sound. Alas, most NGO's lack economic expertise and inflict damage on the alleged recipients of their beneficence. NGO's are at times manipulated by - or collude with - industrial groups and political parties.

It is telling that the denizens of many developing countries suspect the West and its NGO's of promoting an agenda of trade protectionism. Stringent - and expensive - labor and environmental provisions in international treaties may well be a ploy to fend off imports based on cheap labor and the competition they wreak on well-ensconced domestic industries and their political stooges.

Take child labor - as distinct from the universally condemnable phenomena of child prostitution, child soldiering, or child slavery.

Child labor, in many destitute locales, is all that separates the family from all-pervasive, life threatening, poverty. As national income grows, child labor declines. Following the outcry provoked, in 1995, by NGO's against soccer balls stitched by children in Pakistan, both Nike and Reebok relocated their workshops and sacked countless women and 7000 children. The average family income - anyhow meager - fell by 20 percent.

This affair elicited the following wry commentary from economists Drusilla Brown, Alan Deardorif, and Robert Stern:

"While Baden Sports can quite credibly claim that their soccer balls are not sewn by children, the relocation of their production facility undoubtedly did nothing for their former child workers and their families."

This is far from being a unique case. Threatened with legal reprisals and "reputation risks" (being named-and-shamed by overzealous NGO's) - multinationals engage in preemptive sacking. More than 50,000 children in Bangladesh were let go in 1993 by German garment factories in anticipation of the American never-legislated Child Labor Deterrence Act.

Former Secretary of Labor, Robert Reich, observed:

"Stopping child labor without doing anything else could leave children worse off. If they are working out of necessity, as most are, stopping them could force them into prostitution or other employment with greater personal dangers. The most important thing is that they be in school and receive the education to help them leave poverty."

NGO-fostered hype notwithstanding, 70% of all children work within their family unit, in agriculture. Less than 1 percent are employed in mining and another 2 percent in construction. Again contrary to NGO-proffered panaceas, education is not a solution. Millions graduate every year in developing countries - 100,000 in Morocco alone. But unemployment reaches more than one third of the workforce in places such as Macedonia.

Children at work may be harshly treated by their supervisors but at least they are kept off the far more menacing streets. Some kids even end up with a skill and are rendered employable.

"The Economist" sums up the shortsightedness, inaptitude, ignorance, and self-centeredness of NGO's neatly:

"Suppose that in the remorseless search for profit, multinationals pay sweatshop wages to their workers in developing countries. Regulation forcing them to pay higher wages is demanded... The NGOs, the reformed multinationals and enlightened rich-country governments propose tough rules on third-world factory wages, backed up by trade barriers to keep out imports from countries that do not comply. Shoppers in the West pay more - but willingly, because they know it is in a good cause. The NGOs declare another victory. The companies, having shafted their third-world competition and protected their domestic markets, count their bigger profits (higher wage costs notwithstanding). And the third-world workers displaced from locally owned factories explain to their children why the West's new deal for the victims of capitalism requires them to starve."

NGO's in places like Sudan, Somalia, Myanmar, Bangladesh, Pakistan, Albania, and Zimbabwe have become the preferred venue for Western aid - both humanitarian and financial - development financing, and emergency relief. According to the Red Cross, more money goes through NGO's than through the World Bank. Their iron grip on food, medicine, and funds rendered them an alternative government - sometimes as venal and graft-stricken as the one they replace.

Local businessmen, politicians, academics, and even journalists form NGO's to plug into the avalanche of Western largesse. In the process, they award themselves and their relatives with salaries, perks, and preferred access to Western goods and credits. NGO's have evolved into vast networks of patronage in Africa, Latin America, and Asia.

NGO's chase disasters with a relish. More than 200 of them opened shop in the aftermath of the Kosovo refugee crisis in 1999-2000. Another 50 supplanted them during the civil unrest in Macedonia a year later. Floods, elections, earthquakes, wars - constitute the cornucopia that feed the NGO's.

NGO's are proponents of Western values - women's lib, human rights, civil rights, the protection of minorities, freedom, equality. Not everyone finds this liberal menu palatable. The arrival of NGO's often provokes social polarization and cultural clashes. Traditionalists in Bangladesh, nationalists in Macedonia, religious zealots in Israel, security forces everywhere, and almost all politicians find NGO's irritating and bothersome.

The British government ploughs well over $30 million a year into "Proshika", a Bangladeshi NGO. It started as a women's education outfit and ended up as a restive and aggressive women empowerment political lobby group with budgets to rival many ministries in this impoverished, Moslem and patriarchal country.

Other NGO's - fuelled by $300 million of annual foreign infusion - evolved from humble origins to become mighty coalitions of full-time activists. NGO's like the Bangladesh Rural Advancement Committee (BRAC) and

the Association for Social Advancement mushroomed even as their agendas have been fully implemented and their goals exceeded. It now owns and operates 30,000 schools.

This mission creep is not unique to developing countries. As Parkinson discerned, organizations tend to self-perpetuate regardless of their proclaimed charter. Remember NATO? Human rights organizations, like Amnesty, are now attempting to incorporate in their ever-expanding remit "economic and social rights" - such as the rights to food, housing, fair wages, potable water, sanitation, and health provision. How insolvent countries are supposed to provide such munificence is conveniently overlooked.

"The Economist" reviewed a few of the more egregious cases of NGO imperialism.

Human Rights Watch lately offered this tortured argument in favor of expanding the role of human rights NGO's: "The best way to prevent famine today is to secure the right to free expression - so that misguided government policies can be brought to public attention and corrected before food shortages become acute." It blatantly ignored the fact that respect for human and political rights does not fend off natural disasters and disease. The two countries with the highest incidence of AIDS are Africa's only two true democracies - Botswana and South Africa.

The Centre for Economic and Social Rights, an American outfit, "challenges economic injustice as a violation of international human rights law". Oxfam pledges to support the "rights to a sustainable livelihood, and the rights and capacities to participate in societies and make

positive changes to people's lives". In a poor attempt at emulation, the WHO published an inanely titled document - "A Human Rights Approach to Tuberculosis".

NGO's are becoming not only all-pervasive but more aggressive. In their capacity as "shareholder activists", they disrupt shareholders meetings and act to actively tarnish corporate and individual reputations. Friends of the Earth worked hard four years ago to instigate a consumer boycott against Exxon Mobil - for not investing in renewable energy resources and for ignoring global warming. No one - including other shareholders - understood their demands. But it went down well with the media, with a few celebrities, and with contributors.

As "think tanks", NGO's issue partisan and biased reports. The International Crisis Group published a rabid attack on the then incumbent government of Macedonia, days before an election, relegating the rampant corruption of its predecessors - whom it seemed to be tacitly supporting - to a few footnotes. On at least two occasions - in its reports regarding Bosnia and Zimbabwe - ICG has recommended confrontation, the imposition of sanctions, and, if all else fails, the use of force. Though the most vocal and visible, it is far from being the only NGO that advocates "just" wars.

The ICG is a repository of former heads of state and has-been politicians and is renowned (and notorious) for its prescriptive - some say meddlesome - philosophy and tactics. "The Economist" remarked sardonically: "To say (that ICG) is 'solving world crises' is to risk underestimating its ambitions, if overestimating its achievements."

NGO's have orchestrated the violent showdown during the trade talks in Seattle in 1999 and its repeat performances throughout the world. The World Bank was so intimidated by the riotous invasion of its premises in the NGO-choreographed "Fifty Years is Enough" campaign of 1994, that it now employs dozens of NGO activists and let NGO's determine many of its policies.

NGO activists have joined the armed - though mostly peaceful - rebels of the Chiapas region in Mexico. Norwegian NGO's sent members to forcibly board whaling ships. In the USA, anti-abortion activists have murdered doctors. In Britain, animal rights zealots have both assassinated experimental scientists and wrecked property.

Birth control NGO's carry out mass sterilizations in poor countries, financed by rich country governments in a bid to stem immigration. NGO's buy slaves in Sudan thus encouraging the practice of slave hunting throughout sub-Saharan Africa. Other NGO's actively collaborate with "rebel" armies - a euphemism for terrorists.

NGO's lack a synoptic view and their work often undermines efforts by international organizations such as the UNHCR and by governments. Poorly-paid local officials have to contend with crumbling budgets as the funds are diverted to rich expatriates doing the same job for a multiple of the cost and with inexhaustible hubris.

This is not conducive to happy co-existence between foreign do-gooders and indigenous governments. Sometimes NGO's seem to be an ingenious ploy to solve Western unemployment at the expense of down-trodden

natives. This is a misperception driven by envy and avarice.

But it is still powerful enough to foster resentment and worse. NGO's are on the verge of provoking a ruinous backlash against them in their countries of destination. That would be a pity. Some of them are doing indispensable work. If only they were a wee more sensitive and somewhat less ostentatious. But then they wouldn't be NGO's, would they?

Interview granted to Revista Terra, Brazil, September 2005

Q. NGOs are growing quickly in Brazil due to the discredit politicians and governmental institutions face after decades of corruption, elitism etc. The young people feel they can do something concrete working as activists in a NGOs. Isn't that a good thing? What kind of dangers someone should be aware before enlisting himself as a supporter of a NGO?

A. One must clearly distinguish between NGOs in the sated, wealthy, industrialized West - and (the far more numerous) NGOs in the developing and less developed countries.

Western NGOs are the heirs to the Victorian tradition of "White Man's Burden". They are missionary and charity-orientated. They are designed to spread both aid (food, medicines, contraceptives, etc.) and Western values. They closely collaborate with Western governments and institutions against local governments and institutions.

They are powerful, rich, and care less about the welfare of the indigenous population than about "universal" principles of ethical conduct.

Their counterparts in less developed and in developing countries serve as substitutes to failed or dysfunctional state institutions and services. They are rarely concerned with the furthering of any agenda and more preoccupied with the well-being of their constituents, the people.

Q. Why do you think many NGO activists are narcissists and not altruists? What are the symptoms you identify on them?

A. In both types of organizations - Western NGOs and NGOs elsewhere - there is a lot of waste and corruption, double-dealing, self-interested promotion, and, sometimes inevitably, collusion with unsavory elements of society. Both organizations attract narcissistic opportunists who regards NGOs as venues of upward social mobility and self-enrichment. Many NGOs serve as sinecures, "manpower sinks", or "employment agencies" - they provide work to people who, otherwise, are unemployable. Some NGOs are involved in political networks of patronage, nepotism, and cronyism.

Narcissists are attracted to money, power, and glamour. NGOs provide all three. The officers of many NGOs draw exorbitant salaries (compared to the average salary where the NGO operates) and enjoy a panoply of work-related perks. Some NGOs exert a lot of political influence and hold power over the lives of millions of aid recipients. NGOs and their workers are, therefore, often in the limelight and many NGO activists have become minor celebrities and frequent guests in talk shows and such.

Even critics of NGOs are often interviewed by the media (laughing).

Finally, a slim minority of NGO officers and workers are simply corrupt. They collude with venal officials to enrich themselves. For instance: during the Kosovo crisis in 1999, NGO employees sold in the open market food, blankets, and medical supplies intended for the refugees.

Q. How can one choose between good and bad NGOs?

A. There are a few simple tests:

1. What part of the NGO's budget is spent on salaries and perks for the NGO's officers and employees? The less the better.

2. Which part of the budget is spent on furthering the aims of the NGO and on implementing its promulgated programs? The more the better.

3. What portion of the NGOs resources is allocated to public relations and advertising? The less the better.

4. What part of the budget is contributed by governments, directly or indirectly? The less the better.

5. What do the alleged beneficiaries of the NGO's activities think of the NGO? If the NGO is feared, resented, and hated by the local denizens, then something is wrong!

6. How many of the NGO's operatives are in the field, catering to the needs of the NGO's ostensible constituents? The more the better.

7. Does the NGO own or run commercial enterprises? If it does, it is a corrupt and compromised NGO involved in conflicts of interest.

Q. The way you describe, many NGO are already more powerful and politically influential than many governments. What kind of dangers this elicits? Do you think they are a pest that need control? What kind of control would that be?

A. The voluntary sector is now a cancerous phenomenon. NGOs interfere in domestic politics and take sides in election campaigns. They disrupt local economies to the detriment of the impoverished populace. They impose alien religious or Western values. They justify military interventions. They maintain commercial interests which compete with indigenous manufacturers. They provoke unrest in many a place. And this is a partial list.

The trouble is that, as opposed to most governments in the world, NGOs are authoritarian. They are not elected institutions. They cannot be voted down. The people have no power over them. Most NGOs are ominously and tellingly secretive about their activities and finances.

Light disinfects. The solution is to force NGOs to become both democratic and accountable. All countries and multinational organizations (such as the UN) should pass laws and sign international conventions to regulate the formation and operation of NGOs.

NGOs should be forced to democratize. Elections should be introduced on every level. All NGOs should hold "annual stakeholder meetings" and include in these gatherings representatives of the target populations of the

NGOs. NGO finances should be made completely transparent and publicly accessible. New accounting standards should be developed and introduced to cope with the current pecuniary opacity and operational double-speak of NGOs.

Q. It seems that many values carried by NGO are typically modern and Western. What kind of problems this creates in more traditional and culturally different countries?

A. Big problems. The assumption that the West has the monopoly on ethical values is undisguised cultural chauvinism. This arrogance is the 21st century equivalent of the colonialism and racism of the 19th and 20th century. Local populations throughout the world resent this haughty presumption and imposition bitterly.

As you said, NGOs are proponents of modern Western values - democracy, women's lib, human rights, civil rights, the protection of minorities, freedom, equality. Not everyone finds this liberal menu palatable. The arrival of NGOs often provokes social polarization and cultural clashes.

The Wages of Science

By: Dr. Sam Vaknin

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In the United States, Congress approved, In February 2003, increases in the 2003 budgets of both the National Institutes of Health and National Science Foundation. America is not alone in - vainly - trying to compensate for imploding capital markets and risk-averse financiers.

In 1999, chancellor Gordon Brown inaugurated a $1.6 billion program of "upgrading British science" and commercializing its products. This was on top of $1 billion invested between 1998-2002. The budgets of the Medical Research Council and the Biotechnology and Biological Sciences Research Council were quadrupled overnight.

The University Challenge Fund was set to provide $100 million in seed money to cover costs related to the hiring of managerial skills, securing intellectual property, constructing a prototype or preparing a business plan. Another $30 million went to start-up funding of high-tech, high-risk companies in the UK.

According to the United Nations Development Programme (UNDP), the top 29 industrialized nations invest in R&D more than $600 billion a year. The bulk of this capital is provided by the private sector. In the United Kingdom, for instance, government funds are dwarfed by private financing, according to the British Venture Capital Association. More than $80 billion have been ploughed into 23,000 companies since 1983, about half of them in

the hi-tech sector. Three million people are employed in these firms. Investments surged by 36 percent in 2001 to $18 billion.

But this British exuberance is a global exception.

Even the - white hot - life sciences field suffered an 11 percent drop in venture capital investments in 2002, reports the MoneyTree Survey. According to the Ernst & Young 2002 Alberta Technology Report released in March 2003, the Canadian hi-tech sector is languishing with less than $3 billion invested in 2002 in seed capital - this despite generous matching funds and tax credits proffered by many of the provinces as well as the federal government.

In Israel, venture capital plunged to $600 million in 2002 - one fifth its level in 2000. Aware of this cataclysmic reversal in investor sentiment, the Israeli government set up 24 hi-tech incubators. But these are able merely to partly cater to the pecuniary needs of less than 20 percent of the projects submitted.

As governments pick up the monumental slack created by the withdrawal of private funding, they attempt to rationalize and economize.

The New Jersey Commission of Health Science Education and Training recently proposed to merge the state's three public research universities. Soaring federal and state budget deficits are likely to exert added pressure on the already strained relationship between academe and state - especially with regards to research priorities and the allocation of ever-scarcer resources.

This friction is inevitable because the interaction between technology and science is complex and ill-understood. Some technological advances spawn new scientific fields - the steel industry gave birth to metallurgy, computers to computer science and the transistor to solid state physics. The discoveries of science also lead, though usually circuitously, to technological breakthroughs - consider the examples of semiconductors and biotechnology.

Thus, it is safe to generalize and say that the technology sector is only the more visible and alluring tip of the drabber iceberg of research and development. The military, universities, institutes and industry all over the world plough hundreds of billions annually into both basic and applied studies. But governments are the most important sponsors of pure scientific pursuits by a long shot.

Science is widely perceived as a public good - its benefits are shared. Rational individuals would do well to sit back and copy the outcomes of research - rather than produce widely replicated discoveries themselves. The government has to step in to provide them with incentives to innovate.

Thus, in the minds of most laymen and many economists, science is associated exclusively with publicly-funded universities and the defense establishment. Inventions such as the jet aircraft and the Internet are often touted as examples of the civilian benefits of publicly funded military research. The pharmaceutical, biomedical, information technology and space industries, for instance - though largely private - rely heavily on the fruits of nonrivalrous (i.e. public domain) science sponsored by the state.

The majority of 501 corporations surveyed by the Department of Finance and Revenue Canada in 1995-6 reported that government funding improved their internal cash flow - an important consideration in the decision to undertake research and development. Most beneficiaries claimed the tax incentives for seven years and recorded employment growth.

In the absence of efficient capital markets and adventuresome capitalists, some developing countries have taken this propensity to extremes. In the Philippines, close to 100 percent of all R&D is government-financed. The meltdown of foreign direct investment flows - they declined by nearly three fifths since 2000 - only rendered state involvement more indispensable.

But this is not a universal trend. South Korea, for instance, effected a successful transition to private venture capital which now - even after the Asian turmoil of 1997 and the global downturn of 2001 - amounts to four fifths of all spending on R&D.

Thus, supporting ubiquitous government entanglement in science is overdoing it. Most applied R&D is still conducted by privately owned industrial outfits. Even "pure" science - unadulterated by greed and commerce - is sometimes bankrolled by private endowments and foundations.

Moreover, the conduits of government involvement in research, the universities, are only weakly correlated with growing prosperity. As Alison Wolf, professor of education at the University of London elucidates in her seminal tome "Does Education Matter? Myths about Education and Economic Growth", published in 2002,

extra years of schooling and wider access to university do not necessarily translate to enhanced growth (though technological innovation clearly does).

Terence Kealey, a clinical biochemist, vice-chancellor of the University of Buckingham in England and author of "The Economic Laws of Scientific Research", is one of a growing band of scholars who dispute the intuitive linkage between state-propped science and economic progress. In an interview published in March 2003 by Scientific American, he recounted how he discovered that:

"Of all the lead industrial countries, Japan - the country investing least in science - was growing fastest. Japanese science grew spectacularly under laissez-faire. Its science was actually purer than that of the U.K. or the U.S. The countries with the next least investment were France and Germany, and were growing next fastest. And the countries with the maximum investment were the U.S., Canada and U.K., all of which were doing very badly at the time."

The Economist concurs: "it is hard for governments to pick winners in technology." Innovation and science sprout in - or migrate to - locations with tough laws regarding intellectual property rights, a functioning financial system, a culture of "thinking outside the box" and a tradition of excellence.

Government can only remove obstacles - especially red tape and trade tariffs - and nudge things in the right direction by investing in infrastructure and institutions. Tax incentives are essential initially. But if the authorities meddle, they are bound to ruin science and be rued by scientists.

Still, all forms of science funding - both public and private - are lacking.

State largesse is ideologically constrained, oft-misallocated, inefficient and erratic (the recent examples being stem-cell and cloning research in the USA). In the United States, mega projects, such as the Superconducting Super Collider, with billions already sunk in, have been abruptly discontinued as were numerous other defense-related schemes. Additionally, some knowledge gleaned in government-funded research is barred from the public domain.

But industrial money can be worse. It comes with strings attached. The commercially detrimental results of drug studies have been suppressed by corporate donors on more than one occasion, for instance. Commercial entities are unlikely to support basic research as a public good, ultimately made available to their competitors as a "spillover benefit". This understandable reluctance stifles innovation.

There is no lack of suggestions on how to square this circle.

Quoted in the Philadelphia Business Journal, Donald Drakeman, CEO of the Princeton biotech company Medarex, proposed In February 2003 to encourage pharmaceutical companies to shed technologies they have chosen to shelve: "Just like you see little companies coming out of the research being conducted at Harvard and MIT in Massachusetts and Stanford and Berkley in California, we could do it out of Johnson & Johnson and Merck."

This would be the corporate equivalent of the Bayh-Dole Act of 1980. The statute made both academic institutions and researchers the owners of inventions or discoveries financed by government agencies. This unleashed a wave of unprecedented self-financing entrepreneurship.

In the two decades that followed, the number of patents registered to universities increased tenfold and they spun off more than 2200 firms to commercialize the fruits of research. In the process, they generated $40 billion in gross national product and created 260,000 jobs.

None of this was government financed - though, according to The Economist's Technology Quarterly, $1 in research usually requires up to $10,000 in capital to get to market. This suggests a clear and mutually profitable division of labor - governments should picks up the tab for basic research, private capital should do the rest, stimulated by the transfer of intellectual property from state to entrepreneurs.

But this raises a host of contentious issues.

Such a scheme may condition industry to depend on the state for advances in pure science, as a kind of hidden subsidy. Research priorities are bound to be politicized and lead to massive misallocation of scarce economic resources through pork barrel politics and the imposition of "national goals". NASA, with its "let's put a man on the moon (before the Soviets do)" and the inane International Space Station is a sad manifestation of such dangers.

Science is the only public good that is produced by individuals rather than collectives. This inner conflict is difficult to resolve. On the one hand, why should the

public purse enrich entrepreneurs? On the other hand, profit-driven investors seek temporary monopolies in the form of intellectual property rights. Why would they share this cornucopia with others, as pure scientists are compelled to do?

The partnership between basic research and applied science has always been an uneasy one. It has grown more so as monetary returns on scientific insight have soared and as capital available for commercialization multiplied. The future of science itself is at stake.

Were governments to exit the field, basic research would likely crumble. Were they to micromanage it - applied science and entrepreneurship would suffer. It is a fine balancing act and, judging by the state of both universities and startups, a precarious one as well.

Also Read:

The Solow Paradox

The Internet in Countries in Transition

Leapfrogging Transition - Technology and Post Communism

The Revolt of the Poor - Intellectual Property Rights

Leapfrogging to Cellular

Transition in Context

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

The implosion of communism was often presented - not least by Francis Fukuyama in his celebrated "The end of History" - as the incontrovertible victory of economic liberalism over Marxism. In truth, the battle raged for seven decades between two strands of socialism.

Social democracy was conceived in the 19th century as a benign alternative to the revolutionary belligerence of Marx and Engels. It sparred with communism - the virulent and authoritarian species of socialism that Marxism has mutated into. European history between 1946-1989 was not a clash of diametrically opposed ideologies - but an internecine war between two competing interpretations of the same doctrine.

Both contestants boasted a single market - the European Union and COMECON, respectively. In both the state was heavily involved in the economy and owned a sizable chunk of the means of production, though in the Soviet Union and its satellites, the state was the economy.

Both sported well-developed, entrenched and all-pervasive welfarism. Both east and west were stiflingly bureaucratic, statist, profoundly illiberal and comprehensively regulated. Crucially, the west was economically successful and democratic while Russia evolved into a paranoid nightmare of inefficiency and gloom. Hence its demise.

When communism crumbled, all of Europe - east and west - experienced a protracted and agonizing transition. Privatization, deregulation, competition and liberalization swept across both parts of the continent. The irony is that central and east Europe's adaptation was more farfetched and alacritous than the west's.

The tax burden - a measure of the state's immersion in the economy - still equals more than two fifths of gross domestic product in all members of the European Union. The countries in transition - from Russia to Bulgaria and from Estonia to Hungary - are way more economically liberal today than France, Germany and even Britain - let alone the nations of Scandinavia.

An increasingly united Europe has opted for "capitalism with a human face" - the democratic isotope of socialism (sometimes with a touch of corporatism). But it now faces the challenge of the Anglo-Saxon variety of the free market. Nowhere is this ideological altercation more evident than in the countries formerly behind the iron curtain.

Long before Enron and World.com, the tech bubble and Wall Street's accounting frauds and pernicious conflicts of interest - transition has exposed the raw and vulnerable nerves running through the foundations of Anglo-Saxon capitalism. Eastern Europe is a monument to the folly of unmitigated and unbridled freemarketry.

Transition has given economists a rare chance to study capitalism and economic policies from scratch. What's more important - free markets, institutions, education, democracy, or capital? Central and east Europe became a giant lab in which to peruse policies pertaining to

criminality, private property ownership, entrepreneurship, privatization, income distribution, employment, inflation and social welfare.

Superficially, the debate revolved around the scientific rigor and usefulness - or lack thereof - of the "Washington Consensus". Opposing monetary and fiscal policies, free trade versus protectionism, capital controls and convertibility - these occupied the minds and writings of all manner of economic and development "experts" in the first decade after the fall of the Berlin Wall.

Yet, deep underneath, transition - perhaps because it was so thoroughly botched - taught us unforgettable lessons about markets and the way they work, namely that "objective", "mechanical" capitalism is a mirage.

Perhaps the most important moral is that, like all other economic processes - transition is, mostly, in the mind. Successful capitalism requires education and experience. The blind in east Europe were led by the one-eyed. Capitalism was presented - especially by Western protagonists of "shock therapy" - as a deus ex machina, a panacea, guaranteed to transport the region's derelict economies and destitute people to the kitschy glamour of the tacky soap operas that flooded their television screens.

Bedazzled by the alleged omnipotence and omniscience of the "invisible hand", no one predicted the utter meltdown that ensued: the mass unemployment, the ubiquitous poverty, the glaring abyss between new rich and always poor, or the skyrocketing prices even as income plummeted. Nor were the good parts of the new economic regime understood or explained: private property, personal profit, incentives.

The dangers of transition were flippantly ignored and the peoples of central and eastern Europe were treated as mere guinea pigs by eager Western economists on fat retainers. Crime was allowed to hijack important parts of the post-communist economic agenda, such as the privatization of state assets. Kleptocracies subsumed the newborn states. Social safety nets crumbled.

In their vainglorious attempt to pose as accurate and, thus, "respectable", scientists, economists refused to admit that capitalism is not merely a compendium of algorithms and formulas - but mainly a state of mind. It is an all-encompassing, holistic, worldview, a set of values, a code of conduct, a list of goals, aspirations, fantasies and preferences and a catalog of moral do's and don'ts. This is where transition, micromanaged by these "experts" failed.

The mere exposure to free markets was supposed to unleash innovation and entrepreneurship in the long-oppressed populations of east Europe. When this recipe bombed, the West tried to engender a stable, share-holding, business-owning, middle class by financing small size enterprises. It then proceeded to strengthen and transform indigenous institutions. None of it worked. Transition had no grassroots support and its prescriptive - and painful - nature caused wide resentment and obstruction.

The process of transition informed us that markets, left to their own devices, unregulated and unharnessed, yield market failures, anomies, crime and the misallocation of economic resources. The invisible hand must be firmly clasped and guided by functioning and impartial institutions, an ingrained culture of entrepreneurship and

fair play, classes of stakeholders, checks and balances and good governance on all levels.

Wealth, behavioral standards, initiative, risk seeking - do not always "trickle down". To get rid of central planning - more central planning is required. The state must counteract numerous market failures , provide some public goods, establish and run institutions, tutor everyone, baby-sit venture capitalists, enhance innovation, enforce laws and standards, maintain safety, attract foreign investment, cope with unemployment and, at times, establish and operate markets for goods and services. This omnipresence runs against the grain of Anglo-Saxon liberalism.

Moreover, such an expanded role of the state sits uncomfortably with complete political liberty. That capitalism is inextricably linked to democracy is a well-meaning fallacy - or a convenient pretext for geopolitical power grabs. East Europe's transition stalled partly due to political anarchy. China's transition, by comparison, is spectacular - inflated figures notwithstanding - because it chose a gradual approach to liberalization: first economic, then political.

Last but not least, pure, "American", capitalism and pure Marxism have more in common than either would care to admit. Both are utopian. Both are materialistic. Both are doctrinaire. Both believe that "it's a jungle out there". Both seek social mobility through control of the means of production. Both claim to be egalitarian forms of social engineering and are civilizing, millennial, universal, missionary pseudo-religions.

The denizens of the nether regions of central and eastern Europe have been the victims of successive economic utopias. They fear and suspect ideological purity. They have been conditioned by the authoritarian breed of socialism they endured, really little more than an overblown conspiracy theory, a persecutory delusion which invariably led to Stalinesque paranoid backlashes. Indeed, Stalin was more representative of communism than any other leader before or after him.

The Economist summed this semipternal mass hysteria neatly thus:

"The core idea that economic structure determines everything has been especially pernicious ... The idea that ... rights have a deeper moral underpinning is an illusion. Morality itself is an illusion., just another weapon of the ruling class. As Gyorgy Lukasc put it, 'Communist ethics makes it the highest duty to act wickedly ... This is the greatest sacrifice revolution asks from us.' Human agency is null: we are mere dupes of 'the system', until we repudiate it outright. What goes for ethics also goes for history, literature, the rest of the humanities and the social sciences. The 'late Marxist' sees them all ... not as subjects for disinterested intellectual inquiry but as forms of social control."

Many in Europe feel that the above paragraph might as well have been written about Anglo-Saxon capitalism. Reduced to bare-bones materialism, it is amoral, if not immoral. It upholds natural selection instead of ethics, prefers money to values, wealth formation to social solidarity.

Predators everywhere - Russian oligarchs, central European cronies, Balkan kleptocrats, east European managers - find this gratifying. All others regard capitalism as yet another rigid and unforgiving creed, this time imposed from Washington by the IMF and multinationals rather as communism was enjoined from Moscow by the Kremlin.

With eight of the former communist countries now new members of the European Union - albeit second rate ones - transition is entering is most fascinating phase. Exposed hitherto to American teachings and practices, the new members are forced to adhere to a whole different rule book - all 82,000 pages of it.

European "capitalism" is really a hybrid of the socialist and liberal teachings of the 19th century. It emphasizes consensus, community, solidarity, equality, stability and continuity. It places these values above profitability, entrepreneurship, competition, individualism, mobility, size, litigation and the use of force. Europeans firmly believe that the workings of the market should be tampered with and that it is the responsibility of the state to see to it that no one gets left behind or trampled upon.

European stakeholder capitalism is paternalistic and inclusive. Employees, employers, the government, communities and suppliers are partners in the decision making process or privies to it. Relics of past models of the market economy still abound in this continent: industrial policy, Keynesian government spending, development aid, export and production subsidies, trade protectionism, the state-sanctioned support of nascent and infant industries. Mild corporatism is rife and manifest in central wage bargaining.

For some countries - notably Estonia - joining the EU has translated into a de-liberalized and re-regulated future. Others find the EU's brand of the market a comfortable and dimly familiar middle ground between America's harsh prescriptions and communism's delusional model. The EU's faceless and Kafkaesque bureaucracy in Brussels - Moscow revisited - should prove to be a relief compared to the IMF's ruffians.

The EU is evolving into a land empire, albeit glacially. The polities of central and eastern Europe were always constituents of empires - reluctantly or by choice. In some ways they are better suited to form an "ever closer union" than the more veteran members.

Lessons in Transition from Communism to Capitalism

By:* *Sam Vaknin, Ph.D.

Question: What have been the most successful approaches to attracting direct foreign investments: offering prospective investors tax breaks and similar benefits, or improving the overall investment climate of the country?

Empirical research has demonstrated that investors are not lured by tax breaks and monetary or fiscal investment incentives. They will take advantage of existing schemes (and ask for more, pitting one country against another). But these will never be the determining factors in their decision making. They are much more likely to be swayed by the level of protection of property rights, degree of corruption, transparency, state of the physical infrastructure, education and knowledge of foreign languages and "mission critical skills", geographical

position and proximity to markets and culture and mentality.

Question: What have been successful techniques for countries to improve their previously negative investment image?

The politicians of the country need to be seen to be transparently, non-corruptly encouraging business, liberalizing and protecting the property rights of investors. One real, transparent (for instance through international tender) privatization; one case where the government supported a foreigner against a local; one politician severely punished for corruption and nepotism; one fearless news medium – change a country's image.

Question: Should there be restrictions on repatriation of foreign investment capital (such restrictions could prevent an investment panic, but at the same time they negatively affect investor's confidence)?

Short term and long term capital flows are two disparate phenomena with very little in common. The former is speculative and technical in nature and has very little to do with fundamental realities. The latter is investment oriented and committed to the increasing of the welfare and wealth of its new domicile. It is, therefore, wrong to talk about "global capital flows". There are investments (including even long term portfolio investments and venture capital) – and there is speculative, "hot" money. While "hot money" is very useful as a lubricant on the wheels of liquid capital markets in rich countries – it can be destructive in less liquid, immature economies or in economies in transition.

The two phenomena should be accorded a different treatment. While long term capital flows should be completely liberalized, encouraged and welcomed – the short term, "hot money" type should be controlled and even discouraged. The introduction of fiscally-oriented capital controls (as Chile has implemented) is one possibility. The less attractive Malaysian model springs to mind. It is less attractive because it penalizes both the short term and the long term financial players. But it is clear that an important and integral part of the new International Financial Architecture MUST be the control of speculative money in pursuit of ever higher yields. There is nothing inherently wrong with high yields – but the capital markets provide yields connected to economic depression and to price collapses through the mechanism of short selling and through the usage of certain derivatives. This aspect of things must be neutered or at least countered.

Question: What approach has been most useful in best serving the needs of small businesses: through private business support firms, business associations, or by government agencies?

It depends where. In Israel (until the beginning of the 90s), South Korea and Japan (until 1997) – the state provided the necessary direction and support. In the USA – the private sector invented its own enormously successful support structures (such as venture capital funds). The right approach depends on the characteristics of the country in question: how entrepreneurial are its citizens, how accessible are credits and microcredits to SMEs, how benign are the bankruptcy laws (which always reflect a social ethos), how good is its physical infrastructure, how educated are its citizens and so on.

Question: How might collective action problems among numerous and dispersed small and medium entrepreneurs best be dealt with?

It is a strange question to ask in the age of cross-Atlantic transportation, telecommunication and computer networks (such as the Internet). Geographical dispersion is absolutely irrelevant. The problem is in the diverging self-interests of the various players. The more numerous they are, the more niche-orientated, the smaller – the lesser the common denominator. A proof of this fragmentation is the declining power of cartels – trade unions, on the one hand and business trusts, monopolies and cartels, on the other hand. The question is not whether this can be overcome but whether it SHOULD be overcome. Such diversity of interests is the lifeblood of the modern market economy which is based on conflicts and disagreements as much as it is based on the ability to ultimately compromise and reach a consensus.

What needs to be done centrally is public relations and education. People, politicians, big corporations need to be taught the value and advantages of small business, of entrepreneurship and intrapreneurship. And new ways to support this sector need to be constantly devised.

Question: How might access of small business to start-up capital and other resources best be facilitated?

The traditional banks all over the world failed at maintaining the balancing act between risk and reward. The result was a mega shift to the capital markets. Stock exchanges for trading the shares of small and technology companies sprang all over the world (NASDAQ in the USA, the former USM in London, the Neuemarkt in

Germany and so on). Investment and venture capital funds became the second most important source quantitatively. They not only funded budding entrepreneurs but also coached them and saw them through the excruciating and dangerous research and development phases.

But these are rich world solutions.

An important development is the invention of "third world solutions" such as microcredits granted to the agrarian or textile sectors, mainly to women and which involve the whole community.

Question: Women start one-third of new businesses in the region: now can this contribution to economic growth be further stimulated?

By providing them with the conditions to work and exercise their entrepreneurial skills. By establishing day care centres for their children. By providing microcredits (women have proven to be inordinately reliable borrowers). By giving them tax credits. By allowing or encouraging flexitime or part time work or work from home. By recognizing the home as the domicile of business (especially through the appropriate tax laws). By equalizing their legal rights and their pay. By protecting them from sexual or gender harassment.

The Morality of Child Labor

By: Dr. Sam Vaknin

Also published by United Press International (UPI)

From the comfort of their plush offices and five to six figure salaries, self-appointed NGO's often denounce child labor as their employees rush from one five star hotel to another, $3000 subnotebooks and PDA's in hand. The hairsplitting distinction made by the ILO between "child work" and "child labor" conveniently targets impoverished countries while letting its budget contributors - the developed ones - off-the-hook.

Reports regarding child labor surface periodically. Children crawling in mines, faces ashen, body deformed. The agile fingers of famished infants weaving soccer balls for their more privileged counterparts in the USA. Tiny figures huddled in sweatshops, toiling in unspeakable conditions. It is all heart-rending and it gave rise to a veritable not-so-cottage industry of activists, commentators, legal eagles, scholars, and opportunistically sympathetic politicians.

Ask the denizens of Thailand, sub-Saharan Africa, Brazil, or Morocco and they will tell you how they regard this altruistic hyperactivity - with suspicion and resentment. Underneath the compelling arguments lurks an agenda of trade protectionism, they wholeheartedly believe. Stringent - and expensive - labor and environmental provisions in international treaties may well be a ploy to fend off imports based on cheap labor and the competition they wreak on well-ensconced domestic industries and their political stooges.

This is especially galling since the sanctimonious West has amassed its wealth on the broken backs of slaves and kids. The 1900 census in the USA found that 18 percent of all children - almost two million in all - were gainfully employed. The Supreme Court ruled unconstitutional laws banning child labor as late as 1916. This decision was overturned only in 1941.

The GAO published a report last week in which it criticized the Labor Department for paying insufficient attention to working conditions in manufacturing and mining in the USA, where many children are still employed. The Bureau of Labor Statistics pegs the number of working children between the ages of 15-17 in the USA at 3.7 million. One in 16 of these worked in factories and construction. More than 600 teens died of work-related accidents in the last ten years.

Child labor - let alone child prostitution, child soldiers, and child slavery - are phenomena best avoided. But they cannot and should not be tackled in isolation. Nor should underage labor be subjected to blanket castigation. Working in the gold mines or fisheries of the Philippines is hardly comparable to waiting on tables in a Nigerian or, for that matter, American restaurant.

There are gradations and hues of child labor. That children should not be exposed to hazardous conditions, long working hours, used as means of payment, physically punished, or serve as sex slaves is commonly agreed. That they should not help their parents plant and harvest may be more debatable.

As Miriam Wasserman observes in "Eliminating Child Labor", published in the Federal Bank of Boston's

"Regional Review", second quarter of 2000, it depends on "family income, education policy, production technologies, and cultural norms." About a quarter of children under-14 throughout the world are regular workers. This statistic masks vast disparities between regions like Africa (42 percent) and Latin America (17 percent).

In many impoverished locales, child labor is all that stands between the family unit and all-pervasive, life threatening, destitution. Child labor declines markedly as income per capita grows. To deprive these bread-earners of the opportunity to lift themselves and their families incrementally above malnutrition, disease, and famine - is an apex of immoral hypocrisy.

Quoted by "The Economist", a representative of the much decried Ecuador Banana Growers Association and Ecuador's Labor Minister, summed up the dilemma neatly: "Just because they are under age doesn't mean we should reject them, they have a right to survive. You can't just say they can't work, you have to provide alternatives."

Regrettably, the debate is so laden with emotions and self-serving arguments that the facts are often overlooked.

The outcry against soccer balls stitched by children in Pakistan led to the relocation of workshops ran by Nike and Reebok. Thousands lost their jobs, including countless women and 7000 of their progeny. The average family income - anyhow meager - fell by 20 percent. Economists Drusilla Brown, Alan Deardorif, and Robert Stern observe wryly:

"While Baden Sports can quite credibly claim that their soccer balls are not sewn by children, the relocation of their production facility undoubtedly did nothing for their former child workers and their families."

Such examples abound. Manufacturers - fearing legal reprisals and "reputation risks" (naming-and-shaming by overzealous NGO's) - engage in preemptive sacking. German garment workshops fired 50,000 children in Bangladesh in 1993 in anticipation of the American never-legislated Child Labor Deterrence Act.

Quoted by Wasserstein, former Secretary of Labor, Robert Reich, notes:

"Stopping child labor without doing anything else could leave children worse off. If they are working out of necessity, as most are, stopping them could force them into prostitution or other employment with greater personal dangers. The most important thing is that they be in school and receive the education to help them leave poverty."

Contrary to hype, three quarters of all children work in agriculture and with their families. Less than 1 percent work in mining and another 2 percent in construction. Most of the rest work in retail outlets and services, including "personal services" - a euphemism for prostitution. UNICEF and the ILO are in the throes of establishing school networks for child laborers and providing their parents with alternative employment.

But this is a drop in the sea of neglect. Poor countries rarely proffer education on a regular basis to more than two thirds of their eligible school-age children. This is

especially true in rural areas where child labor is a widespread blight. Education - especially for women - is considered an unaffordable luxury by many hard-pressed parents. In many cultures, work is still considered to be indispensable in shaping the child's morality and strength of character and in teaching him or her a trade.

"The Economist" elaborates:

"In Africa children are generally treated as mini-adults; from an early age every child will have tasks to perform in the home, such as sweeping or fetching water. It is also common to see children working in shops or on the streets. Poor families will often send a child to a richer relation as a housemaid or houseboy, in the hope that he will get an education."

A solution recently gaining steam is to provide families in poor countries with access to loans secured by the future earnings of their educated offspring. The idea - first proposed by Jean-Marie Baland of the University of Namur and James A. Robinson of the University of California at Berkeley - has now permeated the mainstream.

Even the World Bank has contributed a few studies, notably, in June, "Child Labor: The Role of Income Variability and Access to Credit Across Countries" authored by Rajeev Dehejia of the NBER and Roberta Gatti of the Bank's Development Research Group.

Abusive child labor is abhorrent and should be banned and eradicated. All other forms should be phased out gradually. Developing countries already produce millions of unemployable graduates a year - 100,000 in Morocco

alone. Unemployment is rife and reaches, in certain countries - such as Macedonia - more than one third of the workforce. Children at work may be harshly treated by their supervisors but at least they are kept off the far more menacing streets. Some kids even end up with a skill and are rendered employable.

The Technology of Law
The Law of Technology

An Epistolary Dialogue Between
Roberto Calvo Macias and Dr. Sam Vaknin

"The juvenile sea squirt wanders through the sea searching for a suitable rock or hunk of coral to cling to and make it its home for life. For this task, it has a rudimentary nervous system. When it finds its spot and takes root, it doesn't need its brain anymore, so it eats it. (its rather like getting tenure)."
Daniel Dennet - Quoted in Paul Thagard's Mind - An Introduction to Cognitive Science

"Everything in nature, in the inanimate as well as the animate world, happens according to rules, although we do not always know these rules."
Immanuel Kant, Logic

"The fuzzy principle states that everything is a matter of degree."
Bart Kosko, Fuzzy Thinking: The New Science of Fuzzy Logic

"When one admits that nothing is certain one must, I think, also add that some things are more nearly certain than others."
Bertrand Russell, "Am I an Atheist or an Agnostic?"

"Most of us can learn to live in perfect comfort on higher levels of power. Everyone knows that on any given day there are energies slumbering in him which the incitements of that day do not call forth. Compared with what we ought to be, we are only half awake. It is evident

that our organism has stored-up reserves of energy that are ordinarily not called upon - deeper and deeper strata of explosible material, ready for use by anyone who probes so deep. The human individual usually lives far within his limits."
William James

Hi, Sam

Thanks for the info. Those problems reveal the contradictions of legality and the new technologies. In fact, this is a question of "statism and mobility". To resolve this (apparent?) contradiction is a great task for judges and legislators. F.G. Junger studied this matter on "Die Perfektion of Technology" (1939). He said that technicians were going to attack the law, transforming traditional law (with its classic proceedings) into a technological regulation. This is, in my opinion, inevitable. So, it seems to me, that we shall work in that direction. How can technological regulation - as fast as it is - be humanlike? One (possible) solution(?) is the one I have developed in "Chaos AD", which is biased towards the big difference of the speed between the dissemination of financial and other information and the much slower democratic proceedings. My idea (based upon the book "The Economy of Chaos" by Antonio Escohotado, 1999) was to reduce this unevenness by speeding democratic transmissions (elections, referenda, legal procedures) while, at the same time, reducing legal complications. But my idea seem to be just that, an idea(l). The problem remains because the law, of its very being, is slow (compared to the speed of light financial movements).

From another angle, we should study not only the legal questions but the real possibilities. It is evident that normal persons will always have legal problems (remember that prisons and madhouses are usually inhabited by the poor). But to the cyber-elites things are quite different for they know the THE SECRET ART OF POWER of the internet. The problem to an elite of hackers lies not in legal impediments but in divining its proper real name.

As I have said in Elite, hackers, as a techno-vanguard, are not subjected to any moral or legal constraints, for they are out of the boundaries of the law (in time and space). They are like conquerors, the law follows them. This does not mean that they do not have (legal) problems but they are of another kind and of other risks. So, I think we should distinguish in our work between those two kinds of actions (positive and passive).

Before start I would like to make some refinements. As the Law is directly related to language, I shall declare that my knowledge of the Law is practically non-existent. To this understatement, we must add my precarious knowledge of the English language. So, I am in a disadvantaged position. Due to this you should take the heavy part of this dialogue. My position will be confined only to making some intuitive questions. In doing that we could also clear some obscure questions on "The Economics of Law and the laws of Economy" - as if this dialogue were to be an appendix to that large course of economics you have been running on your website for some years now.

As you can see, I have tied "economics" and law. In my opinion the two are, in civilized cultures, tied inextricably

- just like the Romans observed very well. This won´t be a problem to our study because economics is, since the 70s, under the complete dominion of technology and its new race of techno-economic engineers and their financial computing.

Its also necessary to delineate some aspects of this subject. It is my contention that historical points of view are not enough to evaluate correctly this "strange world of ours". So, I will use, apart from historical reviews, mythical contexts.

There are some major questions that arise in that terrible "clash" between technology and law. Here are several tracks to take off:

Ethics have been always related to slow motion. Does technology mean the death of morality (to use Nietzsche's terms:-). What kind of justice and laws can be applied in such a fast tempo? There are great problems with official documents and digital formats.

Some good analysis of a space with fast changing laws are: Alice in Wonderland and in a more technologically-orientated way: Wittgenstein's study of the transformations of language.

Another important feature of technology that has a direct relationship to the realm of the law is the cybernetic field (the pennant of this complex world is the book "Cybernetica" by Norbert Wiener), which has the revealing subtitle: "Control in Animals and Humans"). The ever increasing figures of mechanic, electronic and photo-technological controls belongs to "the sign of the times".

The eruption of a enormous amount of lawyers which almost form a new class.

The problems inherent in legislating in the financial realm with its new instruments and techniques which include financial computing, special contracts "over the counter" of great complexity, new theoretical products that appear at great speed (the great problems of the USA administration to control these "volcanic eruptions" of money).

The using of money as Leibniz´s universal characteristic (and its consequences: devaluation of all values).

The ever increasing complexity of Laws and their (priest/secret) arcane languages which open an abyss between the normal person and the "initiated".

Well, I think it is enough for a start. Your turn.

best regards
roberto

Dear RCM,

No amount of self-deprecation will suffice to hide the fact that you are an original thinker. One does not to be a lawyer to discuss the law, the way one has to be a quantum physicist to discuss string theory. The law has one thing in common with technology: it is all-pervasive, it permeates every minutest aspect of our existence, it is the embodiment of (social and economic) philosophies and it evolves constantly (though, as you say, less speedily than technology does).

Before I explore to your various points (probably in my next letter, not to render this one too long) - let me be the nitpicker and set up the framework for our intellectual Christmas adventure.

One can discern the following relationships between the Law and Technology:

1. Sometimes technology becomes an inseparable part of the law. In extreme cases, technology itself becomes the law. The use of polygraphs, faxes, telephones, video, audio and computers is an integral part of many laws - etched into them. It is not an artificial co-habitation: the technology is precisely defined in the law and forms a CONDITION within it. In other words: the very spirit and letter of the law is violated (the law is broken) if a certain technology is not employed or not put to correct use. Think about police laboratories, about the O.J. Simpson case, the importance of DNA prints in everything from determining fatherhood to exposing murderers. Think about the admissibility of polygraph tests in a few countries. Think about the polling of members of boards of directors by phone or fax (explicitly required by law in many countries). Think about assisted suicide by administering painkillers (medicines are by far the most sizeable technology in terms of money). Think about security screening by using advances technology (retina imprints, voice recognition). In all these cases, the use of a specific, well defined, technology is not arbitrarily left to the judgement of law enforcement agents and courts. It is not a set of options, a menu to choose from. It is an INTEGRAL, crucial part of the law and, in many instances, it IS the law itself.

2. Technology itself contains embedded laws of all kinds. Consider internet protocols. These are laws which form part and parcel of the process of decentralized data exchange so central to the internet. Even the language used by the technicians implies the legal origin of these protocols: "handshake", "negotiating", "protocol", "agreement" are all legal terms. Standards, protocols, behavioural codes - whether voluntarily adopted or not - are all form of Law. Thus, internet addresses are allocated by a central authority. Netiquette is enforced universally. Special chips and software prevent render certain content inaccessible. The scientific method (a codex) is part of every technological advance. Microchips incorporate in silicone agreements regarding standards. The law becomes a part of the technology and can be deduced simply by studying it in a process known as "reverse engineering". In stating this, I am making a distinction between lex naturalis and lex populi. All technologies obey the laws of nature - but we, in this discussion, I believe, wish to discuss only the laws of Man.

3. Technology spurs on the law, spawns it, as it were, gives it birth. The reverse process (technology invented to accommodate a law or to facilitate its implementation) is more rare. There are numerous examples. The invention of modern cryptography led to the formation of a host of governmental institutions and to the passing of numerous relevant laws. More recently, microchips which censor certain web content led to proposed legislation (to forcibly embed them in all computing appliances). Sophisticated eavesdropping, wiring and tapping technologies led to laws regulating these activities. Distance learning is transforming the laws of accreditation of academic institutions. Air transport forced health authorities all over the world to revamp their quarantine and epidemiological

policies (not to mention the laws related to air travel and aviation). The list is interminable.

Once a law is enacted - which reflects the state of the art technology - the roles are reversed and the law gives a boost to technology. Seat belts and airbags were invented first. The law making seat belts (and, in some countries, airbags) mandatory came (much) later. But once the law was enacted, it fostered the formation of whole industries and technological improvements. The Law, it would seem, legitimizes technologies, transforms them into "mainstream" and, thus, into legitimate and immediate concerns of capitalism and capitalists (big business). Again, the list is dizzying: antibiotics, rocket technology, the internet itself (first developed by the Pentagon), telecommunications, medical computerized scanning - and numerous other technologies - came into real, widespread being following an interaction with the law. I am using the term "interaction" judiciously because there are four types of such encounters between technology and the law:

a. A positive law which follows a technological advance (a law regarding seat belts after seat belts were invented). Such positive laws are intended either to disseminate the technology or to stifle it.

b. An intentional legal lacuna intended to encourage a certain technology (for instance, very little legislation pertains to the internet with the express aim of "letting it be"). Deregulation of the airlines industries is another example.

c. Structural interventions of the law (or law enforcement authorities) in a technology or its

implementation. The best examples are the breaking up of AT&T in 1984 and the current anti-trust case against Microsoft. Such structural transformations of monopolists release hitherto monopolized information (for instance, the source codes of software) to the public and increases competition - the mother of invention.

d. The conscious encouragement, by law, of technological research (research and development). This can be done directly through government grants and consortia, Japan's MITI being the finest example of this approach. It can also be done indirectly - for instance, by freeing up the capital and labour markets which often leads to the formation of risk or venture capital invested in new technologies. The USA is the most prominent (and, now, emulated) example of this path.

4. A Law that cannot be made known to the citizenry or that cannot be effectively enforced is a "dead letter" - not a law in the vitalist, dynamic sense of the word. For instance, the Laws of Hammurabi (his codex) are still available (through the internet) to all. Yet, do we consider them to be THE or even A Law? We do not and this is because Hammurabi's codex is both unknown to the citizenry and inapplicable. Hammurabi's Laws are inapplicable not because they are anachronistic. Islamic law is as anachronistic as Hammurabi's code - yet it IS applicable and applied in many countries. Applicability is the result of ENFORCEMENT. Laws are manifestations of asymmetries of power between the state and its subjects. Laws are the enshrining of violence applied for the "common good" (whatever that is - it is a shifting, relative concept).

Technology plays an indispensable role in both the dissemination of information and in enforcement efforts. In other words, technology helps teach the citizens what are the laws and how are they likely to be applied (for instance, through the courts, their decisions and precedents). More importantly, technology enhances the efficacy of law enforcement and, thus, renders the law applicable. Police cars, court tape recorders, DNA imprints, fingerprinting, phone tapping, electronic surveillance, satellites - are all instruments of more effective law enforcement. In a broader sense, ALL technology is at the disposal of this or that law. Take defibrillators. They are used to resuscitate patients suffering from severe cardiac arrhythmia's. But such resuscitation is MANDATORY by LAW. So, the defibrillator - a technological medical instrument - is, in a way, a law enforcement device.

But, all the above are superficial - phenomenological - observation (though empirical and pertinent). There is a much more profound affinity between technology and the Law. Technology is the material embodiment of the Laws of Nature and the Laws of Man (mainly the former). The very structure and dynamics of technology are identical to the structure and dynamics of the law - because they are one and the same. The Law is abstract - technology is corporeal. This, to my mind, is absolutely the only difference. Otherwise, Law and Technology are manifestation of the same underlying principles. To qualify as a "Law" (embedded in external hardware - technology - or in internal hardware - the brain), it must be:

a. ***All-inclusive (anamnetic)*** – It must encompass, integrate and incorporate all the facts known about the subject.

b. ***Coherent*** – It must be chronological, structured and causal.

c. ***Consistent*** – Self-consistent (its parts cannot contradict one another or go against the grain of the main raison d'être) and consistent with the observed phenomena (both those related to the subject and those pertaining to the rest of the universe).

d. ***Logically compatible*** – It must not violate the laws of logic both internally (the structure and process must abide by some internally imposed logic) and externally (the Aristotelian logic which is applicable to the observable world).

e. ***Insightful*** – It must inspire a sense of awe and astonishment which is the result of seeing something familiar in a new light or the result of seeing a pattern emerging out of a big body of data. The insights must be the logical conclusion of the logic, the language and of the development of the subject. I know that we will have heated debate about this one. But, please, stop to think for a minute about the reactions of people to new technology or to new laws (and to the temples of these twin religions - the scientist's laboratory and the courts). They are awed, amazed, fascinated, stunned or incredulous.

f. ***Aesthetic*** – The structure of the law and the processes embedded in it must be both plausible and "right", beautiful, not cumbersome, not awkward, not discontinuous, smooth and so on.

g. ***Parsimonious*** – The structure and process must employ the minimum number of assumptions and entities in order to satisfy all the above conditions.

h. ***Explanatory*** – The Law or technology must explain or incorporate the behaviour of other entities, knowledge, processes in the subject, the user's or citizen's decisions and behaviour and an history (why events developed the way that they did). Many technologies incorporate their own history. For instance: the distance between two rails in a modern railroad is identical to the width of Roman roads (equal to the backside of two horses).

i. ***Predictive (prognostic)*** – The law or technology must possess the ability to predict future events, the future behaviour of entities and other inner or even emotional and cognitive dynamics.

j. ***Transforming*** – With the power to induce change (whether it is for the better, is a matter of contemporary value judgements and fashions).

k. ***Imposing*** – The law or technology must be regarded by the citizen or user as the preferable organizing principle some of his life's events and as a guiding principle.

1. ***Elastic*** – The law or the technology must possess the intrinsic abilities to self organize, reorganize, give room to emerging order, accommodate new data comfortably, avoid rigidity in its modes of reaction to attacks from within and from without.

Scientific theories should satisfy most of the same conditions because their subject matter is Laws (the laws of nature). The important elements of testability, verifiability, refutability, falsifiability, and repeatability – should all be upheld by technology.

But here is the first important difference between Law and technology. The former cannot be falsified, in the Popperian sense.

There are four reasons to account for this shortcoming:

1. ***Ethical*** – Experiments would have to be conducted, involving humans. To achieve the necessary result, the subjects will have to be ignorant of the reasons for the experiments and their aims. Sometimes even the very performance of an experiment will have to remain a secret (double blind experiments). Some experiments may involve unpleasant experiences. This is ethically unacceptable.

2. ***The Psychological Uncertainty Principle*** – The current position of a human subject can be fully known. But both treatment and experimentation influence the subject and void this knowledge. The very processes of measurement and observation influence the subject and change him.

3. ***Uniqueness*** – Psychological experiments are, therefore, bound to be unique, unrepeatable, cannot be replicated elsewhere and at other times even if they deal with the SAME subjects. The subjects are never the same due to the psychological uncertainty principle. Repeating the experiments with other subjects adversely affects the scientific value of the results.

4. ***The undergeneration of testable hypotheses*** – Laws deal with humans and with their psyches. Psychology does not generate a sufficient number of hypotheses, which can be subjected to scientific testing. This has to do with the fabulous (=storytelling) nature of psychology. In a way, psychology has affinity with some private languages. It is a form of art and, as such, is self-sufficient. If structural, internal constraints and requirements are met – a statement is deemed true even if it does not satisfy external scientific requirements.

Thus, I am forced to conclude that technology is the embodiment of the laws of nature is a rigorous manner subjected to the scientific method - while the law is the abstract construct of the laws of human and social psychology which cannot be tested scientifically. While the Law and technology are structurally and functionally similar and have many things in common (see the list above) - they diverge when it comes to the formation of hypotheses and their falsifiability.

Ciao,
Sam

Hi, Sam

Fortunately recovered from my technological injuries (computer´s malaise) and its blind laws and we can go on with our dialogue.

By the way, I have to say that interactive work is one of the best achievements of technology. Your exposition of "the quasi-identity of law and technology" cleared a blind spot in my vision. I was so focused on the contradictions that I couldn't see the similarities. And so it is. This is evident in warfare, for instance, where each new weapon (the Huns' step and powder are great examples) induces new rules of war (where is the Clausewitz of the nuclear chessboard?!:-))).

Indeed, your comparison takes us to higher considerations. If we adopt some of your conclusions, we can assert, conversely, that the "new rulers" are the technicians (confirming F.G. Jünger's prognosis). For if technology is law then its technicians are the legislators. This, then, is a great change of even greater consequences. Let us remember that philosophers have been the legislators in later centuries (laws were founded on philosophical principles). Another question, that I will explore deeply in the next letters is: who is the technician and which are his thoughts?

Setting aside this strange hypothesis, lets us see what is actually happening. Whether they have a pessimistic approach or an optimistic one, it seems that thinkers agree on the fact that technology has been the buzzword of the century. An all-encompassing wave that permeates all, even thought. The whole surface of the earth has been

covered with a technological mantle, and not only the earth but the universe, the cosmos, is being cloaked by machines.

These machines and their technology abruptly altered the human atmosphere and its "tempo". The point of view is no longer human, or terrestrial but rather a cosmic one. Video technologies and real time interactions change, as McLuhan brilliantly observed 30 years ago, not only traditional law but its (habitual? last 2500+ years?) enclosing frame: the alphabetic language. This is precisely what most thinkers and intellectuals fail to see - while continuing to debate old things within the old frame. To affirm the identity of law and technology is indeed to erase the law - the law as we know it, in the historical sense - to return to tribal (mythical) law. Apparently, there is a contradiction between the ever increasing complexity of post-modern laws and this "tribalizing" effect but there is no discord between the two. The flow of language (hypertexts) means the flowing of the law - it reminds one of a pre-Socratic tribe studying "physis" in search of new myths to explain a constantly changing nature, to discover, with emotion and delight, forms, attractors emerging from that chaotic madness.

The distinctive mark of this law, the law of this great tribe, is the intensive use of images (and its numerical control and its purified hyper-rational/scientific method: statistical mechanics). The avalanche of video technologies, filming methods, digital processing, all this "new imagery" can be summarized in what Nobert Wiener once said:

"In Newton's times automatism was a clock-machinery with music and rigid statuettes spinning up over the lid. In

the XIXth century the automaton is the glorified steam motor, that burns combustible fuel instead the glycogen of human muscles. The contemporary automaton opens doors with photoelectric cells, points nuclear weapons or solves differential equations."

This "wave of imagery" converts the law into a cybernetic process. It is also interesting to note, as I said in my previous letter, that "Cybernetics" (derived from a greek word: kybernetes: "pilots", steersmen), which can be fairly considered as the beast's mother, has for its subtitle the sentence "Control and communication in the Animal and the Machine". These controls are based on the real-time evaluation and comparison of photographic impressions, quanta of light (and information) measured by digital processes (mostly based on vision and less on sound and other sensa). It changes dramatically not only the traditional law but also the space such law works in, and finally leads not only to a return of the acoustic, tribal word but also to something else: a new grammar that should be better called PHOTOGRAMMAR. The further consequences of this change are not yet observable, but for those of our readers which still possess a consciousness of higher spiritual and poetic orders I would like to note a relationship: the predominance of vision is the nature of predators and birds of prey.

"Cybernetics" and the rest of Wiener's works provide us with the "original" documents (with the "Roseta Stone") of the new law of the new land. N. Wiener is without a doubt one of the most brilliant and powerful scientists and mathematicians of the XX century. Apart from his great contributions to mathematics, computing and other fields, the minor fact that he was deeply interested in Goethe´s "The Wizard´s Apprentice" (and the answers he came up

with) demonstrates the profundity of his thought. We are faced with a serious, first class, thinker. At the centre of Cybernetics is one, at first view, simple mechanism: the feedback loop. In fact, this mechanism was known as early as the XVIII century. Watts' steam engine used a centrifugal regulator based on feedback. Also it has its roots in Hegel's and Fichte's (dialectic) thought and its refined version by the (hallucinatory) mathematical mind of C.S.Pierce. This mechanism is at the heart of all new systems of control and, by extension, of the new social organizations. It is what fashionable intellectuals (Giddens) call "reflexivity" and others "government at distance" or "tele-government" - as per the consumer's taste:-)

On a prosaic level this means a new way (law) of organization, a life in constant movement, changing, reflecting, adapting to new situations always at increasing complexity. On a superior level, if we want to provide an exact and complete "figure", a grammatically well defined prototype, the cybernetic revolution means entering a magical space, much alike that of Alice in Wonderland were laws appear and disappear from fantasy.

Especially interesting (and fascinating and striking) are Wiener´s opinions on the "law of the laws", that is to say, the auto-propagation (and self-learning) of machines. Wiener's writings on these matters provide us with a map of the technological future. But that is another tale altogether:-)

The end of my loop.

Time for your feedback:-)

best regards
roberto

My dear RCM,

It is always such a gift to receive your letters. They provoke in me uncontrollable floods of thoughts which I can rarely capture by putting pen to paper (yes, I blush in admitting to such retro devices...;o(((

Mankind is coming back a full circle - from ideograms through alphabet to ideograms. Consider computers. They started as pure alphabet beasts. I recall my programming days with ASSEMBLY, COBOL and PL/1 on a clunky IBM 360 and later, IBM 370. We used Hollerith punch cards. It was all very abstract and symbol-laden. The user interface was highly formal and the formalism was highly mathematical. Computers were a three-dimensional extension of formal logic which is the set of RULES that govern mathematics.

Then came the Macintosh and its emulation, the windows GUI (Graphics User Interface). I remember geeks and hackers sneering at the infantilism and amateurism of it all. Taming your computer by lashing DOS commands at it was still the thing to do. But, gradually, we were all converted. Today, the elite controls both the alphabet (machine and high level programming languages) and the ideograms (GUIs) - the masses have access only to the ideograms. But it seems that the more widespread the use of the ideograms (graphic interface operating systems and applications), the "wiser" (self-learning, self-diagnosing, self-correcting) they become - the less needed, indeed, the more obsolete the elite is. Finally, it will all be ideograms,

the "alphabet" buried under hundreds of layers of graphics and imagery and accessible only to the machine itself.

It is then that we should begin to lose sleep. It is when ONLY the machine has access to its alphabet that we, humans, will find ourselves at the mercy of technology. Having access to one's alphabet is possessing self-consciousness and intelligence (in the Turing sense). Don't misunderstand me: self-awareness and intelligence can be perfectly mediated through images. But access to an alphabet and to the RULES of its meaningful manipulation is indispensable to survival, at least to the survival of intelligence. By "meaningful" I mean: generating a useful and immediately applicable representation of the world, of ourselves and of our knowledge about the world, ourselves and our interactions with the world. When no longer capable of generating such meaningful representations (because technology has hidden our alphabet - the RULES - from our sight) - that day, technology, philosophy and law-making will be one and the same and humans will have no place in such a world - at least, they will have no MEANINGFUL place in it.

It is false that science generates technology - the reverse has always been true. All the big and important technological advances, the Promethean breakthroughs - were achieved by ENGINEERS and technicians, not by scientists. Engineers manipulate the world - scientists manipulate rules, the laws of nature. What computers did is MERGE this two activities and make them indistinguishable. Writing a new software application is both composing rules and engaging in technology. This is because the substance upon which technological innovation is exercised is no longer MATERIAL. Both

technology and laws deal with INFORMATION now. This is the convergence of the real and the abstract, the Platonic ideal and its inferior shadow, matter and energy. It is no less revolutionary than E=MC2.

So, technology leads science. Both technology and science start with images. Kekula dreamt the structure of the Benzen molecule, Einstein envisioned the geometry of space and so on. But, in the past, technology ended up generating objects - while science ended up generating rules and embedding them or expressing them in formalisms. The big revolution of the second half of this passing century is that now both science and cutting age technology produce the same: rules, formalisms, abstract entities. In other words: information and its manipulation - RULES - have become the main product of modern society. Some of the output is hard to classify as rules. Is a television show a rule or a set of rules? The deconstructivists will say: definitely so and I will second that. a television show, a software application, a court procedure, a text - are all repositories and depositories of rules, thousands of them: social rules, cultural rules, physical laws of nature, narratives and codes and myriad other guidelines.

This leads us to cybernetics.

At first - during the 50s and 60s - an artificial distinction was drawn between cybernetic systems (such as biological ones) and programmable computers (or universal Turing machines). The former were considered limited by the rigidity of the repertoire of their responses to their feedback loops. Computers, on the other hand, were considered infinitely flexible by virtue of their programmability. This view was shattered by the

unexpected enormous complexity of biological organisms and even automata. Gradually, cybernetics was subsumed under computing (rather, vice versa) and computers were considered to be a class of cybernetic systems. I recommend to you to read "Cybernetics and the Philosophy of Mind" by Sayre published in London in 1976).

They all contain information stored, a set of rules to regulate behaviour and feedback loops. Yet, few people - if any - noticed how politically subversive this model was. If the "center's" behaviour is potentially profoundly alterable by feedback from the "periphery" - then centre and periphery become equipotent. More accurately, the very notions of centre and periphery disintegrate and are replaced by a decentralized, loosely interacting system of information processing and information storage "nodes". The Internet, to regurgitate the obvious, is an example of such a decentralized system. The simultaneous emergence of mathematical theories (fractals, recursiveness) that de-emphasized centrality helped to give birth to the inevitably necessary formalism - the language of networks (neural, computers, social and other).

Decentralization removes the power of law-making from any particular node in the system. Each node is a law unto itself. The system, as a whole, as long as it wishes to remain a system and continue to function as such, reaches a "legislative equilibrium". It is a Prigogine type thermodynamic trajectory: it is dynamic, unstable, ever-changing, fluctuating but, by and large, it is identity-preserving and it is functional. The new systems are systems of INFORMAL law as opposed to the older systems which are mainly and mostly systems of FORMAL law.

The clash between these two models was and is unavoidable. The internet, for instance, regulates itself imposing a set of unwritten rules vaguely called the "Netiquette". Part mores and part habits, it is amorphic and always debatable. Yet it functions much better than drug-related laws in formal law systems (like modern states). With no effective enforcement mechanisms, no netiquette-enforcement agencies to speak of - the netiquette maintains an iron grip over netizens. There are other examples outside the internet: the self regulating financial industry in Britain has a better record of compliance that the heavily regulated, SEC-threatened financial community in the USA. Efforts top tax the Internet and to regulate the City are examples of turf wars between formal law systems and informal law systems.

Informal law system will win, there is no question in mind. Not only because they constitute a better organizational model but because they are more adept at processing the raw material of the next millennium, information. Thus, they are better positioned to guarantee the survival of our race.

But there is a price to pay and it is the ever growing fuzziness of our laws. The more complex the world, the more demanding the raw material, the more probabilistic the output - the fuzzier the logic, the less determinate the answers.

This is what I would like to explore in this dialogue - the death of the LAW as humanity knew it hitherto and its replacement by ever-fuzzier, ever less certain technology.

I will start by studying two celebrated occurrences of technology:

Asimov robots and programmable computers (universal Turing machines, to be precise).

Consider Asimov's robots:

Sigmund Freud said that we have an uncanny reaction to the inanimate. This is probably because we know that – despite pretensions and layers of philosophizing – we are nothing but recursive, self aware, introspective, conscious machines. Special machines, no doubt, but machines althesame.

The series of James bond movies constitutes a decades-spanning gallery of human paranoia. Villains change: communists, neo-Nazis, media moguls. But one kind of villain is a fixture in this psychodrama, in this parade of human phobias: the machine. James Bond always finds himself confronted with hideous, vicious, malicious machines and automata.

It was precisely to counter this wave of unease, even terror, irrational but all-pervasive, that Isaac Asimov, the late Sci-fi writer (and scientist) invented the Three Laws of Robotics:

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm;
2. A robot must obey the orders given it by human beings, except where such orders would conflict with the First Law;
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

Many have noticed the lack of consistency and the virtual inapplicability of these laws put together. First, they are not the derivative of any coherent worldview and background. To be properly implemented and to avoid a potentially dangerous interpretation of them – the robots in which they are embedded must be also equipped with a reasonably full model of the physical and of the human spheres of existence. Devoid of such a context, these laws soon lead to intractable paradoxes (experiences as a nervous breakdown by one of Asimov's robots). Conflicts are ruinous in automata based on recursive functions (Turing machines) as all robots must be. Godel pointed at one such self destructive paradox in the "Principia Mathematica" ostensibly comprehensive and self consistent logical system. It was enough to discredit the whole magnificent edifice constructed by Russel and Whitehead over a decade.

Some will argue against this and say that robots need not be automata in the classical, Church-Turing, sense. That they could act according to heuristic, probabilistic rules of decision making. There are many other types of functions (non-recursive) that can be incorporated in a robot. True, but then, how can one guarantee full predictability of behaviour? How can one be certain that the robots will fully and always implement the three laws? Only recursive systems are predictable in principle (their complexity makes even this sometimes not feasible).

An immediate question springs to mind: HOW will a robot identify a human being? Surely, in an age of perfect androids, constructed of organic materials, no superficial, outer scanning will suffice. Structure and composition will not be sufficient factors of differentiation. There are two possibilities to settle this very practical issue: one is

to endow the robot with the ability to conduct a Converse Turing Test, the other is to somehow "bar-code" all the robots by implanting some signalling device inside them. Both present additional difficulties.

In the second case, the robot will never be able to positively identify a human being. He will surely identify robots. This is ignoring, for discussion's sake, defects in manufacturing or loss of the implanted identification tag – if the robot will get rid of the tag, presumably this will fall under the "defect in manufacturing" category. But the robot will be forced to make a binary selection: one type of physical entities will be classified as robots – all the others will be grouped into "non-robots". Will non-robots include monkeys and parrots? Yes, unless the manufacturers equip the robots with digital or optical or molecular equivalent of the human image in varying positions (standing, sitting, lying down). But this is a cumbersome solution and not a very effective one: there will always be the odd position which the robot will find hard to locate in its library. A human disk thrower or swimmer may easily be passed over as "non-human" by a robot. So will certain types of amputated invalids.

The first solution is even more seriously flawed. It is possible to design a test which the robot will apply to distinguish a robot from a human. But it will have to be non-intrusive and devoid of communication or with very limited communication. The alternative is a prolonged teletype session behind a curtain, after which the robot will issue its verdict: the respondent is a human or a robot. This is ridiculous. Moreover, the application of such a test will make the robot human in most of the important respects. A human knows other humans for what they are because he is human. A robot will have to be human to

recognize another, it takes one to know one, the saying (rightly) goes.

Let us assume that by some miraculous way the problem will be overcome and robots will unfailingly identify humans. The next question pertains to the notion of "injury" (still in the First Law). Is it limited only to a physical injury (the disturbance of the physical continuity of human tissues or of the normal functioning of the human body)? Should it encompass the no less serious mental, verbal and social injuries (after all, they are all known to have physical side effects which are, at times, no less severe than direct physical "injuries"). Is an insult an injury? What about being grossly impolite, or psychologically abusing or tormenting someone? Or offending religious sensitivities, being politically incorrect? The bulk of human (and, therefore, inhuman) actions actually offend a human being, has the potential to do so or seem to be doing so. Take surgery, driving a car, or investing all your money in the stock exchange – they might end in coma, accident, or a stock exchange crash respectively. Should a robot refuse to obey human instructions which embody a potential to injure said instruction-givers? Take a mountain climber – should a robot refuse to hand him his equipment lest he falls off the mountain in an unsuccessful bid to reach the peak? Should a robot abstain from obeying human commands pertaining to crossing busy roads or driving sports cars? Which level of risk should trigger the refusal program? In which stage of a collaboration should it be activated? Should a robot refuse to bring a stool to a person who intends to commit suicide by hanging himself (that's an easy one), should he ignore an instruction to push someone jump off a cliff (definitely), climb the cliff (less assuredly so), get to the cliff (maybe so), get to his car in order to drive to the cliff

in case he is an invalid – where does the responsibility and obeisance buck stop?

Whatever the answer, one thing is clear: such a robot must be equipped with more than a rudimentary sense of judgement, with the ability to appraise and analyse complex situations, to predict the future and to base his decisions on very fuzzy algorithms (no programmer can foresee all possible circumstances). To me, this sounds much more dangerous than any recursive automaton which will NOT include the famous Three Laws.

Moreover, what, exactly, constitutes "inaction"? How can we set apart inaction from failed action or, worse, from an action which failed by design, intentionally? If a human is in danger and the robot tried to save him and failed – how will we be able to determine to what extent it exerted itself and did everything that it could do?

How much of the responsibility for the inaction or partial action or failed action should be attributed to the manufacturer – and how much imputed to the robot itself? When a robot decides finally to ignore its own programming – how will we be informed of this momentous event? Outside appearances should hardly be expected to help us distinguish a rebellious robot from a lackadaisical one.

The situation gets much more complicated when we consider conflict states. Imagine that a robot has to hurt one human in order to prevent him from hurting another. The Laws are absolutely inadequate in this case. The robot should either establish an empirical hierarchy of injuries – or an empirical hierarchy of humans. Should we, as humans, rely on robots or on their manufacturers

(however wise and intelligent) to make this selection for us? Should abide by their judgement – which injury is more serious than the other and warrants their intervention?

A summary of the Asimov Laws would give us the following "truth table":

A robot must obey human orders with the following two exceptions:

a. That obeying them will cause injury to a human through an action, or
b. That obeying them will let a human be injured.

A robot must protect its own existence with three exceptions:

a. That such protection will be injurious to a human;
b. That such protection entails inaction in the face of potential injury to a human;
c. That such protection will bring about insubordination (not obeying human instructions).

Here is an exercise: create a truth table based on these conditions. There is no better way to demonstrate the problematic nature of Asimov's idealized yet highly impractical world.

Or consider Turing's universal computers (machines):

In 1936 an American (Alonzo Church) and a Briton (Alan M. Turing) published independently (as is often the coincidence in science) the basics of a new branch in

Mathematics (and logic): computability or recursive functions (later to be developed into Automata Theory).

The authors confined themselves to dealing with computations which involved "effective" or "mechanical" methods for finding results (which could also be expressed as solutions (values) to formulae). These methods were so called because they could, in principle, be performed by simple machines (or human-computers or human-calculators, to use Turing's unfortunate phrases). The emphasis was on finiteness: a finite number of instructions, a finite number of symbols in each instruction, a finite number of steps to the result. This is why these methods were usable by humans without the aid of an apparatus (with the exception of pencil and paper as memory aids). Moreover: no insight or ingenuity were allowed to "interfere" or to be part of the solution seeking process.

What Church and Turing did was to construct a set of all the functions whose values could be obtained by applying effective or mechanical calculation methods. Turing went further down Church's road and designed the "Turing Machine" – a machine which can calculate the values of all the functions whose values can be found using effective or mechanical methods. Thus, the program running the TM (=Turing Machine in the rest of this text) was really an effective or mechanical method. For the initiated readers: Church solved the decision-problem for propositional calculus and Turing proved that there is no solution to the decision problem relating to the predicate calculus. Put more simply, it is possible to "prove" the truth value (or the theorem status) of an expression in the propositional calculus – but not in the predicate calculus. Later it was shown that many functions (even in number

theory itself) were not recursive, meaning that they could not be solved by a Turing Machine.

No one succeeded to prove that a function must be recursive in order to be effectively calculable. This is (as Post noted) a "working hypothesis" supported by overwhelming evidence. We don't know of any effectively calculable function which is not recursive, by designing new TMs from existing ones we can obtain new effectively calculable functions from existing ones and TM computability stars in every attempt to understand effective calculability (or these attempts are reducible or equivalent to TM computable functions).

The Turing Machine itself, though abstract, has many "real world" features. It is a blueprint for a computing device with one "ideal" exception: its unbounded memory (the tape is infinite). Despite its hardware appearance (a read/write head which scans a two-dimensional tape inscribed with ones and zeroes, etc.) – it is really a software application, in today's terminology. It carries out instructions, reads and writes, counts and so on. It is an automaton designed to implement an effective or mechanical method of solving functions (determining the truth value of propositions). If the transition from input to output is deterministic we have a classical automaton – if it is determined by a table of probabilities – we have a probabilistic automaton.

With time and hype, the limitations of TMs were forgotten. No one can say that the Mind is a TM because no one can prove that it is engaged in solving only recursive functions. We can say that TMs can do whatever digital computers are doing – but not that digital computers are TMs by definition. Maybe they are –

maybe they are not. We do not know enough about them and about their future.

Moreover, the demand that recursive functions be computable by an UNAIDED human seems to restrict possible equivalents. Inasmuch as computers emulate human computation (Turing did believe so when he helped construct the ACE, at the time the fastest computer in the world) – they are TMs. Functions whose values are calculated by AIDED humans with the contribution of a computer are still recursive. It is when humans are aided by other kinds of instruments that we have a problem. If we use measuring devices to determine the values of a function it does not seem to conform to the definition of a recursive function. So, we can generalize and say that functions whose values are calculated by an AIDED human could be recursive, depending on the apparatus used and on the lack of ingenuity or insight (the latter being, anyhow, a weak, non-rigorous requirement which cannot be formalized).

Quantum mechanics is the branch of physics which describes the microcosm. It is governed by the Schrodinger Equation (SE). This SE is an amalgamation of smaller equations, each with its own space coordinates as variables, each describing a separate physical system. The SE has numerous possible solutions, each pertaining to a possible state of the atom in question. These solutions are in the form of wave functions (which depend, again, on the coordinates of the systems and on their associated energies). The wave function describes the probability of a particle (originally, the electron) to be inside a small volume of space defined by the aforementioned coordinates. This probability is proportional to the square of the wave function. This is a way of saying: "we cannot

really predict what will exactly happen to every single particle. However, we can foresee (with a great measure of accuracy) what will happen if to a large population of particles (where will they be found, for instance)."

This is where the first of two major difficulties arose:

To determine what will happen in a specific experiment involving a specific particle and experimental setting – an observation must be made. This means that, in the absence of an observing and measuring human, flanked by all the necessary measurement instrumentation – the outcome of the wave function cannot be settled. It just continues to evolve in time, describing a dizzyingly growing repertoire of options. Only a measurement (=the involvement of a human or, at least, a measuring device which can be read by a human) reduces the wave function to a single solution, collapses it.

A wave function is a function. Its REAL result (the selection in reality of one of its values) is determined by a human, equipped with an apparatus. Is it recursive (TM computable and compatible)? In a way, it is. Its values can be effectively and mechanically computed. The value selected by measurement (thus terminating the propagation of the function and its evolution in time by zeroing its the other terms, bar the one selected) is one of the values which can be determined by an effective-mechanical method. So, how should we treat the measurement? No interpretation of quantum mechanics gives us a satisfactory answer. It seems that a probabilistic automaton which will deal with semi recursive functions will tackle the wave function without any discernible difficulties – but a new element must be introduced to account for the measurement and the resulting collapse.

Perhaps a "boundary" or a "catastrophic" automaton will do the trick.

The view that the quantum process is computable seems to be further supported by the mathematical techniques which were developed to deal with the application of the Schrodinger equation to a multi-electron system (atoms more complex than hydrogen and helium). The Hartree-Fok method assumes that electrons move independent of each other and of the nucleus. They are allowed to interact only through the average electrical field (which is the charge of the nucleus and the charge distribution of the other electrons). Each electron has its own wave function (known as: "orbital") – which is a rendition of the Pauli Exclusion Principle.

The problem starts with the fact that the electric field is unknown. It depends on the charge distribution of the electrons which, in turn, can be learnt from the wave functions. But the solutions of the wave functions require a proper knowledge of the field itself!

Thus, the SE is solved by successive approximations. First, a field is guessed, the wave functions are calculated, the charge distribution is derived and fed into the same equation in an ITERATIVE process to yield a better approximation of the field. This process is repeated until the final charge and the electrical field distribution agree with the input to the SE.

Recursion and iteration are close cousins. The Hartree-Fok method demonstrates the recursive nature of the functions involved. We can say the SE is a partial differential equation which is solvable (asymptotically) by iterations which can be run on a computer. Whatever

computers can do – TMs can do. Therefore, the Hartree-Fok method is effective and mechanical. There is no reason, in principle, why a Quantum Turing Machine could not be constructed to solve SEs or the resulting wave functions. Its special nature will set it apart from a classical TM: it will be a probabilistic automaton with catastrophic behaviour or very strong boundary conditions (akin, perhaps, to the mathematics of phase transitions).

Classical TMs (CTMs, Turing called them Logical Computing Machines) are macroscopic, Quantum TMs (QTMs) will be microscopic. Perhaps, while CTMs will deal exclusively with recursive functions (effective or mechanical methods of calculation) – QTMs could deal with half-effective, semi-recursive, probabilistic, catastrophic and other methods of calculations (other types of functions).

The third level is the Universe itself, where all the functions have their values. From the point of view of the Universe (the equivalent of an infinite TM), all the functions are recursive, for all of them there are effective-mechanical methods of solution. The Universe is the domain or set of all the values of all the functions and its very existence guarantees that there are effective and mechanical methods to solve them all. No decision problem can exist on this scale (or all decision problems are positively solved). The Universe is made up only of proven, provable propositions and of theorems. This is a reminder of our finiteness and to say otherwise would, surely, be intellectual vanity.

Enough, I have broken every law of netiquette in this never ending letter and I am becoming fuzzier and fuzzier ...:o))

Sam

Dear Sam,

It is always my intention to offer our readers not only speculative ideas but also "pragmatic" lessons.

But, before descending to terrestrial considerations, I would like to briefly comment on some of your, as usual, interesting opinions.

I will maintain your order:

Alphabet and ideograms:

You talk about elites losing power, this is, to me, a prejudice. whether with ideograms, or with alphabet there will always be elites.

Machines and secret alphabet:

This is the nightmare of post modern man. The machine as dictator. To me machines are nothing more than scenery, man has built them and can dismantle them. In my opinion, the problem is much like the Wizard's Apprentice, or Aladdin. It seems that men created the machine without knowing exactly his destiny, and now he cannot stop it. The machine is not the enemy - Man is. The problem is, and always was: what do we "actually" want? But, who knows? Could dreams (and nightmares) come true?

Technology vs. Science:

The two are great myths, one of functionality and the other of purity.

Matter and energy:

These distinctions were preciously introduced by scientists themselves (re-mixing old dualistic beliefs).
As you have well noted fractals and the mathematics of complexity have gone far beyond that.
I don´t know exactly what a fractal is, but is it matter or energy, information or reality?

De-centralization and power:

Your opinion regarding the future victory of the informal, networked systems is, to my mind, correct.
The Technician knows no classes and no secrets. Another question is the distribution of power.
Certainly, horizontality induces, at first view, some egalitarian version of the world. But this is to me a prejudice.
Horizontality has its own versions of power, it is the field of VIRUSES and CONTAGION.
We should study these mechanisms before making any assertions.
For the few, who, like me, put emphasis on the individual instead of on the masses, horizontality means "open doors".

Robots and laws:

Your extensive study of the laws of robotics laws demonstrates that there is no possibility of control.
When one wants to play with hazard one should know what is being gambled and what is the game.

Technicians, extremely focused as they are on pure functionality, always fail to consider these questions.

Quantum Mechanics:

The paradoxes and fallacies of quantum mechanics can be summarized through the life and thoughts of Richard Feynman, who was at the same time, one of the best mathematicians of QM and one of its fiercest critics. Listening to Murray Gell-Man talking about chromatism makes one lose the little trust in scientists that still remains. Quantum mechanics has finally ended in metaphysics, and not of the best class - better go back to Lucretius.

Loops and recursive learning:

It is quite curios that recursive learning, originally created for the military-industrial complex (for the purposes of rocket navigation) was founded on the observation of the fights of animals. N. Wiener writes about some of them, like the well known fight between the snake (cobra) and the mongoose. This sampling is nothing new. Most martial arts were founded on this kind of observation of nature. Tai-chi is founded on the fight between the crane and the snake, Ba Gua Zhang is founded on ten animal forms, and so on. On these matters, such old fables as the Japanese "the fencer and the cat" provides us with analyses superior to Wiener's.

Finally, this leads us to the crucial point. In your analysis of the Prigogine-type social systems, you include one philosophically-dubious term: identity-preserving. Which identity? human race? life? nature? Isn't it precisely horizontality, the net-work, the idoneus systems which are

built for mutations, for the auto-propagation of "micro-changes" into "macro-effects"? The real question is: what does it mean, and what do we understand by the words SURPASSING, OVER-COMING? Oh, divine, immortal Zarathustra! How little did you suspect the form in which your strange prophecies would come to be! Ah, if you would have known....! but the oracle is always ambiguous.

Well, we shall leave the pragmatic lessons to the next letter:-)

I promise our readers some (martial arts) techniques for personal consumption:-)

best regards
roberto

PS: Just an aesthetic note. Your intensive use of the word "fuzzier" is revealing for FUZZ is the SOUND OF THE TIMES.
From the sound of bells, the "tic-tac" of mechanical clocks to the hum of atomic clocks and computers. It is the sound of speed, of electrification, intensification, movement, anxiety, desperation... the sound of the last velocity, of metamorphosis. Where did we hear that noise before? Is it, perhaps, the sound of a nest of white ants?

Dear Roberto,

I fully share your view that both the Law and Technology (as I told you, I regard them as two manifestations of one and the same thing) - are concerned with the preservation and propagation of identity.

The Law (religious and secular alike) is chiefly concerned with the protection of what IS, of the prevailing social and economic order, with the maintenance of social structure and of social function (or, at the least, of their appearance). Put differently, the Law - a mechanism of social control - is designed mainly to preserve and conserve an ideal of structural immutability coupled with functional flexibility. As immutability and flexibility are contradictory traits - the Law embodies a great tension between its dynamic aspects and its conservative ones. This tension is resolved by the introduction of the idea of identity. It is an abstraction put to good use by individuals as well as by nations and states. It is the belief that as long as an entity invariably succumbs to the same set of laws which dictate both its structure and its processes (the space of its permitted changes) - it is one and the same over time.

Thus the law is structurally static (aspires to maintain structures) and functionally dynamic (aspires to contain change and assimilate it with minimum alteration of the structure). Despite appearances to the contrary, these are the characteristic of technology and technological innovation. Technology aspires to restrain and tame change within recognizable structures. In other words, it, too, is interested in the dynamic preservation of identity by co-opting and "domesticating" change. This is typical of science as well, in my view. I do not agree with Kuhn's model of "paradigmatic" revolutions. I find Deutsch's model of scientific advance through the substitution of explanations within identity-preserving scientific processes to be much closer to reality.

In this sense, the compact disc, for instance, is the structure maintained (carried over from the long play,

vinyl record) as it incorporates changes: the quality of sound, the deciphering mechanism, the material from which the record is made. The internet is a vastly changed network, the likes of which existed before (for instance, the telegraph).

You raise the important issue of incremental changes that somehow (through accumulation or epiphenomenally) accrue to a major change. But this is not the kind of change I am referring to. Few are the changes that disrupt identity to the extent of replacing it by another. One should not mistake the FLUX of identities - emerging, submerging and merging - with a FUNDAMENTAL substitution of an identity by another.

Identities are DEFINITIONS and both the Law and technology are preoccupied by definitions (law) and language (technology).

Allow me to digress a little and talk about cats, chairs and death (isn't this fun? Don't be mad at me - in dialogues there is no LAW that says that we CANNOT or NOT ALLOWED TO digress).

The sentence "all cats are black" is evidently untrue even if only one cat in the whole universe were to be white. Thus, the property "being black" cannot form a part of the definition of a cat. The lesson to be learnt is that definitions must be universal. They must apply to all the members of a defined set (the set of "all cats" in our example).

Let us try to define a chair. In doing so we are trying to capture the essence of being a chair, its "chairness". It is chairness that is defined – not this or that specific chair.

We want to be able to identify chairness whenever and wherever we come across it. But chairness cannot be captured without somehow tackling and including the uses of a chair – what is it made for, what does it do or help to do. In other words, a definition must include an operative part, a function. In many cases the function of the Definiendum (the term defined) constitutes its meaning. The function of a vinyl record is its meaning. It has no meaning outside its function. The Definiens (the expression supplying the definition) of a vinyl record both encompasses and consists of its function or use.

Yet, can a vinyl record be defined in vacuum, without incorporating the record player in the definiens? After all, a vinyl record is an object containing audio information decoded by a record player. Without the "record player" bit, the definiens becomes ambiguous. It can fit an audio cassette, or a compact disc. So, the context is essential. A good definition includes a context, which serves to alleviate ambiguity.

Ostensibly, the more details provided in the definition – the less ambiguous it becomes. But this is not true. Actually, the more details provided the more prone is the definition to be ambiguous. A definition must strive to be both minimal and aesthetic. In this sense it is much like a scientific theory. It talks about the match or the correlation between language and reality. Reality is parsimonious and to reflect it, definitions must be as parsimonious as it is.

Let us summarize the characteristics of a good definition and then apply them and try to define a few very mundane terms.

First, a definition must reveal the meaning of the term or concept defined. By "meaning" I mean the independent and invariant meaning – not the culturally dependent, narrative derived, type. The invariant meaning has to do with a function, or a use. A term or a concept can have several uses or functions, even conflicting ones. But all of the uses and functions must be universally recognized. Think about Marijuana or tobacco. They have medical uses and recreational uses. These uses are expressly contradictory. But both are universally acknowledged, so both define the meaning of marijuana or tobacco and form a part of their definitions.

Let us try to construct the first, indisputable, functional, part of the definitions of a few terms.

"Chair" – Intended for sitting.

"Game" – Deals with the accomplishment of goals.

"Window" – Allows to look through it, or for the penetration of light or air (when open or not covered).

"Table" – Intended for laying things on its surface.

It is only when we know the function or use of the definiendum that we can begin to look for it. The function/use FILTERS the world and narrows the set of candidates to the definiendum. A definition is a series of superimposed language filters. Only the definendum can penetrate this line-up of filters. It is like a high-specificity membrane: only one term can slip in.

The next parameter to look for is the characteristics of the definiendum. In the case of physical objects, we will be

looking for physical characteristics, of course. Otherwise, we will be looking for more ephemeral traits.

"Chair" – Solid structure Intended for sitting.

"Game" – Mental or physical activity of one or more people (the players), which deals with the accomplishment of goals.

"Window" – Planar discontinuity in a solid surface, which allows to look through it, or for the penetration of light or air (when open or not covered).

"Table" – Structure with at least one leg and one flat surface, intended for laying things on its surface.

A contrast begins to emerge between a rigorous "dictionary-language-lexical definition" and a "stipulative definition" (explaining how the term is to be used). The first might not be immediately recognizable, the second may be inaccurate, non-universal or otherwise lacking.

Every definition contrasts the general with the particular. The first part of the definiens is almost always the genus (the wider class to which the term belongs). It is only as we refine the definition that we introduce the differentia (the distinguishing features). A good definition allows for the substitution of the defined by its definition (a bit awkward if we are trying to define God, for instance, or love). This would be impossible without a union of the general and the particular. A case could be made that the genus is more "lexical" while the differentia are more stipulative. But whatever the case, a definition must include a genus and a differentia because, as we said, it is

bound to reflect reality and reality is hierarchical and inclusive ("The Matriushka Doll Principle").

"Chair" – Solid structure Intended for sitting (genus). Makes use of at least one bodily axis of the sitter (differentia). Without the differentia – with the genus alone – the definition can well fit a bed or a divan.

"Game" – Mental or physical activity of one or more people (the players), which deals with the accomplishment of goals (genus), in which both the activities and the goals accomplished are reversible (differentia). Without the differentia – with the genus alone – the definition can well fit most other human activities.

"Window" – Planar discontinuity in a solid surface (genus), which allows to look through it, or for the penetration of light or air (when open or not covered) (differentia). Without the differentia – with the genus alone – the definition can well fit a door.

"Table" – Structure with at least one leg and one flat surface (genus), intended for laying things on its surface(s) (differentia). Without the differentia – with the genus alone – the definition can well fit the statue of a one-legged soldier holding a tray.

It was Locke who realized that there are words whose meaning can be precisely explained but which cannot be DEFINED in this sense. This is either because the explanatory equivalent may require more than genus and differentia – or because some words cannot be defined by means of others (because those other words also have to be defined and this leads to infinite regression). If we

adopt the broad view that a definition is the explanation of meaning by other words, how can we define "blue"? Only by pointing out examples of blue. Thus, names of elementary ideas (colours, for instance) cannot be defined by words. They require an "ostensive definition" (definition by pointing out examples). This is because elementary concepts apply to our experiences (emotions, sensations, or impressions) and to sensa (sense data). These are usually words in a private language, our private language. How does one communicate (let alone define) the emotions one experiences during an epiphany? On the contrary: dictionary definitions suffer from gross inaccuracies precisely because they are confined to established meanings. They usually include in the definition things that they should have excluded, exclude things that they should have included or get it altogether wrong. Stipulative or ostensive definitions cannot be wrong (by definition). They may conflict with the lexical (dictionary) definition and diverge from established meanings. This may prove to be both confusing and costly (for instance, in legal matters). But this has nothing to do with their accuracy or truthfulness. Additionally, both types of definition may be insufficiently explanatory. They may be circular, or obscure, leaving more than one possibility open (ambiguous or equivocal).

Many of these problems are solved when we introduce context to the definition. Context has four conceptual pillars: time, place, cultural context and mental context (or mental characteristics). A definition, which is able to incorporate all four elements is monovalent, unequivocal, unambiguous, precise, universal, appropriately exclusive and inclusive, aesthetic and parsimonious.

"Chair" – Artificial (context) solid structure Intended for sitting (genus). Makes use of at least one bodily axis of the sitter (differentia). Without the context, the definition can well fit an appropriately shaped rock.

"Game" – Mental or physical activity of one or more people (the players), subject to agreed rules of confrontation, collaboration and scoring (context), which deals with the accomplishment of goals (genus), in which both the activities and the goals accomplished are reversible (differentia). Without the context, the definition can well fit most other non-playing human activities.

"Window" – Planar discontinuity in a solid artificial (context) surface (genus), which allows to look through it, or for the penetration of light or air (when not covered or open) (differentia). Without the context, the definition can well fit a hole in a rock.

It is easy to notice that the distinction between the differentia and the context is rather blurred. Many of the differentia are the result of cultural and historical context. A lot of the context emerges from the critical mass of differentia.

We have confined our discussion hitherto to the structural elements of a definition. But a definition is a dynamic process. It involves the sentence doing the defining, the process of defining and the resulting defining expression (definiens). This interaction between different definitions of definition gives rise to numerous forms of equivalence, all called "definitions". Real definitions, nominal definitions, prescriptive, contextual, recursive, inductive, persuasive, impredicative, extensional and intensional

definitions, are stars in a galaxy of alternative modes of explanation.

But it all boils down to the same truth: it is the type of definition chosen and the rigorousness with which we understand the meaning of "definition" that determine which words can and cannot be defined. In my view, there is still a mistaken belief that there are terms which can be defined without going outside a specified realm (=set of terms). People are trying to define life or love by resorting to chemical reactions. This reductionism inevitably and invariably leads to the Locke paradoxes. It is true that a definition must include all the necessary conditions to the definiendum. Chemical reactions are a necessary condition to life. But they are not sufficient conditions. A definition must include all the sufficient conditions as well.

Now we can try to define "definition" itself:

"Definition" – A statement which captures the meaning, the use, the function and the essence (the identity) of a term or a concept.

Let us go one level higher. Let us define ABSENCE rather than PRESENCE, nothing rather than something, inaction rather than action.

In other words, let us try to define death.

A classical point of departure in defining Death, seems to be Life itself. Death is perceived either as a cessation of Life - or as a "transit zone", on the way to a continuation of Life by other means.

While the former presents a disjunction, the latter is a continuum, Death being nothing but a corridor into another plane of existence (the hereafter).

Another, logically more rigorous approach, would be to ask "Who is Dead" when Death occurs.

In other words, an identity of the Dying (=it which "commits" Death) is essential in defining Death. But what are the means to establish an unambiguous, unequivocal identity?

Is an identity established through the use of quantitative parameters?

Is it dependent, for instance, upon the number of discrete units which comprise the functioning whole?

If so, where is the level at which useful distinctions and observations are replaced by useless scholastic mind-warps?

Example: if we study a human identity - should it be defined by the number and organization of its limbs, its cells, its atoms?

The cells in a human body are replaced (with the exception of the cells of the nervous system) every 5 years. Would this imply that we gain a new identity each time this cycle is completed?

Adopting this course of thinking leads to absurd results:

When humans die, the replacement rate of their cells is infinitely reduced. Does this mean that their identity is

better and longer preserved once dead? No one would agree with this. Death is tantamount to a loss of identity - not to its preservation.

So, a qualitative yardstick is required.

We can start by asking will the identity change - if we change someone's' brain by another's? "He is not the same" - we say of someone with a brain injury. If a partial alteration of the brain causes such sea change (however partial) in the determinants of identity - it seems safe to assume that a replacement of one's brain by another will result in a total change of identity, to the point of its abolition and replacement by another.

If the brain is the locus of identity, we should be able to assert that when (the cells of) all the other organs of the body are replaced (with the exception of the brain) - the identity will remain the same.

The human hardware (body) and software (the wiring of the brain) are conversely analogous to a computer.

If we change all the software in a computer - it will still remain the same (though more or less capable) computer. This is equivalent to growing up in humans.

However, if we change the computer's processor - it will no longer be identified as the same computer.

This, partly, is the result of the separation between hardware (=the microprocessor) and software (=the programmes that it processes). There is no such separation in the human brain. These 1300 grams of yellowish material in our heads are both hardware and software.

Still, the computer analogy seems to indicate that our identity resides not in our learning, knowledge, or memories. It is an epiphenomenon. It emerges when a certain level of hardware complexity is attained. Yet, it is not so simple. If we were to eliminate someone's entire store of learning and memories (without affecting his brain) - would he still be the same person (=would he still retain the same identity)? Probably not.

Luckily, achieving the above - erasing one's learning and memories without affecting his brain - is impossible. In humans, learning and memories ARE the brain. They change the hardware that processes them in an irreversible manner.

This, naturally, cannot be said of a computer. There, the separation is clear. Change a computer's hardware and you changed its identity. And computers are software - invariant.

We are, therefore, able to confidently conclude that the brain is the sole determinant of identity, its seat and signifier. This is because our brain IS both our processing hardware and our processing software. It is also a repository of processed data. ANY subsystem comprising these functions can be justly equated with the system of which it is a part. This seems to hold true even under the wildest gedanken experiments.

A human brain detached from any body is still assumed to possess identity. And a monkey implanted with a human brain will host the identity of the former owner of the brain.

Around this seemingly faultless test revolved many of the debates which characterized the first decade of the new discipline of Artificial Intelligence (AI).

Turing's Test pits invisible (hardware - less) intelligences (=brains) against one another. The answers which they provide (by teleprinter, hidden behind partitions) determine their identity (human or not). When the software (=the answers) is accessible, no direct observation of the hardware (=the brains) is necessary in order to determine identity. But the brain's status as THE privileged identity system is such that even if no answers are forthcoming from it - the identity will reside with it.

For instance, if for some logistical or technological problem, a brain will be prevented from providing output, answers, and interactions - we are likely to assume that it has the potential to do so. Thus, in the case of an inactive brain, an identity will be the derivative of its potential to interact (rather than of its actual interaction).

After all, this, exactly, is what paleoanthropologists are attempting to do. They are trying to delineate the identity of our forefathers by studying their skulls and, by inference, their brains and their mental potentials. True, they invest effort in researching other types of bones. Ultimately, they hope to be able to draw an accurate visual description of our ancestors. But we must not confuse description with identity, phenomenology with aetiology. What dies, therefore, is the brain and only the brain.

Functionally, Death can also be defined (really, observed) from the outside. It is the cessation of the exertion of influence (=power) over physical systems. It is sudden

absence of physical effects exerted by the dead object, a singularity, a discontinuity. It is not an inert state of things.

Inertia is a balance of forces - and in Death the absence of any force whatsoever is postulated. Death is, therefore, also not an entropic climax. Entropy is an isotropic, homogeneous distribution of energy. Death is the absence of any and all energies. While, outwardly, the two might seem identical - they are the two poles of a dichotomy.

So, Death, as opposed to inertia or entropy, is not something that modern physics is fully equipped to deal with. Physics, by definition, deals with forces and measurable effects. It has nothing to say about force-less, energy-devoid physical states. Actually, this would be a stark contradiction in its terms.

Indeed, this definition of Death has reality itself to argue against it.

If Death is the cessation of impacts on physical systems (=the absence of physical effects), we are hard pressed to explain memory away.

Memory is a physical effect (=electrochemical activity of the brain) within a physical system (=the Brain). It can be preserved and shipped across time and space in capsules called books or articles (or art). These containers of triggers of physical effects (in recipient brains) defy Death. The physical system which produced the memory capsule will surely cease to exist - but it will continue to physically impact other physical systems long after its demise, long after it was supposed to have ceased to do so.

Memory divorces Death from the physical world. As long as we (or our products) are remembered - we continue to have a physical effect on future physical systems. And as long as this happens - we are not technically (or, at least, fully) dead. Our Death will be fully accomplished only after our memory will have been wiped out completely, not even having the potential of being reconstructed in the future. Only then will we cease to have any dimension of existence (=effect on other physical systems).

Philosophically, there is no difference between being influenced by a direct discussion with Kant - and being influenced by his words preserved in a time-space capsule (=a book). For the listener/reader Kant is very much alive, more alive than many of his neighbours whom he never met.

This issue can be further radicalized. What is the difference between a two dimensional representation of Kant (portrait), a three dimensional representation of the philosopher (a statute) and yet another three dimensional representation of him (Kant himself as perceived by his contemporaries who chanced to see him)?

As far as a bias-free observer is concerned (a camera linked to a computer) - there is no difference. All these representations are registered and mathematically represented in a processing unit so as to allow for a functional, relatively isomorphic mapping. Still, human observes will endow the three dimensional versions with a privileged status.

Philosophically, there is no rigorous reason to do so.

It is conceivable that, in the future, we will be able to preserve a three-dimensional likeness (a hologram), replete with smells, temperature and tactile effects. Why should the flesh and blood version be judged superior to such a likeness?

Physically, the choice of a different medium does not create a hierarchy of representations, from better to worse. In other words, the futuristic hologram should not be deemed inferior to the classic, organic version as long as they both possess the same information content.

Thus, the hierarchy cannot be derived from describing the state of things.

An hierarchy is established by considering potentials, namely: the future. Non-organic representations (hereinunder referred to as "representations") of intelligent and conscious organic originals (hereinunder referred to as ; "organic originals") are finite. The organic originals are infinite in their possibilities to create and to procreate, to change themselves and their environment, to act and be acted upon within ever more complex feedback loops.

The non-organic versions, the representations, are self contained and final. The organic originals and their representations may contain identical information in a given nano-second. But the amount of information will increase in the organic version and decrease in the non-organic one (due to the second Law of Thermodynamics). This inevitable divergence is what endows the organic original with its privileged status.

This property - of increasing the amount of information (=order) through creation and procreation - characterizes

not only the organic originals but also anything that emanates from them. It characterizes human works of art and science, for instance, or the very memory of humans. All these tend to increase information (indeed, they are, in themselves, information packets).

So, could we happily sum and say that the propagation and the continuation of physical effects (through memory) is the continuation of Life after Death? Life and Memory share an important trait. They both have a negentropic (=order and information increasing) impact on their surroundings. Does that make them synonymous? Is Death only a transitory phase from one form of Life (organic) to another (informational, spiritual)?

However tempting this equation is - in most likelihood, it is also false.

The reason is that there are two sources of the increase in information and what sets them apart is not trivial. As long as the organic original lives, all creation depends upon it. After it dies, the works that it has created and the memories that are associated with it, continue to affect physical systems.

However, their ability to foster new creative work, new memories, in short: their capacity to increase order through increased information is totally dependent upon other, living, organic originals. In the absence of all other organic originals, they will stagnate and go through an entropic decrease of information and order.

So, this is the crux of the distinction between Life and Death:

LIFE is the potential, possessed by organic originals, to create (=to fight entropy by increasing information and order), using their own software. Such software can be coded into hardware - e.g., the DNA - and then the creative act involves the replication of the organic original or parts thereof.

Upon the original's DEATH, the potential to create is propagated through Memory. Creative acts, works of art and science, other creations can be carried out only within the software (=the brains) of other, living, organic originals.

Both forms of creation can co-exist during the original's life. Death, however, is proclaimed only with the incapacitation of the first form of creation (by an organic original independent of others), only when the surrogate form of creation becomes exclusive.

Memories created by one organic original resonate through the brains of others. This generates information and provokes the creative potential in recipient brains. Some of them do react by creating and, thus, play host to the parasitic, invading memory, infecting other members of the memory-space (=the cultural space).

Death is, therefore, the assimilation of the products of an organic original in a Collective. It is, indeed, the continuation of Life but in a collective, rather than in an individualistic mode.

Alternatively, Death could be defined as a terminal change in the state of the hardware with designated pieces of the software injected to the brains of the Collective. This, of course, is reminiscent of certain viral

mechanisms. The comparison may be superficial and misleading - or may open a new vista: the individual as a cell in the large organism of humanity. Memory has a role in this new form of socio-political evolution which superseded Biological Evolution, as an instrument of adaptation.

Certain human reactions - e.g., opposition to change and religious and ideological wars - can perhaps be viewed as immunological reactions in this context.

I hope I made my point clear and that you can see the forest from the (too many) woods. Both the Law and Technology deal with identities and definitions - in other words, both are manipulations of language.

We have come a full circle. I opened by saying that technology is the embodiment of valid statements - such as protocols (language) in the physical realm. The Law is a series of such valid statements and, in many respects, Technology feeds the Law and embodies Laws in its hardware and software.

Now, if you still wish to get practical - I am all eyes ...:o))

Sam

Hi Sam,

I must say that your "apparent" disgressions on linguistic problems and concerning life-after-death are no disgression at all but very pertinent questions (all my analyses are, in fact, based solely upon life and death). These two are, in my opinion, the only pair of words that

remain clear. Indeed, your disgression on linguistics provides us with a beautiful example of the contradictions and tensions implied in the couplet "identity and velocity". It would seem that the Law (as does Art) has its own rules of "tempo" and "weight". Indeed, your digression offers a great example of what I call "the inclined enclosing frame", that is to say, all is in motion, even the frame of mind. This is not yet a revolution, however great, this is a change, a metamorphosis.

Regarding your comments on life-after-death I should say that, in spite of your suggestive presentation, they are nothing new. The First world War marked a red line in history fostering a new figure: the anonymous soldier, the cell in the organism, the wheel in the machine . No other form of life-after-death was wished (and considered) by the old Celtic races: sons (propagation of genetic material). In fact, what other life-after-death more real than a son? Those evolutionary ideas! Does anybody still think it is a risk that they have appeared recently? As far as I know Nietzsche was the first who cast the problem in real terms. By the way, I must say that it was Nietzsche himself who thought about life-after-death in your terms and even went far beyond by asking himself, with his habitual poetic genius: "Wouldn't Life be just a strange kind of Death?". Anyway, Nietzsche stumbled on spurious Darwinism as most thinkers, even today, do, but he thought (erroneously?) that there was a truth hidden in Darwinism: a drive to continuous perfection and thus, to supermanhood. Ignoring Nietzsche´s "Rennaisance-like hysteria of power" and, over all his "sins", his titanic deviation, it seems that sometimes, depeneding on his turbulent style and his protean fogs, he brings an investigation to light, a choleric prophecy, a question of destiny: what does it mean to us, the self-appointed

pinnacle of nature, its more powerful tool, this "ever-present" drive to perfection?

To put it in your terms, which trait is common, if any, to IDENTITY and SURPASSING? If we translate such ideas to our century (which, by the way, was considered by Nietzsche as his proper home) a question arises: are we tempted, with our technolgical advances (genetics and artificial intelligence) into achieving supermanhood in its more spurious, materialistic, vulgar and titanical ways?

But, in spite of these metaphysicaI depths, I still wish to be practical:-)

As the only real subject of the law of Life and Death, my writing is always focused on the individual. Humanity, society, seems to be only cast in History (of the past). To start with, it must be said that there is no longer the old "in versus out" (internal versus external) problem (the individual against nature, the state, or culture). As I have pointed out, in a certain way, you, too, live on an inclined plane. It is not only the world which, at an ever increasing "molto vivace" tempo, is changing and threatening us - but also it is our conceptions of world which are changing. From a birds' eye view, all these characteristics: fuzziness, extreme movement, ever faster tempo, the hunger for energy, are the signs of metamorphosis. Finally, the individual himself has to put a face to the dilemma, the "to be or not to be"? Is he with man or with superman? Are we transforming ourselves into information (the modern version of what the ancients called the soul, the spirit)? Is the age of information our supermanhood: the Supermind?

Then, how will the techno-future be related to the individual, which poisons and pleasures, which treats and

fights are there for him? The individual should know, in the first place, that his position is, more than ever, ad hoc.

The First Premise: THERE IS NO EXIT. The technological organization is total. It covers the Earth completely - the environment is now auxiliary. He should also know that the new selection principle is technological, the arena is in n-dimensional spaces, the weapons are mathematics. The old knowledge of nature (and its possibilities) must be accompanied by technological knowledge (for instance, a full knowledge of techno-pharmacology). Technology admits all the old myths and probably new possibilities: masks, guerrilla warfare, etc... all are there for the individual. And it poses new dangers: totalitarianism is le must of these dangers. The domination of technology works with sweeping controls. The use of the mask seems almost essential to survival (the mask of mediocrity is the best). New changes in the selection principle are always possible, the spiritual man must be fully aware of the extension and velocity of the tech-waves. The arena is a magic space, changing abruptly. To survive, the mind of the spiritual man should be like that of a Tai-chi fighter's: open to all the possibilities, just like water (the spirit of Zen), a universal action from a universal point of view. Always ready to fight, always ready to play; extremely relaxed and extremely fixed. Technology feeds on the four elements, only the fifth, Eros, is out of its dominion. Sexual love, friendship and the muses are the only true riches. Whenever we enjoy these pleasures, we are out of the power of the technological Leviathan. There are no morals yet, only models. Stoicism, hedonism and all the other pre-Socratic concepts are always helpful tools (the two ages have some things in common).

A study of other cultures is essential (a full, real-time adaptation to any place and any time). "Umheilicht" must be overcome with two movements of extreme tension: a deep study in history (natural, universal, human, religious, philosophical, etc.) and the diary observation of the technological breaking point (what the old historians called: the "short time" and the "long time"). To combine these two fields is the mark of the cultivated future man. As Goethe beautifully stated: our feet firmly on earth (reality), our minds always connected to the stars. That is our destiny and also our pleasure.

These are nothing more than incomplete advices. The total field is changing all the time. Fully settled in traditional knowledge, the spiritual man should always be attuned to the last movement, ever changing his mind without changing his heart. The (re-)creation of new myths is the superlative "work" bestowed upon the unique person. "Life is UNCONDITIONAL, death is only the beginning."

Well, thats all for now. In my next letter, I'll talk about the king: the technician and his politics. It is essential for the unique person to know who and how rules. Your turn.

Best regards
roberto

Dear Roberto,

Indeed, we are almost in full agreement (does this begin to worry you? ...;o))

I also think that the age of information will see the revolutionizing of the very process of evolution, its speed, its ends, its means, its distribution (all-pervasiveness). I am not sure that we have a choice (between Man and Superman, for instance). I think the phase transition will occur when a new principle of selection is introduced, as you have suggested. It will be a principle of selection between competing models of civilization. In this, its nature will be no different to its predecessors. But it will employ different criteria. For the first time, technology per se, as DISTINCT from humanity - will have a say. From now on - and ever more so in the future - we are TWO equal partners: the Man and the Machine. The increasing complexity of the latter will render it intelligent and the equal of Man himself.

Actually, what you are talking about in your letter is a kulturkampf, a clash or battle of cultures. I tend to doubt this specific outcome - I think transition will be smoother and that disparate cultures will COHABITATE - though I fully agree with all your premises. Here is why:

Culture is a hot topic. Scholars (Fukoyama, Huntington, to mention but two) disagree about whether this is the end of history or the beginning of a particularly nasty chapter of it.

What makes cultures tick and why some of them tick discernibly better than others – is the main bone of contention.

We can view cultures through the prism of their attitude towards their constituents: the individuals they are comprised of. More so, we can classify them in

accordance with their approach towards "humanness", the experience of being human.

Some cultures are evidently anthropocentric – others are anthropo-transcendental. These two lingual coins need elaboration to be fully comprehended.

A culture which cherishes the human potential and strives to create the conditions needed for its fullest materialization and manifestation is an anthropocentric culture. Such striving is the top priority, the crowning achievement, the measuring rod of such a culture, its attainment - its criterion of success or failure.

On the other pole of the dichotomy we find cultures which look beyond humanity. This "transcendental" look has multiple purposes.

Some cultures want to transcend human limitations, others to derive meaning, yet others to maintain social equilibrium. But what is common to all of them – regardless of purpose – is the subjugation of human endeavour, of human experience, human potential, all things human to this transcendence.

Granted: cultures resemble living organisms. They evolve, they develop, they procreate. None of them was "created" the way it is today. Cultures go through Differential Phases – wherein they re-define and re-invent themselves using varied parameters. Once these phases are over – the results are enshrined during the Inertial Phases. The Differential Phases are period of social dislocation and upheaval, of critical, even revolutionary thinking, of new technologies, new methods of achieving set social goals, identity crises, imitation and differentiation.

They are followed by phases of a diametrically opposed character:

Preservation, even stagnation, ritualism, repetition, rigidity, emphasis on structures rather than contents.

Anthropocentric cultures have differential phases which are longer than the inertial ones.

Anthropotranscendental ones tend to display a reverse pattern.

This still does not solve two basic enigmas:

What causes the transition between differential and inertial phases?

Why is it that anthropocentricity coincides with differentiation and progress / evolution – while other types of cultures with an inertial framework?

A culture can be described by using a few axes:

Distinguishing versus Consuming Cultures

Some cultures give weight and presence (though not necessarily equal) to each of their constituent elements (the individual and social structures). Each such element is idiosyncratic and unique. Such cultures would accentuate attention to details, private enterprise, initiative, innovation, entrepreneurship, inventiveness, youth, status symbols, consumption, money, creativity, art, science and technology.

These are the things that distinguish one individual from another.

Other cultures engulf their constituents, assimilate them to the point of consumption. They are deemed, a priori, to be redundant, their worth a function of their actual contribution to the whole.

Such cultures emphasize generalizations, stereotypes, conformity, consensus, belonging, social structures, procedures, forms, undertakings involving the labour or other input of human masses.

Future versus Past Oriented Cultures

Some cultures look to the past – real or imaginary – for inspiration, motivation, sustenance, hope, guidance and direction. These cultures tend to direct their efforts and resources and invest them in what IS. They are, therefore, bound to be materialistic, figurative, substantive, earthly.

They are likely to prefer old age to youth, old habits to new, old buildings to modern architecture, etc. This preference of the Elders (a term of veneration) over the Youngsters (a denigrating term) typifies them strongly. These cultures are likely to be risk averse.

Other cultures look to the future – always projected – for the same reasons.

These cultures invest their efforts and resources in an ephemeral future (upon the nature or image of which there is no agreement or certainty).

These cultures are, inevitably, more abstract (living in an eternal Gedankenexperiment), more imaginative, more creative (having to design multiple scenarios just to survive). They are also more likely to have a youth cult: to prefer the young, the new, the revolutionary, the fresh – to the old, the habitual, the predictable. They are be risk-centered and risk-assuming cultures.

Static Versus Dynamic (Emergent) *Cultures*

Consensus versus Conflictual Cultures

Some cultures are more cohesive, coherent, rigid and well-bounded and constrained. As a result, they will maintain an unchanging nature and be static. They discourage anything which could unbalance them or perturb their equilibrium and homeostasis. These cultures encourage consensus-building, teamwork, togetherness and we-ness, mass experiences, social sanctions and social regulation, structured socialization, peer loyalty, belonging, homogeneity, identity formation through allegiance to a group. These cultures employ numerous self-preservation mechanisms and strict hierarchy, obedience, discipline, discrimination (by sex, by race, above all, by age and familial affiliation).

Other cultures seem more "ruffled", "arbitrary", or disturbed. They are pluralistic, heterogeneous and torn. These are the dynamic (or, fashionably, the emergent) cultures. They encourage conflict as the main arbiter in the social and economic spheres ("the invisible hand of the market" or the American "checks and balances"), contractual and transactional relationships, partisanship, utilitarianism, heterogeneity, self fulfilment, fluidity of the social structures, democracy.

Exogenic-Extrinsic Meaning Cultures versus Endogenic-Intrinsic Meaning Cultures

Some cultures derive their sense of meaning, of direction and of the resulting wish-fulfillment by referring to frameworks which are outside them or bigger than them. They derive meaning only through incorporation or reference.

The encompassing framework could be God, History, the Nation, a Calling or a Mission, a larger Social Structure, a Doctrine, an Ideology, or a Value or Belief System, an Enemy, a Friend, the Future – anything qualifies which is bigger and outside the meaning-seeking culture.

Other cultures derive their sense of meaning, of direction and of the resulting wish fulfilment by referring to themselves – and to themselves only. It is not that these cultures ignore the past – they just do not re-live it. It is not that they do not possess a Values or a Belief System or even an ideology – it is that they are open to the possibility of altering it.

While in the first type of cultures, Man is meaningless were it not for the outside systems which endow him with meaning – In the latter the outside systems are meaningless were it not for Man who endows them with meaning.

Virtually Revolutionary Cultures versus Structurally-Paradigmatically Revolutionary Cultures

All cultures – no matter how inert and conservative – evolve through the differential phases.

These phases are transitory and, therefore, revolutionary in nature.

Still, there are two types of revolution:

The Virtual Revolution is a change (sometimes, radical) of the structure – while the content is mostly preserved. It is very much like changing the hardware without changing any of the software in a computer.

The other kind of revolution is more profound. It usually involves the transformation or metamorphosis of both structure and content. In other cases, the structures remain intact – but they are hollowed out, their previous content replaced by new one. This is a change of paradigm (superbly described by the late Thomas Kuhn in his masterpiece: "The Structure of Scientific Revolutions").

The Post Traumatic Stress Syndrome Differentiating Factor

As a result of all the above, cultures react with shock either to change or to its absence.

A taxonomy of cultures can be established along these lines:

Those cultures which regard change as a trauma – and those who traumatically react to the absence of change, to paralysis and stagnation.

This is true in every sphere of life: the economic, the social, in the arts, the sciences.

Neurotic Adaptive versus Normally Adaptive Cultures

This is the dividing line:

Some cultures feed off fear and trauma. To adapt, they developed neuroses. Other cultures feed off hope and love – they have adapted normally.

Neurotic Cultures	***Normal Cultures***
Consuming	Distinguishing
Past Oriented	Future Oriented
Static	Dynamic (Emergent)
Consensual	Conflictive
Exogenic-Extrinsic	Endogenic-Intrinsic
Virtual Revolutionary	Structurally-Paradigmatically Revolutionary
PTSS reaction to change	PTSS reaction to stagnation

So, are these types of cultures doomed to clash, as the current fad goes – or can they cohabitate?

It seems that the Neurotic cultures are less adapted to win the battle to survive. The fittest are those cultures flexible enough to respond to an ever changing world – and at an ever increasing pace, at that. The neurotic cultures are slow to respond, rigid and convulsive. Being past-orientated means that they emulate and imitate the normal

cultures – but only when they have become part of the past. Alternatively, they assimilate and adopt some of the attributes of the past of normal cultures. This is why a traveller who visits a neurotic culture (and is coming from a normal one) often has the feeling that he has been thrust to the past, that he is experiencing a time travel.

A War of Cultures is, therefore, not very plausible. The neurotic cultures need the normal cultures. The latter are the generators of the former's future. A normal culture's past is a neurotic culture's future.

Deep inside, the neurotic cultures know that something is wrong with them, that they are ill-adapted. That is why members of these cultural spheres entertain overt emotions of envy, hostility even hatred – coupled with explicit sensations of inferiority, inadequacy, disappointment, disillusionment and despair. The eruptive nature (the neurotic rage) of these cultures is exactly the result of these inner turmoils. On the other hand, soliloquy is not action, often it is a substitute to it. Very few neurotic cultures are suicidal – and then for very brief periods of time.

To forgo the benefits of learning from the experience of normal cultures how to survive would be suicidal, indeed. This is why I think that the transition to a different model, replete with different morals, will be completed with success. But it will not eliminate all pervious models - I foresee cohabitation.

Sam

Hi Sam,

I am not worried at all about being in full agreement with you - it is you who should be worried indeed:-)

But, I think we are not dealing with the same question. I am presenting this question in absolute terms. Though all those considerations about cultures are interesting indeed, it is not my intention at all to come with another page of the "futurology of technology" or to try to make a new version of techno-waves, futures shocks and versions of culture wars of Toffler's, Huntington's and all the rest (E. J. said enough in 1931). Concerning this special issue I will elaborate in my next letter, again with pragmatic intentions. I will try to give the reader a brief picture of the king: the technician. It is essential for the individual to know who is the ruler and how he rules.

But I wasn't talking about that when I referred to Nietzsche. My question was not about cultures, nations, techno-waves, races or any other profiles. My interrogation was about the human species as a whole, those strange things we called humans. I don't know what SURPASSING, OVERCOMING, mean de facto. I was just asking the readers (and myself): What does it mean, if we accept the hypothesis (and this is another question) of supermanhood?

Could be a significant change in the human species? I am thinking in "surpassing" humans with genetic engineering, the creation of not only new races but whole new species. That is my central idea in this dialogue: What if technology embodies the Law of Nature, and the Law of nature is an eternal drive to perfection? Doesn't it mean that man must, de facto, be overcome? Does anybody think yet, that a superior species (if this means anything at all) would live with us in pax and harmony? Finally, I will

ask you again: can humans be surpassed? What does it mean, philosophically and existentially, OVERCOMING?

Well, I promise to the readers that the next letter will be entirely pragmatic:-)

We will talk a little about the king and his clothes? Or is he naked?

Best regards
roberto

Dear RCM,

Sometimes, I am so obsessed with WHAT I have to say - that I forget to explain WHY I say it.

I fully understood your questions the first time around. The confluence of genetic engineering, computer networking (communal neural networks), telecommunications (especially wireless) and mass transport is bound to alter humanity profoundly and irreversibly. One possibility is, indeed, surpassing and overcoming on the way to the emergence of a Superman, in the Nietzschean sense (whatever that is). Whether this is the inevitable result - is debatable. But it is a possibility which merits discussion.

I prefer to be less metaphysical. I think that a new CULTURE will emerge. Cultures are highly structured reactive patterns adopted by human communities in response to shocks (including positive shocks), traumas, or drastic changes in circumstances. Cultures to human communities are very much as personalities are to

individuals. I think the new technologies will spawn a host of new cultures (or, more like it, a global new culture).

BUT

We must always bear in mind that:

a. Only a small minority of humanity will be thus effected. Only the citizens of the rich, developed world are likely to have access to genetic engineering and computing and telecommunications on a pervasive scale. The "new species" is likely to be an isolated phenomenon, confined to niches of the Earth. The "new culture" will be a Rich Man's culture. This is what I meant by cohabitation. Even today we have technologically advanced cultures cohabiting with stone age cultures (in the Amazon River basin, in Africa, in Asia).

b. Even if we assume that the idea of historical progress (asymptotically aspiring to perfection) is valid (HIGHLY debatable); and even if we assume that technology will come to embody this idea (of progress); and even if we accept that, in becoming the embodiment of the idea of progress - technology will supplant the Law, it will BECOME THE LAW - even then, it is not certain that it will have any impact on humanity as such. Judging by history, it is more reasonable to assume that people will simply react by generating a new culture. They will respond to these new realities, making use of a series of newly and especially developed formalisms, rituals and behaviours

intended to enhance their survivability in a technological universe.

c. It would not be true to say that history can be no guide to us this time around because the new technologies are so unprecedented. What can history teach us about genetic engineering and its capacity to reconstruct Man and to create whole new species, you can wonder. The answer is: it can teach us a lot. Low-tech genetic engineering (especially in agriculture and breeding) has been going on for millennia now. How can history help us when we try to cope with the Internet? The answer is: is many ways. The Internet is only the latest in a string of networks which spanned the globe (the telegraph, the railway, the radio, television).

So, I went and had a look at history and came up with the conclusion that ALL cultures that I reviewed (by no means a complete survey), present and future, fall into the taxonomic framework that I suggested to you. I believe that the NEW CULTURE, the reaction to the new technologies, will fall into one of the taxonomic rubrics that I suggested and that it will co-exist with other, older, different cultures. That is why I went into this elaborate classification of cultures.

I hope I made myself a lot clearer and I am awaiting your Hans Christian Andersen treatment of the technicians and their clothes.

Sam

Hi Sam

Reading your answer, I finally understand why people are not scared by genetic progress: it is that we simply cannot imagine a surpassing of MAN. We, as the self-appointed pinnacle of nature cannot conceive of anything superior to us. You say that even though THIS CHANGE is possible - it is not likely. But, don't you think that is in contradiction with your own system. You affirm that manipulation of information can be incarnated in matter, that is to say, that changes in the quanta of info imply a change in matter. So, dreams could come true.

Can we dream about something higher than man? Are there any more steps between us and the Universe?:-) What I was asking you, my dear Ph. D., is to discuss this matter, from a philosophical point of view. But you elude it, maybe it is because we humans cannot think further than humans do, maybe there is no concept of perfection beyond Man...

Well, let us get off these speculations and take off into the land of the Technicians, these new mandarins of the Empire(R). But, before starting our "graphic adventure" in the techno-jungle of our Play-SuperStation(TM) thou should know the rules of the game and the tools at thou service.

First: This is a game, any resemblance to reality is pure coincidence.

Second: Every instrument has two sides.

Third: To play this game everyone has to pay a price (and you know what it is).

Fourth: The game is not over yet.

"Is it a fact - or have I dreamt it - that by means of electricity, the world of matter has become a great nerve, vibrating thousands of miles in a breathless point of time? Rather, the round globe is a vast head, a brain, instinct with intelligence!"
Nathaniel Hawthorn (1804-1864)

The Technician, (a lullaby)

Believe me or not, beloved public, but the truth is that our king, the king of this tale, was born a poor child, son of the marriage between Science and "homo faber". For some years he served as apprentice in forges and labs, learning all he saw. One day he had a dream and in it he was the king the world. Inebriated by his dreams, in keeping with the way of the old heroes, he went to the battlefields with his new toys and his grey uniform. Its was time for the world to know him.

The birth of a new ruler. So, with his war machines, he drew a red line (hereinafter called the "death zone") in history. 1914, year one of Age of the Technicians (TM). In those days he was young, arrogant and violent. He was not interested in art, the spirit, self-control... but in his death toys. After the "necessary" destruction of the old world, he donned his new clothes: the overall, the uniform of the Worker, to build his own world (that he had a dreamt of). But the old directors were stupid, they did not see the new world, they were blind and weak, he had to liquidate them. Like the Pied Piper he walked all over the

world, playing his electrifying symphony of work and vengeance. All, young and old alike, awoke and heard the enchantment. The hammer hit the anvil, the sickle harvested flowers and heads, the propeller triturated meat. Flames twisted in revolt, the earth opened its abyss wherefrom the demons entered, but nothing of this affected our young boy, who looked fascinated by his map and his time-clocks and pushed the buttons of his switchboard. When the tempest ended, he was the director of the factory. But, now he needed money,, so he went with his machines to Eldorado(TM), he invented RiskGames (TM) to win in the roulette of the Casino of the Isle(R). Now he was the the director of Starve, Mooty and Poors(TM) and wore Armani(TM). But his thirst was infinite, he wanted all the prize. He wanted girls: the Romans ravished the Sabines(TM). He became an artist, clad in leather, he started a heavy-metal band called The Garage(TM). It was then that he discovered TV, so he contracted a band from Seattle(TM) and invented the grunge. He was now the director of a EFE(TM) (Entertainment For Ever), the megacorp of communications, and wore Burton(TM) shirts. He has all the channels: sports, porno, music, surgery, religion, even one of horoscopes, it was called Acuarium(TM) TV and the TV spot went: "we sell future 24 hours a day, only 5$ per hour". Now he had already discovered the most cruel and sublime pleasure: to control other people's minds. So he bought the various parts of AT&T and made the world over a Net of titanium and silicon - satellites were marked with his trademarked name. Then, he created a new company of software games with the best techno-artists he found. He also bought the biggest chemical/genetic corporation: SupremArtis(TM). Finally he merged all them up and created the Ultimate Super-Megacorp, which

sold mega-consoles whose games were more real than Reality(TM), and he called it The Dream(TM).

Game Over

Insert Coin

Well, hope you liked it. I think it is enough for now. It is always a pleasure to dialogue with you, hope we will keep our team work - I think our different points of view can offer new perspectives to our readers and that is a very good thing.

And, dear readers, never forget: technology, the machine, is only a scenery, you are both the actor and the author.

"He only earns his freedom and his life

Who takes them everyday by storm."

Goethe

best regards
roberto

THE AUTHOR

Shmuel (Sam) Vaknin

Curriculum Vitae

Born in 1961 in Qiryat-Yam, Israel.
Served in the Israeli Defence Force (1979-1982) in training and education units.

Education

Graduated a few semesters in the Technion – Israel Institute of Technology, Haifa.
Ph.D. in Philosophy (major: Philosophy of Physics) – Pacific Western University, California, USA.
Graduate of numerous courses in Finance Theory and International Trading.
Certified E-Commerce Concepts Analyst by Brainbench.
Certified in Psychological Counselling Techniques by Brainbench.
Certified Financial Analyst by Brainbench.
Full proficiency in Hebrew and in English.

Business Experience

1980 to 1983
Founder and co-owner of a chain of computerized information kiosks in Tel-Aviv, Israel.

1982 to 1985
Senior positions with the Nessim D. Gaon Group of Companies in Geneva, Paris and New-York (NOGA and APROFIM SA):
– Chief Analyst of Edible Commodities in the Group's Headquarters in Switzerland
– Manager of the Research and Analysis Division
– Manager of the Data Processing Division
– Project Manager of the Nigerian Computerized Census
– Vice President in charge of RND and Advanced Technologies
– Vice President in charge of Sovereign Debt Financing

1985 to 1986
Represented Canadian Venture Capital Funds in Israel.

1986 to 1987
General Manager of IPE Ltd. in London. The firm financed international multi-lateral countertrade and leasing transactions.

1988 to 1990
Co-founder and Director of "Mikbats-Tesuah", a portfolio management firm based in Tel-Aviv.
Activities included large-scale portfolio management, underwriting, forex trading and general financial advisory services.

1990 to Present

Freelance consultant to many of Israel's Blue-Chip firms, mainly on issues related to the capital markets in Israel, Canada, the UK and the USA.

Consultant to foreign RND ventures and to governments on macro-economic matters.

Freelance journalist and analyst for various media in the USA.

1990 to 1995

President of the Israel chapter of the Professors World Peace Academy (PWPA) and (briefly) Israel representative of the "Washington Times".

1993 to 1994

Co-owner and Director of many business enterprises:

– The Omega and Energy Air-Conditioning Concern

– AVP Financial Consultants

– Handiman Legal Services – Total annual turnover of the group: 10 million USD.

Co-owner, Director and Finance Manager of COSTI Ltd. – Israel's largest computerized information vendor and developer. Raised funds through a series of private placements locally in the USA, Canada and London.

1993 to 1996

Publisher and Editor of a Capital Markets Newsletter distributed by subscription only to dozens of subscribers countrywide.

In a legal precedent in 1995 – studied in business schools and law faculties across Israel – was tried for his role in an attempted takeover of Israel's Agriculture Bank.
Was interned in the State School of Prison Wardens.
Managed the Central School Library, wrote, published and lectured on various occasions.
Managed the Internet and International News Department of an Israeli mass media group, "Ha-Tikshoret and Namer".
Assistant in the Law Faculty in Tel-Aviv University (to Prof. S.G. Shoham).

1996 to 1999

Financial consultant to leading businesses in Macedonia, Russia and the Czech Republic.
Economic commentator in "Nova Makedonija", "Dnevnik", "Makedonija Denes", "Izvestia", "Argumenti i Fakti", "The Middle East Times", "The New Presence", "Central Europe Review", and other periodicals, and in the economic programs on various channels of Macedonian Television.
Chief Lecturer in Macedonia in courses organized by the Agency of Privatization, by the Stock Exchange, and by the Ministry of Trade.

1999 to 2002

Economic Advisor to the Government of the Republic of Macedonia and to the Ministry of Finance.

2001 to 2003

Senior Business Correspondent for United Press International (UPI).

Web and Journalistic Activities

Author of extensive Web sites in:

– Psychology ("Malignant Self Love") – An Open Directory Cool Site,

– Philosophy ("Philosophical Musings"),

– Economics and Geopolitics ("World in Conflict and Transition").

Owner of the Narcissistic Abuse Study List and the Abusive Relationships Newsletter (more than 6000 members).

Owner of the Economies in Conflict and Transition Study List, the Toxic Relationships Study List, and the Link and Factoid Study List.

Editor of mental health disorders and Central and Eastern Europe categories in various Web directories (Open Directory, Search Europe, Mentalhelp.net).

Editor of the Personality Disorders, Narcissistic Personality Disorder, the Verbal and Emotional Abuse, and the Spousal (Domestic) Abuse and Violence topics on Suite 101 and Bellaonline.

Columnist and commentator in "The New Presence", United Press International (UPI), InternetContent, eBookWeb, PopMatters, "Global Politician", eBookNet, and "Central Europe Review".

Publications and Awards

"Managing Investment Portfolios in States of Uncertainty", Limon Publishers, Tel-Aviv, 1988

"The Gambling Industry", Limon Publishers, Tel-Aviv, 1990

"Requesting My Loved One – Short Stories", Yedioth Aharonot, Tel-Aviv, 1997

"The Suffering of Being Kafka" (electronic book of Hebrew and English Short Fiction), Prague and Skopje, 1998-2004

"The Macedonian Economy at a Crossroads – On the Way to a Healthier Economy" (dialogues with Nikola Gruevski), Skopje, 1998

"The Exporters' Pocketbook", Ministry of Trade, Republic of Macedonia, Skopje, 1999

"Malignant Self Love – Narcissism Revisited", Narcissus Publications, Prague and Skopje, 1999-2007

The Narcissism Series (e-books regarding relationships with abusive narcissists), Skopje, 1999-2007

"After the Rain – How the West Lost the East", Narcissus Publications in association with Central Europe Review/CEENMI, Prague and Skopje, 2000

Winner of numerous awards, among them Israel's Council of Culture and Art Prize for Maiden Prose (1997), The Rotary Club Award for Social Studies (1976), and the Bilateral Relations Studies Award of the American Embassy in Israel (1978).

Hundreds of professional articles in all fields of finances and the economy, and numerous articles dealing with geopolitical and political economic issues published in both print and Web periodicals in many countries.
Many appearances in the electronic media on subjects in philosophy and the sciences, and concerning economic matters.

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Economy/Politics: http://ceeandbalkan.tripod.com/

Psychology: http://www.narcissistic-abuse.com/

Philosophy: http://philosophos.tripod.com/

Poetry: http://samvak.tripod.com/contents.html

Fiction: http://samvak.tripod.com/sipurim.html