MONEY IN CRISIS

"We invented money and we use it, yet we cannot...understand its laws or control its actions. It has a life of its own."

Lionel Trilling¹

Historical changes, involving unparalleled speed, scale and complexity, are reshaping our money system. Banks and financial services, under pressure from the cyber-economy, are transforming dramatically. Market innovations, such as Open Finance, make it more difficult than ever for regulators to define what a bank even is, or what money is theirs to manage. New players are vying for power and influence, both in our societies and in our monetary systems. The changes are such that they will significantly impact our lives, our children's lives and the very nature and foundations of our society.

SHIFTS & DEREGULATION

Over the last few decades, additional fundamental changes have been occurring to our monetary systems. These changes have been precipitated by three cumulative shifts that have taken place during the past several decades: a structural shift, financial deregulation and technological advancements.

Structural Shift: On August 15, 1971, President Nixon unilaterally disconnected the dollar from the gold standard, thus inaugurating an era of currencies whose values would be determined predominantly by market forces, not by any "thing." This was the beginning of "floating exchanges," a systemic monetary change in which currency values could fluctuate significantly at any point in time.

1980's Financial Deregulation: The governments of Margaret Thatcher in the U.K. and Ronald Reagan in the U.S. embarked simultaneously on a massive financial deregulation program. A reform package called the Baker Plan #, which imposed similar deregulations in 16 key developing countries in the wake of the Developing Countries' debt crisis of the 1980s. These deregulations enabled a much larger array of participants to become involved in currency trading than was ever previously possible.

Technological shift: The computerization of foreign exchange trading created the first 24-hour, fully integrated, global market, ever. This shift, occurring in tandem with the above, raised the speed and scale with which currencies could be moved around the world to a whole new level.

During his survey of 5000 years of money's history, Glyn Davies identified this technological shift as one of but a pair of exceptional innovations in money: "There have been two major changes,

the first at the end of the Middle Ages when the printing of paper began to supplement the minting of coins, and the second in our own time when electronic money transfer was invented. We know that the first change enabled banks to take the lead role in money creation away from sovereigns. But what will this second change create?

CHANGES TO THE BANKING SYSTEM

Martin Mayer, in his classic *The Bankers* (1974)², recounts the following true story of a man who was honored with a party for 50 years of loyal service to a Virginia Bank. Asked what had been the most important change that he had seen in banking during his career, the man paused a few moments, and then grabbed the microphone to finally reply: "Air Conditioning." In his 1997 follow-up book *The Bankers: the New Generation*, Mayer notes: "Twenty years later, this story is prehistoric. It's still funny, but it's incomprehensible. In these twenty years, banking has changed beyond recognition..."

Indeed, the dynamics of banking have changed more in the past twenty-five years than in the last several centuries. The 1970 U.S. bank holding company law defined a bank as an institution which: "agglomerates the transaction balances of a community to lend it at interest to its commercial enterprises," a definition quite consistent with Adam Smith's, two centuries earlier. It is also, at its core, the same banking business that the Babylonians and the Italian goldsmiths had started on their benches, gathering local savings and lending them out to businesses for a fee.

Financial Services

Most surviving banks today are involved in a variety of different businesses. We now find almost 85 percent of the banking industry's resources coming from sources other than insured deposits. Instead of loans to businesses, the lifeblood of some of the largest banks is credit card loans to consumers (Citicorp, the world's largest bank, makes more than \$2 billion per year in this business—accounting for more than half its profits). They have entered the financial services business, abandoning traditional banking.

The deeper reason for this dramatic shift can be found in the impact of the Information Age that has fundamentally transformed competitive factors within the credit markets. Mayer notes that in the "olden days" 20 or so years ago, "banks used to fancy themselves as advisors to their clients." In fact, they simply took advantage of the monopoly they had over financial market information. When computers suddenly made possible direct access to financial market quotes, corporations used this access to issue their own commercial paper, bypassing the commercial banks in the process. For instance, the largest financial lender in the U.S. today is not a bank; it is General Electric Capital, which completely finances itself without a penny of bank loans. Instead, it raises capital directly by issuing its own bonds or short-term notes.

Traditional banks have not coped well with this massive change. Since 1980, over one-third of U.S. banks have either merged or disappeared. The proliferation of Automatic Teller Machines (ATMs) has taken care of "Banking Hours"—as well as doing away with some 179,000 human teller jobs (37 percent of the U.S. banks' work-force) in just one decade (1983-1993). This adaptation continues: it is expected that technology will eliminate another 30 to 40 percent of all jobs in commercial banking over the next decade.

Credit Cards

Credit cards started as a convenience for the purchase of gasoline, frequent oil changes and auto repairs. They were issued by oil companies to encourage brand loyalty—exactly as the Airline industry is doing today with Frequent Flyer miles. In 1949, Diners Club created the first modern "charge card" on the back of which it proudly listed all twenty-seven restaurants, "the finest in the country," where the card was accepted. In 1955, Diners Club switched to plastic. By 1958, the Bank of America launched its own plastic credit card, which became the VISA card alliance in 1977. Presently, VISA involves no less than 20,000 financial institutions worldwide, 400 million card members and over \$1.2 trillion in annual turnover. And VISA is certainly not alone! Thousands of other credit card systems have proliferated all over the globe. Most significantly, a whole new way of lending money into existence has been created.

Interest rates applicable to credit card loans are much higher—often a multiple—of what banks would be able to obtain from normal business or consumer loans. This is what has made this form of creating money irresistible to issuers.

A titanic struggle has begun in relation to the control of emerging forms of money. Banks are now acting mostly like computerized telecommunications companies, while companies involved in telecommunications, computer hardware and software, credit card processing, Internet shopping, even cable television, have discovered that they can perform many of the services of the banks. Whoever wins control over the new electronic money systems will ultimately be endowed with the power to issue money. As the banker Sholom Rosen claimed: "It's definitely new, it's revolutionary—and we should be scared as hell."

If well-informed bankers get scared of the scale and speed of money changes, what should the rest of us do?

Currencies

Traditionally, managing savings intelligently boiled down to allocating cash between the three classical major asset classes: real estate, stocks and bonds (see insert).

Traditional Asset Classes

The Industrial Revolution gave rise to growing numbers of individuals with financial savings, now looking to "store" those savings wherever they would have the greatest "value" (hence, the term storing values). The three tr s c

Real Estate: During the Agricultural Revolution, real estate, and particularly land, was the dominant form of savings. Individual wealth was evaluated by the quality and the size of the real estate one had accumulated. This all changed with the Industrial Age, when stocks and bonds in commercial enterprises became a favorite investment vehicle.

Stocks: A stock, or a fraction of ownership in a business, is a very old investment instrument. The earliest stock offerings date back to seafarer and caravan trips lost in the mist of time. Such stock purchases were already practiced among the Phoenicians in antiquity, and became openly tradable among the general public in Venice and Genoa by the 13th century. "Men and women from all ranks of life owned shares. They were regarded as particularly good security for one of the favorite forms of investment across the sea, the sea loan, which was repaid only if the ship arrived safely." The oldest public stock exchange still currently functioning is that of Amsterdam, dating from the 17th century.

Bonds: A bond is a loan to the organization on whose behalf it was issued. It is a promise to pay the loan back at maturity, while being paid interest on that loan on a periodic basis. Since "usury," or charging interest, was deeply frowned upon, it was not until the 18th and 19th centuries before this investment option replaced real estate in people's portfolios (though some "perpetual bonds" that are still being honored today can be traced back, for example,

Over the past decade another major asset class has appeared—national currencies—which now play a central role in our world. Currency trading has become the biggest single market in the world, dwarfing the trading volume of all other asset classes and even the entire global economy. As a result, currency markets are becoming vitally important to almost everyone for the first time in recorded history.

Historically, currency was an asset class only for specialists such as moneychangers and banks operating internationally. However, any modern global portfolio has, by definition, a currency component (e.g., holding a Japanese bond or stock means automatically having a position in Japanese Yen). Holding positions in currencies themselves has become a logical extension; particularly as currency trading has very low transaction costs and is potentially very profitable under the floating exchange monetary regime. It has now become a significant factor in professional investors portfolios (see insert).

Currencies: an Ideal Speculation Tool?

As a speculation tool, today's foreign exchange markets offer unique features compared to other asset classes:

- A 24-hour a day, liquid market. This is the most liquid of all asset classes (more than bonds or stocks, whose trading is limited to local market hours, and of course more liquid than real-estate).
- Low transaction costs. Buying or selling a currency in volume is far cheaper than buying stocks, bonds or real estate. The only cost is a small spread between buy and sell in foreign exchange that locks in the bank's profits.
- Depth of the foreign exchange market. When investment managers have a large amount of money to place, buying a stock will drive up the price of that stock. Similarly, when they sell this stock, their own trade will make the market move against them. No such problems exist in foreign exchange: the depth of the currency markets is such that even billions of dollars won't make a blip.

A sure sign that something different is afoot is the sheer volume of currency transactions. In the prehistoric days of the 1970's, the typical daily volume of foreign exchange transactions, worldwide, fluctuated between \$10-\$20 billion. By 2001, that daily volume had reached a staggering \$1.3 *trillion*. It is almost 50 times greater than all the goods and services produced per day (GDP) by all the industrialized countries. It is fair to conclude that something very unusual is going on today, something *never*, *experienced before*.

Derivatives

Besides revolutionizing banking and accelerating the movement of currencies, computers have also played another role in the foreign exchange markets: they have made possible the explosive development of a whole new wave of financial products, generically called "derivatives." Derivatives make it possible to un-bundle each piece of financial risk and trade each one of these risks separately.

For example, a Japanese Yen bond can be un-bundled in at least three pieces of risk: a currency risk (the risk that the Yen drops in value against your own currency), an interest rate risk (the risk that Japanese interest rates will go up after you purchase your bond), and an issuer risk (the risk that the company issuing the bond defaults on the bond). Derivatives enable an investor to select exactly which component of risk they want to include, or exclude, from their portfolios.

As an analogy, imagine that instead of buying a ticket to a classical concert or opera, you suddenly have the capacity to separately select and combine your favorite soprano, your favorite tenor, violinist, conductor, and so on, all interpreting your favorite compositions. If you know what you are doing, the result of this new freedom could be quite extraordinary, and far superior,

to what you can get in a normal "pre-packaged" performance. However, if your knowledge is limited, your personal creation could also turn out to be catastrophic.

Derivatives provide a comparable kind of freedom for financial portfolios, but similarly require a lot more knowledge than average investors can muster. When asked what banks do for their customers these days, Don Layton of Chemical Bank said: "Control his risk; that's a core banking product." Derivatives are the primary tool to achieve this, and have therefore become a major profit center for the banks active in this domain.

Of course, shifting risks from one place to another is fine as long as the party that ends up with the risk is both knowledgeable and strong enough to bear it. Indeed many institutions have been badly burnt, without even understanding what hit them. Barings, a top name in the City of London for 233 years, became one of the most spectacular victims of this process (see insert).

Batrings

The Duc de Richelieu said in 1818 that there were six great powers in Europe—France, England, Prussia, Austria, Russia and the Baring Brothers. This reputation did not help, however, when in February 1995 a single young trader, Nick Leeson, lost \$1.5 billion—two times the bank's entire capital—in the short span of a few days on the Singapore derivatives market. The surprise must have been greatest inside the bank itself, as Ron Baker, the head of the Financial Products Group of Baring Bank had made an enthusiastic assessment of the activities of Mr. Leeson: "Nick had an amazing day... Baring Singapore was the market... Nick just sees opportunities that are phenomenal, and he just takes them."

EFFECTS OF RECENT CHANGE

It bears repeating that only three to four percent of foreign exchange transactions relate to the "real" economy, reflecting movements of real goods and services in the world, and 96 percent are purely speculative. These changes are without precedent and the potential risks are very high. A market that is now fundamentally based on speculation is also quite volatile, and the volatility, in turn, has led to instability.

"Speculative trading" (i.e., trading whose sole purpose is to make a profit from the changes in the value of the currencies themselves) has all but taken over the foreign exchange markets. In contrast, the "real" economy (i.e., transactions relating to the purchase and sale of real goods and services abroad, including portfolio investments) has now been relegated to a mere sideshow of the global casino of the speculative monetary exchange game.

Speculation can play a positive role in any market; theory and practice show that it can improve market efficiency by increasing liquidity and depth in the market. But current speculative levels are clearly out of balance. John Maynard Keynes, the noted 20th century economist, once warned: "Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done." ¹⁰

Increased Currency Volatility

Currency volatility is a measure of change in the value of one currency against all other currencies. And volatility happens to be one of the unexpected consequences of the massive increase in speculative activities.

Back in the 1960's, the proponents of freely floating currency exchanges used to argue that currency volatility would drop as soon as a free market was established. Foreign exchange markets today are certainly much more open and freer than in the 1960's, when the Bretton Woods fixed exchange rate system was operational.

However, an OECD statistical study led to sobering conclusions, directly contradicting that former theoretical forecast. ¹¹ The past 30 years of floating exchanges have revealed the foreign exchange volatility as four times higher than under the Bretton Woods fixed exchange system.

Simple common logic explains how volatility increases with the speculative volume of the trades. Let us assume that a currency is under pressure, and that a modest five percent of the major currency-traders "take a negative view about that currency." This means, in practice, that those who own this currency will sell it, and those who don't own it sell short. In 1986, when total daily volumes hovered around 60 billion dollars, such a move by five percent of the market volume would have represented a \$3 billion move against the currency in question, certainly a challenge to a Central Bank, but a manageable one. Today, with daily volumes of \$1.2 trillion, the same proportional move would generate an overwhelming \$60 billion in transfers against that one currency, an amount that no Central Bank could withstand.

Instability

Speculation has led to volatility. In turn, volatility has resulted in instability.

Experts are concerned. Even people who profit from explosive speculative activity are becoming seriously worried. George Soros, widely considered one of the biggest players in this game, stated: "Freely floating exchange rates are inherently unstable; moreover, the instability is cumulative so that the eventual breakdown of a freely floating exchange rate system is virtually assured." Joel Kurtzman, business editor of The New York Times, is even more damning, as demonstrated by the title of his book: *The Death of Money: How the Electronic Economy has Destabilized the World's Market*. Even a master of understatement such as Paul Volcker, exgovernor of the Federal Reserve, went on record to express his concern about the growth of "a constituency in favor of instability," i.e., financial interests whose profits depend on increased volatility. The net effect of the actions of these constituencies for instability is the monetary crises that regularly make the front-page headlines.

The greater the volatility in the currency market, the greater the instability; the greater the instability, the greater the threat to our monetary system and to our entire society. Nonetheless, it is precisely when our entire monetary system is threatened most, namely, in greater volatility, that speculators are positioned to make their greatest profits!

To illustrate this last point, a typical comment by a foreign exchange trader reveals how a period of relative stability is perceived: "You can't make any money like this. The dollar movement is too narrow. Anyone speculating or trading in the dollar or any other currency can't make any money or lose money. You can't do anything. It's been a horror."

Role Of Central Banks

Central Bankers are increasingly uncomfortable. Not only are they dealing with a world of rising uncertainty and currency volatility, but are additionally being out-gunned in the currency markets.

The "official reserves" of Central Banks consist of the foreign currency reserves that Central Banks can use to intervene in the foreign exchange markets. Typically, if a currency comes under pressure, one country's Central Bank will look to other Central Bankers to prop up their own currency by buying it in the market place. "The most dramatic use of such reserves was in the summer of 1992 and 1993 when the currencies of the European Union came under massive attack in the foreign exchange markets. Some DM400 billion (over U.S. \$225 billion) were mobilized in 1992, and a smaller amount in 1993—amounts dwarfing those spent in any previous period. But despite all the money spent, the Central Banks lost, and the markets won." ¹⁶

Today, the entire combined reserves of all the Central Banks together (about US \$1.3 trillion, including about \$340 billion in Central Bank gold valued at current market prices) would be gobbled up in less than one day of normal trading. Add to this roughly \$15 trillion of privately managed funds, factor in an unknown quantum of derivative positions, and you arrive at an unquantifiable potential foreign exchange volume, which a major crisis could unleash upon the world financial markets, causing bedlam.

Beliefs about Beliefs

Let us sidestep a moment here to reflect, allowing an interesting perspective of the role of Central Banks to be revealed.

When making a purchase, we think nothing of paying for it with, say, a twenty-dollar bill, for the reason that our lifelong experience has taught us that the bill will be accepted by everyone as being worth twenty dollars.

We have a deeply held *belief*—and this is the key—not that the twenty-dollar bill is in itself valuable, but that everyone else will accept it as valuable. We hold the belief that others believe that the money is valuable. What we are in effect talking about is a belief about a belief.

Our beliefs can be quite powerful and commonly possess a formidable presence in the human psyche. History abounds in examples of people who have chosen torture and death to uphold their beliefs. Beliefs are so powerful, that many choose to continue believing in something, even when faced with ample evidence to the contrary.

Then again, a belief about a belief is a different story altogether. It is a fragile and ephemeral thing. Perhaps nothing can shake my belief, but my belief that you believe can be shattered by a mere rumor. Moreover, a chain of beliefs about a belief is only as strong as its weakest link. A rumor that someone on the other side of the world has stopped believing in the Mexican peso, the Thai baht or the Russian ruble, causes one to fear that his neighbors might stop believing—and the whole house of cards might fall down, as it did for Thailand in late 1997, for Russia in 1998 and for Argentina in 2002.

Central Bankers & the Confidence Game

This explains an interesting phenomenon that has been noted about Central Bankers. If you are a Central Banker, you can never admit to having a problem. Customarily, the first step to solving a problem is by identifying and declaring the problem. If you are a Central Banker, however, even the slightest appearance of any doubt or uncertainty about how to proceed on your part will cause an immediate fracture in the chain of belief in the value of your money. Acknowledging a problem creates the very problem you worry about. For instance, in June 1977,

when Michael Blumenthal, then Secretary of the U.S. Treasury, addressed the dollar valuation problem simply by airing his concerns, he launched the dollar into a two-year tailspin.

CONCLUSION

In essence, money is a confidence game. Like the emperor with no clothes (i.e., whenever a "crisis of confidence" looms), everybody just hopes that no untrained kid will make an improper remark. Under such circumstances, it may indeed require a lot of regal confidence, mystery and decorum to ensure that a long and fragile chain of beliefs will hold.

This global casino is triggering the foreign exchange crises that, according to data gathered by the World Bank, shook no less than 87 different countries over the past 25 years. These emergencies are the dislocation symptoms of the old Industrial Age money system. **The stakes are enormous.** Unless some precautions are taken soon, there is at least a 50-50 chance that the next five to ten years will see a global money meltdown.

Ultimately, money (especially money that is not backed by real goods or services) is in essence a trust that lives and dies only in human hearts and minds. Money systems, including our current one, are filled with mechanisms and symbols that aim at keeping that trust alive. Civilizations are built on trust, because it is at the core of the self-confidence required for a civilization to grow and survive.

Conversely, when a society loses confidence in its money, it loses confidence in itself. Entire civilizations have collapsed with the collapse of their money systems (see insert).

All of the above is part of an irreversible process of change in our money system and our societies. We are now in a transition period, an interval of great risk, but also one of enormous opportunity. The risks are not only financial. Money and society are intrinsically linked to one another. Some of the emerging money technologies could create a society more repressive than ever imagined. However, major opportunities are becoming available as well (please refer to the Terra Trade Reference Currency (TRC) Initiative.

ENDNOTES

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