sustainability. While this chapter can only give a brief overview of some of the levers which can shift our economic systems, we hope it has given you an introduction to the growing sources of information now available on these issues, and on the many ways to engage. Each of us needs to find what best suits our personal inspirations and capacities to make a difference. If we all contribute our share, the whole system will continue to shift. While the obstacles are enormous, so are the opportunities. The tipping point is coming nearer. It might just be you who turns the tide.

21. TRANSFORMING MONETARY SYSTEMS:

Changing the Way Money Shapes Leadership

by Bernard Lietaer (Belgium)

Introduction

An old saying states that "decisions about wars are too important to be left to generals." This is why generals tend to report to civilians in democracies, not the other way around.

This chapter intends to make a similar point: "decisions about money systems are too important to be left to central banks and bankers."

While few people would object to the first statement about wars and generals, many people may be surprised about its relevance to money systems and bankers. In fact, since monetary issues are left to "specialists," it makes most people's eyes glaze over instantly as they expect an avalanche of technical jargon impenetrable to the uninitiated.

What non-experts must realize from the outset is that money is *not* "neutral." In every respect, our monetary system has consequences. Therefore, it is our responsibility to create a global monetary system that fosters the consequences we want.

I will demonstrate what I mean in these statements by taking us through the following steps:

- Explaining how our money influences the time horizon of our decisions.
- Describing how today's money system is a main cause of instability in the world.
- Arguing why we can't hope the current monetary authorities will solve the problems.
- Offering a concrete proposal for a privately initiated and managed global currency.
- Concluding that the timing for this proposal is opportune *now*.

How Money Influences the Time Horizon of Our Decisions

First, we must develop an approach to money that does not lead to global myopia. If I ask the typical CEO of a major European company what time horizon he uses when making decisions for his children, he answers: "Oh, twenty or thirty years."

But if ask him, "What is the time horizon when you come into your office every day?" the answer is striking different. "One to two quarters," he will reply. "And if I

didn't do that, I would be replaced by someone who would use such a short term horizon."

Obviously, this business leader is quite capable of thinking with long-term horizons, but doesn't have the freedom to use them for his corporate decisions. The difference between the two domains of decisions is that fiduciary responsibility requires his corporate decisions to be made exclusively on financial criteria. We will show why this CEO and every other CEO's time horizon is fundamentally dictated by our monetary system, over which he has little control.

Part of this short-term-ism is independent of the monetary system: the further events are located in the future, the more difficult it is to make accurate predictions about them, implying higher risks. But it is also a fact that our present financial system itself systematically accentuates the bias towards short-term results, thereby discouraging interest about longer-term implications.

How Today's Money System is a Main Cause of Instability

Secondly, we must develop a global monetary system that does not breed additional insecurity. Business has always involved dealing with risks. However, today's monetary system is adding an additional layer of instability risk, over which business itself has very little influence. This instability expresses itself in three different ways, including:

- The amplification of the business cycle, due to the money creation process (which is an old problem dating back to the beginning of the industrial age).
- The growing frequency and scale of currency and banking crises (a problem that has grown over the past three decades).
- The possibility of a dollar crash (which many informed observers are announcing for the foreseeable future).

Let us look briefly at each of these.

The way money is created tends to amplify the fluctuations of the business cycle, as banks simultaneously tend to either make credit available or restrict it for a given sector, country, or group of countries. Central banks attempt to counteract this process by giving countercyclical interest rate signals. Nonetheless, the net effect remains clear: collective actions of the banking system tend to exacerbate the business cycle in both boom and bust directions. Boom and bust cycles are particularly damaging because of their impact on business, unemployment and political stability.

The bulk of modern money is indeed created by bank debt, and banks tend to have a herd instinct when making credit available or restricting it for particular countries or

industries. When business is good, banks tend to be more generous in terms of credit availability, thereby fueling a potentially inflationary boom period. In contrast, as soon as the business horizon looks a bit darker, banks reduce credit availability and can thereby change a small business dip into a full-blown recession. The central banks try to counteract this phenomenon by giving interest rate signals, but such counteractions are rarely as effective as they would like. Notwithstanding the attempts by central banks to reduce such fluctuations, the current process of creating money through bank-debt remains, in practice, a significant boom/bust-amplification mechanism. The table below shows some data to support this assertion.

An IMF study covers 53 countries that had experienced 158 monetary crises and 54 banking crises between 1975 and 1997. Each of the 53 countries suffered an average loss of 4.3 percent from expected output. Of the 158 monetary crises, there were 96 crises that led to output losses averaging at 7.1 percent.[1]

	Number of crises	Average recovery time[a]	Cumulative loss of output per crisis[b]	Crisis with output losses[c]	Cumulative loss of output per crisis with output loss[d]
		(years)	*(% points)*	*(percent)*	*(% points)*
Currency crises	158	1.6	4.3	61	7.1
Industrial	42	1.9	3.1	55	5.6
Emerging market	116	1.5	4.8	64	7.6
Currency crashes[e]	55	2.0	7.1	71	10.1
Industrial	13	2.1	5.0	62	8.0
Emerging market	42	1.9	7.9	74	10.7
Banking crises	54	3.1	11.6	82	14.2
Industrial	12	4.1	10.2	67	15.0
Emerging market	42	2.8	12.1	86	14.0
Currency & banking crises[f]	32	3.2	14.4	78	18.5
Industrial	6	5.8	17.6	100	17.6
Emerging market	26	2.6	13.6	73	18.8

[a]Average amount of time until GDP growth returned to trend. Because GDP growth data are available for all countries only on an annual basis, by construction the minimum recovery time was one year.
[b]Calculated by summing the differences between trend growth and output growth after the crisis began until the time when annual output growth returned to its trend and by averaging over all crises.
[c]Percent of crises in which output was lower than trend after the crisis began.
[d]Calculated by summing the differences between trend growth and output growth after the crisis began until the time when annual output growth returned to its trend and by averaging over all crises that had output losses.
[e]Currency "crashes" are identified by crises where the currency component of the exchange market pressure index accounts for 75 percent or more of the index when the index signals a crisis.
[f]Identified when a banking crisis occurred within a year of a currency crisis.
Source: International Monetary Fund, 1999, *World Economic Outlook: May 1998*, p. 79.

Costs of Crises in Lost Output Relative to Trend (1975-97)

Losses due to banking crises are significantly worse. The average output loss for each of the 54 banking crises is 11.6 percent. However, among these there were 10 banking crises that were managed without causing a significant output loss. The 44 banking crises that did cause losses averaged a 14.2 percent decline from the expected GDP output. Furthermore, the average output loss in emerging economies is even greater than in industrial economies. Finally, banking crises last on average 3.1 years, twice as long as monetary crises.

In countries that experienced a banking and a monetary crisis simultaneously, the estimated output loss was greater than when each crisis was experienced separately. The average cumulative output loss was 14.4 percent in the 32 simultaneous crises and, this time, was greater for industrial than emerging economies.[2] In short, every region of the world has been significantly affected by the economic side effects of such financial crises. Furthermore, while these shocks are often presented in strictly financial terms as temporary setbacks, the social and human consequences linger on much longer.

The Possibility of a Dollar Crash

It should be clear by now that the instability of a financial market itself exerts a direct and significant effect on business. All efforts to stabilize financial markets have so far failed. On the contrary, the 169 monetary crises and 93 banking crises already on record may be dwarfed by the "mother of all monetary crashes" that would result from an unthinkable dollar crash. Because the dollar is the linchpin currency of the entire global system, a dollar crash would have a devastating effect everywhere.

It used to be that international dollar problems were considered everybody else's problem. John Connally, when he was U.S. Treasury Secretary in the Nixon administration, was explicit about this fact: "The dollar maybe our currency, but it is your problem." Similarly, Paul Volcker made his priorities clear when he was Chairman of the Federal Reserve: "Other people have their problems. We have our problems. I am hired to take care of our problems."[3] This gives additional weight to the alarm signals from American monetary icons, of which a short sample is provided next (with year of statement in parenthesis):

The same Paul Volcker is saying now: "Below the favorable surface [of the economy], there are as dangerous and intractable circumstances as I can remember… Nothing in our experience is comparable... But no one is willing to understand [this] and do anything about it... We are consuming... about six per cent more than we are producing. What holds the world together is a massive flow of capital from abroad... A

big adjustment will inevitably become necessary, long before the social security surpluses disappear and the deficit explodes...We are skating on increasingly thin ice." (2004)[4] Completely uncharacteristically, he goes as far as stating unambiguously: "there is now a 75% chance in five years of a dollar 'hard landing.'" (2005)[5]

Robert E. Rubin, former Secretary of the Treasury who moved on to become Chairman of the Board of Citibank, sees the federal budget "on an unsustainable path," and forecasts "a day of reckoning." More explicitly, he claims that "the scale of the nation's projected budgetary imbalance is now so large that the risk of severe adverse consequences must be taken very seriously, although it is impossible to predict when such consequences may occur." (2004)[6]

Lawrence Summers, another former Treasury Secretary who went on to become President of Harvard University, similarly concluded that "there is something odd about the world's greatest power being the world's greatest debtor."

The International Monetary Fund, for the first time, officially criticized the U.S. in its official report of January 2004: "With its rising budget deficit and ballooning trade imbalance, the United States is running up a foreign debt of such record-breaking proportions that it threatens the financial stability of the global economy." Rodrigo Rato, the Managing Director of the IMF, added: "Record levels of debt are now financed by foreign investors and it is highly unlikely that such easy credit will continue to be available to the U.S. on the basis of the existing policy path." (2004)

C. Fred Bergsten, director of the Institute for International Economics in Washington: "The I.M.F. is right. If those twin deficits — of the federal budget and the trade deficit — continue to grow, you are increasing the risk of a day of reckoning when things can get pretty nasty." (2005)

Paul Craig Roberts, Assistant Secretary of the Treasury in the Reagan administration, and Associate Editor of the Wall Street Journal editorial page, elaborates on the mechanism involved: "The U.S. economy is headed toward crisis… The dollar's sharp decline and projections of continuing trade and budgetary red ink are undermining the dollar's role as reserve currency… At some point the flight will begin. Instead of buying fewer dollars, central banks will sell dollars hoping to get out before the dollar hits bottom. Suddenly, the advantage of being the reserve currency becomes a nightmare as the world's accumulations of dollars are brought to market. An enormous supply and weak demand mean a very low exchange rate for the once almighty U.S. dollar." (2005)[7]

Paul Krugman, Economics Professor at Princeton and MIT, winner of the John Bater Clark medal for the best American economist of his generation, claims: "I think the United States is setting itself up for a Latin American-style financial crisis."[8] He adds: "There is a 50 percent chance that the outcome is pretty calamitous… I spent years as an economist studying crises. And too many times I saw examples of finance ministers saying, 'Of course we can't do this forever, but in the near term it's perfectly sustainable… The scariest words you can hear about financial markets are, 'it's different this time.'" (2005)[9]

Joseph Stiglitz, previously Chief Economist at the World Bank and Nobel Laureate in Economics: says he is also "very worried." "I find it very difficult to know how to put a number" on the probability of a crisis, he added, "but there's a widespread sense in the market that there is a substantial chance." (2005)[10]

We can only hope that all these luminaries are wrong, and that a dollar crash will somehow be avoided. But do we really have to wait for such a devastating event to wake up to the fact that the monetary system requires some rethinking? More importantly: who can and should do such rethinking?

We cannot wait for monetary or banking authorities to solve the issue of instability. In every one of the 93 banking crashes of the past three decades, an identical scenario has been played out. Governments and their taxpayers end up paying for the rescue of the national banking system, and exactly the same unstable system gets rebuilt as before.

It would also be unprecedented that national governments engage preventively in significant currency reforms. While the reasons for such prevailing postures are varied and often complex, the end result is nevertheless the same — a customary lack of initiatives until a major crisis or a world war forces change.

Added to this is today's geopolitical environment in which the United States has emerged as the world's sole superpower, and the U.S. dollar as the world's preeminent currency. This reality confers upon this nation a commanding voice in international monetary policymaking, but reduces the likelihood of any significant governmental monetary initiative being taken. This "benign neglect" approach makes a cooperative governmental initiative by the United States unlikely. And any attempt at reform without the United States would be futile.

Terra: a Privately Managed Global Currency

For all the reasons stated previously, *it is time to consider creating a global currency, which I have called the Terra.*

The opportunity exists today for a private initiative to create a global currency that would correct the problems caused by our current monetary system. It would not require the approval of governments, because it would operate within the pre-existing legal and tax framework of international barter ("counter-trade"). It wouldn't be anybody's national currency, because it would function in parallel with all the existing national currencies. Specifically, the Terra would:

- Provide a robust international standard of value, thereby protecting the transactions completed in this currency from the monetary instability of the conventional system;
- Stabilize the world economy by counteracting the pro-cyclical money creation process of the conventional money system;
- Correct our society's short-term view by realigning stockholder's financial interests with long-term thinking.

A privately issued, complementary trade reference currency may at first seem an unconventional idea. But it may be an idea whose time is coming. Some of the most respected icons of finance and banking think there is a need for such a monetary innovation, as illustrated by the following quotations:

"I foresee new private currency markets in the 21st century."[11] — Alan Greenspan, Chairman of the Federal Reserve Board. 1997

"The ultimate logic of economic globalization is a stable and common unit of account and an internationally accepted means of payment — in other words, a common world currency."[12] — Paul Volcker, former Chairman of the Federal Reserve Board. 2000

"The main thing we miss today is universal money, a standard of value, a link between the past and the future, and the cement linking remote parts of the human race to one another."[13] — Robert Mundell, Nobel Laureate in Economics, at his acceptance speech in December, 1999.

Other economists have similarly been insisting on the need for an international currency that is not based on any particular national currency.[14] The Terra mechanism is a pragmatic proposal to meet the objectives described in those statements. At its core, it is a standardization of today's widespread practice of international barter.

A global Trade Reference Currency (TRC) would be legally structured as standardized counter-trade. This new currency — whose unit of account could be called the *'Terra'* — would be backed by a standard basket of the most important commodities and services traded in the global market (e.g. commodities such as oil, wheat, copper, etc., and services like carbon emission rights or international freight, which could be

standardized.) Terras would be issued by a Terra Alliance as electronic inventory receipts for commodities sold to it by producers.

The bearer would pay the cost of storage of the physical commodities (estimated at 3.5%-4% per annum). This makes the Terra a 'demurrage' currency,[15] which encourages its use as a contractual, planning and trading device, not as a store of value. Neither is it a "financing source" in the sense of creating debt. It is a source for trade financing structured so that credits will be automatically extinguished through the completion of transactions.

How the Terra differs from conventional money

The Terra is different from conventional money in seven other ways:

1. The Terra is defined as a standard basket of the most important commodities and services in the global market for which futures markets can be established. It would, therefore, be conceptually similar to a fully backed gold standard, but rather than being backed by a single commodity it would be backed by a dozen of the main commodities being traded today internationally, including gold. A diversified basket is by definition more stable in value than any component of it. Being fully backed by a physical inventory of commodities would make the Terra a very robust and credible payment unit. This backing would also make it possible to convert the Terra into national moneys under certain pre-established conditions (explained in point 7 below).

2. The Terra is, by definition and design, an inflation-*resistant* currency. Inflation is defined as change in value of a basket of goods and services. Therefore, by selecting the appropriate ingredients in the basket (including, if desirable, an index capturing residual global inflation not picked up directly by the basket of physical commodities itself), the Terra is explicitly designed to be inflation-resistant.

3. It is a currency that is *complementary* to the conventional national money. That is, it operates in parallel with the official moneys, without replacing them.

4. Terras would be issued by the Terra Alliance as electronic standardized warehouse receipts, rather than as notes or coins. The Terra could evolve into an international accountancy unit, used for international planning, contractual and payment purposes.

5. The Terra Alliance would be an organization open to all newcomers that meet certain pre-established criteria (similar in this respect to the Visa credit card system). Such an initiative initially could be undertaken on a small scale as a pilot project.

6. One key feature, which differentiates it from previous commodity basket currency proposals, is that the cost of storage of the physical commodities would be charged to the bearer of the Terra. The cost for holding the currency would be 3.5%-4% per annum. This feature makes the Terra a demurrage-charged currency, the opposite of a conventional positive interest rate currency. Unlike conventional money, it is not designed to fulfill the function of storage of value. Indeed, it is by design intended to circulate. Consequently, it would strongly activate commercial exchanges and investments wherever it circulates.

7. The Terra could be redeemed for conventional money according to specific conditions, including a 2% penalty. The Terra Alliance would then simply deliver the inventories to the corresponding commodity markets and obtain the national money necessary for the payment. The 2% penalty creates an incentive to keep the currency circulating in trade.

In short, the Terra would legally be a standardized warehouse receipt that could be used as an international planning, contract and trading currency. Its unique characteristics of being inflation-resistant and a demurrage-charge currency, would endow this trading instrument with unusually interesting macro-economic advantages as explained below.

Macro-economic benefits of the Terra

The Terra would indeed be an ideal standard of international value, given that its basket would include the main components of global trade. It would even be an exceptionally robust standard, given that it is a fully backed currency, something we have not had since the early gold standard days.

The Terra mechanism would also automatically *counteract the prevalent business cycle,* thereby improving the overall stability and predictability of the world's economic system. During economic downturns, corporations tend to have an excess of raw materials. The Terra Alliance would buy these materials by issuing a usable currency, Terras, and keep them in storage whenever the business cycle is weakening. These corporations, so as to avoid the demurrage charges, would tend to spend the Terras as soon as possible to pay their suppliers. These suppliers in turn would have a similar incentive to pass on the Terras as medium of payment. The spread of this increased incentive to trade with this currency would therefore automatically activate the economy at this point in the cycle.

During boom periods, this mechanism would automatically work in reverse, stabilizing the economy so as to avoid inflation. Corporations would have a systematic

incentive not only to stop selling new inventories to the Terra Alliance, but also to cash in the Terras (even incurring the 2% penalty charge), just to get delivery of the raw materials themselves. This is so, because at the top of a boom cycle, inventories are often insufficient for the production processes. This would reduce the amount of Terras in circulation when the business cycle is at its maximum, thereby cooling off inflationary pressures on the economy.

Summary

In summary, Terra-denominated exchanges would tend to automatically dampen the business cycle by providing additional monetary liquidity in counter-cycle with the business cycle, thereby compensating for the pro-cyclical pattern observed in the money creation process of conventional national moneys. The capacity to jumpstart the world economy is particularly important now as the three major world economies threaten to go in a downturn simultaneously for the first time since the 1930s.

This stabilization of the business cycle is also important for the larger global population because of the direct link between a stable economy and stable, readily available jobs. The counter-cyclical nature of the Terra mechanism would not only improve the immediate situation, but also reduce the boom/bust cycle that feeds job instabilities everywhere.

This proposal for the Terra, in summary, addresses the problems that were identified earlier as consequences of today's monetary regime, namely:

- It would provide a robust international standard of value, which makes it possible to insulate international trade contracts from the uncertainties of national money fluctuations.
- Its emission system would spontaneously counteract the boom/bust fluctuations of the business cycle, thereby improving the overall stability and predictability of the world's economic system.
- If used as a planning tool, it would realign financial interests with long-term concerns, which is a powerful way to motivate its users to make decisions favoring sustainability.
- Finally, this approach can be implemented within the existing legal and tax framework of counter-trade, without requiring new international negotiations or agreements. In other words, any business group that desires to put it into practice can start it.

Let me conclude with a final word about *why the time is opportune right now for developing the Terra.*

Our current money system has demonstrated many positive features and results. It empowered the industrialized world with a level of wealth and standard of living that only royalty could dream about in earlier centuries. But this shouldn't blind us to its limitations.

We are *all* both beneficiaries and victims of our monetary system. We are its beneficiaries, because it is the money system that enabled, for better and for worse, the Industrial Age and the largest increase in wealth creation in the history of mankind. Even during the first phase of the industrial revolution (roughly from 1775 to 1914), production and income per capita in industrialized societies has increased by an estimated one-hundred fold! But we are all also its prisoners. We have known for more than 30 years that we must change our course if humanity wants a future on this finite planet.[16]

However, the changes proposed so far remain too modest compared to what is needed. The reason is that we have ignored the contradictions between the incentives built into our financial architecture and long-term sustainability. Ignoring these inconsistencies makes us overlook both the deeper causes of the problems, and important options for solutions. Continuing to do so will keep us stuck with trying to deal with recurrent symptoms, rather than systemic causes. Our current money arrangement systematically undermines sustainability in several ways. It generates:

- Monetary instability and banking crises that periodically derail entire economies;
- The procyclical money creation process that amplifies the business cycle, thereby increasing instability and uncertainty for everybody, including the financial sector itself;
- Short-term thinking that causes longer-term risks and opportunities to be overlooked or dismissed.

Depending on how we manage the next few decades, we can usher in a new age of sustainable wellbeing, or a collapse. The deepest role of leaders is to take the initiatives necessary to shape the systems that will create our future, instead of trying to deal only with the symptoms after the fact. Rethinking our monetary and financial systems has therefore become a necessary condition for realistically creating a more sustainable world for our children. This is why we can no longer afford to leave the issue of monetary designs exclusively to centralized banks. The tools are here, and the timing is

now, for business leaders to take the initiative in the monetary domain. As the philosopher Georg Simmel concluded a century ago:

"The debate on the future of money is not about inflation or deflation, fixed or flexible exchange rates, gold or paper standards, but about the kind of society in which money is to operate." [17]

What might be some additional incentives for business leaders to take the initiative? There needs to be a psychological bridge from where the economic motivation is now, to where it could be, with a more conscious understanding of the monetary system impacts on ecological sustainability.

The kind of leadership that is needed for the Terra is of a totally new paradigm. In the past, there was always a monarch or emperor trying to impose his currency on the people. Today, we have the same phenomenon — except it is not monarchs trying to dominate the international financial system, but nation states.

During the peak of the British Empire, the pound sterling became the primary international currency. After the empire began to fade, the British actually harmed their own economy by trying to sustain the pound's role. That is one key reason why Britain was the last country in Western Europe to recover from World War II. The USA is now doing just the opposite. It is trying to advance its national interests regardless of its impact of the dollar on the world economy.

It is critical to realize that the role of a global currency has built-in conflicts of interest with the role of a national currency; conflicts that will require a sacrifice of either role. Therefore, the real systemic solution is to create and launch a global currency that is nobody's national currency, such as the Terra described in this chapter. Launching such a currency requires a totally new kind of leadership. This leadership would need to be "world centric"" — that is, able to think on a global level. Even if a leader's political constituency, or paycheck, was national, his or her vision would have to be transnational. We need leaders in the financial community who are willing to lead beyond their own borders, and to develop a currency that reflects and embodies the best long-term interests of humankind. Furthermore, what is needed is leaders who are not only "world centric," but who think in terms of addressing our challenges by changing systems, not by fixing symptoms.

CONCLUSION

For us as co-editors, this book and the ongoing work with our colleagues from the Global Leadership Network continues to be a journey that changes who we are. Like you, we have encountered perspectives that were new to us. Some were compelling; others were challenging; still others, contradictory. But all of them have enriched and deepened our understanding of the world we all are co-creating.

Having worked personally with the authors in this volume, we are deeply moved by their passion and care for our common home. Like roommates who cohabit the space within four walls, we human beings cohabit this small planet. Just as we want our housemate to tend to our shared space, so do we want to know colleagues who are committed to caring for the Earth. These women and men who in all their diverse ways tend so strongly and heartfully to our common home, inspire and support us.

Whatever your reaction may be to this set of essays, we are confident that you will agree with us that it is time to broaden the dialogue about the world's future and the kind of leadership that can guide us there. The question is not whether one author or the other is "right." The question is whether, right or wrong, we can more fully comprehend their way of seeing the world, and through that the perspective of countless others. If we wish to live in a humane, sustainable *and* peaceful world, we are obliged (in the words of the Persian poet Rumi) to explore that field "beyond right and wrong." It is in that mysterious terrain where we can, finally, meet our planetary neighbors in all their complexity.

And this, perhaps, is the primary lesson we have learned from ***Leadership Is Global*: we need to meet our neighbors**. We need to listen to and dialogue with them. We need to enter their homes, their lives, their worldviews and their hearts. **We need to explore this global village and make it work — together**. Engaging the journey with each other will help us to connect to our shared humanity and identify the opportunities that will transform our current civilization into one that works for all.

To conclude this book and continue our conversation, let us consider these eleven questions: