

holdings in US government securities than the Federal Reserve itself, thereby dwarfing the Reserve's intervention means.

- The new requirements of the transition economies (the economies of the former Communist world) were never part of the design of the Bretton Woods system, and are therefore not being met.
- Business considers now that foreign-exchange risks dwarf all other 'normal' business risks, and many foreign investments are not made simply because the currency risk is too high or too expensive to cover.

For the first time in half a century, the time is realistically ripe for a concrete proposal for a new monetary system that could actually be implemented. Several proposals have been made toward replacing the current system with a new global currency, a currency in addition to national currencies.

THREE TYPES OF GLOBAL CURRENCIES

A Global Fiat Currency

This currency would be created by a reformed International Monetary Fund (IMF) without any external reference. The Special Drawing Rights (SDRs) are an example of such a currency, but the SDRs are in fact based on a basket of national currencies. The new global fiat currency would not be based on such a basket. It would require management by the reformed IMF to prevent excessive issuance and to relate it to the needs of global economic activity.

A major advantage of such a currency is that it is very flexible in terms of the amounts issued, and is most familiar to today's monetary experience. This flexibility of issuing fiat currency in any quantity also has a potential drawback, noted already by Ricardo in 1817: 'Experience, however, shows that neither a State nor a Bank ever had the unrestricted power of issuing paper money, without abusing that power.'¹ However, the main problem with such a global fiat currency is that it does not provide any structural link to the 'real' economy. It would just provide an additional currency against which the global speculation could play. As it has no intrinsic value, it therefore does not provide any greater real standard of

5 Global Currency Proposals

Bernard Lietaer

BACKGROUND

The national currencies of a few developed nations form the world's only liquid reserves and means of global exchange. A general consensus is now emerging that this has become detrimental to all parties. Dissatisfaction with the current system has been expressed in developing countries, particularly because of the different standards applied for reserve countries and for other nations. More recently, new factors have started to affect industrialized countries directly, creating an environment in which significant change is more likely. Among these new factors are:

- The current system has become unmanageable and unstable due to massive speculation (well over 90 per cent of all foreign exchange transactions are of a purely speculative nature, against less than 10 per cent for all investments and trade for goods and services around the world).
- In addition, the role of reserve currency and medium of exchange in the global economy is now backfiring on the countries involved. When Zaire wants to trade with Argentina or India, it has to do it in US dollars, and those US dollars can only be earned by directly or indirectly exporting to the United States. Hence, there is a structural and global pressure on the reserve countries to import more than their own interests dictate.
- There is also an increasing loss of control by the reserve currency countries on their own monetary policy. Private Japanese bond managers and non-US Central Banks together have larger

value than any national fiat currency does. This was already recognized by Hogart and Pearce, when they stated that:

It will not be long before the world comes to recognize anew that it is no more possible to conduct affairs without a proper standard of value than it would be to conduct affairs without an agreed unit of length or weight.²

A Commodity-Valued Global Reference Currency

The value of a commodity-valued global currency could be determined by a basket of a dozen key commodities. Since the value of the currency refers to the value of a basket of goods, the currency could also be called a reference currency, differing from a fiat currency whose value does not refer explicitly to any good or basket of goods. For historical and psychological reasons, gold should be one of the commodities in the basket. The other eleven commodities could be the most traded commodities in the global markets. The weighting of these twelve commodities in the basket could be based on a 5-year moving average value as they are traded in the global markets. The selection of the eleven non-gold commodities could be revised periodically, for example every ten years, to ensure that the basket includes the most traded commodities. The resulting change in the value and composition of the basket would thus secure a stable but evolutionary reference value.

The major advantages of this reference currency are that the reference currency provides a link with the real world, and that it formally introduces the raw-materials producers (many of which are from transition economies or developing countries) into the global currency system. In many cases, commodities are associated with instability, but while this is true for any individual component, the overall stability would be ensured by the diversity of the basket of about twelve commodities. Such a basket is definitely more stable than any individual currency today. Furthermore, should any particular commodity experience a major price change (for example, the oil crisis of the 1970s), the value of the global currency itself would adjust and therefore dampen the global inflationary impact.

The major disadvantage of the purely commodity-valued currency is that it does not include a commodity backing of the currency. Some people claim that such a backing is a step back-

wards to a more primitive form of exchange. In fact, exactly the opposite may be true:

From a practical point of view, commodity money is the only type of money that, at the present time, can be said to have passed the test of history in market economics. Except for short interludes of war, revolution, and financial crisis, Western economies have been on commodity money systems from the dawn of their history almost up to the present time. More precisely, it is only since 1973 that the absence of any link to the commodity world is claimed to be the normal feature of the monetary system. It will take several decades before we can tell whether the Western world has finally embarked, as so often is claimed, on a new era of non-commodity money or whether the present period will turn out to be just another interlude.³

Indeed, in the 1970s, we have experienced, in the monetary system as a whole, the biggest global inflation run-up in modern history; in the 1980s, a traumatic strangulation of the developing countries by external debt; and in the 1990s, speculative activity in currencies without historical precedent. If there is a consensus on the global economic evolution since we moved into the world of non-commodity money, it is around the word 'uncertainty'.

A Commodity-Backed Global Reference Currency

This particular global currency adds two features to the previous proposal. First, the global currency would not only be valued but also fractionally backed by a buffer stock of the dozen commodities in the basket. Thus, the buffer stock would not only enhance the stability of the currency but also provide a new tool for the global community to reduce the impact of disasters and other shocks. The size of the buffer stock would be determined in terms of a desirable number of weeks or months of world consumption, and the amount held as a fraction of total outstanding currency would be reviewed periodically.

Second, the costs of creating and maintaining this buffer stock would be charged to the holders of the global reference currency. This key feature stimulates the use of the currency as a medium of exchange, while discouraging using it as a store of value. This charge on the holders of the currency creates automatically what has been variously described in the Anglo-Saxon literature as

stamp scrip or stamp currency; and by *Wara* (merchandise currency) or *Freies Geld* (free money) in the German literature.

The theoretical concept of a stamp scrip was originally developed by Silvio Gesell⁴ during the latter part of the last century. Silvio Gesell was an Argentine businessman and economist who has been neglected by many theoretical economists because of the - at first sight - unconventional nature of his 'charge' concept, technically called 'demurrage'. His starting premise is that money as a medium of exchange is considered a public-service good (just as public transportation, for instance), and therefore a small user fee is levied on it. Instead of receiving interest for holding such a currency, the bearer is in fact paying interest. In Gesell's time, stamps were the normal way to levy such a charge. Now, the generalized use of computers in payment and accounting systems, as well as the availability of electronic debit cards ('smart cards') would make this procedure much easier and convenient to implement than ever before, without the inconvenience of handling any physical stamps.

Is such an unconventional concept as Gesell's 'charge money' a theoretically sound one? The answer is a resounding yes, and is supported by personalities of no lesser stature than John Maynard Keynes. Chapter 17 of Keynes' *General Theory of Employment, Interest and Money* analyzes the implications of such money, and provides a solid theoretical backing to the claims made by Gesell. He specifically states that:

Those reformers, who look for a remedy by creating artificial carrying cost for money through the device of requiring legal-tender currency to be periodically stamped at a prescribed cost in order to retain its quality as money, have been on the right track, and the practical value of their proposal deserves consideration.⁵

Keynes concluded with the amazing statement that 'the future would learn more from Gesell than from Marx'.⁶ The best recent contemporary analysis of Gesell's thesis is provided by Suhr.⁷ He also provides solid answers to some of the criticisms levied against it. In addition, Hajo Riese⁸ makes the point that the usual positive interest-bearing money creates systematic sub-optimization in capital allocations. Other economists who have studied the theoretical and practical implications of such alternative currencies include: Cohrsens, Dahlberg, Fisher, Herr and Yeager.⁹

IMPLICATIONS OF A COMMODITY-BACKED GLOBAL CURRENCY

The simple process of charging the holder of the currency over time has a significant impact on behavior patterns. It provides an incentive to separate the currency's function as a medium of exchange from its function as a store of value. Commingling these two functions of money has become a habit only over the past 200 years. For instance the word capital itself comes from the Latin '*capus, capitis*' referring to the head of cattle (as still used in Texas: 'He is worth 1000 head.').

At first sight, it seems to be convenient that money is also a store of value. However, there is a formidable hidden cost in this convenience since the additional function of money as a store of value significantly exacerbates the business cycle and has other side-effects best revealed by describing the positive aspects of separating the two functions of money.

Impact on the Business Cycle

The reason is explained by the theory of time preference of money, which describes the rational trade-off between consumption today versus saving for the future. When someone expects higher uncertainty in the future, a larger proportion of that person's wealth is logically kept as savings against these uncertainties, and automatically a lower percentage used for immediate consumption. Therefore, at the first signs of a recession, anybody who has money will logically save more and consume less, thereby exacerbating the recession for everybody else. Similarly, in boom years, consumer optimism prevails, and people will simultaneously tend to dip into their savings to buy big-ticket items such as cars and houses, thereby pushing the boom into an inflationary period.

While other factors obviously also play a role in the creation of business cycles, it has been demonstrated many times that psychological effects, like consumer confidence, significantly exacerbate the problem. With the proposed system, this boom/bust tendency would be significantly reduced, because the demurrage charge implies a separation of money as a medium of exchange from money as a store of value.

Impact on Employment

The immediate effect of a charge currency is a strong incentive to avoid hoarding in this currency: people prefer to invest or spend it on goods or services and thereby generate a chain reaction of economic transactions which otherwise would either occur in a much slower fashion, or simply not occur at all. This means, in practice, a strong and immediate creation of local employment without the need for government intervention.

This positive effect on employment is also possible to explain by using Fisher's classical equation (also known as the quantity theory of money): $MV = PQ$, where M is the stock of money, V is velocity of turnover of money, P is the price level and Q is the overall volume of output or income. The demurrage charge implies that the velocity of money increases, since people don't like to hoard the charge currency. On the other hand, since the price level is fixed to the price of the basket of commodities, it has to be the case that output increases similar to the increase in velocity.

During the 1930s, most of the real-life implementations of 'stamp scrip' were aimed at specifically reducing unemployment: in all the cases where it was correctly implemented this objective was met with complete success, as some examples later in this chapter illustrate.

The implementation of current technologies has generated a new phenomenon of 'jobless growth' in the developed world. In Europe, unemployment has reached alarming levels. In the United States, the displacement of jobs from traditional manufacturing and white-collar activities has occurred to jobs in other sectors, most of which are lower paying. In the developing countries, unemployment and underemployment have a much longer history and have never really been solved in the previous system. Therefore, the issue of structural employment on a global level promises to become more rather than less critical in the future. Implementing a commodity-backed global currency would be the most powerful structural incentive to counteract structural unemployment.

Impact on Inflation

Furthermore, if used correctly, such a currency helps to push inflation down. Inflation is simply the depreciation of a currency in terms of goods. The proposed currency has an impact on two sides.

First, while inflation reduces the value of a currency over time, a charge currency becomes automatically more valuable over time. Such a currency acts in this respect as any other commodity which has a significant storage cost: it increases in value over time. (Today's future markets in gold, for instance, show in practice always a higher future value than the spot price, reflecting precisely such a cost of storage over time.)

Second, there is a substantial 'interest cost' built into every good and service purchased. Margrit Kennedy calculates that even in a relatively low-interest country such as Germany, the average interest component in the cost of garbage collection reaches 12 per cent, for drinking water 38 per cent, for sewage costs 47 per cent, and for social housing a whopping 77 per cent.¹⁰ By eliminating interest costs from the economy, the actual cash outlay required for any given good or service would be dramatically reduced.

Impact on Ecology

The most recent reason for interest in stamp scrip and similar alternative monetary systems in the West or in Japan results from environmental concerns.¹¹

The higher the money-rate of interest, the higher is the pressure on entrepreneurs to avoid internal costs, that is, to externalize into the environment as much of the cost as is possible. Thus under neutral money, when interest goes to zero, this additional burden on resources will cease.¹²

This would be even more true with the commodity-backed global currency, where interest rates attain negative values. When it pays more to cut a tree, sell the wood and let the proceeds earn interest than simply let the tree grow, it is predictable that more trees will be cut than is optimal from an ecological viewpoint.

The most important structural shifts would occur in the way people would spontaneously start saving, investing and consuming. The demurrage concept discourages the use of currency as a saving device. If such currencies come into widespread use, the question which arises is what one can use to store value.

The conceptual key to understand this shift involves changing the 'arrow of time' in the investment process. Under the present system, the discounted present value of any investment has to be

higher than the interest rate of a risk-less government bond. This implies that anything that produces value more than 20 years in the future is basically discounted as worthless today. This provides a systemic incentive not to care about the long-term future consequences of our actions, including environmental degradation, for instance. Under the proposed system, the incentive works, in fact, in the opposite way since income in the future would become more valuable than income today, thereby pushing the attention towards long-term implications of current actions.

Once the basic necessities of life are covered, the logical actions include the following:

- Invest in ways that will reduce expenses in the future: pay back mortgages, improve home insulation, improve energy efficiencies, start food gardens.
- Invest in anything that will at the very least keep, or better, increase in value in the future: land improvements, trees and forests and anything that grows over time. If one wanted to prepare a nest egg for grandchildren's college, instead of opening a savings account, one logical thing to do would be to plant, for example, a small forest.
- New liquid forms of savings would immediately develop as well, as soon as the demand for liquidity in the fixed assets just mentioned above would expand, for example, stock would be issued in companies that plant trees.
- In general, stocks would be preferred to bonds, thereby making access to investment capital at low leverage the dominant way of financing businesses.
- Consumption patterns would evolve towards products with a longer lifetime. For example, assume that one has \$100,000 available and two types of cars are offered for sale: a car which costs \$20,000 and lasts about 8 years (as in the current market), and one which costs \$50,000 and lasts 20 years. In today's currency environment, it is logical to buy the short-lived car (because the \$30,000 balance can be put in a savings account and get more value in the long run). With the proposed currency, however, it is logical to buy the long-lived car. Today, no company builds a car like that, because there is no demand for it. In the future, it would become the type of car in the

highest demand. Notice that in the example provided, total income of the car manufacturer is the same over 20 years (assuming no inflation), but the burden on the environment is much lower in the second case.

- Based on the same logic, people would tend to build houses that would last as long as possible, and whenever they have some extra cash available they would spontaneously invest in further insulation and other improvements.

It is important to realize that in all the above examples, there was no need to provide tax incentives or otherwise induce people to do all these things: financial self-interest directly would provoke such actions. This is the reason for calling this particular global currency a 'green' global reference currency.

Today, certain groups try to convince others to act in an ecologically responsible way, while it is in their financial interest to do the opposite. With the proposed system, the economic self-interest pulls automatically in the direction of ecologically sound actions. Only by such realigning of the economic and moral motivations can truly massive changes in behavior patterns be expected. As will be shown later, whenever the currency of the realm had a built-in demurrage, these behavior patterns did indeed materialize.

Impact on International Business

Textbooks may claim that businesses are competing for markets and resources, but in fact it is clear that businesses really compete for money, using markets and resources. (The proof is that whenever a particular market is not profitable, business will legitimately move to another activity in another market.) So, a proposal for a new commodity-backed global currency is in fact a redesign of the objective for which the international corporations are competing. It is therefore essential to assess why business would be interested in using the proposed currency, and how its introduction would make an impact on international operations.

First of all, why should business be interested in using the proposed commodity-backed currency in the first place? The short answer is that the stability in the value of such a currency makes it an ideal forecasting and contract currency, particularly for medium- to longer-term planning or contracts

(in practice more than three years). This would make it possible to structurally eliminate from contracts the currency risks which are currently so detrimental to reliable business planning. Although business – like any other profit-based entity – would not be interested in saving in this currency, it could be easy to buy it in the market whenever needed for payments as well. One could also simply express any values in contracts in the new currency, but at the moment of payment compute the corresponding amounts in any national currency including the US dollar and make the actual payments in such a national currency (as is currently often the practice in Europe with ECU-denominated contracts).

There is also a strategic reason why the introduction of such a currency is a good idea from the business perspective. By using this currency – as was noted earlier – the financial interests of business are realigned with ecological sustainability. The pressure for regulations would therefore be structurally less important over time, simply because they would be less necessary. More than today, it would become in the direct financial interest of the corporations to do what is sustainable in the long run anyway.

Finally, the issue of the interests of the banking sector itself should be addressed. As stated in the first section of this chapter, less than ten per cent of all foreign-exchange transactions involve the exchange of goods and services. This is the only part that the commodity-backed currency would be involved in. Well over 90 per cent of all foreign-exchange transactions would not be affected at all by this proposal. In addition, it should, of course, not be expected that all international business transactions would suddenly become denominated in this new currency, so the real percentage of transactions which would remain as now would be closer to 95 per cent. Finally, there is no reason why the banking sector would not charge the usual spread between bid and ask in transactions denominated in the new currency.

The four objectives – stabilizing the business cycle, spontaneous creation of employment, inflation control and ecologically sustainable growth – are results that economists can predict from the introduction of this commodity-backed global currency. However, the proof is in the pudding. Even more persuasive than any theoretical discussion is compelling evidence from case histories: such systems have indeed been used in the past in a variety of cultures, sometimes for centuries, and have always had the impact mentioned above.

SOME HISTORICAL PRECEDENTS

'Charged' currency is part of the Western inheritance with a much longer history than generally perceived. The oldest-known historical precedent is Egypt, where such a system was integral to a prosperity lasting more than one thousand years. Remember the biblical Joseph who saved Egypt from 'the seven lean years' announced in Pharaoh's dream? Why did the Egyptians keep Joseph in such high regard simply for inventing stockpiling, which must have existed in some form or another in most primitive hunter-gatherer tribes? Or was there something more to his system than that?

What the Bible fails to mention is that these stockpiles were also used as the basis for the currency system. Each farmer who contributed to the stockpile obtained a warehouse receipt – usually a piece of broken pottery with the inscription of the date and the quantity of bags of wheat he had contributed. They are the 'ostraca', thousands of which have been unearthed all over Egypt. The key to it, however, was a time charge on these receipts – to pay for the guardian of the depot, and to compensate for the pilferage by rodents – constituting the 'demurrage' of the Gesell money. This currency remained in use in Egypt until it was forcibly replaced by the Roman currency during the late Ptolemaic period.¹³ Is it a coincidence that from that time on, and to this day, the economic 'miracle of the Nile' has never recurred?

Other interesting precedents of successfully using charge currencies as the dominant legal tender for an extended period of time occurred in Europe. What generated the extraordinary economic prosperity in Europe from 1150 to 1350? What enabled, for instance, the construction of the cathedrals, all built in that time interval, as well as the creation of some of the most lasting and interesting art works of its history? At least part of the answer lies in the currency of the time, called 'brakteaten'. They were metallic plaques, usually of cheap metal with a seal of the local authority, which were regularly recalled and replaced with new ones (in some instances yearly or even quarterly). But in this process a tax was levied called 'seigneurage' (up to 30 per cent of the value of the previous issue!). This tax was a significant source of income to the local lord. It also amounted to a substantial effective demurrage fee.

No wonder people preferred to invest in tapestries, paintings or even cathedrals rather than hoard currencies.¹⁴ After all, the

cathedrals – besides their important symbolic and religious value – also played the economic role of today's Disneyland, by attracting pilgrims to the city. In other words, they were a grandiose way to create future income to the community as a whole. It is also significant that – in contrast to their modern counterparts – they were built to last forever.

More recently, and even more directly relevant to our proposal, are the variety of practical monetary experiments carried out in the West during the depression of the 1930s. Three of these examples will be discussed here.

One further example focuses on the economy of the small town of Schwanenkirchen in Bavaria, which had been wiped out (as was the rest of Germany) by the hyperinflation and economic recession of the 1920s. The owner of the bankrupt local coal mine, Mr Hebecker, decided in a desperate effort to propose payment to his workers not in Reichsmark, but directly in *Wara*, payable in coal from the mine. Each *Wara* was issued on a par with the Reichsmark, and on the reverse side dated spaces were printed. Each month the bearer of the *Wara* bill had to purchase a stamp at a cost of one per cent of the face value in order for this particular bill to remain valid. This was justified as a 'storage cost for the coal backing the bill'. The workers paid for their food and local services with this currency. The baker in turn explained to his wheat suppliers that the only way he could pay them was in that same currency. The wheat suppliers and equipment manufacturers at the end of the cycle simply ended up redeeming the bill for coal from Mr Hebecker's mine.

Schwanenkirchen became quickly the most prosperous community in Bavaria. By 1931, this 'Freiwirtschaft' ('free economy') movement had successfully spread throughout Germany, involving no less than 2000 corporations and a variety of commodities in the *Wara* exchange system. Unfortunately, this experiment was blocked by the Central Bank in November 1931, and continuing economic stagnation generated the general dissatisfaction which brought to power Adolf Hitler with the well-known consequences.

In 1932, Austria was also in the middle of its deepest depression. Unemployment was reaching over 30 per cent and the central government could not do much to help. The mayor of the town of Wörgl, Mr Unterguggenberger, decided to copy the Schwanenkirchen example. He convinced the town hall to issue 14,000 Austrian shillings in 'stamp scrip' covered by the same amount of ordinary Austrian shillings deposited in a bank. This money again was valid only if each month one applied a stamp to its back,

corresponding to the charge rate applicable to this currency. Two years later, Wörgl became, just as Schwanenkirchen in Germany, the most prosperous town in Austria. Taxes were paid early, the water supply and the paved road system extended all over town, inhabitants had repaired and repainted their homes, forests had been cleaned, trees were planted, a new bridge had been built. (This bridge still exists, and a plaque commemorating its construction with stamp scrip is still in place today.)

No less than 200 cities of Austria decided to imitate Wörgl. At this point the Central Bank of Austria felt threatened in its monopoly of currency emission and blocked the extension of the system against the opinion of the vast majority of the population. This decision was appealed all the way to the Austrian Supreme Court but was upheld.

The third example of stamp scrip in the 1930s could have been the biggest experiment of all. In the United States, Dean Acheson, then Assistant Secretary of the Treasury, was approached by Professor Irving Fisher with the same idea under the name of 'stamp scrip'. One feature of Professor Fisher's approach was that the 'charge' stamp was fairly high (two per cent per week) and was calculated so that the face value would be amortized over one year, and the currency withdrawn at that point.

Acheson decided to have the whole concept verified by his economic advisor, the well-respected Professor Russel Sprague, of Harvard University. The answer was that indeed stamp scrip would work perfectly economically, but that it had some implications for decentralized decision making which Acheson should verify in Washington. By this time, the 'stamp scrip movement' as it became known, had spread to 450 cities around the United States. For example, the city of St Louis, Missouri, had decided to issue \$100,000 worth of stamp money.

Similarly, Oregon was planning to launch a \$75 million stamp scrip issue. A federal law had been introduced in Congress by Congressman Pettengil of Indiana to issue \$1 billion of stamped currency. In 1933, Irving Fisher, Hans Cochrane and Herbert Fisher published a little handbook entitled *Stamp Scrip* for practical management of this currency by communities, and described the actual experience of 75 American communities with it.¹⁵

Just at that time, however, on March 4, 1933, Roosevelt announced the New Deal. It announced the temporary closing of all banks, prohibited the issue of 'emergency currencies', and launched a series of centrally determined 'public work projects'.

The last example is the only case known where this kind of

currency is still legal tender today. On the island of Guernsey, part of the United Kingdom, it was originally introduced as an emergency currency during the Napoleonic Wars, and evolved to permanent legal tender after 1914. The economic impact of these wars was unusually harsh on the Channel Islands, including Guernsey. Invoking an ancient prerogative to produce its own notes, in 1813 Guernsey issued 4000 Guernsey pounds which were interest free. While this experiment was not strictly using demurrage, it did clearly go a long way in that direction compared to a 'normal' interest environment. Within months local community projects included repairing buildings and roads, and later on rebuilding Elizabeth College. Issues were made with great care to avoid inflation. The islanders considered the success so effective that this interest-free currency is still used today. British respect for historic precedent made it possible for this experiment to continue. The results are also still visible today: from a small poor island without resources, the island has become very prosperous, and can afford to levy very low taxes on its inhabitants.¹⁶

One can conclude, therefore, that whenever 'charge currencies' have been used in practice, whether as an 'emergency currency' or as normal long-term legal tender, economic prosperity has been the result. More specifically, its initial impact is a strong growth in the economy including an increase in employment, a gradual lowering of costs (as the interest component built into the prices of all goods and services is eliminated), and in the longer run a stable and sustainable growth. The modern experiments were blocked not because they were unsuccessful, but paradoxically because their very success was perceived as threatening to centralized decision making.

SOME POTENTIAL MISUNDERSTANDINGS

The concepts presented here may prompt some questions about classical economic concerns. Keynes commented in this context: 'The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds.'¹⁷

Savings and Investments

What happens to savings and investments under such a global currency regime? With a reduction in the propensity to hoard

currency, one could conclude that savings disappear. According to the classical equation, 'savings equal investments', the latter would similarly be reduced.

The fallacy in the above argument lies in assuming that cash, saving accounts and similar cash equivalents are the only form that savings can take. People would indeed save less in these forms of monetary assets, but would save more in real physical assets, including productive assets. The more creative banks would immediately provide a way to create liquid forms of investments in such assets. These new savings accounts, which would enable small withdrawals and additions to a very conservative form of mutual fund invested in equity investments in assets, with growing value over time, would become the norm.

Large-scale projects could be financed, as today, by issuing stock, which would become in fact more valuable (and therefore easier to sell) than in a 'normal' market economy, because it represents promises of future cash flows. One can have a taste of this phenomenon in today's stock markets: whenever interest rates drop, the stock markets boom. Similarly, bonds could still be issued, but their interest rate would be much lower than today. It is likely that the proportion of financing due to equity versus bonds would increase compared to today, because at present interest is tax-deductible while dividends are not. As the current practice has been often criticized because it creates higher leverage and therefore more instability in business overall, this feature is in fact an additional positive implication for the proposed system. All other things being equal, one should even expect a net increase in total investments after introducing charge currency, but the forms these investments would take would be different.

Inflationary Behavior

The behavior of shunning currency is very similar to what is observed under inflation. So is this not another form of inflationary behavior?

While the behavior patterns generated by the demurrage concept do indeed look similar to what is observed under inflation, the cause is different. Just as one can have a group of people streaming out of a room because of a fire inside or because a celebrity is outside, observed behavior is very similar, but the causes and consequences are not the same. The incentive to spend the money because of demurrage is structurally different from avoidance of

inflated currency. More important, the consequences are also diametrically opposed: under hyperinflation, social structures collapse; while with demurrage currencies the fabric of society is reinforced.

In technical terms, this misunderstanding results from a failure to distinguish between a depreciation of the purchasing power of the monetary unit (that is, inflation), and the devaluation solely of the means of payment while the unit of measurement remains stable (that is, demurrage money). This important distinction has been clarified by Langelutke and also by Suhr.¹⁸

In the case of inflation, people cannot escape the carrying charges of money by obtaining claims to future money such as bonds, whose unit of measurement remains stable. Bond prices collapse, because interest rates have to climb higher still than the inflation rate. These high-interest rates further strangle the economy in the process. In addition, trust in the entire economic structure is lost by the unstable value of the monetary unit itself.

None of these problems appear with charge-rate currency. Bonds and any other forward claims to future money become in fact more valuable because they represent a way to avoid the penalty of holding cash. Real interest rates drop. The value of the monetary unit itself remains stable, guaranteeing to all economic agents access to transaction money at low and predictable costs.

Banking and Capital Rationing

How is banking and capital rationing possible in a demurrage currency environment? Let us assume that the charge rate charged to the public at large on bills and savings accounts is a negative two per cent. The banks themselves would be charged a slightly lower percentage on their own funds (for example, a negative one per cent) in order to provide them similarly with incentives not to hoard their reserves. Finally, banks would still be able to lend out in a free market for housing or other credit-worthy project loans at a low, but positive rate, such as one or two per cent for instance.

Therefore, banks can still have their normal spreads between the cost of funds and the market interest rates, and market rationing would still operate. The only significant difference from the current interest-rate structure is that the starting point is a negative two per cent instead of, for instance, six per cent in the United States today.

There is another relevant aspect from the traditional bank viewpoint: many banking specialists have indeed pointed out that disintermediation is a growing threat to the traditional banking role. It is also well known that such disintermediation always increases dramatically whenever the interest rates reach high levels. It is logical that the temptation to short-cut the bank is highest when direct investments in government bills become more attractive.

Banks in the proposed system are ideally placed to become the suppliers and packagers of the new forms of liquid savings described earlier. An ideal savings account would in fact become a specialized form of low risk mutual fund management. Since government bonds would be yielding extremely low returns, the threat of disintermediation in this role would be further reduced.

Demurrage and Buffer-Stock Costs

What would happen to the funds raised with the demurrage charge? First of all, if the issued global currency is backed at 100 per cent of the value of the buffer stocks, the funds raised would directly serve to pay the costs of creating and maintaining the buffer stocks over time, for all the commodities of the basket. As the demurrage charge is computed to exactly cover these costs, this system could work indefinitely. This would also be the recommended way to start off this new system, since it would also give maximum credibility to this new currency.

If after a few years of successful use it is desired to expand the use of this global currency, one could decide to have only fractional coverage by the commodity basket. The reasoning is the same as in current banking: the likelihood that the whole amount of the global currency will need to be redeemed against commodities at the same time is almost nil. One can therefore afford to have only a fractional coverage. In this case, there are two choices how to operate the system:

- the institution issuing the reference currency can simply reduce the demurrage charge to reflect the lower costs of backing the global currency; or
- the institution issuing the reference currency can keep the charge at its initial level, thereby creating a net income flow for the issuing institution, consisting of the demurrage charge

which is not needed to cover the cost of the buffer stock. The use of this predictable and steady income flow is again a decision which is open.

For instance, the issuing institution which receives the net income flow could create a sinking fund. This fund could be used to buy back the reference currency from the public at the discretion of the issuing institution. This implies that the reference currency once issued can be withdrawn and does not need to circulate forever. This was the process recommended by Fisher in the 1930s for the stamp scrip issues he planned in the United States. Hence, the issuing institution is able to fine-tune the amount of reference currency circulating in the economy. If it is considered not desirable to withdraw the reference currency, the issuing institution can simply opt for a new issue.

Alternatively, if considered desirable, the issuing institution could use the global income from the global currency for financing selected global institutions, such as the United Nations, or other activities of global interest, thereby relieving nation states of the burden of financing these activities.

The system of a reference currency leaves open these choices, as the benefits presented earlier for it remain valid independently of the use of the proceeds of the global currency demurrage charges. It is ultimately a political decision on how best to use this potential new global income.

CONCLUSION

It is very rare in anyone's lifetime to have the opportunity to rethink a new monetary system. It is also an issue that may affect generations from all cultures in the future. There are still monetary specialists, as well as ecologists, who do not see the direct impact that monetary systems have on the 'invisible hand' of ecologically sustainable activity. There may still be people who believe that monetary systems are mostly a technical matter which affect only some rarefied circles of high finance. At the end of the twentieth century, with the collapse of the Communist system and the move of China towards a money-based motivation system, the next monetary system will be the first in recorded history to affect the entire human species simultaneously.

Just one example: the Chinese are planning to emit by 2010 as much carbon dioxide into the atmosphere as the entire planet emits today. However complacent one may be about today's environmen-

tal degradation, it is obvious that in the foreseeable future something will have to be done, or irreversible climate or other changes will oblige us to do so. What ways do we have to influence the decisions of one billion Chinese, other than a global monetary system? Those in charge of designing the next monetary system should be aware that we may not have another opportunity to redirect the world's evolution towards a more equitable and sustainable future.

Notes

1. David Ricardo, *On the Principles of Political Economy, and Taxation* (London: John Murray, 1817) as reprinted in Piero Sraffa (ed.) with the Collaboration of M.H. Dobb, *The Works and Correspondence of David Ricardo*, vol. I (Cambridge, England: University Press for the Royal Economic Society, 1951) p. 356.
2. W.P. Hogart and I.F. Pearce, *The Incredible Eurodollar* (London: George Allen and Unwin, 1982) pp. 130-1.
3. Jürg Niehans, *The Theory of Money* (Baltimore, MA: Johns Hopkins University Press, 1978) pp. 140-1.
4. Gesell investigated the economic disturbances of Argentina's monetary policy and published the first important results of his investigations in a pamphlet: *Die Reformation im Münzwesen als Brücken zum Sozialen Staat* [The Reformation of Currency as the Bridge to the Social State] in 1891. Gesell summarized all of his ideas on political economy in two separate works: Parts I, II, III, and IV with the title *Die Verwirklichung des Rechtes auf vollen Arbeitsvertrag* (Les Huts Geneveys, Switzerland, 1906), and Part V with the title *Die neue Lehre vom Zins* (Berlin, 1911). The second edition of these two books was published as one volume with the title *Die Natürliche Wirtschaftsordnung* (Berlin, 1916) and was subsequently published in English, Spanish and French. The American edition and the revised English edition are published with the title *The Natural Economic Order* (Free-Economy Publishing Co., San Antonio, TX: 1933, and London: Peter Owen, 1958). See also Silvio Gesell, *Die Anpassung des Geldes und seiner Verwaltung und die Bedürfnisse des modernen Verkehrs* [The Reformation of Currency as the Bridge to the Social State] (Buenos Aires: Herpig & Stoevelen, 1897).
5. John Maynard Keynes, *The General Theory of Employment, Interest and Money* (London: Macmillan, 1936) p. 234.
6. Keynes, *The General Theory of Employment, Interest and Money*, Chapter 22, p. 355.
7. Dieter Suhr, *Capitalism at Its Best: The Equalisation of Money's Marginal Costs and Benefits* (Augsburg, Germany: Universität Augsburg, 1989).
8. Hajo Riese, 'Geldökonomie - Keynes und die Anderen: Kritik der monetären Grundlagen der Orthodoxie' in *Ökonomie und Gesellschaft*,

- vol. 1: Die Neoklassik und ihre Herausforderungen (Frankfurt, Germany and New York: Campus Verlag, 1983) pp. 103-60.
9. See Hans R.L. Cochrans, 'Wara' in *The New Republic*, vol. 71, no. 923 (August 10, 1932) pp. 338-9; Hans R.L. Cochrans, 'Fragile Money' in *The New Outlook*, vol. 162 (September 1933) pp. 39-41; Hans R.L. Cochrans, *Das beginnende Engagement der Wissenschaft - Für eine gesunde Geldordnung: Eine historische Bestimmung* (Boll, Germany: Seminar für freiheitliche Ordnung, 1983); Arthur Dahlberg, *When Capital Goes on Strike: How to Speed Up Spending* (New York and London: Harper and Brothers, 1938); Irving Fisher, *Booms and Depressions: Some First Principles* (London: George Allen and Unwin, 1933); Hansjörg Herr, 'Geld: Störfaktor oder Systemmerkmal?' in *Prokla*, vol. 16/2 (Juni 1986) pp. 108-31; Hansjörg Herr, 'Ansätze monetärer Währungstheorie: Eine Keynesianische Kritik der orthodoxen Theorie' in *Konjunkturpolitik*, vol. 33/1 (1987) pp. 1-26; Leland B. Yeager, 'Essential Properties of the Medium of Exchange' in *Kyklos*, vol. 21 (1968) pp. 45-69; Leland B. Yeager, 'Stable Money and Free Market Currencies' in *Cato Journal*, vol. 3/1 (Spring 1983) pp. 305-26.
10. Margrit Kennedy, *Interest and Inflation Free Money: How to Create an Exchange Medium that Works for Everybody* (Steyerberg, Germany: Permakultur Institut, 1986).
11. Hazel Henderson, *Politics of the Solar Age* (New York: Doubleday, 1981); Margrit Kennedy, *Interest and Inflation Free Money: How to Create an Exchange Medium that Works for Everybody* (Steyerberg, Germany: Permakultur Institut, 1986); Yoshito Otani, *Ursprung und Lösung des Geldproblems* (Neu Ulm, Germany: Arrow Verlag, 1981); Dieter Suhr, *Capitalism at Its Best: The Equalisation of Money's Marginal Costs and Benefits* (Augsburg, Germany: Universität Augsburg, 1989).
12. Suhr, *Capitalism at its Best*, p. 112.
13. Hugo Godschalk, *Die geldlose Wirtschaft: Vom Tempeltausch bis zum Barter-Club* (Berlin: Basis, 1986); and Friedrich Preisigke, *Girowesen im griechischen Ägypten enthaltend Korngiro, Geldgiro, Girobanknotariat mit Einschluss des Archiwesens* (Strassburg, France: Verlag von Schlesier & Schweikhardt, 1910 reprinted: Hildesheim, New York: Georg Olms, 1971).
14. Cochrans, 'Fragile Money'.
15. Irving Fisher, Hans R.L. Cochrans and Herbert Fisher, *Stamp Scrip* (New York: Adelphi & Co., 1933).
16. Paul Elkins, *The Living Economy: A New Economics in the Making* (London and New York: Routledge & Kegan Paul, 1986).
17. Keynes, *The General Theory of Employment, Interest and Money*, p. vi.
18. Hans Langelutke, *Tauschbank und Schwundgeld als Wege zur zinslosen Wirtschaft: Vergleichende Darstellung und Kritik der Zirkulationsreformen P.J. Proudhons und Silvio Gesells* (Jena, Germany: Gustav Fischer, 1925) p. 27; and Suhr, *Capitalism at Its Best*, p. 86.

6 Reforming the International Monetary System Towards a World Central Bank: A Summary of Proposals and Fallacies

Bernhard G. Gunter¹

I. INTRODUCTION

Fifty years after the Bretton Woods conference there is a considerable desire to reform the international monetary system. The major objections to the present 'non-system' emerge from considerably adverse effects from exchange-rate volatility and capital flow volatility. While exchange-rate volatility affects both industrial and developing countries,² mainly developing countries suffer from capital-flow volatility. Under the current non-system of unregulated financial markets, capital flows into those markets where fund managers and investors believe the best returns are possible. These beliefs may or may not be consistent with macroeconomic fundamentals. In any case, whenever these beliefs change, capital flows change also, causing high volatility. The further integration of the world economy promises not only an unprecedented opportunity to achieve greater efficiency and higher economic growth but implies also increased volatility, higher risk and subsequent financial crises. The December 1994 Mexican peso crisis was only the tip of the iceberg. Another 'core weakness of the current international monetary system is that the currencies of a few industrial countries constitute the foreign exchange reserves of others and thus become the means of settlement of payment imbalances'.³