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Do Local Currency Systems Have a Role in Economic Regeneration?

Anthony Clayton*

ABSTRACT

Depressed areas and concentrations of poverty are symptoms of underperforming economies, but can persist even in growing economies. because many of them contain clusters of negative social and economic factors which can interlock and become mutually reinforcing. Two common features of economically marginalized communities in otherwise prosperous nations are a low level of cash circulation and expensive capital. One of the more radical ideas proposed to re-integrate these communities back into the wider economy is a local currency system, and a few countries have now experimented with local currencies as a way to increase local economic activity, promote self-help, increase social interactions and thereby rebuild trust. Experiences in the UK. Austria. Australia and Venezuela are compared. The experience of successful projects suggests that a local currency can make a useful social contribution, when embedded in local economic development strategies, as a means of encouraging social cohesion and embryonic economic development. A local currency is, in effect, a reinvention of local banking which, by supplying soft money, can play a positive but transitional role in improving social cohesion and thereby encouraging economic regeneration in poor areas within otherwise prosperous countries.

Depressed areas and concentrations of poverty are symptoms of underperforming economies, but can persist even in growing economies. This is because many of them typically contain clusters of negative social and economic factors which can interlock and become mutually reinforcing. For example, many of the inhabitants can be trapped in marginal and low-waged jobs by a lack of marketable qualifications and skills. Disintegrating family structures mean that many children do not receive an adequate

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education, and are not socialized into patterns of work, while others fall victim to violent crime, drug and alcohol abuse. Borrowed capital is expensive, small local businesses have little turnover and are sometimes weakened by extortion, internal levels of economic activity remain low and little wealth is created. Most employers and investors avoid these areas, and the recent collapse of sub-prime lending may make it increasingly difficult to raise mortgages. These compounded problems therefore become increasingly intractable, and this perpetuates poverty.

The direct cost of these areas includes the loss of economic productivity and tax revenue, and the cost of anti-poverty programmes. The indirect cost includes the various social costs associated with the existence of a significantly disadvantaged group in society, including crime, potential civil unrest, and damage to the self-esteem of those unable to find work, which are reflected in the additional burdens on the health service and police.

Many countries have tried, in different ways, to re-integrate these areas, but with generally low rates of success. One of the more radical ideas proposed to re-integrate these communities back into the wider economy is a *local currency system*, and a few countries have now experimented with local currencies as a way to increase local economic activity, promote self-help, increase social interactions and thereby rebuild trust. These currencies allow people to exchange goods and services, but are effectively confined to particular areas.

Given the seriousness of the problem of entrenched poverty, it is important to assess whether local currencies represent a new and potentially constructive approach to social regeneration. The concept does appear, however, to conflict with another core government role, the task of maintaining sound money. This potential role of a local currency in social regeneration and the possible conflict with macroeconomic policy can only be understood in the context of a paired analysis of the factors that perpetuate poverty and the social and economic functions of money.

The relevance to Jamaica

Jamaica's economy faces serious long-term problems: high but declining interest rates, increased foreign competition, exchange

rate instability, a sizable merchandise trade deficit, large-scale unemployment and underemployment, and a high debt burden. Much of the latter is the result of government bailouts to ailing sectors of the economy, most notably the financial sector in the mid to late 1990s (CIA 2007).

Jamaica's deep-rooted economic underperformance has fostered a wide range of social problems, including unemployment, underemployment, persistent poverty, low levels of educational achievement, and an exceptionally high level of crime. As a result, Jamaica's position on the UNDP Human Development Index slipped from 79th in 2002 to 98th in 2005 (Dunkley-Scott 2005). This combination has deterred investment and encouraged skilled migration and capital flight, which has further undermined Jamaica's economic development, which consequently further government reduced both revenues and employment opportunities.

This has, in turn, perpetuated the conditions that can leave entire communities marginalized and therefore more vulnerable to both extortion and political clientilism. The worst areas have unhealthy physical and social environments, limited community facilities, few social amenities and a pervasive sense of fatalism and despair. They are the breeding grounds for much of the street-level crime that spills out and destabilizes the rest of the community, as criminality looks like the most viable career option to many young people. Jamaica's high unemployment, in conjunction with high crime rates, a thriving trade in illegal narcotics and tribalistic political warfare in communities led to a record 1,671 murders in 2005. Understandably, some 63% of the population list crime and violence as the single most important problem facing Jamaica (Daily Gleaner, 13 November 2006). This has had serious consequences for other countries besides Jamaica. Jamaica has been a major conduit for the supply of illegal narcotics, and a number of recent turf wars and retaliatory killings have spilled over into other jurisdictions. For example, in 2005, Jamaican citizens were the largest foreign contingent in British jails, with some 2,500 incarcerated at a cost to UK taxpayers of about £91 million per annum.

Attempts to prevent further social disintegration had limited success; the level of poverty declined during the 1990s, but government debt escalated dramatically. Even after a debt

reduction strategy that started in 2004, debt reached 133.3% of Gross Domestic Product (GDP) in 2007. This forced a reduction in the level of social services. Iamaica is still, however, defined as a middle income country, which makes it less eligible for overseas assistance. Aid has therefore declined from 0.9% of GDP in 1998 to iust 0.1% in 2003.

Clearly, it is essential to break this cycle of deprivation, hopelessness, psychological degradation, social disintegration, economic underperformance and criminal behaviour. It is also essential to find low-cost ways to do so, given the decline in both government and donor funding. Fortunately, there are some local examples of success in community initiatives in areas, such as Grants Pen, in Kingston, indicating that a reversal in the trend of crime and violence is possible. The successful projects all include local capacity-building, which involves helping people to take charge of their own development, and capacity-building is therefore now popular with major funding agencies, such as the World Bank, Department for International Development (DFID) and Canadian International Development Agency (CIDA).

However, capacity-building is a rather vague and complex concept. In general terms, the successful models all help to build basic social skills, self-respect, confidence and a work ethic, but there are a number of ways to do this. The successful models are usually locally-specific, but there are some general principles that need to be elicited if the lessons are going to be shared across the marginalized communities in Jamaica and other troubled communities of the world.

The next sections look firstly at the factors that can perpetuate poverty and unemployment, then at some of the more innovative attempts to redress these issues in other countries.

Poverty and multiple disadvantages

All societies have some level of both unemployment and underemployment; those people in the economy who cannot find work, or who are employed in jobs that do not utilize or adequately reward their skills. It is important to note that this only becomes a social problem when the rate of unemployment goes above a certain threshold, or remains relatively high for an extended period, because some level of unemployment is inevitable even when

economies are growing rapidly and labour markets are tight. As Schumpeter (1950) noted, new technologies are constantly being invented and disseminated, and existing technologies improved, which raises productivity, creates new markets and generates wealth, but simultaneously, renders old skills and even entire industries redundant. The speed of this intertwined cycle of constant creation and destruction is a measure of the dynamism of an economy, with the speed of the cycle reflecting the ability to innovate, the number of entrepreneurs, the appetite for risk and the readiness to change. However, the process also means that labour is constantly being shed from declining sectors and industries; the workers are laid off and must find new forms of employment. In addition, some firms will fail, whether by bad luck, bad timing or bad judgment, even in a strongly, growing economy. There are many ways that this can happen; managers might not anticipate a change in consumer behaviour, have profits erased by a rise in input prices, choose the wrong new technology or persist too long with an old technology, be insufficiently ambitious and overtaken by more aggressive rivals, or be too ambitious and over-extend at the wrong time, and so on. The market share and assets of the firms that fail will be seized by better-managed or luckier firms, so jobs are constantly being lost and created. At any one time, therefore, a certain percentage of the workforce will be in transition between jobs. This frequently involves changing expectations and acquiring new skills, so these transitions are not necessarily easy or painless. Many governments therefore try to shorten these periods of unemployment by assisting with retraining, which helps to get individuals back into some form of productive work as quickly as possible.

Serious social problems arise, of course, when an entire economy is in recession, or growing more slowly than the rate of population increase, as high levels of unemployment and underemployment can then become chronic. Falling government revenues make it more difficult to support retraining programmes, and the educational underperformance, de-skilling and social disaffection commonly associated with persistent unemployment can make the task of rekindling economic development and growth increasingly difficult.¹

This downward spiral is sometimes compounded with denial; governments may have invested too much political capital in a policy to acknowledge failure, or the Sustained economic growth creates jobs (although the relationship between these two factors is not necessarily linear, as strong growth frequently coincides with economic restructuring and a transition to more capital-intensive, less labour-intensive industries), and the combination of increasing wealth and expanding employment solves many social problems. However, it has also become clear that pockets of high unemployment can persist even in strongly growing economies, when entire communities (defined by economic status, geographical area or sometimes ethnic background) can become 'encapsulated', trapped by a lack of marketable qualifications and skills, and isolated from the economic development and growth around them.

Many countries have experienced forms of this problem. Areas of urban squalor and rural poverty have persisted in the US, for example, even over decades of relatively consistent growth. Similar problems persist in former East Germany, even after extensive, costly government interventions after reunification. The dynamic urban centres of Gauteng province in South Africa are still surrounded by squatter settlements characterized by extensive, persistent poverty. As Wolf (2004) points out, China's growth in recent years has transformed coastal regions, but left a widening gap between the dynamic cities and the relative poverty of the rural hinterland.² The pattern of uneven development is therefore

policy process may be dominated by vested interests, or the nature, extent and causes of the problem may be misrepresented or widely misunderstood. For example, in 1998, the Government of France introduced the 'Aubry policy', which aimed to protect jobs by imposing a 35-hour week and made it relatively difficult and costly to make workers redundant. The more onerous restrictions in France discouraged employers from hiring, however, so, by 1999, the level of unemployment has risen sharply to become the highest in the European Union (EU). Thus, the policy achieved the opposite of what was actually intended, but it was still supported by the government, who had invested a large amount of political capital, and by those in employment, who, understandably, wanted to retain their job security and benefits. One of the arguments that was used to support the French model is that productivity per worker was higher in France than in the UK, where it was relatively easy to lay off workers, but part of this disparity actually resulted from the higher level of unemployment in France, as the larger number of relatively low-wage, low-skilled jobs that could be more readily generated in the UK economy had the effect of reducing average productivity per worker.

2 The low wages in China's cities are largely determined by the low productivity per worker and even lower incomes in rural areas. Those factors, in conjunction with the size of the reserve of rural labour, means that wages will rise slowly (at a rate determined partly by government policies to limit urban migration), thus

relatively common, and the resulting inequalities frequently persist for many years.

The UK experience

The gradual decline of the UK's heavy industries throughout the 1960s and 1970s left the traditional industrial areas, mainly in the north, with high levels of long-term unemployment. Most of these industries were then privatized during the 1980s; the new management rationalized operations, cut costs and ended overmanning, which dramatically improved productivity per worker, but also had the immediate consequence of a sharp increase in unemployment. The service sector, a new generation of light industries (ranging from software to specialized engineering), FDI and the branch operations of various multinational companies all expanded during the period, but did not immediately absorb the same quantity of labour, required different skills and were generally located further south. Thus, parts of the UK temporarily stabilized at a relatively high level of unemployment, with increased competition for the remaining jobs. Some workers accepted lower wages, or less skilled employment, with consequent loss of income, security and benefits, the most vulnerable were usually those who were seen as too old to retrain, had child dependents, disabilities, or insufficient formal qualifications to get a job. This left many people either out of work, or else having difficulty in meeting their living costs from work in the formal economy.

Many attempts were made in the UK to address this problem of regional unemployment, with varying degrees of success. In practice, many disadvantaged communities are characterized by clusters of interacting economic, political, social and cultural problems. This complexity adds greatly to the difficulty of finding a satisfactory solution. In the UK, a characteristic cluster would include the following factors:

• Unemployment, especially when long-term, could create patterns of dependency on welfare payments. In particular, the 'benefits trap', in which the loss of benefit triggered by

maintaining China's comparative advantage in labour-intensive industries, but eventually wages will start to rise when the supply of labour finally starts to tighten, thereby allowing other countries to supplant China in labour-intensive areas.

the acceptance of low-paid work resulted in little net gain. or even a net financial loss, closed off a number of possible routes back into work. Some areas in the US attempted to solve this problem by making it mandatory to accept job offers, or risk the loss of welfare entitlements.

- Limited education, low levels of disposable income and lack of access to capital make it hard to start a viable. legitimate business.
- Disadvantaged communities also tended to have cheaplybuilt, badly-maintained housing, limited facilities for shopping and recreation, and lacked access to good transport links, so low incomes would often mean limited choice, poor services, and little power to change these circumstances. This would compound the demoralization of long-term unemployment.

These factors often co-occurred with a number of other social changes, as family structures gradually transform in such circumstances. Increasing numbers of children are brought up in single adult households, typically with a female head of household, as relationships break down and males leave. Successive generations of unemployed adults, some of whom have never participated in the formal economy, serve as role models for children. This means that some children are not adequately socialized into patterns of work. In some areas, crime, drug and alcohol misuse, with the associated violence, further compound people's difficulties. These situations can become more intractable over time, as limited conventional employment opportunities, a lack of legitimate routes to recognition and success, and progressively weakening family and social structures can lead to a situation where drug dealers and other criminals are seen as role models by children. Such communities also tend to have low rates of further education and training, which means that they become progressively de-skilled and so less attractive to industry. Poor qualifications often limit opportunities, and the practice, by some companies, of rejecting applicants from particular areas when recruiting can perpetuate patterns of disadvantage.

These factors have a number of psychological effects. Social recognition is often achieved through work. As Offe and Heinze (1992) noted, a lack of work-related opportunities can lead, therefore, to low self-esteem, depression, stress-related illness, a poor self-image and apathy. Low incomes make it difficult to acquire (legitimately) the consumer goods that many see as tokens of recognition and status. These problems all contribute to the social exclusion of the people concerned. Offe and Heinze also noted that the gap between those in employment and those in various forms of unemployment, underemployment, precarious or irregular employment was widening, and that this was creating a contingent of marginalized, discouraged and powerless sections of the population.

A high level of unemployment, therefore, has a number of direct and indirect costs. The direct costs include the loss of economic productivity, the cost of welfare payments and the loss of tax revenue. The indirect costs include the various social costs associated with the existence of a significantly disadvantaged group in society, including potential civil unrest, and the damage to the self-esteem of those unable to find work, which are reflected in the additional burdens on the health service, social work departments and the police.

Dealing with unemployment

In the UK, the interrelatedness of these problems was first generally recognized during the late 1960s, and various development and employment creation or training measures were tried over the following four decades. Most of these were based on the assumption that economic regeneration would lead to an improvement in the quality of life for both individuals and communities, which led to a focus on the role of businesses and local authorities as agents of social regeneration.

Part of the initial response in the UK included the first legislation designed to direct funds into inner-city areas. That initiative was followed by a number of other measures, including Development Corporations, City Action Teams, and Task Forces. These were, in general, responses to specific circumstances rather than part of a comprehensive strategy for regeneration. The City Challenge programme offered, potentially, a more comprehensive approach, but was unpopular with some local authorities; mainly because the funds in the scheme were allocated by competitive bidding, an approach that some local authorities rejected at the time on political grounds.

The success of these UK schemes was limited, for a number of reasons:

- There was difficulty in targeting the support. Analysis of the Glasgow Eastern Areas Renewal programme in the 1980s revealed that only 18% of the entrepreneurs were local, and only 8% of the entrepreneurs had been recently unemployed. This suggested that most of the funding was being taken up by relatively successful entrepreneurs, who were relocating their businesses in order to access government funding. There was some evidence that a few entrepreneurs did this repeatedly, relocating into new priority areas as old support programmes terminated, so jobs were being 'churned' rather than created.
- As Armstrong and Hutton (1992) pointed out, the industries in the new growth sectors rarely required the same skills as the declining heavy industries; financial services, computing and information technology were expanding, but these businesses did not employ many former coalminers, steel or shipyard workers.

Successive UK Governments therefore also attempted to address unemployment through the provision of training schemes and support for individuals who were seeking work. However, the level of success achieved through such schemes was also limited. Statistical returns in the Labour Market Quarterly Review for one of the largest adult training initiatives in the 1980s (Employment Training) showed that of those who left the scheme in June 1990, more than half had not completed their training programme, that over 80% of all trainees in the year to March 1991 obtained no qualification whatsoever, and that some 70% of all trainees in the year to June 1991 had failed to find any work three months after leaving the scheme. These results reflected the general perception of these early training schemes as being largely unrelated to real employ-ment, reinforced by the fact that few reputable institutions were willing to supply courses for the low levels of per capita funding available. As a result, some government contracts were awarded to unscrupulous individuals who provided worthless training courses.

The emphasis therefore changed, and a standard development programme in the UK in the mid-1990s would simultaneously upgrade the housing structure, sponsor environmental improvements, and stimulate economic development in an area, the rationale for the first two being that some environmental reclamation had become a prerequisite for economic regeneration. The core economic development component of these programmes consisted, typically, of an attempt to attract some 'keystone' business along with the construction of some starter units to encourage the entrepreneurs in the community. This seemed like a reasonably comprehensive approach, but many local residents still complained that a significant part of the new workforce was commuting from outside the area, and that the supposed benefits of the economic development programme had passed them by.

The fundamental problem, of course, was that no local government (and not many central governments) can address the entire complex of issues associated with the long-term transition to a post-industrial economy, the globalization of trade and the migration of the industrial base, so that any local project can only ever offer a partial solution. Most local authorities in the UK therefore concluded that the regeneration of damaged communities was usually a long-term process, and that much of the community was likely to remain at a low level of economic activity for some time. This approach was probably more realistic, being based on over three decades of costly failures, but it also implied an admission that there was no quick or painless route back to prosperity for areas of relative poverty and multiple social deprivation. In some cases, this also made it necessary to question the underlying assumptions that everyone can, in principle, return to full employment, once they have reduced their expectations and accepted lower wages, that unemployed people should therefore focus their efforts on getting back into conventional employment, and that that people facing long-term unemployment should seek to meet their needs through income earned in conventional work.

The relevance to the Caribbean

A number of Caribbean nations have seen their traditional agricultural exports decline, with the loss of the associated former sources of large-scale employment. Unlike the UK, however, the majority of the Caribbean nations have a relatively narrow economic base, which means that there is less scope for the redundant workforce to be absorbed elsewhere. The only current candidate is tourism, which is now by far the largest source of direct

and indirect employment in the Caribbean, although there are wide variations throughout the region in the percentage contribution to employment (Poon 1993). This is partly because of strong growth — tourism receipts rose from just under 18% of current account receipts in 1980 to around 37% in the 1990s — and partly because it is a particularly labour-intensive industry (Clayton and Karagiannis 2008). However, the same transitional problems apply here too, in that an ageing, redundant cane-cutter is unlikely to find immediate employment in a hospitality suite.

In addition, further shrinkage of traditional agriculture is likely, as emerging export giants, such as Brazil, can supply most of the comparable agricultural products at lower cost. In Jamaica, for example, agriculture now generates just 5% of GDP, but engages 20% of the workforce. This implies a further reduction of some 75% of the residual workforce, except that this does not take account of part-time farmers, many of whom may continue by supplementing their income elsewhere. It is likely, therefore, that poor and marginalized communities will continue to exist in countries like Jamaica for many years to come.

THE POTENTIAL ROLE OF A LOCAL CURRENCY

One common feature of economically marginalized communities in otherwise prosperous nations is the low level of cash circulation. Cash enters the community, usually in the form of welfare benefits, gets spent once in a branch of a chain store, remitted elsewhere, and leaves the area without circulating internally.³ Another common feature is that people in poor, high-risk communities tend to have limited access to credit at normal bank rates, and therefore have to resort to pawnshops and loan-sharks who charge punitive interest rates. The combination of low rates of cash circulation and expensive capital make it more difficult to build viable, legitimate businesses.

One relatively unorthodox approach to this problem that has been tried in several countries is to create a *local currency*. The basic idea is to generate credit and foster exchanges of goods and services

3 In some communities, however, the informal and illegal economy is probably larger than the formal economy. The addition of the informal economy must increase the circulation of money to some extent, but money spent on items, such as illegal drugs (many of which are also not produced locally), must leave the area equally rapidly.

within a community, partly in order to increase the number of people who can take part in (legitimate) local economic activity, and partly to confine the purchasing power thereby created to the area, in the belief that this will help to create other secondary economic development opportunities.

Ekins (1986) notes that variants of this concept have been tried in different countries. The pioneering experiments included the Labour Exchange Bazaar, which was created by the social entrepreneur Robert Owen and which operated in London from 1832 to 1834, a currency system in Guernsey which ran from 1815 to 1836, then was revived in 1914, the Wörgl experiment in Austria which lasted from 1929 to 1934, and a local currency scheme that was used in the internment camps on the Isle of Man during World War Two.

Kennedy (1988) explains that the town of Wörgl issued its own schillings, which were accepted in payment for materials and salaries within the town. There was a small financial penalty (1% of face value) for holding the Wörgl schilling at the end of each month, which prevented accumulation and encouraged people to spend them quickly. The fees accrued to the local council, and were used to finance public works. Over the first year, each Wörgl schilling circulated some 463 times, while each Austrian schilling circulated some 213 times, and unemployment in the town fell by 25% even as national unemployment was rising.

Although the details of these schemes differed, a common factor was their apparent success in enabling people who had previously been unemployed to get back into forms of work, to use their skills and to obtain goods and services. The Guernsey and Wörgl models, which placed a particular emphasis on public works projects, appeared to have played a significant role in arresting the cycle of decline, partly by reducing the haemorrhage of skills, and thereby assisting in the initial redevelopment of disadvantaged areas that eventually became prosperous communities.

The fact that schemes of this type are not more commonly in use at present may be partly due to a perceived conflict with the interests of the conventional banking system. The Austrian national bank, for example, took legal action to prevent the spread of the Wörgl experiment when over 300 other towns in Austria expressed an interest in adopting similar schemes. However, several other local currency initiatives were pursued during the 1990s, and a few states tolerated or even supported these initiatives in order to

promote economic regeneration in disadvantaged communities. One local currency initiative that had some popularity during the period was the Local Exchange Trading System (LETSystem). The first LETSystem was established in Canada in 1983. Ten years later, there were over 400 LETSystems in operation, the majority in Canada, Australia, New Zealand, the UK and the USA.

Local Exchange Trading Systems

Unlike most other forms of local currency, the LETSystems had no material basis; no coins, notes or tokens. The currency consisted of credits, which were recorded in a central system bank. This bank provided three essential services:

- A directory or bulletin board, which contained brief descriptions of offers and requirements which participants in the system wished to trade.
- An accounting system, which recorded transactions, and credited or debited units to or from accounts.
- Periodic statements to LETSystem participants. Each participant got a list of their personal transactions, a note of the resultant period end account balances, and a note of the collective balance for the system as a whole (this last showed whether the system remained viable).

Someone joining the scheme gave their contact details, a note of what they could offer, and a note of what they needed. They were given the most recent directory and, with some schemes, a cheque book. They started with a zero balance. When they saw something that they wanted in the directory, they placed their first order, and their accounts were debited by the appropriate amount. When the new directory came out, their offers were listed, and when they made a sale, their accounts were credited. As interest was neither paid nor levied, there was no incentive to build up a large credit balance. Similarly, there was no penalty for running a deficit, provided it was not so large that others were discouraged from trading with the individual with the deficit.

Raw materials, of course, could not usually be purchased in the local currency. The seller had to recoup these costs, and therefore charged for them in the national currency. For those services which entailed only labour costs, or for those goods that were entirely produced locally (and so which had no external cost

element), charges could be levied entirely in local currency. So transactions could be conducted in national currency (in which case this became a purely private transaction), entirely in local currency, or in a mix of the two. The experience of areas operating these schemes was that the ratio of national to local currency gradually moved towards the ratio of cost to value-added factors of the goods or services traded as confidence in the local currency increased.

Local currencies — are they really money?

The role of a local currency system cannot be understood without some prior knowledge of the nature, value and purpose of money.

The nature of money

As Samuelson (1980) points out, money is the foundation of the modern economy. It has three particularly crucial roles — as a medium of exchange, as a standard of value, and as a store of wealth. The first means that it is widely accepted in exchange for goods and services and in payment of debts. The second means that it is used as a reference to measure the relative worth of different goods and services. The third means that it is possible to accumulate wealth, which can then be used to invest in new projects, or to insure against hard times.

As Newlyn (1962) points out, most forms of trade and economic specialization would become impossible without money, which means that the process of wealth creation would also largely cease. Without money, trade would be reduced to barter, which means that a farmer that wanted a pair of shoes, for example, would have to go and find a cobbler that would accept a sack of grain in payment. In a money-based economy, however, the farmer can sell his grain for cash, then go and exchange some of the cash for his pair of shoes. This avoids a vast expenditure of time and effort, as people no longer have to search out a unique trading partner for every single transaction. Without money, a farmer might measure his wealth in cows, but these cannot be stored against his old age, and can be wiped out by disease. In a money-based economy, the farmer can sell his cows when he wants to retire, and live on the cash, buying beef when he wants some.

There are different kinds of money. The main ones are commodity money, credit money, fiat money and credit.⁴

- The value of commodity money is the value of the material itself. As Galbraith (1975) notes, gold, silver, copper and other metals have been used as money for about 4,000 years, but iron, tobacco, cows, whisky, shells, stones, furs, pig and elephant tusks and other materials have all been used as commodity money.⁵
- Credit money is a token which can, in principle, be redeemed for an actual good or commodity. For example, miniature bronze knives, axes, and other tools were used in China from about 1100 B.C. as tokens for real tools. These were, obviously, much easier to carry around, and could then be exchanged for the actual item when convenient. More commonly, credit money was paper, backed by a promise to redeem the paper for the equivalent value in a commodity, such as gold, which thereby avoided the need to carry heavy gold bars and coins.
- Fiat money, the kind generally used today, is also paper (or electronic), but it is not redeemable. It can only be
- 4 It is important to note that some tokens of wealth are used in exchanges that appear to have a social role rather than a straightforward economic purpose. For example, Malinowski (1920 and 1922) described how the islanders of the Western Pacific would travel hundreds of miles by canoe in order to exchange Kula valuables, consisting of shell necklaces that circulated around the islands in a clockwise direction and shell armbands that were traded in the opposite direction. As Kula items were not traded for anything else, they were not a medium of exchange, nor a standard of value. Nor could they be accumulated, as the Kula valuables always had to be passed on to other partners within a certain amount of time, keeping them in constant circulation. However, skillful Kula trading (using gambits, such as giving more than was received, or delaying a transaction for as long as possible), would allow islanders to progress from lowly novices, with perhaps a dozen trading partners, to become dominant operators with hundreds of trading partners. This brought fame and high status, which then increased the chances of success in marriage, witchcraft and war. Malinowski (1926) therefore argued that the islanders were still utilitymaximizers, although the desired outcome was prestige, status and success, rather than material possessions.
- 5 Newlyn points out that the face value of, for example, a gold coin has to remain the same as its commodity value. If the commodity value rose above the face value, people would melt the coin down for bullion. If the face value rose above the commodity value, people would bring bullion to the mint and have it pressed into coins. Now that all money is fiat money, however, this link is broken; the commodity value of gold now depends on it being used as money, rather than the other way round.

- exchanged for more paper. The value is set by government edit. Both fiat and credit forms of money are made acceptable by government decree that all creditors must take the money in settlement of debts; the money is then referred to as legal tender.
- Credit (in the sense of a promise to pay in future) is also an essential form of money, and most business transactions now use credit instruments rather than currency. A wholesaler might give a retailer a 30-day line of credit, for example, which means that goods will be advanced to that customer on the basis of an agreement that they will pay for them within 30 days. The value of this arrangement, of course, is that it allows the retailer time to sell on the goods, so that they then have the cash to pay for them. Similarly, a purchase using a credit card actually means that the goods are handed over on the basis of a guarantee that the money will be forthcoming.

Money also serves as a standard of value for other forms of money. Many countries have used gold, for example, which means that all other forms of money are ultimately measured in terms of their value in that metal (this is no longer common practice). Some countries have used the currency of another country (some South American states have used the US dollar, for example) as their standard. The rate of exchange (that is, the value of the currency) can be fixed against the reference currency, allowed to fluctuate within certain limits, or allowed to 'float', which is when the exchange rate is determined by the market. The value set by the market is heavily influenced by the economic policies and perceived credibility and competence of the government. A prosperous, well-managed country is likely to have a stable or rising currency value, while an unstable or badly-managed country is likely to experience a declining currency value. Flows of investment capital, the balance of payments, commodity prices and currency trading also affect relative currency values, but by far, the most important factor is the supply of money. This is addressed in more detail in a later section.

As this section suggests, all forms of money other than commodity money actually rely largely on the faith that people place in the monetary system; an important point that is also particularly relevant to the later discussion of local currencies.

Debasing the currency

As noted above, the earliest form of money was commodity money, and metal has been the most commonly used form of commodity money. The fact that the value of the money was the material itself, however, created an immediate problem, which was the need to be sure that the metal offered for an exchange was actually the right weight of the right kind of metal. It probably did not take long before some people realized that an additional profit could be made by adulterating or otherwise reducing the content of the valuable metal, or disguising a base metal to look like the valuable one.

The solution was to press metal into bars or coins of standard weight, so that the size, weight and appearance could all be checked. Initially, however, most countries did not impose any restrictions as to who was allowed to press metal into coins; so many people undertook to do so. This resulted in a great variety of different coins; a manual issued in the Netherlands in 1606, for example, listed 341 different silver and 505 different gold coins in circulation in the country at the time.

The number of different coins in circulation then made it more difficult to be confident about their quality. The underlying problem also remained, in that there was always an incentive for unscrupulous mints and merchants to reduce the actual gold or silver content of coins by trimming, shaving or adulterating them and thereby improve their profits. Governments were also prone to debasing their own currency, which allowed them to settle their debts more cheaply.

This was not a universal problem. Some early coins had a very stable composition, such as the drachma issued by the city of Athens in the sixth century BC, which had a constant content of 65-67 grains of fine silver for centuries. Similarly, the copper Chinese qian, which was introduced in the fourth century, remained a standard coin for about 2,000 years. However, underweight, inferior coins were more common than good, stable coins in most countries.

This problem created a need for an independent assessor of the value of coins. At the same time, the physical storage and transfer of valuable metal could be — and frequently was — a risky business, which created a need for places of safe storage. These two problems were solved by the invention of public banks, institutions that could be trusted to assess the true value of coins and provide

safe storage for them. The first public bank was established in Amsterdam in 1609, and, for most of the next century, the public banks largely confined their operations to assessing and storing coin. Another advance was the introduction, in the seventeenth century, of milled edges for European coins, as this made it much harder to trim some metal off their edges without causing visible damage.

Coins that could be trusted — gold and silver coins in particular — often circulated outside their country of issue because of their intrinsic value. The Spanish silver peso, for example, was widely used in China from the $16^{\rm th}$ century.

The idea of using paper as a proxy for precious metal was first introduced by private bankers in China around the 9th century, in the Tang dynasty, in the form of certificates that could be redeemed for silver or other reserves. These were acceptable across the empire, which meant that it was no longer necessary to transport the silver itself. However, paper certificates can be forged, another form of debasement, so the Song dynasty later made the printing of paper currency a government monopoly (which did not entirely solve the problem).

Banking and credit

The first European private banks were created in the trading cities of Venice and Genoa in the 13th century. As with the later public banks, their initial function was the safe storage of deposited wealth. They rapidly moved into money lending, however, and were the first to discover that banks could create money in the form of credit. Essentially, this worked as follows. Deposits in banks could be transferred from one owner to another in settlement of accounts, which meant that paper records of transactions could be used as proxies for metal coins. This, in turn, meant that the coins in a bank could serve just as well as money, without having to leave the bank. This arrangement was, of course, far safer and more convenient than physical exchanges of metal.

The bankers soon realized that they too could transfer money between accounts by advancing loans to clients. If the money was not removed from the bank, the loan would remain on at least temporary deposit with the bank — thus creating a new deposit. Alternatively, the money might be spent, and then redeposited by a

third party. Further loans could then be issued against these new deposits. This process could cycle a number of times, which enabled banks to create credit which could be many times the volume of the original saving.

This is still one of the central functions of banking. After various historical financial disasters, however, the amount of credit that a bank is allowed to create in this way is now controlled in various ways, all of which were devised by the Bank of England during the 18th and 19th centuries. One mechanism is the reserve requirement (the amount of actual money that a bank has to keep on hand), which is imposed by central banks. For example, a reserve requirement of 25% allows a bank (or a bank system) to create £4 credit for every £1 deposited, while a reserve requirement of 10% allows a bank to create £10 credit for every £1 deposited.6 The ultimate source of this circulating credit is the central bank, which determines the reserve requirements. This circulating credit is then withdrawn, in the same ratio, when central banks sell (for example) government bonds, in what are called open market operations. The cash withdrawn from the system removes the same multiple of credit as was created. The central banks also regulate the system through their control of the bank rate, the rate at which the central bank lends this money back to commercial banks. If the central bank wishes to curb the activities of the commercial banks, it can raise the bank rate and thus make money more expensive. Central banks also support their country's banking system by acting as 'lenders of last resort', which means that they will step in to support a bank under pressure. The knowledge that this will happen, of course, largely removes the pressure.

The early banks also discovered that they were not confined to dealing in records of transactions made by others, and that they too could issue notes as tokens for coins when making loans. The idea was, of course, that these were promissory notes issued against actual money deposits held in the bank, so they could always be redeemed for metal coins. However, the recipient of such a note would also find it more convenient to use it to pay a third party. So notes might continue passing from hand to hand without ever

The total amount of credit money then in circulation consists of the reserve (the amount backed by gold or other source of value) and the fiduciary element (the larger remainder).

coming in to be redeemed. This would allow a piece of paper to be used as money without ever having to call on the coins that it represented. This, of course, also allowed banks to issue more notes than they had coins.⁷

This system depended — and still does — on confidence. First, banks could only survive as long as people believed that they could retrieve their deposits at any time. If too many people lost confidence, and tried to draw out their savings at the same time, it would immediately become apparent that the bank had only a fraction of the actual coins needed to repay every depositor. Second, people would only accept notes as tokens for coins as long as they believed that the notes could and would be redeemed for coins on demand. If people lost faith in the paper tokens, and tried to redeem them, it would also become apparent that the bank did not hold a sufficient stock of metal to meet its obligations.⁸

Some have argued that this apparent ability of banks to create wealth from nothing must be some kind of confidence trick — and it is true that the system does depend on confidence. The more fundamental point, however, is that the only important intrinsic value of the metal that is used to form coins is as a medium of exchange and as a means of storing wealth — so if paper or a line of credit can be used to serve the same ends then it is just as much a form of money as metal. It is, ultimately, no more arbitrary to use paper as money as it is to use metal as money.

The important difference, of course, is that the supply of metal is limited, as gold and silver are relatively rare, and have to be laboriously mined and refined, while paper money can be printed at little cost and effort, can be set to equal any desired value of metal, and can be produced in effectively limitless quantities and values. The use of a scarce substance limits the supply of money — which thus tends to remain 'hard', i.e. keep its value. The use of a plentiful substance makes it possible to increase the supply of

- 7 This gives rise to one slightly surreal outcome, as banknotes have to be printed, and the printers must be paid. So banknotes are printed, then handed over to the Treasury or delivered to banks to be released. Some of these banknotes are then handed back (in effect) to the printers, as payment for their work.
- 8 Many people feel that paper money has to look respectable in order to inspire confidence, but this is not always true. In 1685, for example, the French colonial authorities in Canada used playing cards signed by the governor as promissory notes, as shipments of coin from France had been delayed.

money, which, without some other means of control, then tends to become 'soft'. If the supply of real goods and services does not change, then the value or purchasing power of the money tends to fall (usually perceived as rising prices). This is called inflation.

Historically, when confidence did fail, and banks were ruined, the paper money and credit that they had created became valueless. Thus, this kind of money could be brought into or erased from existence in two equally simple operations. The history of banking indicates a regular cycle of creation and destruction, as banks were established, created money and millionaires, expanded, overreached, and collapsed in ruins, thus erasing apparent fortunes. After a time, someone would establish another bank, and the cycle would repeat.

Inflation

As noted earlier, a prosperous, well-managed country is likely to have a stable or rising currency value, while an unstable or badly-managed country is likely to experience a declining currency value. Flows of investment capital, the balance of payments, commodity prices and currency trading also affect relative currency values, but by far, the most important factor is the supply of money.

In general, money only retains its value when the government manages the public accounts competently, does not default and is prevented from printing more money to cover its debts (which usually requires that the central bank has *de jure* or at least *de facto* independence). If the government prints the right amount of money in relation to the needs of trade and industry and consumers, and if people have confidence that it will continue to do so, then the currency is likely to be relatively stable. However, if the government prints too much paper money, people will lose confidence and the money will lose its value. Inflation also erodes the value of stored wealth, leaving less available for investment or consumption.

This is why one of the most essential roles for the state is to control the money supply, and thereby ensure 'sound money' (money that does not lose value), as failure in this regard can be catastrophic. The truly disastrous consequences of serious inflation can be seen in the following example.

Zimbabwe's inflation will rocket to 1.5m% by the end of 2007, the US ambassador to Harare predicted today, forecasting massive disruption and instability. Christopher Dell said prices were going up twice a day, sapping popular confidence in a government that is now committing regime change on itself.

For Zimbabweans living in the turmoil of economic meltdown, hyperinflation is spreading poverty, as even basic goods become unaffordable. Government regulations will only permit withdrawals from banks of Z\$1.5m per day, which is not enough to buy a week's worth of groceries. At golf courses, golfers pay for their drinks before they set off on their round, because the price will have gone up by the time they have finished the 18th hole. One individual was recently told by a pension company that it would no longer send him statements as his fund was worth less than the price of a stamp. "I can barely cope with inflation in the thousands, but millions? We will die," said Iddah Mandaza, a Harare factory worker.

Many Zimbabweans are resorting to barter. "I traded some soap for two buckets of maize meal. It was much better than trying to buy it in the shops," said worker Richard Mukondo. "People in the rural areas are even worse off. You can see they are hungry and their clothes are in tatters. They trade in whatever they can produce: tomatoes, onions, chickens and eggs."

Tony Hawkins, professor of economics at the University of Zimbabwe, said that no one holds cash in the country any more. "People spend it as soon as they get it. Goods hold their value, not money. The government has run out of solutions. At this rate perhaps inflation could hit 1m%, but one gets a sense that things will crack before then"

Abridged from The Guardian June 21, 2007

Zimbabwe is the first country in the 21st century to hyperinflate. In February 2007, Zimbabwe's inflation rate topped 50% per month, the minimum rate required to qualify as a hyperinflation (50% per month is equal to a 12,875% per year). Since then, inflation has soared. The last official inflation data were released for July and are hopelessly outdated. The Reserve Bank of Zimbabwe has been even less forthcoming with money supply data.

Absent current official money supply and inflation data, it is difficult to quantify the depth and breadth of the still-growing crisis in Zimbabwe. To overcome this problem, Cato Senior Fellow Professor Steve Hanke developed a new metric from market-based price data. As of 14 November 2008, Zimbabwe's annual inflation rate was 89.7 sextillion (10²¹) percent.

Abridged from http://www.cato.org/zimbabwe

Hyperinflation in Zimbabwe has now set a new world record. One of the best-known earlier cases of hyperinflation happened between 1922 and 1923, when the price of a loaf of bread in Weimar Germany went up by a multiple of 1.2 billion. However, this was due to the French and Belgian invasion of the Ruhr, and the ensuing patriotic general strike, which deliberately shut down the entire economy. This was reversed with several key policy decisions; the economy was stabilized again in 1924, and recovered fully over the following five years. By contrast, Zimbabwe's extended decline has obliged most of the teachers, doctors, lawyers and other professionals to emigrate, so the prospects for recovery are now far poorer than in Weimar Germany.

Clearly, it is essential to keep inflation under control, which is why most central banks are so careful to keep control of the money supply (and may therefore be reluctant to support local currency initiatives). Most central banks have explicit inflation targets, which means that they act (usually by raising the base rate of interest when necessary) to keep the rate of inflation below a certain threshold. Deflation can also be a serious problem, however, as many people will defer non-essential purchases when prices are falling if they expect prices to be still lower in the future. Declining revenues oblige retailers to reduce their purchases, which results in declining revenues for manufacturers, which causes job losses, and the ensuing climate of uncertainty makes many people try and reduce their expenditure, thus triggering a further round of economic contraction. Many central banks have therefore adopted symmetrical targets, and now aim to maintain a low, positive rate of inflation. Mild inflation is generally constructive, if people expect the value of their savings to erode slowly, they will seek some form of investment that will give them a return above the rate of inflation, thus encouraging them to make their capital available (directly or indirectly) to the entrepreneurs who need to borrow capital to start up or expand their businesses.

Deflation

Deflation can be just as destructive as inflation. The financial crisis that started in mid-2008 is yet another reminder that economics rests on human psychology. When people are optimistic, they believe that the economy will grow, and that assets will be worth

more in future, so they are more likely to invest. When people are pessimistic, they think that assets will be worth less in the future, or are already over-valued, so they hoard cash instead. This is rational behaviour for the individual, but dysfunctional for society; if everyone stops buying, there are no customers. Thus, the consequences of a collapse in highly speculative or overvalued assets can spread, and then start bringing down even good, responsibly-managed businesses. As people then lose their jobs, they can't afford purchases, so the recession widens further.

By the end of 2008, property, equities, mutual funds, annuities, manufacturing output, sales and demand for energy, metals and other commodities had all slumped, and every country was affected. The price of oil gives a good example of the impact. Between 1999 and July 2008, the price of oil rose 15-fold, from less than \$10 per barrel to over \$147 per barrel. This was mainly due to two factors, rising demand (especially from China), and a lengthy period of underinvestment that led to a situation where demand exceeded the readily available supply. Then, as a result of falling demand, the price slumped; oil lost nearly 80% of its value in just six months. It was trading at less than \$34 per barrel in December 2008. These dramatic shifts can be very destabilizing for both customers and producers.

Many economists believe that governments can shorten the depth and duration of a recession by printing money and flooding the market with liquidity, lowering interest rates, making borrowing cheap, and by mopping up excess capacity by acting as a giant customer. Some governments commission vast public works projects, for example, to create demand. As their suppliers then have a customer, they start ordering from their suppliers, and gradually the economy revives. In the most extreme cases (such as in 2008-9), governments may have to take over entire banks and industries.

True recovery occurs when people think that prices have probably fallen as far as they are going to fall, and start buying again. Eventually, there is sufficient 'real' demand for goods and services in the economy to allow the government to shrink back to its normal size. As a rule, governments then have to raise taxes to pump the excess liquidity back out of the economy before this can cause inflation.

Governments try to prevent such crises by regulating the financial sector. Some of the most important regulatory requirements are those that make actual misrepresentation and fraud (i.e. lying about the value of an asset) illegal, and those that insist on transparency (i.e. making it possible to see a company's true financial position). Other regulatory requirements ensure that institutions have sufficient assets to meet their contractual obligations, by imposing capital reserve requirements and so on. Weak regulation can therefore allow a crisis to develop. Unfortunately, excessive regulation can also trigger a crisis. For example, the Basel II Accord on banking requires banks to increase their capital when risks rise, which looks sensible, but this can then force them to decrease their lending just when capital is most scarce, which might save the bank but trigger a much more extensive economic crisis. Heller (2008) concludes that the key is light-buteffective or 'Goldilocks' regulation, not too much, and not too little.

In technical terms, an asset is overvalued when its price exceeds the present value of the future income. For example, if someone buys a house mainly because they think that it will be worth more in future, instead of buying it for the rental income, it might be overvalued. This means that there is a risk of a crash in asset prices, because people will only go on buying only as long as they expect others to buy, so, when people don't believe this anymore, the price will fall (sometimes by a long way).

One of the causes of the 2007-9 crisis was the development of complex financial products, such as mortgage-backed securities, that allowed bad ('toxic') assets to be bundled in ('securitized') with good assets, and sold as a package. This had the effect of encouraging the extension of cheap ('subprime') mortgages and credit to people who could not actually repay their loans, because the loans could be easily sold on. It also had the effect of hiding the real value of the mortgage-backed security, which might be much less than it was sold for. In March 2007, the value of subprime mortgages in the USA was estimated to be \$1.3 trillion, so this problem had grown to the point where it was big enough to destabilize the entire financial system. Eventually, of course, people got nervous about these assets, and the whole system started to collapse.

This then exposed a far more serious problem; the extraordinary disparity between the amount of credit that had been

issued, and the actual assets available as collateral. At the peak, in mid-2008, central banks held a total of US\$0.845 trillion in gold. The total quantity of notes and coins in circulation, plus the reserves that commercial banks hold with central banks (this measure is known as M0), was US\$3.9 trillion in October 2008. The commercial banks then issue loans on the basis of these assets; as funds are deposited with them, they lend out a multiple of the funds deposited, limited only by the central bank reserve requirement. Any funds then redeposited with a bank can form the basis of further loans. So the banks had lent out US\$39 trillion on the basis of their far smaller deposits. This is normal practice, and the total amount of lending was still less than global GDP, which was US\$55 trillion, and so commensurate with available collateral.

However, derivatives, credit default swaps and collateralized debt obligations allowed traders to lend far more than under the conventional banking model. Credit derivatives alone peaked at US\$62 trillion, the availability of cheap credit then drove up asset values which, globally, reached a notional US\$290 trillion, while the notional value of all forms of derivative reached US\$863 trillion. This was now nearly 17 times more than global GDP. At the peak, there was over 220 times more credit in circulation than actual notes and coins, and over 1,021 times more credit in circulation than the value of all the gold in central depositories.

It is clear that much of this credit is now worthless. In the Davos meeting in January 2009, Steve Schwarzman, the chairman of private equity fund Blackstone, said an "almost incomprehensible" amount of cash had evaporated since the financial crisis took hold, and estimated that 40% of the world's wealth had been destroyed.

This is an extreme case, but similar problems have occurred before, as the brief historical review in the next section makes clear. This is because the challenge of defining and managing the relationship between money and actual physical assets has existed since money was first invented.

Hard and soft money

The constructive role of mild inflation became apparent during the first half of the 18th century, when it was noted that slowly rising prices actually stimulated increased production. The important question in the United States, therefore, was how to expand the

economy with an increase in the money supply and the associated rising prices, while avoiding the eventual crash that a number of European banks had undergone. As Galbraith (1975) explained, this created two conflicting lobbies. Those who had wealth preferred hard (scarce) money, as inflation tended to erode the value (purchasing power) of their capital. Inflation and rising prices often favoured farmers and entrepreneurs, however, for whom the rewards of expansion were immediate and obvious, so such people preferred easy lending and borrowing, soft (plentiful) money and inflation. This created a tendency for states to become more fiscally conservative as they became more established, so that the eastern states tended to support the hard money position, while the younger states to the west tended to favour soft money.

In 1791, the Bank of the United States was established to serve as a central bank, and started to restrict the operations of the various commercial banks. In 1809, in a political coup by those favouring soft money, the Bank of the United States was abolished. Between 1811 and 1815, the number of commercial banks rose from 88 to 208, and continued to increase dramatically. In 1816, the Second Bank was established, but it too was abolished in 1832. This too led to an increase in the number of commercial banks, from 330 in 1830 to 713 in 1836. The face value of notes in circulation went up from \$61 million to \$140 million, while total gold and silver reserves only increased from \$22 million to \$40 million. One bank that collapsed with a note circulation of \$500,000 was found have issued these notes on the basis of gold and silver reserves to the value of \$86.48. This is a multiple of 5,782, which is over five times bigger than the disparity between credit derivatives and central bank gold reserves today, so this problem really is not new.

The United States then settled into, in effect, a dual-currency system. The financial community and banks in the eastern states used hard money, the west used soft money. The banks in the rural western states closely resembled what would now be called a local currency system in several key respects. Large numbers of locallybased banks printed their own notes, which had limited convertibility outside the area. Such local currencies became less and less valuable the further away one got from the issuing bank, as the chances that the recipient of payment in such notes would actually be able to present and redeem them would also diminish with distance. These banks were willing to advance loans to persons

with little capital in order to set them up in business. If the businesses prospered, the bank would be repaid and the whole operation could go on expanding. If the businesses failed, the bank would fail and someone — perhaps the manufacturer or supplier of the tools or seeds, often from a more established state to the east would not get paid. The eastern bankers and manufacturers were willing to comply in this system, as it allowed them to expand their loans and sales — with, of course, a certain element of risk. Notes from the west that were presented in the east could always be refused, or accepted at a discount. By the time of the American Civil War, there were some 7,000 different kinds of bank notes in circulation in the country, issued by 1,600 different banks, some of which were actually defunct. There were, in addition, another 5,000 different counterfeit notes which had been printed by individuals. This made it impossible to do business without the current edition of one of the various guides to the currency, all of which had to be constantly revised and reissued.

The argument about the merits of hard and soft money went on for a further forty years. Eventually, the argument in the US was resolved in favour of hard money, and the US moved to the gold standard in 1900.

The move from gold to fiat

In the late 19th century, many countries adopted an international gold standard, in which all currencies were interchangeable with gold, and money value of each currency was fixed by its accepted parity with gold. This did not last long, however, as most governments suspended their link to the gold standard (and therefore the convertibility of their currency) shortly after the outbreak of World War I. There were subsequent attempts to reintroduce the international gold standard, but these failed during the Great Depression. The UK left the gold standard in 1931. The US dollar, which then became the reference currency for many other countries, was still backed by gold, and remained so until 1971 (although the US did adopt fiat money, the American greenback dollar, as an emergency measure during the War). When the US came off the gold standard, all the world's currencies became fiat money.

This means that all money (with a few exceptions) now has value because governments say that it has value, and people believe them. The exchange rate (which is the actual measure of its value) is determined by the market, which, in turn, is influenced by the perceived competence and credibility of the government. So almost all money now depends on trust. It is, in effect, a shared belief system, that works precisely because most people have faith that the system will continue to operate.

As Newlyn points out, the fact that money is no longer backed by gold does not mean that its value and quantity have become arbitrary. Fiat money is also referred to as managed money, precisely because its value and quantity have to be carefully managed. If effect, the discipline imposed by finite quantities of a physical material (such as gold) have been replaced by the discipline imposed by good monetary and fiscal policies.

The future of money

As Bootle (2003) points out, many existing forms of cash and credit might also be replaced one day. For example, cash, cheques, direct debits and so on are already being replaced with immediate transfers from smart cards and mobile phones. The next stage might involve radio frequency identification devices (RFIDs), which can be woven into clothing, or implanted in users. So, just as metal was replaced by paper, paper and plastic might eventually be replaced by electrons, and all physical tokens of money could then disappear.

Local currency systems: an old idea in a new context.

Local currency systems are, therefore, just another development in a debate that goes back for centuries. Hard, scarce money tends to favour the wealthy and established, because it preserves the value of existing wealth. Soft money, with easy borrowing, offers a means whereby those with few assets can establish a business and better their position. Local currencies are a form of soft money, with easy borrowing, and they are limited to particular geographic areas. Local currency systems therefore resemble American rural banking in the first half of the 19th century. The American history indicates that such currency systems have a real and valuable role to play in enabling a developing region to bootstrap a diverse economy into

existence, that soft money systems can — with appropriate discounts - co-exist with a hard money system, and that soft money systems tend to get replaced by hard money systems as regions become more established and prosperous.

WHAT IS THE ROLE OF LOCAL CURRENCIES IN ECONOMIC **REGENERATION?**

People in areas of high and long-term unemployment tend to have particular problems when trying to set up a business. In particular, relatively few have management skills, many do not know how to get access to advice and finance, and many do not have the collateral to put up as security for a loan, and are seen as poor credit risks.

Attempts have been made to allow people to borrow with little or no collateral and at relatively low rates of interest, via credit unions. A related idea, the community business, allows a group to access funds (often in the form of a soft loan) that they could not borrow individually. However, credit unions and community businesses have a high failure rate. Some of the common problems include a lack of necessary skills, poor understanding of business management and marketing in particular, and embezzling of cash and goods. Credit unions are also heavily regulated in developed countries, which makes the administration demanding.

Local currency systems appear to have several potential advantages in this regard, as follows:

- There is no cash to be embezzled, and the scope for cheating and fraud is limited.
- They can be relatively easy to manage, and there are some existing software packages and established routines to follow. They require little prior financial skill. They are less dependent on the quality of leadership than community businesses and credit unions.
- Participants can start without collateral, and without having to borrow or pay interest.

Advocates of local currency systems argue that they also have some broader advantages:

• Some goods and services can be paid for in a local currency. This reduces cash outlays, thereby increasing disposable income and helping to ameliorate poverty.

- In industrial countries, labour is often more expensive than capital, which creates an incentive to replace labour with capital. If labour can be paid or part-paid in a local currency, and therefore becomes cheaper in cash terms, this incentive could, in theory, diminish or even reverse.
- The experience with local currency systems in countries like Australia is that they appear to encourage persons to offer services outwith their normal trade or profession, as many participants turn hobbies such as knitting, sewing, woodwork, growing vegetables, baking, shopping, dogwalking, grasscutting and painting into extra sources of credits. In a situation, for example, where a factory has closed and a number of welders are made redundant at the same time, thereby saturating the market for welders, it is important to encourage persons to think in broader terms about other ways to earn a living. This effect is generally positive, therefore, and would probably help to augment retraining schemes. In support of this point, Offe and Heinze (1992) argued that the informal economy might not be particularly efficient or very productive, but its real contribution might lie in alleviating the demoralization, frustration and hopelessness that can accompany involuntary inactivity. Similarly, Ekins (1986) argued that local currencies can make a real difference to the level of economic activity and sense of self-reliance in a poor, disempowered community.
- Local currency can only be spent locally. The advocates argue that a geographically-limited currency creates a home market in which the demand generated by each successful local business can be preferentially met by other local businesses, thus creating a local multiplier effect. The 'capital' cannot be lost from the area or be siphoned off by more powerful interests elsewhere, as transactions have to be between locally-based members. Similarly, businesses set up to trade in local currency do not have to compete in the wider and tougher commercial environment, which allows the more marginal businesses to survive. Offe and Heinze (1992) argue, for example, that a local currency system that allows the charge for a good or service to be

split between a local and a national currency component creates a dynamic for local economic growth. As local trade increases, so does the percentage of trade done in local currency, which makes it more attractive to trade locally, and so on.

A local currency may have a particular value for people with a limited capacity for work, such as those with learning difficulties or disabilities, who can survive on welfare but who may find an outlet for their skills and services through the local currency system. This could help to recreate a sense of having something to offer, of being valued, and, by being able to improve their living conditions through their own efforts, a sense of regaining control of their lives. In addition, as units can be donated, the local currency system could serve as a channel for community giving; community events could raise local currency funds to be donated to elderly or disabled people. The recipients would then be in a position to decide how they wished to spend their credit. They would not, however, be exposed to the risk of having to hold cash in the house.

Counter-arguments

The advocates argue that the local nature of a geographically-limited currency is its greatest strength. It is also, of course, its greatest weakness. No community — especially an economically disadvantaged community — is remotely likely to be able to produce more than a small fraction of the goods and services it requires.

More fundamentally, as a leader in *The Economist* in July 2005 (p. 15) pointed out, parallel quasi-currencies are perceived to be inferior to real currencies precisely because they are restricted, and can only be spent on approved goods, or in approved outlets, or by a certain date, and cannot be freely transferred between individuals. They therefore resemble the scrip, issued by some of the factories in the UK, mines in the US and plantations in the Caribbean in the 19th century to pay their workers, redeemable only in the company stores for a limited range of goods at inflated prices.

However, local currencies do seem to have played a genuinely constructive role in places such as Wörgl. This suggests that the real role of a local currency may actually be social restoration, rather than direct economic regeneration *per se.* A local currency can provide a combination of immediate liquidity and improved community cohesion, along with a restoration of confidence and morale to those psychologically affected by their marginalization. It is possible, therefore, that this combination helps to provide the preconditions for the ensuing process of economic regeneration.

The need to reconstruct social networks

The philosophical basis for most local currency systems is the premise that economic relationships depend on a modicum of trust, that trust is generated by a set of benign social relationships, and such networks of benign social relationships are undermined or damaged in communities subject to long-term disadvantage and exclusion. From this perspective, it seems plausible that measures to support the reconstruction of social relationships might be a valuable addition to the standard economic regeneration package.

This perspective is not universally shared, but it is generally agreed that distrust is expensive. Businesses operating in low-trust environments have to exert far more time and effort to ensure that goods will be delivered, bills settled, contracts honoured and so on. In high-trust environment most of these issues can be safely taken for granted in the majority of transactions.

The question is whether a local currency system, which encourages benign social interaction and, through repeated interaction, helps to build up social cohesion and trust, could therefore help to reconstruct damaged social networks and thereby assist in economic regeneration. There are related questions as to whether a local currency system can help to support fledgling local businesses and foster self-reliance, create a multiplier effect in which more local people could benefit from the circulation of money and thus spread the benefits of the standard economic regeneration programme more widely, and thereby — in the long run — reduce social exclusion. Finally, as most conventional social and economic regeneration programmes appear to fail to meet the needs of those excluded from the benefits of a market-based society by their age, special needs, or long-term unemployment, there is a

question as to whether local currencies could help to bring these people into a network of social and economic exchanges, thereby allowing them to increase the extent to which they can manage and control their lives

Contrasting experiences with LETSystems

Australia

LETSystems became particularly popular in Australia, where they were accepted as a tool for economic regeneration. By the early 1990s there were about 160 LETSystems in operation in Australia. Jordan (1991) notes that many LETSystems were combined with and helped to 'finance' other local initiatives, such as community cafes, crèche facilities and home insulation programmes. Their popularity was based, to a significant degree, on two legal rulings; one that ensured that local current earnings did not affect welfare benefits, and one that waived the 'available for work' requirement for welfare benefits in particularly poor areas such as Maleny, where it was acknowledged that conventional job opportunities were largely non-existent at the time. LETs Maleny went on to become the most developed LETSystem in Australia, and supported the growth of local food and recycling co-operatives and a Credit Union.

The experience in Australia during the 1990s indicated that:

- Local currency systems do appear to make a contribution to the perceived quality of life of the participants. LETSystems form a kind of community bulletin board, and therefore play a role in putting people in touch with each other, helping to re-integrate those who have become isolated, and restoring a sense of community. They also offer psychological benefits, as they allow people who are unemployed to participate, and thereby start to rebuild a sense of worth.
- There is evidence, therefore, that local currency systems can play a positive role in helping to (re)construct social networks. This is likely to be of most value in low income or socially isolated communities where the social fabric that supports economic activity has been damaged, which indicates that a local currency system could potentially

form a useful component of economic regeneration programmes.

Thus, the experience in Australia suggests that a local currency can play a useful role in the following instances:

- In a community that has recently undergone a recession, but has yet to lose its skills, retail outlets, manufacturing capacity and so on. A local currency system could play a useful role in a transition back to relative prosperity, but would probably be abandoned once this was achieved. Local economic development could then be better promoted through local sourcing initiatives, which would have the same multiplier effect, but without the same limiting factors.
- In a community that is beyond the reach of most conventional economic regeneration programmes. In communities that have suffered long-term unemployment, and a loss of the skill base, there is often a need to recreate patterns of useful work. Conventional programmes provide funds and create jobs, but many of the jobs do not survive the end of the funding, or serve only to allow the more ambitious and skillful community members to move out of the area. A local currency scheme would not depend to the same extent on external funding, and would not offer a way out of the area. It may therefore be a useful way to recreate patterns of work in a relatively stable form. By allowing participants to develop or maintain their skills, and by enhancing their self-esteem, this may, in the longer term, serve as a bridge back into paid forms of work.

The UK

By 1993, there were about 80 LETSystems trading in the UK, just one-sixth of the number (per capita) in Australia. In addition, these were largely confined to particular communities in the south of England where a high proportion of the population were interested in 'green' or alternative ideas, rather than economically depressed areas. The range of goods and services available within these schemes remained narrow, there was relatively little interest from conventional businesses or local authorities, and there was little or no take-up in post-industrial areas of high unemployment.

Ekins, Hillman and Hutchinson (2000) concluded that the communities that could most benefit from LETS often did not have the skills to set them up; that there was often difficulty in winning the confidence of local traders (which limited their usefulness), and that the ambiguous status of local currencies with regard to taxation and benefits systems created additional problems with their acceptability.

The Bolivarian Republic of Venezuela

Venezuela is currently experimenting with at least ten alternative currencies, which have four key features (The Economist, December 2008, p. 58). First, they can only be used locally. The cimarrone, for example, can only be used in the community market in Río Chico, a small town in the coastal region of Barlovento. Second, they can only be used by 'prosumers', i.e. people who bring something to sell as well as buy. Third, the local currencies are not convertible with the bolivar, Venezuela's legal currency. Fourth, they are not bottomup community developments, but are top-down; they were decreed by President Chavez as part of his vision of '21st-century socialism', which requires encouraging cooperation, abolishing capitalism and eventually abolishing money. In order to make the schemes work, however, the Government of Venezuela has had to have prosumers bussed in from nearby villages to trade in the community markets, and President Chavez has talked about obliging farmers to sell a proportion of their products through these prosumer markets. Uptake, however, is still extremely low, and very few goods are available for local currency.

Two first two features are typical of local currencies elsewhere. Most are strictly local, and most of them are used by prosumers, as it is necessary to have a way of earning local scrip. The third feature is not unusual, although it contrasts with recent developments with local currencies in the UK. For example, Lewes and Totnes, two towns in southern England, use 'community pounds' aimed at encouraging shoppers to buy local products, but both the Lewes pound and the Totnes pound can be exchanged for the legal currency, sterling. The fourth feature, however, is unique. Other local currencies have developed locally, while Venezuela has imposed them from above, which probably accounts for the very limited uptake.

Determinants of success

These contrasting experiences suggest that the attitude taken by central government to local currency systems largely determines their success or failure. The decision, in Australia, to separate them from welfare systems was critically important. Similarly, different governments took different positions on the taxation of local earnings. In general, they were more inclined to levy taxes (in national currency) on local transactions where local units and national currency units were traded at parity, indicating that the local currency unit was simply serving as a proxy. However, several governments regarded local earnings as being partly or wholly taxexempt, some even considered allowing local government to permit the payment of local taxes, rents and fines, and part of local government wages in local currency.

Thus, the viability of any local currency scheme in a developed economy will largely depend on the attitude adopted by the relevant agencies, including those responsible for tax revenue, welfare benefits, local government, and national development and training organizations. For example:

- If the welfare agency decides to set local currency income against entitlement to benefit, or if people working for local currency were deemed to be making themselves unavailable for work, and so not entitled to benefit, the potential loss would probably outweigh any advantages of the scheme.
- There may be problems with planning consents, regulations, and insurance for some of the services that people might wish to offer via a local currency scheme. Most developed nations have relatively stringent regulations, for example, concerning child-minding and food-handling services.
- If the tax revenue-collecting agency regards local currency income as taxable, any taxes due on local currency income would have to be paid in cash from the household's cash income (as the tax agency is unlikely to accept payment in anything else). This may not be a serious problem in households with a sufficient cash income, but is likely to be a serious obstacle in households on low incomes.

The most crucial issue is whether a transaction in local currency is considered to be a form of payment in kind, and, if so, whether an appropriate sum should be taken into account as taxable or deductible. It is clearly essential, however, if a local currency is to be generally useful in a transition to more normal levels of economic activity, that it is seen as 'serious' money. This means that it must be possible to obtain goods and services of real value (including at least some staple items) in the local currency. It also means that the local currency should be kept near par, in terms of the approximate value of goods and services that can be obtained, with the national currency — although the actual exchange rate value of the local currency is likely to vary in practice. This implies that payment in a local currency has to be regarded as a payment in kind and so - subject to current restrictions and provisions — taken into account in calculations of tax liability and benefits allowances.

However, it is also clear that the inclusion of local currency earnings in calculations of tax and benefits would largely remove any attraction it might have as a local medium of exchange. This is partly because it would remove any competitive advantage that the local currency might have, as goods and services would no longer be cheaper in local units. It is also because taxes levied and benefits paid are denominated in units of national currency — a situation which is unlikely to change — so that persons trading goods and services in a local currency would end up owing national currency for non-national currency transactions, and therefore worse off (in terms of national currency) than before.

There are two possible solutions. One would be to fix the exchange rate at an artificially low level. The other is to argue for a specific and time-limited exemption. The first option would fail on one of the primary criteria for acceptance — that the local currency is seen as 'serious' money. The second, on the other hand, has several clear precedents in the form of the tax holidays, grants, rent rebates and other incentives given to enterprises that site their operations in depressed areas that are designated as enterprise zones.

This suggests that the introduction of a local currency could form part of a standard economic regeneration package. For a specific period — perhaps 5 or 10 years — local currency exchanges would not be taken into account in any calculations of tax or

benefits. At the end of that grace period, any such transactions would be taken into account as a form of payment in kind. This would largely remove the incentives for trading in the local currency, but, if the economic regeneration strategy had been successful, there would no longer be any need to use a local currency anyway.

Political factors

Surveys by Clayton and Rowan (1995) of the local currency user groups in the UK found distinct sub-groups of interests. One group consisted of largely middle-class, educated activists who saw themselves as being engaged in a process of political and social transformation, while some inclined to an anarcho-syndicalist view, and saw themselves as politicizing the community and undermining capitalism.

Another group consisted of local community activists, often from seriously disadvantaged backgrounds themselves, who had a much more pragmatic view. They tended to be interested in local currency systems purely in terms of demonstrable local advantages that they could offer. This perspective was actually more productive, as people on low incomes, living in disadvantaged communities, tended to be only too keenly aware of the value of money. They also tend to distrust political activism from outside the community, having become cynical about the motives of most of those involved in politics.

The adoption of the local currency idea by political radicals presented a significant barrier to the use of local currency systems in disadvantaged areas, as there were other key stakeholders, in the tax and welfare benefits agencies, and in the conventional political parties, who were disinclined to support a system that had a reputation for being a front for radical political activism. This was a difficult paradox, as some of the local currency activists were the mainstays of their own local system, but their oppositional stance and rhetoric was itself unhelpful, and probably impeded the more general uptake of local currency systems. The experience in Venezuela indicates that an ideologically based attempt to impose a local currency system in a top-down manner is even less successful, resulting in very little take-up at all.

This suggests that genuine local participation and support is clearly one of the most important factors, and that a pragmatic, as opposed to ideological, approach is equally essential.

Limiting factors

The advocates of local currency systems agree that the single most important feature of the system is that it is restricted to local use. Capital — in the rather special sense of accumulated favours or payments in kind — denominated in a local currency cannot hemorrhage out of an area — unlike normal currency, which does tend to leak rapidly out of a depressed area with little viable economic activity.

Some LETs activists have argued that LETs systems should eventually be linked together in order to create, in effect, an alternative national currency system, but this would remove any advantage that the currency offered. It would also be pointless, given that every country already has a national currency. The current national currencies evolved from a situation where there were a number of forms of currency with varying geographical circulations and different degrees of acceptability, so the idea of linking local currency systems together is, in effect, to reinvent the wheel. In addition, any linking of local currency systems across the borders of designated enterprise zones would also make it impossible to argue for specific and time-limited tax and benefit exemptions for those areas. The value of a local currency system, therefore, requires that it remains local.

This suggests two limiting factors:

 Any business that is successful will, eventually, expand beyond the local area. There will be a strong incentive to do so, as cash must be earned in order to buy non-local goods. Trading in local currency will probably become progressively less important to businesses as they become more successful. However, the volume of local currency business could increase even while it diminished as a percentage of a business's total trade.

There may be a maximum possible size to a local currency system. Such factors as market confidence, system credibility, and willingness to trade may depend on some degree of identification with the community, and possibly on some form of mild social pressure, which would not hold beyond a certain size. The purely local advantages of the system, such as any multiplier effect, would also be lost past a certain point.

Current developments

The recent UK government accepted some of the arguments for a parallel currency; a government paper in 2007 suggested a variant. The proposed UK scheme would have given those aged between 13 and 19 an 'Opportunity Card'; a smart card pre-loaded with £12 in credit. Children in poor areas would get more initial credit, and further credit could be earned by regular school attendance and voluntary work. The credits would then be redeemable against activities seen as socially constructive, such as admission to sports centres or evening classes.

This scheme was criticized, however, on the grounds that it might erode rather than strengthen community cohesion (by linking volunteering to 'payment', it might discourage 'unpaid' volunteering), that it should not be necessary to pay people to attend courses and classes for their own benefit, and that the scheme would allow a number of different public agencies to issue apparently costless credit, a recipe for inflation, expanding liabilities and eventual collapse. It is clear, therefore, that the concept will continue to be contentious.

Could this work in Jamaica?

One obvious limiting factor is that the Jamaican dollar itself is a relatively soft currency, having lost nearly 75% of its value against sterling over the last decade. It is not clear that there is any advantage in operating a soft currency system inside a soft currency area; most local currency systems today operate in poor areas within otherwise prosperous countries with relatively hard currencies.

This leaves, however, two important points. The first is that other attempts to increase the flow of credit into poor areas, in the form of micro-lending programmes in Jamaica, have had limited impact to date, possibly because the micro-finance institutions have attempted to apply a relatively traditional banking model, in that they have sought to collateralize even the smallest of loans in the

traditional way (taking a lien over physical assets such as small household appliances), without acknowledging that this security is probably more theoretical than realistic.

The non-securitized loans offered by the Grameen Bank, which rely on peer pressure to prevent default, and the experience of local currency systems, which rely on community trust to foster activity, may offer some insights as to why a conventional, securitized banking model cannot extend very far into the poorest, unbanked communities.

The second, and more fundamental point, is that the more important role of a local currency often lies in restoring social trust, the foundation of almost all constructive social behavior and economic activity. This is clearly lacking in many of Jamaica's most disadvantaged communities, and even more so between some of Jamaica's most disadvantaged communities, especially the gerrymandered garrison constituencies that have been politically polarized and divided along party lines.

It is not clear that a local currency system itself could play a constructive or healing role in such divided communities in Jamaica. The point, however, is that the principles illustrated by the local currency systems in operation, which highlight the importance of social trust, do indicate a potential source of new ideas in reducing the fears, tensions and barriers that prevent the reintegration of these damaged areas back into the rest of the community.

CONCLUSION

The experience of successful projects suggests that a local currency can make a useful social contribution, when embedded in local economic development strategies, as a means of encouraging social cohesion and embryonic economic development. It is sometimes presented as an alternative to capitalism, but this is inaccurate. A local currency is, in effect, a reinvention of local banking which, by supplying soft money, can play a positive but transitional role in improving social cohesion and thereby encouraging economic regeneration in poor areas within otherwise prosperous countries.

The chances of success depend on various factors, most obviously government tolerance, genuine local participation and support, and a pragmatic as opposed to ideological approach.

Whether a local currency could play a helpful role in a country like Jamaica remains to be seen. The more fundamental point, however, is that the more important role of a local currency often lies in restoring social trust, the foundation of almost all constructive social behavior and economic activity, and this conclusion probably does have much more universal relevance.

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