Community Currencies:A New Tool for the 21st Century

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The three most important concerns of our contemporaries in the developed nations are remarkably convergent—unemployment, the environment, and community breakdown—and there are strong indications that these same issues will remain on top of the agenda well into the next century. Emerging technologies promise to keep unemployment a major issue, even if all Western economies get out of recession. By 2010, China will introduce as much carbon dioxide in the atmosphere as the entire world does today. And community breakdown is one of the most systemic, deep, and complex societal trends of the past 30 years, with no signs of any reversal.

Precisely because we will have to live with these issues for the foreseeable future, only a long-term structural approach can successfully resolve these problems. Here I show how community currencies could contribute to tackling all three problems and also permit us to "retrofit" economic motivation to desirable human behavior.

Aligning Moral and Economic Incentives

There are three main ways to induce nonspontaneous behavior patterns: moral pressure, coercion, and economic incentives. For example, recycling glass bottles can be promoted by education, by regulations, or by incorporating a refundable deposit in the purchase price. A combination of all three incentives is obviously the most effective strategy.

When these incentives conflict, problems will arise. For instance, when there is an economic incentive to do something a regulation or law prohibits, we need costly and permanent enforcement systems. Even in the presence of such enforcement systems we expect smuggling and many more imaginative forms of cheating to occur. More evident are cases where moral pressure is supposed to overrule economic interests. Consider, for instance, the well-known saying, "Money is like manure; it does good only if spread around." This sentiment has been espoused in less florid language by most religions for a long time. However, this moral pressure is diametrically opposed to the concept of receiving interest on money, which provides a built-in incentive to hoard currency. Whenever there are such structural contradictions many people are unable to afford, or simply do not care enough, to follow the moral advice.

It is possible, however, to design a coherent and operational currency system so that this apparent structural contradiction disappears. In other words, by questioning some traditional implicit assumptions, we can realign the moral and economic incentives so that they are in harmony.

Functions of Money

To understand community currencies we need to better understand what money does. We will see that a community currency

should fulfill at least some of the key roles of any currency, and that a well-designed community currency can even fill some of the roles that the "normal" national currency does not.

Since the breakdown in 1972 of the Bretton Woods system, the world has been living with pure fiat currency—that is, there is nothing material backing the currencies of the world. Nonetheless, money has continued to fulfill a number of different functions, only two of which are essential:

- A standard of measure. We compare the value of the proverbial apples and oranges by expressing each of them in dollars, for example.
- A medium of exchange that is more efficient than other forms—barter, for instance.

Money has sometimes played three other roles in the past, and happens to play them today as well:

- A store of value. Historically, this has only rarely been the case. For example the word *capital* derives from the Latin *capus*, *capitis*, which means head, and referred to heads of cattle just as is still done today in Texas or among the Tutsi in Africa: "He is worth 1,000 head." Another example: in Egypt through the Late Classical period, and in Europe throughout the Middle Ages and until the late 18th Century, wealth was stored mainly in land and its gradual improvements.
- A tool for speculative profit, most emphatically today when more than 95 percent of all currency transactions in the world are motivated by speculation, and less than 5 percent are for trades of goods and services. This has been systematically possible only since August 1972, when President Nixon created the floating currency nonsystem we now have.
- A tool of empire. The control by the former Soviet Union of the external trade of Comecon countries via the "convertible ruble" is a recent example.

Though we tend to take for granted that money serves all the functions we are used to—which today means all five functions for the U.S. dollar—it is important to realize that money really needs to serve only the two essential functions in order to be an efficient currency.

Conflicts Among the Functions of Money

In fact, the secondary functions money serves invariably end up hurting the two essential ones. Some examples follow.

Store of Value Versus Medium of Exchange

At first sight, it really is convenient to have money also play the role of store of value. However, there is a formidable hidden cost: this identity significantly exacerbates the boom-bust economic cycle.

The theory of time preference of money, which describes the rational trade-off between consumption today and saving for the future, explains this: When someone expects higher uncertainty in the future, a larger proportion of his or her wealth is logically kept as savings, and less is thus available for immediate consumption. Therefore, at the first signs of a recession, anybody who has money will logically save more and consume less, thereby exacerbating the recession for everybody else. In boom years, consumer optimism prevails, and people will tend to simultaneously dip into their savings to buy big ticket items such as cars and houses, thereby pushing the boom into an inflationary period. While other factors also play a role in the creation of business cycles, it has been proven many times that consumer confidence significantly exacerbates the problem. Providing incentives to ensure that the medium of exchange does not also incorporate the store of value function would therefore automatically dampen this boom-bust tendency of the current system.

Speculation Versus Standard of Value

Joel Kurtzman's *The Death of Money*¹ convincingly describes why and how the speculation on currency undermines currency's role as a standard of value. If, for example, a German company wants to invest in a plant in India, the biggest uncertainty lies not in the risks of the business itself but in what currency to use to make cash-flow projections: rupees, dollars, or Deutsche Mark? The initial investment is in Deutsche Mark, and the proceeds will be generated in rupees, but at what exchange rate can one match the two to determine the expected rate of return? While there are some tools available to manage this risk for short-term transactions, they often are not available for the long-term risks

typical in plant investments, or they are simply too expensive. The net result: fewer cross-border investments, particularly in Third World countries, thereby reducing the worldwide efficiency of resource allocation. We will never be able to determine how many investments have not occurred because of this, but all indications suggest they are quite substantial.

Tool of Empire Versus Medium of Exchange

Recent history provides a telling example of the potential conflict inherent in these two functions of money: Before the collapse of communism, there was no need for anybody to stand guard next to a plant in Poland to ensure that it would not establish closer trade relationships with the West than the Soviet Union felt comfortable with. Having the Comecon currencies convertible only in rubles was an automatic and sufficient guarantee.

Problems with Interest

Another feature of today's money that we take for granted is that money produces interest. This process has become universally accepted in the West only over the past century. Indeed, for more than a thousand years all three major revealed religions emphatically prohibited any interest on money because they considered it usury. It is only since the end of the 19th Century that the Catholic Church, for instance, "forgot" about the sin of usury. This happened to coincide with the period when the Church itself, which for centuries used to be the largest landowner in Western Europe (that is, it was a capital user), found itself with financial assets instead of land (that is, it had become a capital supplier).

However, the problem with interest does not relate to any of these "moral" historico-religious reasons. Interest on money constitutes one of the most systematic causes of our destruction of the global environment. Consider as metaphor, for example, the life of a tree (or any other living resource): Because of interest, the net present value of any income far away in the future is negligible. So, it literally pays to cut down a tree and put the proceeds in a savings account instead of letting it grow for another decade or century. Similarly, the only types of tree worth planting commercially are the fastest-growing varieties such as

pine. (Nobody plants redwoods for commercial reasons.) So even when we plant trees, we are systematically losing biodiversity.

Reprogramming the "Invisible Hand"

Let us assume now that we develop a currency whose sole objective is to fulfill the two main roles of money: standard of value and medium of exchange. To discourage its use as a store of value, we build in a "booster" mechanism: when someone earns the equivalent of \$100 in this currency, we give him or her a purchasing power of \$110 if the money is used today. It would be worth only \$109 tomorrow, \$108 the day after tomorrow, \$100 on the tenth day, and \$90 in twenty days, and so on.³. Now, what would happen?

The following patterns would become manifest:

- A structural incentive to separate the functions of medium of exchange and store of value would be achieved, with the advantage of reducing the boom-bust cycle.
- People would invest or spend this money soon, and those who receive it would in turn do the same. Therefore, additional economic activity would occur, and additional jobs would be created.
- Decisions would be highly decentralized, given that any recipient of the currency would become actively involved in spreading the currency and thereby activating the job creation process.

The most important structural shifts would occur in the way people would spontaneously start saving and investing. Because the booster concept discourages the use of currency as a saving device—particularly if such currencies are in widespread use—something else needs to be used to store value.

The conceptual key to understanding this shift involves changing the "arrow of time" in the investment process. Under the present system, the discounted present value of any investment has to be higher than the interest rate of a risk-free government bond. This implies that anything that produces value more than twenty years in the future is basically worthless today, thus providing a systemic incentive not to care about the long-term consequences of our actions. Under the proposed system, the incentive works in the opposite way: income in the future would

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become *more* valuable than income today, thereby automatically prioritizing the long-term implications of today's actions.

Once the basic necessities of life are covered, the logical uses of money in this new context would include investing in ways that will reduce expenses in the future (pay back mortgages, improve home insulation, improve energy efficiencies, start one's own food gardens) and investing in anything that will keep, or increase in, value (land improvements, trees and forests, and anything else that grows over time). To prepare a nest egg for your grandchildren's college, one logical step is to plant a small forest or have a "savings account" that invests in such activities.

New liquid forms of savings would immediately be offered by the more agile financial institutions as soon as the demand for liquidity in the fixed assets just mentioned increased. This could stem the trend toward disintermediation, because government bonds would yield much lower returns. In general, stocks would be preferred to bonds, thereby making access to investment capital at low leverage the dominant way of financing businesses.

Consumption patterns would evolve toward products with longer lifetimes. Assume that one has \$100,000 available and two types of cars are offered for sale: the usual car of today, which costs \$20,000 and lasts four years, and one costing \$100,000 that lasts twenty years. In today's currency environment it is logical to buy the short-lived car because one can put the \$80,000 balance in a savings account and get more value in the long run. With the proposed alternative currency it is logical to buy the long-lived car. Today nobody builds such a car because there is no demand for it. But in the future, it could spontaneously become the type of car in greatest demand. Note that the total income of the car manufacturer is the same over twenty years (assuming no inflation), but that the burden on the environment is much lower. According to the same logic, people would tend to build houses intended to last forever—and spontaneously invest in further insulation and other improvements whenever they have extra cash.

It is important to recognize that there would be no need to provide tax incentives or otherwise "educate" people to do all these things. We just reprogrammed the "invisible hand" of financial self-interest to provoke these actions.

Today, many people try to convince others to act in an ecologically responsible way, but it is in the financial interest to do the opposite. With the proposed system, economic self-interest pulls automatically in the direction of ecologically sound actions. Only by such realignment of economic and moral motivations can we expect truly massive changes in behavior patterns.

The Validity of "Booster" Currency

The idea of a "booster" currency is just a variation of what has been variously described in the Anglo-Saxon literature as "stamp scrip" or "stamp currency" and in the German literature by "Wara" (merchandise currency) or "Frei Geld" (free money). Its theoretical concept was originally developed by Silvio Gesell about a century ago. Gesell was an Argentine businessman and economist who has been neglected by many theoretical economists because of the—at first sight—unconventional nature of his "charge" or "demurrage" concept.

Gesell's initial premise was that money as a medium of exchange should be considered a public service good (just as public transportation, for instance) and, therefore, that a small user fee should be levied on it. Instead of receiving interest for retaining such a currency, the bearer in fact pays interest. In Gesell's time, stamps were the normal way to levy such a charge. Now, the generalized use of computers in payment and accounting systems, as well as the availability of electronic debit cards, would make this procedure much easier and convenient to implement.

Is such an unconventional concept as "charge money" a theoretically sound one? The answer is a resounding yes, and is supported by economists of no lesser stature than John Maynard Keynes. Chapter 17 of Keynes' *General Theory of Employment, Interest and Money* analyzes the implications of such money, and provides a solid theoretical backing to the claims made by Gesell.⁴ Keynes specifically states: "Those reformers, who look for a remedy by creating an artificial carrying cost for money through the device of requiring legal-tender currency to be periodically stamped at a prescribed cost in order to retain its quality as money, have been on the right track, and the practical value of their proposal deserves consideration." He concludes with the prescient statement that "the future would learn more from Gesell

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than from Marx." The second part of his statement is now accepted fact. Might he also be correct on the first part?

Historical Precedents

The vast majority of the books on economic and monetary theory or history never mention the possibility of such "charge" or "demurrage money." Even the monumental *History of Interest Rates*, which covers interest from Sumer to today, does not mention it once.⁷ Is this concept then just a theoretical idea, or is it a practical possibility? In fact, history records the remarkable ability of this concept to adapt to different cultures and circumstances—and to generate spontaneously the behaviors we are trying to promote.

Egypt

Recall the biblical Joseph, who interpreted the Pharaoh's dream and saved Egypt from "seven lean years" by stockpiling food. Why would the Egyptians have kept Joseph in such high regard for inventing stockpiling? Its use had been widespread since the beginning of the agrarian revolution several thousands of years earlier. Might there have been more to it than the Bible mentions?

These stockpiles were also the basis of the Egyptian monetary system. Each farmer who contributed to the stockpile would receive a piece of pottery having an inscription of the quantity and date of delivery of his contribution, which he could then use to purchase something else. These receipts, or *ostraca*, have been found by the thousands and were in fact used as currency. However, what the Bible missed is the key to the system: there was a time charge on these receipts. For instance, if someone wanted to redeem an *ostraca* of ten bags of wheat after six months, he would only receive nine bags. This demurrage charge reflected the costs of guarding the depot and quantities lost to rodents.

So we can understand that Egyptian farmers would never hoard this currency but invest in what was most handily available to them: improvements on their land and irrigation systems.

This currency was used in Egypt for more than a thousand years, until the Romans forcibly replaced it with their own banking and currency system, more "modern" and having positive interest rates. Note the apparent consequences of this change: As long as negative interest currency was used, the Egyptians

built monuments that would last forever and maintained their agricultural system in remarkable condition, making it the bread-basket of the Ancient World. All this quickly disappeared when the Roman currency was generalized. Since then, Egypt has remained for two thousand years a "developing" country.

The Middle Ages

What triggered the exceptional economic and spiritual prosperity in Europe, particularly from 1150 to about 1300, when the extraordinary blossoming of all the cathedrals took place? Few people are aware that this period coincides with the existence of the *brakteaten* monetary system, under which local lords issued silver plaques that were called back on the average every six to eight months and reissued a bit thinner, amounting to a demurrage rate of about 2-3 percent per month over this entire period. People would therefore automatically invest in anything that would last almost forever: improved land, tapestries, paintings, or cathedrals.

From an economic perspective, cathedrals made sense as an investment in the future. There was fierce competition among cities to attract pilgrims from all over the Christian world, and cities competed for cathedrals, just as today they compete for Walt Disney Co. investments. The main difference, of course, is that cathedrals were also symbols of faith, masterpieces for thousands of craftsmen who chose to remain anonymous, and designed as lasting beauty. Is it a coincidence that cathedrals flourished as the most grandiose symbols of community solidarity in Western history, yet declined as soon as the *brakteaten* system was replaced with the king's monopoly on the creation of currency?

While the previous examples might be discounted because they seem to apply only to pre-capitalistic economies, the following examples bring us to modern times.⁸

The 1930s in Germany

In 1930, Herr Hebecker, owner of a small bankrupt coal mine in Schwanenkirchen, Bavaria, decided in a desperate effort to pay his workers in coal instead of *Reichsmark*. He issued a local scrip—which he called "*Wara*"—redeemable in coal. On the back were small squares where stamps could be applied. A bill would

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remain valid only if the stamp for the current month had been applied. This negative interest charge was justified as a "storage cost."

The workers paid for their food and local services with these *Wara*. For example, the baker had no real choice but to accept them, and convinced his wheat suppliers to accept them in turn. The process was so successful that by 1931 this *Freiwirtschaff* (free economy) movement had spread through all of Germany, involving more than 2,000 corporations and a variety of commodities as backing for the *Wara*. But in November 1931, the German Central Bank, on the basis of its monopoly on currency creation, prohibited the entire experiment.

The 1930s in Austria

In 1932, Herr Unterguggenberger, mayor of the Austrian town of Worgl, decided to do something about the 35 percent unemployment of his constituency (typical for most of Europe at the time). He convinced the town hall to issue 14,000 Austrian shillings' worth of "stamp scrip," which were covered by exactly the same amount of ordinary shillings deposited in a local bank.

After two years, Worgl became the first Austrian city to achieve full employment. Water distribution was generalized throughout, all of the town was repaved, most houses were repaired and repainted, taxes were being paid early, and forests around the city were replanted.

It is important to recognize that the major impact of this approach did not derive from the initial project launched by the city, but instead had its origin in the numerous individual initiatives taken in the process of recirculating the local currency instead of hoarding it. On the average, the velocity of circulation of the Worgl money was about fourteen times higher than the normal Austrian shillings. In other words, on the average, the same amount of money created fourteen times more jobs.

More than 200 other Austrian communities decided to copy this example, but here again the Central Bank blocked the process. A legal appeal was made all the way to the Supreme Court, where it was lost.

Stamp Scrip in North America

Emergency currencies have a longer history in America than most people realize. They seem to appear with a curious regularity—

the 1830s, 1890s, and 1930s—coinciding roughly with the bottom of the long-term economic cycle called the Kondratieff wave. I will concentrate on the last period because it is the best-documented example.

The theoretician behind the movement in the United States in the 1930s was Irving Fisher of Yale University. He had analyzed the Worgl case in Austria and published various articles about its success. Subsequently, more than 400 cities, and thousands of communities or organizations all over the country, issued one form or other of emergency currency. Many were stamp scrip, involving the application of a stamp at prescribed intervals (monthly, for example). There was also a movement to issue this stamp script officially nationwide: Senator Bankhead of Alabama presented a bill to the Senate February 18, 1933, and Representative Petenhill of Indiana presented a bill to the House of Representatives on February 22, 1933.

During this time Irving Fisher approached Dean Acheson, then Undersecretary of the Treasury, to obtain support from the Executive branch for the same idea. Acheson asked the opinion of one of his Harvard professors, who advised him that the system would work but that it would imply strongly decentralized decision making, which he should check out with the President. Soon thereafter, President Roosevelt prohibited any use of "emergency currency" and announced the New Deal centered around a grandiose *centralized* plan of large construction projects.

These examples all show that the concept worked in the modern world whenever it was allowed and correctly implemented.⁹

Community Currency

"If you want people to fight, throw them a bone;
If you want them to cooperate, have them build a tower."
—Saint-Exupery, Citadel

Today, local currencies are again mushrooming all over the world in an impressive diversity and increasing sophistication. As Hazel Henderson has pointed out, the key to the success of a community currency, just as for any currency, is trust. In this case it is trust in your neighbors, in the community as a whole, and in the community's leaders.

My focus here is limited to emphasizing that once you have decided to have a community currency, why not use the best ...the key to the success of a community currency, just as for any currency, is trust.

design available? It is important that community currencies concentrate exclusively on the two key functions of money—standard of value and means of exchange—and therefore discourage the use of this money as a store of value or a means of speculation. The best way to ensure this, in particular for the more sophisticated electronic forms of local currency now coming online (for example, the Minneapolis Commonweal experiment), is to build in a booster or another form of the demurrage concept.

The majority of the present systems simply use a "zero interest" concept. In contrast, the majority of local currencies implemented in the 1930s explicitly built in the demurrage idea, typically through the process of requiring periodic application of stamps. Stamps are a primitive way of achieving the desired objective; today, with smart cards or electronic accounting for local exchange (LETS) systems, demurrage could be achieved much more effectively and conveniently by simply programming a small charge on outstanding balances.

This small step would have several substantial benefits:

Every participant in the local currency system will become a motivated promoter. One of the features that many organizers of LETS systems have noticed is that over time the originators tend to remain the dominant force promoting the system to new users. Some systems simply die when their original promoter is no longer available for this. Paul Glover, the founder of the Ithaca money system, mentioned that he spends a good deal of his time convincing new participants to accept the money. 10 This is typical, because the other members have no major incentive to actively promote new participants: they can just keep the currency until they have some use for it. In contrast, in Worgl or in Swanenkirchen in 1930, each participant was personally motivated to convince his butcher, baker, or cousin to accept the money. One of the reasons that local currencies have multiplied in number today but have not spread as widely as in the 1930s is this structural difference in motivation for member participants.

More jobs will be created. Community currencies now tend to create no more jobs in the community than normal currencies. This was not the case in Worgl, for instance, where we noticed that every shilling of Worgl money created fourteen times more jobs than a normal national Shilling.

Community spirit will be fostered. In many cases, the motivation for introducing community currencies today is often less to create jobs than to foster community spirit. Community currencies are indeed one of the most effective tools to achieve this. The word *community* appeared first in written English in 1283. It is etymologically derived from the Old French and Late Latin, where it referred to a group of monks who owned, operated, and lived from the fruits of their monastery. In other words, it referred to the material organization of a self-contained economic entity. Benedictus of Aniane (5th Century) felt that such a process would automatically support the sharing of the spiritual objectives of their members. Consciously promoting more frequent interactions and interdependencies with your neighbors has therefore long been successful in generating this elusive quality of community spirit. Building in the booster concept or another form of demurrage would increase the density of these interactions and therefore also spread its benefits.

Hoarding will become ill advised. Some community currencies have experienced the hoarding phenomenon. Sometimes this is even interpreted as a sign of success, because such behavior reproduces more closely the use of "normal" currency. But every time someone hoards the community currency, he or she is depriving others of its benefits. In addition, as was shown earlier in the discussion of conflict between the store-of-value and medium-of-exchange functions, there are even structural reasons why hoarding should be avoided.

Ecologically sustainable practices will occur spontaneously on a collective level. While other avenues can be used to promote sustainable behaviors, including regulations and education, why should we not use all the available tools? Reprogramming the "invisible hand" to push for ecologically sustainable behavior would be extremely helpful.

These benefits will become generalized only if and when demurrage currency becomes the dominant currency. This circumstance is less farfetched than it appears, for some community currencies could play the role of prototype experiments in preparation for a new Bretton Woods agreement.

Potential Misunderstandings

In today's politico-economic minefield some may discard the concept of community currencies because of some simple misunderstandings. I address two such issues coming from different parts of the political spectrum

To many people, anything that helps the poor is a welfare system.

Is a Community Currency Just Another Welfare System?

To many people, anything that helps the poor is a welfare system. While that is indeed the case in most programs, community currencies are an exception.

Let us consider a practical example from a city that, by American standards, would be considered an extreme case of poverty. It will show that a community currency does indeed help the poor—but by using market forces, not any transfer of resources from the rich to the poor. In fact, it makes some welfare systems unnecessary because it puts the poor to work to help themselves.

When Jaime Lerner became mayor of the medium-sized Brazilian town of Curitiba in 1973, he had a tricky garbage collection problem. The majority of the 500,000 people of Curitiba lived in shanty towns (*favelas*), which had been built so haphazardly that even the garbage trucks could not get into them. The accumulation of garbage attracted rodents, which in turn spread diseases at alarming rates. The classical solution would have been a welfare program to try to clean up the mess, but Lerner did not have that option because there were too few rich people in Curitiba, and the necessary funds were not available.

The mayor was forced to invent another way. His solution was to pay public transport tokens to people for their garbage, under the condition that they pre-sort and deposit it in recycling bins around the *favelas*. For organic waste, which was composted for use by farmers as fertilizer, people received chits that could be exchanged for food. The program worked spectacularly: the *favelas* were clean-picked by the kids, who quickly learned to distinguish between the different types of recyclable products. People could leave the *favelas* by public transport and travel to the center of town where the jobs were. The additional buses and gasoline were paid for with the proceeds from the sale of the pre-sorted garbage to the glass, paper, and metal manufacturing

companies. Even "normal" money was saved because fewer trucks and less gasoline were required to pick up the pre-sorted garbage. And all this does not even include the savings due to reduced disease and a more efficient labor market. Today, Curitiba is clean, prosperous, self-sufficient, and the only Brazilian city I know to refuse money from the state. It has a state-of-the-art public transportation system and a popular mayor who has been repeatedly reelected. Perhaps most significant, a strong sense of community and pride has arisen in a place where none was visible before.

There is a general lesson here that politicians from every country should become acquainted with: welfare programs can be replaced by imagination and creativity if the right leadership is available. Also, politicians get reelected for providing such leadership.

Won't This New Money Create Inflation?

A common reaction to the concept of a local currency is that it will increase the money supply and therefore fuel inflation. This reaction is further reinforced by the observation that the built-in incentive to get rid of a booster or demurrage currency reflects behavior observed in an inflationary environment. What happens beyond these first impressions?

Consider the issue of increased money supply: Do airline frequent flyer programs increase total airline flying? The answer is obviously yes. But does a frequent flyer ticket create inflationary pressures on air fares? The answer is no, because the airline will readjust as needed the constraints on frequent flyer usage (by, for example, having frequent flyer seats available only on weekends or in off seasons, or only for red eye flights, or only for a certain percentage of the seats). In other words, the airlines will ensure that only otherwise empty seats will be used by frequent flyers.

The same is true for community currencies: their natural niche is linking unused resources to otherwise unmet needs. The more sophisticated community currencies even specifically target this application. The local businesses participating in the Commonweal experiment in Minneapolis accept the community currency only for otherwise unused resources, as when, for example, a restaurant accepts community currency from early diners. Even

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the quantity of local currency issued is only 75 percent of the discounts of goods or services made available to the system by participating merchants. So long as community currencies are issued specifically to ensure the use of otherwise idle resources, inflationary pressures cannot be generated.

In summary, while the behavior patterns generated by the booster concept may look similar to what is observed under inflation, the cause is different. More importantly, the consequences of spending are diametrically opposed: Under hyperinflation, society collapses, while with community currencies the fabric of society is reinforced.

It is important to realize that "normal" national currencies and community currencies play different roles. Nonetheless, theory and practice show that it is possible to design a truly symbiotic relationship between them. This will be the subject of another article.

Conclusions

Community currency is a tool for tackling the major contemporary issues of unemployment, community breakdown, and ecological destruction. This tool represents some (very) old wine that could play a broader role if served in the new bottles that today's technologies make available.

Is this community currency phenomenon a short-term fad that will disappear when the global economies pick up again, or is something more significant going on? In support of the thesis that this is only a temporary fix, one can point out that its reappearance today corresponds with the long economic cycle termed the Kondratieff Wave. Indeed, as I pointed out earlier, U.S. "emergency currencies" have appeared with the regularity of clockwork in the 1830s, 1890s, 1930s, and now. But I would nevertheless argue that—unless governments decide to snuff them out for the wrong reasons—the community currencies we see today are only the beginning of a significant new long-term trend.

My claim is based on the observation that the current cycle is structurally different from all the previous ones. One of the most compelling explanations for the origins of the Kondratieff Wave has focused on the fundamental shifts in technology that have worked their way through the entire productive system. At

intervals of about every fifty to sixty years, we have seen the "water technology" of the 1830s be followed by the steam engine in the 1880s, the internal combustion engine in the 1930s, and the microchip in the 1980s. But the information age is creating a situation without historical precedent: jobless growth, or economic production growth, accompanied by worsening individual conditions. The scales of ecological and community breakdown are similarly without historical precedent. Since the centralized tools for stemming this phenomenon have failed, the local community is the most logical place to do something about it. As I have attempted to show, community currencies have a proven track record for solving problems for which we have no other tools of equivalent simplicity and effectiveness.

It is ironic that we find ourselves again in quandaries similar to our predecessors of the 1930s. Most of the advantages described here for letting people help themselves applied at that time as well. We will never know for sure whether Hitler would have been propelled to power if the people of Germany had been allowed to continue to solve their problems from the ground up and find employment and dignity in their own communities.

Would it not have been worth letting them try it?

^{1.} Joel Kurtzman, The Death of Money: How the Electronic Economy Has Destabilized the World's Markets and Created Financial Chaos. New York: Simon & Schuster, 1993.

^{2.} Willis Harman, "Whatever Happened to Usury?" World Business Academy Perspectives 6(2) (1992): 17–23.

^{3.} Such a tax on hoarding is technically defined as "demurrage." All the values given are all for illustrative purposes; in practice, a lower demurrage rate would normally be used.

^{4.} John Maynard Keynes, *The General Theory of Employment, Interest, and Money*. London: Macmillan, 1936, 1967.

^{5.} Ibid, p. 234.

^{6.} Ibid, p. 355.

^{7.} S. Homer and R. Sylla, *History of Interest Rates*. Third edition. New Brunswick, N.J.: Rutgers University Press, 1991. In the authors' defense: they were primarily bond traders, so did not look for negative interest currencies.

- 8. Several of these examples are also mentioned in Hazel Henderson's paper in this issue. However, I limit discussion to those cases that have the demurrage concept built in, and highlight the behavior patterns they have generated.
- 9. There was an erroneous application of the concept in Hawardem, Iowa, introduced by Charles J. Zylstra. The stamps were to be applied at each transaction, which created the opposite of what was wanted: everybody hoarded the currency instead of spending it. This currency became very unpopular, and is an example often mentioned by the detractors of the system.
- 10. Personal communication, June 1994.
- 11. I define a welfare system as a means to circumvent market forces by redistributing resources from the rich to the poor, usually by means of taxes on the rich to finance support programs for the poor.

