Democratic Money: The Case for a Decentralized Monetary SystemBy Bryn Meyer

Chapter Two: Market Theory and The Problem with Money

Market theory encapsulates a democratic economic ideal, but because the current global system fails to follow the basic conditions assumed by market theory, neoliberal policies are unable to deliver the predicted benefits. In the words of David Korten, in order to achieve this ideal we need to move toward "a mindful market economy – one that is self-organizing, democratically accountable to all people, rewards productive behavior, provides a decent means of livelihood for every person, encourages ethical behavior, and functions in a balanced and sustainable relationship with the other living systems of our planet" (van Gelder, 1999). To begin this ambitious undertaking, Korten suggests a series of reforms he believes are necessary if we are to bring our present economic system more in line with the market ideal:

- End the legal fiction that corporations are entitled to the rights of persons and exclude corporations from political participation.
- Implement serious political campaign reform to reduce the influence of money on politics.
- Eliminate corporate welfare by eliminating direct subsidies and recovering other externalized costs through fees and taxes.
- Implement mechanisms to regulate international corporations and finance.
- Use fiscal and regulatory policy to make financial speculation unprofitable and to give an economic advantage to human-scale, stakeholder-owned enterprises (Korten, 2000).

Although I agree that these reforms are greatly needed, I am not convinced that this is the best starting point for change. These reforms are all initiated at the policy level. Economic policy attempts to police behavior, either by direct regulation or manipulation through the use of economic incentives. However, neither alternative can really eliminate the motivation behind destructive behavior. Corporations are profitable because they are tailor-made to exploit the current economic system. They are not the cause of our problems, but merely one symptom of an unhealthy economic structure. Any attempt to police corporations, solely through fiscal and regulatory policy, is tantamount to treating the symptoms but ignoring the disease. If we are to undertake any significant reform, we must take into consideration that which gives economies of scale such a competitive advantage in the current neoliberal structure.

To this end, the Marxist theory of *historical materialism* provides a useful framework from which to begin our inquiry. One of the basic tenets of this theory is that an economic system, or *mode of production*, is dependant upon the *forces of production*, the sum total of a society's knowledge and technology. For Marx, the mode of production determined the economic structure, or *relations of production*, possible within the system. One does not need to agree with all of Marx's conclusions in order to see the logic behind this simple framework. In essence, technology conditions structure, which in turn conditions economic and social outcomes. In this framework it is the character of a society's technology that plays a large role in determining the type of economic system possible.

Of particular significance to any economic system, is its productive technology, loosely defined as any human invention that facilitates in the creation of wealth. As previously noted in Chapter I, classical market theory defines wealth as the variety of goods and services available within an economy. The key to increasing wealth is the division of labor, encouraging individuals to specialize within a particular field. When the collective talents of a community are brought to market, in theory, every member benefits because they will have access to a greater variety of goods and services than they could ever have provided for themselves. However, there is one necessary prerequisite; for a market system to function, there must be an established mechanism to assist the exchange of goods and services.

With this prerequisite in mind, I assert there is one technology no modern economic system could function without – *money*. Prior to the invention of money, societies were restricted to the most basic barter system, in which goods and services could only be traded directly. The following example illustrates a classic barter exchange. When John gives his neighbor, Mike, a bushel of corn and receives a sack of potatoes in return, a complete barter transaction has occurred. Both John and Mike profited from the exchange by acquiring a desired commodity. The problem with this system is obvious. Although John may want Mike's potatoes, he can only acquire them if he has something Mike wants. If not, no exchange will take place. Under a barter system the division of labor is greatly restricted. A person can only specialize as long as the product of their labor can be reliably traded to supply their other needs. Without money the level of specialization envisioned by market theory would be impossible to achieve.

Money is most simply defined as "any medium of exchange adapted or designed to meet the inadequacy of the method of exchanging things by simple barter" (Greco, 1994). It first appeared in the form of certain useful commodities such as cattle, salt, tobacco, and sugar. Although John may have no immediate use for the commodity, he would willingly receive it as payment for his produce with the understanding that it can be used to purchase other necessities. What makes the commodity an acceptable medium of exchange is the general consensus to accept it as a means of payment. Money, regardless of the form it takes, is essentially an *agreement* to accept something that may have no fundamental utility, but within the market is guaranteed to be welcomed in exchange for something that does.

Historically, money has taken many different forms. But on the whole, money has evolved to become less tangible and more ethereal. Precious metals, such as gold and silver, became a preferred medium of exchange, and would later be minted into coins of certain weights and values. Coins gave way to paper notes that were symbolic representations of gold and silver, and could be redeemed for the amount of metal they represented. Modern money takes the form of non-redeemable notes, bank credit, and computerized accounts.

Wealth vs. Money

From a market theory perspective, the most important thing to remember about money is that it is not wealth. Wealth creation and money creation are two entirely different things. Wealth is created when human skills are applied to natural resources in a manner that produces useful goods and services. Growing crops, weaving textiles, building cars, and educating students are all examples of wealth creation. Money is

merely a symbolic representation of value, created to help facilitate the exchange of real wealth. From this standpoint, individuals engage in productive activity in order to obtain other goods, not money. The basic production circuit of classical market theory begins when a producer creates a commodity C, exchanges it for money M, which is then used to purchase a different commodity C. In simple shorthand the production circuit looks like this, C—M—C, with money treated as a neutral intermediary in the exchange of goods (Horowitz, 1973).

It is at this point that our current system takes a major digression from theory. Market theory assumes that money operates as a neutral technology with no direct impact on the production of goods and services, when, in fact, money is a required input of almost every commodity produced for sale on the market. Hence the classic production circuit, C—M—C, is an inaccurate analysis of how the process works in the conventional economy. To begin production of commodity C, a producer must first obtain money in order to command the necessary resources, such as raw materials, wage labor, or machinery. This means that access to a generally accepted exchange medium is a prerequisite to wealth production. The revised production circuit begins when a producer spends money M in order to produce a commodity C, which he will in turn attempt to sell for a larger amount of money M'. In the new production circuit, simply represented as M—C—M', the first goal of productive activity is to recover the costs of production (Horowitz, 1973). Any additional earnings – or profit – will be used in one of three ways: to purchase consumer goods, to store as savings, or to reinvest.

In an ideal market economy, the goal of productive activity is wealth creation. In contrast, the goal of productive activity in our current economic system is monetary profit. As John Maynard Keynes aptly described, we live in a *monetary economy*; money is the technology that keeps the system functioning (Horowitz, 1973). It permits the division of labor, commands the resources necessary for production, and facilitates the exchange of goods. Given its importance and versatility, it is understandable that we have come to view money as wealth, and to direct our economic activity to create as much of it as possible. With that focus, it's even more efficient if money wealth can be created without the inconvenience of engaging in productive activity. This perception, however, is misleading as money alone has no inherent value, it is only worth the real wealth it can command. This is one of the most significant symptoms of our modern economic pathology, or what Marx describes as finance capitalism: when capital (money) becomes both an end and a means. In this type of system, the command of money becomes increasingly detached from its proper role in production. This process is greatly conditioned by the characteristics of conventional money, making it crucial to understand how this technology functions, beginning with how it is created.

Article I, Section 8 of the United States Constitution grants Congress the power "To coin Money, [and] regulate the Value thereof". This is often incorrectly interpreted to mean that Congress, and therefore the Federal Government, is responsible for creating our country's money supply. In reality, conventional money is created through the lending practices of our banking industry. All financial institutions that engage in lending activity: commercial banks, savings and loans, mutual savings banks, and credit unions have one very important function. They can create money by loaning it into existence. The process is call the "monetization" of debt, meaning quite simply that debt

is converted into money. Let me illustrate by comparing a bank loan to a person-to-person loan. If I were to loan my friend David \$1000, I would no longer have use of that money until he paid me back. However, if I were to deposit that \$1000 into a bank, and the bank in turn loaned \$1000 to David, both of us would have access to \$1000. Where there once was one thousand dollars there is now two thousand that can be circulated back into the economy (Korten, 2000).

So how does this work? When I deposited my money into the bank, the bank created a demand deposit in my name for the amount of \$1000. This demand deposit is simply an accounting book entry that indicates that the bank has a legal obligation (a liability) to make future payments on my checks for up to \$1000. It now has my deposit, which it records as an asset in its accounting books. When the banker gave David a \$1000 loan, he did not just pay out my money. He couldn't, my \$1000 can't simply be given away; it's one of the bank's liabilities. Instead, the bank created a new asset, a loan, for \$1000 and a demand deposit, a liability, in David's name. A few keystrokes in the bank's computer and David now has access to \$1000, and for this privilege he is expected to pay it back with interest (Rukstad, 1992). Not only that, but he will most likely be required to pledge something as collateral that can be confiscated if he is unable to repay the loan.

This is a very important issue to note: conventional money begins as credit, and is created only by incurring debt. The amount of money, and, consequently, debt the bank is permitted to create is limited by the policies of the Federal Reserve, the United States' central banking system. The bank must hold a certain percentage of deposits as required reserves, in proportion to the amount of loans it creates. Thus, deposits are used as reserve funds to support the bank's lending activities. The more deposits the bank can claim as assets, the more money it can create through the lending process.

Money created solely from bank credit, or debt, is a revolutionary change in the foundation of our exchange medium. Historically, people have tied their money system to a culturally significant commodity. As a result, the value of money was easily understood and measured. Unfortunately, a currency based on a specific commodity has limitations. When the U.S. dollar was based on the gold standard, expansion of the money supply was limited, at least in theory, by the size of our nation's gold stock. However, tying the money supply to a naturally finite and scarce resource results in an unnecessary constraint on economic activity. Modern money issued as credit has overcome the limitations of a commodity-based currency, but has done so in a manner that causes it to malfunction in a variety of ways which hinder, either directly or indirectly, our ability to meet the conditions for an ideal market economy.

The flaw of conventional money is the manner in which it is issued, or more specifically, the burden with which it is issued, compound interest. According to community economist, Thomas H. Greco, the mechanism of compound interest causes conventional money to malfunction in three basic ways:

- 1) There is never enough money available,
- 2) Money is systematically misallocated, and
- 3) Money serves to pump wealth from the poor to the rich (Greco, 1994). Let me explain each assertion in turn.

Why there is Never Enough Money

When a commercial bank creates money it also creates a debtor. Returning to our previous example, once David obtains his \$1000 loan he is required to pay it back with interest. The bank is responsible for creating the initial \$1000 dollars but David, who does not have the power to create money, is required to obtain the interest from some other source. As stated by Greco:

The principal amount is created at the time the loan is made, but the money to pay the interest due in subsequent periods has not yet been created. Thus, debtors, in the aggregate, are in an impossible situation of always owing more money than there is in existence (Greco, 1994).

Compound interest creates a classic catch twenty-two situation. In order to avoid the economic repercussions of large-scale loan defaults, the money supply must grow enough to meet the interest burden. However, the only way to increase the money supply is to create more debt, which in turn incurs interest and further exacerbates the demand for growth. Any attempt to meet the ever-growing demand for money requires a corresponding growth in economic activity. If the money supply grew without comparable growth in the production and consumption of goods and services, it would result in massive inflation. In our current economic system, a growth economy is not an option, but a structural necessity.

In essence the mechanism of compound interest creates a growth imperative; the money supply must grow *exponentially* in order to keep pace with the debt burden. This is physically impossible because, due to interest, debt will always grow faster than the amount of money issued by lending institutions. This problem becomes very evident when we compare the growth of U.S. money supply to our domestic debt, as represented in Figure 1. In this graph, I have plotted the growth over 40 years (1960-2000) of the three main money aggregates, M1, M2, M3, which are used by the Federal Reserve to measure U.S. money supply (also referred to as money stock), and compared them to the relative growth of domestic debt. What this data graphically reveals is worthy of further explanation.

The three money aggregates shown are progressively more inclusive measures of money. M1 is the most narrowly defined aggregate, consisting of the most liquid forms of money, primarily currency and demand deposits. Also referred to as transaction money, M1 is of paramount importance to commerce and industry. This is the portion of the money supply that is available for immediate use, and which most people rely on for the majority of their daily transactions. M2 consists of M1 plus a number of less liquid components, mainly household holdings of saving deposits, time deposits, and retail money market mutual funds. M3 is the least narrowly defined aggregate including M2

Growth of Money Supply and Debt

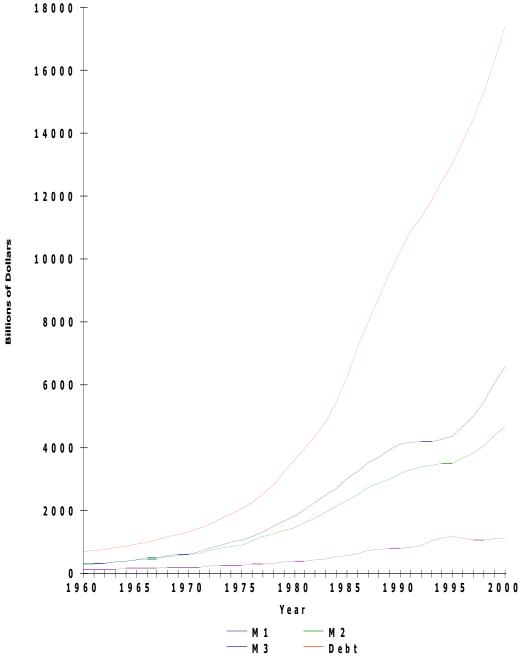


Figure 1¹

plus institutional money funds and certain managed liabilities of depositories, such as

¹ This information was compiled using Federal Reserve H.6 historical data on money stock and debt measures. These measures were seasonally adjusted and based on the money stock and debt aggregates for January of each year. Current and historical H.6 data is available on the Federal Reserve Board's web site (http://www.federalreserve.gov/).

large time deposits, repurchase agreements, and Eurodollars. The Federal Reserve's debt aggregate measures the outstanding credit market debt of the domestic nonfinancial sectors, which includes the debts held by federal, state, and local governments, households, nonprofit organizations, and businesses (Federal Reserve Board, 2001).

At no time during this 40-year period has our nation's money supply ever been adequate to repay domestic debt. We are living in a debt-fueled economy with much of our economic activity wasted in support of this debt burden. As an example of how costly debt maintenance can be, assume that domestic debt will compound at the prime interest rate of 6.3% for August 2001. According to the Federal Reserve in August, 2001 domestic debt measured approximately \$18.89 trillion. At the prime rate, it would incur \$1.19 trillion in interest, more than the M1 aggregate for that month, which was approximately \$1.14 trillion (Federal Reserve Board, 2001).

Compound interest puts us in a precarious economic position. The economy must generate increasing growth in the money supply in order to support the debt burden. Then, as the money supply expands, it becomes even more imperative to maintain economic growth in order to prevent defaults. Given that money is lent into existence, when a debt is repaid, the money issued by the principal is retired from circulation. Hence, any growth of the money supply indicates a corresponding growth in outstanding debt. Compound interest results in what Greco calls the *debt trap*. To maintain a healthy economy, we must cater to the growth imperative. However, the more our economy expands, the larger our debt burden becomes: and the problem will continue to grow exponentially. Given that the interest charged on loans is money never created, it is impossible to eradicate debt in the aggregate. Once incurred, debt will compound exponentially *ad infinitum*. Under such conditions, the unspoken goal of economic activity is to stay ahead of debt for as long as possible.

The exponential growth of debt is a fundamental flaw of our current economy. Exponential growth cannot be maintained indefinitely. In the natural world, this growth pattern, when left unchecked, results in sickness and death. To cite an often-used analogy: money is to the market what cancer is to the human body. Every cell in the human body contains DNA, which is a series of genetic instructions that tells each cell how to grow and what functions to perform. Cancer occurs when a cell's DNA is damaged, altering its genetic instructions. The new instructions direct the cell to undergo rapid and continuous division. Unless stopped, the cancer cells will grow exponentially until they consume the host body. The end result is death for the host as well as the cancer. Conventional money acts like cancer on our environment and socioeconomic structures by redirecting our activities to support its growth. It compels us to pursue short-term economic gain with little or no consideration for the long-term consequences.

How Money is Misallocated

In a market economy, money not only facilitates consumption but is necessary for production as well. As Nobel Prize winner, Frederick Soddy aptly described it; "Money now is the *nothing* (emphasis added) you get for *something* before you can get *anything*" (Greco, 1994). Economic development requires access to credit. Unfortunately, the market regularly fails to extend credit to the poorer areas that need development capital the most. This failure of the market is directly related to how money is issued, or more importantly *who* is permitted to issue money. Money is misallocated at

its source because its creation is perpetually inadequate to meet demand, and its distribution has been left in the hands of an unaccountable banking elite. Like any corporate business, a bank is motivated by two goals – profit and growth. If, for example, I were to apply for a \$100,000 mortgage, to be paid over 20 years for a total of \$200,000 (principal plus interest), the bank's decision to extend me the loan is based entirely on my perceived ability to repay. Bernard Lietaer, international money manager and designer of the single European currency, explains the implications of how these decisions are made:

The bank expects you to pay back \$200,000 over the next twenty years, but it doesn't create the second \$100,000—the interest. Instead, the bank sends you out into the tough world to battle against everybody else to bring back the second \$100,000.... So when the bank verifies your "creditworthiness," it is really checking whether you are capable of competing and winning against other players—able to extract the second \$100,000 that was never created. And if you fail in that game, you lose your house or whatever other collateral you had to put up (Korten, 2000).

It's a system that favors those already ahead in the game. Credit is more likely to be extended to those individuals and/or regions with the proven competitive advantage of pre-existing wealth. Thus, the market avoids lending money in low-income communities where it is most needed because banks are less likely to maximize their profit by investing there.

Compound interest also plays a significant role in the misallocation of money. Investment decisions are strongly influenced by interest rates. In the current system, all productive investments must compete with the moneymaking power of money. Only those investments that have a profit margin in excess of the going interest rate will be able to attract investors. This leads to a market bias in favor of large-scale investment projects which often externalize costs (e.g., shopping malls, corporate farming, nuclear power plants, etc.) and/or high yielding short-term investments (e.g. strip-mining, non-productive securities, currency speculation, etc.). Hence, many socially desirable investments such as those aimed at creating sustainable systems, are at an extreme disadvantage. Depending on the interest rate, such investments, which are usually long-term and lower-yielding projects, cannot be made without taking a loss. For example, assume an investment in wind power is expected to make a 5% profit, but the going interest rate is 7%. If the investment is financed by a bank loan, the investor will not make enough money to pay off the principal plus interest. If interest were abolished such investments could be potentially profitable (if not competitive) and thus possible.

Within our finance system, money also is misallocated when issued for speculative investment. Inflation is a symptom of this disease. Inflation is often described as "too many dollars chasing too few goods." In other words, it's believed to occur when too much money is in circulation resulting in a general rise in the prices of goods and services. This is an inaccurate diagnosis of the problem. Inflation is not caused by the amount of money in circulation per se, but by the basis upon which it is issued. Money by itself has no value; it is only worth the real wealth it can claim. If money is to maintain its value and not inflate, its issuance must coincide with the

production of goods and services. When money is issued for speculative purposes or non-productive commercial expenditures (i.e. mortgage), the market's money supply increases but not the store of goods and services, a nation's real wealth. Furthermore, money issued for non-productive, speculative investments is usually used by the already wealthy, be they individual or corporate, for the purposes of increasing their existing monetary wealth. In essence money is created, used by the investors to obtain more, allowing them to increase their claim on society's real wealth without having to engage in the intervening act of helping to produce it. Such a basis for the issuance of money is not only inflationary it is extractive, removing money from the productive sector to the non-productive financial sector, and compounding the problems of wealth consolidation, an issue I will address in the next section. A sounder basis for the creation of new money is through productive loans, projects that result in the creation of real wealth. Hence, speculative investments, land, consumer loans, and government debt are all inappropriate bases upon which to issue money.

This is not a radical notion. In the early twentieth century it was considered responsible banking to create money only when it was used for a productive investment. In this manner, money was issued tandem to wealth creation and was based upon something of real value. Investments in non-productive capital expenditures or for speculation should only be financed out of savings.

Interest bearing debt also has a direct inflationary impact on market prices. Because interest is the price of obtaining investment capital, producers record it as a cost of doing business and pass it on to the consumer in the prices of goods and services. The cost of interest is a percentage of every price we pay. The amount varies depending upon the capital costs of the good or service. A professor from the University of Hanover in Germany, Dr. Margrit Kennedy, conducted a study to determine the effect interest had on the prices of a number of widely used services. Although her research was conducted in Germany, it is safe to assume conditions would be similar for all industrial countries. since their monetary structures are basically the same. According to her findings, the cost of interest on capital, as a percentage of the fees paid by consumers, comprised 12% of the price for garbage collection, 38% for drinking water, 47% for sewage maintenance, and 77% the cost of rent in public housing (Kennedy, 1995). Kennedy estimates that, on average, hidden interest expenses make up between 30% and 50% of the market prices for goods and services, depending on how capital intensive their production is. This arrangement ensures that money is continually siphoned from the general economy into the financial sector. Which brings me to the third point, that interest pumps wealth from the poor to the rich.

How Interest Pumps Wealth From the Poor to the Rich

As money cycles through the economy, compound interest acts as a redistribution mechanism, transferring money from borrowers back to lenders. To illustrate the process, let's begin at the point of issuance when a bank extends a loan, creating money out of nothing. For the privilege, the borrower must repay the principal plus interest. When the debt is repaid, the bank retires the money it created by the principal, while pocketing the interest as profit. Interest payments pump money out of circulation and back to the lending institution. The larger the debt burden maintained by the economy the faster this redistribution mechanism works. The more we rely on debt spending to

fuel economic growth, the more monetary wealth will become increasingly concentrated into the hands of moneylenders. Hence, the system ensures that "the rich get richer and the poor get poorer."

The effects of this redistribution mechanism are illustrated in a demographic study of the German economy, conducted by Margrit Kennedy. After collecting income data on ten numerically equal sections of the population, determined by income bracket, Kennedy compared the amount of money obtained through interest as opposed to paid in interest by people in each bracket. The results of her study indicate that people in the bottom eight brackets pay more in interest than they earn. People in the ninth income bracket earn slightly more from interest than they pay, while those in the tenth earn nearly twice as much as they pay, or as Kennedy concludes, the top tenth receives the interest which those in the first eight brackets paid.

An even closer look at Kennedy's study also reveals that this redistribution of money occurs exponentially. For example, the top 1% of the population, in terms of income, earned 15 times more in interest than then average earned by the top 10%, while the top 0.01% earned 2000 times more.

In addition to causing the obvious social inequities, the outcome of this redistribution is incompatible with the very economic system responsible for it. The mechanism of compound interest creates an economy dependent on ever-increasing consumption of goods and services. However, as money is consolidated into the hands of an ever-shrinking section of the population, the rest of the population will have to increase its level of consumption using a relatively dwindling portion of the money supply. This results in what is referred to as the *problem of underconsumption*: when consumer demand is unable to keep pace with the exponential economic growth necessitated by our debt burden.

Money and the Market

The importance of money to a market economy cannot be overemphasized. It is the medium that powers exchange and the technology upon which a self-organizing economy relies. Given money's vital role, any malfunctions of the medium will inevitably translate into market distortions. In Chapter 1 we looked at five ways in which current economy policies fail to maintain the basic operating conditions assumed by market theory: 1) buyers and sellers should never be large enough to influence market prices; 2) complete information should be available to all participants; 3) producers should bear the full cost of the products they sell and pass them on in the sale price; 4) investment capital must remain within national borders; and 5) savings should be invested in the creation of productive capital.

I contend that to a large degree our failure to meet these conditions is motivated by the malfunctions of interest-bearing money, the mechanics of which are incompatible with the market ideal. As a technology, interest-bearing money has created an economic structure that is systemically at odds with market theory. Due to compound interest our economic system operates in a state of perpetual scarcity. No matter how much our economy grows the system is structured to always demand more. Economic behavior is conditioned by this fictional scarcity. In order to make a profit while still meeting their lending obligations, companies must maintain a profit margin in excess of the going interest rate. At the same time, they must meet these inflated profit margins while

competing with other producers for scarce money resources, most of which will be drawn from the relatively small M1 money supply. In this environment, companies are economically rewarded for every competitive advantage they can obtain in the race for money. Be the advantage due to immense size, monopoly control of information or a market, or a company's willingness to externalize production costs onto society, the economic outcome for such behavior is often success. It would be economic suicide for any company that chooses not to heed such advantages, and instead acts in a more socially responsible manner.

While market theory cautions against the existence of large corporations, the neoliberal economy actually encourages them. The assumptions that large corporations and monopolies pose a threat to fair prices and competitive markets, and that producers should bear the full costs of the products they sell, are ignored as a matter of structural necessity. Large corporations are particularly well suited to exploit the growth pathology. Their size gives them a competitive advantage to both pursue the most profitable endeavors while at the same time externalize production cost upon society. They possess the economic resources to engage in the large-scale investment projects that promise high returns, as well as the political clout to extort corporate subsidies from federal, state, and local governments. To give one example, Korten notes that, in 1998, Tulsa, Oklahoma agreed to use one year's worth of county sales tax to pay for the construction of a new Whirlpool factory in order to entice the company to set up shop in the county. In addition, the state agreed to reimburse Whirlpool "4.5 cents for every dollar paid in wages to eleven hundred workers for ten years" (Korten, 2000).

While direct subsidies may be the most obvious example of cost externalization, they are minuscule when compared to the unreimbursed costs imposed on society by various production methods, and even the products themselves. This includes; health costs from smoking cigarettes, estimated at \$53.9 billion a year; the costs of unsafe vehicles, \$135.8 billion a year; and \$141.6 billion for injuries and accidents caused by unsafe working conditions. In Tyranny of the Bottom Line, CPA Ralph Estes attempts to inventory these public costs using a variety of authoritative studies. Estes maintains that a conservative cost estimate for the United States alone—not including direct subsidies and tax breaks—would total close to \$2.6 trillion a year in 1994 dollars. To put this in perspective, in 1994 U.S. corporations reported \$530 billion in profits. This is roughly $1/5^{th}$ of the public costs incurred by their activities, which in the end amounted to 37% of the 1994 U.S. GDP of \$6.9 trillion (Korten, 2000).

We have an economic system that rewards corporations for socially irresponsible behavior by giving them a competitive edge in the constant race for profits. In such an environment, responsible economic behavior must be avoided as it handicaps a company's ability to compete for a portion of the perpetually scarce money supply. The Federal Reserve would maintain that this scarcity is beneficial given that "Money... derives its value from its scarcity in relation to its usefulness" (Greco, 1994). However, this belief results in an economic system that favors large, unaccountable corporations as opposed to their smaller, less powerful counterparts. From a local economic standpoint this can put a job-hungry community, or entire region, into the very tenuous position of having to curry the favor of large corporations, as these entities have a competitive edge in most industries. A community may even possess the monetary resources to employ its members in worthwhile productive activities, but is simply unable to do so as profitably

as a large corporation. Such an economy does not reflect the social values of the people dependent upon it. On the contrary, its goal is to thwart the imposition of any values that could inhibit the accumulation of monetary wealth.

This brings me to the last two casualties of our interest-bearing monetary system. The market theory assumptions that a) money capital will remain within national borders, and b) savings will be used to fund productive investments. The economic reason for discarding the former assumption is quite obvious. If the rate of return is higher on a foreign investment, that is where the money will flow, as investors race to make a profit. To our growth-addicted economy, national borders are not an acceptable limitation on investment. In regards to the latter assumption, it is overlooked because our economy operates under the misconception that money is wealth. The only distinction made between productive and speculative investment, is their expected rate of return. As a result, the neoliberal economy views speculative investment in a manner utterly contrary to market theory. The following excerpt from an article in Foreign Policy magazine, "Securities: The New World Wealth Machine," written by John C. Edmunds, exemplifies this mindset:

Securitization – the issuance of high-quality bonds and stocks – has become the most powerful engine of wealth creation in today's world economy...

Historically, manufacturing, exporting, and direct investment produced prosperity through income creation. Wealth was created when a portion of income was diverted from consumption into investment in buildings, machinery, and technological change. Societies accumulated wealth slowly over generations. Now many societies, and indeed the entire world, have learned how to create wealth directly. The new approach requires that a state find ways to increase the market value of its stock of productive assets. ...Wealth is also created when money, foreign or domestic, flows into the capital market of a country and raises the value of its quoted securities.

Nowadays, wealth is created when the managers of a business enterprise give high priority to rewarding the shareholders and bondholders. The greater the rewards, the more the shares and bonds are likely to be worth in the financial markets. ...An economic policy that aims to achieve growth by wealth creation therefore does not attempt to increase the production of goods and services, except as a secondary objective (Edmunds, 1996).

When money flows into a country's financial markets and increases the value of securities, neither wealth nor money, is in fact created. In reality, the country's financial market is simply siphoning money that was already in circulation. What Edmunds refers to as "Securitization," is nothing more than the shuffling of money from one market to another. However, this approach does create something known as a financial bubble; an instance in which an increase in speculation within a financial market, inflates the market value of stocks and bonds beyond their underlying value. It also results in a number of unpleasant systemic consequences.

First, an inflated financial market tends to exacerbate the trend for money to concentrate in the hands of the rich. Consider the U.S. stock market boom during the 1990s. According to Standard & Poor's 500 Stock Index (S&P 500), between 1989 and 1998, the cumulative return on investments was 477.1 percent.² In a study published in 1999 by the nonprofit organization United for a Fair Economy, the distribution of household stock market gains made within this period were highly concentrated.³ The wealthiest 10% of households enjoyed approximately 86% of all stock market gains, with 42.5% going to the top 1 percent (Collins, 1999). Securitization, therefore, does not actually create wealth; it simple accelerates the consolidation of money.

A second consequence of an inflated financial market is that it tends to draw money away from the productive sector that actually engages in the creation of wealth. This can put an economy in a very tenuous position, as was evidenced by Thailand in 1997. During the 1980s the Thailand economy enjoyed a high-level of direct investment (i.e. investment in productive enterprises) from Japanese corporations, which fueled Thailand's growing export industry. However, near the end of the decade, direct investment began to level off. In order to maintain the nation's high economic growth rate. Thai economists decided to set the domestic interest rate above that of the U.S. dollar and maintain a fixed exchange rate between the Thai baht and the U.S. dollar. As a result, foreign money flowed into the country, most invested in the booming Thai real estate market and inflated stock market. The financial bubble started to expand as foreign banks, attempting to get in on the high profit margins all but guaranteed by the country's monetary policy, competed with one another to extend loans to any business interested in borrowing dollars to convert to baht. The Thai government even decided to speed the process by inviting foreign banks to open branches in Bangkok. Money began to pour in even faster and the country's foreign debt expanded from \$21 billion in 1988 to \$89 billion in 1997 (Korten, 2000).

In the wake of this speculation, the country's agricultural and industrial sectors, those engaged in actual productive enterprises, could not compete with the quick returns investors could make in the inflated real estate and stock markets. Industrial productivity began to decline as industrialists neglected to maintain and upgrade their productive facilities, preferring instead to invest in Thailand's booming financial markets. As a result the country's actual productive base began to decline, and exports began to level off, making it even more difficult for the country to pay off its steadily growing foreign debt.

Even as Thailand's financial situation became increasingly precarious, money continued to flow in. In 1996, just one year before the financial bubble would burst, the World Bank cited Thailand as "an excellent example of the dividends to be obtained through outward orientation, receptivity to foreign investment, and a market-friendly philosophy backed up by conservative macroeconomic management and cautious external borrowing policies" (Korten, 2000).

The World Bank came to rue this statement as the Thailand economy began to crumble in the beginning of 1997. The country's inflated real estate market was the first

² Source: Bloomberg L.P., Standard & Poor's 500. Index is capitalization weighted with dividends reinvested.

³ The study's distribution data is based on gains made between 1989 and 1997, however I believe it is safe to assume that the demographics of stock ownership did not change significantly from '97 to '98.

to burst. Real estate overbuilding had resulted in an excess of unoccupied buildings and uncollectable loans, causing two of Thailand's premier finance companies to default on interest payments to foreign lenders. From there the Thailand economy began to collapse like a row of dominoes. Stock market investors started to liquidate their portfolio investments. Concern soon turned to panic and stock prices plummeted. The Bank of Thailand tried to avert disaster by paying out \$9 billion of the country's foreign reserves to cover the demand to convert baht into dollars. Once reserves were gone, there was no way the Thailand government could maintain the fixed exchange rate between the Thai baht and the U.S. dollar. Currency speculators rushed in to profit from the baht's unavoidable devaluation. At this point the IMF stepped in with a public bailout, a \$17.2 billion emergency loan intended to guarantee the foreign debts of the Thai financing companies, local banks, and other defaulting enterprises. Of course the real loser in the Thai crisis was the average Thai worker. Unemployment skyrocketed in the inevitable economic contraction to follow (Korten, 2000).

In the short-term, a financial bubble may give the appearance of prosperity. But inevitably the bubble will burst, and when borrowers are unable to pay off their speculative loans, the lenders will confiscate their real wealth to cover their debts. The pattern is as old as capitalism itself. A period of speculative frenzy breeds a financial crisis, which in turn is followed by a period of liquidation and the consolidation of wealth.

Economic structure conditions economic outcome, and determines which activities are to be rewarded and which are punished. Our ability to comply with the five basic conditions for a healthy market economy will continue to be hindered until we design a system that does not reward destructive behavior with financial gain. To do this, we need to gain more control over our exchange technology. As Thailand graphically illustrates, if we don't control money it will control us.