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Money and Growth: Another Inconvenient Truth?

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Friends Journal devoted the entire July 2006 issue to Quakers and Money. It offered many thought-provoking ideas about our personal relationship with money. But there was nothing about the huge increase in the global money supply that has occurred in recent years, why this is happening, and how it may be furthering social injustice and ecological destruction on a global scale.

Many people understand that human numbers are a problem. As I have traveled within the Society of Friends to discuss concerns about the human-earth relationship, someone almost always says, in effect, "if we don't do something about the population, nothing else matters." In response, I ask "what should we do?" The answer is usually a version of "we've got to get ***them*** to control their population."

Human population growth is a serious problem, including in the United States. Yet so are many other "population explosions" associated with the human enterprise. Those that seem most ecologically salient, in addition to human numbers, are the explosions of manufactured capital and the global money supply.

Even more people understand that environmental pollution is a problem. However, not many attribute pollution to the population explosion of manufactured capital: our machines, buildings, roads, etc. It is as though machines, buildings and roads can be constructed, used, and disposed of without polluting anything. If we truly want to reduce pollution, we will probably need to reduce our machine population, particularly those that must be fed fossil fuels to live useful lives.

Very few people see any problem with having more money. We want to be paid more for the work we do. We want the money we save to "earn" a good return. We expect the growth of our savings to finance our retirement and the value of our homes and other investments to increase. We also expect the government to assure that the purchasing power of our money is not reduced by inflation.

Like machines, money must be fed—by material resources and energy, including human energy—if it is to live a useful life. When banks make loans, they create new debt and new money. If the supply of money increases, then the value of things people use money for—goods, services, and assets—must also increase, or there will be "too much money chasing too few goods" and money will begin to lose its value. As debt increases so do the incentives to exploit land and labor or to engage in financial speculation to acquire the funds to cover the debt.

In my view, the growth of the global money supply is the most insidious population explosion associated with the human enterprise. As long as the human population continues to increase, it will be necessary to "grow" the availability of food, clothing, shelter, healthcare and education if we want to create conditions in which every person's potential can be fulfilled. But all this new money is not being used for basic necessities.

Rather, it's being leveraged through various financial arrangements to make even more money for the already wealthy, to provide pensions and other retirement income for the already comfortable (which includes most Friends in the United States), and to promote more frivolous consumption by people who already have too much stuff. Meanwhile, many of these same people are going heavily into debt to support their excessive consumption, along with corporations that compete or merge with one another to produce and promote the excess and our government which enables it all. Why is this happening?

Unrealistic Expectations

Our society teaches us to have expectations about money that we would know to be unrealistic if applied to almost any other aspect of our lives. Earning compound interest on reinvested savings increases savings exponentially. A return on invested savings of 5-6 percent is regarded as modest. Socially responsible Pax World Fund, in which my wife and I own shares, is proud of delivering a 10 percent return over time. Many corporations want the profit they make to be higher still.

A 10 percent growth rate means a doubling time of about 7 years. If re-invested savings double in 7 years, what effect will this have on the demand for goods and services, the distribution of wealth, the consumption of energy and material resources? Until the current system changes, won't the accumulated savings of the well-to-do, if cleverly managed, continue to grow exponentially, thus increasing the share they can claim of the Earth's diminishing bounty? Doesn't this point to one of the underlying ways growth is built into our current system so that the system cannot thrive unless it grows?[1]

How has the monetary system come to function in this way? Why has the global money supply increased so rapidly in recent years? What does this portend for the future? I am not an

Quaker Eco-Bulletin *(QEB)* is published bi-monthly by Quaker Earthcare Witness (formerly FCUN) as an insert in *BeFriending Creation*.

The vision of **Quaker Earthcare Witness (QEW)** includes integrating into the beliefs and practices of the Society of Friends the Truths that God's Creation is to be held in reverence in its own right, and that human aspirations for peace and justice depend upon restoring the Earth's ecological integrity. As a member organization of Friends Committee on National Legislation, QEW seeks to strengthen Friends' support for FCNL's witness in Washington DC for peace, justice, and an Earth restored.

QEB's purpose is to advance Friends' witness on public and institutional policies that affect the Earth's capacity to support life. QEB articles aim to inform Friends about public and corporate policies that have an impact on society's relationship to Earth, and to provide analysis and critique of societal trends and institutions that threaten the health of the planet.

Friends are invited to contact us about writing an article for ***QEB*****.** Submissions are subject to editing and should:

- Explain why the issue is a Friends' concern.
- Provide accurate, documented background information that reflects the complexity of the issue and is respectful toward other points of view.
- Relate the issue to legislation or corporate policy.
- List what Friends can do.
- Provide references and sources for additional information.

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economist, but my concerns about the human-earth relationship compel me to try to make sense of these questions. There are complexities about financial markets that I do not understand. But I know there is a point beyond which exponential growth of anything of substance within a closed physical system is not possible.

Here is what I have come to understand about the monetary system, and why I think the continued growth of the money supply imperils the viability of our planet.

Base Money and Bank Money

The money used in most of the world's nations is a national currency, which exists in two forms: base money and bank money.

- Base money is minted or printed and spent into the economy by governments. The recipient receives it in exchange for goods or services and can use it to buy goods and services or to pay taxes.
- Bank money is created when a bank credits an account with a loan. The loan enables the borrower to write checks or charge purchases on the account to the amount credited.

In economic theory there are two views of the origin and nature of money. The most prevalent view among orthodox economists is that money emerged from trading in markets as a universal commodity. From this perspective, money is an ethically neutral tool that facilitates market exchange, and markets will create the money they need to function efficiently. The value of bank money stems from the ability of banks to provide base money on demand. This approach seems to view money as separate from and subsidiary to the financial and political systems, even though the integrity of the monetary system is seen as the responsibility of the political system and the life-blood of the financial system.

The less prevalent view is that money emerged as a social phenomenon from keeping written records and issuing receipts based on credit and debt.[2] From this perspective, money is not, and cannot be, ethically neutral because the relationship between creditor and debtor has ethical characteristics, in some cases based on trust and in others on exploitation. The value of money ultimately depends on the ability of society through custom, or the political system through force, to require the debtor to pay the creditor. The destruction of a monetary system comes about when a banking system fails or when a government, rather than paying the debts it owes for the money it has created, simply creates more money instead.

Whatever the murky origins of money, when governments mint or print coins or bills and spend them into the economy, they are manufacturing money as a universal commodity. When banks make loans or issue credit cards they are creating money of account based on debt and credit. Modern industrial societies have progressively shifted the functional meaning of money away from a universal commodity backed by gold and toward a unit of account generated by credit and debt.

This process began with the origins of fractional reserve banking in England during the 17th century. At that time, gold and silver coins functioned as a universal commodity. The king's government gave a charter to a private company, the Bank of England, allowing it to issue paper promissory notes for twice as much gold as it actually possessed. This legalized a practice previously developed by London goldsmiths. The Bank's promissory notes constituted the creation of new money based on creating accounts of credit and debt. The benefit to the king was that it enabled him, by borrowing notes from the bank, to pay for a war that required more gold than he had in his treasury. The arrangement worked as long as people had faith in the value of the bank notes as a medium of exchange.

Fractional reserve banking soon became an integral part of capitalist economies, and it succeeded as long as banks were able to convert notes to gold on demand. Over time a system of private banks coordinated by a central bank evolved to manage the money supply of industrialized nations. The benefit to the economy was providing a means by which the money supply became elastic, expanding as the economy expanded and thus facilitating further economic expansion.

Characteristics of Bank Money

Bank money has three characteristics that base money used to lack. 1) For every dollar the banking system creates, someone must be willing to incur debt and pay interest. Similarly, in order for one party to earn a return on their savings, another party must be willing to incur debt and pay interest. Businesses that borrow will usually go to great lengths to use the borrowed funds to earn enough to pay back the debt plus interest and still make a profit. Consumers who borrow must believe they will be able to pay off their loans plus interest. If debtors are unable to pay what they owe, the aggregate return on invested savings is reduced. If too many borrowers fail, the whole system may break down.

2) Fractional reserve banking creates a multiplier effect in the total money supply. When someone who has been credited with a loan writes a check and the recipient deposits the check in the banking system, this creates a new deposit, and the basis for an additional loan. The multiplier effect can approach the reciprocal of the reserve ratio, the fraction of total deposits that are held by a bank to cover withdrawals. With reserve ratios between 10 percent and 20 percent, there is a potential multiplier effect of 5 to 10 on the supply of base money. Historically, the multiplier effect has been highly beneficial for economic growth as long as the growth is sustained. It becomes highly problematic if economic activity does not continue to expand because the money supply may begin to contract with a reverse multiplier effect.

3) The amount of money created by a bank loan is not only the amount of the loan. Banks charge interest on their loans, which creates debt that is greater than the credit the loans provide. Thus, at any given time in the economy as a whole, aggregate debt is greater than aggregate credit. Because credit exists in the present and debt comes due in the future, as long as the money supply continues to expand by the creation of new debt, the new money in the system can be used to pay interest on the old debt. Economic growth can enable both creditors and debtors to prosper.

However, if the amount of debt in the system stops increasing so that the amount of money stabilizes, there will not be enough money in the system for debtors to pay back their loans plus interest except by transferring wealth to creditors at their own or someone else's expense. This characteristic is not recognized by most orthodox economists. Belgian financier Bernard Lietaer describes it most pointedly by the fable of the "11th Round" in *The Future of Money.*[3,4]

Because bank money is based on interest-bearing debt, the overall level of credit, debt, and the money supply must continue to grow in order for the economy as a whole to prosper. In a non-growing economy, a monetary system based on interest-bearing debt creates a zero-sum game. Wealth will progressively shift from debtors to creditors. Ultimately, either the economy grows or someone must fail if others are to succeed.

Money in Today's Global Economy

As a result of the banking crises during the Great Depression of the 1930s, the United States eliminated the gold standard as the basis for its currency and domestic banking system. The Federal Reserve Bank regulated the activities of private banks to promote full employment with low inflation, and the Federal Deposit Insurance Corporation provided confidence in the banking system.

After World War II, a conference at Bretton Woods, New Hampshire, established an international monetary system based on a gold exchange standard for US dollars. This arrangement constrained the global money supply as long as other nations constrained their money supply to levels their gold or dollar reserves could support, and the US constrained the supply of dollars to a level that US gold reserves could support. The Bretton Woods system brought about a 20-year period of international monetary stability. But because the US government did not constrain its own debt within these limits, in 1971 it unilaterally abandoned the gold exchange standard.

Since 1971, base money in the United States has been made at the behest of the Federal Reserve System to meet the currency requirements of the banking system. Dollars, which have continued to be the global reserve currency, are backed not by gold but by US Treasury Bills, i.e., by interest-bearing public debt. Today's base money now entails the same features of a multiplier effect and an excess of debt to credit as bank money.

In this environment, government regulation of the banking system was substantially curtailed beginning in the 1970s, and legal restrictions on generating more money by increasing indebtedness have been steadily reduced. Offshore banking circumvents these restrictions altogether. The private financial sector has developed many new ways of increasing the global money supply by expanding credit and debt, by developing new types of financial instruments, and by increasing the liquidity of financial assets. The morphing of charge cards into credit cards is one clear and ubiquitous example.

Electronic transactions on a global scale not only increase the money supply instantaneously when new debt is created but also reduce it when debt is discharged; so the overall supply is not only much larger but also more volatile. By the 1990s, there

was no longer any way to measure the global money supply or even to define all the forms money now takes.[5-7]

The Money Trap

The globalization of banking and finance that has occurred since 1971 seems to have created a situation in which national governments no longer control their own money supply, and, therefore, the global supply of money is not managed for any purpose other than private profit. Instead, the International Monetary Fund and the central banks of wealthy nations must manage the servicing of global debt on which the money supply is based in order to prevent its collapse.

This is why, in my view, the growth of the global money supply is the most insidious population explosion associated with the human enterprise. As it has evolved, the monetary system is characterized by positive feedbacks, but this is not widely recognized as a problem. Within the current system, the money supply will either expand or contract. To prevent it from contracting, with all the risk of hardship that would entail, requires continually creating more debt and more money. Creating new debt to sustain the monetary system inevitably drives economic expansion and financial speculation in ways and for reasons that few people understand.

An Essential (though mind-boggling) Task

Orthodox economists are apt to view the profusion and mal-distribution of modern money as a symptom rather than as a cause of our current predicament. But whether seen as a symptom or a cause, altering our understandings and expectations about money and the monetary system would seem to be an essential feature of the challenge we face to constrain global economic activity within ecological limits.

Governments could, at least in theory, restore control over the banking system and then the money supply could be determined by the imperatives of ecological adaptation rather than by the opportunities for profit-seeking. Banks do not have to engage in a fractional reserve process to make loans, which is something governments have authorized them to do. Governments could reclaim their traditional monopoly of issuing money which would be interest-free.

Yet there are powerful vested interests in the current financial system, including the "vested" retirement accounts on which large numbers of us expect to depend in our senior years. U.S. government policy since the 1970s has been to increase our investment in and dependence on the current system of money based on credit and interest-bearing debt.

Adapting economic institutions to ecological realities is perhaps the ultimate challenge for citizens of the United States and the world in the 21st century. There are no easy answers. Rather than clinging to self-serving expectations, assumptions, and ideologies from the past, we need to develop a more comprehensive understanding and practice of economics with people and Earth in mind. We need our most creative and discerning economists, policy experts, and innovative thinkers to focus on this task.

What Friends Can Do

I am convinced that if human society is to progress toward a more ecologically sustainable global economy, sooner or later the monetary system, and all our expectations associated with it, must be transformed from one that has evolved to drive expansion into one that is designed to help restrain expansion.

Changing the monetary system will only be possible if a great many people come to understand why this is necessary. You might be led to learn more about economics and money yourself, and to find ways of acquainting other Friends with the incongruity between our expectations about money and our ecological realities.

Seeds of Violence, Seeds of Hope, is a resource developed by the Friends Testimonies and Economics project to help Friends and others learn more about basic economic concepts and policy perspectives. As recently revised, it consists of core readings (Volume I), interactive exercises (Volume II), and in-depth perspectives (Volume III). Friends Testimonies and Economics is a joint project of the Earthcare Working Group of Philadelphia Yearly Meeting and Quaker Earthcare Witness.[8]

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This article is included in Volume III. Volume II includes several interactive exercises relating to the content of this article. Volume I includes a descriptive article on money, banking and finance.

Print copies of *Seeds of Violence, Seeds of Hope,* Volume I, are available to any monthly meeting at no cost, from which additional copies can be made. Volumes II and III are available to anyone for the cost of duplicating and postage.

To make a request, contact Ed Dreby <drebymans@igc.org> or 609/261-8190. All three volumes are available on the FGC website <fgcquaker.org/library/economics/seeds>.