The Importance of Money and Debt/Credit Relationships in the Enterprise Economy

John Smithin¹

York University

Abstract: This paper argues that money is a social relation or social institution, specifically a debt relation that is *not* defined by its physical properties but nonetheless has causal effects in the "real world". It is created when banks and other financial companies extend credit and is destroyed when the loans are repaid. The state central bank can influence interest rates, and conduct monetary policy, because its liabilities are the base money of the system, combining the functions of the unit of account and (ultimate) means of payment.

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Introduction

From a commonsense point of view, the economy is all about money (Smithin 2000, 1). Yet many of the social science and business disciplines involved in studying economic activity pay less attention to this "most important institution in capitalist society" (Ingham 2004, 195), than it deserves. There are theories about what money *does*: economic theories about money and inflation, political theories about money and power, and sociological theories about money's cultural significance. What is missing, however, is a detailed discussion of the *ontology* of money (Searle 2005, 1) - what money is, how it comes into being, and what is its nature. In disciplines like accounting and finance, it is taken for granted that sums of money are subjects for discussion, without much further inquiry. In economics, one of the most influential approaches

teaches that money itself is not important and that what is really going on when economic activity occurs is a barter exchange of goods and services.

Is Money a Commodity?

For many centuries, well into the modern era, the value of money was thought to derive from its worth as a commodity, such as precious metals like gold and silver in coins or ingots. Such things were believed to be money because market forces had made one of them the most acceptable or "exchange worthy" item in trade in a given society.² This gave rise to the concept of the "medium of exchange", which still appears prominently in textbooks but is misleading because it implies that the most characteristic transaction is a simple "spot" exchange of goods for money (Hicks 1989, 41). This is not so in reality, and, particularly for the more important transactions some sort of agreement (a formal or informal "contract") is required before trade takes place. It is not possible to be dogmatic about timing. The contract comes first, but sometimes the buyer must pay "in advance" – before delivery of the item – while at other times payment is made later. Spot payment is only a special case of one of three types of contract (Hicks 1989, 42). In all three cases, it is implicit that money, the thing offered in payment, is in a different *category* from the particular goods and services being sold. Otherwise, when trading an apple for an orange, why not call either of *them* the medium of exchange?

A major weakness of traditional economic thinking was that the only attempt made to understand the trading process was the assumption that market forces select one, or a limited number, of actual physical objects to serve as money. Even when money was obviously *not* a substantial object (for instance, when it was a piece of paper or a book entry), it was held to be "symbolic" of a more intrinsically valuable commodity. However, the idea that the value of money could be guaranteed in this way (for example, by a gold standard) was always dubious (Innes 2004, 15); today, when the physical form of money may be nothing more than electronic impulses in a computer it is impossible to sustain The numbers on the screen represent only a general claim to a part share of total goods and services - what is usually called "purchasing power" - and even this is subject to continual fluctuation as prices change. It should be noted though, that however physically insubstantial modern money may be, the advent of computers and the Internet has *not* led to the disappearance of money, as was frequently claimed would happen around the end of the 20th century. Money retains the same importance in social life that it has always had, and current financial problems are discussed in much the same terms as they were throughout the 18th, 19th and 20th centuries.

What Is Money?

What, then, *is* money? The main alternative to a commodity theory is a "credit" or "claim" theory of money (Ingham 2004, 6). This is sometimes expressed by stating that "all money is credit" or "all money is debt", but credit and debt are just mirror images of each other. If a bank extends a loan to an individual or a firm, that is *credit*, and the loan is an earning asset to the bank.³ If someone makes a deposit *in* a bank, from the bank's point of view that is a *debt* or *liability*. Confusion can arise because, by definition, assets equal liabilities in a balance sheet. When a bank extends credit its asset portfolio increases, but the liabilities side of the balance sheet must also rise. In the simplest case, the person or firm receiving the loan deposits the funds with the same bank, but even if they pay away the funds to another institution, assets and liabilities of the

system *as a whole* rise to the same extent. There is both "credit creation" and "money creation" at the same time, and when the loans are paid back it amounts to the "destruction" of money and credit. Which side of the balance sheet, however, contains the entries that are actually the *money*? The correct answer is that the funds on the liabilities side are money, to the extent that they can be transferred from one party to another and used to pay off other debt. This corresponds to the definition of money given by Hicks (1989, 42): "Money is paid for a discharge of debt when that debt has been expressed in terms of money". This also covers the historical special case of precious metal coins. The issuer or guarantor of coins had to accept them back in payment of obligations to itself, but it was acceptability that was the key, not the physical properties of the coins themselves (Ingham 2004, 198)

As debts are "expressed in terms of money", this introduces the notion of a "money of account", which Keynes (1971, 3) said was "the primary concept of a theory of money." Modern textbooks also list one of the functions of money as the " unit of account" meaning the abstract concept of a "dollar", a "yen", and so on, in which prices are expressed, accounts are recorded, and profit is calculated. Unlike Keynes, however, textbook writers apparently do not think that this function is important. This is a mistake, because if there were no such function, it would be impossible to conduct business on a rational basis, quoting prices, keeping accounts, and obtaining finance. It is true that the notion of a unit of account, by itself, is not enough to establish a monetary economy. There must also be a *means of payment* recognized as actually constituting so many units of account when transferred. Keynes (1971, 3) explained that the money of account was the "*description* [of the thing]" and money itself was "the *thing* that answers to the description". It has already been stressed that the means of payment need not be a

physical object, but can easily be a book entry or computer transfer, as seen every day. All that is necessary is that what is transferred "counts as" the required sum. There is therefore no real problem in understanding why deposits in banks and other financial institutions can play this role.

A number of the textbook "functions of money" have already been mentioned. Sometimes, it is said that money is "a unit of account, a *medium of exchange*, and store of value", while in other treatments money is described as "a unit of account, a means of payment, and store of value". We have also seen that "medium of exchange" and "means of payment" are not the same thing (though the terms are often used interchangeably), and that the latter concept is more useful. What, though, of money as a store of value? In academic theories of "portfolio choice" or the "demand for money" this is treated as important, but again the emphasis seems wrong. If money is to constitute purchasing power, it clearly must retain value to a certain extent from one period to the next, but money is not the only - or necessarily the best - store of value. A diamond ring or a painting by a famous artist can serve the same purpose, sometimes much better. Also, historically money has frequently continued to perform the unit of account/means of payment functions long after inflation rates have reached very high levels; showing that these are what really seem to matter (Hicks 1989, 42). This is not to deny that money might be more "useful" in capitalism if its real value could be kept more stable; however, as will be argued later, this does not necessarily mean that the inflation rate itself must be zero.

Money as a Social Relation

It sometimes bothers people to learn that money is "created" when financial institutions make

loans, and "destroyed" when loans are called in. The idea that all is done "with the stroke of a pen" (today, more likely a keystroke) is somehow disquieting. Just because something is not defined by its physical properties, however, does *not* mean that it is not "real" or cannot have causal effects in the physical world. This is a characteristic property of all social institutions, social relations, or social facts (Ingham 2005; Searle 2005). They are in a different category from "brute facts" (physical facts), and money is a prime example. A social fact is what it is, not by the laws of nature but because it is accepted as such by convention. It will involve such things as collective intentionality, the assignment of status function, and the adherence to rules and norms of behavior (Searle 2005, 19) A classic example would be a "line drawn in the sand" (Smithin 2009, 51) as a boundary between two warring factions, or just two quarrelsome individuals on a beach. If both parties respect the boundary, it keeps the peace, not by virtue of its physical properties (nothing prevents anyone from stepping over the line), but because it is respected as such. It nonetheless can be *effective*, and has an impact in the world, as long as its conditions of existence are in place. From this can be drawn obvious parallels with many important economic institutions including money itself, private property, firms, banks, mortgages and pension plans. All these rely on the same sorts of conditions of existence, and can be just as real and "binding" on the individuals participating in them. The example of the line also illustrates how easily social consensus can evaporate. The boundary may seem at one moment to represent a solid institution and an unbreakable taboo. At the next, if someone steps over and no retaliation follows, it simply crumbles. There is a clear correspondence between this and a typical sequence of events in the financial world.

The Hierarchy of Money

Bell (2005, 505) reminds us that as money is a social relation involving indebtedness there must be a hierarchy of money, depending on the issuer. Debts are of different quality from the point of view of the creditor (Hicks 1989, 48), and some types of money are more acceptable than others. This point is often obscured in textbooks, making it difficult for readers to understand such things as why central banks can conduct monetary policy by manipulating interest rates or what happens in a financial crisis.

Any individual or institution can issue promises to pay (IOUs) in the unit of account, and Bell (2005, 505-08) envisages a four-tier "debt pyramid" in ascending order of acceptability, with households at the bottom, firms on the third tier, banks on the second, and the state or government at the top. A promise to pay by a household or a firm is not necessarily accepted at face value because it may not be reliable. To deliver the required number of units of account, a firm would have to make profits correctly denominated in the unit, and in an acceptable form, a household would have to make wages, and so on. One way of making lower tier IOUs acceptable might be a promise of conversion into the debt of an entity higher in the pyramid. Alternatively, lower tier securities may trade at discount, or offer a higher rate of interest as a "risk premium" (Bell 2005, 506). Obligations of banks in the second tier frequently *will* be acceptable at face value because they are in principle convertible into higher level obligations - those of the state central bank. Finally, the liabilities of the central bank itself, consisting of currency in the hands of the public plus bank reserves,⁴ are at the top of the pyramid and do not need to be converted into anything else. The most plausible explanation for this is that given by the "chartalist" school (Knapp 1973; Wray 1998), which argues that the state has the power to levy taxes but must also

accept its own liabilities in tax payment. If the general principle is that the choice of the ultimate form of payment rests on the collective acceptance that it is so, the chartalists add that the specific social relation decisive in practice is the power of the state. The state will also typically accept the liabilities of certain second tier financial institutions directly in tax payment (Bell 2005, 506-07). This then validates such obligations as money, over and above any convertibility feature. In any actual economy, therefore, the *money supply* consists mostly of some subset of the total deposit liabilities of second tier financial institutions, such as commercial banks, and the liabilities of the state central bank serve as the *monetary base*. Using a variety of financial techniques, the central bank directly controls the interest rate on loans of base money. This has different names in different countries ('federal funds rate" in the United States "overnight rate" in Canada, and so on). In general, we refer to it as the "policy rate". In turn, changes in the policy rate also affect interest rates both charged and received by the commercial banks. Commercial banks need central bank base money to settle claims among themselves, and no individual bank can afford to get too far out of step with its rivals in the composition of its portfolio. *Reductions* in the policy rate are therefore intended to reduce interest rates in general, increase commercial bank lending and *increase* the money supply, whereas *increases* in the policy rate are intended to have the opposite effect.

Money and Capitalism

If orthodox economists have been confused about the notion of money much the same is true about the concept of an "economy" itself. The usual idea is that this term refers to different methods of obtaining provisions. Therefore, the fictional character Robinson Crusoe, alone on a deserted island, is as much engaged in economic activity as anyone else. This is nonsense as social science however, as the decisions Crusoe makes are not relevant to anyone but himself.

Once we move beyond the isolated individual and make "provision" for more than one person, there are only three basic frameworks for achieving this (Heilbroner 1992, 10). The first is the "traditional economy" of which there are many practical variations, such as hunting and gathering or traditional agriculture. The main principle is that the work that gets done, by whom, and how the proceeds are shared is settled by tradition. The second is a "command" economy, where someone gives orders about what should be done and how the produce should be divided, and others obey. This also covers many variants. It is the method of an army, but also that of slavery and state socialism. The third, as defined by the sociologist Max Weber, is "the provision of human needs by the method of enterprise, which is to say by private businesses seeking profit" (Collins 1986, 21-22). Moreover, this is evidently the main or underlying principle of contemporary "capitalist" economies (although in the real world there are also substantial command elements, such as government bureaucracy, the police and nationalized industries.)⁴ Two issues arise in considering the method of "enterprise". First, that economic analysis as a specialized field really applies only in this case (Heilbroner 1992, 10-16). There is no need for any expertise in "economics" to understand the other methods (or the problems of an isolated individual). It is therefore the method of enterprise that economists *should* be studying rather than general mathematical theories of resource allocation. Second, and crucially, what is this "profit" that provides the incentive for private firms to act? Most obviously, it is a sum of money, bringing us back to the point that the system could not function in the absence of money, and ruling out the possibility of achieving the same results through barter.

Karl Marx described what was later called the "monetary circuit" (Parguez and Seccareccia 2000, 101) in the following way⁵:

$$(1) \qquad M - C - C' - M'$$

The entrepreneurs acquire money, M (for instance, by borrowing or issuing shares), with which they then acquire commodities, C, hat are used in a production process to make more commodities, C'. The newly produced commodities are finally sold for more money, M'. The difference between M' and M is the money profit, without which there would be no incentive for production to take place.

A key question to ask in attempting to understand how the system works is how it is actually *possible* for M' to be greater than M (written M' > M) in the aggregate, and thereby for profits to exist. There can only be one answer: during the circuit money and credit creation must have taken place. The orthodox economic concept of an increase in the velocity of circulation (of a fixed amount of money) is not relevant here. A \$20 bill may pass from hand to hand and, in doing so, appear to generate as much as \$100, \$200, or \$300 dollars of business. However, nobody can end up with more than \$20 in their pocket. For a more concrete example, imagine a world initially with only one entrepreneur, who wants to make money manufacturing "widgets". The entrepreneur goes to a bank and takes out a loan of \$100,000 to spend on wages and raw materials which also creates \$100,000 worth of money in bank deposits. Suppose furthermore that nothing else occurs on the financial side, and meanwhile the widgets are produced and offered for sale. It is actually *impossible* for the entrepreneur to make a profit, as there is only \$100,000 in existence. Even if widget workers and sellers of raw materials are willing to spend *all* their incomes on widgets (unlikely), there is not enough money to pay interest to the bank, let

alone make a profit. How can the situation be resolved? The answer is that someone else must be willing to go into debt, for profits accrue to the first mover. There are basically only three possibilities. First, other entrepreneurs might be willing to take the same sort of chance. If a maker of "super widgets" also borrows \$100,000 but the new product take longer to produce, when the original widgets come on the market there will be a total of \$200,000 in existence. It will then be *possible* for the widget-maker to make profits and repay interest and principal, if enough people decide to buy widgets. Note, however, that when the loans are paid off the money supply declines, meaning that the "super widgets" maker will now need somebody else to become indebted, in turn, to make a profit. There has to be, for example, a manufacturer of "extra-super widgets" also willing to borrow, and so on. This is why Keynes (1964, 161) said that there would be trouble if the "animal spirits" of entrepreneurs faltered. The second possibility is that consumers themselves (domestic or foreign) are willing to become indebted in terms of domestic currency to buy widgets. In this case, there is an issue of how a consumer-led boom can keep going if consumers have trouble paying their debts. Third, the state itself could go into debt. It could run a budget deficit and create monetary demand in that way. This was important historically in the actual genesis of capitalism, and there is no question of the state going bankrupt as it is the issuer of the money. There could be problems, however, because of the reactions of politicians who are concerned about this and therefore always call for a budget surplus or "fiscal responsibility", thereby threatening to shut everything down. Those who already have money could also point to the opposite danger: that the budget deficit could be too large, too *much* money might be created, and existing wealth devalued through inflation.

This brings up the general point that for profits to be "real" (not inflationary), M' > M

must stimulate production, C' > C, to the same extent. If the quantity of commodities *C* stays constant, then M' > M will only mean a rise in prices. This is what those who complain about excessive credit creation, or propose to strictly limit the quantity of money, are thinking about. This is misguided, though: such restrictions will actually tend to lead to economic problems because there is no incentive for production unless there *are* money profits to be made. Rather the goal of policy should be to allow enough credit creation to make M' > M roughly correspond to C' > C, though this is easier said than done.

Monetary Policy

Because of the complex relationship between the state's power to levy taxes and the phenomena of money and credit creation, the main control that the central bank has over monetary policy is over the policy rate of interest (and thereby, indirectly, over interest rates in general). What matters is the "real" rather than the "nominal" policy rate. The nominal policy rate is the number quoted in the financial press-say 1 percent, 3.25 percent, or 5.5 percent. The real rate is the nominal rate less expected inflation. If expected inflation is 2 percent, the real policy rate is the true cost of borrowing base money (and the same logic applies to other rates in the system). If the real policy rate is high, that will tend to reduce bank lending, reduce the money supply, and may cause an economic downturn as well as trending to reduce inflation. If the real rate is low, it will encourage lending, increase the money supply, and help stimulate the economy, but may also cause the inflation rate to increase. If the real rate becomes negative, this also "encourages borrowing", but may now lead to outright inflationary instability. In this case, there is an

unlimited incentive to borrow, and also those currently holding money are getting a negative return and will try to spend their money as quickly as possible. Smithin (2007, 114) has therefore argued that the safest monetary policy would be to stabilize the real policy rate at a "low but still positive" level. A low real provides stimulus for credit creation and productive economic activity, but as long as it does not fall negative, financial holdings still retain their real value and money performs the store of value function as well as can be expected. Note that the policy of stabilizing a *real* rate would still require relatively frequent changes to the *nominal* interest rate, whenever expected inflation changes. Therefore, the practical conduct of monetary policy under a real rate rule might not at first sight seem very different than when the authorities pursue other objectives. It would, however, avoid the excessive swings in real rates that occur under other regimes.

An alternative policy of keeping the *nominal* rate itself at a constant level (no matter how high or low) would lead to instability as soon as there was any change in inflation expectations. If the nominal interest rate is constant, and something causes an inflation (from either the demand or cost side), then the real rate must fall. This will encourage more borrowing and more inflation, and the real rate will eventually become negative. If, alternatively, a deflationary tendency (falling prices) sets in, with the nominal rate constant, the real rate rises, causing further deflationary pressure. What is arguably the worst case scenario will occur if the nominal interest rate is already zero, and then deflation sets in. The real rate will be rising, and the result will be a recession. In such circumstances monetary policy relying on interest rate changes becomes impotent, in an up-dated example of Keynes's (1964, 207) "liquidity trap". In principle it would be necessary to cut real interest rates in such a situation, but this cannot be done since the

nominal policy rate cannot go below zero. The only alternative is expansionary fiscal policy. The government must increase spending, cut taxes, or both, if it wants to boost the economy.

International Relations

Up to now the discussion has assumed the existence of a self-contained monetary network arranged in a hierarchical manner, dominated by a single central bank whose liabilities represent the money of account and ultimate means of payment. In reality, however, there is more than one such network in the world, and the international economy can be seen as the interaction of the competing monetary networks (which are often, but not necessarily, identified with the boundaries of political nation-states). The exchange rate between the different currencies can be floating or fixed. In the first case, the *nominal exchange rate* between two currencies (the foreign currency price of one unit of domestic currency) changes every day on the international markets. In the case of a fixed exchange central banks themselves intervene directly in financial markets (buying and selling their own currencies) to keep the nominal exchange rate at a certain level. Although many people think that this is desirable in order to stabilize international trade, it must be recognized that the nominal exchange rate is only one of many factors determining international competitiveness. To assess the competitive position it is necessary also to consider price levels in different countries and work out a *real effective exchange rate*.

A hierarchical debt pyramid, based now on the acceptability of different national currencies, can also emerge in the international arena, similarly to what happens domestically within a given monetary network (Bougrine and Seccareccia 2008, 5-7). The currency of one particular issuer may become the international "reserve currency" at a certain stage in history, for

example, as happened with the British pound in the 19th century and the US dollar in the 20th. This gives a degree of hegemonic power to the nation concerned, and its financial policies influence the whole world economy. As there is no world government, there is not such a clearcut explanation as to *why* a particular currency emerges as the most powerful internationally as these was in the national case. It is a question of global politics and history. However, if the system *does* have an inherent tendency to concentrate financial power, then in the international sphere, in which questions of political legitimacy are difficult to resolve, it would seem sensible to diffuse that power as much as possible (Smithin 2003, 206). This is an argument in favor of a flexible exchange rate system, which would allow the policy-makers in each country to pursue an independent course. It is an argument against fixed exchange rates, "dollarization", currency boards, or a common currency.

Conclusion

Money is a social relation or social institution, but is entirely "real" and has important causal effects in our lives. Orthodox economics makes a major error by ignoring this, treating economy activity mainly as a question of barter exchange. Specifically, the real interest rate and the real exchange rate are important *monetary* variables.

As a result of its nature, money, in practice, is likely to be a "creature of the state" Lerner (2005, 467). To say this, however, is not necessarily to favor government control of the economy, or socialism. It is just to recognize (social) reality. Rather, the possibilities of success for the market economy/capitalism seem to depend on the judicious use of those monetary and fiscal policy instruments that *are* available to government.

Notes

1. John Smithin is Professor of Economics in the Department of Economics and the Schulich School of Business, York University, 4700 Keele Street, Toronto, Ontario, Canada M3J 1P3; tel: +1 (416) 736 2100, ext.33623; fax: +1 (416) 736 5987; e-mail: jsmithin@yorku.ca.

2. There is a fallacy/circularity in this reasoning because apparently we can have a sufficiently extensive market in place to be able to determine which money will be chosen, even *before* one of the main preconditions of real world market exchange - namely, money itself – has been invented.

3. The same applies when the bank purchases another type of security, such as a bond or an equity share.

- 3. In the United State the widely-used term "federal funds" is revealing.
- 4. Sometimes the phrase "mixed economy" is used to describe this.

5. However, like the classical economists, Marx himself arguably did not grasp the full implications of the fact that money must be involved (Ingham 2004, 61).

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