What Is Money And How Is It Created?

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These should be two of the easiest questions to answer in economics; after all, money is the one thing that we all use in an economy—surely we know what it is, and where it comes from?

Unfortunately, we know what money is the same way the fabled Blind Men of Hindustan know what an elephant is: the one who grabbed the trunk knows it is “like a tree”, while the one who grabbed the tusk knows that it is “like a spear”, and so on. Money is such a multi-faceted and all-pervasive element of our system—the figurative “elephant in the living room”—that our capability to obsess about one aspect of it prevents us developing a proper appreciation of what it actually is.

Not knowing what it is, we develop “creation myths” about where it came from as well—and then we clash with each other over them, like a bands of rival religious zealots. At one extreme, you get people like Paul Rosenberg who argue that our monetary system is based on fraud (“That Couldn’t Possibly Be True”: The Startling Truth About the US Dollar):

Can you and I write checks “drawn on ourselves”? Of course not. We have to back them up with value. The Fed does not. So, the mighty US dollar is not backed by gold or silver or anything at all; it’s simply an accounting trick.

At the other extreme, you get mainstream economists like Paul Krugman, who argue that how money is created is no big deal, and that it’s in fact OK to ignore money when modelling the economy (There’s Something About Money (Implicitly Wonkish)):

there’s a bit of sleight of hand involved in the way we handle money itself: first acknowledge that it’s a special sort of good that people desire only because other people desire it, then ignore that specialness for the rest of the analysis.

They’re both wrong, and for the same reason: they haven’t worked out what money really is. Only one person ever really ever did—and no, it wasn’t Ayn Rand. It was Augusto Graziani, an Italian Professor of Economics, who died early last year. He understood what money is because he posed and correctly answered a simple question: *how does a monetary economy differ from one in which trade occurs by barter?*

This ruled out gold being money, since gold is a commodity that anyone can produce for themselves with a bit of mining (and a lot of luck). So even though gold is really special and incredibly rare, it is in the end, a commodity: an economy using gold for trade is really a barter economy, not a monetary one. As Graziani put it:

a true monetary economy is inconsistent with the presence of a commodity money. A commodity money is by definition a kind of money that any producer can produce for himself. But an economy using as money a commodity coming out of a regular process of production, cannot be distinguished from a barter economy. A true monetary economy must therefore be using a token money, which is nowadays a paper currency. [He wrote this in 1989, before our modern electronic money system had developed]

That doesn't rule out a world in which gold is used as the basis for commerce of course: it just says that that's not a monetary economy. Those who say we'd be better off "going back to gold" are really saying that they don't like a monetary economy, and reckon we would be better off in a barter economy instead.

Identifying money as a paper token wasn't enough, however, since there are some paper tokens—such as a "bill of exchange"—which are used in transactions, but leave a debt obligation between the buyer and the seller. An economy using bills of exchange was not a monetary economy, Graziani argued, but a credit economy:

If in a credit economy at the end of the period some agents still owe money to other ones, a final payment is needed, which means that no money has been used.

So to be money, the token given in exchange for a good must be accepted as a final payment—but this carried the danger that whoever produced the token might be able to "get something for nothing". In an ideal system, this had to be ruled out as well.

This gave Graziani three basic conditions that had to be met for something to be called "money":

a) money has to be a *token currency* (otherwise it would give rise to barter and not to monetary exchanges);

b) money has to be accepted as a *means of final settlement* of the transaction (otherwise it would be credit and not money);

c) money must not grant privileges of seignorage to any agent making a payment.

Graziani saw only one way to satisfy those three conditions:

The only way to satisfy those three conditions is to have payments made by means of *promises of a third agent*, the typical third agent being nowadays a bank.

So money is fundamentally the promise of a bank to its customer, and a monetary payment is the transfer of that promise from one customer to another. Graziani described the typical cheque transaction that dominated monetary exchange before we developed electronic payments:

When an agent makes a payment by means of a cheque, he satisfies his partner by the promise of the bank to pay the amount due. Once the payment is made, no debt and credit relationships are left between the two agents. But one of them is now a creditor of the bank, while the second is a debtor of the same bank. This insures that, in spite of making final payments by means of paper money, agents are not granted any kind of privilege.

This accurate vision of money led Graziani to two epiphanies which have informed my modelling of money ever since I first read his papers. Firstly, though we all tend to think of exchange as something involving two people trading two goods, in reality all transactions involve three parties—a seller, a buyer, and a bank—and just one commodity, which exchanged in return for a transfer of the bank's promise to pay from the buyer to the seller. So all transactions are triangular:

any monetary payment must therefore be a triangular transaction, involving at least three agents, the payer, the payee, and the bank.

Secondly, banks must be part of your economic analysis—leaving them out is leaving out the main (but not the only) way money is created in our modern economy—and you can't just lump them with other firms:

Firms are present in the market as sellers or buyers of commodities and make recourse to banks in order to perform their payments; banks on the other hand produce means of payment, and act as clearing houses among firms. In any model of a monetary economy, banks and firms cannot be aggregated into one single sector.

Unfortunately, that is precisely what mainstream economists do. As Krugman put it recently:

in some sense money is a really weird thing, which can look to individuals like a real asset—cold, hard, cash—but is ultimately, as Paul Samuelson put it, a "social contrivance"; whose value is more or less conjured out of thin air. Mainstream macroeconomics acknowledges the weirdness—in particular, makes heavy reliance on the ability of central banks to create more fiat money at will—but otherwise treats money a lot like ordinary goods. But that intellectual strategy doesn't come naturally to many people, so there's always a constituency for monetary cranks.

That "intellectual strategy" is actually a mistake, which is why mainstream economists miss the importance of banks in creating money. It isn't just the Federal Reserve that can create money—as many people that Krugman labels monetary cranks believe—nor can the Federal Reserve control bank lending, as mainstream economists like Krugman believe.

Banks create money by issuing a loan to a borrower; they record the loan as an asset, and the money they deposit in the borrower's account as a liability. This, in one way, is no different to the way the Federal Reserve creates money, which Rosenberg rails against as fraud. In reality it is simply the nature of a monetary economy: money is simply a third party's promise to pay which we accept as full payment in exchange for goods. The two main third parties whose promises we accept are the government and the banks.

That's simply the nature of money: it is not backed by anything physical, and instead relies on trust. Of course that trust can be abused—and frankly that's done more often by the banks than by the government. But thanks to the anti-government attitude of monetary cranks like Rosenberg, and the dominance of economics by "barter cranks" like Krugman—who ignore banks completely and yet pretend to understand the economy—we continue to ignore the main game: what the banks do (for good and for ill) that really drives the economy.

Graziani, A. (1989). "The Theory of the Monetary Circuit." Thames Papers in Political Economy **Spring**: 1-26.