Money is not a cigarette¹

Reading the histories of money and finance written in recent years, and observing the confusion in much of the debate about quantitative easing and fiscal policy, left me with a regret. Although my brief was to write a philosophy book, I did not make the definition of money a subject of direct analysis. I focused on the properties and consequences of money, assuming that its definition – an asset whose primary function is payment – was uninteresting. This was an error. Confusion over the definition of money is central to the major macroeconomic policy failings in the developed world since the financial crisis in 2008.

With a clear understanding of money, for example, it makes no sense to engage simultaneously in both quantitative easing (explained below) and austerity, as much of the developed world has done. Quantitative easing (QE), by definition, means that governments can borrow and spend freely.

The word "money" is often used casually to describe different things. In common conversation "money" is often interchangeable with "wealth". We describe someone as having "a lot of money", meaning they are wealthy. We also refer to "deposits" held in a bank as "money (or cash) in the bank", even though deposits are really loans we make to banks, which they may or may not honour.

Despite this, "money" also has a unique real-world counterpart: physical cash and its electronic equivalent, bank reserves. The technical term for these is "monetary base", which is a measurable quantity and is consistent with our intuitive sense of the meaning of money: a valuable asset with which we pay for things. In a stricter, more abstract, sense, "money" can be thought of as a property of certain things. In this sense there is no perfect counterpart in the real world, because many things may can have this property to varying degrees and in changing circumstances.

¹ A revised excerpt from the Introduction to "Money" (2nd ed) published by Routledge.

"Liquidity" can be defined as the ease with which an asset can be converted into cash, or the means of payment. "Moneyness" or "liquidity" becomes a spectrum - with the monetary base at one end and highly illiquid assets at the other. Economists have argued over where to draw the line, and many include deposits in their defined real world counterpart for what we mean by "money". Friedman and Tobin were more accurate: they called demand deposits "quasi money". I think it is most accurate to recognise that deposits are loans to banks, which are often treated as if they are perfect money - but they are not (in a panic banking they are often not money at all!). What is undeniable, is that physical cash and bank reserves are always money.

Now, a specific confusion seems to pervade formal analysis of money: this is the claim that money is a debt, or a liability, of government. I shall argue that this view is an analytical error, but in part it explains why governments have pursued inconsistent policies, such as simultaneously creating money through QE and trying to reduce government borrowing.

To non-economists, the suggestion that money is a debt makes little sense. Try asking someone in America what they think they are owed for their ten-dollar bill. Or in the UK, ask a taxi driver if they are worried about the government defaulting on a twenty-pound note. You will get some very strange looks. The question is incomprehensible. If you have money, nobody owes you anything. Money is an asset you can buy things with. A ten-dollar bill is not a debt; it has value, purchasing power. This intuition is correct. So what is the origin of the experts' confusion?

The belief that money is a debt has multiple causes. One of the disconcerting features of money, discussed in Chapter 1, is that it is created out of nothing. It causes us cognitive discomfort that something effortlessly created and of no intrinsic value (or even physical form) can be so important and valuable. Calling it a "debt" seems to be more reassuringly concrete.

The second reason why money is often confused with debt is a coincidence of history. Historically, debt certificates were often used as money. In many countries the first money was letters of credit and bills of exchange of private banks. A piece of paper issued by a creditworthy private bank was a very convenient form of paper money in fourteenth- and fifteenth-century Florence. A perfect description of this practice can be read in the magnificent *Money and Beauty* (Sebregondi & Parks 2011). But just because a debt can be used as money does not mean that money is a debt. This is a logical fallacy. Think of a clearer example: cigarettes are often used as money in prisons. This does not make money a cigarette.

A sophisticated version of this error is evident in Felix Martin's *Money* (2013). In this entertaining history of money, Martin highlights the fact that even primitive economies have complex systems for credit, clearing and settlement. Credit is needed to solve an intertemporal problem (see Chapter 4). In the simplest terms, some people have more money than they need now and others need more now than in the future. Borrowing and lending is the solution. Clearing and settlement arise because often it is easier to exchange goods and services immediately. Verified payment takes place subsequently. Martin is right to identify the importance of this process, but he tries to argue that it is money. This is a similar logical error. Money is a specific thing, it has a specific quantity, and it can be clearly defined in a way that is distinct from debt, credit, clearing and settlement.

Accounting convention has also contributed to economists' confusion. Money is an asset. Its specific value as an asset – what makes it money – is in our ability to pay for things with it. However, in standard accounting, known as double-entry bookkeeping, every asset has a corresponding liability. When you deposit money with a bank, and the bank uses the cash to make a loan, it has a liability (the deposit) and an asset (the loan). Accountants don't seem to like the fact that governments can

create money – an asset – out of thin air, without a corresponding liability. So they designate physical notes and coins and bank reserves (the electronic version) a liability of government. Strictly speaking, notes and coins and bank reserves are called "the monetary base", which is described in conventional accounting as a liability of the central bank, and the balance sheet of the central bank is consolidated with that of the rest of government, so money becomes a liability of the state.

This convention dates back to commodity standards, when the government did "owe" something to the holder of a ten-pound note: ten pounds of silver, or a certain amount of gold. This is no longer the case. Electronic money is created at the press of a few buttons on a keyboard; the government owes the holder of money nothing. So governments can, in fact, create a financial asset – cash – without a corresponding liability (Buiter 2004). This is a unique property of money.

This may seem an arcane and trivial argument. Who cares if accountants and economists – wrongly – treat the money created by the government as a liability? Well, this obscure fact, has surprisingly far-reaching consequences, and has caused a great deal of confusion. When, for example, I quizzed the renowned economist Paul Krugman, no less, on the implications for governments' balance sheets of central banks buying government bonds by creating new money, he repeated accounting convention, taking it as assumed that money was a liability of the government (Krugman 2012).

How can governments have too much debt if they buy back what they issue?

If money is not a liability of the state, it makes no sense to simultaneously worry about government debt and engage in QE. This confusingly named policy, often unhelpfully described as "unconventional", is, in fact, both very conventional and very simple. QE involves the central bank buying debt issued by governments with newly created (electronic) money. The money is paid to the banks, insurance companies and individuals who sell the government bonds to the central banks. The non-bank institutions, who sell government bonds to the central bank, deposit the proceeds with banks, who in turn deposit these funds at the central bank. So this newly created money shows up as cash accounts held by banks with the central bank (called bank reserves). These reserves are the electronic equivalent of notes and coins. They are the money used to settle payments between banks.

It is simplest – and correct – to think of QE as the purchase of government bonds with newly created money. But what happens to the government debt purchased by the central bank? After all, the central bank is part of the government. So the government is in fact buying the debt that it has issued. How, then, can the government have "too much" debt? Imagine, for example, that you bought your mortgage back from your bank. Would you still consider yourself indebted? That makes no sense. A debt to yourself is no longer a debt.

In other words, quantitative easing amounts to the cancellation of government debt.

Since the financial crisis in 2008, the US central bank, the Federal Reserve Board and the Bank of England have purchased almost as much debt as their respective governments have issued over the entire period. Their *net* debt – what matters – is almost unchanged. So it makes no sense to talk about a government debt crisis in the UK and US as a consequence of the financial crisis (Lonergan 2012).

All of this follows from the definition of money. Due to an anachronistic accounting convention, money is treated as a liability, so the decline in government debt that occurs due to

QE, is not treated as such. An analytical error provides an intellectual cloak for austerity. It simply makes no sense to engage in QE and simultaneously worry about government borrowing.

Accountants may feel discomfort, and economists confused, but markets understand this: The governments that have engaged in QE have seen their costs of borrowing collapse despite, in many cases, continuing to run "huge" budget deficits. Japan is the most extreme example. Japan was running the largest budget deficit of the major economies prior to the financial crisis. Its recession was then compounded by the Fukushima nuclear disaster, which resulted in a further increase in government borrowing. Have markets questioned its solvency? Far from it. After engaging in QE, Japan's government bond yields fell below 1 per cent, and are among the lowest of any country in history. The same is true for all countries that embarked on QE. This is inconsistent with the belief that they have "borrowed too much".

A note to economists

If you are already convinced by these points, which follow as a matter of logic and are not contentious empirical claims, feel free to move on to the Introduction. If you are a trained economist, and refuse to accept the existence of this free lunch, read on.

I first made similar points to these on the Economists' Forum of the *Financial Times*, in an article titled "Governments Can Borrow Without Increasing Their Debt" (Lonergan 2012). The comments responding to this article were overwhelmingly from economists refusing to accept that money is not a liability of government (the renowned economist Willem Buiter is an exception; Buiter 2004).

Much of the confusion arises over poor definition. A debt is an obligation to make future payments. A liability is also an obligation to make payments, but it includes contingent payments, that is, payments in specific circumstances, such as insurance claims. Money falls into neither category: An issuer of money simply does not have an obligation to make future payments.

Three other common responses are made to my claim that money is not a liability of government: inflation, reversibility and interest on reserves. What if the money created by the central bank creates inflation? This is an important question but, whatever the answer, it is not clear that this alters the issue of whether or not money created by governments should be treated as a debt. It is, of course, conceivable that a government could purchase its debt with newly created money and create lots of inflation. This may be a bad policy, but it still reduces the government's debt. In fact, it highlights the difference between money and debt. Either way, this is not an accurate description of QE, in current circumstances. The money is being created by operationally independent central banks subject to specific inflation-targeting mandates. They believe it is helping them to fulfil their mandate, and is therefore beneficial. In Chapter 1, I also criticize the simple causal connection between money and inflation. There are even circumstances where creating money reduces inflation (by preventing a reduction in productive capacity due to a shortage of liquidity), something that has plausibly occurred in the United States. The opposite is true in the Eurozone. It is possible that inflation in the Eurozone would be lower if the central bank had engaged in QE. Think of an economy like Italy, where the productive capacity has been impaired owing to a credit crunch that QE would have avoided.

Mervyn King, the former governor of the Bank of England, has produced a subtler argument for continuing to treat money as a liability. He argues that in the future the Bank of England may have to reverse QE by effectively reissuing the debt (by selling back its holdings) and removing electronic money from the banking system. King is effectively arguing that the government has a contingent liability: if there is too much money in the economy, it might have to issue debt to withdraw reserves. But the opposite is also true, if the amount of money needed to stabilize the economy increases – for example, after a financial crisis – the government has a free lunch; it can reduce debt by creating reserves. The latter looks like a more accurate description of current conditions. After a financial crisis it is highly likely that the private sector wants to hold higher levels of cash balances, without increasing spending. Moreover, the regulatory environment requires banks to hold more money relative to deposits. These preferences are likely to be enduring. In summary, the government may have a contingent liability associated with the reversal of QE, but there is no reason to believe it is one-for-one with the amount of debt that has been purchased; it is likely to be a great deal smaller because a significant amount of the increase in reserves is permanent.

A more technical and intuitively appealing argument as to why money should be considered a liability of government concerns the payment of interest on reserves. As mentioned above, "reserves" are electronic money held by the banks with the central bank. Many central banks now pay interest on these holdings. This certainly makes reserves look a lot more like a liability or a debt. Most debts require the payment of interest (and the repayment of principal). But the important word is "require". There is no obligation on the government to pay interest on reserves; after all, we don't receive interest

payments on notes and coins. Indeed, for most of its history the US Federal Reserve did not pay interest on reserves. The only reason that central banks do so now is because they think it may influence market interest rates. It is a policy tool that suits them currently and not an obligation. It is more accurate to view interest paid on reserves as a transfer to the banking system. The level of reserves is determined by the central bank and, if it pays zero interest, there is nothing the banks can do about it.

Let me summarize with some shorthand using standard economic theory. I am merely arguing that when there is an increase in the demand for money, the government, as the monopoly creator of money, can reduce its debt without increasing the rate of inflation or altering the level of interest rates. If the increase in the demand for money is enduring, this reduction in debt can persist without harmful effects on the economy. These effects are highly likely in the wake of a financial crisis. It follows that QE has almost certainly caused a significant reduction in the net debt of government and, while it continues, there is no plausible fiscal constraint.

In conclusion, arguing for austerity while simultaneously engaging in QE is inconsistent. This is the logical conclusion of a clear definition of money.