Reflections on monetary policy – then and now

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1. Banks short of money

A bank making a loan without attracting a deposit experiences a fall in its balance at the Bank of England (BofE). Another bank will have gained the deposit created by the loan and its balance with the BofE will have risen. In normal circumstances the first bank will obtain the finance it needs by borrowing from the second bank in the inter-bank market.

The banking system as a whole will be short of funds if the total of their balances with the BofE is less than desired. The BofE normally responds to a shortage by purchasing Treasury bills from banks or conducting sale and repurchase agreements (REPOs) as part of its routine money-market operations. (In the opposite case the BofE mops up a surplus by selling Treasury bills, etc.) The BofE normally supplies whatever quantity of reserves banks want subject only to it being at a price, that is, a rate of interest, of the BofE's own choosing. The system as a whole is, accordingly, never short of reserves.

An individual bank can, however, be short of funds if it cannot borrow in the inter-bank market or if it does not have sufficient Treasury bills or assets eligible for REPO to obtain assistance directly from the BofE.

During the current crisis the inter-bank market has not been functioning properly. A bank short of funds has had, accordingly, to rely on obtaining assistance directly from the BofE. The difficulty was the banks as a whole had few holdings of Treasury bills or gilt-edged stock eligible for REPO. This was because far more gilt-edged stock had been sold to non-banks and foreigners (by the Debt Management Office {DMO}) than were needed to cover the public sector cash requirement, leading to the government repaying previous borrowing from banks. Indeed, when the crisis broke in mid-2007 the banks held *minus* £13bn gilts, that is, they had borrowed £13bn stock to conduct REPOs with the BofE. Although the BofE did subsequently supply more reserves than banks as a whole wanted, individual banks ran out of funds. The BofE can be severely reprimanded because it took no less than five months to extend the range of assets eligible for REPO. Even then, the BofE required substantial margin. Some banks did not have sufficient capital to put up the margin. For them, a reserve crisis had become a capital crisis.[2]

[1] The author would like to thank Jamie Dannhauser, Senior Economist, Lombard Street Research, for help in preparing this paper; any errors, of course, remain the author's.
[2] The application of IFRS accounting rules from early 2007 is central to explaining this phenomenon.

Later on, the government provided substantial capital but it did so on such onerous terms that banks had a strong incentive to reduce the size of their balance sheets, and therefore their need for capital, to escape from the government's clutches as soon as possible. Many banks were reluctant to make new loans and curtailed old loans by reducing credit lines when they came up for renewal. Matters were made worse by increased mandatory capital requirements under the Basel II rules and the Financial Services Authority (FSA) insisting on marking to market at a time when forced selling meant that the price of assets could be below fair value.

All told the BofE, DMO and FSA can all be criticised.

2. The Debt Management Office

Prior to 1998 the BofE was responsible for debt management. Before 1971 it had three aims when managing debt, namely:

● Maximising investors' desire to hold gilt-edged stock in the long run.

● Assisting the aims of monetary policy.

● Minimising the cost of servicing the national debt.

In practice the first took priority and the tactic employed was to preserve an orderly market, it being thought that investors would be encouraged to buy gilt-edged stock if they were confident that they would always be able to sell in quantity close to prevailing prices.

The regime altered in 1971 (when 'Competition and Credit Control' was introduced). One of the changes announced was that the BofE would no longer be prepared to respond to requests to buy gilt-edged stock outright (although it reserved the right to do so solely at its discretion and initiative). This suggested that the first of the above aims of debt management had been scrapped but before long it appeared to brokers and investment managers close to the market that little had changed. It was not until 2006 that an explanation was forthcoming. Tony Coleby, Deputy Chief Cashier of the BofE with responsibility for monetary policy from October 1973 to May 1977, disclosed in a submission to a Witness Seminar the existence of a secret 'safety net' to protect the gilt-edged jobbers under which the BofE 'stood ready each day to buy limited quantity of stock at set margins significantly below that day's opening level' and the stock bought was subsequently sold to test the tone of the market when it subsequently rose.[3] In the words of one senior participant at the seminar,

[3] Lombard Street Research/Centre for Contemporary British History Witness Seminar, The Old Gilt-edged Market, 22nd March 2006.

> ‘It was clear to us all that the view the attendees had of the gilt-edged market was at complete variance to that of the authorities; and this was exemplified by Jeremy Wormell's capitulation at the end! After two books on the market, he was gob-smacked (and that is the right word!) at discovering at last what the authorities were trying to do.[4] And that was totally at variance with what we had all expected them to be doing.’

Sale of gilt-edged stock to the non-bank private sector reduces the money supply. After monetary targets were announced in 1976, such sales became one of the ways in which the authorities tried to hit the published targets. Assisting the aims of monetary policy had become the first aim of debt management. This continued, especially in the early 1980s when over-funding occurred when Nigel Lawson was Chancellor of the Exchequer. It ceased to be an aim when Lawson abandoned monetary targets in 1985. Tony Coleby certainly approved as indicated by his observation, ‘Government debt management then became a simple matter of organising the Government’s finances, and that is what it should be’.

In 1998 responsibility for managing the gilt-edged market was taken away from the BofE and passed to the DMO. The *1999-2000 Debt Management Report* stated that the formation of a Debt Management Office distinct from both the Treasury and the Bank of England ‘will complete the separation of debt and cash management from monetary policy operations’. There is however confusion. The aim of supporting monetary policy is not included in the aims and objectives listed in the DMO’s latest *Framework Document* but, since the 2003-04 edition, its *Annual Review* has stated,

> ‘The Government’s debt management objective, as implemented by the DMO, is: to minimise over the longer term, the cost of meeting the Government’s financing needs, taking into account risk, **whilst ensuring that debt management policy is consistent with the aims of monetary polic**y’. [emphasis added]

In the second half of 2008 DMO sales of gilts were such that bank lending to the public sector fell by over £14bn. DMO continued to hinder monetary policy. What confusion!

3. The Financial Services Authority

It cannot be stressed too strongly that prudential supervision of individual banks (micro supervision) is very different from supervision of the banks as a whole (macro supervision). This is illustrated clearly by the situation immediately before the current crisis broke in mid-2007. Banking profits were excellent and asset prices had increased so that the value of collateral had risen well above the value of loans being secured. Individual banks appeared to be very healthy whereas the banking system as a whole was on the brink of disaster. Macro supervision had gone by default.

The requirements of macro and micro supervision often clash. In a recession a micro supervisor wants banks to have more capital. Further, it may insist on banks marking-to-market, that is, valuing assets at current market prices. This is particularly dangerous when

[4] The *Gilt-edged Market*, Jeremy Wormell, Allen & Unwin, 1985.

there are forced sellers. Forced selling perverts the law of supply and demand, as a fall in price leads to more selling rather than less. There is nothing like forced selling to destroy market confidence. Prices fall below fair value. The result is that healthy businesses can go bankrupt. This includes banks. A micro supervisor like the FSA can do exactly the opposite to what is wanted to restore the system as a whole to health. In short the FSA can be, and has been, a menace.

4. The Bank of England

It is tempting to argue that the BofE ceased to exist as a central bank in 1998 after it was split into three and became merely the Monetary Policy Committee (MPC) with a mandate to set interest rates to control inflation. Indeed, the person chosen to succeed Lord George as Governor was an academic economist apparently highly qualified to set interest rates but without any first-hand practical experience in banking or markets, which was logical given the MPC's mandate. He in turn chose a Deputy Governor with similar qualifications - his first preference wasn't someone who was strong in areas in which he was weak - which was consistent with the BofE no longer having responsibility in those areas. But some of the central bank's core functions had gone by default. The person to blame was the Chancellor of the Exchequer at the time of the split in 1998, who was Gordon Brown.

5. The Monetary Policy Committee

The MPC consists mainly of academics. Two theories currently dominate academic thinking, namely, Modern Portfolio Theory (MPT) and the Efficient Market Hypothesis (EMH). Unfortunately these theories provide a woefully inadequate explanation of the behaviour of financial markets in the past. A much fuller explanation is obtained if the two theories are complemented by liquidity theory. Unfortunately the MPC disregards the Liquidity Theory of Asset Prices (LTAP).

Here the author must disclose a vested interest and express frustration. Twenty years ago he left the sharp end of the City, having been widely acknowledged as the guru of the gilt-edged market, to join City University Business School (now Cass Business School) to pass on to others what he had learnt in markets that was contrary to conventional academic theory. He is by no means alone at being critical of academic thinking. The following expresses the views of senior fund mangers in Edinburgh:

> 'For at least the last decade, there has been a growing sense of frustration among market professionals with the attempts by academics to account for the behaviour of financial markets. Practitioners do not dispute the value of academic analysis, but assert that academic theories do not adequately explain the behaviour of financial markets. The result is that many very experienced practical people have become highly critical of traditional teaching in universities.'

In 2002 the Trustees of the Stewart Ivory Foundation decided to sponsor a foundation course in investment. Liquidity was identified as one of the crucial omissions and the author was invited to cover this subject. A book *The Liquidity Theory of Asset Prices* followed, which was summarised in *Issues in Monetary Policy*.[5]

Very briefly, the amount of money that individuals and firms hold is often different from their intended holding. Some will be taking action to increase their holding whereas others will be reducing theirs. In the economy as a whole one or the other can be dominant for many months. *The crucial point is that the supply of money in the economy as a whole is rarely equal to the demand for money.* If there is a surplus, some of it will be spent on goods and services and some will be spent on existing assets. If there is a deficit, some expenditure will be curtailed and some assets are likely to be sold. Consequences for the economy and for asset prices follow.

The current recession is a monetary phenomenon. The story starts with an explosion of bank lending. The lending itself was *not* the key feature. The key feature was the *money* being created by the lending. The lending is one-off. The money stays in the system because money is quite like the hot potato of the children's game – one individual can pass it to another but the group as a whole cannot get rid of it. Put another way, a loan typically stays inert on the bank's books for months or even years. By contrast, the borrower can write cheques against the deposit, moving the money into someone else's deposit. Whereas the loan is only one transaction, the extra deposit is money and can result in endless rounds of transactions.

Much of the lending was to purchase assets, the prices of which rose. The seller of the assets received the bank deposit. Asset prices rose further when the money was reinvested, and so on. The result was asset-price inflation, booming bank profits and the perception of high-levels of bank capital relative to assets.

Buoyant bank lending continued. The continuing effects of the money created by the lending compounded. The result was a financial bubble, with all the excess behaviour that always occurs when a bubble is building up. The only thing unusual this time was the degree of the excess, for example, the amount of leverage. The result was a house of cards waiting to collapse.

When the bubble burst the whole process went into reverse. The downswing started off symmetrical with the upswing. It was again a monetary phenomenon. Matters became much worse when the value of collateral in general fell below the level of the loans being secured. Forced selling occurred. Market confidence was then shattered because the law of supply and demand had reversed. Falling prices forced more people to sell rather than

[5] *The Liquidity Theory of Asset Prices*, Gordon Pepper with Michael J. Oliver, Wiley, 2006; *Issues in Monetary Policy*, ed. Kent Matthews and Philip Booth, ch. 10, Wiley, 2006. At the time of writing the course has been given about twenty times, in Edinburgh, London, on the Continent and in New York and Singapore, to great acclaim from practitioners but to almost complete lack of interest by academics, including members of the MPC.

discouraging sellers. Forced selling is also a monetary phenomenon; by definition people are selling to raise cash. Monetary phenomena need monetary cures.

It was and remains extremely worrying that there was no mention of money's role in the eight speeches by members of the Monetary Policy Committee during the first few months of 2008. It was frightening that there was no mention of money in the Bank of England's October 2008 *Financial Stability Report*. Put simply, it means that the authorities did not understand what was happening recently and there could be no confidence that they would adopt the right measures to cure debt deflation.

6. How to cure the current problem of debt-deflation

Monetary policy has various weapons:

● Reducing interest rates

● Boosting banks' capital and reserves

● Boosting the money supply

Interest rates

When interest rates are already low further reductions are ineffective. In any case rates cannot be reduced below zero, which can be high in real terms if prices are falling (that is, if inflation is negative).

Banks' reserves

It is wholly within the power of the BofE to boost bank reserves. All it has to do is to add to its assets, for example, purchase Treasury bills. This too can be a weak weapon in a deep recession. Banks may not make use of the increase in reserves. You can lead a horse to water but you cannot make it drink. Adequate bank capital and reserves are necessary conditions to cure debt-deflation but not sufficient.

The authorities appear at present to think that ensuring that banks have sufficient capital and reserves and guaranteeing loans will stop bank lending from subsiding. The problem is however not only that banks are reluctant to lend, that is, a problem with the supply of loans; the demand for loans is also likely to fall. People and businesses borrow from their bank either because they want to (voluntary borrowing) or because they need to (involuntary borrowing). At the start of a recession involuntary borrowing rises because income, cash flow and profits are squeezed. As the recession develops the usual pattern is a fall in bank lending both because involuntary borrowing subsides and because voluntary borrowing declines. In the current recession voluntary borrowing is particularly likely to fall because people have witnessed the pain from getting too deeply into debt.

The money supply

Milton Friedman and Anna Schwartz's classic book *A Monetary History of the United States* argued that the Fed's mistake in the early 1930s was to focus on bank reserves and not the money supply. Japanese experience in the 1990s also confirmed that direct measures to boost bank reserves are ineffective in a deep recession if monetary growth remains inadequate.[6] Boosting monetary growth is crucial. It is wholly within the government's power to ensure that monetary growth is adequate. It merely has to purchase assets from the non-bank private sector. It can buy back previously issued government debt, or not issue new debt to finance the budget deficit. It can also purchase corporate bonds or equities. The government can 'print money' in this way.

Put another way, on the asset side of banks' balance sheets, lending to the private sector is likely to subside, as already argued. This means that, as a matter of mathematics, banks' liabilities will be in danger of falling unless another category of lending becomes buoyant. This is why that it is essential for the government to increase its borrowing from banks.

7. A monetary and fiscal easing: where the cash goes

Fiscal ease

An increase in the budget deficit injects spending power into the economy but the continuing impact depends on how it is financed. Borrowing from the non-bank private sector accommodates an increase in saving, which is a withdrawal of spending power. This method of finance tends to cancel the impact of the fiscal ease. Borrowing from banks, in contrast, leaves the spending power in the system. All told fiscal ease financed by the government borrowing from banks has a much greater impact than fiscal ease financed by borrowing from non-banks.

Direct monetary ease

If the government buys an asset from the non-bank private sector the seller of the asset receives a bank deposit. The seller can do various things with the deposit.

● He or she can buy an asset, in which case the price will tend to rise. Good! The recession will not end until confidence returns. Confidence in financial markets will not end until forced selling, which perverts the law of supply and demand, ceases. This will not happen until asset prices stop falling.

[6] For elaboration see *The Fed Adopts Quantitative Expansion: A Primer on QE*, John Greenwood, Chief Economist, Invesco, December 17th 2008.

● He or she can purchase goods or services, in which case economic activity will be stimulated.

● He or she can repay a bank loan. Good! Over-indebtedness can be reduced without asset prices falling. The government should buy another asset to replace the monetary injection.

● He or she can retain the bank deposit as an investment. It will earn virtually no interest. As soon as confidence returns it will be exchanged for a better investment, helping asset prices to rise.

It may be argued that a targeted measure, such as a government guarantee of bank loans to small companies, gets the money through quickly to where it is most wanted. This type of monetary injection would be helpful but will not provide a sufficient boost to the economy unless monetary growth in the economy as a whole is adequate. If it is not, the recession will deepen and the cash flow of small companies will deteriorate further and the targeted measure will not have been a success.

8. Summary: the current dangers

Fears have, however, been expressed that printing money is inflationary. The answer is that in an atmosphere of financial crisis an economy can be flooded with bank reserves and money without inflation rising because banks do not have the confidence to use reserves and neither companies nor households have the confidence to spend the money. As soon as confidence returns bank reserves and the excess money in the economy should be quietly mopped up to prevent inflation from rising. The BofE's holdings of Treasury bills can be reduced by allowing them to run off when they mature. Assets acquired by the government during the recession can be sold to non-banks. A disadvantage of employing fiscal policy to fight a recession is the lag before it becomes effective. It takes time for capital projects, for example, to be brought forward. The lesson from experience in the 1960s and 1970s is that the lags are such that the boost to activity occurs after the economy has started to recover. Fiscal policy can easily be destabilising rather than stabilising. Direct action to boost the money supply can, in contrast, be deployed very quickly to combat a recession and reversed much more quickly when the economy starts to recover.

Another disadvantage of using fiscal policy is that it can lead in due course to a tremendous burden of debt. The advantage of direct monetary action is that the government's holdings of assets can be sold and the burden of debt reduced when the recession is over and assets are again priced according to fair value.

In short, printing money in the circumstances of a deep recession is safer in the longer term than easing fiscal policy *providing the government and the Bank of England take the appropriate action as soon as the economy starts to recover.*