MONETARY CONTROL IN THE U.K.

A talk by Gordon Pepper on 24th October, 1979 to the Institute of Bankers, City of London Centre

During the last month, there have been three important developments concerning monetary control. Firstly, two and a half weeks ago, Paul Volcker announced changes in the method of monetary control in the U.S. - the Fed is changing from interest rate control to quantitative control of the reserve base of the U.S. banking system. Secondly, last Monday the Financial Times reported that an important debate was under way within the Treasury and the Bank of England about changes in the methods of monetary control in the U.K. The third event was yesterday's abolition of exchange controls - in effect, it opens a euro-currency loop-hole in the corset - the relaxation of exchange controls comes close to making the corset ineffective. As a result, this talk is different from the one I intended a few days ago.

U.K. residents are now allowed to place deposits and borrow in the euro-sterling market. Consider the position of a foreign bank which opened a branch in London only a few years ago. The bank would have been hoping for a reasonable amount of U.K. domestic banking business. Its hopes would have been frustrated by the corset. It may have acquired customers who wanted sterling finance but it would not have been able to bid for the deposits to satisfy these customers without incurring severe penalties under the corset. As from midnight last night, the bank can suggest to its customers that its Paris or Frankfurt branches can supply euro-sterling finance. If the Paris or Frankfurt branch bids for euro-sterling deposits at rates a little higher than the London inter-bank rates, it should attract the necessary deposits to accommodate its new customers. I wonder how many money brokers telephoned their clients today pointing out that money could now be switched from a domestic deposit to a euro-sterling deposit for a gain in interest?
Such transactions in euro-sterling deposits and loans are outside the corset. They also escape the Bank of England's reserve asset regulations. Further, the transactions are not recorded in the domestic banking statistics. The euro-sterling deposit of the U.K. resident is not included in the data for the money supply.

One result of abolishing exchange controls is to make the corset largely ineffective. A few days ago, in our last Monetary Bulletin, we wrote that although there has been a marked deceleration in the underlying growth of sterling M3 since MLR was raised in June, it may not yet have fallen below the 11% upper limit of its current target range. There was certainly insufficient evidence of satisfactory monetary growth for the authorities to reduce MLR. Similarly, the evidence currently before me does not justify the lifting of the corset. The authorities, however, have evidence which has yet to be published.

In effect, the authorities have come close to scrapping the existing system of monetary control without announcing what will be put in its place. At the moment, there is something of a void.

My own forecast is that monetary growth will continue to decelerate. The corset may already have done its job (such as it was - which is debatable). If I am right, the absence during the next few months of an efficient system of monetary control will not matter very much. If monetary growth has already turned downwards, tight constraints will not be needed. But forecasts can be wrong. An efficient mechanism might be needed during the next few months. Although I welcome the abolition of exchange controls in its own right, the authorities are taking considerable risks with monetary control.

If monetary growth does rebound upwards, the euro-sterling loop-hole will distort the published statistics. There are already various other loop-holes, such as acceptance credits held outside the banking sector, but these, in the main, can be quantified. The disquieting thing about a euro-sterling loop-hole is that it cannot be quantified. In my opinion it would be best for the Bank to announce that the corset has been lifted. If it does so, we would at least be able to know what was happening if monetary growth again became excessive.
When I was planning this talk before the announcement about exchange controls, I intended to compare the present situation with that in 1970/71 after the last Conservative Government was elected to power. The election was in June 1970. The consultative document "Competition and Credit Control" was published in May 1971. The changes were put into effect in September 1971, i.e. fifteen months after the election. I was going to say that I thought the timing might be roughly similar this time. I am now wondering. The present void needs filling more quickly.

I had planned to say that the monetary system would be changed, if only for one reason. In 1970, both the Bank of England and the Treasury wanted change because the previous system of monetary control had resulted in intolerable distortions to the financial system. Non-clearing banks had gained at the expense of clearing banks, and deposit-taking-institutions just outside the banking sector (near-banks) had gained at the expense of banks. When distortions to the financial system reach a certain stage, a central bank wishes to change its system of monetary control.

The distortions caused by the present corset are large. In the winter and spring of 1978, before the present corset was imposed, various banks indulged in window-dressing transactions to increase the base of their interest-bearing eligible liabilities. They did this in spite of the Bank of England warning that they would not obtain a competitive advantage, because the corset would be back-dated. In the event, many bankers believe that the corset was not back-dated sufficiently and that the bankers who window-dressed their balance sheets stole a march. If the present corset is lifted and bankers subsequently think that a new one will be imposed, I hate to think of the size of the pre-emptive transactions which will then occur. Next time everyone will join in. In short, the distortions to the financial system caused by the corset have probably reached the stage at which the Bank of England again wants to change the control mechanism.

There is, however, a far more important and basic reason for wanting to change the system of monetary control. The present mechanism is insufficiently powerful to prevent excessive monetary growth. Excessive monetary growth can come from two sources. Firstly, the government can print money and, secondly, excessive private sector credit can be created. I will deal with each of these in turn.
In medieval times the most common form of money was coinage, e.g. gold sovereigns. If a medieval king wanted to finance a war, he could do so by debasing the coinage, i.e. by reducing the gold content in sovereigns. Later, the most popular form of money was paper money, e.g. pound notes. Governments could then literally print money, as happened in Weimar Germany. Nowadays the most popular form of money is bank deposits. Over 80% of sterling M3 consists of bank deposits. The modern way of printing money is government borrowing from the banking system.

Exactly what happens is this. Supposing that the government makes a payment to someone by way of cheque. When the cheque is cleared, the person concerned will be credited with an additional deposit at his bank and the balance which his bank keeps with the Bank of England will rise by the same amount. Because a balance with the Bank of England does not earn interest, the bank will probably withdraw the money from the Bank of England and place it on call with a discount house. The discount house will then have surplus funds. The Bank of England will absorb these surplus funds by selling Treasury bills to the discount market as part of its day to day operations in the money market. The result will be that the government will have borrowed from the banking system, in this example from a discount house by selling Treasury bills, and the total of bank deposits will have increased by the rise in the person's deposit with his bank, i.e. the money supply will have grown.

The above process is automatic. Under the U.K's present system of monetary control, if the government does not manage to raise all the finance that it needs from the general public (in the gilt-edged market for instance) the residual comes automatically from the banking sector.

There are various possible systems for financing government deficits. Extreme monetarists advocate a system in which it is impossible for a government to print money excessively. Economists who are not quite so extreme argue that, if a government prints money excessively, it should announce what it is doing and publicly justify it. More permissive economists argue that if a government prints money it should at least take a conscious decision to do so. The most permissive case is a monetary system in which the government prints money automatically without having to take a conscious decision. The last is the existing system in the U.K.
The second way in which the money supply can grow excessively is through private sector credit creation. If someone with an overdraft makes a payment by cheque, his overdraft rises and the recipient's bank deposit increases. The money supply rises with the increase in the bank deposit.

The growth of bank lending between last December and last June was an example of what can happen under the U.K.'s present system of monetary control. The background last December was that during the previous sixteen months the growth of sterling M3 had averaged more than 14% per annum, which was above the 12% upper limit of the target range. Between mid-December and mid-June, bank lending suddenly grew at a 27% annual rate. The corset had been imposed in June 1978, i.e. it had been in place for six months before bank lending became buoyant. It was exactly the sort of situation that the corset was meant to control. It did not. The upshot was that the excessive monetary growth continued until last June. The fact of the matter is that under the present system of monetary control the published growth of sterling M3 between August 1977 and June 1979 was 14% per annum but, allowing for distortions, it was about 15½% per annum. It was well in excess of the upper limit of the target range.

From my description of the present system, you may wonder why monetary growth has not been even more excessive. What happens is this.

This brings me to the design of the new monetary mechanism. I have already said that the commercial banks first collect the monetary data, which are reported to the Bank of England which processes and aggregates them. At this stage, the Bank becomes aware of any problem of excessive monetary growth. The authorities then have to decide on appropriate action, and the decision-making process may take a little while. Further, action to control monetary growth is unpopular, because it entails raising interest rates, and the politicians may want to wait for further data, to make sure that the unpopular action is really necessary. The result may be a problem of quite considerable proportion before action is taken.

I now come to a crucial point. The Prime Minister, the Chancellor and the Governor may all be determined to curb the excessive monetary growth but the authorities simply do not know what rise in interest rates is necessary. The authorities
may consult the computer for a theoretical answer, but little confidence can be placed on the result. In the U.S. the authorities decide on a hike in interest rates, followed by a pause for a month or so to see the effect. If excessive monetary growth remains, interest rates are given another hike, and so on.

The trouble with this approach has been illustrated all too clearly in the U.S. Inflation is a malignant disease. The financial system can get further and further out of equilibrium. The rise in interest rates can get further and further behind what is needed to restore equilibrium.

There is considerable evidence, for example in a speech by Lawrence Roos, President of the Federal Reserve Bank of St. Louis, at a recent seminar at the City University, that central banks rarely alter interest rates sufficiently quickly. When monetary growth is excessive, they do not raise interest rates fast enough. When monetary growth is inadequate they do not lower interest rates fast enough. It is evident that there is a competitive advantage over Member Banks. They were quick off the mark when interest rates increased. Congress, citing the higher rate of interest, might suggest that its customer should purchase one of its own holdings of U.S. Treasury bills at a sale and repurchase. Since purchases at the primary market are of a near-term nature, the Fed imposed on Member Banks the obligation to buy and sell at the rate determined for the Treasury bill auction.

To stop this from happening, monetarists argue for a system of monetary control which produces a market clearing rate of interest. The market, itself, should establish the necessary change in interest rates.

This brings me to the design of the new monetary mechanism. I have already said that the corset will be scrapped. It is also clear that the definition of reserve assets should be changed.

Under the new definition, the total pool of reserve assets should be under the complete control of the authorities. This is in contrast to the present situation, where banks can increase the pool of reserve assets by bidding for Treasury bills held by the non-bank private sector. They can also attract money previously deposited with local authorities. Local authorities then have to borrow from the Public Works Loans Board and the Bank issues Treasury bills to banks to finance the PWLB. Under the new definition of reserve assets, banks, either individually or together, would no longer be able to enlarge the pool of reserve assets.
I should warn that, if the authorities announce a new mechanism of control under which they cannot control the reserve base of the banking system when things are going badly wrong, the reaction of the foreign exchange and gilt-edged markets will be hostile, and inflationary expectations will be affected adversely.

There are various possible monetary systems under which the authorities can control the reserve base of the banking system. Much of the detailed argument can be avoided if the following principle is accepted. The new control mechanism must not penalise a bank relative to a near-bank or an off-shore bank.

Current experience in the U.S. is an awful warning of the mess which can occur if the domestic banking system is penalised. Member Banks of the Federal Reserve System are required to place reserves with Federal Reserve Banks on which no interest is paid. This lack of interest becomes an increasing penalty as interest rates rise. When interest rates rose in 1974/75, non-Member Banks and near-banks realised that they had a competitive advantage over Member Banks. They were quick off the mark when interest rates rose this time. Member Banks have had to defend themselves. Suppose for example that a customer asked a Member Bank for a C.D. The Member Bank, knowing that a non-Member Bank could issue a C.D. bearing a higher rate of interest, might suggest that its customer should purchase one of its own holdings of U.S. Treasury bills on a sale and repurchase basis, the transaction circumventing the Fed’s reserve requirements. In this way the Member Bank can remain competitive. There are many other examples of money substitutes - ATS and NOW accounts, money market funds and euro-dollars - being created because of the excessive penalty that the Fed imposes on Member Banks. The lesson is very clear. The new control mechanism for the U.K. must not penalise a bank compared with a near-bank or offshore bank. This lesson is doubly important now that exchange controls have been abolished.

Acceptance of the principle that the control mechanism must not penalise a bank compared with a near-bank or an off-shore bank rules out several monetary systems which have been proposed. For example, it rules out a permanent version of the corset, altered to allow one bank to buy some of another bank’s quota of interest-bearing eligible liabilities. It also rules out the proposal that there should be two types of Treasury bill - Type A which would qualify as a reserve and Type B which would not. The terminology
may vary. For example, Type B bills may be called Treasury deposit receipts. Under such proposals, if there is a reserve squeeze, banks would bid for Type A bills, driving their yield down, and would sell Type B bills, which would drive their yields up. The difference between the yields on the two types of bills would penalise banks. Various similar schemes have been suggested. In each case you should ask yourself whether they penalise banks severely.

The systems which control the reserve base of the banking system without penalising banks are variations of monetary base systems. The concepts of monetary base and of high powered money are not familiar in the U.K. I will try in the simplest possible terms to explain the basic concept. The following represents the balance sheet of a central bank.

### Balance sheet of a central bank

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Assets</th>
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</thead>
<tbody>
<tr>
<td>notes &amp; coin</td>
<td>Treasury bills</td>
</tr>
<tr>
<td>balances from commercial banks</td>
<td>foreign currency</td>
</tr>
</tbody>
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The main liabilities are notes & coins in circulation and balances kept by commercial banks with the central bank. The main assets are Treasury bills and foreign exchange. The above account will not be familiar. In effect, I have merged the accounts of the Banking Department, Issue Department and Exchange Equilibration Account.

Some people define the monetary base as notes & coin plus the balances from the commercial banks, i.e. the total of a central bank's liabilities. Others exclude notes & coin in circulation with the general public; they just include till money (or vault cash, to use the U.S. terminology) and the balances from the commercial banks. Our own proposals which we published last June focussed only on the balances from the commercial banks. We suggested that banks should be required to keep reserves with the Bank of England (the clearers could be allowed to keep them on behalf of non-clearers if the latter so wished, to leave clearing unchanged). We also suggested that the reserve ratio should be chosen so that banks' reserves would be close to the level which they would choose for prudential
reasons. Further, we suggested that interest should be paid on reserves backing interest-bearing deposits. In this way our proposals were designed not to penalise a bank compared with a near-bank or an off-shore bank.

Under the purest form of monetary base, proposed by many academics, the reserve ratio is not specified; each bank is left to decide on the level of reserves which it considers prudent (as in Switzerland). This form of monetary base does not penalise banks compared with near-banks or off-shore banks.

Tonight is not a suitable time to discuss the technical details of monetary bases. The important point is that under these schemes banks’ reserves are liabilities of the Bank of England.

A central bank, like any bank, knows the size of its liabilities and assets continuously. Therefore, a central bank would know daily the size of the monetary base. Further, a central bank can control the size of its liabilities by buying or selling assets, either Treasury bills or foreign exchange. In the U.S., the Fed tends to buy or sell Treasury bills in its domestic money markets. In Switzerland, the National Bank tends to deal in foreign currencies on the foreign exchange markets. In principle, a central bank can control its assets, and therefore its liabilities, on a daily basis.

Suppose that the Bank of England announced that the reserve base of the banking system would rise at a 10% annual rate. Banks would then know that the total assets of the banking system could not grow at a faster rate than 10%. If they started growing faster, and if banks forecast that this would continue, action to constrain the growth of assets would have to be taken. Base rates could be raised to discourage the demand for loans. A start could be made on revising overdraft limits. Alternatively, assets could be sold, for example Treasury bills, gilt-edged stock or commercial bills.

Similarly, discount houses could watch the Bank’s Weekly Return to see if bank reserves were growing faster than 10%. If they were, it would be a warning that the discount market might at some time in the near future be given less assistance by the Bank than it wanted. Under the present system, the Bank gives the discount market
whatever quantity of assistance it wants, choosing only the price (i.e. the rate of interest) and the method of giving assistance. Under a monetary base system, the discount market might ask for £100m., say, and be given only £95m. Discount houses would have to raise the remaining £5m. by selling assets, e.g. Treasury bills.

The well known equation setting out the main factors governing the supply of money is shown below. I have divided the last factor, sales of public sector debt to the non-bank private sector, into three components: firstly, non-marketable government debt, e.g. national savings, on which interest rates cannot be altered quickly for administrative reasons, and other public sector debt. Secondly, sales of marketable long-dated central government debt, e.g. medium and long-dated gilts. Thirdly, sales of marketable short-dated central government debt - this being the important issue.

Factors influencing the money supply

Increase in sterling M3

= (i) public sector borrowing requirement
plus (ii) bank lending in sterling to the private sector
less (iii) external and foreign currency finance raised by the public and banking sectors
less (iv) sales of public sector debt to the non-bank private sector. This debt can be subdivided as follows:

(a) non-marketable central government debt, e.g. national savings, and other public sector debt,
(b) marketable long-dated central government debt, e.g. long-dated gilts
(c) marketable short-dated central government debt, e.g. Treasury bills

At present U.K. money markets are primarily designed to enable the Government to sell short-dated central government debt to the banking sector. They should be widened to enable the Government to sell such debt to non-banks as well as banks. Further, if Treasury bills and under-one-year gilts no longer qualify as reserve assets, the way would be clear for the Bank to issue six and twelve month Treasury bills, as happens in the U.S. The Bank could also issue one and two year gilt-edged stock, instead of buying

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them in as it does at present - again, this happens in the U.S. The discount market would be given the important task of widening money markets to include the non-banking sector. Discount houses have already proved that they can do so, viz the large quantity of bankers acceptances currently held outside the banking sector. About two years ago, when the corset produced the right yield differentials, discount houses showed that they could also sell large quantities of Treasury bills to non-banks.

Why, if it is as good and as simple an idea as I have described, have central banks not adopted monetary base schemes and quantitative control of the reserve base of commercial banks? Their most important objection is the fear that interest rates will not be just volatile but unstable in the short run. As I described earlier, under the present system of monetary control there is a lag of maybe two or three months before a rise in interest rates has a powerful impact on monetary growth. If there is a substantial lag before interest rates work, they might continue to rise during the lag. Further, there might be a perverse effect on the monetary aggregates in the short run. Involuntary loan demand could rise and yield differentials could cause arbitrage transactions which would add to monetary growth, as occurred in 1972/3. If this happens, interest rates could become unstable under a monetary base system of control, i.e. changes could feed on themselves.

The key to preventing interest rates being either unstable or extremely volatile is those sales of short-dated central government marketable debt to non-banks that I mentioned earlier. If they occur, the money supply will react quickly to the system coming under pressure.

Earlier I discussed how banks and the discount market as a group would react to their assets growing faster than the permitted rate. I considered the position from the viewpoint of the banking sector as a whole. But how would an individual bank react?

Suppose that you are a treasurer of a bank which is short of £10m. reserves at the Bank, what would you do? You could do two things - you could either bid for deposits or sell assets. In practice you would do both. Bidding for money would raise interest rates. This is how market clearing rates of interest would rise - how the market itself would
establish the necessary rise in interest rates which I described earlier. And the sales of assets would have a quick effect on the money supply.

Under Competition and Credit Control, banks found that pressure on the system as a whole was relieved if they bid for deposits, because this increased the pool of reserve assets, as explained earlier. Under a monetary base system, pressure on the system as a whole could not be relieved by such action. Bank A could pinch the reserves of Bank B, but the total would not increase. Banks would find that their desired objective would be achieved more often by sales of assets, which would relieve pressure on the system as a whole.

Sales of short-dated central government debt to non-banks would be an important buffer which would be needed to make interest rates stable. But it would not be the only buffer. I do not know one responsible monetarist who advocates very short term control of the money supply. Unless conditions are extreme, fluctuations in the money supply which reverse within about six months have no relevance for the real economy. This cannot be stressed too often. Accordingly, various timing buffers can be built into a monetary base system to guard against instability in the very short run, for example reserves can be based on average weekly data instead of on data at a single point of time. Again, I will not go into detail tonight.

Finally, I come to consultation. Competition and Credit Control in May 1971 was described as a consultative document, but the authorities had already made up their minds about the new design. I am hoping that a genuine consultative document will be published by the authorities within a month or so. There should then be a gap of, say, six months before implementation, whilst the new proposals are running the gauntlet of scrutiny not only by academics but also, and more importantly, by practical bankers. Treasurers, general managers and officials of discount houses should be given every opportunity to criticise the new proposals. Ideally, the authorities' consultative document should contain two or three different proposals. If this happens, I hope that practical bankers will describe how they will react to difficult conditions under each proposal. If they do, there is every chance that a monetary base system can be designed under which interest rates will not be unstable or extremely volatile.
In the U.S. the Fed has introduced quantitative control of the reserve base in the worst possible way - during a crisis when the financial system is badly out of equilibrium and when the new mechanism has not been explained clearly and is not understood by many people in the money market. Further, I am not sure whether the buffers to make interest rates stable have been included in the U.S.

People I talk to in the U.K. want evolution and not revolution. One possibility is that the present 12 1/4% reserve asset ratio will remain, but 6%, say, of these reserves must be placed with the Bank. A two tier system could be introduced under which the authorities could gradually place more and more emphasis on the 6% reserve ratio and less on the 12 1/4% reserve asset ratio. In this way, they might blend the new system with the old.

In finishing, I repeat my plea for a genuine consultative document. Unfortunately, the Bank of England has an instinct for secrecy, especially when something may become operational. I hope that the bankers here tonight will support my plea for full discussion this time before the authorities make up their minds about the general design of the new system of monetary control. In this way we can avoid the pitfalls of Competition and Credit Control.