# 4. Monetary Base Control

First Principles of Central Banking 6/2/81 – 6/3/81 Samo . Which refers

MR MIDDLETON

cc Mr Britton Mr Grice

# MONETARY BASE

You asked what we might give Sam Brittain. In ascending order of helpfulness we could:

- (i) tell him how to get the figures out of the BEQB and Financial Statistics;
- (ii) tell him the Bank are probably going to publish a refined version of this sum in the March BEQB;

Janton

- (iii) show him our own crude back series;
- (iv) show him the charts attached to my paper on Target Aggregates;
- (v) give him Joe's paper. (A revised version of which is coming round today.)

I would certainly do (i) and (iii), probably (iv). On (v) I don't think there is anything very secret - though it contains unpublished work of our own and the Bank's. But it is pretty damning to the idea that Mo is of any real significance. What impression do you want to give?

Re



MR MIDDLETON

CC Mr Monck
Mr Britton
Mrs Lomax
Mr Grice

MONETARY BASE CONTROL

The Financial Secretary was most grateful for sight of Mr Grice's paper attached to your minute of 5 February. He finds the relationship between the base and current price GDP - (e) on page 12 - to be of obvious interest.

SAJL

S A J LOCKE 10 February 1981 MRS LOMAX

cc Mr Burns
Mr Middleton
Mr Unwin
Mr Monck
Mr Turnbull
Mr Shields
Mr Grice

# PUBLICATION OF SERIES FOR MONETARY BASE

Charles Goodhart rang me last week (while you were away) about the proposed publication of a series for the monetary base in the BEQB. He said they expected to include the numbers, with a purely 'statistical' commentary, in the March edition, although he could not at this stage guarantee that the work would be completed in time. He added that the March BEQB would be published <u>after</u> the Budget, probably towards the end of the month.

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A J C BRITTON 17 February 1981

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Mrs Lomax

cc Mr Burns
Mr Britton
Mr Unwin
Mr Monck
Mr Turnbull
Mr Shields

Mr Grice

PUBLICATION OF SERIES FOR MONETARY BASE

Mr Britton's minute of 17 February. We shall of course have to tell Ministers exactly what is proposed for publication. We must also satisfy ourselves that it is correct.

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P E MIDDLETON 18 February 1981

In Middleton

You having a weather with the Bank

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you know how we get on.

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Mr N.J.Monck, HMT From Mr G.M.Gill BANK OF ENGLAND Threadnesdly Street London ECIR 8AH

24 February 1981.

Dear Sir,

on 2 March there is likely to be an exceptionally large shortage in the money markets, largely attributable to the lf-yearly payment of Petroleum Revenue Tax to the Exchequer. The period of shortage should be short-lived and will be followed in the week beginning 9 March by several days when, on present indications, there will be sizeable surpluses. The Bank has decided that, in order to prevent the shortage on 2 March from causing unwanted disturbance to the money markets, it will reduce the reserve asset ratio requirement with effect from 2 March from 10% to 8%. The reduction will be temporary and banks should restore their reserve asset ratios to 10% by 10 March.

Yours faithfully,

G.M.Gill Chief Manager, Banking & Credit Markets.

In Madleton

IR MIDDLETON

cc Principal Private Secretary Sir D Wass

Mr Ryrie

Mr Burns Mr Monck

Mr Britton Mr Turnbull

Mrs Lomax

Mrs Gilmore

Mr Ridley

Mr Cardona

FINANCIAL SECRETARY'S LUNCH WITH MESSEL'S: 27 APRIL

The Financial Secretary has agreed to attend a lunch at Messel's on 27 April, to be hosted by Tim Congdon. I attach a copy of Mr Congdon's letter setting out the details and listing two of the other guests who will be attending.

Also attached is a copy of a paper written by Mr Congdon entitled "First Principles of Central Banking", due to appear in the April issue of The Banker. The Financial Secretary would be grateful for an appraisal of this paper, with special reference to Mr Congdon's attack on MBC. He would like to have this before he departs for the Easter Recess - ie by close on Wednesday 15 April.

SAIL

S A J LOCKE

5 March 1981

OUR RE-

YOUR REF

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2nd March 1981

The Right Hon. Nigel Lawson, MP, PC, H.M. Treasury, Parliament St., London SWIP 3AG

Dear Nigel,

I am delighted that you can come to lunch in Messel's on 27th April. Not only will it be a great pleasure for me to see you again, but we are all looking forward to hearing your views on the present economic situation.

I hope the discussion will not be too specialised, but I would like to have some analysis of the issues raised by monetary base control. Two senior executives of discount houses - Alastair Buchanan, chairman of Allen Harvey & Ross, and Brian Williamson, director of Gerrard & National - will be attending and I hope to have one or two bankers as well.

I have also recently written a paper, with the rather provocative title "The first principles of central banking", which I hope will be of interest. All being well, it should appear in the April issue of <u>The Banker</u>. As you will see, it is very sceptical of the merits of moving towards monetary base control. Indeed, its central theme is that such a move would reverse two centuries of money market evolution.

The lunch will be at 1.00 p.m. for 1.15 p.m. in our office at Winchester House. I am very much looking forward to seeing you and George Cardona.

With best wishes,

Yours sincerely,

Tim Congdon

Enc.

The title of this article is rather presumptuous. Is it really necessary to return to basics almost three hundred years after the founding of the Bank of England? Have not the first principles of central banking become understood and familiar from decades of experience?

Perhaps the most important merit of the monetary base debate is that it has made financial practitioners, including officials at the Bank of England, think hard about what they do and why they do it. The controversy has established a need for a clear restatement of the ground rules of central banking. Unfortunately, several academic contributors to the debate have taken a cavalier attitude towards these ground rules and therefore reached mistaken conclusions about the desirability of certain arrangements which they term "monetary base control". The essence of their proposal is that by manipulating the quantity of cash in the economy (also known as the "monetary base" and "high-powered money"), the Bank of England can control the money supply. This article is intended to expose certain weaknesses in their position, weaknesses which stem from an apparent failure to understand how central banks currently operate.

### Cash and deposits

The first step must be to emphasise the contrast between cash, comprised of notes, coin and bankers' balances at the Bank of England, and bank deposits. These two groups of asset are bracketed together in most conventional definitions of the money supply. But they are very different. Notes and coin are liabilities of publicly-owned institutions (the Bank of England and the Royal Mint); they are legal tender and so must be accepted as payment for goods; and there is no question of their not being worth the stated face value. On the other hand, bank deposits are liabilities of private companies; cheques drawn against such deposits may quite properly be refused as payment; and there is a risk that the depositor may not receive back his money's worth. In practice, cheques are the almost universal payments instrument for large transactions. Their acceptability is made possible by the public's confidence that its deposits will be repaid in cash and so retain their value. Deposits can be repaid as long as banks have sufficient cash to meet withdrawals.

The first task of every central bank is to ensure that confidence is maintained. If there are any doubts about the convertibility of deposits into cash, the central bank must inject cash into the system and let it be known that it will continue to pump in support until the crisis has ended. Indeed, to say that this is the central bank's most vital function does not go far enough. If a central bank failed to perform the role of lender of last resort, other banks would have no demand for its services. Assuming they were free to choose, they would leave their cash reserves at another more trustworthy institution which was prepared to help them in an emergency. (1) It is hardly an exaggeration to say that the provision of cash to the banking system is the central bank's raison d'etre.

Despite this, central banks have not always given assistance in crisis conditions. Whenever they have refused to supply cash or even shown signs of hesitation about doing so, the result has been a financial disaster. The most spectacular was the Great Crash in the USA between 1929 and 1933 when thousands of banks had to close their doors, industrial output collapsed by 47 per cent and unemployment reached 15 million.

An interesting feature of the Great Crash was that the public's distrust of banks became so deep that there was a switch towards payment in cash rather than by cheque, while the banks decided that they should in future keep higher ratios of cash to deposits. In consequence, the monetary base actually rose between 1929 and 1933. Over the same period the money supply fell heavily because of the liquidation and withdrawal of deposits. It would be difficult to imagine a more effective demonstration that the quantity of cash is not the determinant of monetary expansion or general economic conditions. Curiously, Professor Milton Friedman - who, with Mrs. Anna Schwartz, wrote a classic account of the events in chapter 7 of A Monetary History of the United States - is today a protagonist of monetary base control. (2)

#### The central bank attitude

The attitude of most central bankers is sharply at variance with Friedman's. Unlike him, they do not think that the quantity of cash is by itself an important economic variable. Instead they have traditionally emphasised their responsibility for the management of credit. (3) They nevertheless have an irritating tendency not to define precisely what they understand by "credit". The mere mention of the word therefore infuriates academic monetarists who regard it as a characteristic example of central bank obscurantism.

In fact, credit has two connotations. First, there is an intimation that all banking ultimately rests on trust and, more specifically, on the belief that deposits can be repaid with cash. As we have seen, this is a legitimate concern. Secondly, credit is equated with new lending, particularly by the banks, although lending by other financial intermediaries is considered relevant as well. Since new bank credit expands deposits, the main constituent of the money supply, it might seem that the central banker and the academic monetarist are close together. But this is not The academic monetarist seems to consider that deposits are determined mechanistically as a multiple of banks' cash holdings and that nothing further needs to be said. He also disdains the analysis of nonbank credit since he doubts the economic significance of the liquid financial assets to which it gives rise. The gap between this position and the "Radcliffe view", expressed in the famous 1959 Royal Commission Report and probably held by many Bank of England officials today, is wide. The Radcliffe view is that measures of all "liquidity" in the economy, and not solely the money supply, convey useful information.

One aspect of credit management is the ready supply of cash to the banking system. As the Bank of England's money market managers have to work with bankers every day, it is not surprising that a cooperative relationship of this kind should develop. But, in the central banker's

view, it is also innocuous. He believes that the important variable to restrict is not the amount of cash held by the banks, but the price and the availability of credit in the economy. In this he follows the tradition of the Banking School in its protracted polemics with the Currency School in the mid-19th century. The monetary base advocates are modern representatives of the Currency School's ideas. (4)

## Flexible lending facilities

If a bank knows that it can always obtain cash from the Bank of England, it can offer flexible lending facilities. The overdraft is the best example. Under an overdraft arrangement a customer can borrow when he, rather than the bank, decides. Suppose that the customer takes advantage of an overdraft and that bank advances rise. The counterpart to the increase in advances is, of course, an increase in deposit liabilities. Against the higher deposits the bank must hold more cash. If the bank could not obtain cash quickly and easily, it could not extend convenient lending facilities. In general, the more readily the Bank of England supplies the commercial banks with cash, the more flexible are the lending terms offered to companies and individuals. The ultimate ideal is reached when the commercial banks accommodate the financial needs of the private sector, while the Bank of England accommodates the cash requirements of the banks.

This may sound simple and straightforward, but the institutional ramifications have in Britain become rather complicated. The problem historically was to decide who was entitled to borrow cash from the Bank of England. At first, the Bank was not limited to a special category of economic agent; it could and did lend to anyone. But in the nineteenth century it was realised that the Bank's privileges - in particular, the legal tender status of its liabilities - gave it an unfair advantage over other banks. It therefore confined itself to lending to other financial institutions.

But this merely renewed the difficulty. Those financial institutions which were entitled to borrow from the Bank were able to offer better lending facilities to non-banks than those that were not. The right to obtain cash from the Bank, by either discounting paper or straight borowing, was valuable. It took many years before it was realised how this right could be restricted, while the benefits to the economy of the lender-of-last-resort service might continue.

The answer was for the Bank to confine its lending to a group of institutions closely connected with the banks, but not themselves responsible for initiating lending to industry and commerce. These institutions evolved in the discount houses of today. The houses take deposits - known as money-at-call - from the banks. When the banks are short of cash, they call back their money and rebuild their position. The houses in turn borrow from or sell assets to the Bank. In other words, the banking system has easy, reliable access to cash and can therefore give flexible lending terms to the general public. But - and this is very important - the discount houses themselves do not take the first steps in any loans to non-banks. They do not compete with the banks for overdraft or other lending business, but only discount bills which already have bank

"names" on them. (An exception is that the houses sometimes promote the issue of trade bills. But, significantly, trade bills are not eligible for rediscount at the Bank.)

It follows that the discount houses are not obsolete relics of favours granted almost a century ago to certain fortunate financial entrepreneurs. They serve a genuine social function. The lender-of-last-resort service, and the flexible bank lending arrangements it makes possible, a public benefit. The intermediation of the houses between the Bank of England and the commercial banks prevents this benefit being appropriated by a limited number of private banking institutions. As any company (including a non-bank) can leave call money with the discount houses, the advantages of the lender-of-last-resort system are widely dispersed. Freedom of entry into the banking industry, and competition within it, are encouraged by their existence.

#### Threat to overdrafts

To the supporters of monetary base control, this institutional arcana is irrelevant detail. Their concern for the precision of money supply management is so single-minded that they have little respect for other attributes of financial efficiency, including the convenience of the practices by which banks serve their customers. They accept that strict control over the monetary base would necessarily curtail the banks' freedom of balance sheet manoeuvre and might perhaps lead to the ending of the overdraft system. (5) In their view, this would be a small price to pay if a well-regulated monetary base was accompanied by a well-regulated money supply.

It is, in fact, very doubtful whether a close connection does exist between the monetary base and the money supply. The historical evidence is that the amount of cash in the economy is determined by previous movements in national income. Far from being the motor force behind money supply changes, it responds passively to economic developments already under way. Such statistical links as there are between the monetary base and the money supply do not imply that the causal relationship is in the direction that the academic monearists require for their policy proposal. In any case, the links are weak and unconvincing. The monetary base advocates are probably chasing a will-o'-the-wisp.

But suppose that monetary base control would promote greater exactitude in the attainment of money supply targets. Would its introduction be socially costless? The answer must be an emphatic "no". The demise of overdraft facilities would have highly undesirable effects.

First, many important economic activities rely on flexible access to bank accommodation. The best examples are financial concerns, like hire purchase companies and stockbrokers, and commodity traders. The changes in the balance sheets of such companies are sizeable, volatile and unpredictable from day to day. If they were not able to borrow, usually on a temporary basis, large amounts from their banks, their business would have to be abridged. Among the social functions of stockbrokers and commodity traders is to allow speculators to take positions in financial and commodity markets, thereby smoothing out price fluctuations. If banks had to withdraw their credit lines, these markets would operate less efficiently.

The relevance of this argument in the British context deserves heavy emphasis. The location of several major service industries, such as insurance, ship-broking and commodity trading, in London may owe much to the quality of the banking facilities available there. If the banks were forced to trim their accommodation because they could not obtain cash from the Bank of England whenever they wanted it, the City would lose competitiveness compared to other international financial and brokerage centres. The interdependent service industries, on which its prosperity is based, might emigrate.

Secondly, the availability of unused overdraft finance enables companies to respond flexibly to unexpected changes in the demand for their products or in their costs. In the same way as idle bank balances, overdrafts provide them with a cushion against shocks. As a result, companies have more time to take redemial action if their plans turn out wrong. For example, they do not need to lay off workers or reduce production so quickly if demand proves weaker than they envisaged. A flexible banking system therefore makes a contribution to macro-economic stability. This function has been most visible in crisis conditions, like the "lifeboat" rescue operation for property companies in 1974 and again in 1980 with the Massey-Ferguson support scheme. But it is always at work inconspicuously. (6)

The British take their overdrafts so much for granted that they fail to appreciate the very genuine benefits they derive. Until now few opinion-formers have made much noise in defence of the overdraft because its continuance is not considered to be really under threat. But monetary base control, by undermining the customary relationship between the Bank of England and the commercial banks, would lead to substantial modification of banks' lending practices. Once the danger was understood, the monetary base enthusiasts might be confronted by strong opposition from both the banks and their customers.

## Monetary control in practice

But, if the Bank of England is always prepared to supply the banks with cash, how can it achieve control over either "credit" or the money supply? It is this question which has perplexed - and still seems to perplex - the academic monetarists.

The key to the answer is that cash, whether in the form of notes and coin or balances at the Bank of England, pays no interest. A natural corollary is that, although banks must keep some cash to meet deposit withdrawals and fulfil their obligations at the daily cheque clearing, they want to hold down their cash holdings. Whereas they earn interest (and therefore profits) on their other assets, they earn none on cash. In their balance sheet management, they are involved in a continuous balan- de grant eing aet between prudence (which demands high cash holdings) and profitability (which demands low). (In practice, banks in Britain know that certain assets, including Treasury bills and eligible commercial bills, can be easily exchanged at the Bank of England for cash. The critical prudential ratio is therefore between holdings of such "primary liquidity" and deposits, not between cash and deposits. Vault cash is regarded as a stock-in-trade rather than a prudential reserve.

complicates the present discussion to elaborate the implications of these arrangements, important though they are, and we shall assume in what follows that cash is what matters.)

Typically, therefore, a bank's actual cash holding is as close to the minimum as is consistent with its safety. If it should lose cash for any reason, it must seek to regain it as soon as possible. One option might be to attract cash from the general public by offering a higher rate on deposits, but it seems that the public is not sufficiently interestrate responsive for this purpose. The alternative is to obtain cash from the central bank. It is, after all, the ultimate source of all high-powered money. In consequence, when the banks are short, they are sooner or later dependent on the Bank of England. The position has been formalised in the requirement that the clearing banks hold  $1\frac{1}{2}$  per cent of their eligible liabilities as balances at the Bank, but assistance from the Old Lady would at some stage be sought even in the absence of a mandatory instruction.

It is from the banks' compulsion to seek assistance that the Bank derives its power. The rate of interest at which the Bank provides cash sets interest rates in all short-term financial markets. Market interest rates could not be above the Bank's because then it would be sensible to borrow from the Bank and nowhere else. They could be beneath the Bank's rate if the banking system was awash with cash, but we have seen that this is unlikely because banks attempt to minimise the amount of cash they hold. Indeed, one of the Bank's prime operational objectives over many decades has been to keep the markets continuously short of cash so that they are always on the brink of having to borrow from it. In that way, Bank rate - or, in recent years, Minimum Lending Rate - became "effective". (7)

"Market-determined interest rates"

Now it should be clear from this account that the notion of "market-determined interest rates" is either a platitude or a confusion. It is a platitude if the Bank of England is itself deemed to be a market participant; it is a confusion if the private sector market participants are thought to have any real autonomy from the Bank.

Although rates in the short-term money markets may fluctuate in a band around MLR, the position of that band is determined by MLR. The ebb and flow of cash in the discount market may result in Treasury bill rate varying from  $15\frac{1}{2}$  to  $17\frac{1}{2}$  per cent when MLR is 17 per cent. But precisely the same ebb and flow of cash would be associated with Treasury bill rate variations between  $11\frac{1}{2}$  and  $13\frac{1}{2}$  per cent if MLR was 13 per cent. The degree of cash tightness in the money markets does not govern the level of interest rates; it only influences movements around a level fixed by MLR. The Bank of England must, whether it likes it or not, set interest rates. In any system where it is prepared to lend cash or rediscount paper at a known and well-publicised rate, that rate is the benchmark for all other short-term interest rates. Even if its rate were not known and well-publicised, its activities would send out vital signals to private sector market participants; the Bank would remain the true determinant of interest rate levels, although in a more uncertain environment.

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Despite this, academic monetarists - and journalists and Treasury officials who have been influenced by their work - have repeatedly called in recent years for interest rates to be governed by "market forces". Thus, Professor Brian Griffiths, in an article in the City University's 1980 Annual Monetary Review, urged that the Bank abandon interest rate management as an essential step in moving towards monetary base control. In his view, "in a system in which the growth of the monetary base is the operational target it would be up to the market, not the Bank, to determine the appropriate level of short-term interest rates." (8) But we have seen that, in normal conditions, the market does not determine market rates. The banking system maximises its profits by holding as little cash as possible. Whenever it is short, the Bank has the whiphand and cannot avoid being the final arbiter.

Circumstances can be envisaged in which the Bank would not exercise its power. It could say that it would not rediscount paper or lend beyond certain specified limits, these limits being related to a monetary base target. As we explained at the beginning of the article, that would create a potentially very dangerous situation and raises the question of what residual lender-of-last-resort function the Bank should retain. Fortunately, Griffiths in his Annual Monetary Review article did give recommendations on this subject. Under his proposal, "banks which are short of cash would still be able to borrow." Indeed, if banks lacked reserves because the Bank had mismanaged the monetary base, "then the Bank should step into the market and buy government debt in sufficient quantity to replenish the banking system." (9)

It is rather difficult to reconcile these remarks with everything else that Griffiths, and other monetary base advocates, have previously written. If the banks can borrow at their discretion, the Bank of England cannot exert precise control over the monetary base. It is perhaps even more surprising that, later in his article, Griffiths presses for the Bank to reduce uncertainty by making it "quite clear in advance to the market the terms on which it would lend as lender-of-last-resort and ... the interest rate bands within which it is prepared to see market rates fluctuate". (10) Griffiths' suggestion is open to the interpretation that the Bank, not the market, should regulate interest rates. There is, to say the least, an apparent problem of inconsistency here.

It is definite that the only way the Bank can shift towards monetary base control is by making the terms of its cash support more vague and ambiguous. If the Government's 24th November statement on monetary policy meant anything substantive (and it probably did not), it meant that. A "quite clear" announcement of the rates at which the Bank will rediscount or lend would merely perpetuate existing practices.

#### The penal rate

The discussion can, however, be taken a little further. Griffiths thinks that the banking system could be deterred from seeking cash if the Bank would give assistance only at a penal rate. Were banks to borrow at a rate above the return on their assets, they would be losing money on that part of their portfolio. They would have an obvious incentive to repay their loans quickly. Any associated expansion of the monetary base

would be temporary and soon reversed. (11) Indeed, Griffiths is at one point even more ambitious. "If the terms on which the banks can borrow from the Bank of England are sufficiently penal, then in the normal course of business, banks will so arrange their cash holdings that they do not need to borrow from the Bank of England." As he correctly observes, "For this to be so, what matters is not the absolute level of the discount rate but the differential between MLR and market rates of interest."

The trouble with this idea is that, although the Bank sets the level of interest rates, the market decides the differential between MLR and other rates. If there is a "quite clear" MLR, discount houses, banks and other operators buy and sell paper between themselves at rates as near to or as far from MLR as they wish. In practice, therefore, MLR is — and always has been — penal. This was explicitly recognised in the pre-1978 MLR formula in which it was fixed  $\frac{1}{2}$  per cent above Treasury bill rate at the weekly tender. If the houses were "in the Bank" for seven days, their profits suffered because the cost of running their Treasury bill portfolio had become too high.

The discovery that a penal Bank rate was the key to disciplining the money markets was made in the nineteenth century. The vital step was Horsley Palmer's evidence to the 1832 parliamentary committee on the Bank of England, in which he argued that Bank rate should be held above market rates except in emergencies. As one historian of the discount houses has noted Palmer enunciated, on all fundamentals, "the classic principle of orthodox central bank credit". (12) It is more than a little strange that Professor Alan Meltzer, in an article also in the City University's 1980 Annual Monetary Review, should judge that today a penalty rate is "one of several institutional reforms that would enable the central bank to improve control of monetary aggregates". This particular "institutional reform" was carried out a hundred and fifty years ago. (13)

#### Conclusion

British central banking evolved in the nineteenth century in response to accidents and mistakes, as the Bank of England and the banks tried to establish arrangements to their mutual advantge. Beneath the surface antagonisms was an underlying theme, that both the Bank and the commercial banks should serve their respective customers as effectively as possible. A system emerged in which the Bank was prepared to provide cash at a known, widely-publicised rate, he banks were thereby enabled to offer flexible lending facilities to industry and the discount houses acted as intermediaries between the two. The high point of this system was in the twenty years before 1914, when the City's international role was consolidated. The period has subsequently become admired as a halcyon age of financial stability. No one at the time would have considered something termed "monetary base control" as essential to the Bank of England's achievement.

Indeed, the process of "technical change" in central banking was the development of arrangements which permitted the banks to economise on their unprofitable cash holdings. (14) The more reluctant and the more unpredictable is the central bank in providing cash assistance, the more cash the commercial banks need to hold themselves and the less efficient they are in meeting the financial needs of the economy as a whole. This

is, although rarely stated with enough vigour, one of the most basic principles of central banking. It is implicit in central bankers' random remarks, so often condemned by academic monetarists as vacuous mumbo-jumbo, on their duty to accommodate the system and preserve stability in the money markets.

Monetary base control is at variance with this principle. In the most idealised form of the proposal, where the Bank of England would not extend any cash assistance whatever once a predetermined monetary base limit had been exceeded, the conflict is patent. But, even in diluted versions involving more uncertainty and higher cost in Bank of England support than at present, there would have to be some curtailment of banking services. The overdraft, perhaps the most remarkable product of the British banking system, would be threatened.

Interestingly, a situation did arise in October 1980 when the banks were short of cash and they could not obtain help from the Bank of The problem stemmed from the interaction of three features of the British financial mechanism - the confinement of lender-of-last-resort facilities to the discount houses; the designation of money-at-call as a reserve asset; and the discount houses' undefined assets multiple. (15) Loan demand was strong, obliging the banks to leave more money-at-call with the houses for reserve asset purposes. But the houses did not want more funds as they were approaching their undefined assets multiple. At the same time the banks were losing cash because of heavy official giltedged sales. The result was that the houses did not need to borrow from the Bank, even though the banking system as a whole was desperately short. A wedge was driven between the discount and inter-bank markets, so that short-term interest rates became market-determined in a brutal sense. Overnight rates soared to 150 per cent. Needless to say, the banks complained loudly. In accordance with its time-honoured willingness to help their business requirements, the Bank adjusted its intervention tactics appropriately. Permanent improvements in the institutional framework are necessary to ensure that in future the discount and interbank markets work together harmoniously. It is, of course, fundamental to the Bank's manipulation of interest rates that its actions in one market should impact on the other.

But the existing monetary control system does not need to be altered significantly. The crux of this system is that interest rates are varied to influence the demand for credit and, hence, the growth of liquid assets, particularly bank deposits. Cash is supplied freely. The main function of the Bank's operations in the discount market is to accomplish its interest rate aims. This is a perfectly viable method of managing credit. It does not differ, in terms of procedure, from that found in the late nineteenth century under the gold standard. The difference in terms of objectives is that today the Bank of England is ruled by a money supply target, whereas eighty years ago it was subservient to an arbitrary gold price of £3 17s.  $10\frac{1}{2}$ d. an ounce.

Of course, the authorities - through setting the wrong interest rates or having too high a budget deficit - will sometimes miss their targets. But it will be much better if they try to make the existing system work, instead of concocting new systems at short and irregular intervals before any of them has been given a chance to settle down. In

particular, they should ignore the blandishments of the monetary base enthusiasts. By obliging the banks to forego access to Bank of England facilities and instead rely on their own cash resources, monetary base control would not only reverse two centuries of money market evolution, but also violate the first principles of central banking.

Tim Congdon

16th February 1981

- (1) The process whereby commercial banks select one central bank as their lender of last resort has parallels with the invisible hand explanation of the state proposed by Nozick in his Anarchy, State and Utopia (Basil Blackwell: Oxford 1974). The gist of this explanation is that individuals choose one dominant protective association to arbitrate disputes and that association is the state. The parallel is drawn in T.G. Congdon 'Is the provision of a sound currency a necessary function of the state?' National Westminster Bank Review, forthcoming 1981.
- (2) The monetary facts relating to the 1929 to 1933 period are on pp. 332-42 of M. Friedman and A.J. Schwartz A Monetary History of the United States 1867-1960 National Bureau of Economic Research: New York 1963.
- (3) This is reflected in the phrase "Competition and Credit Control" used to describe the 1971 changes. The much-quoted remark by the Governor at that time, "What we have in mind is a system under which the allocation of credit is primarily determined by its cost", also symptomised the emphasis on credit, not money. 'Key issues in monetary and credit policy', text of an address by the Governor Bank of England Quarterly Bulletin June 1971.
- (4) The similarities between the 19th century controversy and the modern monetary base debate are discussed in T.G. Congdon 'The monetary base debate: another instalment in the Currency School vs. Banking School controversy' National Westminster Bank Review August 1980, pp. 2-13.
- (5) The adverse impact of monetary base control on the overdraft system was emphasised in M.D.K.W. Foot et al. 'Monetary base control' Bank of England Quarterly Bulletin June 1979, pp. 149-56.
- (6) Sir John Hicks has contrasted, although very briefly, the workings of a "pure auto-economy" (i.e. one in which liquidity is measured solely by the actual possession of liquid assets) and a "pure overdraft economy" (i.e. one where companies have no liquid reserves, but conduct operations on a continuous overdraft from their banks). See pp. 50-57 of J.R. Hicks The Crisis in Keynesian Economics Basil Blackwell: Oxford 1974. Hicks perceptively follows his discussion by the question, "What, however, of the liquidity of the banks themselves?", which immediately raises the issue of the connections between the banks and the central banks.
- (7) The Bank's struggle to make Bank rate effective is the theme of R.S. Sayers Bank of England Operations 1890-1914 King & Son: London 1936.
- (8) B. Griffiths 'Base control: the next steps', pp. 35-45, in Annual Monetary Review City University: London 1980. The quotation is from p. 36.
- (9) Griffiths 'Base control' p. 39.
- (10) Griffiths 'Base control' p. 44.

- (11) This argument is clearly stated on p. 27 of W.T. Newlyn Theory of Money Oxford University Press 1962.
- (12) W.T.C. King History of the London Discount Market Frank Cass: London 1936, p. 79.
- (13) The quotation is from p. 32 of A.H. Meltzer 'Central bank policy: some first principles', pp. 27-33, in the Annual Monetary Review. Meltzer's comment is understandable, however, because the Federal Reserve's discount rate has never been penal. The Federal Reserve achieves its objective (influencing bank reserves) solely by open market operations and has done so ever since its foundation in 1914.
- (14) An indication of how much the financial system has economised on cash is given on p. 42 of R. Cameron 'England 1750-1844', pp. 15-59, in R. Cameron (ed.) Banking in the Early Stages of Industrialisation Oxford University Press 1967. In 1688-89, there was flom. of specie in circulation and f2m. of banknotes and deposits, and f8m. of other means of payment (mostly bills of exchange). In 1913 there was fl45m. of specie, f45m. banknotes and f1,075m. deposits, while the monetary function of other means of payment had been extinguished.

Reductions in the quantitative importance of notes and bank reserves have occurred since 1913. They will be furthered by the introduction of electronic funds transfer and other changes in money transmission technology, which have already played havoc with the relationship between the narrow monetary aggregates and national income in the USA.

(15) This rather peculiar phase in the Bank's money market management was analysed in a note, 'The lender-of-last-resort function: its role in monetary control', accompanying Messel's Weekly Gilt Monitor 24th October 1980.