Should Britain adopt monetary base control?

Tim Congdon
L. Messel & Co

The UK government is about to invite a general debate on alternative ways of controlling the money supply. The author doubts the efficacy of monetary base control, the alternative favoured by some influential critics of present methods

Important debates tend to have long pedigrees. The current controversy over whether Britain should adopt monetary base control as the centrepiece of financial policy is no exception to this rule. It is the contemporary incarnation of the running battle between the Currency and Banking Schools, which continued for most of the nineteenth century and, according to Bagehot, occupied more 'high and massive a brain-power' than any other question 'since the world began'. The demand from monetary base advocates that the Bank of England restrict the growth of its liabilities is identical in spirit and very similar in content to the Currency School's insistence that the Bank of England's fiduciary note issue be limited by parliamentary statute.

Despite the many thousands of words written about this subject and the 'high and massive brain-power' applied to it, the debate is unresolved. As a practical matter, the Bank pays little attention in its conduct of monetary policy to the quantity of cash it has issued. As a theoretical option, however, many academics and some City practitioners think it should.

Previous criticisms

Until now criticism of monetary base control, notably by three Bank of England economists in June 1979, has questioned its feasibility and argued that it could be implemented only at the cost of much increased interest rate volatility*.

The theme of this article is rather different. It starts from the premise that the monetary base, which consists of notes and coin in circulation, and bankers' deposits at the Bank of England, is by itself a rather uninteresting category. The behaviour of most non-bank economic agents is affected in only a slight and trivial way by the number of pound notes they keep about them. The monetary base matters solely because it includes those assets which are used for settlement of inter-bank debts and which consequently serve as the foundation for the multiple expansion of bank credit and deposits.

As bank deposits comprise the greater part of the money supply, the monetary base is relevant for money supply control. Indeed, the pressure for a new system has arisen mainly because of the emphasis now placed on money supply targets in economic policy. The case for monetary base control fails if either it does not ensure control over the money supply or the disadvantages of the alternative control framework are greater than those of present arrangements. As we shall see, monetary base control does not ensure control over the money supply and it has many disadvantages.

It is necessary at the outset to clarify that monetary base control is understood not to involve an officially imposed cash ratio applicable to all banks. Most supporters of monetary base control rightly regard a compulsory ratio as an arbitrary tax on the banks, since no interest is paid on cash. A uniform ratio is also recognised to be discriminatory because different banks have different types of business and so different needs for cash. Instead, banks' freedom to choose their own portfolio structures is taken to be integral to the monetary base proposal†.

*Their article was published in the June 1979 *Bank of England Quarterly Bulletin.*

†Monetary base control proposals have different nuances over the degree of regulation required and on whether a fixed ratio should be imposed. Professor Brian Griffiths, perhaps the strongest advocate of monetary base control in this country, has, however, always favoured no official ratios whatever. His consistency on this point, which can be seen by comparing his 1970 article in *The Banker* on *British banking: a plan for competition* with his most recent article in the City University's *Annual Monetary Review*, is admirable.

TABLE 1 THE MONETARY BASE AND THE MONEY SUPPLY

1. The monetary base (in £ millions)

	Components of the monetary base:						
	Bankers' balances with Bank of England:		Notes and coin in circulation:		Monetary base:		
December	Total	Held by clearing banks	Held by public	Held in bank tills	Total	Held by banks	Held by public
1970	167	—	3,296	903	4,366	1,070	3,296
1971	182	—	3,526	882	4,590	1,064	3,526
1972	224	—	4,090	865	5,179	1,089	4,090
1973	195	—	4,419	1,039	5,653	1,234	4,419
1974	300	—	5,183	1,142	6,625	1,442	5,183
1975	320	308	5,674	1,154	7,184	1,474	5,674
1976	325	314	6,462	1,154	7,941	1,479	6,462
1977	425	419	7,525	1,334	9,284	1,759	7,525
1978	420	409	8,682	1,423	10,525	1,843	8,682

Source: Financial Statistics.

Note: Banks' holdings of coin, notes and Bank of England balances were separately categorised before 1975 and, although figures for bankers' balances are available, they do not refer to the same date. The figures for cash in tills before 1975 are not, therefore, exactly accurate. Interpretation is unlikely to be altered by more precise data.

2. The monetary base and other monetary aggregates

	(1)	(2)	(3)	(4)	(5)	(6)
December	Total monetary base £m	Money supply (sterling M3) £m seasonally adjusted	Ratio of monetary base to money supply %	Monetary base assets held by banks £m	Banks' deposit liabilities £m	Ratio of banks' base to deposits %
1970	4,366	17,320	25·2	1,070	—	—
1971	4,590	19,620	23·4	1,064	22,047	4·8
1972	5,179	24,930	20·8	1,089	30,772	3·5
1973	5,653	31,700	17·8	1,234	41,125	3·0
1974	6,625	34,840	19·0	1,442	43,723	3·3
1975	7,148	37,270	19·2	1,474	43,941	3·4
1976	7,941	40,570	19·6	1,479	48,644	3·0
1977	9,284	44,660	20·8	1,759	56,560	3·1
1978	10,525	51,380	20·5	1,843	62,892	2·9

Source: Financial Statistics; Economic Trends.

Note: The sterling M3 figures are taken from *Economic Trends* and refer to the end of the fourth quarter, not to the banking make-up day. They are not fully comparable with the monetary base data, but interpretation would probably not be changed by more precise data. Banks' deposit liabilities include deposits held by foreign residents, which are not part of the money supply.

3. Growth rates of the monetary base and other aggregates (% increase or decrease)

	Total monetary base	Money supply	Monetary base assets held by banks	Banks' deposits
1971	5·1	13·3	–0·6	—
1972	12·8	27·1	2·3	39·6
1973	9·2	27·2	13·3	33·6
1974	17·2	9·9	16·9	6·3
1975	7·9	7·0	2·2	0·5
1976	11·1	8·9	0·3	10·7
1977	16·9	10·1	18·9	16·3
1978	13·4	15·0	4·8	11·2

Existing arrangements must be described as a further preliminary. The monetary base amounted, on the mid-November 1979 make-up day, to £11,309 millions. Of this notes and coin in circulation accounted for £10,725 millions. Since about six-sevenths of the note and coin issue is held by the general public the banking system's stake in the monetary base is rather small. At the mid-November make-up day it was £2,002 millions, compared to the banks' total sterling liabilities of £90,672 millions, and in general it constitutes under 3½ per cent of deposits.

Clearly, there is a certain irony in referring to cash as the monetary base since it is not used principally by the banks as the foundation of their credit operations, but by the public for ordinary transactions purposes. As we shall see later, this has a major bearing on the link between monetary base and money supply movements.

At present the Bank of England responds automatically when banks want to change their balances with it into notes and banks convert current accounts into cash on demand. Deposits are therefore considered as good as cash, a characteristic of the British banking system which has long been taken for granted, but should not be overlooked. Bankers' balances at the Bank of England fluctuate from day to day, depending on whether cash is being injected or withdrawn from the banking system by flows out of and into the Exchequer, official foreign exchange operations, and so on.

The clearing banks have an obligation to maintain balances at the Bank equivalent to 1½ per cent of eligible liabilities. If they are either much above or beneath this ratio, money is too easy or tight in the discount market and the Bank intervenes, mostly by transactions in treasury bills, to restore equilibrium. In short, the Bank supplies the public and the banks with as much cash as they want.

Imprecision

With these arrangements, there has been no close connection between the monetary base and the money supply. Table 1 shows that in the 1970s the monetary base has often grown slowly, when the money supply has expanded rapidly and vice versa. This is not surprising because, as we have shown, the monetary base is dominated by the note circulation with the public which has accommodated transaction requirements and, more specifically, increasing needs for cash due to inflation. By contrast, the money supply has been regulated with the deliberate objective of preventing inflation.

It is perhaps more worrying for friends of the monetary base that cash held by the banks and their deposit liabilities have had very different growth rates year by year during the 1970s. In qualification, it should be remembered that a once-for-all reduction in the proportion of monetary base assets to deposits occurred after the abolition of the cash ratio in the September 1971 Competition and Credit Control reforms. But even since then the proportion has behaved erratically. It varied from 3·5 per cent in December 1972 to 2·9 per cent in December 1978. If the proportion had been 3·5 per cent in December 1978 deposits—and, hence, the money supply—would have been about 20 per cent higher than they actually were. The pattern in recent years does not suggest that the monetary base is a precision instrument in attaining money supply targets.

Other ramifications

The public's preponderance in monetary base holdings has other ramifications. A simple example will illustrate a general point. If money national income rises by 20 per cent in a year it is likely that the public's demand for cash, closely related to the value of transactions to be carried out, will also rise by 20 per cent. Suppose that the anti-inflationary money supply target is set at 12 per cent and that the Bank steers the monetary base on a 12 per cent growth path to achieve that. Clearly, the public's need for cash—much larger than the banks' in absolute terms and rising in line with inflation—obliterates the banks', which will suffer continual raids on their cash reserves.

There is one way of fending off the attacks, to raise interest rates on deposits substantially and induce the public to part with cash despite the high inflation rate. In practice, different banks will probably have different withdrawals experience so that there could be chaotic, unco-ordinated interest rate movements and a much more unruly banking system than has been usual in Britain.

The difficulty could be overcome if the authorities could predict accurately in advance the public's demand for cash, since it could then estimate what should be left over for the banks to achieve the desired rate of deposit expansion. Unfortunately, predictions are unlikely to be accurate. Because of the large disparity between the banks' and the public's cash holdings, any errors in prediction have an exaggerated impact on the banks' position.

Quite aside from the formidable management issues raised here, there are awkward technical problems because of seasonal variations in the public's demand for cash. These variations are significant, with December typically being 5 per cent higher than August. That may not sound like much, but 5 per cent of the public's holding is equivalent to 30 per cent of the banks'.

It could be argued that extrapolations from the present system are bogus since the banks' demand for cash would be much greater if they could not be confident of its ready availability from the Bank of England. They would deliberately maintain

higher holdings of vault cash to protect themselves against changes in the public's demand for notes and coin. This conjecture is correct, but it raises two issues.

First, the authorities would have to assess, before adopting monetary base control, what the banks' equilibrium demand for cash would be with the new system. Unless monetary policy was to be inappropriately deflationary, that demand would have to be accommodated and only subsequently could targeting the monetary base be pursued. If the government announced forthwith that the monetary base would grow by, say, 10 per cent a year, the banks would scramble for cash and interest rates might be topsy-turvy for several months. The chaotic conditions in American money markets after the Federal Reserve's measures in October last year, ostensibly intended to establish monetary base control, were an instructive warning.

Secondly, as cash pays no interest, banks would suffer reduced profitability. If they are currently earning a competitive rate of return (a reasonable assumption since there are no major entry restrictions into British banking), they will either reduce their services or charge more to their customers. The proposition is hardly surprising. Monetary base control makes banking a more risky business and it is logical that the cost of bearing increased risk should be passed on, at least in part, to the public.

Loose control

But these transitional difficulties could no doubt be tolerated. The question arises whether control over the money supply would, once the new system was fully installed, be more or less tight than now. The impact on the money supply has to be emphasised because the monetary base is itself of minimal economic significance. Proponents of monetary base control often emphasise that the base could be regulated with complete accuracy by the Bank of England because it consists almost entirely of the Bank's own liabilities. They claim, therefore, that their system has the virtue of improved precision. This argument is irrelevant. Exact targeting of the monetary base is unhelpful unless it implies exact targeting of the money supply.

Professor Brian Griffiths, one of the most consistent champions of the base, seems to recognise the point in his article on *The Reform of Monetary Control in the United Kingdom* in the City University's 1979 *Annual Monetary Review*. He says that it would be a desirable change if 'the Bank of England would announce an explicit target for the rate of growth of the money stock and then control the monetary base, by co-ordinating the activities of the Discount Office, government broker and foreign exchange operations to achieve target growth'.

Perhaps the biggest defect of the monetary base in this context is that it neglects the basic dichotomy in British banking between the clearers and non-clearers. Settlement of inter-bank debts between the clearers is by cash; settlement between the non-clearers is by changes in their clearing bank balances. It is for this reason that only the clearing banks include sizeable amounts of cash among their assets. Table 2 illustrates vividly the contrast between their cash holdings and the non-clearers'. (The very high 16·1 per cent cash ratio of the Scottish clearing banks is an artefact caused by the requirement that their own notes be backed pound for pound by Bank of England notes in their tills. Scottish notes are effectively just an advertisement for the banks issuing them and have no wider significance, but they are another irritation for monetary base enthusiasts.)

If, after the adoption of monetary base control, the non-clearers regarded the clearing banks as safe as before they would not need either to hold cash or to increase the ratio of their clearing bank

TABLE 2 BANKS' CASH RATIOS ON MARCH 21 1979

	(1) Notes and coin in tills £m	(2) Balances with Bank of England £m	(3) Total of (1) and (2) £m	(4) Eligible liabilities £m	(5) Ratio of (3) to (4) %
London clearing banks	762	395	1,157	26,098	4·4
Scottish clearing banks	452	1	453	2,819	16·1
Northern Ireland banks	26	—	26	917	2·8
Accepting houses	1	1	2	1,968	0·1
Other British banks	24	13	37	6,804	0·5
American banks	2	1	3	4,040	0·1
Japanese banks	—	—	—	301	—
Other overseas banks	8	1	9	2,888	0·3
Consortium banks	—	—	—	230	—

Source: Bank of England banking statistics.

balances to total liabilities. It is sincerely to be hoped that their faith in the security of the clearing banks would be in no way undermined by the new system. But a necessary corollary is that no constraints whatever, except those of prudential and profitable banking, then exist over the growth of the non-clearers' balance sheets.

It follows that the money supply could expand much more quickly than the monetary base, as the non-clearers took market share away from the clearers. The clearers would be handicapped by the cash needed as ballast to prevent their deposits becoming too top-heavy, while their rivals would be free to expand their lending as quickly as they could pull in deposits. Of course, there is some resemblance between this possible development and the clearers' loss of market share before Competition and Credit Control in 1971. The abolition of the 8 per cent cash ratio, which had been introduced in 1946 and applied solely to the clearers, was one of the main benefits they gained from Competition and Credit Control.

Cash from the public

Although the non-clearers would be outside the control net in a cash-based system, it might be thought that the clearers' deposits would still be restricted. There should at any rate be no slippage in one half of the banking system. However, this is not so. Reference has already been made to the very uneven split of monetary base assets between the public and the banks. The banks' holdings of notes and coin might increase relative to the public's with the proposed new arrangements, but the public's would remain much larger. If the clearing banks saw strong loan demand which they could not satisfy because of inadequate cash holdings and the Bank of England rigidly refused to supply the system with more, the banks' obvious tactics would be to attract cash from the public by raising interest rates on deposits.

Supporters of the monetary base have a ready answer, that there is substantial econometric evidence that the public's demand for cash is very stable and not particularly sensitive to interest rates. But, because of the multipliers involved, it has to be almost totally interest-inelastic to avoid the control problem. For example, assume that the interest-elasticity of the demand for cash is a mere 0·1, that the clearers hold one-third as much cash as the public, and that the clearers can vary their cash ratio by 33 per cent without straining their prudential limits. Then an increase in deposit rates from 10 per cent to 11 per cent (ie by 10 per cent) causes the public to hand over 1 per cent of its cash to the clearers; the clearers' cash holdings have risen by 3 per cent; and their deposits could rise by 4 per cent. In relation to money supply targets of 7 per cent to 11 per cent or less, it is rather alarming if such a large movement

could happen in response to a tiny change in deposit rates.

In short, monetary base control would not improve the authorities' grip on the money supply. On the contrary, money supply growth would frequently deviate from that of the base. When this happened the authorities would almost certainly forget about their monetary base target, take policy decisions in response to money supply movements and revert to the system as it now stands.

But, if monetary base control did survive, it would radically alter the relationship between the Bank of England and the banks. We have shown that at present cash and deposits are more or less on a par in terms of 'money-ness', because of the readiness with which the Bank supplies the system with cash. Every central bank in the world operates broadly in the same way, so that banks hold cash as a stock-in-trade and not as a protection against a loss of confidence.

This is the true purpose of the Bank's lender-of-last-resort function, although it tends to be neglected (except, rather curiously, in elementary textbooks) because a run on the banks is such a remote and hypothetical possibility in contemporary Britain. But rigid adhesion to a monetary base would make it much less remote and hypothetical. As we have seen, once the Bank declined to supply cash as and when needed, the competition for cash would—even in normal circumstances—be between the banks and the public. The banks might not always win. There might then be doubts about their solvency, even if their business had been responsible and well-conducted.

Ancient lessons

If the reader finds this implausible he should look at chapter 7 in Friedman and Schwartz's *A Monetary History of the United States* on 'The Great Contraction'. The authors do not think that much bank lending in the late 1920s was unsound, a notion supported by chronology since there were few bank failures shortly after the stock market crash, but only in 1931 and 1932. By that stage, the fall in prices and output had cut the ability of borrowers to repay bank debt. As genuine alarm about the safety of bank deposits developed, the public hurried to convert deposits into cash and thousands of banks were liquidated.

Friedman and Schwartz argue that it was the pig-headed refusal of the Federal Reserve to flood the banks with cash which was the fundamental cause of the depression. The Federal Reserve's mistake can be partly excused by its anxiety over losing gold, which at the time seemed important, but there is a more general conclusion. Any central bank which worries about the size of its liabilities is potentially a menace to financial stability. In a crisis, a central bank must pump cash into the system without stint. It must concentrate on the price, not the quantity, of cash.

Supporters of the monetary base may protest that there is no conflict between the lender-of-last-resort function and their proposal. They will admit that the Bank of England will occasionally have to inject more cash than the target allows, but they will say that this should be a temporary smoothing operation. What they will not say is how to define 'temporary' or how to specify the circumstances in which additional support should be given. Nearly all of the major financial crises of the last two hundred years have arisen because of squabbles between central bankers, usually engendered by personal rivalry, over precisely these issues.

The Bank of England learnt its lesson in the nineteenth century. The Bank Charter Act of 1844 embodied the Currency School/monetary base principle that the fiduciary issue should be restricted. A mere three years later the Act had to be suspended in order to prevent a financial crisis. The Act was suspended repeatedly in the 1850s and 1860s whenever a crisis threatened and Parliament passed a sequence of Acts gradually increasing the bank's note issuing power. In his classic *Lombard Street,* written in 1866, Bagehot advanced the case for what is now accepted as a cardinal principle of British central banking—that the Bank of England must never refuse to help the banks out of a cash shortage. If it needs to induce caution in an over-extended system, it should instead operate on Bank rate.

The real weakness

With today's system for putting notes and coin into circulation the banks are supplied with cash as a matter of routine and interest rate changes constitute the operational cutting-edge of policy. The Bank of England obeys Bagehot's rule almost by habit. There are good reasons, going back over a hundred years, for this division of labour between its weapons and there are no persuasive arguments for shifting the emphasis towards the monetary base. Apart from the increased risk to the banks of a more arm's length relationship with the Bank, monetary base control would lead to a deterioration of control over the money supply.

The weaknesses of the British system of monetary control are the variability of public sector debt sales and the interest-inelasticity of loan demand, two characteristics which necessitate violent interest rate swings to discipline the money supply. But introducing monetary base control would do nothing to overcome these weaknesses. The current debate about the monetary base is a distraction from more fundamental problems—an excessive budget deficit, the management of interest rates to curb private sector credit, and a lack of diverse external financing options for the corporate sector. The sooner financial analysts concentrate on these problems and reject the monetary base, the better.

LETTERS TO THE EDITOR

Monetary base control

From Mr Geoffrey E. Wood

SIR—In his article on money supply control in *The Banker* of February 1980, Tim Congdon raised a number of questions. The questions are relevant, and important, in discussion of what monetary control technique the United Kingdom should adopt. It is therefore a very great pity that he went on to supply answers; for in almost every case the answers he provided were wrong.

His major criticism was that even precise day-to-day control of the monetary base—notes and coin plus bankers' balances at the Bank of England—would not provide precise day-to-day control of any broader monetary aggregate. But who on earth wants it to? Such rigid control of the broader aggregates is unnecessary for the stability of prices. What matters is that the trend of money growth be under firm control.

Under a monetary base system, the trend of money growth would be controlled by the growth rate of the monetary base and thus, so long as the monetary authorities behaved responsibly, we would have the kind of monetary stability that matters—stability of the trend.

There would of course be fluctuations about that trend—here Tim Congdon is right. But he is wrong in what he considers would be the cause of these fluctuations, and wrong in considering them to be harmful; they are a beneficial feature.

These fluctuations would not be, as Tim Congdon fears, the result of erratic fluctuations in the public's demand for cash. These fluctuations would not affect money growth for the very reason that they are erratic and unpredictable. When the banking system received an unanticipated cash deposit, it would not use that increase in reserves to increase its lending. Rather it would just let its reserve ratio rise. It would do this because it would know that sometime in the future there would be an unpredicted withdrawal of cash; and if the banking system had used that deposit to support additional lending it would then have to resort to the Bank of England for assistance. That assistance would be given, but at a penal rate of interest. The system's imprudence would thus cut sharply into its profits.

Fluctuations in money growth about its trend would arise because the banking system would always hold reserves in excess of the legal minimum ratio (because by the nature of a legal minimum you cannot legally go below it). The size of these reserves would be determined by banking prudence, and would fall as interest rates rose and rise as they fell.

This means that the money stock and interest rates would both rise when the demand for bank lending increased—as at the upper turning point of the business cycle—and drop back again when the demand for bank lending did. Interest rate fluctuations would thus be dampened without any action by central bank, and with no risk of the trend of money growth getting out of control.

The profit-seeking behaviour of banks would therefore dampen interest rate fluctuations and prevent the erratic element in the public's demand for cash from causing the broader monetary aggregates to behave erratically.

Tim Congdon is right that a monetary base system would not give the authorities rigid control of the money stock, but it would give them the kind of control that is actually useful.

As he concedes, most of his other objections to the monetary base are really to temporary problems that would accompany the change. There might indeed be pressure on money markets as the banks 'scrambled' for cash; the pressures do not have to be as severe as they were in the United States in October last year, however, provided that the Bank of England, unlike the Federal Reserve on that occasion, gave an indication of its longer-term intentions. In any event, UK money markets and the markets in government debt have not exactly been characterised by modest and orderly interest rate movements in recent years. The relevant comparison is not with an imaginary ideal world, but with the available alternatives.

Profits squeezed

Charges to bank customers might rise if the banks were to hold, as seems likely, a larger amount of non-interest-bearing reserves than they do at present. These charges would of course not have to rise. If banking became more competitive, what would be squeezed would be the monopoly profits of the banks.

The market share of the clearers might fall; but the behaviour of the clearers' market share is surely an extraordinary consideration to introduce into a discussion of the choice of monetary control technique. The purpose of a monetary control technique is to control the money supply, not to protect the banks' market share.

In summary, Tim Congdon's criticisms of the monetary base as a money supply control technique are either wrong or irrelevant. That said, it is possible to end on a note of agreement, and on a major point. Adoption of

the monetary base approach to money supply control is not a panacea. It can undoubtedly give us better money supply control than we have at present, and less wild swings in interest rates. But a fall in the general level of rates and a recovery in the corporate bond market must await a fall in the rate of inflation and in the inordinate claims of the public sector on the resources of the UK economy.

Yours faithfully,

GEOFFREY E. WOOD
Centre for Banking and International Finance, The City University, London.

LETTERS TO THE EDITOR

Monetary base control

From Mr Tim Congdon

SIR—Implicit in Geoffrey Wood's letter (in *The Banker* of April and May 1980 page 105) about my article on monetary control was an interesting suggestion which, although not properly developed, merits discussion. In essence, it was that the authorities control the growth of the monetary base, presumably over a period of years, in the belief that eventually the money supply would follow a similar course. Substantial fluctuations in money supply growth around the trend, due to change in the banks' demand for cash reserves and in the public's preferences between cash and bank deposits, would be tolerated.

It should perhaps be said that this idea cannot be recognised in previous writings by monetary base control advocates, including those by Geoffrey Wood. Indeed, an article of which Geoffrey Wood was co-author expressed concern about the excessive variability of money supply growth month by month. This article, 'Reforming monetary control in the United Kingdom', appeared in the same publication as his letter.

What is wrong with concentrating on the monetary base and allowing the money supply to deviate, perhaps sharply, from trend? One difficulty is that there may be long-run changes in the relationship between the base and the money supply, due to advances in financial technology or permanent shifts in the public's preferences between cash and deposits. In consequence, the authorities cannot be sure that when the money supply is growing faster (or lower) than the monetary base it will automatically slow down (or accelerate) later. They cannot easily distinguish between a trend development and a departure from the trend.

Faced with this sort of problem, it is sensible for the authorities to focus on the variable which has most behavioural significance to the economy. While the existing structure of bank credit remains intact, the money supply total (notes and coin held by the public and bank deposits) will always have greater economic importance than the monetary base.

But it is perhaps even more fundamental that a central bank's willingness to keep the banking system well-supplied with cash maintains the public's confidence in bank deposits. If the Bank of England rigidly adhered to a monetary base target and, for any reason, the public decided to maintain a higher cash/deposits ratio, the banks would be drained of cash and questions might be raised about their future ability to convert deposits into cash. The result would be a catastrophic financial crisis. With present arrangements this outcome is unthinkable because the note issue responds passively to the public's transactions needs.

Geoffrey Wood claims that erratic variations in the public's demand for cash would not affect monetary growth. A bank would not expand lending against an 'unanticipated' cash deposit. We are assured that instead cash reserves would be increased because the bank 'would know that sometime in the future there would be an unpredicted withdrawal of cash'.

I am not sure that a bank can 'know' something unpredictable, but it should be clear that my true anxieties are not about Geoffrey Wood's command of the English language. They relate instead to the danger that a central bank which adhered to a self-imposed limit on the growth of its own liabilities is potentially a menace to financial stability.

On balance, therefore, it seems better for the Bank of England to control the money supply in both the short and the long run, rather than focusing on the short-run behaviour of the monetary base in the hope that trend money supply growth will be appropriate.

There is no need to comment at length on one or two other remarks in Geoffrey Wood's letter. It is enough to say that at no point in my article did I recommend that the clearers' market share be protected and that I do not consider banks to be earning 'monopoly profits'. I will leave your readers to decide whether they are working in a monopolistic industry.

Yours faithfully,

TIM CONGDON

L. Messel and Co

From Mr Geoffrey E. Wood

SIR—In his response to my letter commenting on his article on monetary base control, Tim Congdon asks an interesting question. How tight should monetary control be? Should the authorities keep money growth on its target path month by month, quarter by quarter, or over what length of time? As Tim Congdon notes, this issue has been touched on by almost every participant in the debate over monetary control, but has in the current discussion been directly addressed by no-one.

The issue is a complex one, requiring analysis in some detail; but it is nonetheless possible to bring out the main lines of argument quite briefly.

The central point is that so long as a fluctuation in money growth is confidently expected to reverse, it will have little effect on any market in the economy. Markets in goods and services will not respond to it, and most of its effect on financial markets will be smoothed out by speculation. An example helps to show this.

A drop in bank lending rates following a surge in the supply of reserve assets to the banking

system will not feed through to long-term interest rates, and will not produce a substantial increase in borrowing, if the drop is expected to reverse. In contrast, if the new monetary conditions are expected to persist, the change will have repercussions throughout the economy.

It is thus very desirable that the monetary authorities adopt a system of monetary control under which everyone in the economy can distinguish clearly between a temporary fluctuation in money growth and a change in the authorities' monetary stance. That is why monetary base control is desirable; a change in the growth rate of the base, and only a change in the growth rate of the base, signals a change in policy stance.

That is why, too, short-run monetary volatility is damaging in the United Kingdom but innocuous in Switzerland. The Swiss authorities have a record of controlling the trend of money growth, but those in the United Kingdom do not—so any fluctuation in the United Kingdom produces fears either of a change in policy or of a lack of will to implement policy.

Tim Congdon is of course right that the relationship between the growth of the base and of the broader aggregates is not immutable; institutions do change. But the historical experience has been that such changes are gradual—evolutions not revolutions. There would be plenty of time for the authorities to respond, and for markets to realise this response was not a change of policy.

Further, these changes would not be frequent. This is quite unlike the present situation, when every month markets may have to decide whether monetary policy has changed or whether the fluctuation in money growth is just the result of an inappropriate tap price and MLR.

As to the importance of a central bank's willingness to keep the banking system 'well supplied with cash' to maintain '...the public's confidence in bank deposits', it should not be forgotten that under a monetary base system the central bank would always be willing to supply the banking system (although not necessarily an individual bank) with cash in a financial crisis. The difference from the present system would be that if this meant growth faster than planned in the monetary base, the cash would be supplied in return for paper discounted at a penal rate.

It is because reserves were supplied without stint, and at non-penal rates, to the banking system that the United Kingdom has now intolerably high inflation. Such procedures, if carried only a little further, do not maintain confidence in bank deposits. They destroy all confidence in the value of money.

Yours faithfully,

GEOFFREY E. WOOD

The City University, London