Monetary Control: Detailed Arrangements Consequent on the Publication of the Green Paper 1980

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debate on the role of MBC as a technique for controlling one or other of the wider monetary aggregates.

31. As a method of influencing monetary conditions, monetary base control works by exploiting the relationship which is assumed to hold between the supply of cash to the banking system and the total volume of bank deposits. Since the monetary base (cash) is equal to some or all of the liabilities of the Central Bank, (see tables I and II) the authorities should both know what it is from day to day, and be able to control its growth with a high degree of accuracy. Since, it is argued, banks need cash (base) in order to create deposits, control over the base gives the authorities a direct and reliable means of controlling monetary growth.

32. Interest rates will be determined by the interaction of supply and demand. Market determined rates will respond speedily to shocks, rather than with a lag once monetary growth has visibly got out of control. Unanticipated changes, such as overshoots in the borrowing requirement, will as a rule be reflected in fluctuations in short rates, rather than unplanned changes in the money supply. This will provide reassurance for market expectations and may actually help to reduce inflation more rapidly. A further advantage over the present system, it is claimed, is that the authorities will be directly influencing the banks' behaviour, rather than attempting, at one remove, to influence their customers. Banks will have to choose how to rearrange their portfolios on profit maximising grounds; and if raising interest rates fails to restrain the demand for credit, they will be compelled to find something else that does produce the desired results.

33. That, in broad terms, is the case for monetary base control. The Green Paper on Monetary Control raised three issues:

(i) can the base be controlled over a useful time horizon without an unacceptable degree of interest rate volatility?

(ii) is there likely to be a stable relationship between cash and deposits in a banking system as sophisticated as the UK's, particularly given the availability of a wide range of other highly liquid money market instruments? Even if one exists, is it sufficiently reliable and well understood to deliver effective monetary control?

(iii) would a mandatory system of MBC (in which any behavioural relationship is overriden by legal cash ratio requirements) run into exactly the same problems of disintermediation experienced with the corset?

34. As well as inviting opinions on the practicability of the various MBC schemes discussed in the Green Paper, opinions were also invited on the desirability of some form of monetary indicator system, which was advanced as a more modest move towards automatic interest rate flexibility. The essence of indicator systems is that they would replace discretion by rules of some sort; interest rate changes on a given scale might, for example, be triggered by deviations in either the growth of £M3 or the monetary base from the target path. The advantage claimed for such a system is that it might produce more timely adjustments in interest rates (though not necessarily more appropriate ones).

(a) Control of the Base

35. The most comprehensive definition of the monetary base includes all the liabilities of the monetary authorities. In the UK, as tables 1 and 2 show, this consists of all notes and coins in circulation plus bankers balances with the Bank of England. Advocates of non-mandatory MBC (or pure base targeting) sometimes envisage controlling this broad measure of the base on the grounds that it is an important determinant of inflation in its own right. Chart 1 shows the composition of the base, under current UK institutional arrangements. Notes and coins held by the non-bank public account for more than 80% of the total, vault cash (or "till Money") held by banks for a further 15%, while bankers balances represent only about 5%. Not surprisingly, since notes and coins are used for transactions and are supplied on demand, there is a fairly close relationship between the base and nominal incomes and prices (see charts 3 and 5), and the growth in the base has been broadly in line with other monetary aggregates (especially M1, one-third of which is notes and coins). The causal significance of these relationships is however more open to question, and still more, whether they would survive an attempt to ration the supply of base.

36. Under a mandatory system, the banks are compelled to hold base assets equal to a certain proportion of their qualifying liabilities. The wider economic significance of the assets making up the base is therefore of relatively little moment; what matters is the supply of base to the banks. Controlling notes and coins held by the non-bank private sector would create unnecessary complications. Whether a narrower definition should include till money as well as bankers balances can be decided on control grounds, and written into the design of the scheme. Recent debate in the UK has tended to assume that in a mandatory system the authorities would only directly seek to control bankers balances.

37. The Bank of England know the total of bankers balances on a day-to-day basis. They can influence the size of these balances by operating on the asset side of the balance sheet shown in table 1. This balance sheet reflects transactions arising from

the normal course of operating Exchequer Accounts (including the Exchange Equalisation Account) whose size is determined by the Central Government Borrowing Requirement and net intervention in the foreign exchange market. Given these transactions, the authorities try to meet a given target for the base by varying their sales of public sector debt (including Treasury bills) to the private sector (including the banks). Yields on public sector debt vary according to the amount sold. The effect of open market operations may sometimes be to leave the banking system short of cash. To the extent that the authorities meet this deficiency by providing lender of last resort facilities, the base will be expanded. Effective control of the base therefore means that the authorities must be able to regulate the amount of base provided in this way. One way to achieve this is through the price mechanism - by only providing last resort facilities on penal terms.

38. The scope for errors in day to day control is considerable Daily fluctuations in Exchequer Accounts can amount to ± £500m. This is enormous in relation to the sort of growth in the base the authorities are likely to be aiming at, even over a period as long as a month; even if bankers balances were as much as 10% of the money stock (as compared with 1% now), an annual target growth of 5% a year might only permit about £20-30m growth in the base each month. These problems would still be present over periods as long as a week, and perhaps even a month, though they would be less acute.

39. Practical versions of MBC therefore need to leave a margin for error in short term control of the base, if unnecessary fluctuations in short term rates are to be avoided. In this context it is interesting that the Swiss, who are publicly committed to a target for the base, only aim to hit it over a period of about six months. The Americans have not published any targets for the base at all -and indeed seem to take decisions about the desirable growth in bank reserves practically on a week by week basis, in the light of short term developments.

(b) Non Mandatory Monetary Base

40. MBC systems are classified as mandatory or non-mandatory according to whether or not banks are bound by legal minimum reserve requirements. In a non-mandatory system the authorities exercise control by exploiting the banks' need for cash, for operating and prudential purposes. The argument is that cash is an essential input into the provision of liquidity services. This is equally true whatever the legal status of the financial intermediary providing these services, and regardless of whether its liabilities are included in the target aggregate. Problems of avoidance and disintermediation simply do not arise. The corollary, however, is that controlling the supply of cash would not affect the supply of assets against which it was not essential to hold cash reserves. The main doubt about non-mandatory MBC, therefore, is whether it would offer a sufficiently powerful lever over monetary conditions in an economy where there are many close substitutes for cash.

41. The Swiss system is run on these lines, without the aid of legally imposed minimum reserve requirements. It is true that in recent years the Swiss have substantially overshot their monetary targets, and that there is growing instability in the cash/deposits relationship. The official response has been to switch to a base target alone. Whatever the problems however the authorities have clearly felt the approach was worth persevering with; the Swiss inflation performance remains enviable. (See Annex 3).

42. Even relative to Switzerland, cash does not play a large part in the UK banking system. While the total liabilities of the Bank of England are equal to roughly one-fifth of total bank deposits, base money held by banks is only equal to about 3% of total deposits, and bankers balances with the Bank of England are very small indeed - less than 1% of total deposits. This figure is only as high as it is because London Clearing Banks are required to hold bankers balances equal to 1½% of eligible liabilities with the Bank, which, they claim, is considerably in excess of what they would choose to hold on prudential and operating grounds. By comparison Swiss banks voluntarily hold balances with the Swiss National Bank equal to 13% of deposits (M2).

43. While cash plays a limited role in facilitating transactions between clearing banks, it has virtually no role as a source of liquidity. An important element in the relationship between cash and money, on which the Swiss version of MBC rests, is therefore missing under present UK institutional arrangements. Unlike Swiss banks, UK banks hold a wide range of short term money market instruments for liquidity purposes - notably Treasury Bills, but broadly all those included in the present definition of reserve assets. The status of these instruments owes something to the fact that the Bank is prepared to accept them under all circumstances as eligible for lender of last resort facilities. If these arrangements were modified they might no longer be effectively as good as cash; it is also possible that if short term interest rates became more volatile, the liquidity of these assets might be somewhat impaired. More generally the banks demand for liquidity probably reflects the terms on which lender of last resort facilities are available; if these were more restricted it might be higher.

44. It is possible, therefore, that if present institutional arrangements were changed, a stable demand for cash, as a source of prime liquidity, might emerge. On the other hand, it is likely that the non-clearers at least would continue to have a negligible demand for cash. The inescapable problem is that there is no means of knowing whether this would happen before the changes were made. Equally serious, the authorities would have no information about the nature of the relationship even if it existed. It is most improbable, for example, that the ratio between cash and deposits would be a constant: it would almost certainly be significantly affected by changes in interest rates. But if the authorities were to operate the system effectively, it would be essential for them to have some idea of the size of these inter-relationships.

45. The major doubt about this form of MBC therefore is whether it would provide effective control; this question cannot be answered until the experiment has been tried. A switch to non-mandatory MBC would therefore be a major gamble. Moreover not even the most ardent advocates of non-mandatory MBC suggest that it could be counted on to control an aggregate as wide as £M3. Indeed there are good reasons for supposing that it would never do this. While banks have some motives for holding cash against retail deposits, and, with enough time, the authorities might hope to observe a stable relationship, it is improbable that a reliable and significant demand for cash to hold against wholesale deposits would ever emerge. The behaviour of the banks engaged in the Euro markets offers some support for this view - the deposits they choose to hold with their head offices, which are 'cash' in their terms, appear to be extremely small. On its own, therefore, non-mandatory MBC can only be regarded as an instrument for controlling a somewhat narrower aggregate than £M3 (say M2).*

(c) Mandatory MBC

46. The problem of effectiveness would be partly solved by imposing minimum reserve requirements. Even then the relationship between changes in base and changes in the money supply would not be mechanical if the penalties for reserve shortage were very high since banks would probably hold excess reserves, (unless this too were penalised.) And in principle there will always be some scope for banks to relieve cash pressures by bidding notes and coins away from the non-bank public (for example, by offering interest on current accounts). These elements of flexibility would not necessarily be undesirable, given the problems involved in short term control of the base outlined above.

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* See table II for definitions

47. The principal problem in mandatory systems is the risk of substantial disintermediation. This is in part because a legal reserve requirement amounts to a form of tax on the banking system. The size of the implicit tax depends on the interest foregone on the banks holdings of required reserves. The effect of the tax is to raise margins on UK banking business: the result is likely to be a once for all loss of business depending in part on the size of the tax. Changes in the size of the required ratio will alter the size of the tax; so will alterations in the rate of interest (if any) paid by the Bank, relative to market rates. If the bank were to pay interest, at market rates, on all required reserves, the tax would be zero. The risk of a loss of business, probably to offshore banks, would be correspondingly reduced.

48. However there is no avoiding some incentive to disintermediation if the scheme is to offer any effective control. The fact that during times of base asset shortage the banks face the prospect of having to raise marginal funds at penal rates, raises the marginal cost of bank intermediation relative to that by other institutions not subject to the control. Rather than lose business outright, the banks have every incentive to find ways round the controls, by routing flows through Euro markets. To the extent they do this, MBC will not generate the across the board change in interest rates needed to control the demand for credit in the longer term; what will happen instead is that relative yields will change, and control will be largely cosmetic.

49. The effort devoted to avoidance will reflect profit maximising decisions by banks and customers. This will turn on:

(i) the degree of pressure exerted by the authorities - the scale of penalty and the certainty of having to pay it (as perceived by the individual bank);

(ii) the costs involved in avoidance rather than compliance.

If the authorities are to make the system work they may have to invest resources themselves in making avoidance expensive. The resources required will almost certainly rise the longer the controls persist.

50. A more promising alternative is to use mandatory MBC to control a target aggregate which, at least initially, is comprised of assets which have no obvious close substitutes. That probably means excluding wholesale deposits since, in the absence of exchange controls, Euro deposits provide a nearly perfect substitute for domestic wholesale deposits. It may be that retail deposits would come to have close substitutes in time as well, but if, as implied in the previous section, it is more probable that banks have a 'natural' demand for cash to hold against retail deposits, then controlling the base will exercise some control over all the other institutions whose deposits are a close substitute for retail bank deposits, whether or not they are subject to reserve requirements themselves.

d) Multiple Targets

51. If, therefore, it were decided to move to some form of MBC, it would be desirable to reconsider the case for multiple targets. There are two broad possibilities:

(i) the authorities could set a target for the monetary base (defined broadly). Short term interest rates would be generated as a by-product of the operations needed to control the base. There would be no compulsory reserve requirements, and control over wider monetary aggregates would depend on other instruments eg. fiscal policy, or debt management.

(ii) the authorities could use a mandatory form of MBC to meet a target for an aggregate like M2*: ie. the deposits against which banks were required to hold cash would be those included in M2 (broadly, retail deposits only). Growth in the base would be set to achieve the target for M2. Short term rates would be determined as a by-product of controlling M2, rather than £M3 (or M_0).

52. Neither of these options could, on their own, be relied upon to deliver control of £M3 on, say, an annual basis. Indeed, if the second options led to disintermediation out of M2 it might make the problem of controlling £M3 worse. But they would provide market determination of short term rates which could well be an improvement over the existing discretionary control. However this would not necessarily be the case. Under option (i), if the demand for cash in a non-mandatory system turned out to be weak or unstable, interest rates would be determined by the market, but they would not necessarily be conducive to control of any of the wider aggregates.

53. The authorities would need to use fiscal policy and debt management to control the wider aggregates (£M3 and PSL1**) While fiscal policy sets some bounds on the growth of total financial wealth, it would not be enough on its own, since there would still be the possibility of sharp changes in the composition of private sector portfolios in response to changes in relative yields, which could lead to a rapid rise in PSL1 or PSL2 even when narrower aggregates like M1 and M2 were well on track.

54. The authorities would therefore need to structure the composition of public sector debt sales between long and short dated instruments to prevent unhelpful changes in relative rates from appearing . A policy of simply aiming at a smooth flow of

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* Reviving M2 might not be entirely simple. There are difficulties in devising a definition of wholesale deposits which would be robust enough for control purposes. It would involve collecting new data. But so far the problems do not look insuperable.

** If MBC were used to control a relatively narrow aggregate, it might be appropriate to pay more attention to PSL1 at the same time. This would also help to reassure some sections of the market.

gilts sales, month by month and allowing Treasury bills to take the strain as the residual source of finance would probably produce an erratic path for PSL1 - certainly so long as the PSBR continues on its present bumpy path through the financial year.

55. A move to a system of MBC would thus inevitably raise issues of debt marketing techniques and not only because relinquishing short term control over short term rates would make it difficult, if not impossible, for the authorities to deliberately stimulate speculative purchases of gilts by operating on short rates. (This question is discussed in more detail in section VI below.)

(e) The Monetary Control Consultations

56. A detailed account of the main points to emerge from the consultations which followed publication of the Green Paper is given in Annex 4 by the Bank of England. While UK respondents generally agreed on the importance of medium term control, there was a widespread disposition to dismiss 'short term' control as not being of fundamental importance - subject to the important proviso that the credibility of the Government's commitment to its monetary targets should be well established. No consensus emerged on the key issue of whether it was desirable to move away from discretionary interest rates towards more market determined short rates. But the monetary indicator system found few friends (though there was muted welcome for the idea of an indicator with override). Most people appeared to regard it as insignificantly different from the present system, with little to contribute to the problem of the appropriate scale of interest rates changes.

57. Monetary base systems found few new converts, though some of the early proponents, (Griffiths and Pepper) shifted their ground a little and became more explicit on the practicabilities of their schemes. There was widespread agreement that any kind of MBC would require important institutional changes if it were to stand any chance of working in the UK. There was considerable concern at the transitional problems that might be involved, and in particular at the risk that a major upheaval in the method of control would have unforeseeable consequences for the demand for money which would jeopardise the success of the MTFS.

58. There was no enthusiasm for non-mandatory MBC from the financial institutions. (eg. the Clearing Banks, Accepting Houses Committees, Discount Market), though a number of UK academics favoured this form of MBC. The relevance of the Swiss experience was widely questioned, principally on grounds of institutional differences; the fact that the Swiss use MBC to control M1 rather than M3 (and latterly as a target in its own right) was also noted. Few City experts could see non-clearing banks developing a significant and stable demand for cash in the absence of legal reserve requirements. There was little positive enthusiasm for mandatory MBC among the institutions either, though there was greater willingness to concede that some flexible forms of MBC might be workable. But many people, especially those closely connected with banking, argued that it would give rise to significant disintermediation especially if targeted on £M3. There was a widespread view that it would amount to "the corset in disguise".

59. One largely unresolved issue centred on the behaviour of the banks. Many practitioners stressed that banks were principally in business to lend to customers; that they were not short term profit maximisers and could afford not to be: that they would go to considerable lengths to accommodate their customers; and that lending decisions were not sufficiently centralised for reserve asset considerations to have major bearing on loan policy. The most likely responses to a cash squeeze were liability side management and disintermediation. Against this, it was argued that bank behaviour was a product of the monetary control environment. It would change if there were a change in that environment. British banks had shown themselves well able to adapt to the fiercely competitive conditions of international banking.

60. The discussions with foreign MBC experts dwelt far less on the institutional and practical implications and more on the broad theoretical advantages of a move to MBC. The central point to emerge was the importance of controlling the base, both because it was the only aggregate which the authorities could control directly, and because, it was argued, it has a reliable

bearing on the rate of inflation. The distinction between mandatory and non-mandatory systems was not thought to be crucial. While the importance of honouring the inflation objectives implicit in the MTFS was accepted, £M3 was not thought to have an intrinsic value as a target. While the transition to MBC would probably be difficult the Government's chances of achieving a deceleration in monetary growth by present methods of monetary control were generally held to be poor.

V. Monetary Base Control: Practical Possibilities

61. Control of the base would, by itself, require important institutional changes. This is true whether or not the banks are subject to compulsory reserve requirements. The terms on which the Bank provides lender of last resort facilities would have to change. It is unlikely that the discount market could survive in its present form. Call money would probably disappear, and a market in base money, like the federal funds market, would probably grow up. Techniques of selling gilt edged securities would need to change. The implications for medium to longer term interest rates are not clear, but short rates up to three months would certainly become more flexible. If major distortions in financial flows were to be avoided this flexibility would have to extend to <u>all</u> short rates, especially banks base rates but also mortgage rates as well as MLR. This would in turn have far reaching implications for the terms on which both the banks and building societies could lend to their customers; some changes in the overdraft system, for example, seem inevitable.

62. These changes are not necessarily undesirable, indeed some (eg. changes to the overdraft system) may be a necessary pre-condition to improved monetary control. But they would constitute a major upheaval in the UK financial system, comparable to that which followed Competition and Credit Control. The portfolio preferences of both the banks and non-banks would certainly change. There might be a surge in bank lending and the money supply, for example, as companies replaced overdraft facilities by term loans, and deposited the proceeds in their accounts. Changes in the character of short term assets, like Treasury bills,

which are currently fairly close substitutes for money, could be expected to affect the demand for money. The net effect of these changes is almost impossible to predict; but, even more so than the ending of exchange controls and the corset, a switch to MBC would have widespread repercussions on financial markets and asset prices.

63. To minimise the risks of a breakdown in control, there would have to be a reasonably long transitional period, in which the authorities gradually switched the focus of their operations from interest rates to the monetary base. In practice this might mean allowing the market an increasing role in the determination of MLR, (within a gradually widened band for example), while narrowing the target range for the growth in the monetary base.

64. It is impossible to judge in advance whether a purely non-mandatory system of MBC would prove practical in the longer term. The problems of transition might be even more acute than in moving to a mandatory scheme, since the authorities would have to guess the appropriate level of the base, as well as find out, by trial and error, the correct rate of growth. And in the final analysis, there is absolutely no guarantee that the interest rates generated by control of the base alone would keep the wider aggregates on an acceptable year to year path, even with the help of fiscal policy and debt management. If the demand for base by the banks was, in the event, weak and unstable, the chances are that control of the base would not give the authorities much effective influence on monetary conditions.

65. Annex 1 describes a mandatory version of MBC which might prove workable. The main features of the scheme are summarised in table III. It is designed to minimise the possible distortionary effects of imposing legal reserve requirements, while offering

more certain control over the wider aggregates than a purely non-mandatory scheme. While it might eventually be possible to dispense with legal reserve requirements there can be no assurance of this. The scheme must therefore be judged in its own right as something which might well become permanent, and not just as a half-way house.

66. It has some clear advantages over the corset; it does not impede competition between banks for example, and it is targeted at an aggregate (M2) with fewer obvious close substitutes than £M3. Nonetheless it is a mandatory scheme; and as such it would need to be operated fairly lightly, if it were not in turn to give rise to some of the same problems of disintermediation and distortions that were experienced under the corset.

VI. Other Possibilities for Reform

(a) Using the existing reserve asset system more aggressively

67. It has been suggested that it might be possible to move in the direction of MBC, without major institutional upheaval, by using the present reserve asset requirement more aggressively. In practice this might mean that the authorities would have an eye to reserve asset growth in determining the movement of short term interest rates. The authorities would estimate the growth in reserves which would be consistent with the target for £M3, taking account of the probable relationship between £M3 and eligible liabilities. If the demand for reserves was stronger than allowed for in this calculation, reserve assets would be created only in ways which would involve significantly higher short term rates.

68. This would represent a step towards controlling quantitites rather than prices. Compared with a move to a mandatory MBC, however there would be a number of important differences. First,

the authorities cannot control the supply of reserve assets in the present system with any precision (though they can squeeze bank liquidity by calling for Special Deposits). Second, Treasury bills, which under an MBC would be the residual asset which the authorities would use to control the base, are reserve assets in the present system. The authorities therefore have less flexibility in the assets they can use to influence bank liquidity than they would have under MBC (though in principle this gap might be filled, as suggested in (b) below). There is also a risk of perverse changes in relative yields which, as in 71/72, might cause the non-bank private sector to shift into bank deposits, thus inflating the money supply. Thirdly, the denominator of the current RAR, eleigible liabilities, is unsatisfactory as a control total, as experience with the SSD scheme has amply demonstrated. Using the present system more aggressively would leave the discount houses intact, though it would not avoid those institutional changes arising from greater volatility in short term interest rates. There is a risk that such a move might combine the worst features of the 71/72 experience and the corset, without achieving a credible move to interest rate flexibility or more effective control of underlying monetary conditions.

(b) Debt Sales

69. Under any system of monetary control, a crucial role must be played by sales of public sector debt. The more certain the authorities can be of selling a desired quantity, then, other things being equal, the better their control of the money supply will be. Whether Ministers decide to move to monetary base control or not, therefore, we shall have to persevere with efforts to improve the techniques and instruments at the authorities' disposal. This would, however, become more urgent with a move to monetary base control, because that would reduce the authorities' ability to use one of the present instruments - discretionary changes in MLR.

70. This is a minefield, and it would be wrong to suggest that it will be at all easy to pick a way through it. Present methods of selling debt can be criticised, but they have enabled the Bank to sell vast quantities of gilts at a real cost which has not obviously been excessive. The Bank surveyed a large number of alternatives in the Quarterly Bulletin for June 1979, but found problems with all of them. Nonetheless, it may be helpful in this paper to outline the areas in which we think it would be most profitable to concentrate further work.

71. One is the possibility of indexing at least a certain volume of gilts, in the hope of reducing their capital uncertainty and hence making them easier to sell at will. Work is already under way to design an indexed gilt which could be restricted to the UK investing institutions.

72. The second is the possibility of marketing gilts by varying their relative yield rather than by varying one general level of interest rate. With existing techniques the Bank find that they can only sell gilts on a rising market: that is, when interest rates are expected to fall, and gilts are expected to offer capital gains. On occasion, therefore, the authorities have to engineer the necessary expectations. Under present arrangements, they do so when necessary by raising MLR and hence the general level of interest rates to such an extent that investors expect the next move to be downwards.

73. This has several undesirable features. Firstly, it is inefficient: it is like reducing the price of all drinks to persuade people to buy more coffee. Secondly, it is uncertain: the authorities have no way of knowing how far to raise interest rates to convince investors that the peak has been reached. Thirdly, it is extraordinarily painful: changes in MLR are highly political and there is therefore a bias towards delay, in which there can be hiatuses in gilts sales.

74. There are thus strong prima facie reasons to look for a way of changing gilt prices promptly and directly when necessary, instead of changing them by means of changes in MLR. One would be for the authorities to announce, as a regular policy, that the minimum price for all new issues would be set at a fixed margin below the market price prevailing on the day of announcement. This might enable yields to move up in fixed steps when demand for gilts was slack; but if investors expected them to rise by more than this margin before the peak was reached, there might still be few takers. An alternative would be to sell all new issues through the tap system, and to instruct the Government broker to reduce tap prices as far and as fast as necessary to sell the required volume. The problem with this is that the interest rate gyrations it could produce might be considerable, and might reduce the attractiveness of gilts as an asset. A third possibility might be to abolish the minimum price for new issues altogether, and put them either out to open tender or to a tender underwritten by some or all of the investing institutions. However this, too, might produce massive swings in prices, and still leave hiatuses in sales at times when there might simply not be enough bidders.

75. All these options carry risks. At the least, there would be greater variability in long relative to short term interest rates. This itself might deter the investing institutions, because they would be less certain of the price at which they could sell their gilts on the secondary market. The average cost of long term borrowing might have to rise to compensate. At the worst, the marketability of gilts might be more directly damaged, because the jobbers who make the market might be unable to cope with really large swings in prices: they do not have ough capital to absorb major fluctuations in the value of their stocks. The Bank believe that increases in the average yield on gilts would then be insufficient to compensate the institutions for the reduction in their marketability. It could thus become more difficult to place the public sector's debt, even at higher yields.

76. The third gap in the authorities' armoury which seems, at this stage, to merit further attention is that there is no short-term instrument which is sufficiently attractive to the non-bank public to be used to offset the monetary effects of swings in the public sector's accounts. Treasury bills are virtually monopolised by the banks, because they count as reserve assets. much of the strain of funding outside the banking system therefore falls on gilts. If there were a move to MBC, it would be necessary to develop a non-bank market in Treasury bills. If Ministers decide against a move to MBC, there is a case in principle for trying to add an instrument between Treasury bills and gilts which would appeal to the non-banks and could therefore provide a residual source of finance at less cost to the money supply than recourse to Treasury bills. The risks in this case are that the new instrument could increase the cost of borrowing, crowd out existing public sector debt, and be little less liquid to a non-bank holder than, say, a clearing bank certificate of deposit counted as part of the money supply. Again further work is needed.