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14 November 1980

The Rt Hon Margaret Thatcher MP
10 Downing Street
London SW1

My dear Prime Minister

I enclose two papers written in response to the remit given at your last seminar on possible improvements in funding methods and the practicalities of moving towards more flexibility in the determination of short-term interest rates. But it might be helpful if I set down some rather broader considerations on the question of monetary control. The experience of recent years, together with the consultations and discussions held this year on monetary base control, lead me to the following conclusions.

In view of the difficulties experienced in controlling £M3 it is natural to look for a different approach and to some form of monetary base control. As is now familiar ground, there are two possible forms of such control: one with a "mandatory" cash requirement, targeted in relation to another monetary aggregate; and one with "non-mandatory" cash holdings where only the base itself is targeted. A difficulty with either of these is that we have no experience of how they will work - whether there are any appropriate stable relationships and what they are. In either case, there would have to be a lengthy learning period. In the face of this difficulty - acknowledged I think by everybody - one is bound as a practical person to be sceptical about the virtues of declaring for either system wholeheartedly at this stage.

There is another consideration. It is very difficult to see that a system of monetary control under which short-term interest rates are increasingly generated by management of the base rather than by the discretion of the authorities could be compatible with membership of the EMS exchange rate regime. Yet it is to me

equally difficult to envisage that we can determine our policies on the basis that we shall continue to stand out from the EMS exchange rate regime for another two or three years.

Thus, while it may be sensible to ensure that such changes as we make in the methods and content of monetary policy are compatible with a gradual move towards some form of monetary base control, and while it may be worth deliberately developing our techniques in such a way that we derive useful information about how a monetary base control system might work, our immediate task is to improve our methods and techniques so as to help achieve the prime aims of government policy: a reduction in inflation and the resurgence of the market economy.

It is in this light that I would invite you to consider our two papers and my more general recommendations. The greater flexibility in short-term interest rates which we are putting forward for consideration could ease both the political and the technical tensions in our monetary operations. Moreover, the possibility of considerable fluctuation of short-term rates within an undisclosed band could encourage the banks to move towards more variable pricing for their lending, including their overdraft lending, which would also be helpful.

On the funding of government debt, important improvements are already in train, ie to tap the personal sector's surplus more directly and take some of the weight off the capital markets. Beyond that, we remain continually ready to explore and introduce further new instruments and improvements in technique. But we should be deceiving ourselves to believe that there are new techniques or instruments for selling marketable debt which would enable £M3 to be kept on track, whatever was happening to the economy and the other counterparts.

Another area in which we are eager to see progress is that of encouraging the corporate sector to move away from bank financing towards the capital markets. We have suggested a number of possibilities which are being examined in the Treasury and which I hope may prove fruitful.

Finally, I need hardly say that better control of the PSBR and a greater smoothness of its pattern through the year should greatly help to improve control of the money supply. I know that strenuous efforts are being made towards this end.

Yours sincerely

Gordon Richardson

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# FUNDING TECHNIQUES

## SUMMARY


1 The problem with existing funding techniques is not that they cannot produce massive and sustained finance for the Government over a period, but that they are vulnerable to short-term pauses caused by investor uncertainty.

2 Such pauses are often a symptom of the need for corrective policy action; and improved funding techniques cannot be seen as a substitute for such necessary policy action without imposing substantial damage on the capacity of the gilt-edged market in the longer term.

3 Against this background the aim is taken as being to establish techniques that will reduce the vulnerability to funding pauses and provide as much scope as possible for smoothing the path of £M3 in the shorter term.

4 Blanket techniques, such as auctions - whether or not they are underwritten - for achieving this aim would result in radical change to the present structure of the gilt-edged market, and of the capital market more generally; and the gilt-edged market that then emerged is likely to have a reduced capacity to provide finance for the Government over a period.

5 An alternative, piece-meal, approach might include a number of techniques, viz:

(a) diversification of the sources of government borrowing;

(b) a broader market in central government short-term debt;

(c) borrowing by nationalised industries in their own name for some modest part of their needs;

(d) aggressive use of partly-paid gilts;

(e) flexibility provided by unofficial tap stocks through NILO;

(f) flexible use of convertible stocks;

(g) use of Restricted Indexed Gilts (RIGS).

6 These techniques in combination can provide some protection against funding pauses, provided that confidence in overall policy is maintained.

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# FUNDING TECHNIQUES

## AIMS

1 The problem

(a) Capacity of the gilt-edged market over a period.

Over any period of more than about 6-8 weeks the existing techniques of gilt-edged market management have proved capable of achieving massive and sustained sales of stock to domestic non-bank investors, so financing a very large proportion of the PSBR, even at its level of recent years, in non-monetary form. Annual and quarterly figures for the PSBR and gilt-edged sales are shown in the attached charts. Chart II in particular shows that during the last 3 1/2 years for which figures are available, to mid-1980, net official gilt sales covered almost 90% of the PSBR of over £30 billion during the period, while gilt sales to the domestic non-bank private sector covered just over 75%.

The ability of existing techniques to raise adequate finance for the Government in the gilt-edged market over a period has not hitherto therefore been regarded as a problem. Indeed the more frequent criticism is that the authorities have relied too heavily on the gilt-edged market to fund the PSBR and that this has been an important factor in the exclusion of private sector borrowers from the capital market. Net official gilt sales have, for example, taken 91% of all net funds raised in the domestic long-term capital market during the past 3 1/2 years. Action is now being taken to correct this over-reliance on gilt-edged market funding through the shift of emphasis to National Savings instruments that will tap personal sector savings more effectively, and the first step will be taken with

Gilt sales and the PSBR

£ billion

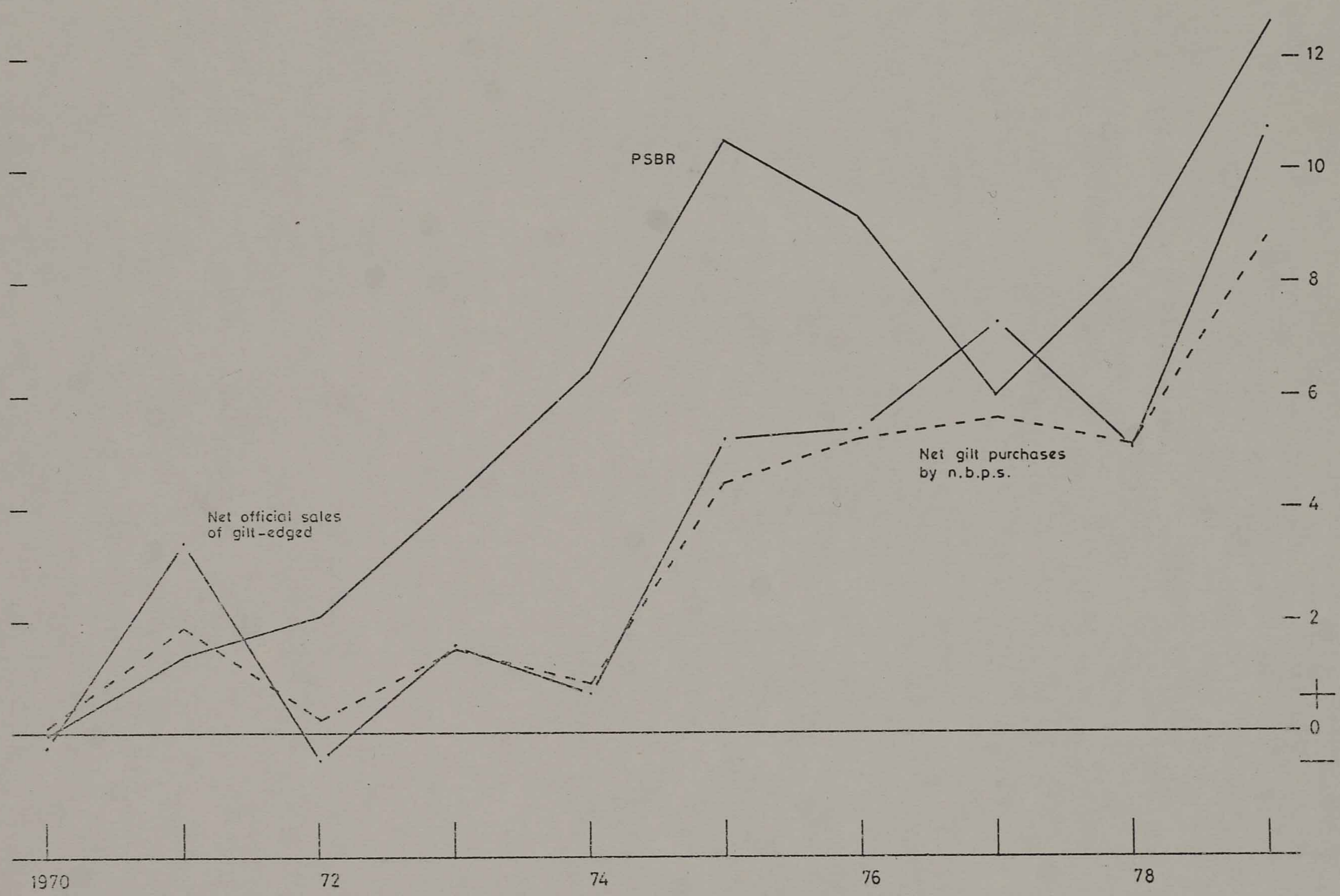


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CHART I

Gilt sales and the PSBR (unadjusted)

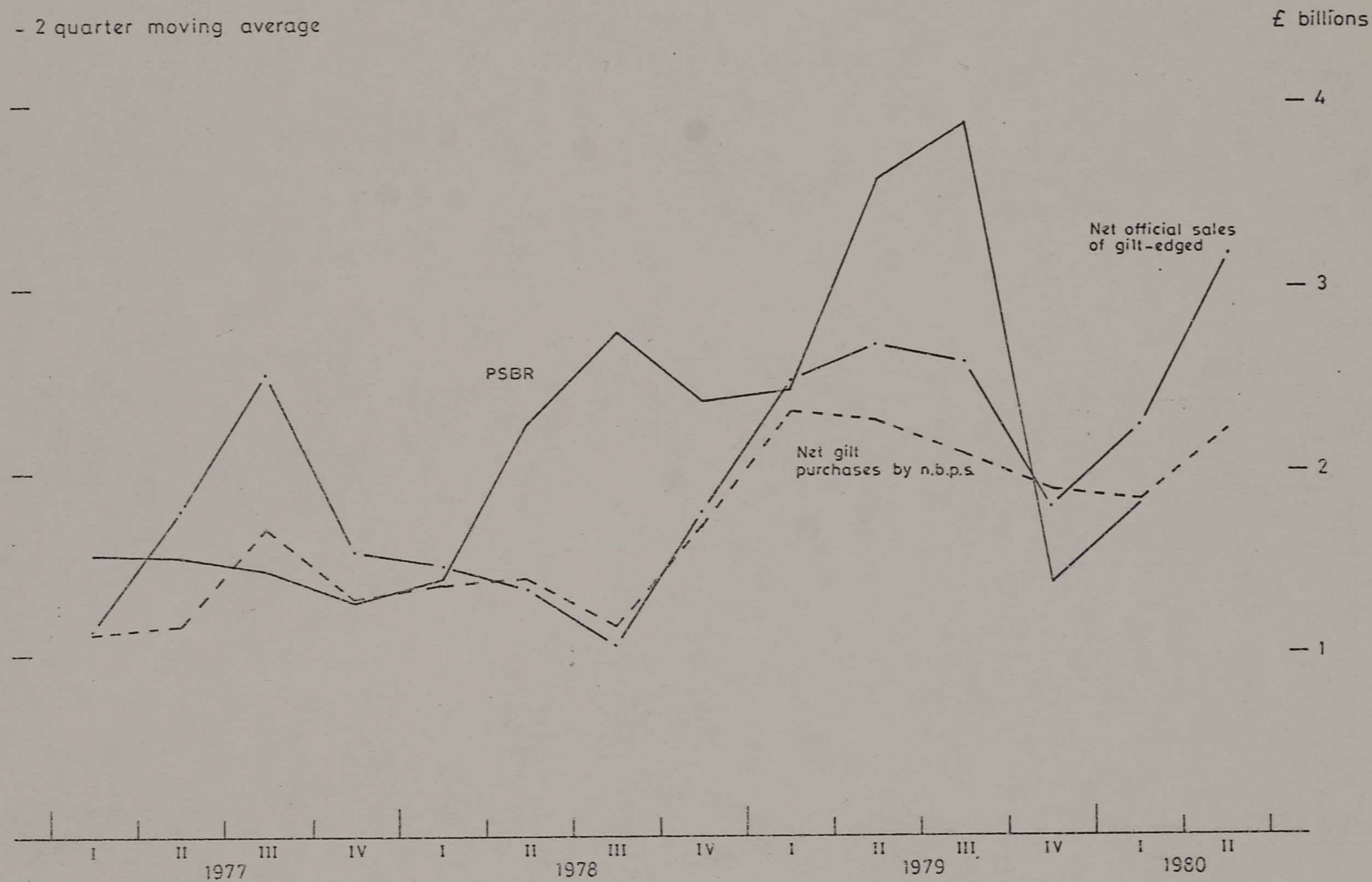


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CHART II

the new issue of indexed savings bonds on 17 November; the proposed sale of BNOC bonds next year will work in the same direction. In addition, since August, new arrangements for setting the interest rate on Certificates of Tax Deposits are already enabling these instruments to compete more effectively for the liquid resources of companies - notably in present conditions oil companies.

Particularly if some more substantial part of the financing burden can be carried by other debt instruments in this way - and always assuming that the PSBR itself is reasonably controlled - there is no reason to suppose that existing gilt-edged market techniques will not continue to be able to raise adequate finance for the government over a period.

(b) Funding pauses.

The problem more usually identified is one of periodic pauses in the gilt-edged funding program which, even if they last for only a few weeks, can lead to an acceleration in £M3 growth which can in turn affect expectations, market interest rates and the exchange rate. In some instances monetary control can only be restored by a rise in MLR which can bring about a rise in gilt-edged yields to a point where the funding program can be resumed - a manoeuvre known journalistically as "The Duke of York".

This sequence of events has been much discussed but often in oversimplified terms.

It is frequently implied for example that the problem originates in the gilt-edged market, and so, it is concluded, it can be resolved in the gilt-edged market if only we had different techniques. In reality funding pauses do not develop out of thin air. (Still less do they arise from wilful ganging up by institutional investors as is often suggested by their characterisation as "buyers' strikes".) In general they are a symptom of investor uncertainty which in most instances stems from a sense - often justified by events - that policy is failing in some other area. The danger of the mistaken analysis which sees funding pauses as the cause of the problem is that it can, all too easily, suggest that different funding techniques would allow gilt sales to compensate for policy failures elsewhere, ie that if only the symptoms could be suppressed more effectively there would be no need to attend to the underlying disease, through corrective fiscal or interest rate action.

Similarly it is often implied that MLR is raised because it is the only way to restart the funding program, and that it is only raised for this purpose. Neither proposition is true. Depending on the circumstances it may take a fall rather than a rise in MLR to stimulate the gilt-edged market; or if the problem originates in an excessive PSBR, fiscal action alone may be the necessary response. Increases in MLR are invariably proposed on the basis of a much broader assessment that higher short-term interest rates are necessary to control the trend in the growth of the money

supply. It is of course true that a rise in MLR will often go to the cause of the uncertainty in the gilt-edged market (for example the MLR increases to 14%, and to 17%, last year were strongly influenced by the strength of private sector demand for bank credit, and in each case they took account of the accompanying fiscal action), and the Bank certainly always take into consideration the expected effect on the gilt-edged market - but on no occasion has an increase in MLR been proposed solely in order to allow the gilt-edged funding program to be resumed. It is therefore a considerable over-simplification to suggest that it is the funding pause, rather than the factors that prompted it, that has forced - or could force - a rise in MLR (and talk of the Duke of York or of cutting the price of all drinks to sell more coffee, is equally a caricature of the real position). The unspoken suggestion here too is sometimes that, with different gilt-edged funding techniques, policy action which is necessary on wider grounds can somehow be avoided. Quite clearly, in the Bank's view, if the attempt were made to use the gilt-edged market in this way - whatever the techniques that were used - the capacity of the market to continue to provide finance for the Government in the longer term would be put seriously at risk.

None of this is to suggest that a problem cannot originate in the gilt-edged market; clearly there can be occasions on which market concerns prove to be unjustified or exaggerated - though in practice the resulting pauses tend to be less severe and are generally short-lived. Nevertheless - given the central role of the gilt-edged market - we accept the importance of finding

techniques that will help to avoid pauses of this nature. But it is crucially important that what can and what cannot reasonably be expected of such techniques should be understood and agreed so that the potential costs and benefits of possible changes can be properly assessed.

2 The objective

Against this background there are two possible objectives that might be sought through different funding techniques:

(i) First, we might aim to achieve whatever volume of gilt-edged sales the forecasts suggested was necessary to offset the movements in the other counterparts of £M3 in any given banking month in the hope of achieving more stable short-term monetary growth; and

(ii) Secondly we might aim for techniques that could be relied upon more confidently to produce a regular volume of funding month by month, related to the expected gilt-edged funding need over a longer period, say, of 6 months or a year.

Both these approaches would be designed to avoid funding pauses in the context discussed above, and both could be described as "selling debt according to need" in line with the mandate given at the Prime Minister's last seminar.

The first approach is much the more ambitious: but, quite apart from the question of the operational techniques for achieving the given volume of gilt sales, the present short-term forecasts are nowhere near sufficiently reliable to be used to set a gilts target that could be used successfully for the kind of close, short-run monetary control envisaged. (As noted in the Treasury's recent paper, the short-term forecasts for the CGBR are accurate

only to within ± £500 mn. one month ahead and ± £750 mn. three months ahead; and uncertainty of this kind of order can persist until very late in the actual month in question.) Moreover, even if an adequate target could be set for total gilt sales, there is no technique that can possibly control the gilt-purchases of domestic non-bank private sector investors in isolation. While therefore this approach might be a desirable ideal, it is not likely to be practicable to aim more precisely than to sell rather more or rather less gilts in particular months, when we know of some particular major special factor in the opposite direction affecting the other £M3 counterparts. (If a substantially smoother PSBR profile could be achieved the position may be different; but we would need to see this in practice before we could assess what was likely to be possible.)

The second approach has the more modest aim of at least avoiding periods of famine in the gilt-edged market but not seeking to fine-tune gilt sales or therefore to smooth, month by month, the growth of £M3. Essentially it would be designed to limit the risk to £M3 of a major funding pause.

It is assumed in the remainder of this paper that it is this latter aim which is regarded as the more important; but that, beyond this, Ministers would want us to do what we could, given the unavoidable limitations of the forecasts, to smooth the path of £M3 - quarter by quarter if not month by month. These are indeed the objectives we currently pursue.

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## TECHNIQUES

### 3 Auctions

The apparently obvious technique for guaranteeing regular, month by month, gilt sales in some sizeable minimum amount, but which would be capable of some degree of variation in the short run, is the auction - where we would simply announce to the market at regular intervals the quantities we wished to sell at which maturities, leaving the market to determine the terms on which the stock was taken up.

As a general approach this would add directly to the short-run price volatility of the market - since it would be the deliberate intention to secure sales irrespective of the state of market demand. It would mean too that virtually all official sales would be made directly by the Bank to final investors through the primary market; the secondary market dealings associated with tap stocks would be reduced, and this would add further to price volatility while at the same time the reduced turnover in the secondary market would have a major adverse impact on the profitability of the jobbers that now make the market. In these circumstances, with the risks increased and the rewards reduced, the gilt-edged jobbing system is unlikely in the Bank's considered judgment to survive in its present form.

The wider implications of this development are considered further below. In relation to the gilt-edged market the Government would need to consider how the transition could be managed without severe disturbance to the flow of finance; and it would

need to consider what kind of market mechanism might ultimately emerge. The risks are that gilt-edged would become a less readily marketable and more expensive form of borrowing, and that the capacity of the market over the longer term - especially for long-dated stocks - would be substantially reduced.

The changes in market structure that would result from an auction system for the marketing of gilt-edged would be likely to include: the dispersion of dealings in gilt-edged and in other securities outside the central market made on the Stock Exchange; and the end within the Stock Exchange of the separation of the market-making function provided by jobbers from the function of brokers. Both developments would require a reconstruction of the present arrangements for the supervision of the securities market.

The present central market is governed by the Stock Exchange Council and the Stock Exchange is a member of the CSI. The Council's writ over dealers in securities does not run outside the Stock Exchange and it would therefore have no authority to supervise such non-member market-makers as might come into existence. Unless it were envisaged that such market-makers should be allowed initially to operate with no more supervision and regulation than is provided either by existing statutes or by virtue of their membership, if any, of existing trade associations (which have little or no direct experience of regulating dealing in securities) a new set of arrangements would have to be devised beforehand. Establishing the nature and scope of these arrangements (allocation of responsibilities for drawing them up, their statutory or non-statutory form, identification of those to whom they should apply and consultation on and drafting of rules, securing co-operation and reference to the OFT) would clearly require much thought and a considerable period of planning.

Similarly, substantial change would be required within the Stock Exchange. The Council's existing arrangements for the regulation of dealings and the protection of investors rest heavily on the separation of capacity between jobbers and brokers. It would not be sufficient for the Stock Exchange only to amend its existing rules to take account of the end of this separation, which in itself would be a complex task. New rules would have to be thought out and drafted and this process would need to be closely co-ordinated with the study outlined in the preceding paragraph.

4 Underwriting

To moderate the effects of auctions on price volatility in the gilt-edged market, some commentators - including the Wilson Committee - have suggested that the auctions might be underwritten by the major institutional investors. Commercial underwriting can clearly provide an occasional borrower with the finance he needs at an assured price close to the market price. It does not follow at all that it could provide the same service for HMG's continuous funding program. It would need to be considered, for example, why the institutions - left to themselves - should in this case accept underwriting at a higher price than they would bid in a straight auction. If they were not prepared to do so, underwriting may not make much practical difference to the degree of price volatility associated with auctions. And whether or not the auctions were underwritten, the effect on secondary market dealing would be the same. Thus essentially the same questions about market structure would arise. Underwriting would, in addition, provide a constant temptation to the Government to seek to influence the decisions of the institutions, which could rapidly displace the present free market.

5 A piece-meal approach

Short of such a general approach of this kind there are a number of techniques which might be used and developed to help to achieve the objective defined earlier with less disturbance to existing market arrangements.

(i) Vulnerability to funding pauses in the gilt-edged market should be substantially reduced by the diversification of the sources of government funding mentioned earlier (National Savings, CTD's) provided these are now kept competitive. In particular personal savers and to some extent commercial companies, are likely to take more diverse views of actual and prospective financial developments, than institutional investors - who all being subject to the same influences and with the same objectives often behave in a herd-like way. This should make for a steadier flow of funding.

(ii) A further possibility would be the creation of a broader market in marketable central government short-term debt with a maturity initially of up to one year but perhaps extending eventually to 3 or 4 years. This possibility has been considered frequently in the past, but rejected because no clear non-bank market could be identified: persons, companies and institutions all hold the vast bulk of their liquidity in capital-certain, immediately encashable, deposits with banks or building societies, holding only minimal amounts of CD's for example.

Nevertheless, and especially in the context of the steps considered in the companion paper on greater money market flexibility, it may nevertheless be appropriate to seek to develop a non-bank market for this kind of instrument. It could also provide the opportunity to experiment with auctions at the boundary between the money and capital markets without the wider implications for the capital market structure that a general move to auctions in relation to gilt-edged would have.

Any move in this direction would be bound to take time before it could make a significant contribution to monetary control. Initially such bonds might be taken up largely by the banking system, and this may be necessary to the development of an effective market. And we will need to look closely at the implications for the maturity of the debt. We already have for example an annual average of over £4 bn. of gilt maturities during the next five years.

This possibility is being further explored.

(iii) Borrowing by nationalised industries in their own name
Discussions are being held with the nationalised industries to examine their request to be allowed to borrow in capital markets in their own names. If the question of cost can be satisfactorily resolved, this might allow some modest part of the PSBR to be funded outside the Bank's operations as is the case with local authority borrowing through techniques such as placings, outside underwriting, or, if they wished, through auctions, without this calling into question the structure of the gilt-edged market as a whole. This could provide a further modest element of more regular funding.

(iv) Aggressive use of the partly-paid gilt technique. This was already used vigorously during the spring and early summer of this year - as on earlier occasions - to tie up future funding for up to three months ahead. It meant that we were able to ride out almost without noticing it, the very pronounced funding pause which resulted from the shock of the July and August £M3 figures. Although virtually no new net official sales were made between 24 July and 3 September the take-up of gilts by domestic non-banks in banking August, September and October was £960 mn., £890 mn. and £680 mn. respectively, - in each case well above the average monthly amount expected to be needed for the year as a whole. We would hope to be able to use this technique again for example when the PSBR falls back later in the current financial year.

(v) Unofficial tap stocks from the National Investment and Loans Office. Discussions have been in progress for some time to give some additional flexibility to the Bank's gilt-edged market management by enabling the Bank to acquire stock more easily from the NILO which can then be sold into the market without publicity and without the price sensitivity that applies in the case of normal tap sales. This flexibility would be especially useful during periods when the market was seeking to establish a new yield basis below an established tap price; and between the exhaustion of one tap and the announcement of another. It could allow sales of, say, up to £400-500 mn. on technical rallies in a generally unsettled market (as it has during the past week).

(vi) Convertible stocks. These stocks attach to a conventional short-dated issue an option to convert, on one or a series of future dates, into a longer maturity at something close to the current long yield. They can, in principle, be used quite flexibly in a number of different situations. The option might for example be made available on generous terms but only if the stock was purchased within a specified period as a means of giving impetus to the funding program. Or the terms for the option might be made more aggressive if we wished to encourage a downward movement in long yields and the surrounding circumstances meant that such a movement would carry conviction with the market. We have in fact considered this possibility on a number of recent occasions but have not actually implemented it because of the uncertainty about the future size of the PSBR.

(vii) Restricted Indexed Gilts. Although a number of points remain to be settled, we now have a prospectus in an advanced state of readiness for an issue of indexed gilts with eligible holders restricted to pension funds and the pension fund business of life companies. The ability to sell such stock, if it were acceptable to the Government taking account of wider considerations, would be useful at times when market expectations were for an increase in inflation, and could then have the effect - as a result of switching and because of the effect on expectations - of pushing up the yield on conventional stocks to a point where they again became attractive. It would of course be important - on wider grounds - - that an initial issue should be made at a time when the Government was seen to be acting from strength rather than weakness, ie when the prospect for inflation, the money supply, and conventional funding, was reasonably bright; once successfully introduced, however, the instrument might then be used to support the funding program if it ran into difficulties. It needs to be recognised however that there would be a risk, if the RIG's proved attractive, that the institutions would stay out of the conventional market forcing pauses that might not otherwise occur.

These various possible techniques, used in combination, provide reasonable grounds for hoping that the risk of pauses in the gilt-edged funding program can be reduced, provided confidence in overall policy is being maintained. Without that we doubt whether there is any technique that could achieve the stated objective without major damage to the capacity of the gilt-edged market in the longer term.

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INCREASING THE FLEXIBILITY OF OFFICIAL OPERATIONS IN MONEY MARKETS

The Bank have prepared a technical paper (attached) describing the possibilities for introducing more flexible official operations in the money markets. This note is in part a summary, but its main purpose is to illustrate the steps that would be necessarily involved in taking this approach.

Feasibility

It would be possible to move cautiously from a system where the authorities maintain an adjustable peg for short-term interest rates, by setting MLR, to a system in which they floated much more freely. But inevitably the direction and momentum of any such float would be quite largely determined by the readiness with which we provided the system with cash, whether by open market operations or through the 'discount window'. So the system would be a 'dirty' rather than a 'clean' float, unless or until the discretionary element in official operations could be reduced or removed.

Market Involvement

Despite the disappearance of MLR itself, markets would continue to look for clues to the authorities' intentions, and the movement of very short-term interest rates would still be seen as largely the consequence of official actions. But there might develop more room than now for the rates for longer-term money, three months and over, to reflect market judgments about the level of rates needed to secure official objectives.

Institutional Change

Were we to embark on official operations in the inter-bank market, the size and central position of the big four clearing banks would be likely to involve us in daily negotiations between us and them. This would run quite contrary to the aim of allowing a free and open market more say in the determination of rates. It is largely in pursuit of that

aim that the Bank sees a need for the retention of market intermediaries, notably the discount houses.

This has several consequences. First, it implies that the Bank's open market operations should continue to be conducted in bills, including both Treasury and Commercial Bills, rather than in the inter-bank market. Second, it suggests that it would be wise to go on confining access to the discount window to the discount houses, albeit at a floating and "penal" rate. Third, the Bill markets would be required to adapt efficiently to new conditions in which the Bank operated at much more flexible rates. This adaptation would take time and care.

Operations

If the system sketched above were adopted, whether in practice as a transition to monetary base control or not, the important policy question would be how to set the guidelines for operating it. There must, of course, be a strong presumption that any persistent deviation of the money supply from its targeted path would require us to operate so as to encourage interest rates to move in the appropriate direction; and a key question for decision would be how quick and how large such moves should be, and whether any surrounding circumstances (other than the money supply) should be taken into account. We would also need to decide the upper and lower limits (if any) needed to prevent an excessive change in interest rates. There would be a strong case for not announcing such limits, partly to keep banks uncertain of the future cost of their money and partly to avoid, de facto, reintroducing a peg.

Supply Side Controls

It is often said that a "supply side" constraint on banks' cash would have an effect different in kind from a change in interest rates as such. But in a fully competitive system, which ours is, any single bank will always reckon to be able to attract extra reserves by bidding for them in the market. Thus a limitation on the quantity of cash would impinge on an individual bank in the form of a change in the price of cash rather than of some outright shortage or famine.

But the expected future price of cash can be made more variable and less predictable. Greater flexibility of official operation in the money market could help achieve this. This would in turn cause some changes in banking behaviour. There would be some helpful readjustment of the overdraft system. But in our view, based on lengthy consultation, such changes in behaviour would not be far-reaching in their helpful effects.

Cash Ratio

If it were to be decided to move towards a non-mandatory base control, the prior introduction of a more flexible interest rate system with a managed float would represent a necessary and coherent first step. There would then follow a long period of transition. In the light of experience the guideline for the float might gradually be changed so as to concentrate upon a target for the base itself. Likewise, the limits on interest rate movements could be steadily widened if that were found in practice to be desirable.

A mandatory base control relates the base by some required ratio to an aggregate money supply; and the purpose of having such a base would be to enable the authorities to respond to deviations of the money supply from target with a sizeable and automatic adjustment in interest rates.

We could operate a more flexible system with our present cash base or with one of the same kind spread more evenly between the banks. This would imply a very low ratio but there might still be some difficulties in learning sufficiently about the behaviour of a fully non-mandatory base.

We see no advantages in maintaining the present Reserve Asset Ratio and advocate its abandonment as soon as discussions with the banks, regarding the prudential need for liquidity, are complete.

Bank of England
14 November 1980

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# INCREASING THE FLEXIBILITY OF OFFICIAL OPERATIONS IN MONEY MARKETS

## A Introduction

1 At the seminar with the Prime Minister on 13 October, the Bank were asked to explore ways in which their present discount window operations[1] could be modified, and the Reserve Asset Ratio replaced, so as to permit a greater flexibility in short-term interest rates which was generated as far as possible by market forces.

2 This paper first outlines the main features of the present system (Section B). The changes that would be necessary, together with the implications of particular options, are the subject of Section C. There follows, in Sections D and E, consideration of how far the changes might:

(a) affect the role of the authorities in influencing interest rates; and the motivation of their operations;

(b) alter banks' behaviour in ways helpful to monetary control;

(c) facilitate evolution towards a form of monetary base control.

3 Because it is generally agreed that the Reserve Asset Ratio (RAR) should be abolished, the analysis which follows assumes only the existence of some prudential guidelines regarding banking liquidity. The nature of these prudential guidelines is not explored in this paper. Following the outcome of the present review of monetary control, discussions within the banks about the consultation document on banking liquidity, issued last March, will need to be brought to completion.

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[1] The phrase "discount window operations" is used in this note to describe the sort of facilities currently offered by the Bank to the discount houses at 2.30 pm each day; these generally involve the Bank in supplying funds on request, at MLR. They are to be distinguished from loans to institutions in financial difficulties, which are genuinely last resort loans, and also from assistance which is applicable only under the present Reserve Asset system and involves the Bank in swapping reserve for non-reserve assets to limit upward pressure on short-term interest rates.

B The present system

4 The present system can be likened to an exchange rate regime of the "adjustable peg" variety. MLR is fixed by the authorities; certain key interest rates may diverge from it but in response to sustained pressure the Bank has the choice of intervening to validate the level of MLR (the peg) or of adjusting it. Continuing the analogy, the changes being sought would amount initially to a form of "dirty" floating in the money markets: dirty rather than free because, as is explained later, official operations would have to continue being both active and discretionary rather than automatic.

(a) Minimum Lending Rate

5 MLR is the rate at which the discount market expect to be able to borrow from the Bank at 2.30 pm under the discount window provisions. When these facilities are used, the Bank usually lends overnight but on occasion offers funds only for seven days.

6 The effect of such lending is to inject cash into the system; and the fact that the discount houses can obtain funds at MLR provides some anchor for short-term rates generally. But, as recent experience has emphasised, it is quite possible for overnight rates in the interbank market to go some way above MLR before 2.30 and far above MLR later in the day. The present system does not, therefore, invariably protect the banks against the risks of volatile rates at the very short end of the market.

7 The influence of MLR is most powerful in the setting of very short-term rates by the market but it also affects slightly longer rates. This is because operators take the level of MLR and the associated tactics used by the authorities as saying something about official intentions for the future. For example, whenever MLR is raised three-month rates tend to reflect the new level fully, because the market have come to expect that a rise in MLR is unlikely to be followed by a fall in less than, say, 8-12 weeks.

8 Clearly the determination of short-term interest rates could be significantly different if MLR could be made to "disappear". But it is also clear that, deprived of one source of information about official desires and expectations, money market operators would look for another, and would expect to find it in the conduct of our open-market operations.

(b) Open market operations and the cash ratio

9 Two features in the present system complement discount window operations. The first is the cash ratio of 1½% Eligible Liabilities (ELs) which applies only to the London clearers. In the language of the MBC discussions, this is a form of cash requirement based on lagged accounting. There is no absolute obligation on the banks to reach a particular target balance at the Bank on any one day. A degree of averaging is allowed.

10 The second feature is the conduct of open market operations. Changes in the banks' cash will depend in the first instance on net flows between them and the Bank arising mainly from the transactions of the Exchequer and from movements in the note circulation. The Bank normally seeks to offset such flows, wholly or in part, through open market operations. These are usually conducted in Treasury, Local Authority, and Prime Commercial Bills (the Bank offering to deal at existing market rates rather than to move them up or down). The principal counterparties to the official operations are the discount houses, although Treasury and Local Authority Bills are also traded directly with the banks. It is by declining to buy paper to the full extent of the shortage of bankers' cash, and thereby causing the banks to withdraw call money from the discount houses, that the Bank can ensure that the discount window will be used. This provides the opportunity to exercise a desired influence on interest rates and is known in the literature as "making Bank Rate (MLR) effective". The discount window may however also be used if the market prefers, on a commercial judgment, to borrow at MLR rather than offer enough paper to the Bank.

11 It is normal official practice to engineer an initial position of moderate cash shortage week by week. This may be done if necessary by increasing the quantity of Bills offered at the weekly tender and relying on the obligation undertaken by the discount houses to bid for the whole amount.

## C Options for Change

12 One change has already been assumed, namely the disappearance of the Reserve Asset Ratio. This Ratio did not feature in the above description of the present system because it is neither necessary nor efficient as an instrument for the control of short-term interest rates. It has however affected the operation of the money market and its disappearance would affect the environment in which open market operations are conducted.

13 The outcome will depend significantly upon the final form of the prudential guidelines on banking liquidity. But the most important effect now foreseen will be to release the banks from the obligation to hold a minimum quantity of, for example, Treasury Bills and call money. Hitherto the effect of the RAR has been to keep yields on reserve assets stable and relatively rather low even when pressures on other rates are strongly upwards. With the abolition of the RAR, banks would be much freer to reduce their holdings of call money and Bills at times of stringency. The differential with, for instance, comparable inter-bank rates would accordingly be more stable; and it would need to narrow considerably if call money and Bills were to continue to be held by the banks on the present scale. Such a narrowing of the differential might come about relatively easily in the Treasury Bill market but how in the new circumstances holdings of call money with the discount market - which in recent experience has provided a higher yield than Treasury Bills - would be adjusted is more problematic. The ability of the discount houses to accommodate periodic large fluctuations in the volume of call money would depend on the general level of the banks' holdings, the relationship between the call money rate and the yields on other money market assets, the degree of volatility in those yields, and the nature and terms of their access to the discount window at the Bank. These matters are discussed further in paras.16-27 below.

14 Apart from the abolition of the RAR, the options for change concern

(i) the form of the cash ratio,
(ii) the nature and operation of discount window facilities, and
(iii) the structure and conduct of open market operations.

15 The question of the cash ratio is closely related to the form(s) of monetary control system that it is desired to adopt or to make available for ultimate adoption. If a non-mandatory form of monetary base control is to be made available, it will be necessary to operate for a considerable period with no cash holding obligation whatsoever for the banks, in order to learn what their purely functional demand for balances is. Mandatory forms of base control would require the cash holding obligation to be related as closely as possible to the monetary aggregate (if it were other than the base itself) in terms of which the targets were to be set. It is well established that, because of the scope for disintermediation, no workable relationship can be found with broader monetary aggregates such as £M3. If any narrow aggregate other than M1 is to be considered, it would be necessary first to discover the characteristics of the aggregate, and unwise to construct a cash ratio related to it until they had been found to be suitable. If all that is required is - as hitherto - a fulcrum against which to operate a policy based on an intermediate interest rate target, the choice is wide. A fulcrum would exist with no obligatory cash balances at all, provided the penalty for being overdrawn was sufficiently deterrent; but if a requirement were to be retained, for other reasons, its form should reflect considerations of equity between banks and the need to avoid generating widespread disintermediation as a means of escape from it. Further consideration is being given to these questions in the light of very recent discussions between the Chancellor and the Governor.

16 Greater flexibility through open market operations and discount window facilities. Discussion of the discount window may be considered first. In the present system MLR serves as an anchor for short-term interest rates because market operators have a presumption that cash will be made available at that rate. The necessary condition for initiating greater flexibility in rates is to remove that presumption. It could be done in a variety of ways. It might, for example, involve -

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Guidelines

(a) no more than the exercise of the discretion which the Bank already has in principle to lend at rates above the posted MLR - while otherwise retaining the present arrangements; or

(b) the complete abolition of MLR, with lending through the discount window provided only at rates varying from day to day and designed to be penal in relation to those earlier established in the market.

On technical grounds, the one option that is not available in a system retaining either obligatory bankers' cash balances or normal voluntary holdings thereof is the abolition of discount window facilities. But a combination of unattractive discount terms and active open market operations could minimise their use and eliminate their abuse.

17 If option (a) above were adopted, it would remain evident that the authorities rather than the markets were dominating the setting of rates. If we attempted to create uncertainty about the rate at which the discount window would operate, the market would act to remove the uncertainty by testing the rate. If the authorities behaved consistently in setting the rate, that would in effect set a new level of, or a new formula for calculating, MLR. If, on the other hand, the choice of rate were deliberately capricious, markets would simply become confused, so that the setting of interest rates became a haphazard process.

18 If instead option (b) above were adopted, and if MLR were actually abolished, this would shift onto the conduct of open market operations both the expression of official influence on interest rates and the attempts of the market to discern what the official intentions were. This may best be illustrated by comparing how in such circumstances open market operations might be undertaken, first when the existing level of rates was regarded as satisfactory, and secondly when some upward movement was regarded as necessary.

19 In the first case (maintaining an existing level of rates), the object would be to maintain the level of bankers' cash consistent with prevailing interest levels. If the market and the Bank took the same view of the likely cash movements in the day, the Bank could readily buy

sufficient paper at prevailing rates to achieve the desired level of cash. This could be effected, as now, by the authorities inviting offers of paper at existing market rates and accepting what was offered. It could also, in principle, be achieved by the authorities making known the quantity of paper they were prepared to buy, and accepting the most favourable offers. The latter approach, which would require some development of our dealing techniques, would detach the authorities to some extent from appearing to set rates and, for that reason, would be preferable. But there would remain a need to take decisions involving at least implicit judgments about the level and prospective future developments of interest rates. In deciding which offers to accept, the Bank would have to choose between different maturities of paper, each probably offered at a different rate. The decisions reached would be eagerly studied by a market looking for indicators of official thinking.

20 In the second case, when some upward movement in rates was desired, the object would be to leave banks with less cash than they wanted at ruling interest rates. The market would then find themselves trying to sell more paper than the authorities were offering to buy and interest rates would tend to rise. Anyone unsuccessful in obtaining cash for his paper would then have to bid for it within the market, failing which he would have to take his chance at the discount window.

22 A vital assumption underlying the above description of a new style of open market operations was that the market's perception of the position on the day accorded with the official estimates. In the present system official estimates are frequently revised heavily during the day and still prove wrong in the event. Equally often, money gets 'stuck' somewhere within the banking system and its availability is unknown to the money markets. More resources could be devoted to improving information systems, but unpredicted influences on banks' cash would probably continue to be large in relation to the tolerance levels within which the new style of open market operations would be seeking to exert its influence. This means that the new technique would be a less precise means of bringing about a new level of

market interest rates than that of simply varying MLR. It also means that there would be some risk of market forces, under the influence of erratic shocks, producing needless gyrations in short-term interest rates. This risk could be met either by use of an unpublished ceiling rate at which the discount window operated freely, or by ceiling (and floor) rates at which open market operations were undertaken freely.

22 Some economists, commenting upon the corresponding practical problem envisaged with MBC systems, argue that variability in very short-term interest rates does not really matter, because over time markets learn how to distinguish genuine underlying influences on rates from the effects of random shocks. It does matter, however, if rate variability impairs the operations of short-term markets and makes it harder to conduct official open-market operations of the necessary size. Whether markets would be impaired in practice is difficult to judge; it would depend on how the system operated and what institutional developments there were. It is, for example, likely that we would have to give up the practice of engineering recurrent shortages of cash by "over-issuing" Treasury Bills through the weekly tender. If so, it would be important that the market was functioning well enough to permit us to withdraw cash at once by selling Treasury Bills, because the market's starting position would be one of underlying cash surplus much more frequently than it is now.

23 The health of the money market in its present, or a new, form is of major importance if we are to have the scope for sufficient official open market operations in the existing Bill instruments. It was indicated in paragraph 13 that the disappearance of the Reserve Asset Ratio would pose significant problems of adjustment for the discount houses. It is highly doubtful whether they would at the same time be able to withstand the additional load of being the vehicle through which an erratic variability in market interest rates was generated on a pronounced scale. If, in response to

such pressures they were to become only brokers in bills rather than dealers and market-makers, it would become a good deal less certain than now that official operations could be undertaken on the scale necessary to permit the desired management of banks' cash balances. Much greater weight might then have to fall on discount window lending, probably to banks directly.

24 If nonetheless the changes in fact encouraged the growth of an active market in Treasury Bills, including both banks and non-banks, the future role of the discount houses would be relatively less important. It was suggested in paragraph 13 that the banks might continue to have large - though compressible - holdings of Treasury Bills provided the supply was maintained at a sufficiently high level to preserve a reasonably attractive yield. It is questionable, however, how ample a supply could be maintained if Treasury Bill operations are to remain the residual means of financing the public sector, with the main emphasis placed, for reasons of control over £M3, on sales of debt to non-banks. Further, the only possible way we can see of persuading non-banks to prefer Treasury Bills in large amounts to CDs or bank deposits would be to engineer a steep increase in the supply. But in those circumstances, the banks would have a powerful incentive to intermediate by increasing deposits so as to hold more Bills, and the more likely outcome of an attempt to encourage non-bank holdings of Bills by this route would be to raise £M3.

25 It would accordingly be unwise to rely completely on Treasury Bills as the instrument for official open-market operations. Some form of private sector paper would therefore be needed as well. At the moment commercial bills are used. They have the desirable quality of being the most secure form of private sector paper - which explains their historic place in central banking operations. But their availability, in quantity, depends on the existence of market intermediaries to gather them together, a function currently performed by the discount houses.

26 If there were no ready market in prime commercial bills, the remaining vehicle for open market operations would be deposits with banks, either by our dealing in CDs or by our making straight deposits in the interbank market. There is no doubt that adjustments involving large sums could be undertaken by those means. But they would have two great disadvantages. There is first the presentational problem, already encountered with the existing gilt repurchase transactions, of supplying official funds directly to banks at times when their lending may appear to be contributing to difficulties in achieving the official monetary target. The second and more substantive disadvantage arises from the dominance in the inter-bank market of the operations of the clearing banks. Official provision, when necessary, of large amounts of cash would automatically coincide with large shortages to be met by three or four massive counterparties. Any structure of market rates that resulted would be inevitably the product of bilateral haggling, and would reflect the degree of official hard-headedness rather than a free market process of rate-determination. Development of that process therefore requires the retention of intermediary market-makers between the giant principals on either side.

27 All this leads to the conclusion that in starting down the road towards greater responsiveness of interest rates to free market forces, we should be careful to nurture rather than undermine the market mechanisms through which we can operate and through which the resulting market pressures can influence interest rate developments. That would imply retaining - but perhaps progressively widening - intervention points in open market operations, and a discount window safety valve which would continue to be available to the market intermediaries. The pace at which our intervention points might be widened would depend on how successfully market rates floated freely within them, rather than bouncing around in a random way between floor and ceiling.

D The exercise of judgment

28 Whatever the exact form of these suggested new arrangements, the judgments exercised by the authorities in running it would, at least for some time, continue to exercise a critical degree of influence over at least part of the interest rate spectrum. For the authorities' actions would be the dominant determinant of the supply of cash, and the implicit 'lending rate' set by these operations - while it might be less easily visible than the present published MLR and could certainly be operated as a rapidly moving range rather than as a set figure as at present - would be established by the market from the price at which we conducted business.

29 There might nonetheless be greater scope for independent market forces than at present in the determination of somewhat longer (say three-month) rates. Much as now, these forces could always be expected to do part of the authorities' work, in that all rates would tend to rise as soon as the market guessed that the authorities were dissatisfied or would have to become dissatisfied with the prevailing conditions. However, the longer-term effects on market expectations of a posted MLR would no longer exist and, while the market would undoubtedly look for substitute indicators, it might be possible to avoid providing a consistently reliable substitute.

30 In practice, of course, the way in which the system was operated would be heavily influenced by the wider policy aims being sought; and it would be important to be clear what the intermediate objectives of monetary policy are at any point in time. Currently, the guidelines for operating the suggested arrangements would be set primarily with regard to the achievement of annual targets for £M3. But it would be open to the authorities, in the constant adaptation of their tactics, to consider a wider range of economic and financial indicators and to change the balance of particular factors over time.

## E The significance of the changes

31 The conclusions of Section D are that the changes outlined in C might permit:

(a) some extension of the influence of independent and free market forces in the setting of short-term interest rates;

(b) the creation of a veil over the authorities' dominant influence on very short-term money rates and the reasons for changes in the day-to-day conduct of policy.

Such development might well have presentational and psychological advantages. While moreover they would seem to do little of themselves to increase the sensitivity of £M3 to changes in interest rates they might make it somewhat easier to establish the level of rates which would produce the desired growth of £M3 over an appropriate time horizon.

32 It has been suggested that the adoption of a much more flexible system would cause the banks to modify the relative importance which currently they attach to their lending as opposed to their borrowing operations, such that a worth while restraint on the availability of credit could be obtained during a restrictive phase of policy. But it remains our view, in the light of all the consultations following the Green Paper, that such restraint would be unlikely and that banks individually would continue to respond to persistent stringency by bidding for additional resources in the money market.

33 It is, however, likely that greater volatility in very short-term rates would lead the banks either to abandon base-rate related lending in its present form or else to move base rates much more readily. Indeed, if they did not, round-tripping of the kind all too familiar in the present system could become an intolerable nuisance nothwithstanding the removal of the Reserve Asset Ratio. Such a change would be a desirable development‡

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‡Other changes might well follow, for example, more frequent changes in deposit rates, with a possibly greater need for flexibility of rates offered by building societies.

and while the arrangements set out in Section C are not necessary for it to occur, they could well lead the clearing banks to adopt lending rates more closely related to market rates than at present. This would improve the control of £M3 to the limited extent of removing the short-term distortions presently caused, on occasion, by round-tripping.

34 It has also been suggested that changes of the kind outlined in Section C would significantly reduce the relative attraction of Treasury Bills to the banks, thereby making it more likely that some useful short-run smoothing of £M3 could occur because banks and non-banks could actively and easily trade in Bills with each other. The implications of the analysis in Section C are, however, not encouraging in this respect. For the banks' need for liquid short-term assets is likely to go on dominating the demand for Bills unless the supply were increased in a manner immediately damaging to constraint of £M3. Even then, there could be no assurance that interest rate relativities would thereafter generally move so as to permit regular trading in the right direction (smoothing £M3) between banks and non-banks, in response to pressure by the authorities on the system.

35 Questions regarding evolution towards monetary base control are discussed in another paper, to be circulated by the Treasury. It suffices to say here that the changes outlined in Section C would not preclude an evolution towards monetary base control of either the 'mandatory' or 'non-mandatory' variety.

Bank of England
14 November 1980