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P E Middleton
Deputy Secretary

24 July 1981

T Lankester Esq
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Dear Tom,

Seminar on Monetary Control: 31 July

I attach a set of papers prepared for the Prime Minister's seminar. The covering paper is intended to serve as a steering brief for the discussion.

I am copying this letter to Sir Robert Armstrong.

*Yours ever,
P E*

P E MIDDLETON

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SEMINAR WITH THE PRIME MINISTER: NOTE BY OFFICIALS

1. In his Budget Statement the Chancellor said:

"Discussions are now to take place with the financial institutions about these and other changes, including the future of the cash ratio. When they are complete, the Bank will aim to keep very short-term interest rates within an unpublished band, and in due course suspend altogether the practice of having an announced MLR, which would by then have lost its operational significance."

2. The purpose of the seminar is:

- a. to take note of the new arrangements. Some elements are in place already; a further set of changes will come into effect on 20 August.
- b. to consider how the unpublished bands should be determined.

3. There are 3 papers which:

- I. Describe the new arrangements and explain how they work.
- II. Discuss the role which the narrow aggregates could play in monetary policy decisions.
- III. Explain how the considerations set out in the Budget Speech might be brought together in taking interest rate decisions.

The papers have been prepared by a Working Group of officials from the Treasury and the Bank. Mr Walters (No 10) was a member of the Group.

The Arrangements (Paper I)

4. The arrangements follow from decisions taken at the Prime Minister's seminar last November. They were first described in the Chancellor's November 1980 statement and were carried forward in the 1981 Budget. They reflect extensive discussions with the financial institutions culminating in the Draft Provisions issued by the Bank in June (and shown to the Prime Minister by the Chancellor on 19 June). The Draft Provisions are attached for the sake of completeness, but all the relevant points are covered in

the paper.

5. There is no dispute about the form of the arrangements which are due to go into operation on 20 August. The intention behind the changes is to give the market a greater role in determining the term structure of interest rates and to enable the authorities to exercise influence over short term rates in a more flexible and less prominent fashion.

6. The Prime Minister particularly asked about the timing of the suspension of Minimum Lending Rate. Giving the market more of a role means giving the authorities less. Putting MLR into suspense is part of the new approach. We therefore recommend that MLR should be suspended on 20 August. This would gain the maximum presentational and operational advantage from the new arrangements. The Authorities' role in influencing some of the more politically sensitive rates, would become less direct and obvious.

7. But when this has been done the Authorities will be unable to give such clear signals about their immediate interest rate intentions. In particular they will have considerably less direct influence over base rates and mortgage rates.

8. There may however be occasions when the Authorities will wish to signal changes in interest rates before a change in the Bank's market operations can become fully effective. The most obvious circumstances would be in response to sharp fluctuations in the foreign exchange markets. These occasions will be exceptional. But, in presenting the new arrangements, it will need to be made clear the Authorities will retain the capacity, on occasion, to signal in advance the rate at which they will provide cash to the market.

This issue is considered in paras 35-38 of Paper I.

Setting Short Term Interest Rates

9. The other two papers discuss the crucial issue of how we first set, and then change, the band within which very short rates (ie up to 14 days) are allowed to fluctuate.

10. The Government is presently committed to £M3 as the basis for its medium term strategy.

11. The Government also restated its annual targets in terms of £M3 in the Budget, while recognising that other factors needed to be taken into account in determining short-term interest rates.

12. The Prime Minister in her minute of 4 June to the Chancellor of the Exchequer said that she believed that we must switch to a system of quantitative control sooner rather than later. So the group has concentrated on those changes which seem to be practical possibilities for immediate implementation.

13. The new arrangements are consistent with a widening of the interest rate bands and moving to monetary base control. But none of us is advocating an immediate move to a monetary base regime which would exclusively determine short-term, interest rates. The changes we have considered are those which to quote the Budget Speech are:

"Desirable in their own right and consistent with a gradual evolution to monetary base control."

14. The immediate issue, as we see it, concerns the determination of the band for short-term interest rates. Broadly speaking there are two options:

a. Make this decision depend primarily on one or other of narrow aggregates - essentially the choice is between M1 and the wide monetary base. This would mean abandoning the annual £M3 target. We do not regard the option of dual targets - eg for M1 and £M3 - as viable.

b. Retain an annual target for £M3 and set the interest rate band on the basis set out in the Budget Speech.

This said:

"Decisions about short-term interest rates will continue to take account of the whole range of monetary indicators referred to earlier and other factors that affect the significance of the numbers, especially the progress of inflation."

The other factors included: the narrow aggregates, the

exchange rate and the real cost of borrowing.

We all agree that whichever option is adopted it would be necessary to retain some discretion to depart from the set criteria, in special circumstances.

The Narrow Aggregates (Paper II)

15. The paper sets out the implications of moving to the narrower aggregates:

- a. the narrow aggregates are not demonstrably inferior to £M3 in predicting long run trends in inflation. Like all aggregates, however, they show large and erratic short-run variations which are not closely associated with movements in nominal incomes.
- b. M1 would be easier to influence by changes in the level of short term interest rates than £M3 . But it does not have the same obvious links with expenditure and tax policy. And the response of M1 to interest rates is still subject to a margin of error.
- c. M_0 , the monetary base, would be more difficult to control by changing the level of interest rates than M1 (and possibly than £M3).
- d. It would be possible (subject to the qualification in b above) to relate interest rate decisions to a quantitative objective for the growth of M1 over 6-9 month periods.
- e. An immediate move to M1 would mean either adopting figures which seem high both in relation to the £M3 targets and to nominal incomes, or accepting high real interest rates.
- f. Such an objective for M1 would make it difficult and sometimes impossible to meet, at the same time, an annual target for £M3 . There might also be some conflict with the medium term £M3 targets; these would cease to have much day to day operational significance though they would remain very important at Budget time.
- g. In the event of a narrow aggregate deviating from target, the presumption would be - much more clearly than with £M3 -

that the initial response should be to change the level of short-term interest rates. This instrument would not, therefore, be available to meet other objectives, without adverse implications for achieving the target for the narrow aggregate.

£M3 Plus Other Factors (Paper III)

16. The paper explains the implications of retaining the annual £M3 target and the associated considerations set out in the Budget Speech:

a. It follows directly from the Budget Speech, and is more obviously consistent with the MTFs. It would not need a new announcement, though we might wish to give more explanation of how the various factors were to be taken into account.

b. It provides a less clear guide to changes in the interest rate bands. £M3 responds to the structure of interest rates as well as the general level of interest rates. It can be unpredictable in the short term, and can take a long time to respond.

c. The additional factors to be taken into account are difficult to quantify.

d. Decisions would be taken with a longer forward timescale in mind, and in practice are likely to be taken less frequently.

e. It appears to be more flexible because it gives the authorities greater discretion, whereas an M1 approach might look more rigid. This flexibility will however be seen as a disadvantage by those who want to give maximum weight to preventing shocks coming through on to the money supply.

17. In one way or another a range of factors will be taken into account in arriving at decisions on interest rates; this has been stated repeatedly by Ministers since the Green Paper on Monetary Control. The choice between the two approaches is one of emphasis in determining the bands - primacy to M1 or primacy to £M3.

Presentation

18. If interest rates are to fluctuate more, changes in the interest rate bands should be seen as a natural response to the criteria by which interest rates are set. We need to do everything we can to ensure that changes, whether up or down, are not seen as overt political acts. So far as possible Ministers need to stick to the line taken by the Prime Minister in Ottawa and avoid commenting on particular actions by the Authorities in the money markets or on changes in particular interest rates.

PEM
24 July 1981

Paper I

MONETARY CONTROL: THE NEW ARRANGEMENTS

I. Introduction

1. The purpose of this paper is to set out:
 - (i) the form that the new arrangements, which are shortly to be put into effect, will take;
 - (ii) how they will function;
 - (iii) what they are seeking to achieve.

It is not, of course, possible to provide a complete textbook before the new arrangements have even been put fully into effect. It is inevitable that they will evolve with use and experience. ~~With the exception of the timing of the suspension of M.I.R., the paper is agreed between the Treasury and the Bank.~~

2. One of the features of the new arrangements is that they can be operated with a variety of styles of monetary policy; for example, with a high or low degree of discretion in the setting of interest rates, with greater emphasis given to wide or narrow aggregates. The focus of this paper is essentially technical, concentrating on how the new mechanisms can be operated rather than the form of monetary policy which they are made to serve. The wider issues on the determination of interest rates and the role of different monetary aggregates in this are discussed in the companion papers - Setting Short Term Interest Rates and A Role for the Narrow Aggregates.

3. This paper will discuss:
 - (I) The characteristics of the new arrangements
 - (a) The interest rate band
 - (b) Operations in bills
 - (c) Discount window lending
 - (d) Bankers' balances
 - (e) Special deposits
 - (f) Reserve asset ratio, prudential norms.
 - (II) Suspending minimum lending rate.
 - (III) Presentation
 - (IV) Procedures.

4. Following the debate on monetary control, culminating in the Prime Minister's seminar last November, the Chancellor announced a series of changes to be made to the system of monetary control. These were set out in the Bank's Background Note of 24 November. The process was carried forward in the Budget and in the Bank's paper of 12 March. These changes had a number of aims:

- (i) to allow greater scope for market forces in determining the structure of short term interest rates. The Bank would formulate its objectives in terms of very short term rates (0-14 days), leaving the longer short term rates (up to three months) freer to vary;
- (ii) to reduce the bias for delay which was thought to characterise administered interest rate changes;
- (iii) to achieve a lower political profile for interest rate changes.

These changes could also lead to more flexible market related pricing of overdraft facilities which might reduce the scope for round-tripping and the distortions to monthly money supply figures which this can produce.

5. The Chancellor also said in November that no decision had been taken about the desirability of moving to a system of monetary base control. However, the changes to be made were seen as consistent with further evolution in that direction.

II Characteristics of the New Arrangements

6. Following the November statement, work was undertaken to design a system which would implement these objectives. Some changes have been made already - reduced emphasis on discount window lending, a movement by the Bank away from posting three months dealing rates. After the Budget, the Bank put proposals to the banks and other financial institutions. Discussion of these is more or less complete and a final draft of the detailed provisions was circulated in June. (A copy was sent to the Prime Minister on 19 June). Subject to any points raised by market participants, the final text will be issued in mid July, with the intention of putting them progressively into effect, beginning on 20 August (the start of banking September). The main features of the new arrangements are as follows.

(i) Interest rate band

7. The Bank will aim to keep very short-term interest rates within an unpublished band, the level of which will be determined by the authorities according to the requirements of its monetary policy. The band will relate to rates on Treasury bills of 0-14 days maturity from which rates for eligible bank bills of equivalent maturity will be derived. Although the

Bank's open market operations will still extend to longer maturities it is only at the very short end that it will seek to control rates. It is proposed initially to set a width of 2 per cent which would be achieved on average over a week. The aim would be to keep actual dealing rates within an outer limit of 1 per cent on either side of the band. The width of the band would be reviewed from time to time, in the first place after six months. It should be noted that maintenance of bill rates within the band is consistent with wider fluctuations of comparable inter bank rates e.g if shortages or surpluses develop late in the day.

8. One of the objectives of the modifications to monetary control arrangements we are now introducing is to allow market factors more influence over short-term interest rates, both for their informational content and to facilitate prompter adjustment by de-politicising as far as possible the process of interest rate formation. There will still of course be substantial official influence over the general level of rates through the interest rate band at the very short end of the money market, but that influence will be less dominant and will be capable of being changed more flexibly if the level and width of the band are not revealed at the time. Otherwise, as with MLR in the past, official interest rate decisions would tend automatically to set the whole pattern of short-term rates - including bank base rates and mortgage rates - and so will continue as major political decisions which can lead to a "bias to delay". It is accepted that the proposed arrangements will mean more uncertainty about official interest rate intentions in the financial market but this is a necessary part of allowing the market's own expectations a greater role.

9. Given that we do not wish to reveal details of the band at the time, it follows that we will not wish to reveal, even after the event, details of the rates to which the band applies, how precisely it is operated, or how wide it is, since to do so would make it much easier for the market to discover the key parameters within which we operate and to use this information - rather than their own market judgement - to forecast future interest rates.

10. To a substantial extent fluctuations within the band will reflect random factors or "noise", arising from imperfect estimates by market participants, including the public sector, of the size of surpluses and deficits expected to emerge during the day. Movements in the longer short rates beyond the horizon of the band will be more informative than fluctuations of the rates confined within the band. But this is not necessarily to say that the latter can have no informational content. If overnight to 7 day rates move to the top of the band without any corresponding movement in three month rates we might assume that the market expected the fluctuation to be temporary. In this case we would interpret the movement as "noise" in the system. If, on the other hand, short rates moved to the top of the band for a period, and rates further out adjusted in sympathy, then the market would clearly be signalling its belief that rates need to rise generally - in other words that the band

should be moved. This could also be the case if longer short term rates rose but technical factors were continuing to hold down very short rates.

11. The precise figure of 2 per cent is very much a matter of judgement, as is the additional outer band of a further 2 per cent. Too narrow a band would in practice leave existing arrangements unaltered, and could not be expected to have any significant effect on the banks' behaviour in a direction that might be helpful to monetary control. Too wide a band could risk creating a damaging degree of volatility.

12. The very wide band set by the Federal Reserve in the US - often as much as 5 or 6 per cent - is not comparable to that to be introduced here. The Fed operates with a guideline for the quantity of market intervention (non-borrowed reserves) in a given period, and allows interest rates to fluctuate within a band whose purpose is essentially to trigger reconsideration of the reserves target between monthly FOMC meetings. Since we are not proposing to operate a system of quantity targeting, our band does not fulfil this role. Without such a guideline, a very wide band would serve only to increase uncertainty. While some element of uncertainty will be an essential factor in inducing changes in banks' behaviour such as the pricing of loans, there is little merit in increasing uncertainty per se, beyond the point necessary to give the Bank sufficient flexibility in its market dealings.

13. One of the implications of having an interest rate band rather than MLR is that banks' and building societies will not have an easily identifiable rate to which they can peg their base and mortgage rates. They will be left to make their own judgements. As a consequence it is likely that there will be less uniformity between individual banks and building societies, a further factor weakening the latter's cartel arrangements. In general the variability of banks and building societies rates is likely to depend more on the frequency of adjustment of the band than of fluctuations within it, though if rates were at the top of the band and were expected to say there or to presage an upward adjustment, some institutions might adjust their rates. As with prime rates in the US, it is possible that a bank will misjudge the market and have to reverse an interest rate change within a short period.

(ii) Operations in bills

14. The Bank is placing greater emphasis on open market operations and less on discount window lending. These operations are being conducted in bill markets rather than the inter bank market, largely through the Discount Houses. A number of consequential changes are necessary to ensure an adequate stock of commercial bills is help by the discount market;

- (a) the list of banks whose acceptances are eligible for discount at the Bank and hence can be used in open market operations is being extended.
- (b) In contrast with the sum of over £4 billion currently held by all banks on a daily basis with the discount houses under the reserve asset ratio, eligible banks will

undertake to maintain a minimum of secured money with the discount market - initially around £2 billion - and to aim at a daily average of some £3 billion. Included in the calculation of the latter will be secured call money with money brokers and gilt edged jobbers.

15. The Bank's normal operating procedure (already largely in place) will be to make a daily estimate of the banking system's net cash shortage or surplus and then, if there is no desire to influence short-term rates in any particular direction, to offset the shortage or surplus by matching bill transactions. At various times during the day the Bank communicates its estimate of the shortage or surplus to the market. It has recently begun to report twice daily to the market on the rate at which they have dealt.

16. In the case of a shortage, the Bank will invite the discount houses to offer bills for sale, either outright or for repurchase on a specified future date. The Bank may indicate the kinds of paper it wishes to buy - normally Treasury, local authority and eligible bank bills - and also the desired maturities. At present, the Bank distinguishes four maturity bands for bills -

- (i) 1-14 days,
- (ii) 15-33 days,
- (iii) 34-64 days,
- (iv) 64-91 days.

It may, however, on occasion be more precise still and specify paper maturing on particular dates.

17. The Bank's choice of maturity is influence primarily by the expected future pattern of surpluses and deficits so that, for example, the prospect of four weeks of continuing shortage will encourage the Bank to buy bills with a maturity of one month or more. Where there is the expectation of a significant cash surplus at some known future date, the Bank may set out to buy bills for repurchase by the discount houses on that date. With such a transaction, both the current shortage and the prospective surplus are simultaneously smoothed.

18. A second factor affecting the Bank's choice of maturity and the relative attraction of outright transactions compared with repurchase arrangements is the state of the market. The Bank may know, for example, that there are insufficient short-term bills in market hands to allow a large shortage to be dealt with.

19. For the reasons set out in paras 17-18, the Bank may therefore undertake operations in a range of maturities in pursuit of its objective for 1-14 day rates. When operating in the longer maturities the Bank will do so in a way which will not frustrate the objective of leaving longer short-term rates freer to vary - see paragraph 4(i) above.

20. If, in a cash shortage, a discount house wishes to respond to an invitation from the Bank, it may offer various amounts at a range of prices, just after midday. (This contrasts with the arrangements which operated until early this year, under which the Bank posted dealing rates based on the result of the previous week's Treasury bill tender). The Bank then accepts or rejects these offers in the light of the agreed objective; if the 1-14 day rates are required to rise, the Bank will not accept sufficient offers to reduce the cash shortage, rejecting the higher prices (lower interest rates). The market then has a second chance to offer bills in the early afternoon at lower prices and the same process will occur again. If the Bank still has not offset the cash shortage in full, the discount houses will be left to borrow from the Bank at a rate of the Bank's choosing (see paragraphs 23-26 below).

21. In the case of a prospective cash surplus for the day, the Bank will seek to "mop-up" spare cash by offering to sell Treasury bills⁽¹⁾, the maturity of which will be chosen to smooth out a prospective cash shortage on some specific future date. As in the case of a cash shortage (para 17-18), this may involve operations spanning more than 14 days though more typically only very short maturities are offered. Traditionally, the offer of mop-up bills has been confined largely to the discount market but in future it will be made also to banks active in the money market.

22. There are a number of other techniques which have been used for coping with money imbalances. For example:

- (a) repurchase agreements for gilts and fixed rate export credit paper. These were used during 1980 but were finally run off in December. Such operations are regarded very much as a last resort, but in extreme circumstances it would be possible to reactivate them though the Bank would first consult the Treasury before doing so.
- (b) foreign exchange swaps. On occasions swaps have been made mostly over the end of banking months, but within calendar months, on the presumption that they would not be "visible" in any published statistics. It is only possible to use this device if it is seen as consistent with exchange market and reserves management. Thus the scope for these operations may be limited. The Treasury are normally informed when such operations are contemplated by the Bank.

(1) It is both cheaper (for the Government) and administratively easier for all concerned if the Bank sells Treasury bills rather than other forms of paper.

(ii) Discount window lending

23. Though discount window lending is being reduced in importance, (it has only been used on 7 days so far this year) it will still have a role to play. The Bank's background note of 24 November stated "The Bank would normally charge a rate of its discount window lending somewhat above comparable market rates but within the unpublished band...."

24. Two distinct sets of circumstances can be envisaged. In the first, discount window lending might be used as a deliberate operating technique when it is desired to increase market rates - either within an existing band or concurrently with a raising of the band - or to resist a decline in rates which the market is bringing about. Implicitly, the rates at which bills were being offered by the market would not be acceptable, or not in sufficient quantity for the whole shortage to be relieved, and a visit to the Bank would become necessary for the Houses to square their books. The size of the penalty to be applied when lending to them would reflect the size of the increase in market rates that was desired. It would be unnecessary to charge a rate higher than the top of the band, and the November paper said that the Bank would not do so. Nor would the Bank wish always to charge a rate exactly equal to the top of the band, if the objective remained to conceal precisely where the band lies. When lending is undertaken as a deliberate act of policy execution by the Bank, it would be done under the so called 2.30 arrangements, and the fact and details of the lending would be immediately make know.

25. There are other possible circumstances in which the Bank might wish to use discount window lending as a deliberate technique of market management, but without having any policy objective on interest rates to pursue. An example is provided by the events of 2 March 1981. On that day the market was massively short because of the payments of Petroleum Revenue Tax that were due; but the projections for the immediate future suggested that a considerable reflux would take place over the next week or so. Market management considerations therefore indicated that much of the cash provided should be repayable in about seven days, and this would not have been possible by outright purchase of bills. In principle, bills could have been bought on a repurchase basis, but the available supply of bills was too limited for that to be done. The only available technique was, accordingly, to lend at non-penal rates. In such circumstances, the lending would be explained to the market as an exception to the normal rule of "lending somewhat above comparable market rates".

26. Thus it may not be appropriate in all circumstances to impose a penalty but in general the lending rate should be somewhat above comparable bill rates in order to ensure that the discount houses offer sufficient paper at acceptable rates and thus that bills operations remain the main means for supplying cash. A modest fraction - e.g. $\frac{1}{4}$ per cent would generally be sufficient. On occasions, however, a larger penalty might be required, the limit being the upper end of the band.

(iv) Bankers' balances

27. Under the old arrangements, the clearing banks maintained 1½ per cent of their eligible liabilities as bankers' balances with the Bank of England. This sum served as the fulcrum for money market management. Under the new arrangements all banks and licensed deposit takers with eligible liabilities in excess of £10 million will maintain a non-operational non-interest bearing deposit of ½ per cent of eligible liabilities - currently about £330 million. The non-operational balances will be an amount to be observed at all times. In addition the clearers will voluntarily maintain operational balances, again non-interest bearing, initially of around £150-200 million. Overdrafts will not be permitted. Under the old averaging system, holdings of cash above the required level were tolerated more readily as they in effect bought the right to go below at a later date. Under the new system, any "excess" holdings will have an opportunity cost and the clearers will therefore have strong incentive to keep such holdings on the minimum required to operate the clearing system. As experience is gained with the new system, the clearers may be able to cut down the size of the operational balances.

28. Observation of the banks' desired cash holdings might make it possible to learn something about the properties of monetary base system, particularly a non-mandatory one consisting of bankers' balances. However, while it is true that some element of voluntary or excess balances will appear for the first time, it cannot be assumed that the level of balances banks choose to hold under one set of arrangements will be translated to another. Desired balances will depend on the degree of uncertainty about the cost of funds, the assurance that there is an upper limit to the cost and the availability of assets only slightly inferior to cash such as money at call with the discount houses.

29. The present banking sector for statistical purposes, comprising some 350 banks (including the National Girobank, the Banking Department of the Bank and banks in the Channel Islands and the Isle of Man) will shortly be enlarged into a new monetary sector. The enlarged sector will include all recognised banks and LDTs, the National Girobank, the Banking Department of the Bank, the Trustee Savings banks and those banks in the Channel Islands and the Isle of Man which are subject to broadly parallel cash ratio arrangements. The effect of this enlargement will be to produce a once-off net addition to the stock of £M3 of around £8 billion (13 per cent). In monitoring progress against the monetary target, allowance will be made for this. It is not expected that the trend growth of £M3 will be significantly affected.

(v) Special Deposits

30. The Special Deposits Scheme will remain in place under the new arrangements, and will apply to all institutions with eligible liabilities of £10 million or more. As before, calls will be set as a percentage of eligible liabilities. Special Deposits carry Treasury bill rates. The authorities have to give notice, and, because of the number of banks involved, it may

take up to ten days for a call to become effective, though releasing deposits takes only a matter of a few days.

31. Since the early 1970's Special Deposits have not been used deliberately to squeeze bank liquidity, since banks tended to respond to reserve asset pressure in ways which increased rather than reduced the money supply. Special Deposits were however used to mop up excess bank liquidity, to pre-empt a rise in bank lending by indirectly raising the cost of wholesale funds. Under the old RAR, a call for Special Deposits was no different from varying the level of the reserve asset ratio. The same technical effect could (and can) be achieved by official sales of bills providing the banks are willing to buy and hold bills offered for sale. Special Deposits may sometimes be a surer way of offsetting fairly short lived fluctuations in liquidity. They also have an announcement effect, which can be useful if the authorities want to give a clear signal to the market.

32. Under the new arrangements, Special Deposits should still provide one way of mopping up excess bank liquidity. The new prudential arrangements will be much more flexible than the RAR, and it is not intended that they should operate as a monetary control. But it is probable that the banks will have a reasonably stable demand for liquid assets - and will continue to regard Special Deposits as, to some extent, a substitute for bills and LA deposits. The chief difference may be that there will be much more elastic in the system; how much depends on how far the banks hold excess reserves, in response to changed money market tactics. The risk of distorting the monetary aggregates if Special Deposits are used to squeeze bank liquidity may therefore be rather less than under the old RAR. Since the option of varying the reserve asset ratio will no longer exist, Special Deposits - though possibly a rather weaker instrument - may still prove a useful addition to the authorities' armoury of instruments.

(iv) Reserve asset ratio and prudential supervision

33. The reserve asset ratio will be abolished on the starting date for the new arrangements. While discussions on developments in supervision are continuing, the banks have given assurances that they will discuss in advance any changes in their policies for the management of their liquidity. Meanwhile supervision will continue to be exercised by the Bank in the normal way. The Bank is resuming discussions with the banks on a new prudential regime on the basis of a new paper on liquidity measurement. The evolving prudential system will not be characterised by a universal requirement for all banks like the RAR but will seek to establish with individual banks what are the liquidity characteristics which are appropriate given the type of business they conduct.

34. These liquidity policies will not be operated as requirements to be observed either constantly or on make up days. It is intended that there should be a substantial degree of variability around the liquidity pattern agreed so as to accommodate pressures on bank liquidity, for example during periods of high tax payments. This will permit liquidity to be used when it is most needed, something which the RAR tended to obstruct. These new arrangements should therefore help in avoiding local crises of shortage of liquid assets and should therefore conflict less with the operation of monetary policy. It would be an exaggeration, however, to claim that the requirements set for individual banks will not have any monetary effect. The new arrangements cannot help solve a potential secular shortage of bank liquidity caused by a tendency for bank lending to grow faster than deposits. If liquidity has been seriously eroded, there is likely to be pressure on the money supply as banks seek deposits in order to increase their holdings of liquid assets. While the liquidity norms can accommodate seasonal variations, it will not be appropriate to relax general prudential standards to accommodate a chronic problem of monetary policy.

II. Suspending Minimum Lending Rate

35. It was announced in the Budget that the Government's intention was "in due course to suspend altogether the practice of having an announced MLR, which would by then have lost its operational significance".

36. Retention of an MLR would not fit well within the new arrangements as it would present a clear signal of the authorities' views about interest rates beyond the very short rates which the authorities will keep within the band. This would limit the expression of a market view. It would also retain the high political profile of administered changes.

37. It is important, however, to recognise the full implications by suspending the practice of an announced MLR which would be operational as well as presentational. The authorities leverage over longer short term rates (1-3 months) would be less and this may sometimes be unwelcome. Relying on open market operations, the authorities will not be able to provide a signal about its interest rate objectives as precisely, quickly or credibly as they could with MLR. The banks and building societies have in the past, related their base and mortgage rates to MLR. In its absence, their behaviour is likely to be less predictable. If market pressures were generating a sharp rise in 3 months rates for example which the authorities considered to be unjustified, this might only be prevented by intervening to cap the longer short-term rates, a step which even if it did not formally amount to reviving MLR would be tantamount to doing so. In short, giving the market more influence - in order to secure prompt changes in interest rates and reduce Ministerial responsibility further - can only mean giving the authorities less. In general, the Bank feel more confident about their ability to achieve an upward movement through money market operations, than they do about leading the market downwards.

38. There may be occasions when a substantial change in short-term interest rates is either required immediately or needs to be timed to coincide with policy action in other fields. The Bank of England's open market operations could not be relied on to ensure that such changes would occur to the right extent and at the right time. In such exceptional circumstances, when the Authorities consider that an immediate signal about such a move is necessary, it will still be possible to give one by announcing in advance the rate at which the Bank will provide cash on the next available occasion. Thereafter the normal arrangements, under which no advance announcements about rates would be made, would be resumed.

III Presentation

39. The new arrangements are attempting to:

- (i) reduce the high political profile and scale down the degree of direct Ministerial responsibility. If this can be done it should help to:
- (ii) reduce the so-called bias for delay. Interest rates will be adjusted more promptly and there will no longer be the presumption that the direction of a change will not be reversible within a matter of weeks.

40. In principle control of a quantity - money - should imply freedom for the price - interest rates - to vary. In practice, however, it will be difficult to achieve public acceptance of this proposition. Although the monetary target is a quantity rule, the links between money and interest rates are not very direct or precise nor have we committed ourselves to being guided only by one monetary aggregate. What we do not have is a quantity rule at the point at which monetary policy is operated i.e. in the money markets. This contrasts with the position on the exchange rate where the objective of achieving no net intervention rule is directly operational or with monetary policy in the US where the Fed sets a path for the supply of non-borrowed reserves. Only if we were operating a policy of controlling the supply of monetary base month by month (targetting the wide base over 6 months would be little different from targetting other aggregates) would there be a sufficiently precise quantity rule.

41. Although the task will not be easy, there are ways in which the arguments can be presented and which emphasise interest rates as the product of policy rather than their objective.

- (i) It should be stressed that control of a quantity, money, implies that there cannot be a separate interest rate target. Though the Government has some discretion this is very much circumscribed. The authorities can influence the timing of interest rate changes and can choose the speed with which deviations from the monetary target are corrected.

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- (ii) There will eventually be no MLR which is pivotal to the whole structure of interest rates, and thus a single rate to which banks can link a base rate. It is to be expected that base rates will both be less important in pricing loans and be moved more often.

42. A change will be needed in the way briefing is prepared and in the way Ministers refer to interest rates. It will be necessary to talk less in public about the Government "setting", "cutting" or "raising" interest rates. Instead the emphasis must be on creating conditions which produce or permit lower rates, or if rates have to go higher, on the need for higher rates. Ministers' statements will have to be symmetrical, refraining from taking credit when they have "cut" rates. Ministers will also have to refrain from commenting day to day operations in the money markets and on interest rate changes by banks and building societies and still more from attempting to exert moral suasion on them.

43. There are a number of practical steps by which public understanding of the Government's position on interest rates could be got across:

- (i) Guidance could be prepared for the Press Office and Economic Briefing setting out the way in which interest rates will be determined and how this should be presented.
- (ii) A guidance note could be prepared for Ministers on the same lines.
- (iii) On a suitable speech occasion a Treasury Minister could include a passage about interest rates under the new arrangements.

Finally, it will be necessary to consider the terms in which the Bank's operations in the money markets are described e.g. in the Quarterly Bulletin. Paragraph 9 above indicated that we will not want to reveal the width or location of the band. The description, therefore, will have to be carefully constructed so as to give the public an adequate account of developments without undermining the authorities' freedom of action.

IV Procedure

44. The procedure for reviewing monetary developments and prospects and for deciding on the interest rate band will represent a development of current practice. Shortly after the publication of the provisional money figures for one month, an exercise is undertaken to assess the prospects for the current plus the following two months. This, together with a report by the Bank on recent money market operations,⁽²⁾ and a note relating the monetary prospects to developments in the economy more generally, is then discussed at a Treasury/Bank meeting chaired by Mr Ryrie - the Bank team is led by the Deputy Governor.

⁽²⁾ Information on money market influences and the Bank's operations, eg what maturities were traded at what rates, is sent over to the Treasury each week.

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The meeting will attempt to form a view about interest rates and in particular whether changes in the interest rate band are required. It will also consider the prospects for funding and what our objectives should be over the coming months.

45. Initially the Bank will aim to keep rates within the band without being committed to aiming at the centre. Indeed the amount of "noise" might make this difficult to achieve. However, as experience grows, a band of 2 per cent might prove more than enough to accommodate noise. One response would be a decision to operate with a narrower band. Alternatively deciding to aim at a particular area of the band might become a possibility e.g. in circumstances in which the case for an upward shift of the band was accumulating but one of the regular occasions for decisions was not imminent. The authorities in these circumstances might want to push rates within the band towards the upper limit or not seek to resist a tendency for rates to stay near the upper limit. It is too soon, however, to gauge whether such tactics would be desirable.

46. The outcome of the meeting will, as now, be a submission to the Chancellor (the Bank representatives will send their own submission to the Governor) which will set out the monetary prospects and, if necessary, make recommendations on the interest band. The Chancellor will then discuss the proposals with the Governor and seek the agreement of the Prime Minister.

47. Although this procedure is built around the banking month and the publication of the money figures, there will certainly be occasions when interest changes need to be considered outside this timetable. Once MLR has gone, however, there will no longer need to be a presumption that changes are made on a Thursday; indeed it will be desirable to prevent an easily predictable pattern of behaviour by the authorities from becoming recognisable.

H F 3 Division

July 1981

SUMMARY AND CONCLUSIONS

1. There are two broad ways in which the narrow aggregates (M1 and Mo) could be given a greater role in monetary policy decisions: we could set explicit targets for them, or they could be used more informally as indicators, alongside £M3 and other variables, to inform interest rate decisions.

Targets

2. The alternatives are:-

(a) a single target for one of the narrow aggregates in place of the existing annual and medium term targets for £M3 ;

(b) a short term (6-12 month) operational target for M1 or Mo, with £M3 remaining as the medium term target for MTFs purposes;

(c) a short term target for either M1 or Mo as an adjunct to both the annual and medium term targets for £M3 .

3. The case for replacing £M3 depends on whether either M1 or Mo is judged preferable to £M3 on control grounds, and in terms of its relationship with prices. A case can be made out for M1, but Mo does not look a strong candidate because, unlike M1, it would be difficult to control by varying the level of short term interest rates. But it would be difficult to abandon £M3 entirely without damaging the credibility of the strategy. A target aggregate like M1, which can in principle be controlled by varying interest rates alone, might also fail to act as an effective constraint on fiscal policy. (See paras 7-20).

4. There are strong objections to multiple targets (options b and c) which have special force where targets for both broad and narrow aggregates are annual. Different aggregates have not tended to move together over periods as short as a year. Measures taken to control one aggregate

could throw the other further off course. We could well end up missing both targets, (see paras 21-27.)

Indicators

5. A more low key approach would be to take systematic account of the information contained in the narrow aggregates, alongside £M3 , in taking interest rate decisions. This could be done without setting formal targets for the narrow aggregates if the forecasts were used as a benchmark to identify unexpected developments in $M1$ and $M0$. The narrow aggregates have not on average been reliable forward indicators of movements in broad money but on occasion they have signalled when interest rate movements have become excessive (eg. 1977) and provided an alternative measure of monetary conditions in periods when the broad aggregates are known to be distorted by special factors (eg. the early '70's and 1980). But this does not point to any very-simple rule. (See paras 28-34.)

Outlook for 1981/82 and 1982/83

6. The narrow aggregates are likely to grow fast relative to both £M3 and nominal incomes as inflation decelerates, unless interest rates rise in real and possibly nominal terms. This is because the velocity of $M1$ tends to vary with nominal interest rates and thus with the rate of inflation. A target for $M1$ which accommodated some fall in velocity over the next few years would probably have to be over 10%. It might not be possible to meet a single figure target without high real interest rates, given the fiscal framework set out in the MTFs. (See paras 35-39)

THE ROLE OF THE NARROW AGGREGATES

Introduction

This paper summarises and updates some of the work done before the Budget on the choice of target aggregate and considers whether there is a role for one of the narrower aggregates (M1 or some measure of the monetary base) either as a target in its own right or as a less formal yardstick for taking short term interest rate decisions. The Budget reaffirmed the Government's commitment to £M3 as the target aggregate both for medium term (MTFS) and annual purposes. The paper discusses how far a role for one of the narrower aggregates would be compatible with this position. It concludes by reviewing the prospects for the different monetary aggregates in the next two years as implied by the Budget forecast, and by the latest internal forecasts and describing how we might set about choosing a numerical target for a narrow aggregate, should we want to adopt one.

I. The Monetary Aggregates

(a) M1

2. UK statistics currently identify three measures of money: £M3, M3 (which differs from £M3 only by including residents foreign currency deposits) and M1. The most obvious function of money is to act as a means of payment and the aggregate which most closely corresponds to money in this sense is M1, which consists of notes and coins and £ sight deposits. Most of these deposits do not carry an explicit rate of interest,* but there is a small, though quite rapidly growing, interest bearing component, including accounts which are clearly not primarily a means of payment, but provide a temporary home for funds eventually destined for the gilt edged market. But M1 does not include all the assets which can be effectively used to make payments and

*though current accounts do bear an implicit rate of interest because of the way offsets to bank charges are calculated.

financial innovations of the sort recently introduced in the USA are likely to make it even more difficult to unambiguously identify a set of assets which performs this role. There are also statistical problems with M1; for example, the seasonal adjustments are prone to much larger revisions (in percentage terms) than are the adjustments to £M3 and short term movements in the series do tend to be rather erratic.

(b) £M3

3. Sterling M3 includes all the assets that are in M1, plus a large interest bearing component (£ time deposits and CD's) which fulfill another, wider function of 'money'-to act as a store of value; But there are a wide range of other short term financial assets which serve the same purpose - LA deposits, Treasury bills and deposits with finance houses. The main feature which distinguishes time deposits from these other assets is that they are capital certain. Like other short term financial assets, however, they become more attractive when the level of short term interest rates is expected to rise, relative to longer term rates. The fact that 60% of £M3 is interest bearing is the reason why £M3 is primarily responsive to relative rates of return rather than, like M1, to the level of short rates alone. While a rise in short rates will unambiguously depress M1, it may or may not reduce long term rates, and the expected capital gains to be made from holding gilts.

(c) M2

4. The Bank are now in the process of constructing a new monetary aggregate, M2, to fill the gap between M1 and £M3. Unlike these other measures of money, which are based on subsets of the deposits distinguished in the banks' own balance sheets, M2 is an attempt to give statistical content to a purely economic concept - money balances which are primarily used to finance transactions. It will include interest bearing accounts below a certain size, as well as current accounts, and may include deposits outside the banking system which can be used to make payments. It will be sometime before the usefulness of the new series can be properly assessed. The first data should be available by the end

of the year, but it will be a matter of years before we have enough understanding of its seasonal and other properties to use it as the basis for taking monetary policy decisions.

(d) The Monetary Base (Mo)

5. Other measures of money can be derived from the published statistics, though they are not identified as monetary aggregates in their own right. One of the narrowest measures is base money* (designated Mo for the purposes of this paper) which include notes and coins held by the public - 85% of the total - and ^{bank}cash and bankers' balances at the Bank of England. From a theoretical standpoint, it is an interesting concept because it measures the money which is created directly by the monetary authorities (sometimes called 'high powered money'). Money assets which are the liabilities of the banking system (bank deposits) are excluded altogether. Looked at another way, base money is equal to that part of the Central Government's borrowing requirement, including its net acquisition of foreign assets (via EEA), which is not funded by selling non-money assets to either the banks or the non-bank private sector. Unlike other measures of money, information on the monetary base is available on a daily basis.

(e) Growth of the Different Aggregates

6. Over long periods of time, the various aggregates tend to move broadly in line with one another: between 1964 and mid-1980 for example the trend growth of Mo was $8\frac{1}{2}\%$ of M1. $8\frac{3}{4}\%$, while £M3 grew by about $10\frac{3}{4}\%$. If the years 1972-75 are excluded in calculating the trend (on the grounds that £M3 was distorted by the aftermath of Competition and Credit Control, round tripping etc.) the correspondence is even closer, with a trend growth of £M3 of $8\frac{1}{2}\%$ a year. But the year by year growth rates in broad and narrow aggregates have often diverged very sharply - indeed, over the 1970's,

*The monetary base can be defined in a number of ways. The definition used here is the wide base including notes and coins and bankers' balances at the Bank of England, but not other deposits at the Bank (eg. by Bank staff, and overseas customers). Different definitions of base money were discussed in an article in the March 1981 BEQB.

there appears to have been a slight inverse relationship between the annual growth rates of M1 and £M3. There are three striking recent examples. Between 1971 and 1975, £M3 first grew at three times the rate of M1 (1972/73) and then rose much more slowly than M1 over the period 1974/75. In 1977, M1 growth was much higher than £M3, while in 1980, £M3 grew more than twice as fast as M1. On each occasion M0 behaved like M1 rather than £M3. The last two episodes reflected dramatic changes in short term rates (down in 1977, up in 1979/80) which were not matched at the long end of the market, leading to sharp changes in the attractiveness of all short term financial assets (including time deposits) relative to longer term ones.

II. Choice of Target Aggregate

7. A satisfactory target aggregate needs to meet two conditions:- it must be causally related to the final objectives of policy - nominal incomes and inflation - and the authorities should be capable of controlling it, at least over the target period (ie. within a year, in the case of an annual target).

(a) Relationship with Inflation

8. There does not seem to be much to choose between the different aggregates as predictors of inflation. Over the last fifteen years or so, the correlation between prices and £M3 has been no better or worse than between prices and M1. Until about 1978, it is true, £M3 did seem to have the edge over M1. But this rested heavily on a single episode - the inflationary explosion of 1975 which was preceded in 1972/3 by a much more dramatic upturn in the broad than the narrow aggregates. One view is that an excessive growth in broad money led, two years later, to a price explosion. An alternative view is that £M3 was heavily influenced by special factors in 1972/73 and that the rise in UK inflation in 1975 was largely caused by developments in the rest of the world, the 1974 oil price rise and the upsurge in manufactured export prices. This is not to say that the 1975 inflation

was non-monetary in origin: the increase in world export prices in 1973-5 was preceded by a sharp rise in world monetary growth in 1971/72, echoes of which can be seen in the UK for both the broad and narrow aggregates.

9. This explanation does not resolve all the problems about the monetary origins of the 1975 inflation, but it casts doubt on the popular view that the behaviour of £M3 and M1 in the early '70's proves conclusively that, for the UK, broad aggregates are more economically significant than the narrow ones. The period 1972-75 aside, M1 has been slightly better than £M3 in predicting the rate of inflation and since 1978, M1 has been distinctly better, with £M3 showing a marked tendency to under-forecast the rise in prices that occurred.

10. The more important point, however, is that simple relationships between money (and money alone) and prices are not very good at tracking movements in inflation over periods as short as 2-5 years, though they may be adequate for explaining long run trends. Inflationary shocks of various sorts - stemming from movements in world oil prices changes in tax policies, income policies and their aftermath etc. - may significantly affect the speed with which prices respond to movements in the money supply. Even though these fluctuations may be ironed out in the long term, they can be very important in determining prices in the short to medium term. But over the long term, as noted above, the various monetary aggregates tend to move fairly closely together.

11. This suggests that it is not possible to discriminate adequately between the different monetary aggregates on the basis of their relationship with prices. Restraining the rate of inflation by controlling the money supply is a fairly long run policy and, over this time horizon, one aggregate will broadly do as well as another.

(b) Control Issues

12. On the second issue - controllability - the differences between the various aggregates are more pronounced. The instruments available to the authorities are variations in the level of short term interest rates and fiscal policy. They may also, on occasion, be able to influence relative interest rates, through operations in the gilt-edged market, though-in our present state of knowledge - not reliably and possibly not to any great extent. Changes in short term rates may often have powerful effects on £M3 by changing expectations about future interest rates and encouraging asset holders to switch between money and gilts. But the net effect on £M3 depends on how long rates move as well, and this is not easy to predict. Short term interest rates also directly influence the growth in gross wealth, which includes bank lending- though this effect takes a year or two to build up. In general, therefore, the relationship between £M3 and the level of short term interest rates is neither very reliable nor very well understood certainly over periods as short as a year. The authorities cannot, therefore, depend on controlling £M3 by manipulating short term interest rates alone. A supportive fiscal policy is necessary. But since fiscal policy is cumbersome to change, relatively slow acting, and its effects are specific to the precise measures taken, this makes control of £M3 over periods of less than a year a distinctly chancy business.

M1

13. By contrast the narrower aggregates are less likely to be affected by fiscal policy changes and to be more responsive to changes in the level of short term interest rates. The link with fiscal policy is a matter of degree. The demand for M1, like the demand for broad money, seems to be related to gross financial wealth as well as income, and it too is likely to be influenced by fiscal policy - though to a rather smaller extent than the demand for £M3 . The relationship between M1 and the level of short term interest rates seems to be reasonably well defined and stable. Recent work suggests that the direct effect of a 1 percent

point rise in short rates is to depress the demand for M1 by about 1½% after one year, and about 2% in the longer term. Indirect effects through the impact of higher interest rates on income and wealth tend to increase the effect, especially in the longer term. These effects are not instantaneous, of course, and they are subject to a margin of error so they cannot guarantee very precise control. They may still mean that unacceptable fluctuations in interest rates are needed to control M1, especially over relatively short periods when, for other reasons, the demand for M1 is growing strongly relative to its desired path. But they provide some basis for thinking that M1 might be relatively easier to control, on an annual basis, than £M3.

The Monetary Base (Mo)

14. The wide monetary base (Mo) would probably be more difficult to control than M1. Even though base money consists only of the monetary liabilities of the monetary authorities, controlling the base is no different in principle from controlling M1, whether the Bank's operating instructions are set in terms of interest rates or quantities. This is because 85% of base money consists of notes and coins in the hands of the public. Quantitative rationing of the physical supply of notes and coins is not a serious option - the main effect would probably be to distort monetary conditions, rather than control them.

15. The Bank can only act directly on the banking system's holdings of cash through its money market operations. But these are tiny compared with the public's holdings. It will often not be practical to offset shifts in the public's demand for notes and coins by contracting or expanding the supply of cash to the banking extent by a matching amount. Nor would this be necessary if control of the base were only sought over a period of about 6-12 months. In practice, the Bank would have to react to a rise in the public's demand for notes and coins by driving up interest rates far enough to reduce the public's demand for cash to the extent needed to bring Mo back on track within the target period - ie. several months later. Control of Mo would therefore be based on judgements about private sector behaviour and would raise similar issues to those raised by control of M1 or £M3.

16. The problem is that the relationship between the wide base (Mo) and interest rates seems to be considerably weaker, less stable and more poorly determined than that between M1 and interest rates. We have found no relationships capable of explaining past, very volatile movements in bankers' balances at the Bank of England, nor would past experience necessarily be a good guide to future behaviour, given the changes to money market tactics and the cash ratio now in prospect. Banks holdings of notes and coins (about 10% of the total) do seem to be (rather poorly) related to bank deposits and short term interest rates. The most important component of the base - notes and coins held by the public - are supplied on demand and, not surprisingly they seem to be well related to consumer prices and real personal disposable incomes. Evidence drawn from the fifteen years prior to about 1978 suggests that they are not much influenced by the level of short term interest rates. However, one explanation for the very low growth in the base in 1979 and 1980 is that notes and coins were more responsive to interest rate levels than past relationships would have suggested.

17. Estimates of the interest rate sensitivity of the demand for notes and coins therefore depend on how much weight is attached to very recent experience. This implies that the response to interest rates is unstable. On the basis of the last 15 years' experience including 1979 and 1980 one might guess that a 1 percentage point rise in short rates would reduce the demand for cash by about $\frac{1}{2}\%$, within a year. But ignoring 1979 and 1980, experience since 1965 is consistent with a very small response indeed - less than $\frac{1}{4}\%$ in a year. Both these estimates are subject to disturbingly large margins of error, relative to their size.

18. In our present state of knowledge, we could not hope to control Mo with any reasonable degree of precision within a year by manipulating the level of short term interest rates - and, conversely, movements in Mo could not provide as good a guide for setting interest rates as M1.

Since we are so uncertain about the size of the short term response to interest rates, it would be extremely difficult to know how much to move interest rates if M_0 was growing either too fast or too slowly. The small size of even the largest estimates strongly implies that very large movements in interest rates would be needed to correct over or under-shoots within a period as short as 6-12 months. So, on the evidence now available, M_0 looks decidedly inferior to M_1 , on control grounds.

(c) Why $\mathcal{E}M_3$?

19. If M_1 is easier to control over relatively short time periods than $\mathcal{E}M_3$, and is not demonstrably inferior to it in terms of economic significance, why was it decided to re-affirm the commitment to $\mathcal{E}M_3$ as an annual target at the time of the Budget? One important argument was continuity: the need to demonstrate that, following a serious overshoot of the 1980/81 target, the policy of controlling the money supply had not been abandoned or diluted. Equally important was the desire to avoid - and be seen to avoid - achieving monetary control solely by means of unduly high interest rates. This route can put a disproportionate share of the burden of adjusting to lower inflation on the company sector leaving the public sector relative unscathed. Fiscal restraint must play a full part (though of course the net effect on industry depends on how this is achieved).

20. A target for a narrow aggregate which can, at least in principle, be controlled by manipulating short term interest rates offers no assurance that fiscal policy will play a supporting role. In practice, however, interest rates might not have been very different, on average, in recent years, if we had been operating an M_1 target. Moreover, the fact of very high interest rates, if they prove to be necessary, may itself force a change in fiscal policy. The US, where policy is largely focussed on narrow money, provides one illustration of these problems. Despite the difficulties of achieving short term control, therefore, the fact that $\mathcal{E}M_3$ can only be controlled if fiscal policy is consistent is sometimes considered a positive virtue, if one of the objectives of policy is to meet money targets without undue reliance on interest rates.

III Targetting a Narrow Aggregate: the Options

21. These arguments do not rule out some shorter term role for M1, or even M0, in taking decisions about interest rates providing it can be assumed that fiscal policy is in fact consistent with the MTFs. The possibilities are:-

(i) a single target for a narrow aggregate in place of the existing targets for £M3, annual and medium term - possibly (though not necessarily) alongside some objective for the PSBR; this option was discussed in the preceding section;

(ii) a short term (6-12 month) operational target for one of the narrow aggregates, with £M3 as the medium term (MTFS) target;

(iii) a short term target for a narrow aggregate as an adjunct to the annual and medium term targets for £M3.

(iv) using the narrow aggregates to interpret or predict monetary conditions alongside £M3, without adopting a formal target for them.

(a) Multiple Targets: options (ii) and (iii)

22. The objection to options (ii) and (iii) is that measures taken to control the narrow aggregate may jeopardise the already difficult task of achieving the target for £M3. This has most force if there are annual targets for both £M3 and one of the narrow aggregates, but it may be serious even if the £M3 target is only a medium term one. The problem arises because both broad and narrow money are responsive to interest rates and fiscal policy instruments, though to different degrees. If we knew, with some precision and confidence, exactly how each instrument affected each of the different aggregates, and fiscal policy could be manipulated as flexibly as interest rates, it should,

in principle at least, be possible to offset the unwanted consequences for £M3 of interest rate changes made primarily with an eye on the narrow aggregate by altering fiscal policy. Even if this were not feasible, it might still be possible to vary gilts sales so as to smooth the path of £M3 , before the necessary fiscal changes were implemented and took effect. In other words, two (and possibly three) policy instruments should in theory allow the authorities to hit two intermediate targets at more or less the same time.

23. But whether there is, even in theory, scope for multiple targets is debatable. Even though the relationship between short term rates and the level of £M3 is unreliable, the authorities may need to use them to control bank lending, if they are to control £M3 over a run of years without distorting banks' balance sheets in a way which may sooner or later prove destabilising. If so, they may have less room for manoeuvre on interest rates than the simple "two instruments two targets" proposition suggests. If bank lending is growing strongly for example, control of £M3 will involve overfunding the PSBR, unless and until bank lending is reduced. This will tighten money market conditions and the authorities will be confronted with a choice between allowing short term interest rates to rise and providing possibly substantial amounts of money market assistance eg. by buying commercial bills, or forward swaps. If short rates are allowed to rise, the growth in bank lending should in time be corrected, and a more balanced pattern of bank lending to public and private sector will be re-established. But if short term rates are held down - because they are determined by other considerations - banks will find themselves increasingly short of public sector assets.

24. It is difficult to know how banks would react in such a situation. If they are indifferent as between commercial bills and public sector assets, there may be no real problem. But they may not be. Cutting lending is likely to be a last resort. In the short run, banks could respond by bidding liquid assets



away from non-banks, driving down their yields and encouraging the non-bank private sector to switch into money. Whether, in this situation, the authorities would be right to allow a rise in the money supply rather than put up interest rates, depends on why bank lending is growing so fast. If it represents a structural shift away from other non-bank forms of borrowing for example, it may be appropriate to accommodate at least some of the increase in the money supply. But if it reflects a sharp rise in activity, it would probably be preferable to increase interest rates.

25. If the theoretical case for multiple targets is not clearcut, the presentational and practical difficulties are obvious. Multiple targets may reduce the credibility of monetary policy. Commentators will be tempted to focus on the aggregate which is performing worst relative to target, as the authorities will usually want to point to the one which is most nearly on track. Even if one target is de-emphasised and called a medium term target, both markets and the authorities would find it almost impossible in practice to ignore short term developments. This is not unreasonable, since even short term fluctuations may contain some information about longer term trends among the inevitable "noise".

26. There can be no guarantee that both targets would in practice be met, certainly on a year by year basis. Our knowledge of the effects of different policy instruments is inevitably imprecise, and the fact that policy takes time both to change and to take effect adds to the problem. In recent years it has proved difficult to meet even one target, with all the instruments at the authorities disposal. Two would certainly add to the problems to put it no higher.

27. It would be difficult to make £M3 a purely medium term target in the current financial year, without risking a serious loss of credibility in the overall strategy. The fact that last year's target was so seriously overshoot makes it particularly important to achieve the 1981/82 target if at all possible. Adopting an additional annual target for M1 or Mo could jeopardise the £M3 target, without significantly adding anything to the credibility of policy. This risk would still be present if there were a move to multiple targets after the end of the current target period - say in the 1982 Budget.

(b) Narrow Aggregates as Indicators: option (iv)

28. A less formal way of giving a role to the narrow aggregates would be to treat them as early warning devices, rather than explicit targets. This would be worth doing if there was reason to think that movements in the narrow aggregates systematically 'led' developments in £M3 or other broad money aggregates. But in fact this does not seem to have been the case, on average, over the last decade or so, judging by the statistical relationships between M1 and £M3. On the other hand, one can certainly point to individual episodes where, with the benefit of hindsight, the narrow aggregates seemed to be giving an earlier - or more accurate - signal about monetary conditions than £M3.

1977/78

29. The clearest example is 1977. In the first half of 1977, MLR was reduced by stages from 15% to 5%, as the authorities tried to hold the exchange rate down. This was reflected in an acceleration in the growth of M1 from 0.6% in 1976 Q4, to 5% in 1977 Q2 and 7.2% in the third quarter. Despite heavy intervention, £M3 growth never exceeded 3% even in 1977 Q3. This dramatic fall in interest rates did however fuel the growth in bank lending in 1978, which was largely responsible for the target overshoot in that year. If the authorities had taken more

account of the narrow aggregates in early '77 - as some commentators advocated at the time - they might have abandoned the policy of trying to reconcile incompatible exchange rates and monetary objectives sooner, thereby increasing their chances of meeting the £M3 target in both 1977 and 1978.

1980

30. Last year provides an example of a case where the narrow aggregates may have been giving a more accurate picture of underlying monetary conditions than £M3. On our own analysis the rise in £M3 reflected a rise in financial wealth, as consumers reacted to the inflationary shocks of 1979/80 by saving more, relative to their income, in order to rebuild the real value of their holdings of money-fixed assets. Since the rise in financial wealth represented a move back to some preferred position, not a temporary switch which will be reversed, the increase in £M3 to which it gave rise is likely to be held, not spent. It was a response to past inflation, in other words, and is unlikely to fuel a future rise in the price level. The narrow aggregates, which are less responsive to financial wealth, were more affected by the sharp rise in interest rates in both nominal and real terms. The effect of interest rates on activity is uncertain, but it is difficult not to believe that they were a factor in the savage destocking that took place last year, and, indirectly, in the deceleration in inflation that occurred.

31. While there is therefore some reason to think that the narrow aggregates may have been a better indicator of monetary conditions last year than £M3, the evidence is not conclusive. We cannot be sure, at this stage, that the growth in broad money will not fuel future inflation. Our analysis rests on the assumption that there is a stable demand for wealth relative to income. If the rise in financial wealth was not planned, or is only temporary, the associated rise in £M3 could still find its way into extra spending, and finance future inflation. In fact, however, little is known directly about the demand for gross financial wealth. The evidence is indirect and largely based on the behaviour of the personal sector saving ratio in the 1970's.

32. Secondly, $\text{\pounds}M3$ was only a misleading indicator, even on our analysis, if the Government's concern is about the future rate of inflation, rather than the price level itself. If the worry is the price level itself accommodating past inflation is not acceptable: the appropriate response to the $\text{\pounds}M3$ overshoot was not to ignore it, but to claw it back in future year to correct for the inflationary shocks that took place in 1979/80 which were unwittingly accommodated by the expansion of broad money in 1980/81.

1972-74

33. There is one notable episode when, it is often asserted, the narrow aggregates provided a misleading indicator of underlying monetary conditions and future inflation - the period 1972-4. Over this period, the authorities justified their failure to tighten policy in the face of an explosive growth in $\text{\pounds}M3$ partly by reference to the more moderate growth in M1. Some of the difficulties in interpreting this episode have already been mentioned. $\text{\pounds}M3$ was known to be heavily distorted by the aftermath of Competition and Credit Control, and in 73/74 by round tripping, and there were good grounds for looking at other monetary indicators. (though there were also fears that M1 was distorted too, to a lesser extent). Moreover, the decision not to adopt a more restrictive stance on fiscal policy as well as interest rates was in part a deliberate one, not just a by-product of inadequate information. As the charts show, both real M_0 and real M1 rose sharply relative to past trends between 1972 and mid-1973. Yet fiscal policy remained very lax until late 1973 and the authorities did not push MLR above 9% until July 1973. Thereafter the growth in the narrow - though not the broad - aggregates did decelerate sharply as interest rates were raised in stages, to 13% by November.

34. The simple view that the narrow aggregates always lead movements in broad money does not stand up. But M1 and M_0 have sometimes contained useful information about underlying monetary conditions and future trends which are

obscurred in the broad aggregates, for structural or other reasons. It would be unwise to ignore sharp divergences in the growth of broad and narrow aggregates. But equally, there seems no case for relying on either M₀ or M₁ entirely, to the exclusion of other factors (including broad money) in taking decisions about interest rates. The moral seems to be that no rule can remove the need for the authorities to form their own interpretation of events before changing policy instruments.

IV. Outlook for the Monetary Aggregates in 1981/82 and 1982/83

35. In 1980/81, £M₃ grew twice as fast as M₁ and M₀. The forecast underlying the MTFS suggested that this position may be broadly reversed over the next three years, if the assumptions on which it was made are correct: £M₃ growth was assumed to fall from nearly 18% in 1980/81, to 8% in 1981/82 and then to decline steadily by a percentage point each year to reach 6% in 1983/4. With the PSBR falling relative to GDP, this was consistent with a gradually declining path for interest rates. The narrower aggregates were expected to grow relatively rapidly, however, at around 14-15% a year, principally in response to the decline in interest rates and some recovery in activity.

36. The latest forecast shows a somewhat different picture. Higher and rising short term interest rates are now thought to be necessary if the £M₃ target is to be met; the average level of short term rates is put at nearly 14% in both 81/82 and 82/83. As a result, the forecast growth of the narrow aggregates is rather lower than in the MTFS, though still above the assumed growth in £M₃. M₁ is expected to grow by about 11% in both financial years, while M₀ may grow by about 10½% this year, falling to about 8% next.

V. Setting Targets for the Narrow Aggregates

37. While the forecasts are subject to a wide margin of error, the broad conclusion they point to is plausible: namely that a target for M₁ or M₀ which is in single figures will require higher real interest rates than would otherwise

be needed to meet the MTF5 targets for £M3. This reflects a general problem with targetting a narrow aggregate when the rate of inflation is changing. The demand for M1 depends, inter alia on the price level and the level of nominal interest rates. If nominal rates are constant as inflation comes down, the demand for M1 will grow broadly in line with nominal incomes, though the deceleration in the rate of inflation will itself cause real interest rates to rise. If, on the other hand nominal interest rates fall in line with inflation to keep real interest rates constant, the demand for M1 will tend to grow faster than nominal incomes. In other words, the fact that the demand for M1 is sensitive to the level of nominal interest rates means that velocity is likely to vary with the rate of inflation. This makes it difficult to reconcile a smooth growth in M1 with stable real interest rates during periods when the rate of inflation is changing.

38. There have been pronounced changes in M1 velocity over the past decade, as the rate of inflation has varied. M1 velocity rose steeply between 1972-75 when the rate of inflation accelerated, although real interest rates fell. When inflation decelerated from 1976 to 1978, M1 velocity fell sharply, although real interest rates became less negative. Between 1978 and 1980 inflation accelerated again, and M1 velocity again rose sharply, while real interest rates tended to fall until the end of 1979. The increase in M1 velocity as inflation decelerated through 1980 was, associated with a marked rise in real interest rates.

39. Over the next few years, a target for M1 which would avoid the need for high real interest rates would probably have to be above the growth in nominal incomes - that is, the target would have to be set to accommodate some fall in velocity as inflation comes down. That would mean choosing rather high numbers - certainly above the current £M3 target

and probably in excess of 10% for both 1981/82 and 1982/83. If the target were a public one, this would be presentationally very difficult, though it would be consistent with using M1 as an indicator, for internal purposes, in the sense discussed in section III(b) above, to interpret movements in £M3.

FEU

7 July 1981

CHARTS

Chart 1 Velocity

A: Mo
B: M1
C: £M3

Chart II Money and Prices (% changes)

A: Mo
B: M1
C: £M3

Chart III Real Money Supply and Real GDP

A: Mo
B: M1
C: £M3

CHART 1: VELOCITY

A: Mc

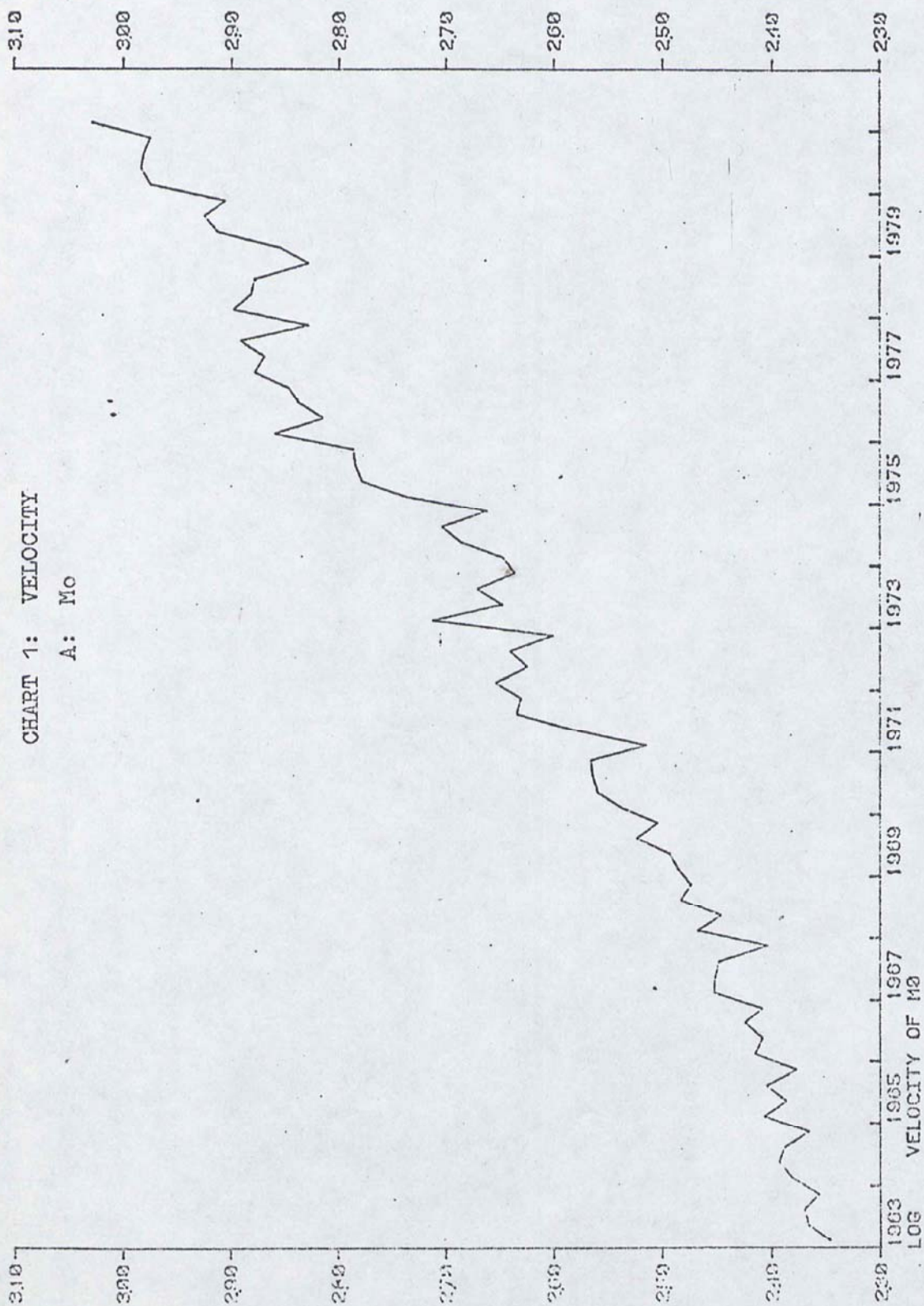


CHART 1: VELOCITY

B: M1

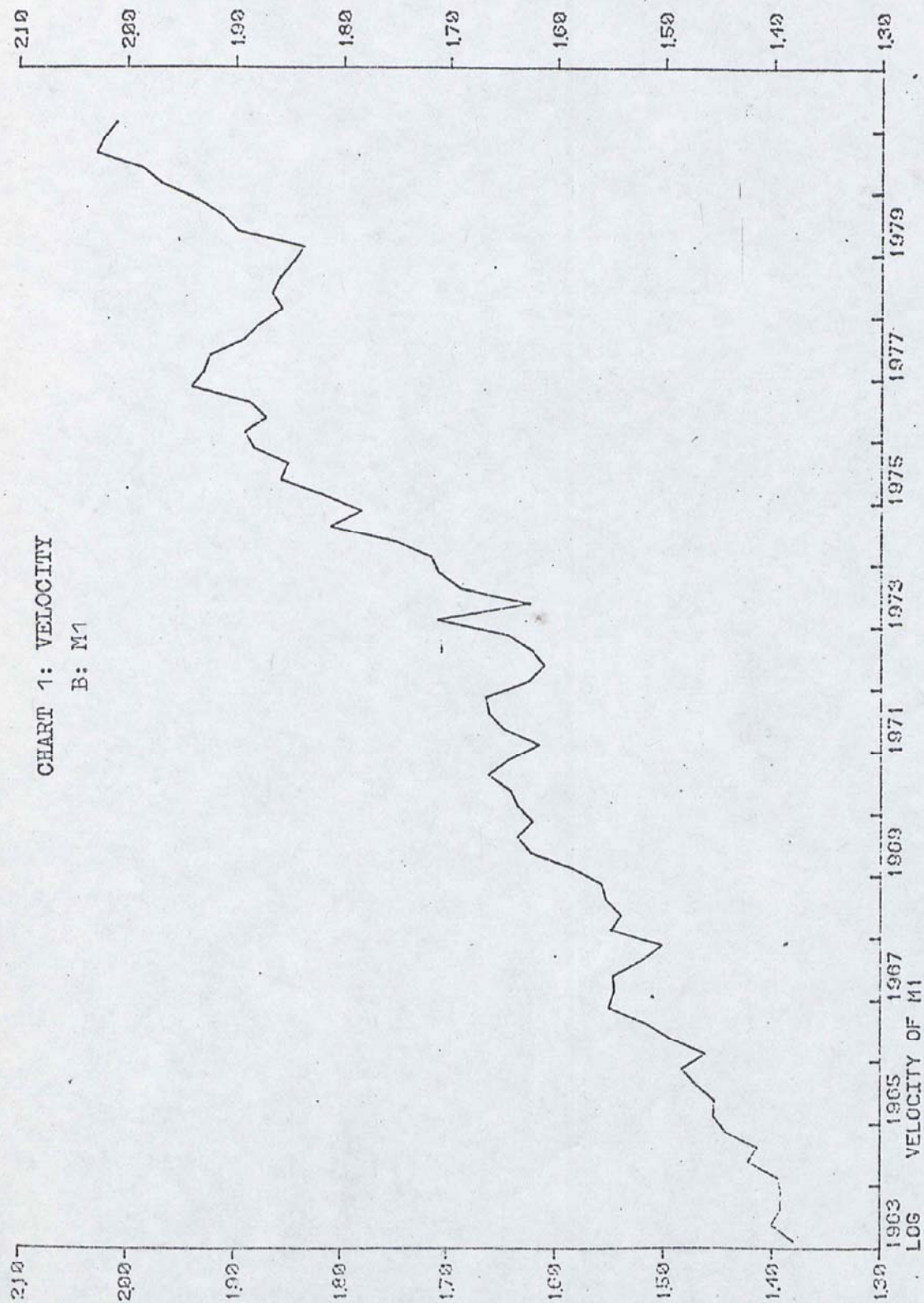


CHART 1: VELOCITY

C: 5M3

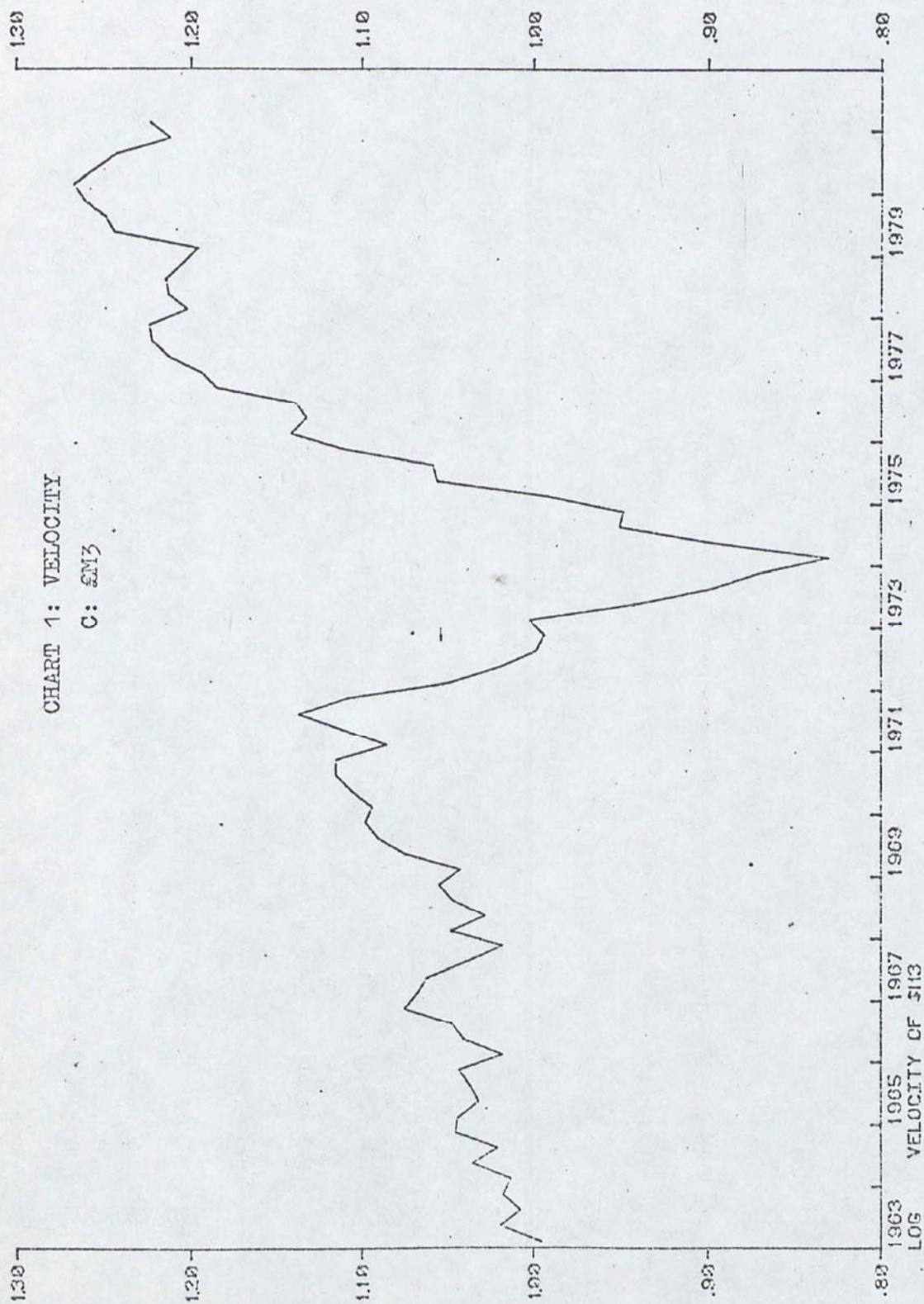


CHART 2: MONEY AND PRICES
A: Mo

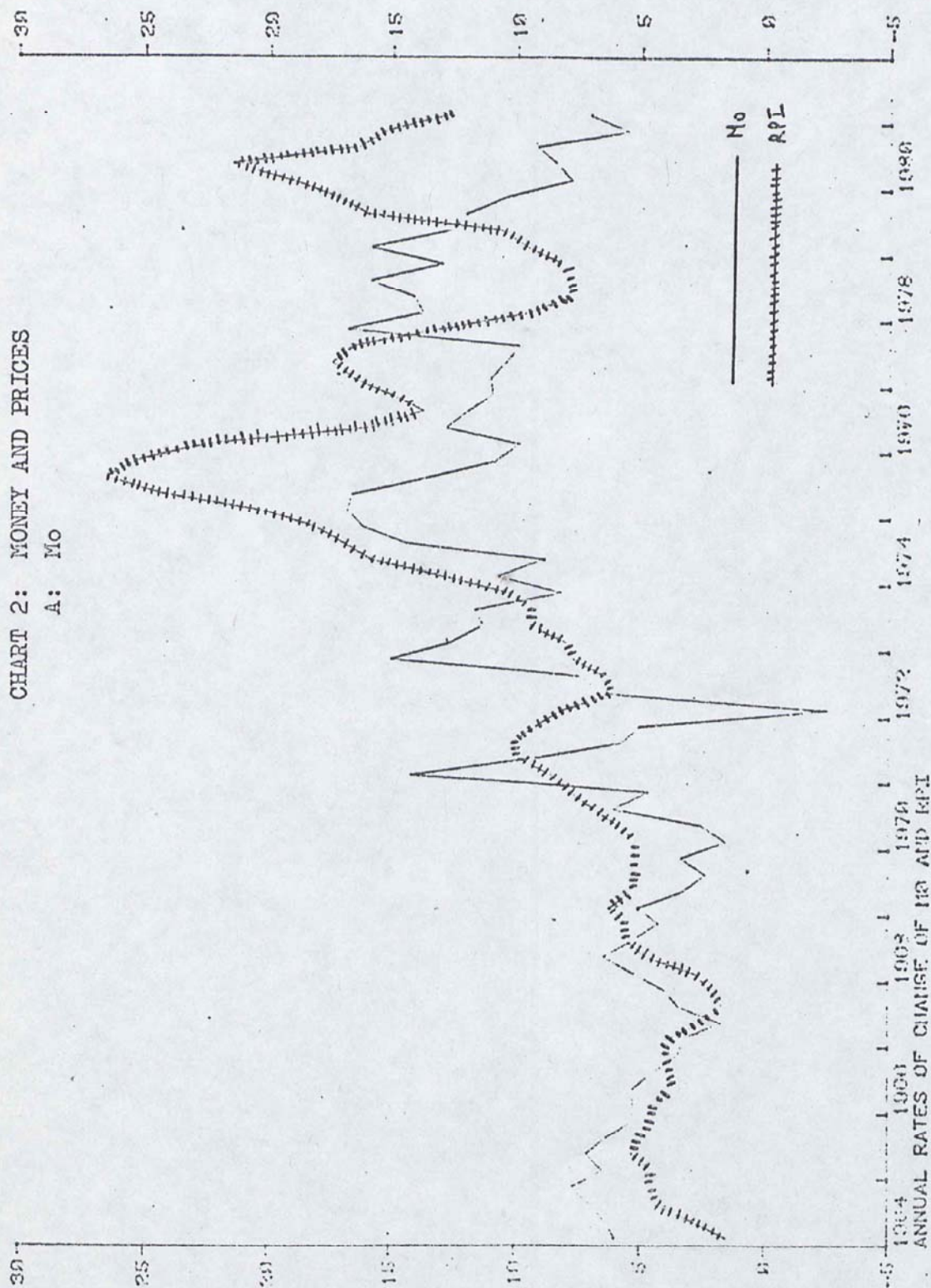
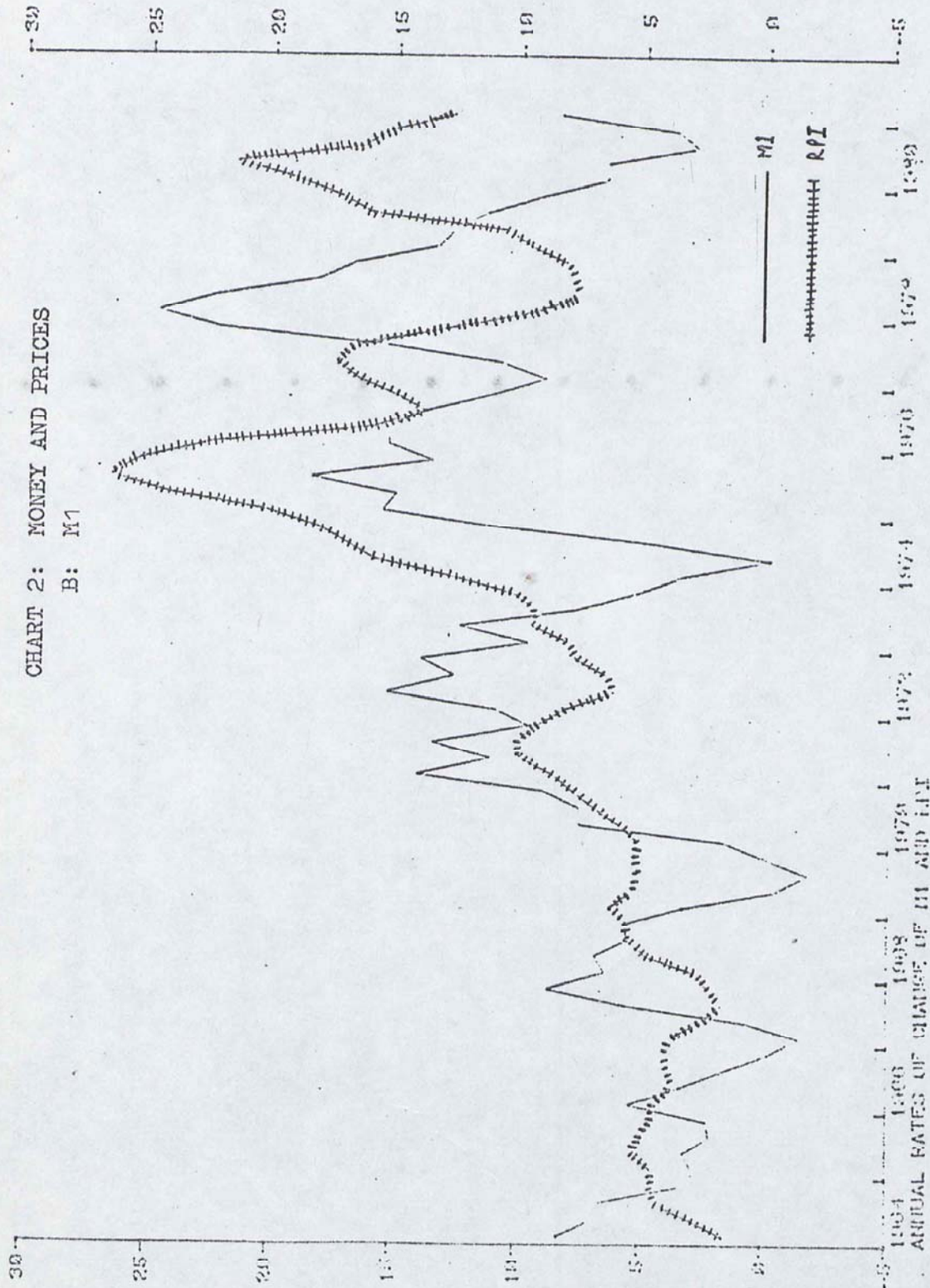


CHART 2: MONEY AND PRICES
 B: M1



1964 1968 1972 1976 1980 1984 1988 1992 1996 1999
 ANNUAL RATES OF CHANGE OF M1 AND RPI

M1
 RPI

CHART 2: MONEY AND PRICES

C: £M3

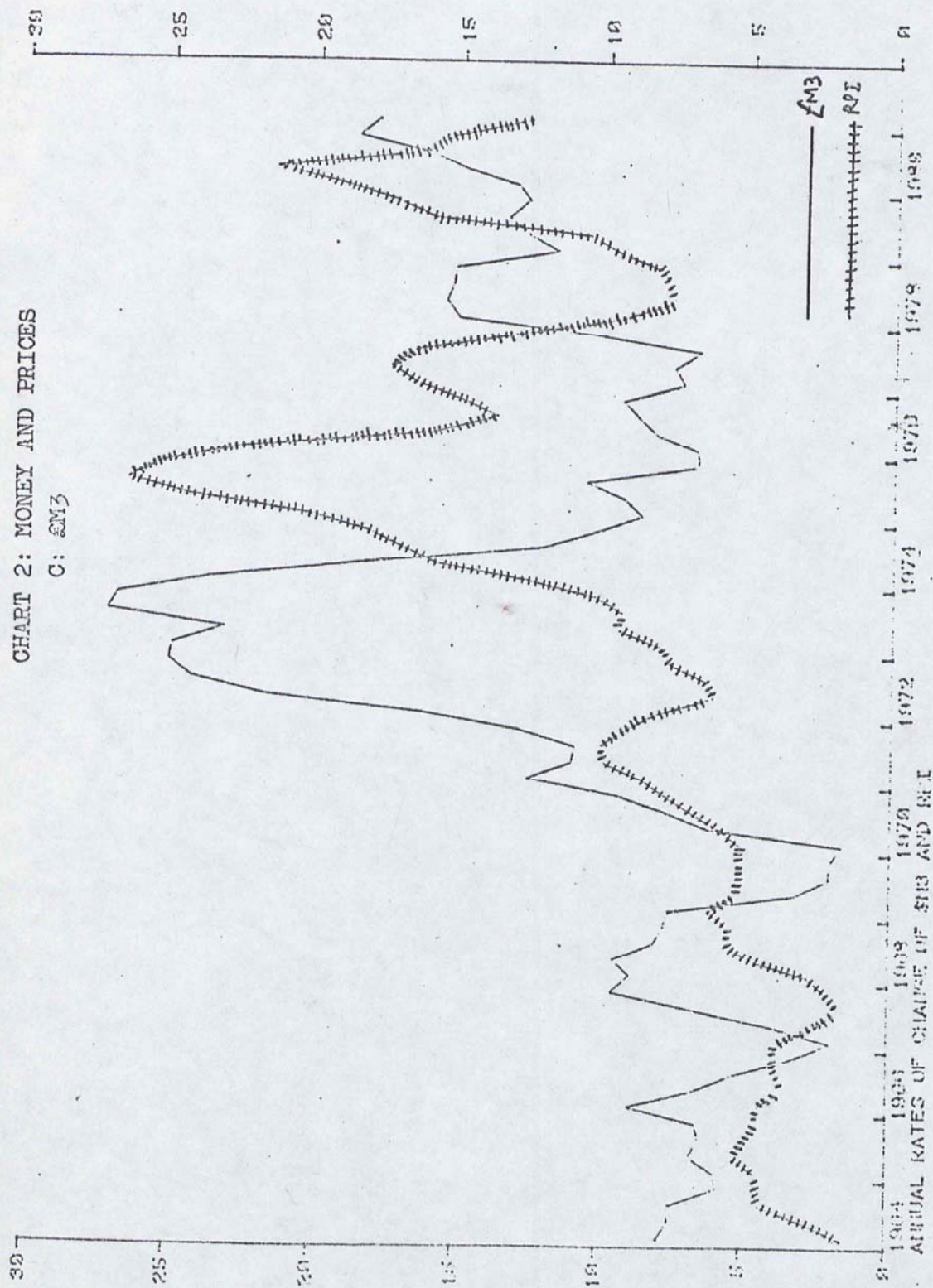


CHART 3: REAL MONEY SUPPLY AND REAL GDP

A: Mo

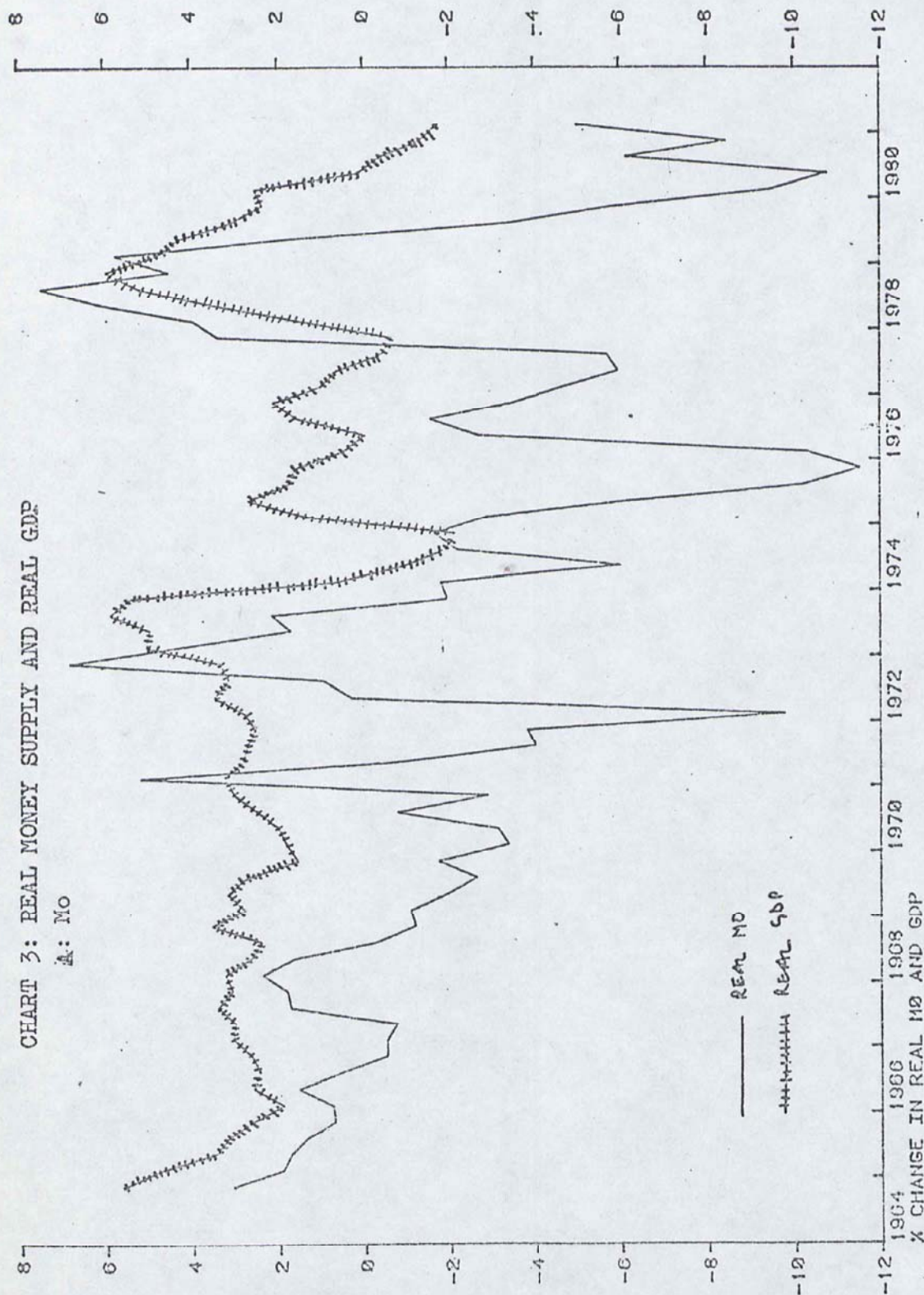


CHART 3: REAL MONEY SUPPLY AND REAL GDP
B: M1

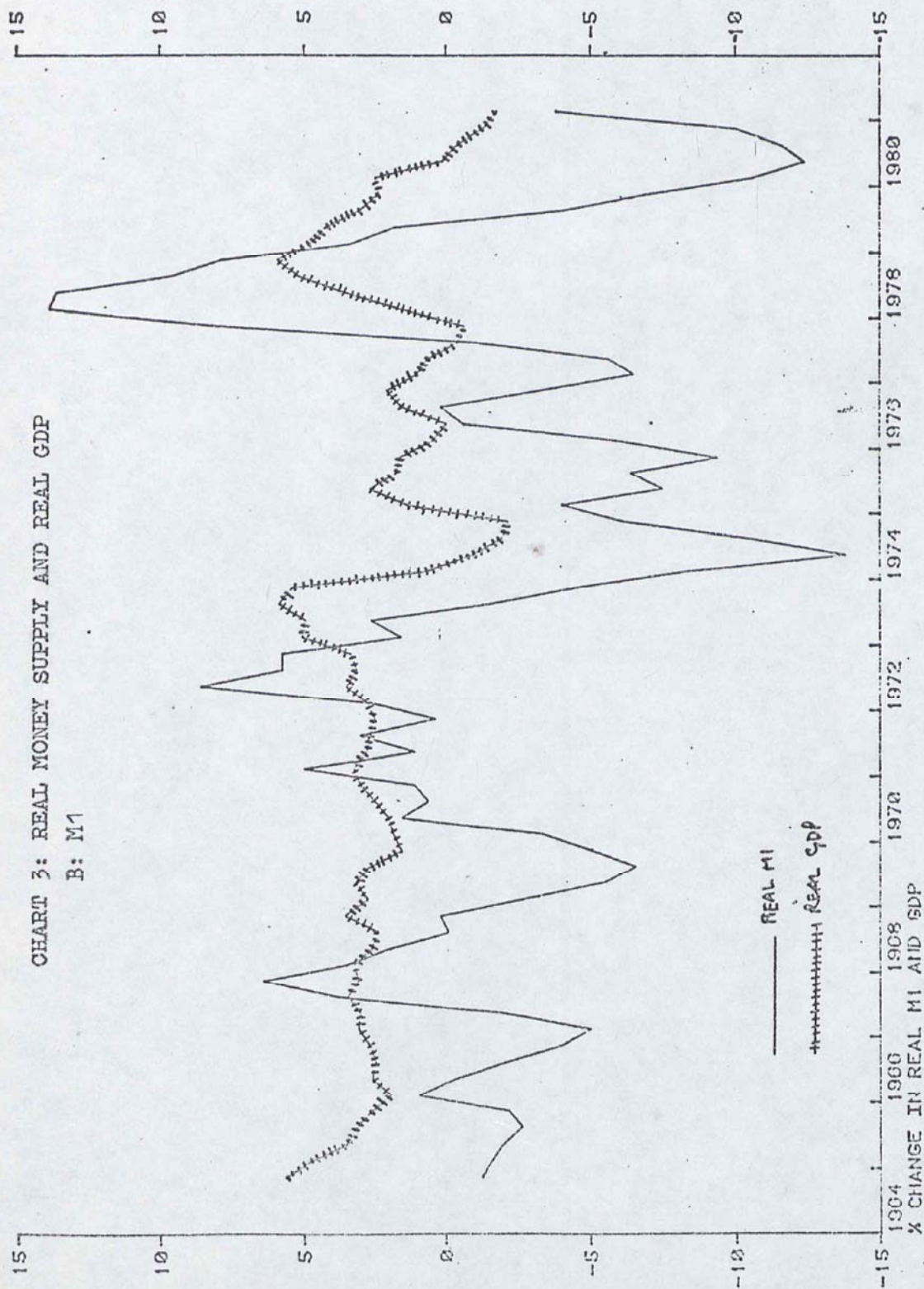
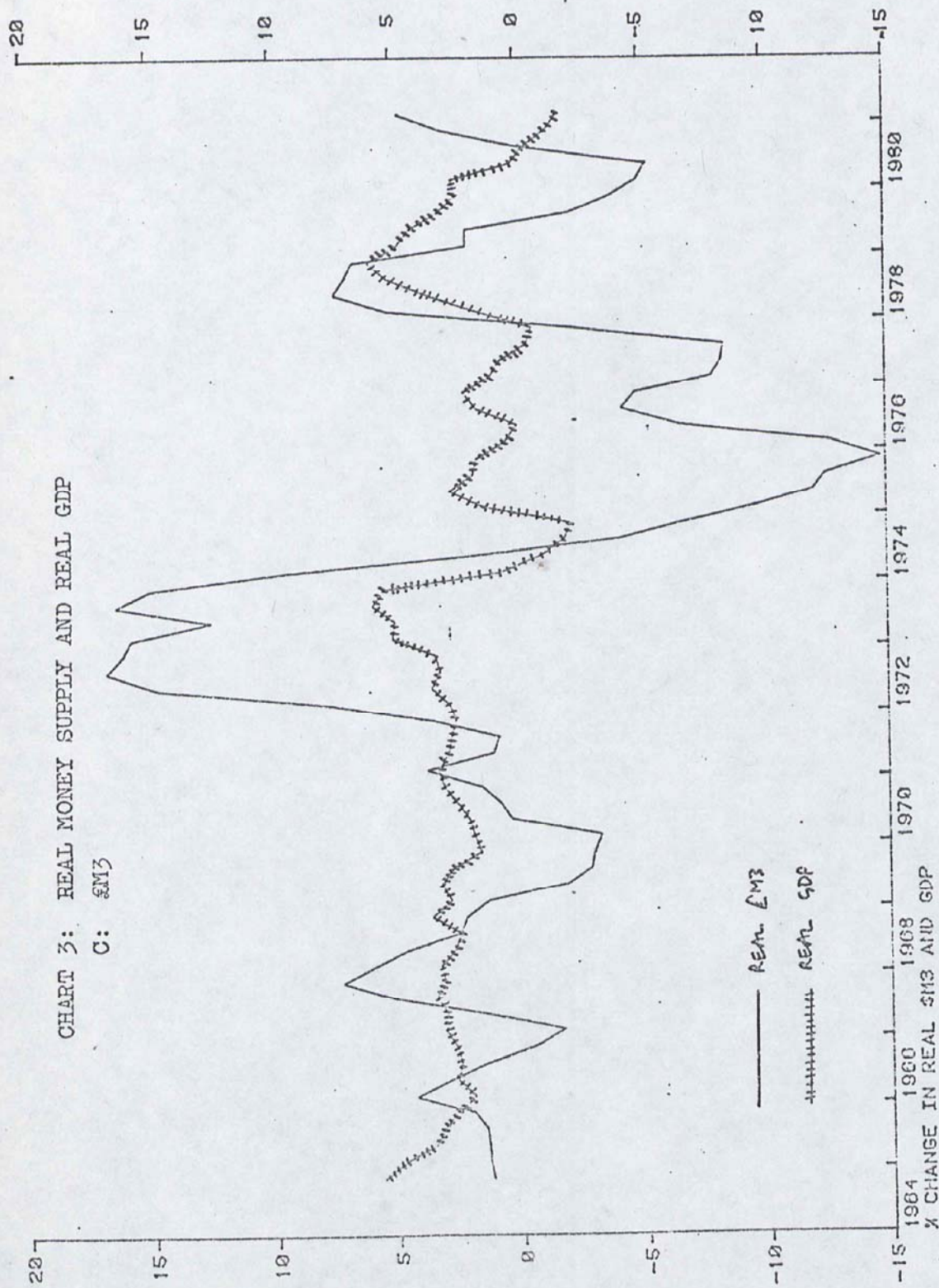


CHART 3: REAL MONEY SUPPLY AND REAL GDP

C: £M3



SETTING SHORT-TERM INTEREST RATES: £M3 AND OTHER INDICATORS

The new arrangements are intended to reduce the visibility of the guiding hand of the authorities and also to let the market play some part in the determination of interest rates of differing maturities. The system is described in the first paper prepared for the seminar: "Monetary Control: The New Arrangements".

2. It has also been established that the movement of £M3 relative to the target range is not the only factor to be taken into account in deciding the level of the interest rate band. The purpose of this paper is to describe the factors to which we should give attention and the circumstances in which an increase or reduction in the level of the band might be considered appropriate. We are not seeking a simple formula which will provide the correct response to all conceivable circumstances, but neither do we want to re-think our position each month from first principles.

3. We shall be operating within the framework of the medium-term strategy. This was designed with the intention that the deceleration of monetary growth should be achieved without relying on an excessive level of interest rates. In that sense, but only in that sense, we have an objective for the level of short-term interest rates themselves. This has been an important consideration in fiscal policy decisions, most notably in this year's budget. It cannot, however, be given much weight in setting short-term interest rates, month by month, unless it can be demonstrated that such a move is consistent with the overall strategy, and with a reduction in the growth rate of money and prices.

4. The new arrangements are designed, amongst other things, to remove a perceived bias towards delay in an administered MLR system. We shall not, therefore, wish to build any such bias into the new system, and should, indeed, consider a decision to keep the level of the band unchanged as needing just as much justification as a decision to raise or lower it.

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5. The interest rate band will be relatively narrow, and its main purpose will be simply to allow for the imprecision of control. The instructions to the market operators will be to keep rates within the band. This does not mean, however, that we cannot, or should not, respond to market pressures. These will show up not only as movements within the band, but also as movements in rates at longer maturities which the authorities do not influence so directly. Thus, the first of the factors to be considered when setting rates is the experience of market conditions in the preceding period.

Market conditions

6. The authorities cannot be wholly passive in the market, since there would then be no reason why the outcome for any of the monetary aggregates should accord with our intentions. If, however, we make our intentions clear to the market, then we may find that market sentiment is useful as an indicator to us of future developments in the factors which govern our decisions. Thus, if the market believes that the rate of monetary growth or inflation is likely to accelerate, there will be upward pressure on interest rates - so long as the market believes that these are amongst the factors which influence the authorities in setting interest rates. If the market expects monetary growth or inflation to accelerate, and we have no reason to believe that view is incorrect, then we may well decide to make a move in interest rates immediately rather than wait for the monetary growth or inflation to manifest itself in fact. The situation has parallels in the management of an exchange rate: sometimes the market can see the "fundamentals" more clearly than the monetary authorities.

7. Money market conditions, especially in the longer maturities, will reflect such expectations, but more "technical" factors such as the flow of funds day-by-day into and out of the exchequer will also be important, especially at the very short end. Thus, last summer there was sustained and strong upward pressure on rates during periods when the PSBR was being overfunded. The system will work rather differently after the reserve assets requirement is abolished, but conditions of the same general kind can recur (for example, in the aftermath of the Civil Service dispute). Such "technical"

pressures are not, in general, likely to signal new information which is relevant to the achievement of targets for the monetary aggregates, or the economy more generally. Typically, we will want to resist such pressure, whether up or down, to the extent necessary to keep interest rates within the band.

8. Market conditions more generally, including the foreign exchange market and the gilts market as well as money markets, may also on occasion influence the timing of interest rate changes. If these markets are unsettled for any reason, there will remain a strong inhibition against the authorities initiating a movement of interest rates, particularly a movement in an unexpected direction. It would be particularly difficult to lower interest rates at a time when the exchange rate was falling.

Sterling £M3

9. The Budget Speech confirmed that the targets for £M3 will continue as the centrepiece of the economic strategy. The emphasis is on meeting the target for the year as a whole, rather than month-by-month. It should be possible to keep the confidence of the markets in the face of short-term fluctuations in £M3, provided that assurance can be given of a consistent underlying trend. Moreover we do not have the instruments to achieve very precise control if we wished it. This must influence the way in which we monitor movements in the target aggregate and respond to divergences in either direction.

10. The first stage of analysis must be, as always, to estimate the effects of known distortions to the outturn figures. Last year the after-effects of the corset scheme were important; this year it is the Civil Service dispute; round-tripping has also been a recurrent problem. The next stage is to look at identifiable factors influencing the short-term outlook. The result is a view of the current trend, based on the movement over the past six months together with the prospect for the next three months.

11. The assessment also needs to look further ahead than the next three months. The short-term response of £M3 to changes in interest rates seems, typically, to be quite small relative to the response in the longer-term. In these circumstances, there is clearly a danger

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of over-correction in response to deviations from the target path if the authorities attempt control over too short a period. We have never believed that it was possible to correct all deviations within a period as short as three months. A more realistic horizon would be about six to twelve months - in other words we should, even in the early months of the target year, direct our assessment towards the measures necessary to deliver the right level of £M3 at the end of the year and beyond. This suggests a need for a forecast which focuses on conditions nine months hence.

12. Unfortunately monetary forecasting is a particularly hazardous occupation. Typically the error margin for a forecast of £M3 twelve months ahead is about 4%. Nevertheless we will want to take account of all the relevant information we now have that has clear implications for future monetary growth. If such information was ignored there would be occasions when interest rates were moved up or down to correct divergences which were believed to be transitory. This would tend to increase the volatility of the money supply as well as interest rates. It would also mean turning a blind eye to early warnings that conditions were likely to become too tight or too slack.

13. If interest rate decisions are to be based on forecasts of £M3 as well as outturns, it is important that the reasoning behind these forecasts is clear and convincing. Sometimes we can point to particular events in the future which can be predicted with reasonable confidence - the receipt of our EEC refund last year was a good example. Sometimes we can point to events in the recent past which will undoubtedly have implications for the future - a recent change in interest rates or the exchange rate would be a good example. We must also take account of the prospects for economic activity generally and for inflation, insofar as they are relevant to monetary developments, to the PSBR for example, and to bank lending - although, again, uncertainty must reduce the weight given to such forecasts.

14. Having assessed the underlying trend in £M3, and considered what information there is about the prospects nine months ahead, the next step in principle should be to calculate the scale of interest rate change that would bring the target aggregate back to the centre of the

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range within the nine-month forecast period. A calculation of this kind cannot, in practice, be made with any certainty or precision. A wide aggregate like £M3 responds not only to the level of interest rates, but also to the structure of relative interest rates in ways which are complicated and not at all well understood. Indeed the possibility of a perverse reaction in the short run, £M3 increasing as a result of higher short-term interest rates, cannot be ruled out.

15. The effects of short-term interest rates on £M3 include:

- (a) higher interest rates will reduce bank lending, but this effect seems slow acting;
- (b) higher interest rates will increase the incomes of some individuals and institutions, but on the other hand, some will suffer capital losses; on balance, this should reduce the demand for money, but again it will take time to work;
- (c) higher interest rates will make interest-bearing bank deposits more attractive, but on the other hand if the rise is thought to be temporary, gilts will be even more attractive; on balance this could produce a substantial reduction in £M3 almost immediately, but the effect is difficult to predict;
- (d) higher interest rates will reduce economic activity and inflation, especially if the exchange rate is strengthened; this will reduce the demand both for bank lending and for bank deposits.

The latest estimates suggest that a rise in short-term interest rates of one percentage point will, on average, reduce £M3 after nine months by 1 to 2 percentage points. But these estimates keep changing; and the effects also depend on tactical decisions of the authorities in the gilt-edged market. There is no satisfactory way of replacing the process of forecasting and policy assessment by a purely mechanical procedure.

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Last year, faced with a serious over-run on £M3, we decided that an interest rate increase was not an appropriate response. Instead, some quite stringent fiscal measures were taken in this year's Budget. This instrument was chosen partly because the monetary problem was associated with an over-run on the PSBR, and partly because interest rates were already at a high level. This illustrates the general point that an increase in interest rates will not always be the appropriate response to excessive monetary growth. Sometimes a fiscal policy solution will be preferred, or else a change in the funding programme.

The Other Monetary Aggregates

17. A separate paper, "The Role of the Narrow Aggregates", discusses M1 and M0 either as alternatives to a £M3 target or as elements in a system of multiple targets. The analysis of various periods in the past suggests that the narrow aggregates do contain information which should be taken into account in interpreting the movements of £M3 and in interest rate decisions. We need to establish as routine an appropriate procedure for making use of this information.

18. Each year a target is set for £M3. It would be possible at the same time to estimate the growth of M1 which was compatible, according to the information then available, with the achievement of the £M3 target. This would reflect medium-term trends in the velocity of circulation of the two aggregates, recent and prospective movements in interest rates and no doubt a variety of "special factors". The result of this calculation could then form the basis for a guideline relating to the movements in M1 in the following twelve months. During the year we would then monitor the outturn and prospect for M1 over the same time span as we apply to £M3. Unexpected movements in M1, irrespective of what was happening to £M3, would be considered an important element in the interest rate decision.

19. At present we do not publish even a forecast of M1, although a qualitative indication was given in this year's Budget Speech. If the procedure of setting guidelines for M1 came to play a more important part in interest rate decisions, we would need to consider whether it would be advantageous to make a more explicit public reference to it.

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20. At a later stage a similar procedure might be applied to M0, but in the coming year its movements are likely to be distorted by the change in the cash ratio. The narrow aggregates should be especially valuable when £M3 is believed to be subject to serious distortion. Currently, for example, the growth of M0 is of particular interest as it is relatively undistorted by the Civil Service dispute.

21. Last year we also made frequent reference to the wider aggregates, especially PSLI, since they were likely to be less distorted than £M3 by the ending of the corset. The growth of more vigorous competition between banks and building societies suggests a rather similar role for PSL2 in the future. This year we have also seen a remarkably rapid increase in residents' foreign currency deposits, made possible by the abolition of exchange control. This suggests an enhanced role for M3, which had attracted little attention in previous years.

22. Recent analysis of money supply movements over a long period of time suggests that a useful relationship may exist between £M3 and the total of all financial assets held by the private sector. This total, the gross financial wealth of the sector, is potentially the widest wide aggregate of all. Quarterly data is now available, and even monthly movements can be estimated approximately. We expect to make more use of this data in interpreting monetary conditions in the future.

External Considerations

23. Over the past year, intervention in the foreign exchange markets has been confined to short-term smoothing and it is assumed that this policy will continue, irrespective of whether the rate is rising or falling. It is appropriate, however, that external considerations should be given some weight in setting short-term interest rates. This does not mean that the Government has or should have an objective for the exchange rate. On the other hand, the exchange rate will influence our judgments through its effects on inflation and the growth of nominal incomes in the domestic economy.

24. Forecasts of the exchange rate have been unreliable and the way it is influenced by relative interest rates remains very uncertain.

Nevertheless, movement in overseas rates are relevant information when we are considering interest rate movements in the UK, since differentials do have some effect on the exchange rate and the exchange rate does have an effect on prices. As mentioned above, conditions in the exchange market may also on occasion be important to the timing of interest rate moves, especially when such a move could be misinterpreted as a change in the nature of our policy either towards the monetary targets or towards the exchange rate itself.

Nominal Incomes

25. The purpose of the monetary targets is to control nominal incomes and ultimately the price level. In interpreting movements in the monetary aggregates, it is always necessary to set them in that context. Last year it was partly the relatively slow growth of nominal incomes which led to the decision to permit some over-shooting of the target for £M3. That decision is potentially reversible if the growth of nominal incomes were for any reason to speed up again.

26. We have made use on several occasions recently of the idea of a national cash limit. Within the framework of the monetary strategy there is, in effect, a constraint on gross domestic product as current prices, although no explicit target, or even forecast, has ever been announced for this total. The idea, without quantification, has been used in setting out the implications of public sector settlements for employment. It is also relevant to the setting of short-term interest rates.

27. Quarterly figures for current price gdp are only available several months in arrears. There is normally however sufficient information in the monthly indicators to build up quite a good estimate for the movement of nominal incomes on a reasonably up-to-date basis, although some guesswork would undoubtedly be involved. We will aim to assemble enough information to give an estimate of the level of nominal incomes in the current quarter and its growth over the preceding six month period. This can then be set alongside the trend in the monetary aggregates calculated for the same months.

In the same way we can look ahead at the prospect for nominal incomes over the next nine months consistent with the latest indicators and the latest view of the economic forecasters.

28. Outturn and prospect can then be compared with the growth rate of nominal incomes expected when the target was set for £M3. This growth rate, which would normally be based on a forecast published at Budget time, would then become a guideline for monitoring performance, similar to that proposed for M1. At present we do not publish a forecast including gross domestic product at current prices explicitly, but if we chose to do so, the extra information divulged would not be very significant.

29. The growth of nominal incomes is partly a real growth of output and partly inflation. Obviously our attitude to the two parts is not in the long run the same. Behind the idea of a constraint on nominal income is some view of the sustainable growth of real output. If we changed our view about that rate - the underlying growth of productive potential - then we might well wish to change our view of the appropriate growth in nominal incomes, and even of the money supply. But unless we do change our view in this way, our response to deviations of nominal incomes from the guidelines would be much the same, whether they were deviations in volume or in price. It is not appropriate therefore to include output (or employment) as such amongst the factors taken into account in setting interest rates.

Real Interest Rates

30. The interest rate cut of November 1980 was largely a response to the decline in the rate of inflation. One line of argument linked this to the growth of nominal incomes, but there was another which was based on the consequent movement in real interest rates. As inflation slows down the stringency of a given nominal interest rate increases. It is plausible, although not at all well documented, that real rather than nominal interest rates influence private sector saving, investment and borrowing decisions.

31. There is no straightforward way of measuring real interest rates, since they depend on the rate of inflation in the future rather than

the past. The best we can do is to examine the implications of inflation forecasts, which will in turn be heavily influenced by experience of inflation in the recent past. In practice, we cannot expect to gain much insight from trying to measure real interest rates, especially now that the rate of inflation is changing relatively slowly.

32. In the past interest rates have not kept pace with actual changes in the rate of inflation; thus rapid rates of inflation have typically been associated with negative real interest rates and low inflation with positive real interest rates. As the rate of inflation slows down, therefore, it is not to be expected that the interest rate will necessarily keep pace. Much depends on the way inflationary expectations are now based; it cannot be assumed that the experience of the last few years has left perceptions unchanged. There does not seem to be a sufficient basis on which guidelines for real interest rates could be devised. But the presumption remains that short-term interest rates will, other things being equal, move down gradually as inflation abates.

Policy Decisions

33. This paper has reviewed the information relevant to decisions about short-term interest rates:

- (i) Market Conditions - as we may want to follow the lead of the market, when we consider it is based on a sound interpretation of monetary and other developments.
- (ii) The Current Trend in £M3 - over a period of about six months back and three months forward, after adjusting for known distortions;
- (iii) The Prospect for £M3 - up to about nine months ahead, but discounting for the unavoidable uncertainty surrounding all financial forecasting;
- (iv) The Other Monetary Aggregates - especially M1, for which we might establish a guideline based on the forecast of a growth rate compatible with the £M3 target;

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(v) External Considerations - not because we have an exchange rate target, but because depreciation contributes to inflation;

(vi) Nominal Incomes - monitoring outturn against guideline for the value of gross domestic product at current prices, but not the split between price and volume;

and (vii) Real Interest Rates - to the extent that we can measure them.

34. It would be both artificial and arbitrary to attach fixed mathematical weights to each factor. There is a general presumption that $\pounds M3$ has some primacy over the other indicators. The starting point, therefore, is a judgement of the level of interest rates needed to meet the target for $\pounds M3$ within a horizon of six to twelve months (we cannot hope for more precise control than that). The events of last year, however, suggest that short-term interest rates cannot always be guided by actual or prospective movements in $\pounds M3$ alone. At the least, those movements need to be interpreted in a wider context. We need an assessment of why $\pounds M3$ is growing (or expected to grow) faster or slower than intended. If that assessment shows that there is something odd about the behaviour of $\pounds M3$ relative to other indicators, we may be persuaded that the general presumption of its primacy has to be discarded in this case.

35. One source of such evidence is the narrow aggregates. We have no targets for either M1 or the monetary base, but we could have a guideline for M1 believed to be consistent with the achievement of the $\pounds M3$ target. If the relative movement of the aggregates diverged significantly from that predicted, we would regard that as justifying examination of the possibility that $\pounds M3$ was (as last year) giving a misleading signal.

36. We need also to look beyond the movements in $\pounds M3$, to try and see what they mean for the achievement of the ultimate objective of reducing inflation. There are exceptions to the rule that the relation of $\pounds M3$ to nominal incomes is stable and predictable even in the medium term. We have to be on the lookout for changes in institutions (the

relative importance of banks and other financial institutions as intermediaries for example) or in private sector behaviour (the relationship of income to financial wealth for example) which will change the significance of the target aggregate. If changes of this sort occur, and are likely to be longlasting, then the response must either be to change our intentions for EM3 or else to change the path of nominal incomes we expect as a consequence. We cannot keep both.

37. One way of interpreting the movements in monetary aggregates therefore is to set them alongside the behaviour of nominal incomes relative to pre-set guidelines. Usually this procedure will confirm the conclusions that would follow from looking at the money supply alone: excessive monetary growth will usually go with actual or prospective excess in nominal incomes, and vice versa. If it does not, we would want to look again at the judgements behind the forecasts of nominal incomes. Only when we are reasonably confident that those forecasts are well-based would we wish to qualify the normal rule that monetary aggregates are the main influence on short-term interest rate decisions.

38. The considerations set out in this paper are in line with the broad statements in the Budget Speech about the factors taken into account in setting short-term interest rates. Nevertheless, if this approach is confirmed, there would be advantage in setting out for the public in rather more detail the way in which the factors are assessed and their contribution to ^{the} overall judgment. This would take the form of a statement ^{made} describing the regime in general terms, when the new arrangements come into force, rather than a commentary on particular interest rate movements that develop at a later stage.