4. Monetary Targets and Economic Policy

Control of Monetary Aggregates

14/9/1978

6

FRAME

MR GRICE

CC Mr Bridgeman
Mr Middleton
Mrs Lomax
Mr Wiggin
Mr King
Mr Spencer

ASPECTS OF MONETARY POLICY AND THE REAL ECONOMY

I found your paper interesting and educational. There are, however, several points that I would like to raise.

Pages 1-2 I agree that many measures of monetary policy exist but this does not mean that no single measure is of any value. You seem to be saying that the problem is less acute with fiscal policy (which you equate with the PSBR). However, there are, at least half a dozen measures of fiscal policy - all superior to the PSBR and all of which might move in different directions. This does not mean that all indicators of fiscal policy are meaningless. Indeed, most indicators are simplifications and will inevitably be misleading on occasion.

Page 3 para 1 All bankers' balances at the Bank are reserve assets.

Page 4 para 2 You argue in this paragraph and elsewhere that sectoral holdings of money are relevant for certain considerations such as sectoral expenditure. Whilst this may be true for wealth effects (in which case money is only indirectly relevant, as you point out) it is unlikely to be the case for expenditure constraining effects. If the personal sector is short of transactions balances it can readily obtain funds from other sectors e.g by withdrawing money from building societies. The situation is analogous to a country under fixed exchange rates. In both cases it is the excess demand for money in aggregate that is relevant. If money enters a consumption function explicitly it should comprise the total money supply and not simply that part held by persons.

Page 4 para 3 Your figure for persons time deposit comfortably exceeds both persons'total bank deposits and total private sector time deposits. The correct figure is likely to be well below £25bn, therefore. Nonetheless, the amount remains large given the differential between 7-day deposit rates and building society interest rates. The explanation must either be that the "true" rate of return on bank 7-day deposits is understated by the 7-day deposit rate (e.g. 7-day deposits have transaction characteristics) or investors are irrational or the two assets are far from perfect substitutes. No doubt the first two factors are present but my own guess is that the final consideration is paramount. There are many examples of "escrow" funds which must be held with the banking system and are likely to be held on 7-day deposit. For instance, 10% of the value of the turnover of the UK housing stock is held by solicitors on 7-day deposit with banks for a period typically in excess of one month.

Page 6 para 4 "Round-Tripping" has been a major problem for the wider monetary aggregates but is less likely to be a problem in the future. Many prime borrowers now pay market related internal rates on bank loans which automatically prevents "round-tripping".

Page 7 para 6 Unless I have misunderstood your intention the "major deficiency" of DCE that you identify in this paragraph is not a deficiency at all. There is, of course, a behavioural distinction between bank credit extended to the government and credit extended to the private. However although the way DCE data is compiled might give the impression that it contains these two elements it is in fact entirely composed of money put into the hands of the non-bank private sector by the government or the banking system. The distinction, therefore, is by donor not recepient. Indeed, the PSBR minus debt sales does not equal bank lending to the authorities since the latter includes the change in the foreign exchange reserves (minus overseas purchases of public sector debt) whilst the form includes the note issue. It is in fact intended to measure the increase in residents' bank deposits and notes and coins that results from government

expenditure after allowance has been made for taxation and debt sales. Similarly, bank lending represents the increase in residents bank deposit resulting from the extension of bank credit.

If my argument is correct, and DCE is not in fact flawed, then the problem that you identify of finding an appropriate stock figure disappears. However, I do not think cumulated DCE is the appropriate stock figure anyway. DCE should be compared with £M3 to obtain orders of magnitude. After all, the fact that the bulk of German money supply originated from the change in the reserve rather than DCE is irrelevant for German inflation. Money doesn't stink.

Your final criticism of DCE - that it throws into shadow non-bank domestic credit transaction - also seems misguided. These transactions such as HP credit or building society advances - are relevant only for relative prices. The overall price level is, of course, determined by the money supply and it is the DCE aggregate corresponding to this quantity that is relevant. It may be that you consider building society deposits to be part of the true money supply but that is a separate matter. It follows from this that the analysis in the final sector-which decomposes domestic credit expansion C, into credit extended to the Government, Cg and credit extended to the private sector Cp - is flawed. Nonetheless I think the analysis can be applied to the situation in which PSBR increases are partially offset within DCE. The parameter then becomes the offset coefficient and allows us to analyse the spectrum of opinions from $\gamma = 0$ (Gordon Pepper) to $\gamma = 1$ (Sir D. Wass?). To do this effectively may perhaps require the relaxation to two strong assumptions: ultra-rationality and independence of output and real money balance. I do not think either assumption is critical to your results but they do imply some modification.

S R BELL
September 1978

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Mr Bridgeman

cc Mr Wiggins
Mrs Lomax
Mr Williams
Mr Grice
Mr Prust
Mr Bell

REVIEW OF MONETARY POLICY: THE BANK PAPER

Charles Goodhart has sent me the attached draft of his paper, which I have not yet read. I have not got beyond the few headings for my own paper - but the preliminary work is well under way. I hope to circulate a draft in the course of next week, and it might be helpful if we could have a word when we have had a chance to look at the Bank's work, before I get down to serious writing.

P E MIDDLETON
14 September 1978

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CONFIDENTIAL

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BANK OF ENGLAND
Threadneedle Street
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P.E.Middleton, Esq.,
H.M.Treasury,
Parliament Street, SW1

14th September 1978.

Dear Peter,

MCR and EMS

Many thanks for your draft paper on Monetary Implications. I shall read it with interest and hope to let you have comments soon. Meanwhile let me reciprocate by sending you four copies of my own draft paper on "Monetary Targets and Macro-Economic Policy", this being one of the papers requested in the MCR programme. I would emphasise that this paper is an early draft and should be regarded as my own responsibility and not as committing others in the Bank. I hav had the benefit of some detailed comments from Bob Atkinson and my own colleagues in EID, but more senior officials have not had the time or opportunity to chew over any of this. I have reason to believe, for example, that my analysis of the relationship between external policy, in particular exchange rate commitments, and monetary targets (on pages 7-10), an area where my own views have been subject to considerable change and are not yet really firm, has also left considerable questioning and uncertainty in other more senior officials here. On the other hand this does point to a countervailing advantage, in that there are several extremely important issues which we can and should discuss on which attitudes are still flexible, and minds not made up in advance.

Yours sincerely,

Charles

C.A.E.Goodhart

DRAFT

Monetary Targets and Macro-Economic Policy

Introduction

1. This paper discusses the rationale for having monetary targets. The reasons for adopting such targets at all give some guidance about which aggregate(s) should be chosen for that purpose and how such targets should be operated.

2. Monetary targets are intermediate objectives in the sense that their achievement is not a final objective of policy - in the sense that full employment, price stability are such final objectives - but rather a means to that end. Since the relationship between the achievement of the intermediate (monetary) target and the achievement of the final objectives is itself variable and not capable of close prediction, what is the reason for varying the instruments of policy to achieve an intermediate target in the first place rather than aiming directly to achieve the optimal desired mix of final objectives?

3. /To digress for a paragraph, the answer initially given by Poole to this question, and still widely held by American academics, is that satisfactory data on the progress of the economy were slower and more subject to error than the monetary data. Accordingly, a divergence of the monetary series from its planned path was a useful early indication that money income was currently diverging from its planned path: action to restore monetary growth to target would similarly restore incomes to their planned path. In the UK, however, the erratic nature of the monetary series, the prompt availability of a range of direct information on prices and the real economy, and the lack of short-term robustness in the relationship between monetary growth and money incomes handicaps the use of the monetary series as a form of indicator variable. Though, even so, at times observation of monetary developments, especially M1, may be a factor in influencing some people judgment about what is 'really' happening in the economy./

4. The case for intermediate monetary targets rests not on short-term difficulties of observing how the economy is currently developing but rather on the medium-term uncertainties about how it should be steered over the medium and longer term. Monetary targets have value insofar as the medium and longer-term relationships between money and money incomes have a demonstrable stability. Insofar as they do, money incomes, and, of course, particularly price inflation cannot accelerate without an accompanying expansion of the money stock.

5. An alternative approach to achieving a desired mix between real growth and inflation has been to aim for some appropriate pressure of demand, usually proxied by a target unemployment rate, for example, Modigliani's Non-Inflationary Rate of Unemployment (NIRU). It is evident, however, that the relationship between supply capacity in the UK and the level of unemployment has been variable, so that it is difficult ever to be confident what the proper level to aim for might be. Given this uncertainty, combined with a proper dislike of unemployment itself, and a normal lag between expansionary pressures affecting output and then causing faster inflation(1), there is somethi of an inbuilt tendency for the adoption of this alternative approach to result in accelerating inflation. The effect of that on expectatio causes further trouble, and naturally leads to a search for some further, more effective discipline against inflation to provide both an umbrella and a constraint for other policy measures. That discipline can be provided by a monetary target.

6. Insofar as monetary targets act as a discipline, they will involve the authorities in having to adjust their policy instruments to achieve these intermediate targets. Such adjustments, especially of a deflationary kind, will often be unpopular. If the discipline is to be accepted, it must be seen to be necessary. That necessity derives ultimately from the medium-term relationship between monetary growth and the growth of money income. Insofar as that relationship appears to be unstable, the underlying intellectual justification of accepting the discipline is eroded.

7. The medium-term is no more than a summation of short terms. A policy step is always taken in a short run context (as well as in a longer run context); /is it right to do X this month or wait for more information until next month?/. Thus, even the short run instability of the relationship between money and money incomes will cause problems, because the authorities may want to defer deflationary measures on the grounds that the 'excessive' monetary growth is the result of temporary distortions - eg. in the gilt market - while outside commentators may interpret the short run change as the beginning of a longer run trend. Apart from reinforcing the argument for basing the monetary target on an aggregate with a stable

(1) The lags between demand management actions and the resultant outcome in terms of output, employment and inflation are also liable to produce policy-generated cycles in activity.

relationship with money incomes, this consideration raises questions both of the achievement of credibility and of operational strategy and tactics which are discussed further below.

8. Although the argument that a monetary target provides a discipline on macro-economic policy is straightforward, the type of discipline involved, the question of which instruments and policies are constrained by the need to achieve a monetary target, does depend on the form of the monetary target, which aggregate is chosen. In succeeding sections the relationship between monetary targets and interest rate, fiscal and exchange rate policies are explored.

Interest Rate Policy

9. The link between the achievement of quantitative monetary targets and the instruments of policy is closest in the case of interest rates. The authorities can adjust (some) interest rates; interest rates are the monetary instrument. Interest rates both enter into the demand for money function and form a main transmission route whereby monetary changes affect the economy.

10. This link is particularly close when the monetary target is M1, rather than a broader monetary aggregate. The adjustment of M1 to its target path is brought about by an appropriate variation in the general level of interest rates - given the level of nominal incomes. In those countries where an M1 target is used, e.g. USA and Canada, this is seen as a discipline to bring about offsetting changes in the general level of interest rates, as nominal incomes and therefore M1 diverge from their planned trends. This discipline forcing the authorities to make sufficient changes to interest rates to control M1 is seen as desirable because political constraints restraining upwards movements in interest rates, and Central Bank concern with stability in financial markets, had tended previously to dampen contra-cyclical interest rate movements to the extent that monetary growth and credit creation had varied pro-cyclically. /In so far as there is quite a large interest elasticity of demand for M1, B.Friedman has shown, in his 1977 Brookings Paper, that keeping M1 to a desired path will still result in a smaller than optimal degree of interest rate variation, because to the extent the desired growth in M1 is met by substitution between assets it remains possible for actual nominal incomes to diverge from desired nominal incomes./

Can't say that fgt must be exact at each effect

11. Thus an M1 target was seen as providing an overt justificatio for an appropriate degree of contra-cyclical adjustment in interest rates In practice such a target never did amount, and probably never could have amounted, to a rule for that purpose. The lags involved before M1 adjusted to interest rate changes meant that any attempt to bring M1 back very rapidly, i.e. within a month or two, to its desired path would require excessive, indeed perhaps impossible, interest rate variations. So the horizon over which adjustment was to be achieved, and the speed of adjustment, remained a matter of judgment. Moreover doubts about the reliability of the M1/Y relationship and the occasional influence of other considerations, such as external factors or conditior within the financial system, sometimes influenced the authorities' response: meanwhile the adoption of rolling targets in the US gave the authorities somewhat more leeway to relate the general level of interest rates to factors other than absolute commitment to the achievement of an M1 target. The room for judgment, particularly in the speed and extent of response, remained quite large, though the rate of growth of M1 was the single most important consideration, particularly in the direction (as contrasted with the extent) of change.

?free away

12. Although M1 adjusts to changes in interest rates with a lag, that adjustment process seems fairly robust in most circumstances. This depends, however, on the demand deposits in M1 having a zero, or low fixed, yield, so that changes in the general level of interest rates change the relativities between own and competing alternative yields. In the case of broader monetary aggregates, £M3 or M5 for instance, which contain a large proportion of liabilities bearing interest rates set at market rates, changes in the general level of interest rates cannot be relied upon even to shift interest relativities in the correct direction. Indeed those actions that impinge primarily upon the banks own liquidity, e.g. calls for Special Deposits, are likely, over some initial period at least, to move interest differentials in the wrong way

13. The problem of trying to control a broader monetary aggregate by interest rate adjustments is compounded by the natural reaction of investors in the gilts market. When £M3 is growing 'too fast' investor can expect subsequent movements in interest rates to be upwards. In so far as such movements occur primarily at the short end of the market, where the authorities can exert greater influence, the yield curve shifts in the 'wrong' direction. For these reasons it is not perhaps surprising that the short-term reaction of £M3 to interest rate changes has been sluggish, unsatisfactory and even perverse, though eventually such changes, working largely via the demand for bank borrowing, have had considerable effect.

14. This has meant that it has not been possible to indicate what adjustments in interest rates would be consistent with stable growth in £M3. With no stable relationship between £M3, interest rates and mone incomes, it seems hardly sensible to use a target of that form to indicate an appropriate contra-cyclical adjustment path for interest rates.

Fiscal Policy

15. Insofar as interest rate adjustments are thought to be of small consequence for the economy, it is of less value to have the relationship between such rates and monetary growth at the heart of monetary policy. Even in the US, where the various transmission route of monetary policy effects via interest rates are considered to be stronger, the monetary authorities remained vitally concerned about the state of fiscal policy and the fiscal/monetary mix. In this concern they are not much helped by concentration on M1: this aggregate is affected only (through the demand for money function) by money incomes and interest rates; fiscal policy only enters indirectly through its effect on Y, and whether Y is increased by fiscal or any other form of expansion makes no difference. This conclusion is reached partly because the outstanding stock of M1 is always thought to be demand-determined - a disequilibrium with the supply of M1 balances differing from that demanded is never observed. That assumption is reasonable on theoretical grounds, but also the direct statistical and economic links between the various supply-side counterparts and M1 are hopelessly blurred - because all time deposits, public sector deposits, etc., would have to be netted off against the supply-side counterparts to arrive at the M1 statistic.

16. This latter identification of supply-side counterparts, of course, is more easily possible with the broader monetary aggregates, £M3 and M5. Here the relationship between monetary growth and the fiscal deficit is obvious from the accounting framework. Moreover, given the difficulties, desribed above, of using interest rates to control £M3, it can be argued, by the LBS for example, that variations in the PSBR are the only effective way of controlling £M3.

17. Fiscal policy, however, has been, and will no doubt continue to be, influenced by many other factors than just its monetary implications. Fiscal policy adjustments lie at the heart of Keynesian macro-models, where they are seen to 'work' whereas monetary policy measures often do not seem to do so. If such Keynesian analysis is to

be over-ridden for the sake of monetary objectives, then at the very least the medium-term relationship between M3 and money incomes and between the PSBR and M3 would have to be very robust.

18. The fragility of the first of these conditions, the relationship between M3 and Y, is well known. As for the second, although we may not be able either to forecast or to control debt sale and bank lending very accurately, they amount to large sums. Accordingly the size of PSBR consistent with the achievement of a £M3 target cannot be calculated with any great precision; nor, equally, can the actual outturn of the PSBR be accurately forecast itself. With this degree of uncertainty on the monetary side facing the authoritative seeming forecasts, multipliers and simulations from the regular NIF-style forecasts, it seems implausible to suggest that purel monetary conditions either have had, or are likely to have, a dominati influence on fiscal policy decisions.

19. These decisions, largely influenced by non-monetary considerations, taken at Budget time, then provide the context in whic monetary policy operates. For the above reasons, it has been the cas and is likely to remain so, that the fiscal context - determined largely by other considerations - will often cause difficulties for the monetary authorities. Then with the fiscal decisions taken, the monetary authorities are forced back to the use of monetary-type instruments, in particular interest rates for month-to-month control. But, as already noted, such interest rate adjustments are not effectiv in short/medium term control of £M3. The result has been sharp swing in interest rates, culminating during periods of crisis over excess monetary growth in resort to direct controls, 'the corset', and enforced fiscal adjustments. It may well be that these subsequent fiscal adjustments were absolutely necessary (indeed delayed too long), and that such events did succeed in subjecting fiscal policy at least ex post facto to a desirable degree of monetary constraint. Nevertheless, this system has given the appearance, and sometimes the feeling, of lurching from mini-crisis to mini-crisis. Indeed insofar as £M3 can only be controlled by fiscal changes, and it takes a crisis to promote such changes, it has become a system that works by generatin its own crisis conditions.

20. To the extent that fiscal changes were undertaken with more of an eye to their monetary implications, it would become somewhat easier to maintain a £M3 (or M5) target as the centrepiece of monetary policy. For the time being, however, tension between fiscal policy, as an instrument of Keynesian demand management on the one hand and as a major influence on monetary conditions on the other, is likely to remain.

External Policy

21. Estimates of the effects of monetary policies, eg via interest rates, directly on the level of domestic activity suggest that these are notably stronger in the US than in the UK. The reason for this may well be that the UK is a much more open economy, wherein domestic monetary developments are particularly prone - even more so than fiscal measures - to leak out across the balance of payments. In a floating system this leads to changes in exchange rates (with subsequent 'indirect' effects on the economy) and under a fixed exchange rate system to reserve flows. There would seem to be a very close inter-relationship in the UK between external and domestic monetary developments, though, as with most such relationships partly depending on the wayward interplay of expectations in volatile financial markets, the relationships are not easily modelled nor stable in the short run.

22. Given the existence of such a close relationship between domestic monetary and external developments, the process of setting a target for one of these two variables would seem to imply that the other needs to vary in a manner consistent with the achievement of the prior commitment. Although we can try to estimate, ex ante, what (given policy assumptions about intervention policy, debt repayment, policies abroad, etc.) the rate of domestic credit expansion and monetary growth consistent with an exchange rate commitment might be, our predictive abilities are limited. Particularly if the permissible range of variation in the target variables (the exchange rate and monetary growth) was small, there would be virtually bound to be some ex post conflict, preventing the achievement of both targets simultaneously.

23. An exchange rate commitment acts as a discipline on other policies in much the same way as a monetary target in a floating regime. The adoption of a firm exchange rate commitment might seem to lessen the need for a monetary target, while at the same time increasing the likelihood of conflicts between their joint achievement. That would indeed be so if the fixing of the exchange rate was seen as irrevocable and final, as in a full currency union. That is not, it is expected, likely to be the case in the proposed European Monetary System (EMS). Instead both the authorities and markets will expect that exchange rates may on occasions be adjustable. In such circumstances monetary targets will still be needed to give a guarantee to decision makers within the private sector that domestic policies

will be consistent with maintaining the exchange rate commitment. In particular, it will be necessary to reassure markets that the option of resorting to regular discrete devaluations will not be over-used. There will surely be occasions, for example in the aftermath of a devaluation, when economic commentators doubt the will or the ability of the authorities to sustain adherence to the fixed rate regime in future. A monetary target could be a valuable, indeed necessary, adjunct to the maintenance of the exchange rate commitment as well as to the control of inflation.

24. The choice of the form of monetary target, in particular whether it should be primarily expressed in terms of an objective for DCE or alternatively for one or other monetary aggregate - eg M1, £M3, M5 -, would, however, seem to depend largely on the degree of commitment to exchange rate fixity on the one hand as compared with domestic objectives on the other. For example, if the balance of payments is stronger than expected, and upwards pressure on the exchange rate greater - say because our EMS partners are inflating faster than expected - the inflows are likely in part to reduce DCE /less bank lending, more gilt sales/ as well as raising £M3. In consequence adherence to a DCE objective would be likely to bring about additional monetary inflation (deflation) during periods of upwards (downwards) pressure on the exchange rate. With domestic inflation depending on domestic monetary growth (not just DCE) - this being the assumption on which the rationale for monetary targets is based - priority to a DCE objective would enable a commitment to a fixed exchange rate to be achieved more easily (as compared with giving priority to a monetary target) but only by over-riding domestic economic objectives.

25. On the other hand, when a monetary target (rather than a DCE objective) is adopted as the main commitment, possible conflicts between external and domestic objectives become more overt. In so far as problems arise when attempts to achieve both objectives (external and domestic) simultaneously lead to conflicting signals for policy, it may be useful to identify such conflict situations and assess their likelihood and implications. Obviously a condition in which monetary growth is faster (weaker) than intended, while exchange rate pressures are downwards (upwards) is <u>not</u> a conflict situation, since the same set of restrictive (expansionary) domestic policies will ameliorate both divergences from target path simultaneously.

26. The first conflict situation occurs in cases where both the exchange rate and monetary growth are weaker than intended. This indicates that more deflation was necessary than had been forecast, or expected, or hoped, to achieve convergence with the other economies on the pegged exchange rate. The implication of this would seem to be that the authorities should either deflate further to meet the needs of the exchange rate commitment, or devalue. The opposite (mirror-image) conflict situation provides perhaps an even more difficult dilemma for the authorities; in this case upwards pressure on the exchange rate occurs at the same time as upwards pressure on the monetary aggregates. This dilemma occurred in the UK in 1977, and has occurred quite frequently in W.Germany, Holland and Switzerland. The problem is caused because the authorities tend to dislike both revaluation (because of competitiveness) and faster monetary growth (because of its inflationary effect). This often leads to attempts to find devices to reduce monetary growth (in some cases 'optically') without putting even more upwards pressure on the exchange rate.

27. Since M1 can only be controlled by interest rate adjustments, and since varying interest rates to control M1 would surely seem to involve perverse capital flows in such conflict circumstances, the possibility of such conflict situations arising would seem to weigh against the adoption of M1 as a monetary target during a fixed rate regime. Broader aggregates, £M3 and M5, can be influenced by other means, direct credit controls - as adopted for example by the Dutch in recent years - or changes in the PSBR, perhaps of a financial nature [such as sales of assets (eg BP) to non-bank residents]; such measures may have less direct effect on external flows. On the other hand, all measures to control the broader monetary aggregates which are not purely optical (and who then is fooling who?) will work in the 'wrong' direction with respect to the exchange rate in conflict situations. Moreover continuing flows over the exchanges will, it is generally believed, directly affect £M3 and M5 to a much greater extent than in the case of M1. Accordingly if the dilemma and disequilibrium is temporary, it may not necessarily be more difficult to aim to control M1 and absorb the exchange flows by intervention (though that will be much easier in the second expansionary conflict case, since there is no physical upper limit to reserves), than to aim to control both £M3 and the exchange rate through, for example, some direct credit control mechanism. If the disequilibrium is really more fundamental, the particular choice of monetary aggregate in that circumstance becomes of secondary importance.

28. To summarise, whereas a full monetary union would make independent national monetary targets otiose and impossible to achieve, the limited degree of greater exchange rate fixity implied by the present EMS negotiations would continue to require under-pinning by domestic monetary targets. Within such an EMS the relative weights to be attached to maintaining the commitment to greater fixity on the one hand and to the achievement of domestic (nominal income) objectives on the other remain to be determined. This same consideration will influence the choice between making DCE or a monetary aggregate the main intermediate target: adherence to a DCE target carries with it the implication of giving priority to maintenance of the (fixed) exchange rate. The adoption of monetary targets would bring possible conflicts between domestic and external objectives more into the open. Such conflicts would perhaps be particularly acute should M1 be adopted as the main monetary target, since the same single instrument, changes in the level of short-term interest rates, would be required for short-term adjustments to attain both the external exchange rate and the domestic monetary target.

Operating Monetary Targets

29. The act of setting a (published) monetary target is tantamount to giving an (overt) pledge that action will be taken to restore monetary growth to the target path, if it is moving away from it. The actions necessary to control monetary growth depend importantly on the particular aggregate(s) chosen as target, ie which the authorities implicitly pledge to seek to control. If M1 is to be the target, it is essential to control the general level of interest rates: whereas control over other instruments, eg fiscal policy changes, direct credit controls, have no direct impact - as far as can be ascertained - on the growth of such transactions balances. On the other hand, variations in the general level of interest rates are not a reliable and effective way of controlling broader monetary aggregates, whereas fiscal policy and direct credit controls have more impact.

30. The choice of monetary target, and the horizon over which it might be operated, depend in large part on the kind of operating instructions that one hopes that the fluctuations in monetary growth will provide. Clearly the authorities do need some guidance about the 'appropriate' level of interest rates, and clearly such guidance needs to be available on a fairly continuous short-term basis.

This consideration, taken together with the finding that the relationship between M1 and Y is more robust that that between £M3 and Y, would seem to argue strongly for having an M1 target as the main operating month to month guide to the appropriate direction of changes in interest rates, though the existence of lags in monetary relationships generally, and in the demand for money (M1) in particular, makes the choice of the extent of adjustment in interest rates and the appropriate length of horizon more a matter of judgment.

31. It might be thought that control over other monetary aggregates could be achieved by keeping to an M1 target on the reckoni that the aggregates bear a stable relationship to each other over time. However, in the UK, the relationship between the rates of change of the various aggregates has not beem particularly close.(1) In the rather extreme case of 1972 and 1973, for example, the growth in M1 was well below that of M3, so that keeping an annual M1 target of (say) 10% would not have prevented the excessive rise in M3 which in fact occurred. With M1 being affected by the general level of interest rates and wider aggregates (M3 and probably also M5) being affected more by relative interest rates it is probably not surprising that they do not move very closely together, except - and this is very tentative - in the very long run.

32. This therefore suggests that a target for a wider aggregate will be needed in addition to an M1 target, with the advantage that wider aggregates can be more easily related to the counterparts, in particular the PSBR. The fact that M1 can be fairly readily kept under control by changes in the general level of interest rates suggests that this should be the prime target for the short-run; this is reinforced by the closer relationship it has with incomes than does M3.

33. The main objection to that conclusion is that an exchange rate commitment would also generally provide instructions to the authorities on the 'appropriate' direction of interest rate changes. If the exchange rate commitment has priority, then would not the maintenance of a separate target for M1 either be otiose (in the sens that it is simply providing the same signal as the exchange rate) or lead to policy conflict? It is the relationship between an M1 targe and external policy commitments that poses the main area of difficult

(1) Monetary Policy Group in EID is currently completing an exercise reporting the cross-correlations between M1, £M3 and M5.

34. The correct interpretation of signals given by movements in the broader monetary aggregates is more complicated. They have tended to be interpreted by market commentators as giving short-term signals about interest rate adjustments. For the reasons already noted this is a misuse of broader monetary targets. They should instead be seen as more medium-term indicators of the appropriate stance of fiscal policy and, perhaps, of the need for direct credit controls, within a system in which interest rates on a shorter-term horizon are separately guided either by an M1 target or by an exchange rate commitment.

35. With interest rates being thus separately guided, the question arises whether there would be much room for debt management, for example by trying to shift the slope of the yield curve or by tailoring the timing and form of new taps to the mood of the market, to play an independent (ie, independent of changes in the general level of interest rates) role in the achievement of a broader monetary target. The authorities can always refrain from selling debt, and can thus help to prevent an undesired decline in monetary growth. Within a free market system they have less ability to force gilt sales upon unwilling investors at acceptable levels of interest rates. In an inflationary world, the likelihood is that the persistent problem will be to hold down the expansion of liquidity and monetary growth as far as possible. It has remained a continuous objective of the authorities to fund as much as possible, but it is not possible to tailor this to the short-term achievement of a particular monetary number within the context of the present market structure.

36. If little weight can, or should, be placed on debt management to adjust the growth of the broader monetary aggregates to their desired paths from month to month, or even from quarter to quarte the control of broad monetary targets would have to rest largely on fiscal policy and/or direct credit control measures. The question then arises that if there was also to be a separate target for the PSBR, whether a broad monetary target would not be otiose in the same fashion that an M1 target might be so described within a fixed rate regime. But, even though gilt sales cannot be controlled to order by debt management, the fact that the PSBR has, or has not, been able to be satisfactorily met by (voluntarily achieved) non-monetary (and non-liquid) debt sales to the non-bank public is an important datum, and should of itself provide an additional guide for the conduct of fiscal policy (a role that it would in an important sense lose if gilt sales were directed by dictat). Furthermore even if interest rates

are proximately determined by the need to achieve an M1 or an exchange rate target, it is still possible for credit expansion to get out of hand - as occurred in 1972/73. Thus it seems unlikely, perhaps particularly unlikely if the UK was to enter a Bremen-type European monetary system, that occasional recourse to direct credit controls of some kind could be permanently discarded. On such grounds it can be argued that, even with separate PSBR targets, an additional target for a broader monetary aggregate would not be otiose.

37. The introduction of direct credit controls, and fiscal changes, would not be steps to be taken lightly without convincing evidence of their necessity. Accordingly such steps should not be taken as short-term control measures, but only after a run of figures was clearly indicating serious malaise. In this sense a broader monetary aggregate should be consciously presented and operated within a medium-term horizon. However, even with the authorities committed to a medium-term monetary target, it is not certain how far this would allay the short-term fears which lead to periods of "famine" in the markets as at present. The markets may still feel unhappy about the authorities' (lack of) moves and this could lead to the same kind of one-way self-fulfilling expectations about changes in interest rates as occur at the moment (such as Spring 1978). Use of a rolling target which is updated every six months could further reduce credibility in the authorities' will to maintain stability over, say, a two-year perio

38. A major problem in setting a medium-term target for, say, a two-year period is, therefore, that it does imply - if it is to have credibility - a fairly explicit two-year fiscal policy over that period which would necessarily include some form of target for inflation. Although setting a target for the PSBR leaves some flexibility over its composition, it seems unlikely that a Chancellor would leave himself no freedom of manoeuvre at Budget time. /If major changes are then introduced, some of the benefits of a medium-term target will be lost, as a two-year target will tend to become merely the sum of short-term changes./ Again it is very doubtful to what extent any government will wish to make (fairly) explicit two-year inflation targets, and, if made, how they would affect incomes policies and relations with the unions: could such targets be made simultaneously desirable and credible? Commitment to a continuous reduction in inflation, together with a projected real growth rate, could, however, have a stabilising effect on expectations.

39. How do we get from here, in which a broader monetary aggregate is used inappropriately as a short-term guide mainly for interest rate policy, to there, in which movements in a narrow monetary aggregate are used as a short-term guide (for interest rate policy) while there is a medium-term target for a broader aggregate as a part of a co-ordinated fiscal, monetary, incomes policy strategy for the steady reduction of inflation. One condition would seem to be to have ready an alternative, more appropriate, short-term intermediate target, (M1 and/or exchange rate targets) which could be convincingly projected as the guide for the month to month movements in interest rates. Unless some such alternative is ready, the market will go on interpreting the broader monetary figures in a short-term context.

40. If we should move in this direction, there would be a number of questions about the choice of the particular narrow monetary aggregate to be adopted that would need consideration and answering. We would need to decide what that aggregate would be - presumably either the existing M1 or, as some would prefer, the non-interest-bearing component of M1. Our weekly banking returns will soon provide a weekly (unadjusted) series for M1 - although it remains to be seen how big the weekly fluctuations are and how well they tie up with the fuller monthly series. But the interest/non-interest-bearing split is not available weekly and could only be obtained after negotiations with the banks and further computer programming, etc. Moreover, if M1 is to be used as the main month-to-month guide to interest rate policy, more attention would have to be given to the best way of monitoring and presenting this series, which exhibits large erratic fluctuations even after seasonal adjustment, which is itself a hazardous and uncertain exercise. In particular, any possibility of using the weekly observations, in order to average out the fluctuations on individual dates, would have to wait a considerable time, possibly several years, until the regular intra-monthly fluctuations can be identified and interpreted.

41. A second condition for the transition would seem to be for the authorities to operate the broader monetary target in what was clearly a medium-term context. That might involve, for example, setting two-year targets for the broader monetary target twice yearly, e.g. looking six months back and eighteen forward, /NB with the horizon of an accompanying M1 target being consciously different and shorter/, at times consistent with possible fiscal measures (eg at Budget time) and using the same occasions to review the case for guidelines, or other forms of direct control, for credit expansion to the private sector.

It should be understood that steps to restore broad monetary growth to its intended path would only normally be taken on the occasion of such (twice-yearly) reviews.

42. Both the transition to the new regime and the intellectual logic of the revised system would be improved if the medium-term broade monetary target were expressed in terms of M5 rather than kept as a £M3 target. If the need is to try to operate broader monetary targets in an entirely new way, then a concomitant change to a new target would aid public understanding and acceptance of the new approach. Statistically M5, (because building society lending is included whereas sales of liquid forms of public sector debt to non-banks have now no effect on the aggregate), concentrates attention more on the twin cynosures of the PSBR and credit expansion - and slightly less (but onl slightly less) on public sector debt sales. Intellectually and logically the case for having a broader monetary aggregate, (since it cannot rest easily on a demonstrably close relationship between M3 and Y), must depend on the arguments that both the state of liquidity and the pace of credit expansion in the economy are important variables. If so, there is really no justification for excluding building societies, particularly now they have grown so large, from the target variable. Indeed there is a good case for considering any direct controls within a context that shares burdens equitably between the banks and the building societies.

43. Another paper is considering the changes in statistical procedure that might need to be undertaken if the authorities were to adopt M5 as their target. Meanwhile it is perhaps just worth noting that, in so far as this target is to be seen as a medium-term target, i is not so much of a disadvantage /even perhaps a slight advantage?/ if consistent, seasonally adjusted short-term (ie monthly) data are not readily available to the general public. If the aim is to persuade both the authorities and commentators to look at broader monetary targets in a medium-term context, then there would be something to be said for making the quarterly data into the operational series. /The problem here would be that the lags in data collection and changes in Budget timing could leave the latest known quarterly figure looking out of date at the time of the regular review. Furthermore any one individual end-quarterly observation may be distorted by special factors. It would be almost inevitable for the authorities in such circumstances to watch the more frequent and more quickly available partial monthly proxies for the full M5 series. If it proves