

**37) MONETARY TARGETS: GERMANY, THE US,  
AND THE UK: PART D (I)  
24<sup>TH</sup> JANUARY 1978**

*Mr Wiggins*  
*Cancel Mr Williams to Sir J.*



*Jk S*

MR. BRIDGEMAN

TREASURY  
13 NOV 1978  
H. F. C. S.

- cc. PS/Chancellor of the Duchy
- PS/Minister of State
- Sir D Wass
- Mr Airey
- Mr Atkinson
- Mr Couzens
- Mr Jordan Moss
- Mr Littler
- Mr Hancock
- Mrs Hedley-Miller
- Mr Middleton
- Mr Britton
- Mr Dixon
- Mr Wiggins
- Mr Scott
- Mr M.L. Williams
- Mr Wood

MONETARY TARGETS IN GERMANY, THE US AND UK

The Chancellor found your minute of 18th January and the attached note by Mr. Williams very useful. He indicated, however, that he would like to see what has happened in the UK to inflation and growth each year in the context of targets and outturns for money supply. He has in mind, as I mentioned on the telephone, some similar figures with regard to Germany which were included in a recent article in "The Times".

*K.J.*

(F.K. JONES)  
24th January, 1978

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D

TREASURY  
- 3 FEB 1978  
H. F. C. S.

MR. GOODHART

MONETARY TARGETS

A few, relatively minor, points in Middleton's two draft papers for the Chancellor -

Monetary Targets: The choice of target variable

Page 3,  
para.4 The description of M1 in terms of paying, or not paying, interest is a bit confusing when quite a lot of M1 is interest-bearing. Would the following be any better?

A case can however be made for considering M1 as a policy variable. By concentrating on deposits which are transferable or withdrawable on demand without interest penalty, it is the monetary aggregate which in the main measures the amount of funds freely available for transactions, and it reduces the area of confusion between the demand for transactions balances and the demand for financial assets as part of a wider demand for forms of holding wealth. Although some other balances (e.g. the clearers' seven-day deposits) are almost as available, there remains a fairly clear-cut distinction between M1 and wider definitions of the money supply for which it is difficult to find a natural stopping point.

Page 5,  
para.10  
line 9 Insert "or 'wholesale' time deposits" after 'certificates of deposit'.

Page 6,  
para.11  
lines  
7 - 9 It would surely be wrong to give the Chancellor the impression that the SSD scheme enables 'the short-run growth of M3 to be controlled with some degree of certainty'. There are too many inconsistencies in the composition of the two totals. "Help to control over a period" perhaps.

<sup>n</sup> 48  
Page 16 This paragraph is much too optimistic about the possibility of using the new weekly figures to compile an end-month M5 sufficiently reliable for monetary control purposes. The weekly figures cover only 80 or so banks and for statistics of flows we are initially assuming that there is 'no change' in the assets and liabilities of other banks; for an end-month aggregate, however, 'levels' would be needed and some method of grossing up would have to be devised. More important, however, is the fact that the level of bank deposits will almost always differ by a few days (over a week at end-quarters) from the end-month figures of building societies, etc.; and this is just the time in the month when there are likely to be switches between the two. I would suggest deleting the sentence beginning 'However' in line 7 and the last sentence of the paragraph.

Page 10, insert 'and in the banks' capital and reserves, etc.' after para.21 'lending overseas'.

Rolling Targets: Technical issues

Page 2 First paragraph under 'length to base period'.

line 3 Insert 'for example' after 'this could arise'. Variations in market conditions and in the timing of other types of transactions are other causes of erratic movements in the series.

line 9 Delete two sentences beginning 'There is the additional.....' and substitute -

- with three problems associated with the present system of fixed targets:-

1. As is

2. The present annual target has to be fixed before the 'base level' is known and, therefore, may turn out in practice to be tighter or easier than intended.

3. Fresh information on the development either of economic prospects or of structural monetary developments may make some reorientation of monetary policy desirable before the end of a full year. This requires that the authorities' stance should be measured against actual and likely future developments in the economy, and in the light of decisions taken from time to time about economic priorities; targets should be rolled forward accordingly.

More generally the adoption of rolling targets allows some additional flexibility. While this has some undoubted advantages, there are also dangers, particularly that flexibility may be interpreted as laxity. Problems of dealing with 'base drift' and of general presentation are considered subsequently. Suffice it to say here that the public justification for promulgating changes in the underlying trend rate of monetary growth, especially upwards changes, would have to be extremely carefully prepared and presented.

MR LITTLER

cc Mr Hancock  
Mr Isaac  
Mr Middleton  
Mr Dixon  
Mr Wiggins  
Mr Matthews  
Mr Williams

TREASURY  
31 AUG 1978  
H. F. C. S.

Mr Fforde }  
Mr Page } Bank of  
Mr Goodhart } England

ROLLING TARGETS

I attach the draft paper on this, which reflects Bank comments: it is agreed with Mr Middleton.

2. I should draw your attention to the following points:-

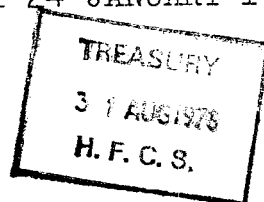
- i. Mr Fforde will wish to discuss with you the handling of the paper with the Chancellor and the Governor. The Governor has not yet discussed the details with them, and they are doubtful about highlighting at this stage points for discussion between the Chancellor and the Governor in the way that paragraph 18 does;
- ii. the Bank are having a further look at the one month/3 month average discussion and have not yet reached a considered view - they hope to be able to quantify the effects more by the time of your meeting;
- iii. Annexes 2-5 are a re-ordering of the paper attached to Mr Williams' minute of 17 January - a recast version should be available by lunchtime tomorrow, but this is already generally agreed;
- iv. Annex 6 will be a revision of the paper attached to Mr Wiggins' note of 18 January: a revision is being prepared following Mr Middleton's meeting this morning

with Mr Goodhart and others, but it is likely to require further work. It will bring out that, if one accepts the strict Friedmanite doctrine, there is a good case for a target for M1.

J. M. B.

J M BRIDGEMAN

24 January 1978



## MONETARY TARGETS

The Chancellor indicated, after considering with the Governor the Treasury paper "Monetary Targets 1978-79 - Rolling Targets etc" and the Bank paper dated 16 November, that he agreed in principle that there would be advantage in moving to a system of rolling targets. This paper, and the annexes to it, have been prepared by the Treasury, in consultation with the Bank, as the basis for decisions on the form which such a target, or targets, should take and on the choice of monetary aggregate, or aggregates, to which they should relate. The question of what the number, or numbers, should be to be announced in the Budget will be dealt with in the context of submissions on the general economic stance to be adopted in the Budget: the fiscal stance (including the size of the PSBR) and the monetary stance (including the monetary targets) interact to such an extent that they need to be considered as a whole.

2. This paper first summarises briefly the main recommendations on the mechanics of the suggested system for rolling targets on which there is unanimity of view between and within the Bank and Treasury. It sets out at greater length the issues which arise on the choice of the target variable or variables, on which there is not such unanimity of view, and so on which the Chancellor and Governor may wish to focus their discussion.

The Object of the Change

3. The earlier paper suggested that the adoption of rolling targets would get over some of the difficulties with the present system of having a target for the financial year specified in the Budget, without subsequent review. In particular it would get over the difficulties that:-

- i. if a divergence occurs towards the end of the financial year, it may either be too late to correct it in the remainder of that year or require an over-sharp reaction in

order to bring the absolute growth of the money supply back within the desired limits by the end of the year: this difficulty can be compounded by market reactions to the likelihood of an over-shoot making it a self fulfilling prophecy;

- ii. the target has to be fixed before the "base level" is known and there is no ready mechanism for subsequently adjusting the target to allow for an over-shoot or under-shoot at the end of the preceding year, which was not anticipated at the time the target was fixed;
- iii. fresh developments during the course of the year, whether in the monetary field or elsewhere in the economy, may make it desirable to change the target during the year: however, unless the system provides for such updating, a change of target could well, of itself, produce an adverse reaction in financial markets.

It also seemed desirable to adopt a system which got over another difficulty with the existing system, namely that the growth is measured from the level at one mid-April make-up day to the level at the next mid-April make-up day, which means that it can be affected by freak monthly figures at the beginning and the end of the year.

4. However, the markets may be suspicious of a rolling target system, just because it does allow an additional measure of flexibility. It will be necessary to stress that its introduction represents a more intelligent way of using monetary targets as a tool of macro-economic management, and does not represent a weakening of the authorities' resolve to control the growth of the money supply.

#### The Form of the System

5. Against this background the desiderata in choosing the particular system would seem to be that:-

- i. the form should enable the authorities to focus the attention of the market and commentators

on the trend of the growth of money supply (however defined) in relation to the desired trend, and so minimise the risk of "market-  
nerves" as each monthly figure is announced;

- ii. the form should not however be so loose that the target failed to achieve its aim of reassuring the markets that the Government intended to pursue a responsible monetary policy, supporting its counter-inflation policy;
- iii. the timing of announcement, at each roll-forward, should be such that the targets could be fixed in the context of an overall reassessment of macro-economic policy, and, if necessary, be associated with a change in fiscal policy;
- iv. there should be an opportunity at each roll-forward to explain the rationale of fixing the target, in relation both to monetary developments in the preceding period and to the Government's overall economic policy.

6. Annex 5 discusses how the system should be formulated to achieve these ends drawing as appropriate on the American and German systems described in Annexes 2 and 3. Bank and Treasury officials are agreed in recommending that:-

- i. the target should continue to relate to a period of a year: a shorter period, say 6 months, would reduce the emphasis on the trend, and would be too liable to random fluctuations. A longer period looks too far into the future to carry conviction with the market. A year is the period adopted by all other countries with targets. [Annex 5 paragraph ]

sometimes expressed a view on the desired medium term trend

- ii. there should not be a medium term target as well: ~~The US have~~ but quantification would not be practicable for the United Kingdom until inflation is under control.

- iii. the roll-forward should be twice a year: the NIF timetable would permit two or three times. But four months is really too short for a reassessment, would encourage "market nerves", and would not fit the Parliamentary calendar. [Annex 5 paragraph ]

- iv. the targets should therefore be announced in the Budget and roughly 6 months later.  
[Annex 5 paragraph ]
- v. to enable the "base level" to be known at the time of the roll-forward, the targets should relate broadly to the calendar year, and calendar mid-year to mid-year.  
[Annex 5 paragraph ]
- vi. the target should be expressed in the form of a "desired range" for the growth of [£M3] over the [calendar year 1978], rather than as a single figure: a point target could be associated with a margin of error, but it would risk becoming an upper limit in the eyes of the market rather than a centre point. [Annex paragraph ]
- vii. the width of the range should be 4%. There are strong arguments for saying that the width of the range should be at least this, both because of the degree of imprecision in the links between the monetary aggregates and incomes, and because of the extent of "random perturbations" in the monthly figures. However, the risk of an adverse market reaction to the change to rolling targets would be aggravated if the present range of 4% were also widened. [Annex 5 paragraph ]
- viii. every effort should be made to put the emphasis in commenting on progress during the year on the trend, and to dissuade the Press and market from monitoring progress mechanistically in relation to either "cones" or "tramlines". [Annex 5 paragraph ]

7. We had greater difficulty in deciding where the balance of advantage lay in respect of having the base level, and so the final level, determined by the level on one make-up day (mid-January and mid-July respectively), or on the average of three centred on those days. The argument in favour of using the average of three months is basically:-

- i. it reduces the likely extent of random perturbations (by nearly half) and the problem of revisions generated by retrospective adjustment of the seasonal adjustment (by [rather more than half?]);

- ii. it accords better with the general emphasis on the trend;

The arguments for the single months are

- iii. it is much simpler to explain, both initially and in subsequent comment as the figures are published;
- iv. the 3 month average can cause problems near the end of a period because it is easier to anticipate the outcome before the end of the final 3 month period.

The rolling target system of course reduces the significance of the last. On balance we would recommend the 3 month average.

8. Annex 1 describes the system which would result if these recommendations were adopted. As it points out, it will be necessary to devote a considerable effort in speeches and publications (BEQB and Treasury EPR) after the Budget to explain what is intended.

9. Annex 4 sets out the pros and cons of the Chancellor of the Duchy's alternative suggestion that progress against the target should be mainly gauged by the figure for the increase in the last 12 months: we consider that it gives too much weight to what happened 6 to 12 months ago, and too little to what has happened in the more recent period.

#### The Choice of the Target Aggregate

10. The complexities of the economic system and the range of Government objectives are both such that the decision to select a particular variable and to set a published target for it inevitably involves a degree of over-simplification and the risk that some ultimate objectives will be prejudiced in achieving it. The arguments for nevertheless having a target for a monetary aggregate are essentially two:-

- i. it will help to convince the financial markets that the Government is earnest in its intention to not allow monetary expansion to stimulate inflation;
- ii. the monetary authorities have to react continuously to developments in the markets - it is not possible to make a complete reassessment of macro-economic policy each time - so a monetary target can be a useful "sub-optimisation rule" for guiding monetary decisions between overall reappraisals of policy.

11. Given that there is no one monetary aggregate which encapsulates the totality of monetary conditions or those conditions' potential effect on the rest of the economy (eg on prices and activity), the selection of one or more monetary aggregates for a target inevitably involves a degree of arbitrariness and compromise. (The United States has targets for two; Germany has one - central bank money - which can be thought of as a weighted average of several aggregates - see Annexes 2 and 3.)

12. The characteristics which seem desirable for the aggregate or aggregates selected for the target are:-

- i. it should be thought "relevant" in the sense that changes in it affect the rest of the economy so that constraining it to its target (either upward or downward as necessary) is likely to help towards the Government's broader economic objectives, and not the reverse;
- ii. it should be controllable in the sense that there exist policy instruments that can affect it, and their use is likely to help overall macro-economic policy;
- iii. it should bring out the articulation of domestic monetary policy with other aspects of policy eg fiscal policy, exchange policy;
- iv. reasonably timely and clear statistics are available for it, and it is not subject to so great random fluctuations that a change in trend cannot be distinguished for some time;

- v. there exist reasonably clear econometric relationships, so it is possible to say with some confidence what the target for it should be in relation to an overall desired course for the economy.

13. Annex 6 looks at the attributes of the main possible aggregates (all of which are used for a target in some countries)

M1 - basically current accounts in the banking system, plus cash held outside that system.

M2 - M1 plus "retail" interest bearing deposits, but not CD's and wholesale deposits.

M3 - M2 plus CD's and other wholesale deposits.

M5 - M3 plus other near liquid assets eg Treasury bills, building society and local authority deposits.

DCE - credit advanced by the banking system.

Total credit DCE plus credit advanced through the building societies and **bond** markets.

14. If the theoretical basis for one's concern with the monetary aggregates is the belief that the levels of liquidity and credit in the economy can affect activity and prices through a number of routes, it then makes more sense to control one or both of the wider aggregates, M5 and total credit. But target for either M5 or total credit is impracticable, at least for the next few years, since timely statistics are not available. Moreover both M5 and total credit involve considerable definitional problems on the boundary.

15. DCE and M3 have the desired characteristics to about the same extent, namely there are reasonable a priori reasons for believing that a "much too high" or "much too low" level would jeopardise objectives for prices and activity, they can be broadly controlled with a lag, they are clearly linked to the PSBR etc, monthly statistics are available (and weekly figures are becoming available for M3). But on the other hand they are subject to definitional problems and the econometric

"fit" with prices and activity is not very good. They also have the advantage that the markets are accustomed to them. There are a priori reasons for considering DCE more relevant when domestic monetary conditions can have a critical effect on the exchange rate (eg when in balance of payments deficit) and M3 more relevant when the main concern is the domestic effect of monetary conditions on inflation.

16. There are some grounds for preferring M2 to M3 although these are debatable. It is not possible to link it with the PSBR in the way that is possible with DCE. The critical point is that statistics are not currently available, and we would need statistics for a reasonable period before considering setting a target.

17. M1 in contrast scores in respect of those characteristics for which DCE and M3 are weak, and vice versa. It is better defined, and the Bank's economists have established a better econometric fit with money incomes, and so prices and activity. "Strict monetarists" would argue that M1, which consists essentially of transaction balances, is the most relevant aggregate for monetary control. (Those who were more concerned with overall liquidity and credit effects would argue that there are a priori grounds for supposing that the causal link is from incomes to M1, rather than the reverse; if that is right measures to control it will not necessarily have the desired effect on the rest of the economy.) The only policy variable available for influencing it is short term interest rates. It has no clear interaction with other aggregates.

18. There is agreement between all the Bank and Treasury officials concerned that there is a clear case for continuing with a target for £M3. (We would revert to DCE instead if, at some stage in the future, it appeared that domestic monetary conditions were putting greater downward pressure on the exchange rate than was desired, and we were intervening heavily to support the rate.)

19. There is, however, disagreement over the suggestion, put in the Bank's paper last November, that there should also be a target for M1. The arguments for it are essentially:-

- a. if one accepts the strict monetarist view, it is the most relevant aggregate to control;
- b. the closer econometric fit makes it easier to gauge the degree of corrective action on interest rates required;
- c. even if the strict monetarist position is not accepted M1 has on occasion (but far from always) acted as a lead indicator for M3, so having a target for it could lead to more timely action to control M3;
- d. if we have more than one monetary target, then it will be easier to explain, and accept, excesses on one of them;
- e. if we accept that £M3 by itself is not a full indicator of monetary conditions and account will be taken in reaching decisions of other indicators, such as M1, it will only be possible to take account of such others if we have a priori view of a desirable level: in that case it might as well be a target.

The arguments against are:

- f. those who do not accept the strict monetarist approach would reply that there is no reason to think that the causal link is from M1 to real activity, so it is irrelevant to have a target for it. (To use the analogy in the Annex, it would be equivalent to trying to control the speed of a car by holding the speedometer needle.)
- g. if it is a good lead indicator for £M3 (and the evidence on this is mixed) it could be used as such to help to take timely and appropriate action on £M3, without having a target for it; more generally, assessments of the economy take account of the development of a wide range of facets of the economy, without setting prior targets for each;
- h. having a target for M1 would be equivalent to having a short term interest rate target, with the significant exception that random perturbations in the relationship between the two would have to be absorbed by varying interest rates;

- i. far from making it easier, having two targets will make it worse - the Government will be held to be failing in its monetary policy if it fails to achieve either, so increasing the risk of criticism and of adverse reactions in the markets;
- j. the fact that the only way the authorities can influence M1 in the short term is through interest rates will mean that having a target for M1 will increase the risk of monetary targets inducing instability rather than stability in the markets - indeed the market reaction to M1 being above target could induce the subsequent over-shooting of  $\text{£M3}$ , by causing markets to expect a rise in short term interest rates, and so hold off from buying gilts (which increases  $\text{£M3}$ , but not M1);
- k. the "black-box" nature of the link between M1 and the rest of the economy will tend to bring discredit on the idea of monetary targets.

### Conclusion

20. The Chancellor and the Governor are accordingly invited to agree that:-

- i. a shift to a rolling target system on the basis set out in paragraph 7 above and Annex 1 should be announced in the Budget speech;
- ii. there should be such a target for  $\text{£M3}$ .

They are invited to consider whether there should also be a target for M1. 7

ANNEXES

1. The Recommended System of Rolling Targets
2. The US System.
3. The German System.
4. Monitoring by reference to changes in the last 12 months.
5. Technical issues arising on the form of the system.
6. Technical aspects of the choice of the monetary variable.

ANNEX 1

If the Chancellor and Governor accept the recommendations in paragraph 5 the system would work broadly as follows:-

1. In the Budget speech the Chancellor would announce the shift to the rolling target system, that he intended that the trend of the growth of money supply during 1978 would be in the range x% to y% per annum, and that that target would be rolled forward 6 months in the autumn. He would explain why he had decided on x% to y%, with the mid-point the same as, or higher, or lower as the case might be, than the desired rate of growth of money GDP in the period.
2. The details of the base period etc would be explained in more detailed briefing and expositions.
3. The reference to trend in the Budget speech would be taken up and emphasized in other speeches and briefing - it would be made clear that the authorities would have regard to what appeared to be happening to the trend during the year, as well as to the cumulative position to date.
4. During the following months corrective action would be taken if it appeared that the trend had shifted outside that range; or factors were developing that would almost certainly make it do so, and it was thought that there were not other factors already at work which would bring the growth trend back to the desired course. The presumption would be that unless deviations were very radical - which would almost certainly mean other things in the economy were also going wrong - the corrective action at this stage would be the use of one or more monetary instruments.
5. In the autumn - not earlier than mid-September when the mid-August money supply figures were available (so the outcome of the first 6 months on the "3 month moving average" basis was known, but usually a month or so later when Parliament had reassembled and the Bray forecast based on the autumn NIF was published - the Chancellor would roll the target forward to one applying to the trend from mid-1978 to mid-1979, explaining the new figures in relation both to what had happened, and his reassessment of the economy. (He might or might not also decide to take fiscal action.)