

PO-CH/NL/0091 PT B

Pank. B

**SECRET**

(Circulate under cover and  
notify REGISTRY of movement)

Begins: 10/1/86

Ends: 21/2/86



PO -CH /NL/0091



PART B

Chancellor's (Lawson) Papers:

**MONETARY POLICY IN THE  
1986 MEDIUM TERM  
FINANCIAL STRATEGY**

1600/NL/0091

PO -CH

PART B

Disposal Directions: 25 Year

*[Signature]*

1/8/95



NOTE OF A MEETING IN H M TREASURY ON FRIDAY 10 JANUARY 1986  
at 10 AM

PRESENT Chancellor  
Economic Secretary  
Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr Odling Smee  
Mr Peretz  
Mr Scholar  
Mr Culpin  
Mr Riley  
Mr Walsh  
Mrs Rowlatt  
Mr Cropper  
Mr H Davies

#### MONETARY POLICY IN THE 1986 MTFS

1. The discussion focussed on the annotated agenda attached to Mr Peretz's note of 8 January. Also relevant was the paper on broad money submitted with Sir P Middleton's minute of 13 December and the further notes attached to Mr Peretz's minute of 8 January.

#### Operation of Policy

2. Sir Terence Burns said that there was no need to change the way in which monetary conditions were assessed on a monthly basis. But there was a real problem with the status of targets for broad money. He remained sure that it had been right to end overfunding. But the result was that it was almost impossible to control the growth of broad money ~~certainly within a target period~~. Wider liquidity was not easy to interpret but in principle we sought to judge the appropriate growth rate relative to the projected growth of income in the light of past behaviour. An excessive growth in broad money was a reason for concern. The correct response was to be more cautious in setting short term interest rates, and to look for more reassurance in the behaviour in other monetary indicators.



3. The Chancellor commented that it was scarcely surprising that other countries with free financial systems did not have precise policies for broad money. In practice the authorities could only react to a rapid growth in bank lending or liquidity by raising short term interest rates. The relationship between short rates on the one hand and credit and broad money on the other was notoriously unstable and sluggish. The implication <sup>was</sup> ~~L~~ that the authorities should be prepared to offset rapid credit expansion by a tightening of policy, without necessarily expecting this to have much effect on the rate of growth of credit.

4. In discussion, it was argued that it might be appropriate to take more direct steps to reduce the rate of growth of credit. On the other hand, the need for credit rationing had really arisen from reluctance on the part of governments to ~~contemplate~~ <sup>raise</sup> sufficiently ~~high~~ short term interest rates. Providing the authorities were prepared to move interest rates if necessary, they could afford to be more relaxed about the growth of credit per se.

5. Given the build up in broad liquidity, it was important to have adequate early warning of the need for policy action. No one indicator was entirely satisfactory, but over the last ten years the indicator that had most consistently given the right reading had been M0. The exchange rate had very often been right but broad money had been highly unreliable. The problem was that M0 gave very little advance warning - the evidence suggested that it led changes in nominal GDP by only about two or three ~~quarters~~ <sup>quarters</sup>.

#### **Narrow Money.**

6. The Chancellor said there was a strong presumption against changing the narrow money target aggregate. But M0 had a problem



of credibility. It was hard to justify focussing on an aggregate that was to all intents and purposes <sup>consisting largely of</sup> notes and coins, rather than on the total of non interest bearing money.

X  
X following  
7. Sir Terence Burns said that the boundary between interest and non interest bearing money was <sup>still</sup> subject to violent change, with the introduction of interest bearing accounts. While he accepted the case for a nib M1 target in principle, it was not a practical option. He accepted that there were presentational problems with M0, which had not been helped by the timing of the latest rise in interest rates.

8. It was agreed that M0 should be maintained as the target for narrow money. The Chancellor asked Sir Peter Middleton and Sir Terence Burns to consider what might be published to bolster its market credibility.

#### Choice of target for broad money.

9. The Chancellor said it would be extremely unwise to target a new measure of broad money, given the problems of interpretation and control ~~that was~~ common to all the available measures. The real choice lay between:

- presenting target ranges for sterling M3 for the whole MTF5 period
- publishing a target for sterling M3 for the year ahead only
- dropping targets for broad money altogether.

of  
saying  
10. What was said about broad money in the text <sup>of</sup> ~~to~~ the MTF5 would also be important. There was a choice between <sup>saying</sup> ~~suggesting~~ that the aim was to keep broad money within the target range,



and stating explicitly that, while an above target growth in broad money would be a prima facie <sup>reason for</sup> ~~case~~ raising <sup>for</sup> short term interest rates, this could not be expected to bring broad money growth back within the range.

11. Sir Peter Middleton suggested that the time had come to drop sterling M3 targets altogether. He doubted that there was any longer a strong presentational case for retaining them even for the year ahead. It would be better to meet the criticism that policy had changed head on. The presentational gap left by dropping ~~the~~ sterling M3 could to some extent be filled by upgrading the role of money GDP.

12. Sir Terence Burns thought it would be very difficult to stick to the existing MTFS presentation. Realistic targets for sterling M3 might look alarmingly high to the market. He marginally favoured retaining <sup>a</sup> ~~the~~ sterling M3 target for one year only, making it clear in the accompanying text that if the growth of broad money was excessively high, the response would be to tighten up elsewhere, without any expectation that this would lead to a significant moderation in the growth of sterling M3.

13. In discussion, it was suggested that while Sir Peter Middleton's approach was a fairly accurate description of how policy was actually operated, dropping targets for broad money altogether could give the wrong signals, implying more of a shift in policy than had actually occurred. The cleanest option might be to publish figures for money GDP over the whole MTFS, with targets for both M0 and sterling M3 for the year ahead only. It was agreed that the surrounding text would be crucial.

### Conclusions

14. Summing up, the Chancellor said he had considerable sympathy for Sir Peter Middleton's approach, but felt that no one would believe that we paid attention to bank lending and broad money



if we dropped sterling M3 targets altogether. There was a clear need to give a higher profile to money GDP in the presentation of the MTFS. On balance, he favoured:

- sticking with the existing aggregates for broad and narrow money (M0 and £M3)
- publishing targets for sterling M3 for one year only
- showing ranges for M0 for the whole MTFS period (although he would not rule out publishing M0 targets for the year ahead only as well)

Further thought needed to be given to the <sup>public</sup> presentation of monetary policy. The Chancellor thought he ought to make a major speech after the Budget, possibly to the Bow Group.

#### Next steps.

15. The Chancellor will be holding a meeting with the Bank shortly to discuss the presentation of monetary policy in the MTFS. Sir Peter Middleton agreed to provide an annotated agenda.

RACHEL LOMAX

#### Distribution:

Those present  
PS/Chief Secretary  
Mr Sedgwick

*Professor Cripps - Number 10*

053/0 ref

SECRET

At type in  
head form with  
para numbers.

DRAFT

NOTE OF A MEETING IN H M TREASURY ON FRIDAY 10 JANUARY 1986 at 10 AM

PRESENT Chancellor  
Economic Secretary  
Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr Odling Smee  
Mr Peretz  
Mr Scholar  
Mr Culpin  
Mr Riley  
Mr Walsh  
Mrs Rowlatt Rowlatt  
Mr Cropper  
Mr H Davies

#### MONETARY POLICY IN THE 1986 MTF'S

1 The discussion focussed on the <sup>annotated</sup> ~~allocated~~ agenda attached to Mr Peretz's note of 8 January. Also relevant was the paper on broad money submitted with Sir P Middleton's minute of 13 December. <sup>and the</sup> ~~There were~~ further notes attached to Mr Peretz's minute of 8 January.

<sup>bold</sup> 5. Operation of Policy

2 Sir Terence<sup>e</sup> Burns said that there was no need to change the way in which monetary conditions were assessed on a monthly



basis. But there was a real problem with the status of targets for broad money. He remained sure that it had been right to end overfunding. But the result was that it was almost impossible to control the growth of broad money certainly within a target period. <sup>Wider</sup> ~~A level~~ liquidity was not easy to interpret but in principle we sought to judge the appropriate growth rate <sup>relative to</sup> within the projected growth of income in the light of past behaviour. An excessive growth in broad money was a reason for concern. The correct response was to be more cautious in setting short term interest rates, and to look for more reassurance in the behaviour in other monetary indicators.

3 The Chancellor commented that it was <sup>scarcely</sup> surprising that other countries with free financial systems did not have precise policies for broad monies<sup>es</sup>. In practice the authorities could only react to a rapid growth in bank lending or liquidity by raising short term interest rates. The relationship between short rates on the one hand and credit and broad money on the other was notoriously unstable and sluggish. The implication that the authorities should be prepared to offset rapid credit ~~growth~~ expansion by a tightening <sup>of</sup> policy, without necessarily expecting this to have much effect on the rate of growth of credit.

4 In ~~this~~ discussion, it was argued that it might be appropriate to take more direct steps to reduce the rate of growth of credit. On the other hand, the need for credit rationing had really

arisen from reluctance on the part of governments to contemplate sufficiently high short term interest rates. Providing the authorities were prepared to move interest rates if necessary, <sup>they</sup> ~~it~~ could afford to be more relaxed about the growth of credit per se.

3 Given the build up in broad liquidity, it was important to have adequate early warning of the need for policy action. No one indicator was entirely satisfactory, but over the last ten years the indicator that had most consistently given the right reading had been M0. The exchange rate had very often been right <sup>but</sup> broad money had been high <sup>The problem was that</sup> unreliable. <sup>L</sup> M0 gave very little advance warning - the evidence suggested that ~~this~~ <sup>it</sup> ~~led~~ <sup>led</sup> changes in nominal GDP by only about two or three-quarters.

S. Shear  
(6572)

Narrow Money. <sup>↑</sup> 6. The Chancellor said there <sup>was</sup> ~~is~~ a strong presumption against changing the narrow money target aggregate. But M0 ~~had~~ had a problem of <sup>y</sup> ~~credibilities~~ <sup>that</sup> ~~credibilities~~. It was hard to justify focussing on an aggregate <sup>on</sup> ~~was~~ <sup>that</sup> to all intents and purposes notes and coins rather than <sup>on</sup> ~~the~~ <sup>on</sup> the total of non interest bearing money.

M0

x

117 Sir Terence Burns said that the boundary between interest and non interest bearing money was subject to violent change, with the introduction of interest bearing accounts. While he accepted the case for a nib M1 target in principle, it was not a practical option. He accepted that there were presentational problems with M0, which had not been helped by the timing of the latest

rise in interest rates.

§ It was agreed that M0 should be maintained as the target for narrow money. The Chancellor asked Sir Peter Middleton and Sir Terence Burns to consider what might be published to bolster its market credibility.

*subhead bold*  
↑  
Choice of target for broad money. § The Chancellor said it would be extremely unwise to target a new measure of broad money, given the problems of interpreting <sup>ation</sup> and controlling <sup>that was common to</sup> all the available measures. The real choice lay between:

- presenting target ranges for sterling M3 for the whole MTFS period
- publishing a target for sterling M3 ~~only~~ for the year ahead *only*
- dropping targets for broad money altogether.

*10*  
§ What was said about broad money in the text to the MTFS would also be important. There was a choice between suggesting that the aim was to keep broad money within the target range, <sup>and</sup> ~~or~~ stating explicitly <sup>that, while</sup> ~~as~~ an above target growth in broad money would be a prima facie case for ~~tightening monetary policy by~~ raising short term interest rates, ~~but~~ <sup>back</sup> this could not be expected to bring broad money growth within the range, ~~over the target~~

period.

• *H* Sir Peter Middleton suggested that the time had come to drop sterling M3 targets altogether. He doubted that there was any longer a strong presentational case for retaining them even for <sup>the year ahead</sup> ~~one~~ year. It would be better to meet the criticism that policy had changed <sup>head on</sup> ~~head on~~. The presentational gap left by dropping the sterling M3 could to some extent <sup>be filled</sup> ~~be filled~~ by upgrading the role of money GDP.

• *R* Sir Terence Burns thought it would be very difficult to stick to the existing MTFs presentation. Realistic targets for sterling M3 might look alarmingly high to the market. He marginally favoured retaining the sterling M3 targets ~~x~~ for one year only, making it clear in the accompanying text that if the growth of broad money was excessively high, the response would be to tighten up elsewhere without any expectation that this would lead to a significant moderation in the growth of sterling M3.

*H* In discussion, it was suggested that while Sir Peter Middleton's approach was a fairly accurate description of how policies <sup>y</sup> ~~was~~ actually operated, dropping targets for broad money altogether could give the wrong signals, implying more of a shift in policy than had actually occurred. The <sup>n</sup> ~~clear~~ <sup>clear</sup>est option might be to publish figures for money GDP over the whole MTFs, with targets for both M0 and sterling M3 for the year ahead. <sup>only</sup> ~~L~~ It was agreed that the surrounding text would be crucial.

## Conclusions

#14 In summing up, the Chancellor said he had considerable sympathy for Sir Peter Middleton's approach, but felt that no one would believe that we paid attention to bank lending and broad money if we dropped sterling M3 targets altogether. There was a clear need to give a higher profile to money GDP in the presentation of the MTFs. On balance, he favoured:

- sticking with the existing aggregates for broad and narrow money (M0 and £ M3)
- publishing targets for sterling M3 for one year only
- showing ranges for M0 for the whole MTFs period (although he <sup>w</sup> could not rule out publishing M0 targets for the year ~~x~~ ahead only ~~x~~ as well)

Further thought needed to be given to the presentation of monetary policy. The Chancellor thought he ought to make a major speech <sup>(after the Budget)</sup> possibly to the Bow Group.

Subhead  
body  
Next steps. <sup>15</sup> The Chancellor will be holding a meeting with the Bank shortly to discuss the presentation of monetary policy in the MTFs. Sir Peter Middleton agreed to provide an ~~allocated~~ <sup>annotated</sup> agenda.

R

RACHEL LOMAX

Distribution:

Ps/ Those present  
Chief Secretary  
Mr Sedgwick

16/1/86



Permanent Secretary  
H M TREASURY

You might  
glance at  
p. 20-21  
and p. 22

Chancellor,

You might

like to glance at this. It  
is not very profound but it  
is a useful survey of  
recent developments. The UK  
is in an almost<sup>\*</sup> unique  
position of having heavily  
distorted monetary aggregates but  
with no exchange rate anchor.

16/1

16/1

16/1

MS  
unclassified  
unclassified

Thanks.  
Good for  
the UK. Has  
high relevant  
to public  
administration  
policy  
16/1

Paris, drafted: 18th December 1985

Department of Economics  
and Statistics

dist: 20th December 1985

Or. Engl.

DES/NI(85)9

THE FORMULATION OF MONETARY POLICY:  
A REASSESSMENT IN THE LIGHT OF RECENT EXPERIENCE

(Note by the Secretariat)

CONTENTS

	<u>Page</u>
I. INTRODUCTION	3
II. DIFFICULTIES SURROUNDING THE CONDUCT OF MONETARY POLICY IN THE PRESENT CONTEXT	3
A. Instability of the money-income relationship	3
B. Constraints created by fiscal imbalances	7
C. Exchange rate variability	7
D. Debt problems and threats to banks' solvency	15
III. POLICY RESPONSES: OVERVIEW OF THE CURRENT APPROACH	16
IV. OPTIONS FOR POLICY FORMULATION IN A CHANGING ENVIRONMENT	17
A. What are the basic objectives of monetary policy?	18
B. How can monetary policy objectives be best accomplished?	18
1. Retaining the monetary targeting approach	19
2. Nominal income targeting	21
3. Nominal exchange rate targeting	22
C. What is the room for judgement in the conduct of policy?	24
D. How should monetary policy intentions be presented to the general public?	25
NOTES	37
REFERENCES	40

33659

2826E.



LIST OF TABLES

1.	Actual Budget Balances	8
2.	Structural Budget Balances	9
3.	Exchange Rate Volatility	11
4.	Real Exchange Rates vis-à-vis the Deutschemark	12
5.	Variability of Real Effective Exchange Rates over the Period 1973.Q1-1985.Q2	14

LIST OF CHARTS\*

1.	Trends in Money Velocity	28
2.	Predictions of the Income Velocity of Money	33
3.	Nominal and Real Exchange Rates	35

---

\* Included after the main text.

## I. INTRODUCTION

1. Since the mid-1970s, a number of countries have formulated their monetary policies primarily in terms of targets for money or credit aggregates (1). While contributing, almost everywhere, to a gradual reduction in inflation to rates which prevailed during the 1960s, this approach has provided the required flexibility to cope with the external shocks of the 1970s and the emergence of large budget deficits. It has also allowed central banks to adjust interest rates in a more timely way than was often previously possible, as such adjustments become endogeneous in the context of pursuit of the targets. However, problems have arisen in recent years which have considerably complicated the conduct of target-oriented monetary policies. In some countries the relationship between major aggregates and money income has been disturbed by a number of factors, notably the widespread development of financial innovation, the process of deregulation and the growing international integration of financial markets. At the same time, the concerns raised by the increased variability of exchange rates, the difficulties of some heavily indebted developing countries and questions about some banks' solvency (mainly in the United States), have put additional constraints on policy. As a result, doubts have been expressed about the continued feasibility or usefulness of monetary targeting in policy formulation.

2. This paper examines this issue in the light of the experience in the countries of the Group of Ten (2) since the early 1980s. Part II below discusses the main difficulties which have surrounded the conduct of monetary policy in recent years. Part III describes the ways monetary authorities have responded to these problems. Part IV considers a number of possible options for formulating monetary policy in the future.

## II. DIFFICULTIES SURROUNDING THE CONDUCT OF MONETARY POLICY IN THE PRESENT CONTEXT

### A. Instability of the money-income relationship

3. Chart 1 illustrates the behaviour of the income velocity of the main monetary aggregates in the seven major OECD countries in recent years. For each aggregate, the chart presents actual velocity and a (centered) nine-quarter moving average, which shows its underlying trends, abstracting from short-run fluctuations. Two series of observations emerge:

- i) In the three countries where instability of the money-income relationship has been of greatest concern -- the United States, the United Kingdom and Canada -- the underlying trends of velocity for most of the aggregates shown have shifted substantially in recent years, either oscillating with no clear long-term tendency, as with M2 in the United States, or changing direction altogether. These shifts, which have persisted for two or three years, have often broken previous trends which had appeared to be well-established.

- ii) Among the other major countries, there has been little sign of an important change in velocity trends which have established themselves during the past decade for M2+CDs in Japan and M3 in Germany. In France, a downward trend in velocity of M2R reversed itself around 1977 and velocity has risen gradually since then, while in Italy, velocity of M2 has displayed no stable pattern.

4. Another way to examine the stability of the money-income relationship is to analyse it econometrically through the behaviour of the demand for money function. If this is stable, fluctuations in the money-income relationship will be systematically related to fluctuations in the determinants of real money demand (i.e. real income, interest rates and expected inflation), and if the trends in these determinants are predictable so will be the medium-term behaviour of the money income relationship. The instability that has recently been observed in velocity movements in some countries has, therefore, two possible explanations. First, the effects of financial innovation, deregulation and the increased international integration of world financial markets may have affected the demand for money function itself. Indeed, they have influenced both the pecuniary and the non-pecuniary returns from holding the monetary assets included in particular aggregates, and they have increased the range of substitutes not covered by these aggregates. This may have resulted in a complete change in the parameters of demand for money functions or, where close substitutes for assets included within an aggregate exist outside this aggregate, in the lack of any meaningful relationship at all. As the effects of innovation, deregulation and internationalisation of markets are likely to continue in ways that are difficult to foresee, and since their impact on money demand cannot be fully assessed until there has been more experience with the changed environment, this explanation calls into question the role that monetary aggregates may usefully play in the process of policy formulation.

5. The alternative explanation for the erratic behaviour of velocity is that while the demand for money function may have been stable, despite the structural and regulatory changes in the financial environment, determinants of money demand, i.e. interest rates and inflation expectations, may have changed sharply and unpredictably as a consequence of the successful disinflationary process. On this argument, as gains against inflation are consolidated, a stable relationship between money and income should reassert itself, implying that while some flexibility may be called for in the short run, monetary aggregates should retain an important role in policy formulation.

6. Two years ago the OECD Secretariat investigated the stability of demand for money functions in the seven major countries (3). A conventional specification was used for all the main aggregates (4), with real income, expected inflation and a short-term interest rate as explanatory variables (5). Inflation expectations were modelled in two ways: as extrapolative, i.e. equal to the actual inflation rate; and as essentially adaptive, being determined by an autoregressive process. The equations were also estimated with the expected inflation term suppressed, and all equations were subjected to a number of stability tests. The estimation period began with the shift to floating exchange rates, in the second quarter of 1973 for most countries, and ended in the first quarter of 1983. The majority of specifications were found to perform unsatisfactorily in the sense that the parameters of the implied long-run money demand function were theoretically incorrect or of implausible magnitudes, the equations were dynamically

unstable, or they systematically failed the various tests of parameter instability. Nevertheless, at least one broadly satisfactory equation was found for each country (6). The ability of these equations to explain recent developments provides a further test of their stability, and hence may be indicative of the extent to which monetary aggregates may still be relevant for policy formulation in the future.

7. Chart 2 presents dynamic simulations of velocity behaviour, both during the sample period and a forecast period beginning in the second quarter of 1983, for the main equations which performed satisfactorily. Among the countries for which money-income instability has been a serious policy concern, the United States has two aggregates (M1 and M2) which were found to have reasonably stable demand functions. These aggregates have been targeted by the Federal Reserve for the past ten years, although with varying degrees of priority attached to the achievement of the targets. The corresponding equations include an expected inflation term based on an autoregressive process. They successfully simulate both the recovery in velocity which began early in 1983 and the recent slowdown, although the extent of these changes was somewhat underestimated and, in the case of M1, the equation missed the timing of turning points slightly. Furthermore, the errors out of sample are comparatively small. Broadly, the equations suggest that the underlying money demand functions have been reasonably stable and that a large part of the recent money-income instability is explicable in terms of downward adjustment of interest rates and inflation expectations associated with successful disinflation.

8. For the United Kingdom, the only aggregate for which a satisfactory equation was found was M1, which the authorities were targeting when the equations were being estimated. For Canada, only M1A appeared to have a reasonably stable demand function: this aggregate has never been targeted, but following the suspension of the target for M1 in November 1982, due to distortions associated with shifts from sight deposits to daily interest-bearing checking accounts, it appeared to be the best alternative since it included these accounts. However, neither the equation for M1 in the United Kingdom nor M1A in Canada forecasts correctly the events since early 1983. Both equations predicted recoveries in velocity during 1984, whereas it actually fell sharply, and the size of the errors increased substantially in comparison to those within-sample. It may be germane that neither equation contains an expected inflation term, so that they may underestimate the impact of disinflation on the attractiveness of holding highly liquid assets. Shifts from financial assets not included in these aggregates to comparatively new types of interest bearing deposits which they take into account may be in fact more significant.

9. Among the countries where money-income instability has been of less concern, in Japan the aggregate which has played an important role in policy formulation (M2+CDs) was found to have a stable money demand function. It shows no sign of instability in out-of-sample forecasting. The same is true for Germany with respect to M3, which, while not targeted, tends to move closely over the medium term with central bank money, the aggregate used as a target. In France, a stable equation was also found for M2R, which, until the recent redefinition of the money aggregates, has been targeted by the authorities. However, its forecasting performance out of sample is not good, as the equation predicts a fall in velocity over the two years to early 1985 while actual velocity has remained at historically high levels. This may

reflect, at least in part, the availability of increasingly attractive financial assets not included in M2R, some issued by the government in order to facilitate the smooth financing of the increased budget deficits in recent years, and some offered by commercial banks as part of the process of financial innovation. In contrast to the case of the United Kingdom and Canada, the hypotheses that the equation fails because it does not adequately take account of disinflation cannot explain the instability of M2R demand because the errors are in the opposite direction.

10. Finally, for Italy, where policy is formulated primarily in terms of targets for total domestic credit, the only stable money demand equation that could be identified was for M1, with the inflation expectations term suppressed. As this aggregate contains transactions and savings deposits, both of which earn interest at rates which are broadly related to their size, rather than their maturity, the distinction between it and the broader aggregates, M2 and M3, may be irrelevant in the case of Italy (7). In fact, this aggregate has never been seriously considered for the purposes of monetary targeting, and the equation has not explained recent developments well.

11. The above results must be interpreted very cautiously, since, as in any econometric work, equations may be sensitive to a large number of technical assumptions. These results appear, however, to be broadly representative, in a qualitative way, of the recent literature in this area (8). In particular, the conclusion that a reasonably stable demand function exists for the main monetary aggregates in the United States, Japan and Germany seems to be a robust finding. This is true notwithstanding the fact that the effects of financial innovation and deregulation in these countries have ranged from major in the United States, to significant but not disruptive in Japan, to minor in Germany. The greater instability of the money-income relationship in the United States is perhaps due to the fact that the necessary (and actual) degree of disinflation was larger in this country than in Japan and Germany, so that the associated effects on money demand were greater.

12. In the other major countries, the data do not appear to warrant such a conclusion. For the United Kingdom there has not appeared to be a stable demand function for the main broad aggregate, £M3, for many years (9), and the apparent stability of demand for the narrow aggregate, M1, has not survived the rapid changes in the financial environment. This has left the authorities without an obvious aggregate to target, except the very narrow M0, to provide an anchor for nominal magnitudes in order to restrain inflation over the medium term; the increasing role of the exchange rate in policy formulation owes much to this consideration (see Part III). In France and Italy the evidence suggests that financial assets outside the main aggregates have become increasingly important as substitutes for those within the aggregates, calling the significance of the latter into question. In Canada, demand functions for narrow money have collapsed completely in the face of financial innovations, while it has always been difficult to identify a demand function for broad money. In the latter three countries, close attention has been paid to exchange rate stability vis-à-vis main trading partners. In this circumstance the increasing international integration of financial markets may have also contributed to money demand instability (via currency substitution), exacerbating the effects of financial innovation, more than in countries where there exists greater exchange rate uncertainty in the short run.

B. Constraints created by fiscal imbalances

13. In a number of countries, the existence of large budget deficits may have exacerbated the problems facing monetary authorities in recent years. Indeed, except for Japan, Germany and to some extent, the United Kingdom, where progress has been made in reducing fiscal imbalances, most of the countries considered have experienced a deterioration in their budget position since the second oil shock (Table 1). To a considerable extent this deterioration has reflected cyclical factors, but in three major economies -- the United States, Italy and Canada -- deficits have also increased substantially on a structural (i.e. cyclically adjusted) basis (Table 2). As a result, government borrowing in credit markets has grown markedly.

14. In the context of the greater reliance on market-oriented mechanisms to allocate resources in financial markets and the commitment to monetary policies aimed at controlling inflation, such increases in government credit demands, particularly where they have been structural rather than cyclical, have tended to be reflected in higher domestic real interest rates. This has exposed monetary authorities to pressures, since high interest rates are often perceived by the public as having been determined by them. The commitment to non-inflationary monetary policy may tend to be undermined by high real credit costs, as these lead to concern about their adverse effect on investment and are particularly unpopular with households in view of their implications for housing finance. Such a situation may strengthen market expectations that central banks will be forced at some point to allow inflationary monetary accommodation.

15. Monetary authorities may have been constrained not only by budget deficits in their own country, but also by the impact, at the world level, of borrowing needs of governments in general. In this regard, the change in the international distribution of budget deficits during recent years has been important (see Section C below). In the context of increasing integration of financial markets, changes in the international pattern of government borrowing tend to influence the direction of international capital flows. Where monetary policies are formulated in terms of exchange rates, money market rates must be raised quickly if increases in foreign budget deficits lead to capital outflows which put pressure on exchange markets. Where exchange rates play little or no role in policy formulation, such incipient capital outflows lead to exchange rate depreciation in the first instance, and eventually to a current account surplus. The financial counterpart to this current account improvement -- i.e. net capital outflows -- tends to raise interest rates in a way similar to that required to prevent the exchange rate from moving (10). Regardless of how policy is formulated, therefore, interest rates are influenced by fiscal policies internationally, and not just domestically.

C. Exchange rate variability

16. In analysing the variability of exchange rates, it is useful to distinguish between short-term volatility and medium-term swings. Short-term volatility is the degree of variability in nominal exchange rates from day-to-day, week-to-week or month-to-month. Table 3 shows the standard deviations of exchange rates against the dollar and the main non-dollar cross rates around their six-month moving average. Standard deviations greater than two are underlined in order to highlight periods or currencies which have been

Table 1

## ACTUAL BUDGET BALANCES

Financial surplus (+) or deficit (-) of the general government sector,  
as a percentage of nominal GNP/GDP

	1979	1980	1981	1982	1983	1984	1985
United States	0.6	-1.2	-0.9	-3.8	-4.1	-3.4	-3.7
Japan	-4.8	-4.5	-4.0	-3.6	-3.5	-2.7	-1.6
Germany	-2.7	-3.1	-3.9	-3.3	-2.4	-1.9	-1.1
France	-0.7	0.2	-1.8	-2.7	-3.0	-2.7	-3.4
United Kingdom	-3.5	-3.5	-2.8	-2.3	-3.7	-3.8	-3.6
Italy	-9.5	-8.0	-11.9	-12.6	-12.4	-13.5	-14.1
Canada	-1.8	-2.7	-1.6	-5.0	-6.2	-6.3	-6.7
Total major seven	-1.7	-2.4	-2.6	-4.0	-4.2	-3.8	-3.7
Total smaller countries*	-2.5	-2.7	-4.2	-5.0	-5.6	-4.7	-4.0
Total of above countries	-1.8	-2.4	-2.8	-4.1	-4.4	-3.9	-3.8
OECD Less United States	-3.5	-3.4	-4.1	-4.4	-4.6	-4.2	-3.8

\* Australia, Austria, Belgium, Denmark, Finland, Greece, Ireland, Netherlands, Norway, Spain and Sweden.

Table 2

## STRUCTURAL BUDGET BALANCES

Cyclically-adjusted surplus (+) or deficit (-) of the general government sector, as a percentage of nominal GNP/GDP

	1979	1980	1981	1982	1983	1984	1985
United States	1.2	0.7	1.0	0.1	-0.6	-1.4	-1.6
Japan	-4.2	-3.8	-3.4	-3.0	-2.4	-1.9	-1.0
Germany	-2.1	-2.5	-2.8	-1.3	0	0.5	1.1
France	-0.9	0.4	-0.6	-1.1	-0.9	0.4	0.3
United Kingdom	-4.2	-3.2	-0.3	1.2	0	-0.4	-0.5
Italy	-9.7	-8.8	-12.5	-11.9	-10.2	-10.5	-11.0
Canada	-1.6	-2.1	-1.3	-1.7	-3.4	-4.3	-5.4
Total major seven	-1.3	-1.3	-1.1	-1.3	-1.5	-1.7	-1.6
Total smaller countries*	-1.3	-1.6	-2.2	-2.3	-2.7	-2.4	-2.0
Total of above countries	-1.3	-1.4	-1.3	-1.4	-1.6	-1.8	-1.7
OECD less United States	-3.1	-2.8	-2.9	-2.5	-2.4	-2.1	-1.8

\* Australia, Austria, Belgium, Denmark, Finland, Greece, Ireland, Netherlands, Norway, Spain and Sweden.



characterized by high degrees of volatility. Two features stand out from this table. First, the bilateral rates between the U.S. dollar and the Canadian dollar, and, since 1975, between the Deutschemark and the French franc, have been more stable than most of the other exchange rates considered, reflecting the priority given by the authorities in Canada and France to such stability. Apart from the Deutschemark-Swiss franc rate, all cross rates involving the U.S. dollar, yen, Deutschemark, pound sterling and Swiss franc have experienced substantially greater degrees of instability. Second, while some years were clearly more turbulent than others, with 1977 comparatively calm and 1978 and 1981 particularly disturbed, there is no apparent trend in volatility in either direction. This runs counter to some views originally expressed that a diminishing trend would become evident as exchange markets gained experience with floating.

17. The costs of short-run volatility, notably the possibility of adverse effects on trade due to risk considerations, have been analysed in a number of studies (11). The general consensus of these studies is that while volatility may be a nuisance it is not a serious problem. Where there are no impediments in the form of exchange controls the risk can be covered by using forward markets. This has the disadvantage of precluding a trader from benefitting from favourable movements in exchange rates, but for major currencies a considerable degree of "one-way" cover (i.e. protection against unfavourable movements while allowing benefits of favourable changes) can be obtained by using currency options.

18. Medium-term swings in exchange rates refer to movements which may persist for several years in the same direction and reverse only in the longer run. As an illustration, Chart 3 shows the behaviour of nominal and real effective exchange rates, as well as bilateral exchange rates against the U.S. dollar, for the G-10 countries over the period since the shift to floating in 1973. Among the countries which have attached less priority to exchange rates in policy formulation, two broad features stand out:

- i) the United States, Japan, the United Kingdom and Switzerland have all experienced very large swings in both nominal and real exchange rates over a two to five year period. Each has at some stage registered an effective appreciation in real terms of around 40 per cent. In the United States this more than offset an earlier large depreciation, while in the other three countries it was subsequently to a large extent reversed over periods of three to four years.
- ii) In Germany, the secular appreciation of the nominal effective exchange rate has largely offset differential inflation so that in real terms the Deutschemark has not fluctuated so widely on a trade-weighted basis as the other major international currencies. As Table 4 indicates, this primarily reflects its stability against European currencies as a result of joint floating arrangements (the "snake" and, later, EMS). However, both its appreciation against the dollar during the 1970s and its subsequent depreciation shows that it has not avoided major swings against the other main international currencies.

19. Even in those countries where greater priority has been attached to exchange rate considerations in the formulation and conduct of policy,

Table 3

EXCHANGE RATE VOLATILITY

(Standard deviation expressed as a percentage of the weekly nominal exchange rate around its six-months (27 week) moving average)

A. EXCHANGE RATES AGAINST THE U.S. DOLLAR

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Yen	<u>2.34</u>	0.91	1.03	1.60	<u>2.93</u>	<u>2.22</u>	<u>3.18</u>	<u>2.31</u>	<u>3.15</u>	<u>2.01</u>	1.56
Deutschemark	<u>2.88</u>	<u>2.13</u>	0.97	1.12	<u>2.18</u>	1.36	<u>2.60</u>	<u>3.15</u>	<u>2.05</u>	1.82	<u>2.52</u>
French franc	<u>2.21</u>	<u>2.18</u>	1.09	0.61	1.75	1.31	<u>2.40</u>	<u>2.62</u>	<u>2.79</u>	1.94	<u>2.44</u>
Pound sterling	<u>1.83</u>	1.29	<u>2.52</u>	0.85	<u>2.10</u>	<u>2.49</u>	1.87	<u>2.43</u>	1.38	<u>2.00</u>	1.87
Italian lira	1.92	1.75	<u>3.11</u>	0.20	1.31	1.17	<u>2.43</u>	<u>2.18</u>	<u>2.09</u>	1.59	<u>2.21</u>
Canadian dollar	0.47	0.48	0.98	0.83	1.03	1.02	1.04	0.82	1.18	0.29	0.70
Belgian franc	<u>2.55</u>	1.95	1.03	1.03	<u>2.24</u>	1.49	<u>2.57</u>	<u>2.86</u>	<u>2.67</u>	1.64	<u>2.51</u>
Dutch guilder	<u>2.43</u>	1.95	1.07	0.97	<u>2.19</u>	1.44	<u>2.51</u>	<u>3.09</u>	1.75	1.72	<u>2.50</u>
Swedish krona	<u>2.45</u>	<u>2.06</u>	0.90	<u>2.35</u>	1.19	0.92	1.81	1.57	<u>3.77</u>	1.06	1.75
Swiss franc	<u>2.67</u>	<u>2.13</u>	0.79	1.07	<u>4.09</u>	1.68	<u>3.15</u>	<u>3.51</u>	<u>2.30</u>	1.91	<u>2.10</u>

B. OTHER MAJOR CROSS RATES

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
<u>Yen against:</u>											
Deutschemark	1.69	<u>2.02</u>	1.44	1.53	<u>2.55</u>	<u>2.01</u>	<u>2.12</u>	<u>3.19</u>	1.61	1.31	1.86
Pound Sterling	1.22	1.03	<u>2.34</u>	1.77	<u>2.88</u>	<u>2.21</u>	<u>2.21</u>	1.57	<u>2.90</u>	<u>2.40</u>	1.53
French franc	1.97	<u>2.18</u>	1.64	1.44	1.89	1.99	<u>2.14</u>	<u>2.76</u>	1.90	1.29	1.79
Swiss franc	<u>2.13</u>	<u>2.04</u>	1.62	1.49	3.40	1.81	<u>2.03</u>	<u>3.46</u>	1.92	0.67	1.16
<u>Deutschemark against:</u>											
Pound sterling	1.49	1.58	<u>2.93</u>	1.13	1.85	<u>2.17</u>	1.37	<u>2.69</u>	1.64	<u>2.30</u>	1.10
French franc	<u>2.10</u>	0.90	1.55	0.63	1.76	0.27	0.35	1.15	1.20	1.12	0.20
Swiss franc	1.18	0.65	1.10	0.51	<u>2.89</u>	0.81	0.93	1.47	1.35	1.33	1.07
<u>Pound sterling against:</u>											
French franc	1.30	1.80	<u>2.66</u>	0.83	<u>2.20</u>	<u>2.06</u>	1.25	<u>2.50</u>	<u>2.28</u>	<u>2.57</u>	1.06
Swiss franc	1.79	1.68	<u>3.07</u>	1.06	<u>2.89</u>	<u>2.21</u>	1.78	<u>3.04</u>	<u>2.21</u>	<u>2.19</u>	1.01
<u>French franc against:</u>											
Swiss franc	1.99	1.15	1.21	0.59	<u>3.52</u>	0.89	1.04	<u>2.09</u>	1.87	1.26	1.03

Note: All numbers exceeding 2.00 are underlined.

Table 4  
 REAL EXCHANGE RATES VIS-A-VIS THE DEUTSCHEMARK (a)  
 (1980 = 100)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 (b)
United States	120.8	118.9	116.6	121.2	114.0	101.6	96.8	100.0	131.0	143.0	151.2	171.7	180.6
Japan	109.2	106.7	101.8	107.2	111.2	123.1	106.4	100.0	126.2	117.1	125.7	138.4	140.9
France	94.5	88.0	100.4	97.8	92.1	91.1	93.6	100.0	103.9	99.6	95.8	98.0	102.1
United Kingdom	73.6	72.9	78.8	72.6	71.4	72.4	80.3	100.0	115.5	111.0	103.1	103.4	106.5
Italy	96.2	92.4	97.0	88.7	88.6	86.9	90.2	100.0	106.6	108.6	113.2	118.6	120.5
Canada	121.0	129.0	123.3	137.7	121.9	100.5	94.8	100.0	128.9	142.3	152.7	163.5	163.0
Belgium	92.4	94.0	100.3	101.7	104.7	103.0	101.6	100.0	99.2	88.9	85.7	87.5	89.9
Netherlands	89.0	91.4	97.0	99.8	101.6	100.8	99.4	100.0	100.4	102.5	99.1	99.0	98.9
Sweden	96.7	94.0	103.2	108.7	103.8	93.6	93.4	100.0	109.4	98.5	90.0	98.7	102.7
Switzerland	84.2	86.7	96.1	100.8	93.4	107.9	103.8	100.0	108.9	116.5	118.6	119.3	117.2

a. Bilateral exchange rates vis-à-vis the Deutschmark, adjusted for differential movements in the GDP deflator.

b. Secretariat estimates.

Source: OECD.

significant swings have occurred. The French franc, Belgian franc and Dutch guilder have all experienced major movements against the main international currencies similar to those experienced by the Deutschemark. In effective terms, however their variability has been less marked, reflecting the influence of European currency arrangements. Finally, both Canada, where monetary policy was formulated primarily in terms of monetary targets until emphasis shifted toward resisting currency depreciation against the U.S. dollar after 1978, and Sweden, where the exchange rate target has been formulated in terms of a basket of currencies, have experienced substantial swings in their real exchange rates.

20. The impression given by the chart is broadly confirmed by the global measure of exchange rate variability presented in column 1 of Table 5. This shows the standard deviation of real effective exchange rates since 1973. Only for Belgium does this measure indicate that variability has been greater, on a comparative basis, than was suggested by the chart. However, the picture appears different if the openness of the economy is taken into account. To this end, the standard deviations have been weighted by the share of trade in GNP (column 3). According to this adjusted measure, the United States and Japan shift from being among the most affected by variability when the exchange rate is considered in isolation to being among the least affected when external exposure is taken into consideration. On the other hand, Belgium stands out strongly as having been most affected by exchange rate swings. Otherwise, the figures continue to show France as comparatively unaffected, the United Kingdom as highly affected, and Canada and the remaining European countries in the middle.

21. Since exchange rates are best viewed as prices which adjust to balance the supply of and demand for stocks of assets denominated in different currencies (12), the wide swings which have been experienced can be attributed to changes in the main factors influencing this balance:

- i) by directly influencing the rate of return on financial assets, fiscal and monetary policies can cause large exchange rate movements, particularly when divergent changes are occurring in a number of countries at once. Some of the most striking episodes of exchange rate instability during the past dozen years owe much to this factor. In particular, the shift in the United States from easy monetary policy and tight fiscal policy during the late 1970s to the opposite mix during the 1980s, while fiscal policy in some other major countries moved from expansion to restriction, contributed much to the wide swings of the dollar during this period.
- ii) Exogenous non-policy factors such as technological innovations, divergent movements in productivity across countries, discovery and development of natural resources, and changes in demand patterns also affect exchange rates. These factors influence the current account of the balance of payments, leading to shifts in the ownership of financial assets at the world level. If investors wish to hold the bulk of their wealth in their own currency, the exchange rate will tend to rise in countries where such factors tend to generate an external surplus.

Table 5

## VARIABILITY OF REAL EFFECTIVE EXCHANGE RATES OVER THE PERIOD 1973.Q1-1985.Q2

(Standard deviation of the logarithm of the quarterly real effective exchange rate)

	(1) Standard deviation	(2) External exposure*	(3) Weighted standard deviation (3)=(1)X(2)
United States	11.07	0.105	1.17
Japan	9.09	0.143	1.30
Germany	7.06	0.276	1.95
France	4.71	0.211	0.99
United Kingdom	15.15	0.273	4.14
Italy	6.65	0.256	1.71
Canada	7.21	0.281	2.02
Belgium	11.39	0.624	7.11
Netherlands	4.48	0.512	2.29
Sweden	8.60	0.304	2.61
Switzerland	8.08	0.347	2.80

\* Average trade exposure (average of exports and imports as a share of GDP) during 1974-1983.

- iii) Since the returns on financial assets are importantly influenced by capital gains and/or losses due to exchange rate movements, expected future developments affect the current exchange rate. Therefore, any new information which leads market participants to reassess the likely evolution of future rates of return on financial assets can have a large impact on exchange rates. In periods of high uncertainty, where it is difficult for markets to form a clear view about future exchange rates, expectations may lose their anchor and bandwagon effects or speculative bubbles may be generated by some news (13).

22. The costs associated with the large swings in real exchange rates may have been substantial in recent years. Although it is difficult to identify an "appropriate" or "sustainable" real exchange rate, the possibility exists that any particular persistent appreciation or depreciation might be an adjustment from an "inappropriate" level to a "correct" one. However, the tendency of such movements to reverse themselves subsequently strongly suggests that they are as likely to be increasing misalignments as corrections. To the extent that investment and resource allocation decisions, which cannot easily be modified, are taken on the basis of relative cost and price considerations reflecting unsustainable real exchange rate movements, these may entail serious real costs. Furthermore, large changes in real exchange rates, regardless of their longer run sustainability, influence demand patterns and competitiveness. This may create pressures in favour of protectionist measures which, in recent years, have increasingly threatened the commitment of major countries, notably the United States, to free trade. As recent experience suggests, when such concerns about resource misallocation and protectionism become sufficiently serious monetary authorities may have to reconsider their policy stance.

23. Such costs of large exchange rate movements must of course be measured against their benefits. The shift to the present regime occurred in large part because countries committed to maintaining low inflation rates wished to insulate themselves from the increasingly inflationary international environment of the 1970s. By relieving them of the need to intervene in exchange markets and/or to ease monetary conditions to maintain fixed parities, the change in regime has been successful in this regard. In Japan, Germany and Switzerland, in particular, non-inflationary monetary policies have been implemented reasonably successfully, and secular upward movements of effective exchange rates have contributed importantly to restraining price increases. This has also been the case in some smaller European economies, such as the Netherlands, which have chosen to stabilize their currency in terms of the Deutschmark. Similarly, monetary policies intended to reduce inflation from the high rates prevailing during the 1970s were implemented in the United States and the United Kingdom after 1979, and sharply rising exchange rates played an important role in the success of these policies. It is true that, at the same time, this exchange rate appreciation contributed to the slowdown of real demand and the unusually severe recessions of the early 1980s, but it is doubtful that any successful anti-inflation policy could have avoided a severe recession.

#### D. Debt problems and threats to banks' solvency

24. An additional constraint on the conduct of monetary policy in recent years has been the difficulty experienced by a number of developing countries

in servicing their external debts. This constraint has been particularly serious in the United States for two reasons. First, since a large percentage of the debts of those developing countries whose situation is most precarious is denominated in dollars, adjustments in U.S. monetary policy can potentially exacerbate or alleviate the situation. Second, U.S. commercial banks have been most exposed to the risk of default of these countries -- a situation aggravated by the existence of a large amount of questionable loans to some distressed domestic sectors, notably agriculture and natural resource extraction. While many banks have improved their capital adequacy and have already made provisions for some bad loans, large write-offs of debts would threaten the solvency of some of them, which could entail the intervention of monetary authorities. To date, however, there have only been isolated cases of defaults leading to insolvency of financial institutions, such as Continental Illinois, but banks' overall exposure remains substantial.

### III. POLICY RESPONSES: OVERVIEW OF THE CURRENT APPROACH

25. To cope with the internal and external difficulties described above, the monetary authorities, in countries most seriously affected, have generally adopted a pragmatic attitude, relying increasingly on judgement and taking into account the information contained in a broad range of real and financial indicators. In particular, they have felt less constrained to adhere rigidly to previously announced targets as circumstances have changed in unforeseen ways. This has been the case in the United States, the United Kingdom and Canada, where the authorities have at times missed targets (all three countries), rebased their targets in mid-year (U.S.), incorporated overshoots in the following year's target (U.S., U.K.), announced multiple targets (U.S., U.K.), changed the relative weights attached to various targeted aggregates (U.S., U.K.) or suspended targets altogether (Canada).

26. In the context of such greater flexibility in monetary targeting, the exchange rate has played an increasing role. In the United States it is one of the indicators which has been influencing the formulation of policy in recent months -- though in ways that reflect conflicting considerations. On the one hand, the authorities have been concerned to moderate the strength of the dollar in view of the growing current account deficit and its adverse effects on certain sectors, which have encouraged protectionist pressures. Another consideration has been the necessity to alleviate the burden of developing countries' debts and their servicing costs in order to avoid the risk of widespread default, to which, as noted above, the U.S. banking system is particularly exposed. On the other hand, concerns have been expressed that too rapid a decline of the dollar might create potential inflationary pressures (14) and should therefore be resisted. In the United Kingdom and Canada the exchange rate has been accorded even greater significance, although neither country has attempted to fix specific objectives for it. In the United Kingdom this process began in 1981, when it was concluded that the strength of the pound indicated that the stance of policy was far tighter than suggested by the growth of  $\text{£M3}$ . Since January 1985 the emphasis of policy has been more explicitly directed toward the exchange rate. In Canada, the attention paid to the exchange rate began to increase during the late 1970s, when depreciation against the U.S. dollar aggravated inflationary pressures. Since targets for the growth of M1 were suspended in 1982 due to distortions caused by financial innovation, stabilization of the exchange rate has become de facto the main intermediate objective of monetary policy.

27. In Japan, while financial innovation and deregulation have not led to problematic distortions in monetary aggregates, the authorities have sometimes faced a serious problem of exchange rate instability. The strength of the yen during 1978 was probably excessive, as has been the subsequent decline. More generally, the yen's fluctuations have caused concerns about resource misallocation, and the general tendency toward weakness against the U.S. dollar has helped to make Japan the main target of protectionist pressures. Although the Bank of Japan has not allowed major swings in monetary growth, it has at times adjusted monetary policy in light of exchange rate considerations. For example, the expansion of M2+CDs was permitted to accelerate somewhat in 1978, and in recent years has been held down to the region of 7-8 per cent, although at times somewhat higher growth might have been desirable from a domestic viewpoint. This owes much to the severe constraints on reducing Japanese interest rates during the recent period due to the high levels of rates prevailing in the United States. Finally, following the Group of Five initiative to encourage dollar depreciation in late September 1985, the Bank of Japan engaged in "non-sterilized" intervention on the exchange market, which provoked a squeeze on bank liquidity. As a result, both domestic interest rates and the yen rose sharply.

28. In continental Europe, as noted in Part II, the difficulties created by financial innovation, exchange rate swings and developing countries' debts have been somewhat less severe. Generally, the conduct of monetary policy has been less constrained than in North America, Japan and the United Kingdom. Thus, in Germany, the monetary authorities have adhered closely to pre-set targets in order gradually to reduce the rate of inflation. Moreover, while the timing of adjustments in interest rates has sometimes been motivated by exchange rate considerations, the adjustments themselves have rarely been such as to compromise monetary targets, and never by very much. This contrasts with the attitude which was taken in 1978, when rapid monetary expansion was permitted in order to moderate the rise of the Deutschemerk against the dollar.

29. Most other European countries, except the United Kingdom and Switzerland, have been constrained in their scope to be flexible by exchange rate commitments vis-à-vis the Deutschemerk within the EMS or, in the case of Sweden, an exchange rate policy formulated in terms of a currency basket in which the Deutschemerk has a large weight. While there were several realignments during the early 1980s, mainly involving devaluations against the Deutschemerk, exchange rates have for the most part been maintained in nominal terms since early 1983. This has greatly facilitated the reduction of inflation throughout Europe, despite the strength of the dollar, although in most countries price increases still remain more rapid than those in Germany.

#### IV. OPTIONS FOR POLICY FORMULATION IN A CHANGING ENVIRONMENT

30. Although there is no simple answer to what is "best" for all countries in all circumstances, a number of interrelated issues must be addressed in order to define what could be the most appropriate way to formulate monetary policy in the present context. For purposes of exposition these are considered below under four headings: (1) what is monetary policy attempting to accomplish? (2) how can it be accomplished? (3) how much reliance should be placed on judgement? and (4) how should policy be presented to the general public?



A. What are the basic objectives of monetary policy?

31. It is widely accepted that the main role of monetary policy is to control inflation over the medium term in order to maintain the stability of the currency and preserve its use as a store of value. This means that while there are a number of considerations which may lead to conflicts in policy objectives in the short run, these should be resolved in such a way that monetary policy does not fail to provide an anchor for the behaviour of nominal magnitudes over longer periods. To this end, given the progress in reducing inflation achieved in most countries, a broad strategic judgement must now be made, either explicitly or implicitly, about what constitutes an appropriate rate of inflation over the medium to longer term. Should countries attempt to reduce inflation further towards zero or should they aim at stabilizing it at the relatively "low" rates currently prevailing (15)?

32. The argument for stabilizing inflation at the prevailing rate stresses the costliness, in terms of lost output and still higher unemployment, of reducing it further. The forces working to maintain real wages are held to give the inflationary process a great deal of inertia, while the influence of forward-looking expectations on price formation is confined primarily to financial markets. Further reduction in inflation would therefore require substantial prolonged deflation affecting a wide range of markets and sectors. Adherents of this view would consider the costs of continued inflation at current rates as moderate, especially as it stabilizes and becomes widely and correctly anticipated. The conclusion which follows is that the costs in terms of prematurely aborting the recovery, particularly in light of the international debt situation, would outweigh the benefits from a further reduction in inflation.

33. The opposing view assesses the costs of inflation as more severe than does the first. On this view, therefore, it is appropriate to accept the costs of incomplete recovery for longer in order to achieve a given reduction in inflation. Furthermore, longer-term output and employment performance are held to be improved by a non-inflationary environment, i.e. the short-term trade-off is reversed over time. A second consideration is that experience suggests that it is very difficult to stabilize inflation at any rate significantly above zero without encountering tendencies for it to accelerate. Therefore, it is unrealistic to hope that the costs of inflation would be mitigated as the inflation became fully anticipated. Because inflation is seen to be costly and politically unpopular, any such acceleration would make deflationary policies inevitable. Finally, more stress is placed on forward-looking inflation expectations as an influence on wage and price formation. A clear and credible commitment by the monetary authorities toward eliminating inflation would favourably affect wage and price formation so that the costs would be less than generally thought. Adherents of this view argue that inflation should be reduced until price stability is fully restored, i.e. that the appropriate rate of inflation is zero.

B. How can monetary policy objectives be best accomplished?

34. Once a judgement has been made about the desirable evolution of inflation and nominal magnitudes more generally, it is necessary to find a way to conduct policy in order to achieve these objectives. Given that central banks cannot control spending or price formation directly, most find it useful

27. In Japan, while financial innovation and deregulation have not led to problematic distortions in monetary aggregates, the authorities have sometimes faced a serious problem of exchange rate instability. The strength of the yen during 1978 was probably excessive, as has been the subsequent decline. More generally, the yen's fluctuations have caused concerns about resource misallocation, and the general tendency toward weakness against the U.S. dollar has helped to make Japan the main target of protectionist pressures. Although the Bank of Japan has not allowed major swings in monetary growth, it has at times adjusted monetary policy in light of exchange rate considerations. For example, the expansion of M2+CDS was permitted to accelerate somewhat in 1978, and in recent years has been held down to the region of 7-8 per cent, although at times somewhat higher growth might have been desirable from a domestic viewpoint. This owes much to the severe constraints on reducing Japanese interest rates during the recent period due to the high levels of rates prevailing in the United States. Finally, following the Group of Five initiative to encourage dollar depreciation in late September 1985, the Bank of Japan engaged in "non-sterilized" intervention on the exchange market, which provoked a squeeze on bank liquidity. As a result, both domestic interest rates and the yen rose sharply.

28. In continental Europe, as noted in Part II, the difficulties created by financial innovation, exchange rate swings and developing countries' debts have been somewhat less severe. Generally, the conduct of monetary policy has been less constrained than in North America, Japan and the United Kingdom. Thus, in Germany, the monetary authorities have adhered closely to pre-set targets in order gradually to reduce the rate of inflation. Moreover, while the timing of adjustments in interest rates has sometimes been motivated by exchange rate considerations, the adjustments themselves have rarely been such as to compromise monetary targets, and never by very much. This contrasts with the attitude which was taken in 1978, when rapid monetary expansion was permitted in order to moderate the rise of the Deutschemerk against the dollar.

29. Most other European countries, except the United Kingdom and Switzerland, have been constrained in their scope to be flexible by exchange rate commitments vis-à-vis the Deutschemerk within the EMS or, in the case of Sweden, an exchange rate policy formulated in terms of a currency basket in which the Deutschemerk has a large weight. While there were several realignments during the early 1980s, mainly involving devaluations against the Deutschemerk, exchange rates have for the most part been maintained in nominal terms since early 1983. This has greatly facilitated the reduction of inflation throughout Europe, despite the strength of the dollar, although in most countries price increases still remain more rapid than those in Germany.

#### IV. OPTIONS FOR POLICY FORMULATION IN A CHANGING ENVIRONMENT

30. Although there is no simple answer to what is "best" for all countries in all circumstances, a number of interrelated issues must be addressed in order to define what could be the most appropriate way to formulate monetary policy in the present context. For purposes of exposition these are considered below under four headings: (1) what is monetary policy attempting to accomplish? (2) how can it be accomplished? (3) how much reliance should be placed on judgement? and (4) how should policy be presented to the general public?

A. What are the basic objectives of monetary policy?

31. It is widely accepted that the main role of monetary policy is to control inflation over the medium term in order to maintain the stability of the currency and preserve its use as a store of value. This means that while there are a number of considerations which may lead to conflicts in policy objectives in the short run, these should be resolved in such a way that monetary policy does not fail to provide an anchor for the behaviour of nominal magnitudes over longer periods. To this end, given the progress in reducing inflation achieved in most countries, a broad strategic judgement must now be made, either explicitly or implicitly, about what constitutes an appropriate rate of inflation over the medium to longer term. Should countries attempt to reduce inflation further towards zero or should they aim at stabilizing it at the relatively "low" rates currently prevailing (15)?

32. The argument for stabilizing inflation at the prevailing rate stresses the costliness, in terms of lost output and still higher unemployment, of reducing it further. The forces working to maintain real wages are held to give the inflationary process a great deal of inertia, while the influence of forward-looking expectations on price formation is confined primarily to financial markets. Further reduction in inflation would therefore require substantial prolonged deflation affecting a wide range of markets and sectors. Adherents of this view would consider the costs of continued inflation at current rates as moderate, especially as it stabilizes and becomes widely and correctly anticipated. The conclusion which follows is that the costs in terms of prematurely aborting the recovery, particularly in light of the international debt situation, would outweigh the benefits from a further reduction in inflation.

33. The opposing view assesses the costs of inflation as more severe than does the first. On this view, therefore, it is appropriate to accept the costs of incomplete recovery for longer in order to achieve a given reduction in inflation. Furthermore, longer-term output and employment performance are held to be improved by a non-inflationary environment, i.e. the short-term trade-off is reversed over time. A second consideration is that experience suggests that it is very difficult to stabilize inflation at any rate significantly above zero without encountering tendencies for it to accelerate. Therefore, it is unrealistic to hope that the costs of inflation would be mitigated as the inflation became fully anticipated. Because inflation is seen to be costly and politically unpopular, any such acceleration would make deflationary policies inevitable. Finally, more stress is placed on forward-looking inflation expectations as an influence on wage and price formation. A clear and credible commitment by the monetary authorities toward eliminating inflation would favourably affect wage and price formation so that the costs would be less than generally thought. Adherents of this view argue that inflation should be reduced until price stability is fully restored, i.e. that the appropriate rate of inflation is zero.

B. How can monetary policy objectives be best accomplished?

34. Once a judgement has been made about the desirable evolution of inflation and nominal magnitudes more generally, it is necessary to find a way to conduct policy in order to achieve these objectives. Given that central banks cannot control spending or price formation directly, most find it useful

to have an intermediate target which offers a clear set of guideposts around which policy can be formulated, either rigidly or more flexibly, over the medium term.

35. Two approaches, interest rates and real exchange rate targeting, are usually regarded as unsatisfactory for this purpose, as neither of these offers an anchor which monetary policy can stick to in an attempt to prevent unlimited cumulative divergences of the price level from a non-inflationary path (16). It is generally difficult for monetary authorities to identify what is the appropriate real or nominal interest rate level consistent with non-inflationary policies. Since interest rates are affected by fiscal policy, as well as by exogenous domestic and international developments, their movements are not easily predictable. Furthermore, attempts to keep interest rates at relatively low levels may entail an acceleration of monetary growth and eventually the loss of control over inflation. Thus, while interest rates may be useful as operating instruments to assist the achievement of intermediate targets in terms of money or credit aggregates or exchange rates, they cannot, themselves, offer a viable basis for policy formulation over the medium term. Similarly, there is no uniquely appropriate real exchange rate, and, even if there were, a policy of fixing it, as under a crawling peg arrangement, would imply automatic accommodation of domestic inflationary disturbances. ✓

36. If monetary policy is to be successful, it must therefore be conducted in such a way that inflationary pressures will be resisted. Three approaches merit consideration in this respect (i) retention of monetary targets; (ii) adoption of nominal income targets; and (iii) stabilisation of the nominal exchange rate, i.e. a "hard currency" option. ||

#### 1. Retaining the monetary targeting approach

37. Notwithstanding the difficulties experienced in a number of countries with monetary targeting, a retention of this approach, perhaps in a modified form, may still appear useful if it is possible to identify an appropriate aggregate displaying a stable relationship, in the sense of being predictable, with nominal income over the medium term. In most countries attention has so far focussed mainly on aggregates of varying breadth consisting of monetary assets held by the non-bank public. Conceptually, construction of such aggregates involves, first, ordering the various types of assets by their "moneyness" and then adding up the value of those with at least a particular degree of liquidity. A major difficulty is that financial innovations and deregulation have tended to "distort" the aggregates by changing the attractiveness and "moneyness" of previously existing assets, both relative to each other and to new assets as they become available (17). In principle, this problem can be addressed by periodically altering the definitions to include new types of financial assets in the appropriate aggregates and to adjust the statistical treatment of existing assets where their characteristics have changed. While this would be a way of endeavouring to maintain meaningful aggregates to target, it would not preclude some change in the parameters of demand functions for the redefined money aggregates. Furthermore, if the financial environment were changing too rapidly the frequency of changes in definition that would be required would be too high to make the effort useful.

38. An alternative way to deal with ~~this~~ <sup>how would!</sup> problem, within the monetary targeting framework, would be to focus on divisia monetary aggregates. These are essentially index numbers which weight various monetary and quasi-monetary assets according to their degree of liquidity. The weights depend upon the shares of the assets in the total and upon their relative opportunity costs, which, in practice, are measured as the difference between the rates of return on these assets and the maximum available market return. Advocates of giving divisia monetary indices an important role in policy formulation argue that much of the variability of income velocity and instability in the demand for money -- a feature of relationships involving conventional monetary aggregates -- is eliminated when the divisia counterparts of these aggregates are used instead.

39. Some empirical evidence has been provided to support the view that divisia aggregates are superior to conventional ones (18), but a number of studies have come to the opposite conclusion (19), so that there is no clear empirical case in their favour in terms of the behaviour of money demand and velocity. Moreover, divisia monetary aggregates have a number of drawbacks (20). The reaction of markets to the framing of monetary targets in terms of a composite index is uncertain, and it might prove difficult to establish confidence in such an indicator, which has a much less obvious interpretation than conventional aggregates. In addition, control of divisia monetary aggregates would be subject to the same difficulties as those met in controlling conventional ones. Finally, the weights used in the divisia index are not independent of the quantities of the assets considered. If, for example, the monetary authorities attempted to reduce the growth of the divisia aggregate by restricting the supply of cash, the return on financial assets would rise. This would increase the weight given to cash in the index and alter the weights attached to the other assets. Therefore, control of a divisia index would require that the weights of the components be predictable.

40. A third possibility in the context of an aggregates-oriented approach would be to consider an aggregate consisting only of high-power money, i.e. essentially notes in circulation and bank reserves, which represent liabilities of the monetary authorities. Targets for central bank money in Germany and Switzerland and M0 in the United Kingdom fall into this category at present, although, as discussed below, operating procedures in these countries differ substantially from those sometimes associated with "monetary base control" proposals. From a purely technical viewpoint there may appear to be advantages in focussing on a aggregate that consists solely of high powered money, as the monetary authorities should normally be in a position to control their own balance sheets. Furthermore, at least some of the shifts in private portfolios and changes in financial behaviour, which arise as a consequence of innovation, would be unlikely to affect or distort an aggregate consisting entirely of base money.

41. Such an approach could, however, introduce other types of difficulties. Indeed, any policy focussing on a broadly defined base money aggregate must take account of the public's demand for notes, which largely relates to spending intentions and is not very sensitive to short-run changes in interest rates. Since banks usually hold very little spare cash, over and above what they are required to deposit with the central bank, a policy of restricting the supply of central bank money, in the face of an increase in the public's demand for notes, would run the risk of draining the banking system of cash and causing pressures in the money market. This could force

the central bank to intervene in order to provide additional cash, accommodating the demand for notes but at the risk of undermining the effectiveness of the policy. To avoid these problems, control of CBM in Germany and Switzerland and M0 in the United Kingdom operates indirectly: money market management is primarily designed to restrain the growth of broader aggregates and/or spending intentions, and hence the demand for bank notes, in order to achieve the targets. In so doing, however, monetary policies are subject to the same difficulties as those affecting broader aggregates.

42. Alternatively, policy formulation could focus on a narrower concept of base money -- i.e. bank reserves -- with a view to restraining banks' lending activities and, hence, the expansion of their balance sheets. A passive attitude might thus be taken with regard to the demand for notes, with the central bank accommodating the public's desire to switch between deposits and currency, on the assumption that notes constitute only a small share of monetary assets. However as banks' demand for free cash is generally very small, quantitative control of bank reserves would provide a poor basis for restraining other nominal magnitudes. Where reserves are required and not remunerated, they act as a tax on banks' activities and encourage disintermediation, which exacerbates the problems which have affected monetary targeting. Increased reliance on reserve requirements could also be seen as running counter to the general trend towards deregulation in financial markets. In practice, while bank reserves have been used as an operating target, as in the United States during 1979-82, they have not been seriously considered by central banks as a potential intermediate target.

## 2. Nominal income targeting

43. An alternative to controlling monetary aggregates that has attracted increasing interest in recent years is nominal income targeting (21). This is generally seen as offering a medium-term framework for setting policy in the short run. In some respects such an approach would be similar to monetary targeting. First, the choice of a target range for either intermediate variable incorporates a judgement about the appropriate behaviour of inflation over the time horizon covered by the targets. Second, both imply a degree of non-accommodation of upward and downward movements of inflation in comparison to the rate of price increase compatible with the chosen target range. More inflationary wage and price behaviour than envisaged by the authorities would lead to tighter monetary conditions and lower real activity, while less inflation, or actual price deflation, would provide more room for real growth.

44. The nominal income approach has several attractions. At the strategic level, it would make it more transparent to the public that while the authorities assume responsibility for the medium-term growth of nominal magnitudes, the split between prices and output depends on the behaviour of the private sector. It therefore offers a clear incentive to moderation in wage and price formation in order to make room for more real output. At the operational level, if money velocity is predictable, the nominal income target can be regarded as a velocity-adjusted monetary target. However, nominal income targeting is in some sense more general than monetary targeting as it allows the authorities to bring more information to bear on the conduct of monetary policy. In particular, it gives the authorities the possibility of responding to disturbances which influence money velocity in unforeseen ways by offsetting adjustments in policy. Moreover, it provides an overall

framework encompassing instruments other than monetary policies, and remains applicable regardless of the short-run stability of the demand for money or the relative effectiveness of fiscal and monetary policies in influencing demand.

45. There are, however, some clear operational problems associated with the nominal income targeting approach. Perhaps the most serious is that nominal income is not a variable that the monetary authorities themselves are in a position to control, at least within a year, which is the normal projection period for monetary targets. If it showed signs of deviating from the target during the projection period, it would be very difficult to engineer a correction. The way the economy responds to monetary variables is not sufficiently well understood, and the lag structure of these responses is too uncertain, to allow any confidence that short-run adjustments would be successful. Efforts to make short-run corrections could thus lead to serious instability in subsequent years.

46. Another difficulty is that the non-accommodating nature of a nominal income target implies that policy should respond to a disturbance affecting prices with a view toward causing a one-for-one offsetting movement in output. As the money-income relationship, even where it is stable, has some elasticity during the short run, a monetary target would not normally have this effect. The nominal income approach could be therefore comparatively destabilizing with respect to output in the face of price disturbances, if attempts were made to implement it over periods as short as a year. Formulation of targets in terms of ranges would possibly ease this problem somewhat, as the authorities could, in principle, aim for the lower or upper ends of the ranges in this circumstance. However, this is also true of monetary targets, so the comparatively greater ability of the real economy to absorb price shocks under monetary targets remains.

47. Finally, the statistical base for nominal income targeting is not very satisfactory. While monetary data are available quickly and are rarely revised to a significant extent, apart from the seasonal adjustment, national accounts data are generally available only after a lag of several months and are subject to considerable subsequent revision.

### 3. Nominal exchange rate targeting

48. The nominal exchange rate offers an alternative intermediate target which is currently used by a number of countries, mainly smaller ones (22). Choosing this approach and adhering to it implies that the objectives concerning the desirable evolution of domestic inflation over longer periods are similar to those formulated abroad, since nominal magnitudes, and hence inflation, are forced to adjust to foreign ones. Operationally it involves choosing a reference exchange rate, usually the currency of a major trading partner or a basket of currencies, and some combination of exchange market intervention and adjustment of monetary conditions to influence capital flows to ensure that the target is met. Generally the achievement of a nominal exchange rate target is more straightforward than is often the case with monetary targets. A policy of intervention in the exchange market, if not sterilized, quickly affects short-term interest rates and leads, in principle, to equilibrating capital flows which allow the exchange rate to be maintained. In practice, most central banks moderate the effects of exchange rate intervention on the domestic money market and in some cases, notably

Canada, they rely primarily on money market operations to stabilize the exchange rate. Nevertheless, whatever the precise operating procedure, a policy of allowing rapid and substantial movements in money market rates should normally make nominal exchange rate targeting viable in a technical sense without necessitating unsustainable movements in official reserves.

49. There are a number of positive aspects of a policy formulated in terms of stabilizing the nominal exchange rate:

- i) If inflation is low in the reference currency country, pegging the exchange rate to it will contribute to restraining price increases.
- ii) The exchange rate is an instantly observable market price whose meaning is clear to everyone; if policy is successful in stabilizing it, its behaviour will not be subject to the problems of interpretation which often arise with monetary targets.
- iii) In the case of domestic wage and/or price disturbances, a fixed exchange rate allows some scope for monetary accommodation. Therefore, while the effect of such a disturbance on competitiveness should set up forces tending to cause a correction, the adjustment process should occur more gradually, and the overall impact on economic activity should be less, than in the case of monetary non-accommodation.
- iv) If the rate of inflation has converged toward that achieved in the reference currency country, and the parity is appropriately chosen, a policy of nominal exchange rate stabilization should limit the extent of real exchange rate misalignment and associated resource misallocation. Some divergence of wage and price behaviour from that prevailing in trading partners, resulting in an inappropriate real exchange rate, can always occur. To correct the situation, nominal exchange rate stabilization relies more heavily on constraints imposed by competition in international product markets than on overall monetary deflation of demand. This avoids the situation which often arises with monetary targeting where slow adjustment in goods and labour markets leads to overadjustment in exchange rates, exaggerating the extent of apparent misalignment.

50. On the other hand, adhering to a nominal exchange rate target may have potential disadvantages. First, it ultimately implies abdication of control over domestic monetary conditions in favour of adjusting to foreign ones. To the extent that it is difficult to find reliable relationships between domestic monetary variables and economic performance this may not be a problem, and if monetary policies in the country responsible for the reference currency are steady and non-inflationary this may be a welcome feature. However, targeting a nominal exchange rate raises issues concerning the sovereignty of national policies and implies domestic monetary adjustment to both external shocks and policy changes (either inflationary or deflationary) taking place abroad. Second, because a fixed nominal exchange rate ultimately involves acceptance of the endogeneity of money and credit conditions, inflation control must rely heavily on the direct effects of international cost competitiveness and price arbitrage in tradeable goods markets. In those countries where international trade accounts for a relatively small share in



activity, this can be a comparatively weak restraining force, while the loss of control of the domestic money supply would imply risks of both inappropriate overall levels of aggregate demand and accommodation of undesirable wage and price behaviour. Third, it is not possible for all countries simultaneously to rely on a fixed exchange rate to determine their monetary policies. At least one country, or a group of countries whose currencies play a dominant role, must have an important responsibility in determining the rate of inflation in the system as a whole.

C. What is the room for judgement in the conduct of policy?

51. In implementing their policy the monetary authorities must take a view about the usefulness of exercising discretion and judgement in the short term with respect to the achievement of pre-set targets. In the light of recent experience, three cases can be distinguished:

- i) judgement is sometimes necessary at the operational level in order to achieve the authorities' medium-term objectives;
- ii) judgement must be used to decide at what point unanticipated events necessitate a reconsideration of the authorities' medium-term objectives;
- iii) judgemental adjustments of the stance of policy in the short term may assist in the pursuit of secondary objectives without compromising the main ones.

52. Regarding case (i), the choice of the intermediate target used to achieve medium-term goals strongly influences the need for the exercise of judgement. Where reliance is placed on controlling the growth of monetary aggregates, the policy will be successful only if these aggregates constitute reasonable proxies for the concept of "money". Given the present environment of innovation and change in financial markets, judgement must be exercised to ensure that policy is geared to controlling an economically meaningful aggregate likely to have a stable relationship with nominal income, and not an arbitrary statistic. If such an aggregate can be identified, however, it can serve as a guide for policy implementation, eliminating the need for interpretation of a range of indicators.

53. In contrast, implementation of a policy formulated in terms of nominal income relies on judgement so completely as to raise questions as to whether it provides any guidance at all at the operational level. Indeed, the scope for making use of all available information and adjusting policy in response to events is seen by adherents of the nominal income approach as a major advantage. Equally, those who doubt that central banks have enough information or knowledge about the functioning of economies, to take advantage of this scope for discretion successfully, would see this reliance on judgement as the major drawback of the approach.

54. The hard currency option is, in this regard, the opposite extreme from the nominal income approach. As noted above, the nominal exchange rate is a quoted market price whose evolution is known without any lag and which poses no problems of interpretation. Opting for this approach implies essentially making a decision to adhere rigidly to a policy rule and to leave the problems

requiring operational judgements to the foreign monetary authorities who issue the currency or currencies chosen as reference.

55. Regarding case (ii), the authorities must always be prepared to alter their objectives in the light of unanticipated developments if the costs of not doing so are sufficiently high. Since these costs may not be directly comparable to those incurred by missing an inflation objective, the balance must essentially be a political judgement. The monetary authorities cannot avoid such a judgement when they decide how much priority to attach to their inflation objectives. This is true regardless of the choice of intermediate target. In recent years the two most important developments which have been taken to justify a reconsideration of the overall stance of policy are the fragile international debt situation and the increase in protectionist pressures associated in part with the rise in the dollar until the early part of 1985. These are widely believed to have been important factors behind the easing of policy in the United States in 1982 and 1985. Concern about protectionism has also resulted in a tightening of monetary policy in Japan, especially following the Group of Five initiative in September 1985 designed to lower the dollar's value, notably vis-à-vis the yen.

56. Case (iii) essentially concerns fine-tuning, i.e. the scope for stabilizing real output and employment in the short term. Over the medium term, the monetary authorities are not really in a position to influence the average level of activity, but views differ on their scope for limiting the amplitude of fluctuations. The advantage of exercising judgement in this area is that in many cases short-run macroeconomic performance can be improved. The danger, however, is that it might prove easier to provide extra support for demand when activity is low than to restrict demand when it is unsustainably high, resulting in an inflationary bias. There are two reasons for this. First, it is very difficult for the authorities to know what the sustainable average level of activity is and there may be a tendency to overestimate what is possible because it appears desirable. Second, even if the authorities have the information required to make an objective and accurate assessment of what is possible, political pressures may make it difficult to respond to fluctuations in real activity in a symmetric way.

D. How should monetary policy intentions be presented to the general public?

57. Another important aspect of policy formulation in the present context concerns the way monetary authorities can make their intentions known to the public and, in particular, the extent to which they should commit themselves openly and explicitly to achieving specific goals. While the widespread decline in inflation and gradual adjustment of the public's expectations in this regard may have reduced the necessity to influence the public's behaviour in order to minimize output losses, monetary authorities cannot afford to neglect the effects of their actions on inflation expectations. Indeed, a worsening of expectations would threaten much of the progress that has been made in recent years toward establishing an environment conducive to non-inflationary growth. Moreover, changes in expectations can have important effects on financial markets, and, in particular, can exacerbate the problem of exchange rate instability.

58. The strongest attitude the monetary authorities can take vis-à-vis the public is to commit themselves to the achievement of an announced target.

This would make clear what they intend to do and would provide an objective way to hold them accountable, which implies that the target to be achieved must in fact be something for which they are in a position to accept responsibility. In this regard a formal target for nominal income would pose serious problems. Since nominal income cannot be controlled over shorter periods such as a year, the monetary authorities will normally be reluctant to make commitments of this type. Furthermore, among the factors which influence the behaviour of nominal income in the short run, fiscal policy plays an important role. While, as noted above, one of the advantages of the nominal income approach is to encompass the effects of policies generally rather than those of monetary policy alone, it would blur the role of the monetary authorities. Central banks which have traditionally had a high degree of independence might find this threatened if they were forced to share responsibility with the government for a target which they cannot achieve on their own.

59. In contrast, targets expressed in terms of monetary aggregates or exchange rates offer clear statements of the contributions which central banks can make towards achieving a stable financial environment. These have the advantages of (i) providing scope for adjusting interest rates in a timely way and (ii) allowing the authorities to resist political pressures for excessively easy policies. Furthermore, if the targets are regarded by the public as meaningful, in the sense that their achievement would have implications for inflation, and if the authorities' commitments to achieving them are credible, the effect on private sector expectations is likely to be favourable. As recent experience has shown, however, there are potential disadvantages associated with public commitments to achieve announced targets for these variables. First, they may limit the authorities' freedom in the short-run conduct of policy in undesirable ways. There is, of course, some scope for building in some flexibility by expressing targets in terms of ranges rather than points, but once the limits of the ranges are reached the problem is fundamentally the same. Second, a high priority would have to be attached to the achievement of the target, which implies confidence in the targeted intermediate variable. Where financial innovation is considered to be a problem, or where exchange rate movements would quickly lead to reconsideration of policy, central banks would probably avoid committing themselves strongly to targets they might be forced to abandon.

60. A more flexible approach would be for the monetary authorities to announce targets but to make them conditional on certain other developments (23). Monetary targets subject to certain caveats about exchange rate behaviour or nominal income developments fall into this category. An important issue here is the severity and explicitness of the conditions. If these are constraining and clearly stated, conditional targets boil down to complicated versions of simple targets. They do, however, allow for some flexibility in the face of unforeseen developments. If the conditions are weak, or vaguely stated, conditional targets essentially commit the authorities to very little. This has the advantage of allowing them to exercise more flexibility in the conduct of policy, but at the cost of undermining any favourable effects on expectations which could be expected from a persistent achievement of announced targets.

61. Some flexibility could also be introduced in policy formulation by making only projections for the evolution of the intermediate policy variable, which is the case in Japan with M2+CD. Unlike a target, a projection is not

an explicit statement of the authorities' intentions. However, it indicates the way the central bank views economic and financial developments in the near future and, since projections can only be made on the basis of assumptions about policy, it implicitly takes account of the authorities' likely behaviour. Projections do not put the authorities' credibility at risk in the way that targets do, because if they turn out to be wrong the markets cannot easily distinguish the extent to which this is due to developments in the private sector or to policies. They therefore allow the authorities more flexibility in the conduct of policy than do targets. On the other hand, they offer less scope for establishing a central bank's credibility when this does not already exist.

62. A final possibility is for central banks to preserve their room for manoeuvre by not making any public statements about the future evolution of intermediate variables. This would essentially involve foregoing the advantages of influencing expectations that are associated with the clear and credible announcements of targets. However, where inflation has been reduced to rates that would be appropriate over the medium term and the central bank's credibility is well established, the costs of sacrificing such advantages may be minimal. On the other hand, they could be substantial if the decision not to announce targets is perceived as reflecting a central bank's bias toward laxity.

63. In practice it may prove difficult for monetary authorities to avoid giving some form of explicit public indication of their policy intentions in terms of an intermediate target. Historically this has been the norm: until the early 1970s the fixed exchange rate system placed a well-understood constraint on policies and the move toward monetary targeting followed soon after the shift to floating. At present only Canada among the major countries makes no formal statement designed to explain its policies in terms of an intermediate target, but the importance attached to the exchange rate by the Canadian monetary authorities is well known. For most central banks, therefore, to dispense for a long period with any public formulation of policy intentions in terms of intermediate targets would represent an entirely new posture.

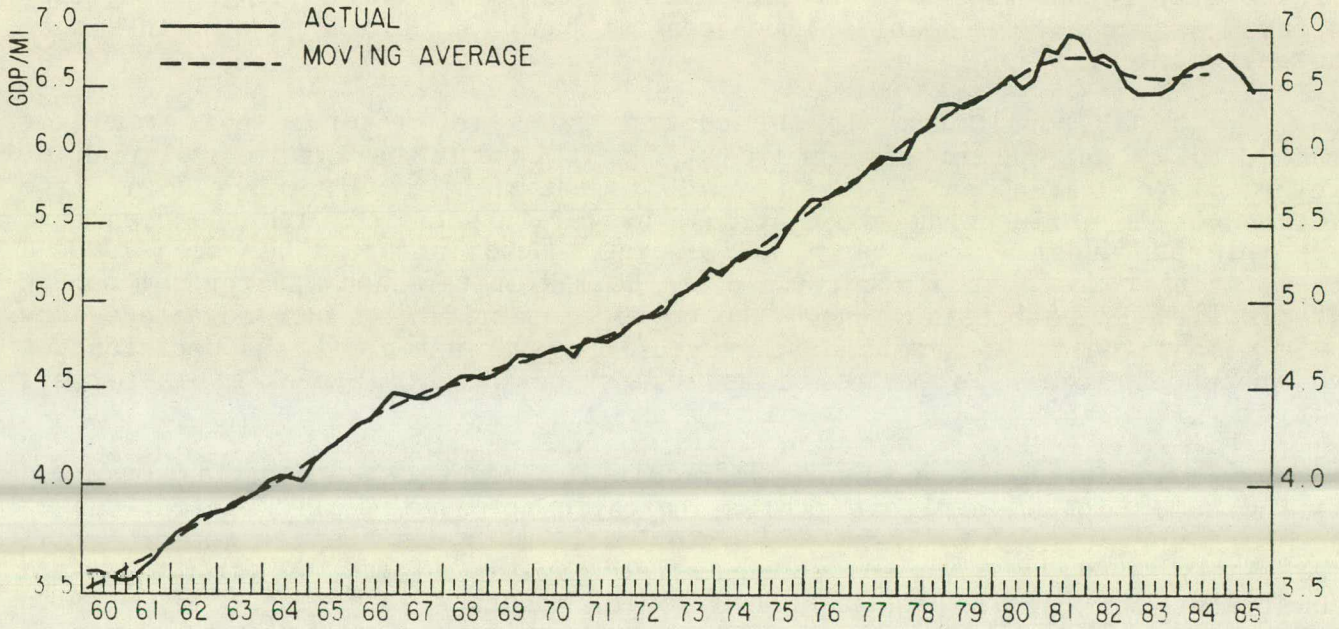
64. Finally, while it may be convenient for a central bank to preserve its options, even if it in fact adheres fairly rigidly to a policy rule which is not formally disclosed to the public, there are also limits to this approach. Lack of information about the monetary authorities' intentions could be damaging if it caused uncertainty in the private sector and, consequently, resource misallocation. Furthermore, the government and the public will inevitably wish to be able to hold the central bank accountable for its actions, and to have benchmarks by which the success of these actions can be measured. By formulating their policies in terms of an intermediate target central banks can increase the likelihood that they will be held responsible for developments they are in a strong position to control. The alternative may be that, in the public's mind, they are held accountable for developments they are either poorly placed to influence or cannot responsibly do anything to change.

CHART 1

TRENDS IN MONEY VELOCITY

UNITED STATES

VELOCITY OF M1



VELOCITY OF M2

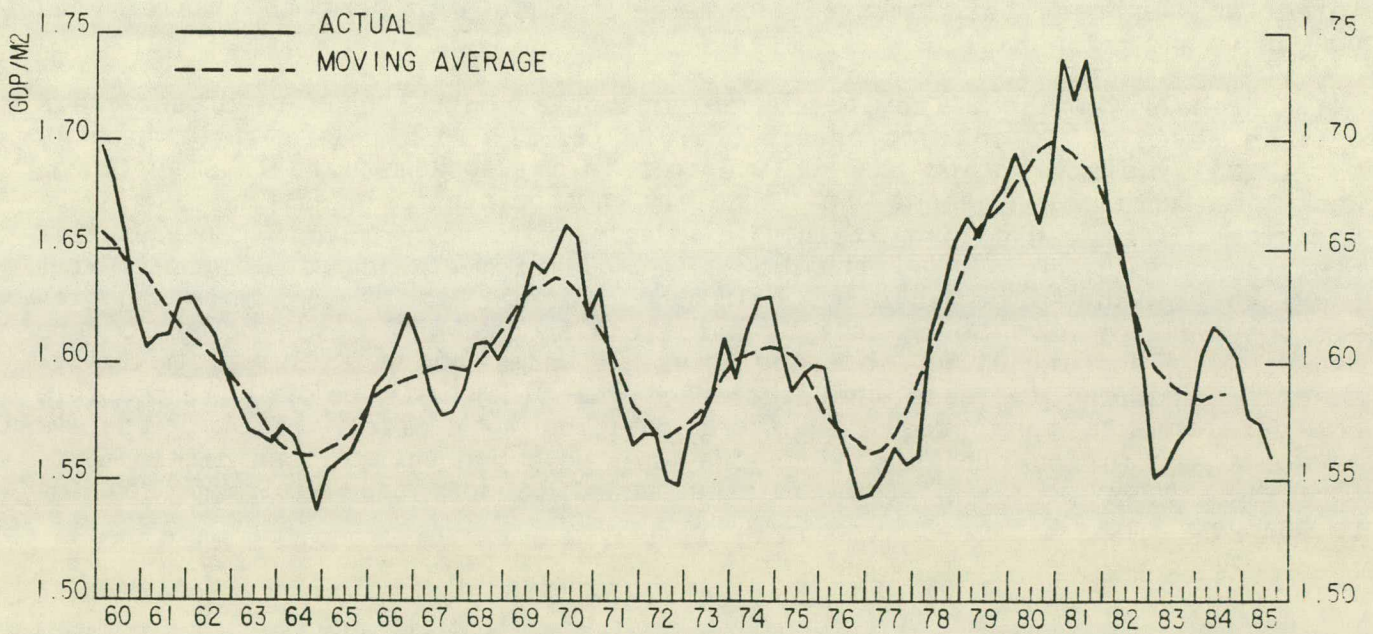
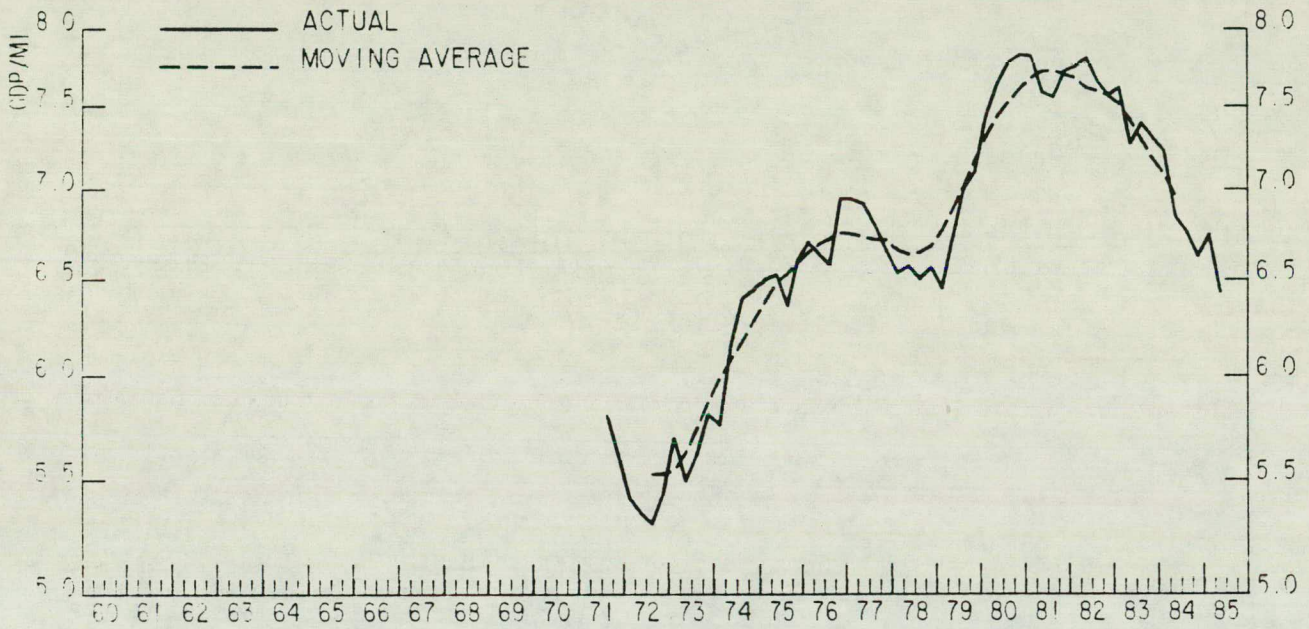


CHART 1 (continued)  
UNITED KINGDOM  
VELOCITY OF M1



VELOCITY OF M3S

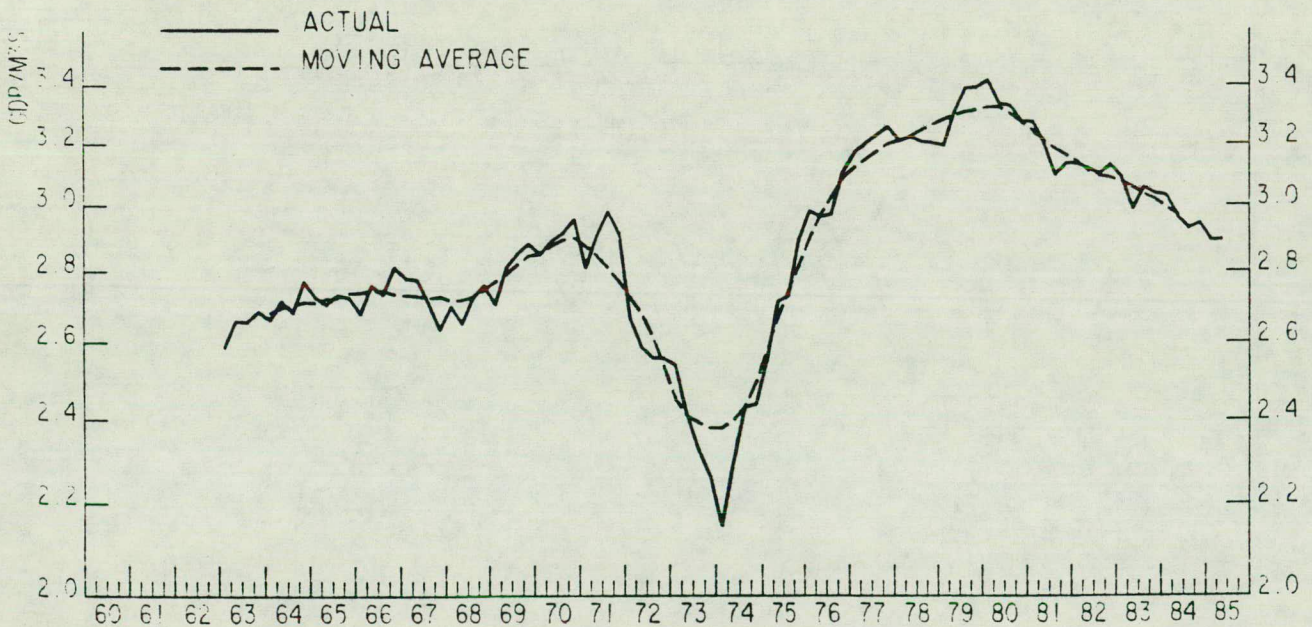
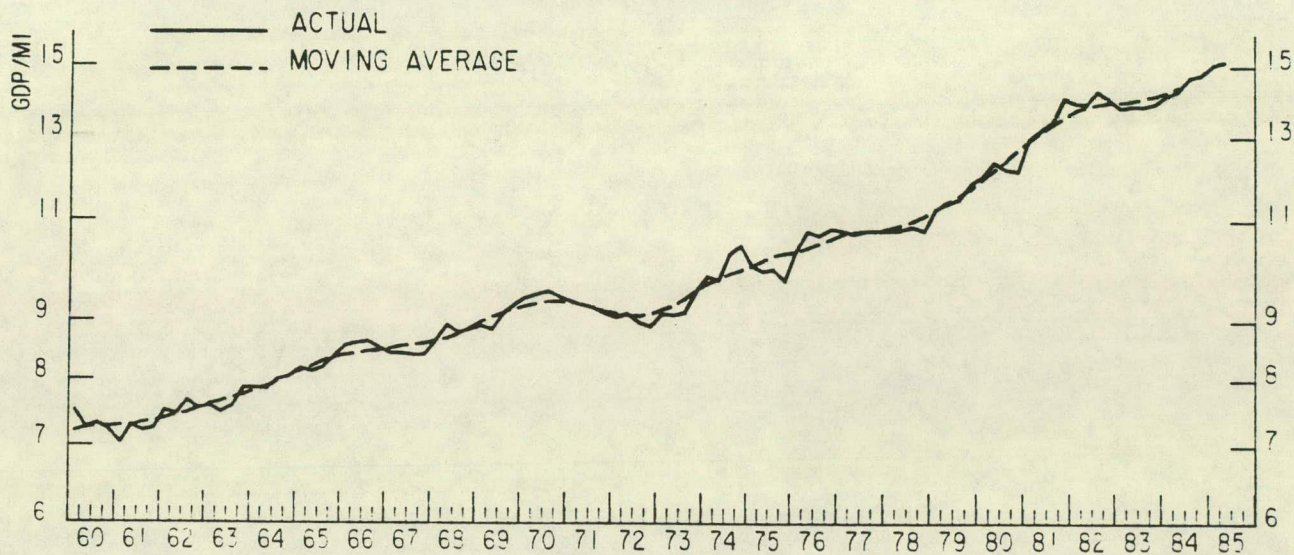


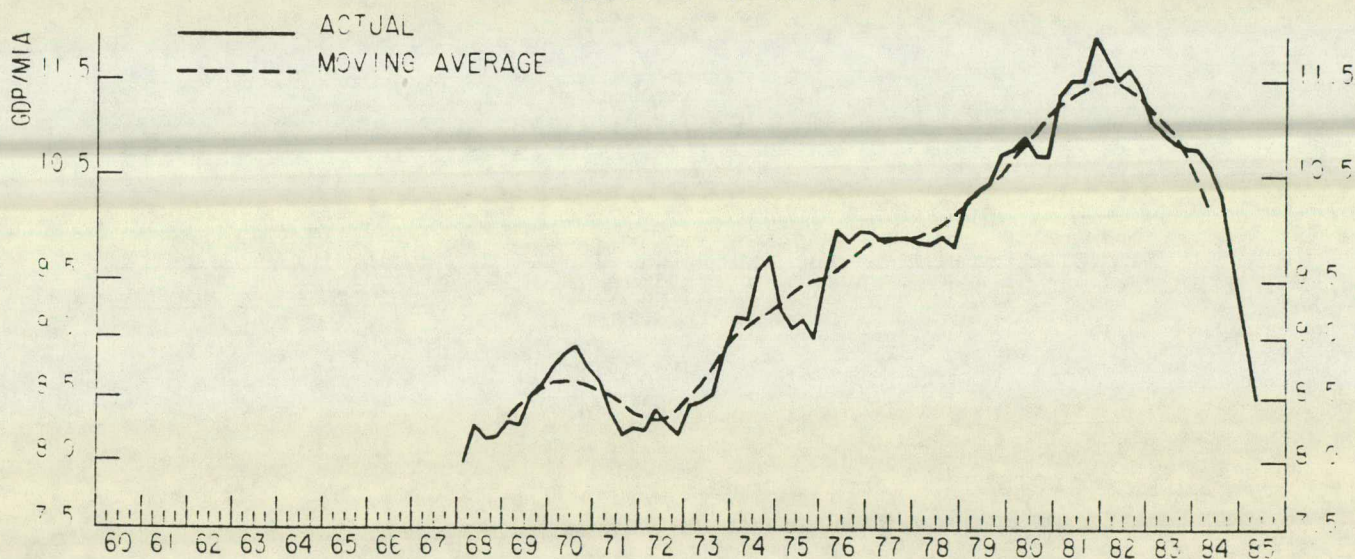
CHART 1 (continued)

CANADA

VELOCITY OF M1



VELOCITY OF M1A



VELOCITY OF M2

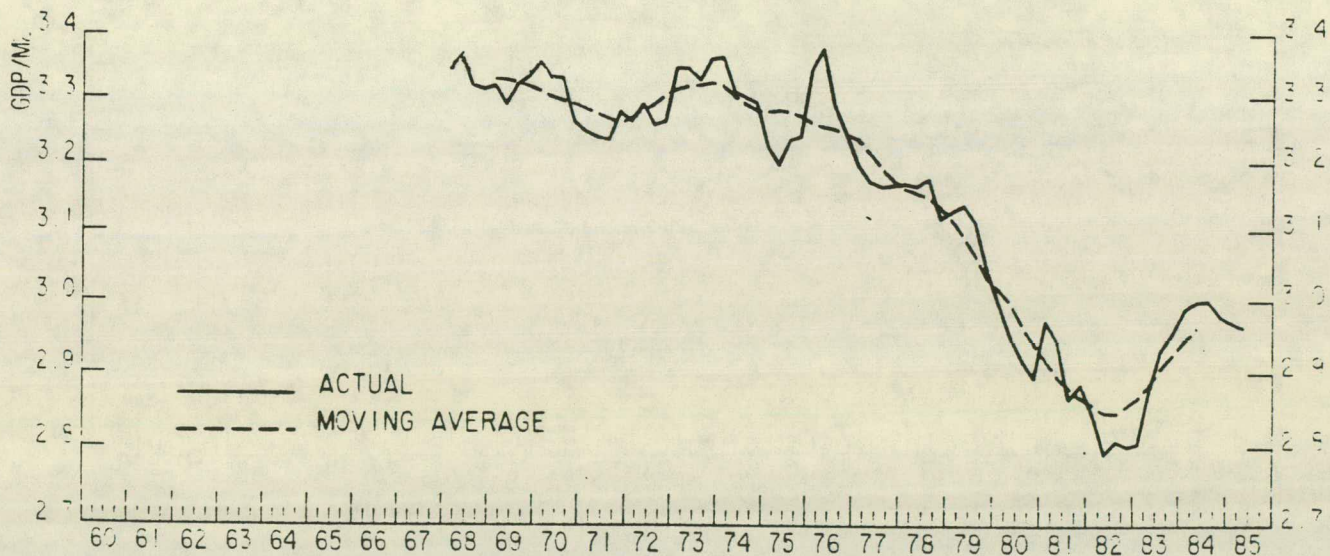
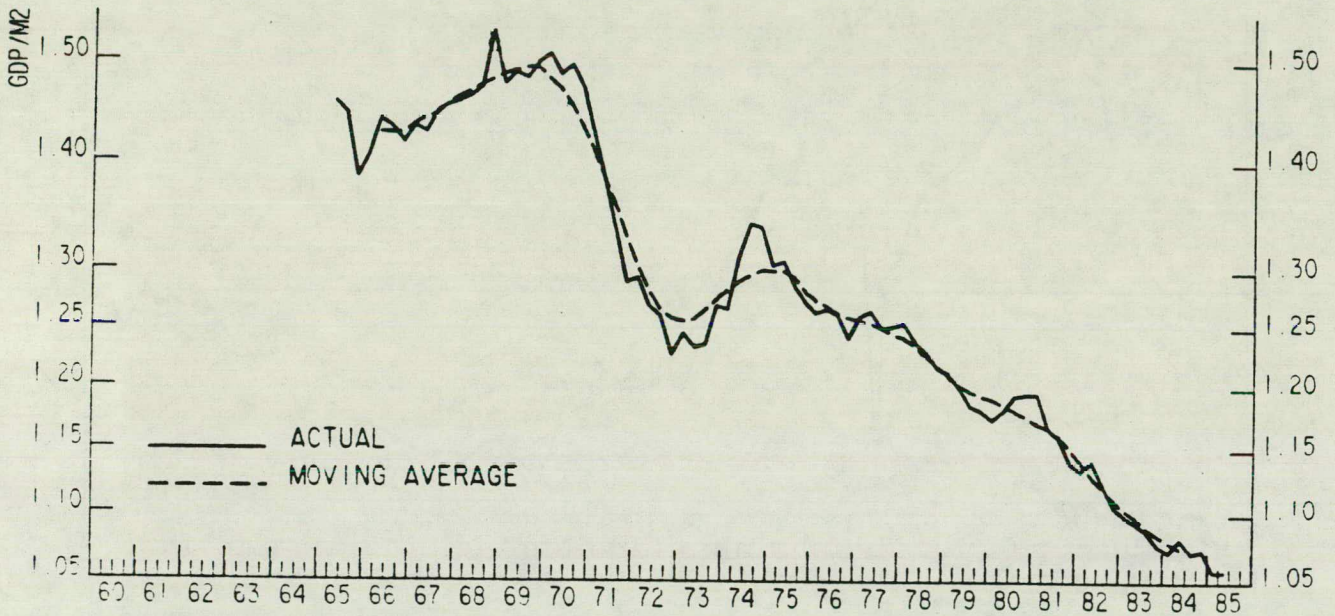


CHART 1 (continued)

JAPAN

VELOCITY OF M2+CD



GERMANY

VELOCITY OF M3

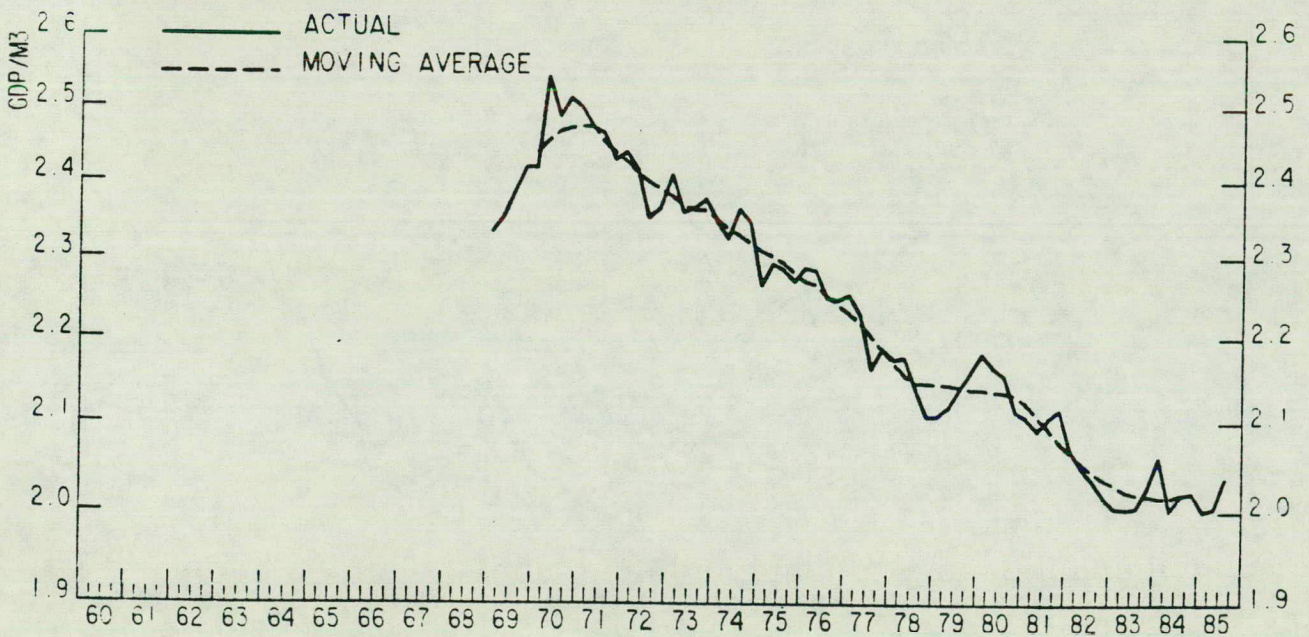
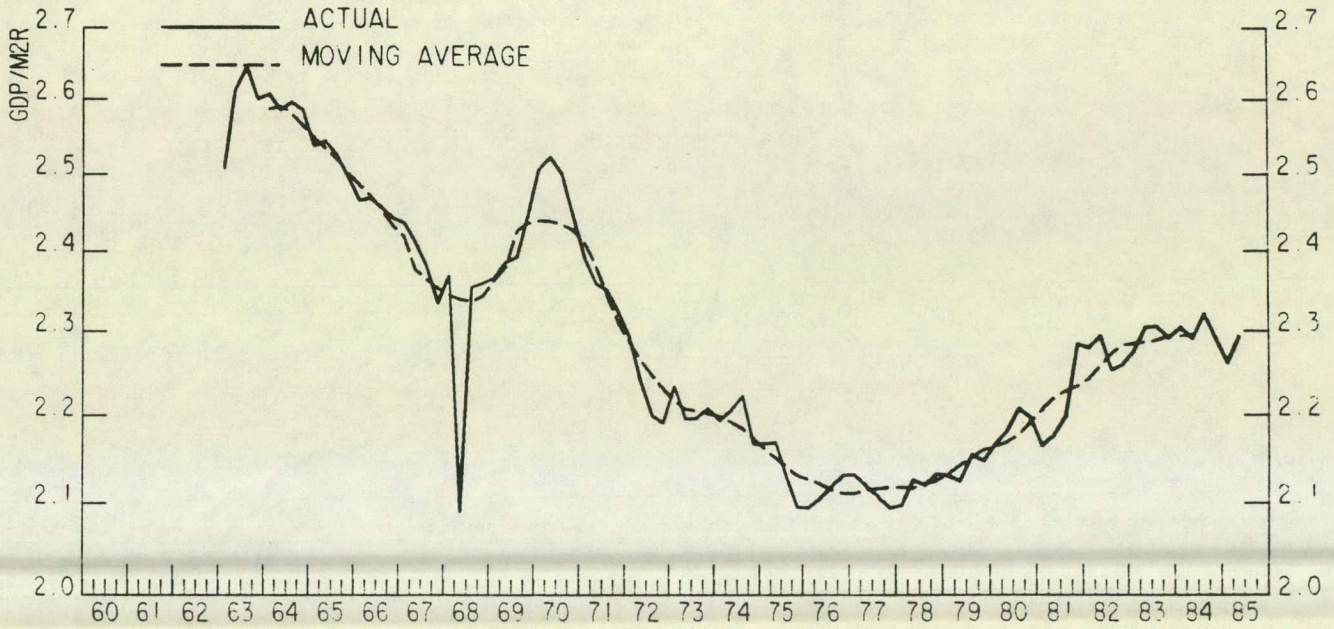




CHART 1 (continued)

FRANCE

VELOCITY OF M2R



ITALY

VELOCITY OF M2

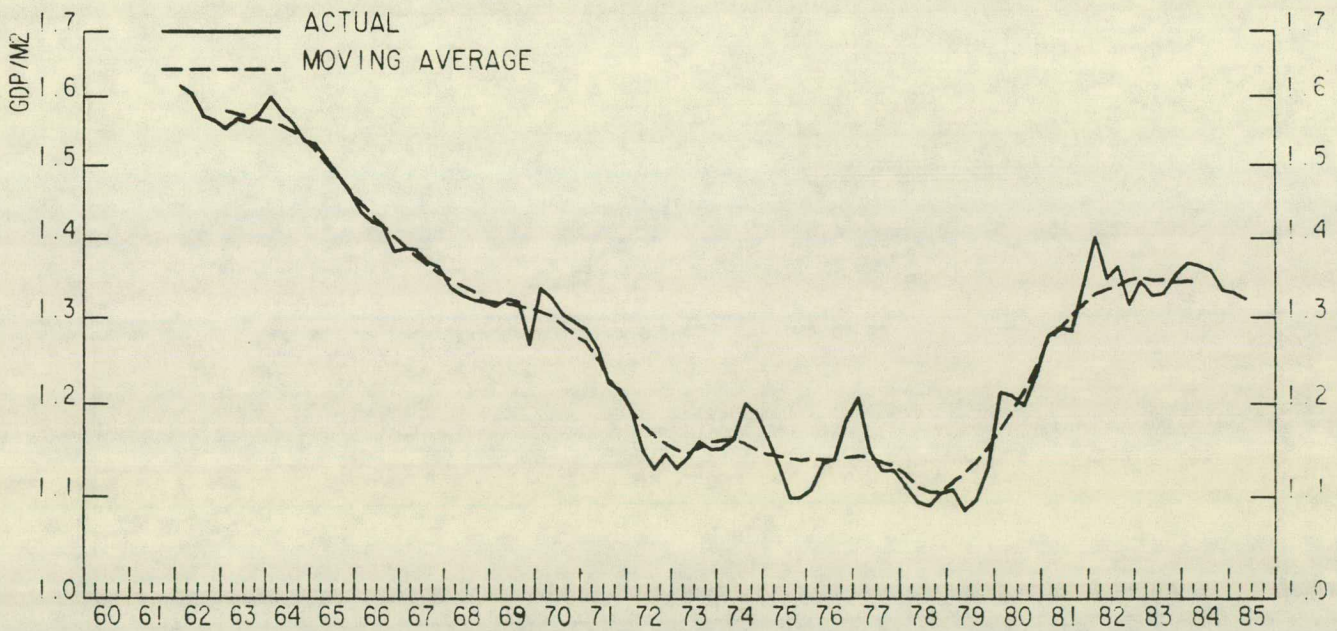
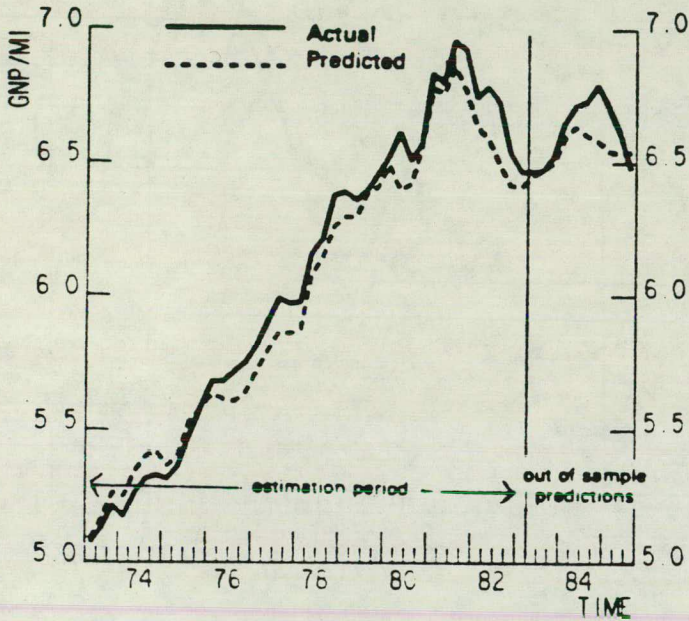


CHART 2

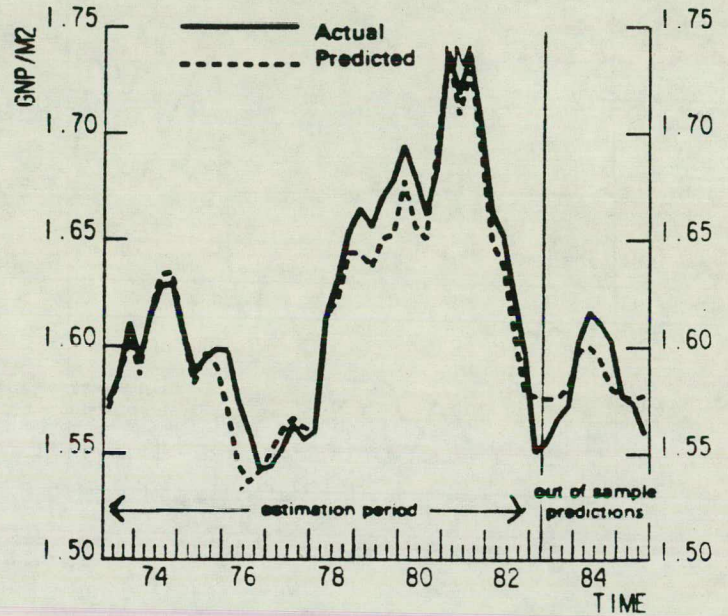
**PREDICTIONS OF THE INCOME VELOCITY OF MONEY \***

UNITED STATES

M1 VELOCITY

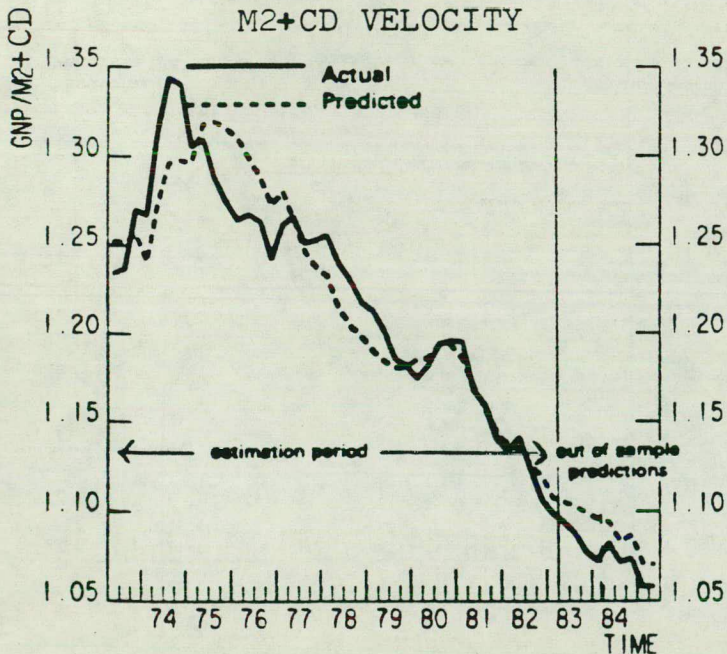


M2 VELOCITY



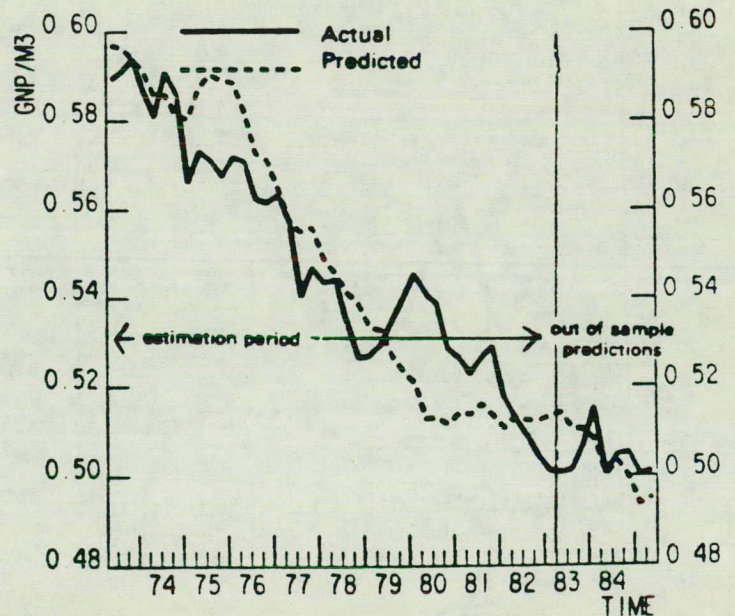
JAPAN

M2+CD VELOCITY



GERMANY

M3 VELOCITY

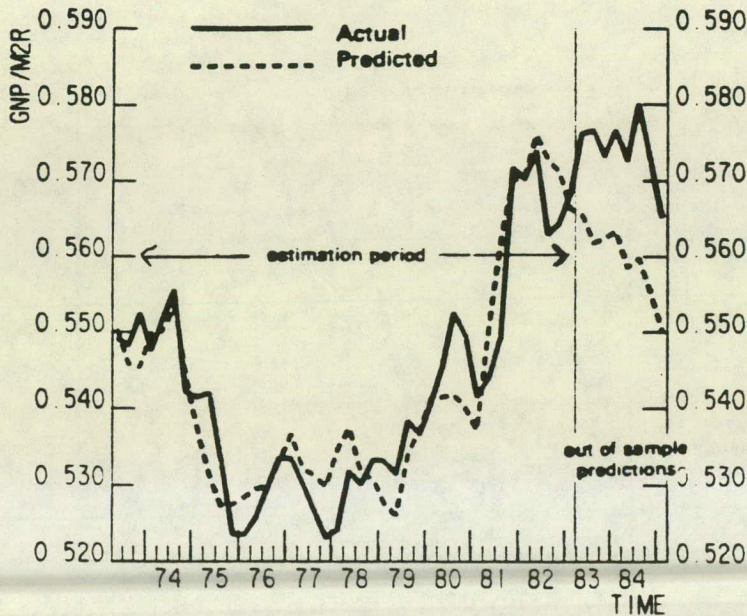


\* Velocity behaviour implied by simulations of money demand equations, whose specification is described in footnote 5. Further details are available from the Secretariat upon request.

CHART 2 (continued)

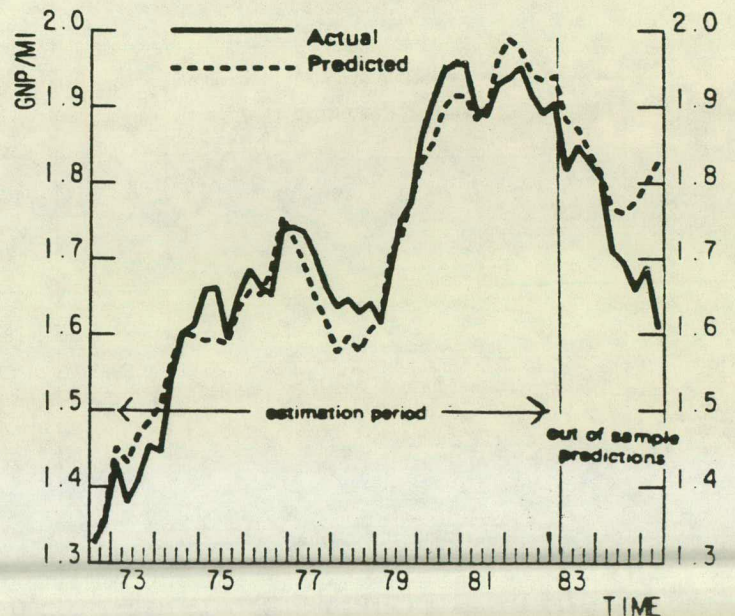
FRANCE

M2R VELOCITY



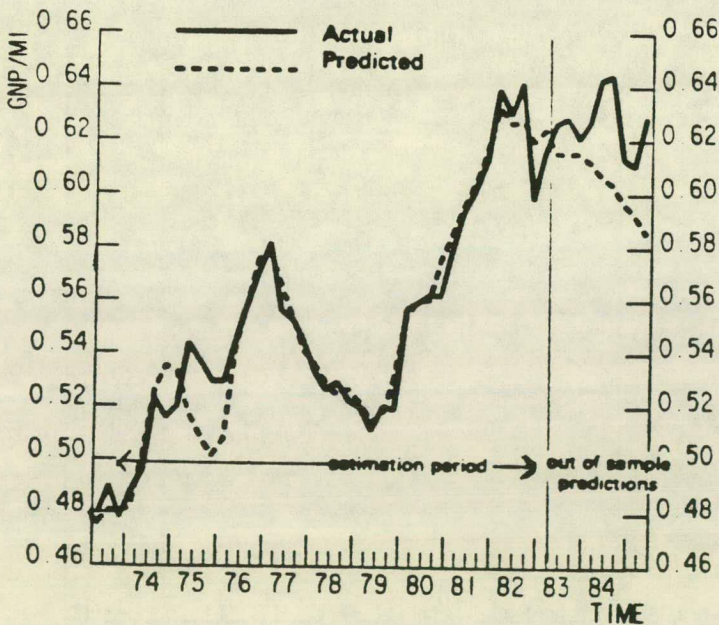
UNITED KINGDOM

M1 VELOCITY



ITALY

M1 VELOCITY



CANADA

M1A VELOCITY

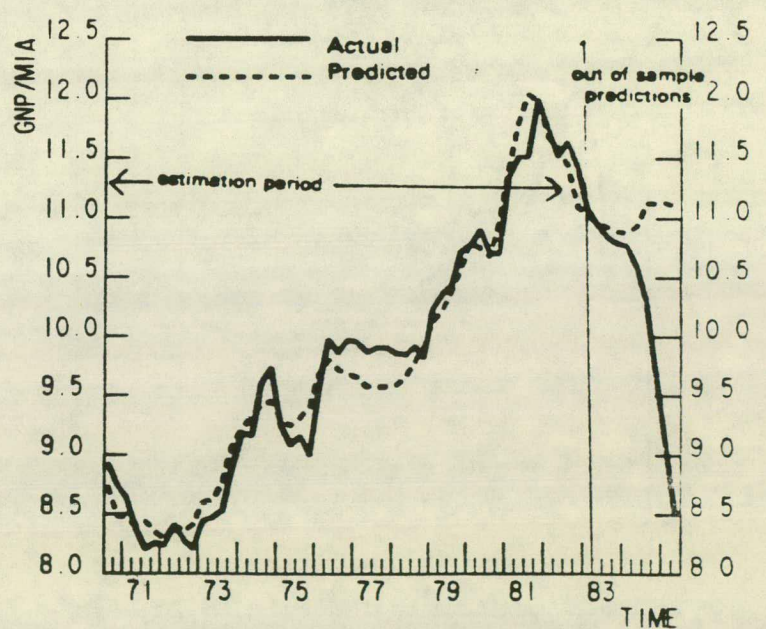
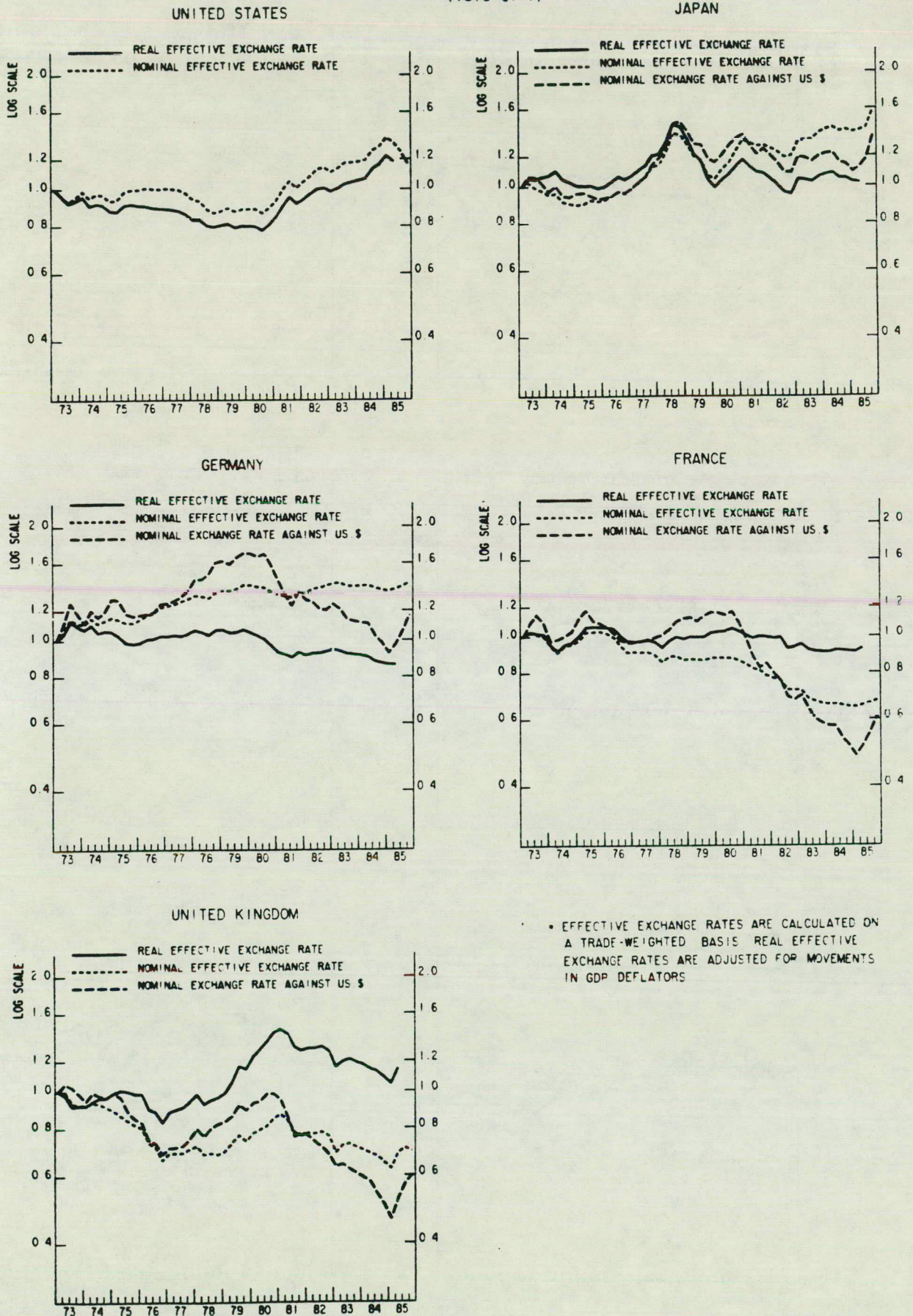
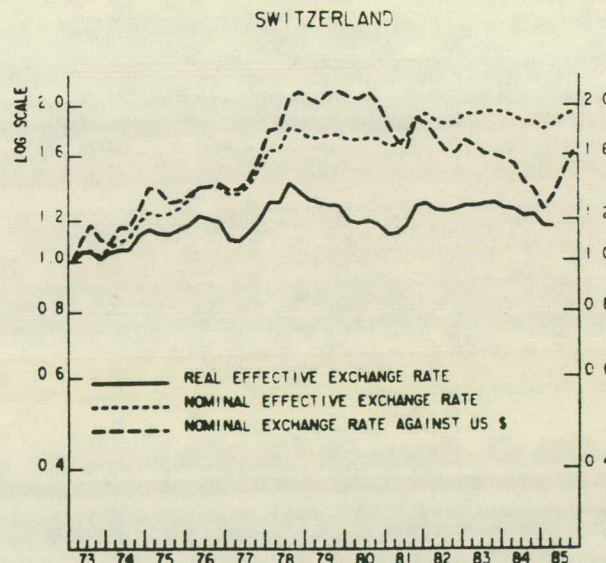
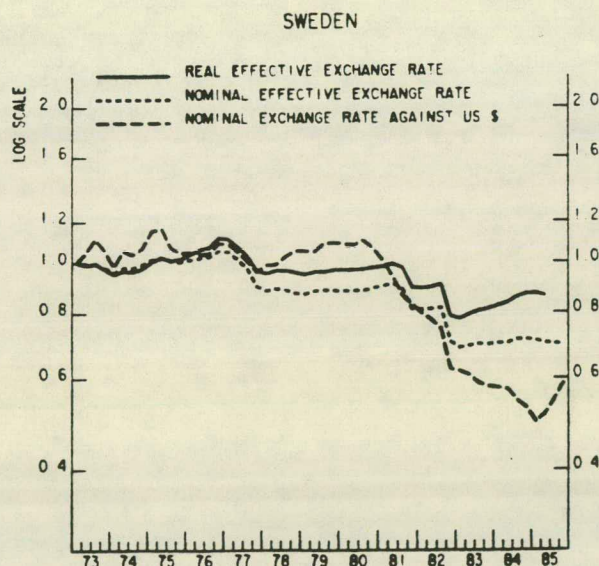
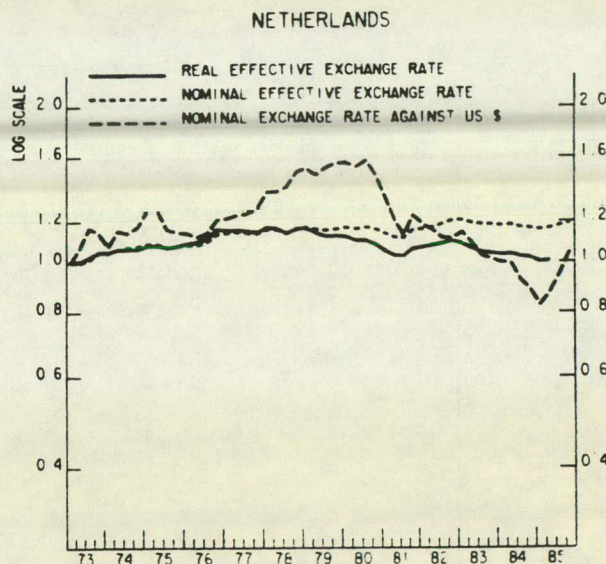
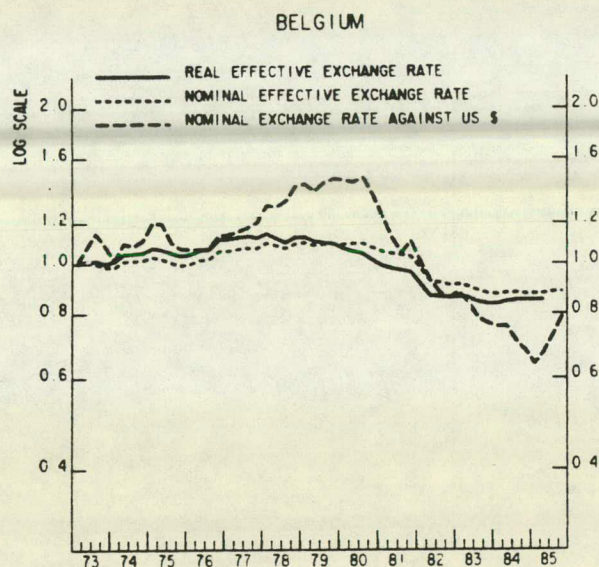
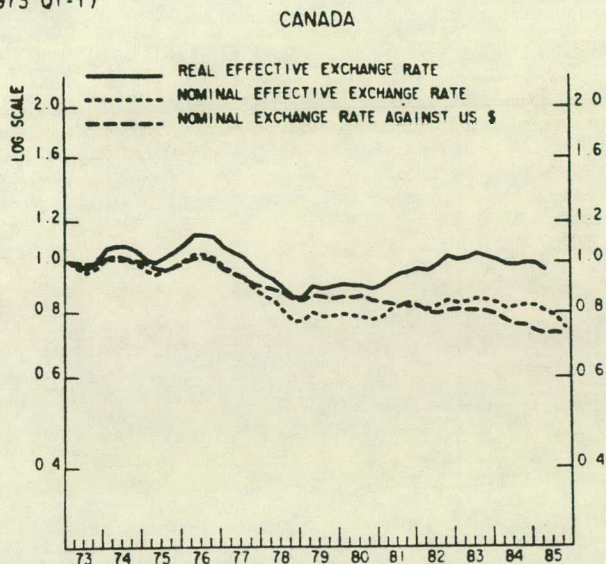
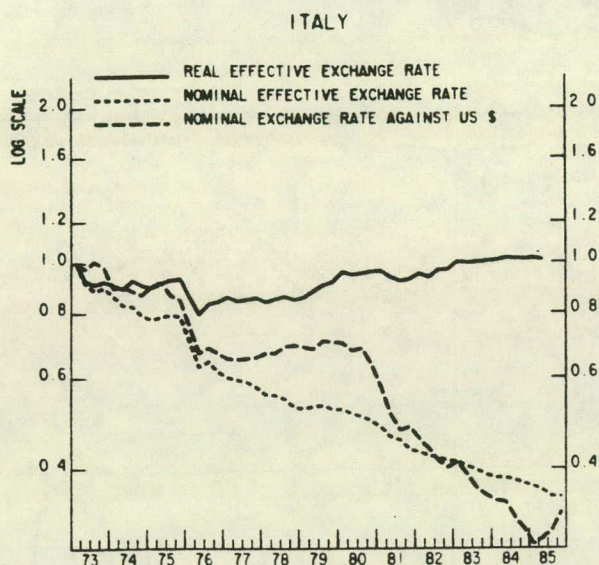


CHART 3  
NOMINAL AND REAL EXCHANGE RATES (\*)  
(1973 Q1=1)



\* EFFECTIVE EXCHANGE RATES ARE CALCULATED ON A TRADE-WEIGHTED BASIS. REAL EFFECTIVE EXCHANGE RATES ARE ADJUSTED FOR MOVEMENTS IN GDP DEFLATORS.

CHART 3 (CONTINUED)  
NOMINAL AND REAL EXCHANGE RATES  
(1973 Q1=1)



NOTES

1. For a discussion of the factors which motivated the adoption of monetary targets, see OECD (1979).
2. United States, Japan, Germany, France, United Kingdom, Italy, Canada, Belgium, Netherlands, Sweden, and Switzerland.
3. See Atkinson, Blundell-Wignall, Rondoni and Ziegelschmidt (1984) and Blundell-Wignall, Rondoni and Ziegelschmidt (1984).
4. An exception was the United Kingdom, where only M1 and £M3 were analyzed. For Germany, CBM was regarded as a proxy for M3 and not considered.
5. The following specification was used:

$$D\ln\left(\frac{M}{p}\right) = a_0 + a_1 \ln y + a_2 \ln(1+r) + a_3 D\ln p^e + a_4 \ln\left(\frac{M}{p}\right)_{-1}$$

where:

M = the monetary aggregate under consideration;

y = real GNP;

p = GNP deflator;

r = short-term interest rate;

D = the difference operator;

and a superscript "e" refers to an expected variable.

6. In the case of Japan, the Secretariat study reported that equations for M1 performed best. The equation for M2+CD's, with the expected inflation term suppressed, was in many respects satisfactory, but the Durbin "h" statistic was high and it failed to pass some of the more rigorous stability tests. However, the evidence pointed to instability near 1974, while there was no evidence of a structural break in the more recent period of financial innovation. Furthermore, Blundell-Wignall, Rondoni, Ziegelschmidt and Morgan (1984) reported that much of the problem disappeared if simultaneity, due to the monetary authorities influence on interest rates in the short run, were taken into account. In view of the importance accorded to M2+CDs in policy formulation in Japan, therefore, the demand function for this aggregate was incorporated in the Secretariat's INTERLINK model, and it is the one analysed in this paper. In the case of France, the equation for M2 was re-estimated using M2R when the authorities changed the definition of the monetary aggregate they target. The parameters and statistical properties of the M2R equation are very similar to those of the original M2 equation.
7. For discussion, see Vaciago (1985).
8. For the United States, Judd (1983) and Judd and Motley (1984) report results similar to those mentioned in the text. However, a number of studies report a tendency for the interest elasticity of money demand to increase in recent years which may reflect changes in the financial environment. Radecki and Wenninger (1985) point out that the estimated

interest elasticity in conventional equations increases as the sample period is extended to include the early years of the 1980s, and reports accurate predictions for the first half of 1985 from an equation estimated on data to 1984. Brayton, Farr and Porter (1983) indicate that allowing for a rising elasticity by modelling the components of M1 separately produces a "number of models [that] can fairly accurately explain the behaviour of M1 over 1982 and the first quarter of 1983", and Simpson (1984) reports that a non-linear model based on their work performs fairly well during 1983 and early 1984. Dooley and Spinelli (1985) report results similar to those mentioned in the text for France and Japan. Their results for Italy, like those reported by Calliari, Spinelli and Verga (1984) and Spinelli (1980), indicate that there was no serious stability problem for the demand for broad money provided sample periods do not run into the early 1980s. They point out a persistent over-prediction of money demand since then, about half of which they attribute to financial innovation. Buscher (1984) reported results for Germany similar to those in the text. For the United Kingdom and Canada difficulties in finding stable money demand equations have been so severe that few studies have recently been published in this area. Andersen (1985), however, reported results on data for 1983 broadly similar to those reported in the text.

9. See, for example, Hacche (1974).
10. For discussion, see Atkinson and Chouraqui (1985).
11. See, in particular, International Monetary Fund (1984) and Bank of England (1984). The only well-known study which succeeds in finding a significant effect of currency variability on trade flows is Akhtar and Hilton (1984). This study has been criticised on methodological grounds, for example by Gotur (1985). Gotur reported that straightforward application of the Akhtar-Hilton methodology to France, Japan and the United Kingdom "yields mixed results", while Davies and Hale (1985) reported being unable to replicate these results for the United Kingdom.
12. See, for example, OECD (1985), pp.121-54.
13. The appreciation of the pound during 1979-80 and the dollar since 1980 are sometimes attributed to such a process following major policy shifts. See, for example, Okina (1985).
14. See, for example, Axilrod (1985).
15. For a more detailed discussion of the main considerations in choosing an appropriate inflation rate objective, see Atkinson and Chouraqui (1984).
16. See, in this respect, OECD (1985) and Atkinson and Chouraqui (1985).
17. This has particularly been a problem in some countries where the assets included in monetary aggregates have been restricted to the liabilities of the monetary authorities and commercial banks, as with M1 and M2 in the United States before 1980, M2R in France and £M3 in the United Kingdom, making the significance of these aggregates vulnerable to disintermediation.

18. Support for Divisia aggregates using U.S. data is reported in Barnett (1980, 1982), Barnett and Spindt (1979) and Barnett, Offenbacher and Spindt (1981).
19. See, for example, the studies by Cockerline and Murray (1981) using Canadian data and Bailey, Driscoll et al. (1982a and 1982b) for the United Kingdom.
20. A more detailed discussion of the limitations of Divisia aggregates is contained in Goldfeld (1982).
21. See, for example, Meade (1978) and Tobin (1983). This issue was also examined by the Secretariat in a document prepared for the Working Party No.3 in July 1983: see OECD (1983).
22. For more detailed discussion, see OECD (1985).
23. For an argument in favour of conditional targets see Artis and Currie (1981).



REFERENCES

- Akhtar, M.A. and R.S. Hilton (1984), "Exchange Rate Uncertainty and International Trade: Some Conceptual Issues and New Estimates for Germany and the United States", Federal Reserve Bank of New York Research Paper, No.8403, May.
- Andersen, P.A., (1985), "The Stability of Money Demand Functions: An Alternative Approach", BIS Economic Papers, Basle.
- Artis M., and D. Currie (1981), "Monetary Targets and the Exchange Rate: A Case for Conditional Targets", Oxford Economic Papers, Vol.33, July (Supplement), pp.176-200.
- Atkinson, P., A. Blundell-Wignall, M. Rondoni and H. Ziegelschmidt (1984), "The Efficacy of Monetary Targeting: The Stability of Demand for Money in Major OECD Countries", OECD Economic Studies, No.3, pp.145-176.
- Atkinson P., and J.C. Chouraqui (1984), "The Conduct of Monetary Policy in the Current Recovery", OECD Economics and Statistics Department Working Paper N°14.
- Atkinson P. and J.C. Chouraqui, (1985), "The Origins of High Real Interest Rates", OECD Economic Studies N° 5.
- Axilrod, S. (1985), Testimony before the Subcommittee on Domestic Monetary Policy of the House Committee on Banking, Finance and Urban Affairs, November 7.
- Bailey, R.W., M.J. Driscoll, J.L. Ford and A.W. Mullineux (1982a), "The Information Content of the Monetary Aggregates in the U.K.", Economics Letters, Vol.9, pp.61-68.
- Bailey, R.W., M.J. Driscoll, J.L. Ford and A.W. Mullineux (1982b), "The Aggregation Error in Divisia Monetary Aggregates: Some findings for the U.K. 1963-1980", Economics Letters, Vol.10, pp.123-128.
- Bank of England (1984), "The Variability of Exchange Rates: Measurement and Effects", Bank of England Quarterly Bulletin, September.
- Barnett, W.A., (1980), "Economic Monetary Aggregates: An Application of Index Number and Aggregation Theory", Journal of Econometrics, Vol.14, pp.11-48.
- Barnett, W.A., (1982), "The Optimal Level of Monetary Aggregation", Journal of Money, Credit and Banking, Vol.15, No.4, Part 2, pp.687-707.
- Barnett, W.A., B.K. Offenbacher and P.A. Spindt (1981), "New Concepts of Aggregated Money", Journal of Finance, Vol.36, pp.497-505.
- Barnett, W.A. and P.A. Spindt (1979), "The Velocity Behaviour and Information Content of Divisia Monetary Aggregates", Economic Letters, Vol.4, pp.51-57.
- Blundell-Wignall, A., M. Rondoni and H. Ziegelschmidt (1984), "The Demand for Money and Velocity in Major OECD Countries", OECD Economics and Statistics Department Working Paper N° 13.

Blundell-Wignall, A., M. Rondoni and H. Ziegelschmidt and J. Morgan (1984), "Monetary Policy in the OECD INTERLINK Model", OECD Economics and Statistics Department Working Paper N°16.

Brayton, F., T. Farr and R. Porter, (1983), "Alternative Money Demand Specifications and Recent Growth in M1", Board of Governors of the Federal Reserve System, Division of Research and Statistics (mimeo).

Buscher, H.S., (1984), "The Stability of the West German Demand for Money, 1985-82", Weltwirtschaftliches Archiv, Vol.120, pp.256-278.

Calliari, S., F. Spinelli and G. Verga, (1984), "Money Demand in Italy: A few More Results", Manchester School, pp.141-159.

Cockerline, J.P. and J.L. Murray, (1981), "A Comparison of Alternative Methods of Monetary Aggregation: Some Preliminary Evidence, Bank of Canada Technical Report 28.

Davies, G., and J. Hale (1985), Memorandum on the European Monetary System, submitted to the House of Commons Civil Service Committee enquiring into the Financial and Economic Consequences of U.K. Membership of the European Communities, HMSO, July.

Dooley, M. and F Spinelli (1985), "Financial Innovation, Deregulation and Money Demand in France, Italy and Japan", International Monetary Fund Research Department (DM/85/15).

Goldfeld, S.M. (1982), "Comment", Journal of Money, Credit and Banking, Vol.15, No.4, Part 2, pp.716-720.

Gotur, P., (1985), "Effects of Exchange Rate Volatility on Trade: Some Further Evidence", International Monetary Fund, (DM/85/24).

Hacche, G. (1974), "The Demand for Money in the United Kingdom: Experience Since 1971", Bank of England Quarterly Bulletin, Vol.14, No.3, pp.284-305.

International Monetary Fund (1984), "Exchange Rate Volatility and World Trade", IMF Occasional Paper No.28.

Judd, J.P., (1983), "Deregulated Deposit Rates and Monetary Policy", Federal Reserve Bank of San Francisco, Economic Review, No.4, pp.27-44.

Judd, J.P., and B. Motley, (1984), "The 'Great Velocity Decline' of 1982-83: A Comparative Analysis of M1 and M2", Federal Reserve Bank of San Francisco, Economic Review, Summer, pp.56-68.

Meade, J., (1978), "The Meaning of Internal Balance", Economic Journal, Vol.88, September, pp.423-435.

OECD (1979), Monetary Targets and Inflation Control, Monetary Studies Series.

OECD (1983), "Setting Policy in a Nominal Income Framework", (CPE/WP3(83)4).

OECD (1985), Exchange Rate Management and the Conduct of Monetary Policy, Monetary Studies Series.

Okina, K., (1985), "Empirical Tests of 'Bubbles' in the Foreign Exchange Market", Bank of Japan Monetary and Economic Studies, Vol.3, No.1.

Radecki, L. and Wenninger, J. (1985), "Recent Instability in M1's Velocity", Federal Reserve Bank of New York Quarterly Review, Autumn, pp.16-22.

Simpson, T. (1984), "Changes in the Financial System", Brookings Papers on Economy Acticity 1, pp.249-272.

Spinelli, F., (1980), "The Demand for Money in the Italian Economy: 1867-1965", Journal of Monetary Economics, Vol.6, pp.83-104.

Tobin, J. (1983), "Monetary Policy: Rules, Targets and Shocks", Journal of Money, Credit and Banking, Vol.XV, No.4 (November), pp.506-518.

Vaciago G. (1985), "Financial Innovation in Italy and its Implications for Monetary Policy", paper prepared for the fourteenth Money Study Group Conference at Oxford, September.

CONFIDENTIAL  
Covering SECRET

From: K F MURPHY  
Date: 23 January 1986

MRS LOMAX

cc PS/Economic Secretary  
Sir T Burns  
Sir G Littler  
Mr Cassell  
Mr Peretz  
Mr Sedgwick o/r  
Mr Odling-Smee  
Mr Walsh  
Mr H Davies  
  
Mr Griffiths - No 10  
  
Governor - B/E  
Mr George - B/E  
Mr Flemming - B/E

MONETARY POLICY IN THE 1986 MTFs: AGENDA

... I attach an agenda for the meeting with the Chancellor which is being arranged by your office. It has been prepared by Mr Cassell in consultation with Mr George and Sir Peter Middleton has seen it and is content.

KFM  
K F MURPHY  
Private Secretary

CONFIDENTIAL  
Covering SECRET

FROM: F CASSELL  
22 January 1986

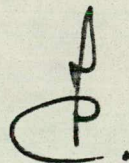
✓  
SIR PETER MIDDLETON

c Mr Walsh

MONETARY POLICY IN THE 1986 MTFS: AGENDA

Following the Chancellor's meeting with Treasury officials on 10 January you asked me to agree an annotated agenda with the Bank for a meeting between the Chancellor and Governor.

The attached agenda has been agreed with Eddie George. It follows the sequence of the discussion at the meeting on 10 January.



F CASSELL

9-22-1

CONFIDENTIAL  
Covering SECRET

298/62

SECRET

## MONETARY POLICY IN THE 1986 MTF5

Annotated Agenda

## Reference Papers:-

MP "Monetary Policy in the MTF5"

NMA Addendum on Narrow Money.

1. Do we propose any changes in how we operate monetary policy in practice?

Are we content to continue along the lines set out in Mansion House Speech: funding related to PSBR; short-term interest rates set on judgement based on range of evidence, but balancing in particular evidence from growth of narrow and broad money, and exchange rate (eg looking for lower growth of narrow money if broad money grows faster or exchange rate is weak)?

2. What aggregate to target for narrow money?

M2 still suffering from teething troubles, and affected by building society innovation. M1 and NIB-M1 both greatly affected by move to interest bearing sight deposits, and growth of interest-bearing chequing accounts. M0 still looks the best bet.

Ref: NMA - paragraphs 2-7

3. Do we still need a target for broad money?

There are 5 subsidiary questions:

- a. Do we think growth of broad money carries information about future inflation? (Yes, probably, about potential risk for future inflation; but do we know enough about behaviour of broad money to interpret meaning of any particular growth rate?)

SECRET

b. If so, do we know enough about its behaviour to set a target?

c. Do we have any means of controlling broad money within target period? (Probably no. See 6 below.)

d. Market has lived with no target for £M3 since Mansion House: but could it live with no target for 1986-87? Would setting a target only for M0 be seen as abandoning the policy?

e. If we do retain a target, do we want also to retain ranges for all MTF5 years? (See 7 below.)

Refs: MP - paragraph 11.

4. What broad aggregate to target/monitor?

a. Is £M3 seriously flawed, with increasing bank/building society competition?

b. Would it be better to switch to a wider aggregate (that includes building society deposits)? Recent analysis *does it?* suggests that this would have a more stable demand function and velocity trend. But we need to be sure that any new broad aggregate would be sufficiently more reliable than £M3 to justify making the change.

c. Market aspects: would market be happier with £M3; or is it now so discredited that a change would be helpful for the market?

d. Implications of a change for funding policy? (Eg treat sales of gilts to building societies as we now treat sales to the monetary sector?)

Refs: MP - paragraphs 12-19.

5. What to **call** any new broad aggregate?

£M3; "broad money"; £M3A; £M4; PSL2?

Ref: MP - paragraphs 20-28.

6. Do we need to make changes in the way we explain and present policy?

Options include:

- Explain that **target ranges for broad money** (or for broad and narrow money) **may act as triggers for corrective action on short-term interest rates**, but that **such action would not necessarily be expected to get aggregates in the ranges within the year.**

- Explicitly **demote money targets to "guidelines,"** with greater emphasis on money GDP.

- Set target for **narrow money only**; say that broad money will be treated in same way as the exchange rate (ie taken account of in setting interest rates, but with no predetermined guideline).

7. What ranges to set for **narrow money** and (if any) **broad money**:

a. as **targets (or guidelines) for 1986-87?**

b. as **illustrative ranges for later years?**

For 1986-87 options would seem to be:

i. for narrow money (M0) either 2-6 per cent, as in 1985 MTF5; or 1-5 per cent.

ii. for broad money, either 9-13 per cent; or 10-14 per cent.

*his surely  
can't take a*

*final decision about numbers*

*yet - he  
hasn't yet  
seen the  
forecast.*



SECRET

For later years, given uncertainty about velocity trend for broad money, would there be advantage in displaying illustrative ranges/assumptions for money GDP and narrow money only?

Refs: MP - paragraphs 29-32; NMA - paragraphs 8-9.

SECRET



FROM: MRS R LOMAX  
DATE: 27 January 1986

cc Sir T Burns  
Mr Cassell

~~SIR P MIDDLETON~~

bff 28/1  
for m. policy  
meeting folder

OECD PAPER ON "THE FORMULATION OF MONETARY POLICY"

The Chancellor was grateful for a sight of the OECD paper on monetary policy. He has commented that there is food for thought there, and it is highly relevant to forthcoming monetary policy meetings.

*RL.*

RACHEL LOMAX

*I'd like it  
back so I  
can make a  
copy*

Chancellor.

CONFIDENTIAL

I saw the paper  
for this meeting. I think  
that you will find this account  
of the discussion equally interesting

SIR PETER MIDDLETON

*Sm*  
28/1.

FROM: F CASSELL  
27 January 1986

cc Sir T Burns  
Mr Peretz  
Mr Sedgwick o.r.  
Mr Odling-Smee  
Mr Walsh  
Mr Matthews  
Mr Pickford

**OECD MONETARY EXPERTS MEETING: 23-24 JANUARY**

This was rather a good meeting, on the theme of our various experience with monetary targetting. Only three of the eleven countries represented in the group were happy with their recent monetary performance - Germany, Japan and Switzerland. These of course were the three countries whose banking systems had seen least innovation. There were signs, however, that this was changing. German banks have just been given freedom to issue CDs (though Dr Dudler of the Bundesbank had no doubt that they would use this freedom "responsibly"). Swiss banks were about to introduce a new electronic clearing system that could virtually eliminate the need for cash reserves, and so disrupt the hitherto stable relationship between monetary base and the liquidity of the economy.

2. All the other countries reported considerable difficulty in assessing monetary conditions. This was a matter of great concern to them even where they were targetting the exchange rate, not a monetary aggregate. I have tried to summarise in the attached table the current state of play in each of the overseas countries represented.

3. Five general conclusions seemed to emerge:-

i. Deregulation and financial innovation, by breaking down the distinctions between transactions balances and asset balances, had made M1 a less reliable indicator of monetary conditions. Almost every country (but particularly

41

CONFIDENTIAL

the United States and Canada) said that they were now putting less weight on M1 and more on M2 and M3; France had also redefined M2 to embrace more banks and a wider range of liquid assets. The argument sometimes took the rather curious form of saying that M1 had become unsuitable for targetting because recent innovations had made it too interest-elastic. Steve Axilrod stressed this. In discussion it was conceded that this was not likely to be the ultimate effect of financial innovation, but rather a transitional effect where interest rates on some near-money assets remained sticky. There was some sympathy for our decision to go from M1 to a much narrower aggregate (M0) that had a low interest elasticity with an unequivocal sign. But no inclination to follow it. (The Swiss are in a sense already there, but their main preoccupation at the moment is where they will move if M0 breaks down - and their present thinking is that it would probably not be to M1 but to something wider.) The general impression was that broad aggregates had performed better than narrow ones over the past two or three years but (except in Japan, Germany and Switzerland) that no aggregate had performed very well.

ii. The recent rapid growth of money and credit in many countries carried a threat of resurgent inflation that might only be kept at bay by holding real interest rates high - with consequences for longer-term growth that could be serious.

iii. Given the uncertainties about velocity, greater emphasis on nominal GDP had attractions. There was much interest in our own views on this. The shortcomings of nominal GDP were recognised and - in a group heavily weighted with central bankers - it was felt not to be an appropriate monetary target, because it was not something that central banks could themselves control (unlike money supply!). Its value in estimating "velocity adjusted" money supply

Wol  
Carter

Why should  
key?

(Carter's law) ??  
or XR?

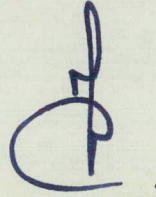
was, however, recognised. The Bank of Canada has been looking closely at this question and has found that nominal income variables do contain useful information, especially (in Canada's case) nominal final sales (which washes out the effects of inventory shifts).

iv. There were many constraints on the operation of monetary policy in current circumstances - the need to keep an eye on external as well as domestic objectives, the "fragility" (in some countries) of the banking system, the pressures to monetize budget deficits, the sheer uncertainty of key relationships like velocity. But one that particularly worried some (though not all) countries was the downward rigidity of wages. Several speakers expressed disappointment that monetary targetting seemed not to have influenced expectations in the labour market. This meant that the leverage of monetary restraint on inflation had to be transmitted through activity. This could become a major constraint on its use, beyond a certain range. Most speakers seemed to think that this same rigidity would also inhibit pursuit of a nominal income objective, though some were hopeful that if the authorities were resolute enough attitudes in the labour market would change.

v. Despite the disappointments, there was no option but to persist with monetary targetting in the major economies. Many would prefer to adopt the Japanese term "projection" for these exercises, but felt that they were stuck with 'target'. It was vital that financial markets recognised the difficulties that the authorities had in assessing monetary conditions, and accepted that "shift adjustments" in the aggregates were from time to time necessary. Monetary policy always required judgement, never more so than now. Targets should never be seen as iron rules. But too much discretion was very dangerous. Steve Axilrod saw the continuation of targets for monetary aggregates as a means of fencing in the area for judgement.

CONFIDENTIAL

??  
In short, the general conclusion was that monetary policy would have to go on much as before. The one consolation that most participants drew was that things on the whole had got better, rather than worse, in 1985.



F CASSELL

CONFIDENTIAL

**CONFIDENTIAL**

Country	Target	Comments
United States	M1, M2, M3, total domestic non-financial debt.	M1 has been main target, but (because of financial innovation) now considered less reliable than broader aggregates. At present more attention being paid to M2 and M3 than to M1.
Canada	No monetary target since 1982. Exchange rate target (stability with \$).	Authorities monitor monetary aggregates, as indicator of current monetary conditions/future inflationary pressure. M1 used to provide a fairly reliable indicator; no longer does so. Recent research suggests that aggregate of the M2 family is best indicator.
Japan	Broad money (M2+CDs)	Not called a 'target' but a 'projection'. Bank of Japan has had considerable success in achieving it.
Germany	Central bank money as proxy for M3 <u>Wash DC</u>	Bundesbank considers broad money (M3) as best guide to monetary conditions <i>Plan with target for lower (more stable) inflation</i>
France	Exchange rate target through membership of ERM; but also target for broad money (M2)	M2 now redefined to include wider range of banks and deposits, including savings deposits. Recent research suggests that this wider aggregate has been a better indicator of monetary conditions than the old M2.
Italy	Exchange rate target through membership of ERM; but also target for total domestic credit	Bank of Italy regards domestic credit as best guide to monetary conditions; but speaker stressed importance of stable exchange rate in maintaining discipline in overall financial conditions

CONFIDENTIAL

Country	Target	Comments
Switzerland	Narrow money (monetary base)	This had worked very well. Growth of monetary base reliable indicator of monetary conditions, and effective way of controlling liquidity of the economy. But worries that new electronic system of bank clearing will reduce banks' demand for cash reserves, and destroy stable relationships on which present system rests.
Netherlands	Exchange rate target (link to D-mark)  <i>how?</i>	Central bank watches growth of broad money closely for signs of future trouble. If it judges that M3 is growing too fast it will seek to restrain it by requiring banks to fund more of their lending in the capital market - so steepening the yield curve.
Belgium	Exchange rate target through membership of ERM	Central bank monitors growth of monetary aggregate for signs of impending troubles.
Sweden	No monetary target; main emphasis on stability of the exchange rate	Central bank monitors all the monetary aggregates. Gives most weight to M3 as a guide to monetary conditions (but interprets movements in the light of growth of Treasury discount notes, introduced in 1982 and widely held as liquid asset by private sector).





30/1

2 hours plus

CHANCELLOR OF THE EXCHEQUER'S OFFICE: MEETING

<b>SUBJECT</b>	MTFS and Monetary Policy	
<b>DATE AND TIME</b>	Thursday 30 January - 4.00 pm	
<b>VENUE</b>	Chancellor's Room, Treasury/ <del>No. 11</del> /Conference Room/ <del>House of Commons</del>	
<b>PAPERS</b>	Annotated agenda to be circulated by Mr Cassell.	
<b>THOSE ATTENDING</b>	<p>EST</p> <p>Sir P. Middleton</p> <p>Sir T. Burns</p> <p>Mr Cassell</p> <p>Mr Peretz</p> <p>Mr Odling-Smee</p> <p>Mr Walsh</p> <p>Mr Davies</p> <p>Professor Griffiths (No 10)</p> <p>Governor</p> <p>Deputy Governor</p> <p>Mr George</p> <p>Mr Fleming</p>	<p>cc. Sir G. Little</p> <p>Mrs Lanax</p> <p>} Bank of England</p>

CONFIDENTIAL



NOTE OF A MEETING IN HM TREASURY ON THURSDAY 30 JANUARY 1986 AT 4.00PM

Record  
of  
30/1  
MTG

Present: Chancellor  
Economic Secretary  
Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr Odling-Smee  
Mr Peretz  
Mr Riley  
Mr Walsh  
Mr H Davies

Professor Griffiths - No 10

Governor Bank of England  
Deputy Governor  
Mr George  
Mr Flemming

---

**MONETARY POLICY IN THE 1986 MTFS**

The meeting focussed on the annotated agenda attached to Mr Murphy's minute of 23 January. Also relevant were "Monetary policy in the 1986 MTFS" (13 December 1985) and the Addendum on narrow money (3 January 1986).

Operation of policy

2. The Governor said that the Bank saw no need to change the way in which monetary conditions were assessed; policy should continue to take account of both broad and narrow money and the exchange rate. Sir Peter Middleton agreed that, on the assumption that both EMS and monetary base control were not options, the central issue was how to improve the explanation of present policy. Professor Griffiths thought that an element of discretion was absolutely right in current circumstances; there was no unique measure of money and it was necessary to look at a range of indicators in taking decisions about short-term interest rates.

3. Sir Terence Burns suggested that the extent to which the authorities were prepared to take responsibility for movements in short-term interest rates was still source of confusion. In discussion, it was noted that there had been a marked change in the public line over the last year or two; we no longer tried to argue that interest rates were set by the market. Reality was rather complicated; tactically, the room for manoeuvre was often quite small, and even in the longer term the markets were aware of the limits imposed by the Government's own policy objectives. The experience of the past fortnight had however been helpful in dispelling the market's belief that there was an unpublished exchange band with a lower limit of 78.

4. The Chancellor concluded that the aim was to make present policy clearer. However the market was looking for numerical clarity, which was difficult to achieve, and very often tactically unwise. Whatever was said in the FSBR would therefore need expanding in a major speech shortly after the Budget.

#### Narrow money

5. The Chancellor said that in principle the narrow money target should be total non-interest bearing money rather than M0; however structural changes, associated with the introduction of interest bearing accounts, had made this impractical. There was no realistic alternative to M0. It was disappointing that the market had not been persuaded to treat it more seriously. He wondered if there was anything further that could be done to improve its credibility.

6. Mr George thought not; the market was quite ready to accept the distinction between narrow and broad money and to attach significance to both. It would probably accept a NIB M1 target if that were feasible. But M0 was not seen as a good proxy. In the absence of a suitable alternative, however, the right course was to stick to M0.

7. Sir Terence Burns doubted whether NIB M1 would be a suitable target aggregate, even in the absence of structural change. Past experience suggested it was too interest-sensitive. Mr Cassell added that the introduction of interest bearing current accounts was undermining the distinction between asset balances and transaction balances - broad and narrow money.

8. Professor Griffiths noted that the market's attitude towards M0 reflected the authorities' behaviour; in practice M0 had not acted as a constraint on policy decisions. In discussion, it was noted that M0 was only one element in assessing monetary conditions; and monetary targets were never more than a starting point for evaluating the need for policy action.

9. Summing up this part of the discussion, the Chancellor said that it was agreed that M0 should be retained as the target for narrow money. Further consideration should

be given to ways of improving its credibility; in particular, either the Treasury or the Bank should look again at the case for publishing a further article on M0 at some stage.

#### Broad money

10. The Chancellor said that it was common ground that broad money should be taken into account in assessing monetary conditions. The key question was whether it should continue to be targetted.

11. Sir Peter Middleton argued for dropping the sterling M3 target on both policy and presentational grounds. It had always been difficult to control sterling M3 over a target period; on the present approach to funding, it was now impossible. Moreover, in present circumstances any feasible target for sterling M3 would be a high number. The only reason for retaining it would be to demonstrate that the authorities still took broad money seriously. He doubted whether this would be convincing in practice; there was a real risk of missing any new target - and having to face again all the difficulties involved in suspending it. Other measures of broad money would raise the same sort

of problems. The right course was to rely on money GDP and M0, and explain that the broad aggregates, included sterling M3, were taken into account in setting short-term interest rates, in very much the same way as the exchange rate.

12. The Chancellor strongly agreed that it would be most unwise to move to any other broad money target. There were immense problems of interpretation and control with all the available measures, and the act of moving to a new target aggregate would enhance the status of broad money. The choice therefore lay between retaining targets for sterling M3 and dropping targets for broad money altogether.

13. The Governor said that the market was convinced of the need for a broad money target (though target was itself a term of art). This partly reflected the doubts about M0, and the fact that we had made a virtue of not having a target for the exchange rate. The perception was that without a broad money target the authorities would be effectively operating without targets at all; and such a regime would lack credibility. The Bank's first preference would be to move to another measure of broad money. If sterling M3 were to be retained, they foresaw real difficulty in selecting an appropriate target range.

14. It was agreed that it would be important to explain the status of the targets for broad money clearly. Mr George argued that targets, whether for broad or narrow money, had never been rigidly interpreted; the numbers were there to create a presumption for action, but the possibility of overriding them, if there were good reason to do so, had always existed. In discussion it was pointed out that the distinctive feature of broad money was that, while targets could act as triggers for corrective action on short-term interest rates, such action could not necessarily be expected to get the aggregate within the range over the target period. While short-term interest rates had a predictable effect on M0, their effect on broad money was far from clear. This was particularly true with the present approach towards funding.

CONFIDENTIAL

15. Sir Terence Burns saw the force of Sir Peter Middleton's position, but thought that dropping sterling M3 altogether would appear to signal a greater change in policy than had actually occurred. There were many problems with broad money, of which the most serious was the difficulty of interpreting the recent behaviour of velocity. On balance, he did see a case for moving to another measure of broad money. Failing that, the best solution might be to keep sterling M3 but to set targets only for the year ahead, making it quite clear that the targets were only triggers for thought.

16. Professor Griffiths thought that, on intellectual grounds, Sir Peter Middleton was right. Broad money contained little information, it was hard to control, and targets had been repeatedly missed without adverse consequences for money GDP. But the market attached importance to broad money, partly as a measure of potential spending power, and partly as an indirect constraint on public sector borrowing. Dropping broad money altogether would therefore be a great gamble.

17. In discussion, it was suggested that publishing ranges for sterling M3, even for the year ahead, could be dangerous. Sterling M3 had become increasingly volatile, as changes in relative interest rates led to large shifts in deposits between banks and building societies. Other broad money aggregates were rather better behaved. Indeed, it was arguable that sterling M3 would play a smaller role in internal deliberations than other measures of broad money. The presentational case for retaining sterling M3 was also debatable; the markets were expecting the authorities to retain a broad money indicator in the 1986 MTFs, but not necessarily sterling M3. Following the Mansion House speech, restating the target for sterling M3 might be greeted with surprise, and maybe scepticism.

18. The Chancellor concluded that Sir Peter Middleton had a strong case - and also an honest one. The problem was that reality was rather complicated. The present approach to operating policy was not adequately portrayed either by setting a target for broad money, or abandoning it altogether. The key argument for sticking

CONFIDENTIAL

to sterling M3 was continuity. Switching to a new broad money target could only serve to entrench the practice of targetting broad money. But other measures of broad money were not obviously superior to sterling M3; their velocity trend was unpredictable, and they were difficult to control. On balance therefore the risks of sticking to sterling M3 were less than the risks of dropping it altogether. But the argument was finely balanced, and it would be wrong to give the impression that other broad measures were ignored. Equally, an effort should be made to explain the status of the sterling M3 target - and in particular, the point that corrective action could not necessarily be expected to bring it back within the target range.

MTFS: targets and ranges

19. The Chancellor said that given the problems with the monetary aggregates it was clearly right to give a higher profile to money GDP in the 1986 MTFS. There would be ample justification for setting sterling M3 targets for the year ahead only. The treatment of M0 was more debatable; it was not subject to the same problems as broad money and, other than to maintain symmetry with broad money, there was no real reason to drop the illustrative ranges that had previously been provided for the later years.

20. In discussion, it was agreed that there was a good case for making minimum changes to the MTFS; this would imply retaining the full set of figures for M0 and money GDP, and only dropping ranges in later years for sterling M3. Since the ranges for later years had never been more than illustrative, the issue was essentially presentational. An asymmetrical treatment of M0 and sterling M3 might look rather odd; on the other hand, dropping all money figures for the later years could give undue prominence to money GDP, and create the impression that the Government's commitment to controlling monetary growth had changed.

21. Summing up, the Chancellor said that there was a presumption that illustrative ranges for M0 would be published for all years, but the issue should be reconsidered in the context of a draft of the MTFS. Decisions about the numerical targets to set for narrow and broad money would also need to be taken at a later stage, in the light of the forecast. It had been agreed that the aim should be to raise the profile of money GDP in the 1986 MTFS; but it was for consideration precisely how this should be done.

RL.

RACHEL LOMAX

31 January 1986

Distribution

Those present  
PS/Chief Secretary  
Sir G Littler  
Mr Sedgwick - o/r  
Mr Culpin



ROLE AND SCOPE  
OF THE MTF'S  
IN THE PAST

ISSUED  
FOR THE  
1986  
MTFS

pmwp

SECRET

FROM: T BURNS

DATE: 6 February 1986

CHANCELLOR

cc Chief Secretary	Mr Odling-Smee
Financial Secretary	Mr Peretz
Economic Secretary	Mr Scholar
Minister of State	Mr Sedgwick (o/r)
Sir Peter Middleton	Mr Riley
Sir Geoffrey Littler	Miss Peirson
Mr F E R Butler	Mr Cropper
Mr Cassell	Mr Lord
Mr Evans	Mr Davies

ISSUES FOR THE 1986 MTF'S

We shall soon be starting to write the text of the 1986 MTF'S. But before drafting starts in earnest, it would be helpful to discuss the outline of the document and the issues you wish to give most coverage. This minute is intended to serve as a background for that discussion. Two separate notes by MP on a range for money GDP and medium-term projections and fiscal prospects which were meant to accompany this minute are not yet finished. We hope to circulate them before tomorrow's meeting.

The Role and Scope of the MTF'S in the past

2. The MTF'S has in the past fulfilled a number of different functions. Previous versions have included:

- a statement of the Government's broad objectives, and the framework of policy
- an analysis of recent financial conditions and the implications for the way the Government operates policy
- paths for the monetary aggregates, including the target for the current year, and a statement of the Government's approach to interpretation of monetary conditions

- a statement of the factors considered relevant in setting the PSBR, and an illustrative path for the medium term
- assumptions for output, inflation and money GDP for the MTFS period
- projections of public expenditure, revenue, and fiscal adjustment.

3. The length of the MTFS and the weight given to the various components have varied from year to year. After the relatively short inaugural version in 1980 the MTFS was noticeably longer between 1981 to 1984 before being cut back sharply in 1985. These variations have occurred mainly in the sections dealing with financial conditions and policy, which were given a much more summary treatment in 1980 and 1985 than on average in the intervening years. These changes are summarised below, with further details given in an annex.

Approximate number of words in past versions of the MTFS

	Financial Conditions and policy	Fiscal Projections	Total
1980	1050	600	1650
1981	2150	500	2650
1982	2300	900	3200
1983	1800	500	2300
1984	2000	650	2650
1985	1350	600	1950

Objectives for the 1986 Version

4. In the early years, the dominant purpose of the MTFS was to demonstrate the Government's commitment to reducing inflation, and to indicate the monetary and fiscal policies that were judged to be consistent with this. Inflation is now at a much lower level but there is considerable uncertainty about the role of the various indicators of monetary and fiscal conditions. It remains necessary to demonstrate the

*What is the MTFS? (MTFS lives, by)*

*last 1982  
+ 1984 followed  
major  
returning  
the MTFS.  
(especially 1982, when  
I did the for  
date before  
Kwas!)*

commitment to further progress on inflation, but possibly more attention will need to be given to our explanation of the way the Government sees the problems of operating macroeconomic policy; and the rationale for the particular intermediate targets that are chosen.

5. This need not necessarily be done in the MTF5 document itself - you have suggested that a major speech on monetary policy would be desirable after the Budget. But some of the ground will have to be covered in the MTF5. As ever this will require a balance between simplification, in order to get across the main messages, and explanation of the complexities involved.

6. In the light of the post Mansion House comment, this year's MTF5 might have two main objectives:

(i) to restate the objectives of the MTF5 and set out, as far as possible, how policy actually operates.

(ii) to counter the belief in some quarters that the MTF5 has effectively collapsed. Comment has centred on the suspension of the £M3 target, some perception of an increased role for the exchange rate in setting interest rates, doubts about the relevance of the PSBR as a fiscal indicator, and the statement in the last Budget that there is nothing sacrosanct about the precise mix of monetary and fiscal policies.

7. The remainder of the minute discusses some of the ground that might be covered in the 1986 MTF5 under the conventional headings. Inevitably they will contain material found in previous MTF5s:

(a) medium term objectives and the framework of policy

(b) the operation of monetary policy

(c) recent financial developments

(d) the PSBR path and the fiscal projections

MEDIUM TERM  
OBJECTIVES/  
FRAMEWORK

SECRET

### Medium Term Objectives and the Framework of Policy

8. This section will need to demonstrate the success of previous MTFSS in delivering a satisfactory path for money GDP and inflation. It might also deal with money GDP as a strategic medium term objective, and the role of the monetary targets and the PSBR path. Some possible material is as follows:

- (i) A description of the behaviour of money GDP over the last few years, and how this compares with the Government's assumptions as set out in (some) recent versions of the MTFs. The conclusion would be that the operation of the MTFs has led to a satisfactory outturn for nominal demand with an output/inflation split that has, if anything, been better than expected.
- (ii) A description of the behaviour of the main monetary aggregates in recent years relative to the profile of money GDP; and how changes in observed velocity trends have led to changes in the ranges for the monetary aggregates, and the choice of aggregates to be targetted.
- (iii) Some emphasis of the principle that the prime objective of the MTFs is to control the growth of nominal demand. Monetary targets are a means to that end, and changes in trend velocity due to financial innovation and other structural factors need to be accommodated if the Government's objectives are to be met.
- (iv) The nature of the strategic objective for money GDP/nominal demand in the medium term. The NEDC pledge. The money GDP path is subject to revision if changes in the supply side imply a change in the sustainable growth rate or level of output. Monetary and fiscal numbers are revised as necessary to be consistent with the objective for nominal demand.

SECRET

9. It would be possible to mention here that the Government's objectives for nominal demand can, within limits, be met with different mixes of fiscal policy and interest rates, and that this may have implications for monetary growth - particularly narrow money. But this and any discussion of criteria for the choice of mix should probably be in the fiscal policy section.

10. It would be natural to conclude this section by setting out the objectives for money GDP and the monetary ranges for the current MTFs, and possibly also the assumptions for output and inflation. There is much to be said for having table 2.1 in last year's version fairly early in the document.

#### The operation of monetary policy

11. There are a number of possible ways of organising the material on monetary conditions and policy. One possibility would be to follow a section on the medium term policy framework by sections on the operation of monetary policy, covering recent monetary conditions; operational issues such as the role of monetary aggregates, exchange rates, and other indicators; and the monetary ranges.

*Does* 12. In a document relating primarily to medium term strategy, there is a case for making the section on recent monetary conditions shorter than has sometimes been the practice. Indeed it could even go into Part 3 - Recent Developments and Prospects. If it were retained in Part 2, the aim would be to provide sufficient material on the overall stance and mix of policy to lead into the sections setting out the monetary ranges and fiscal projections.

13. Developments in 1985-86 which you might want to highlight are:

- (i) the temporary interruption in the middle of the last year to the declining path for money GDP and inflation, suggesting that the monetary and fiscal tightening that took place in early 1985 was necessary to bring the economy back onto the right medium term track.

(ii) the relatively high level of real interest rates

(iii) the very rapid growth of all measures of broad money, partly continuing past trends and financial innovation, and possibly reflecting also the decision to cease overfunding.

(iv) the satisfactory growth of M0

(v) the gyrations in the exchange rate, and their relation to oil price movements and prospects and the behaviour of the dollar.

14. The section covering operational issues might include material on some or all of the following points:

(i) the limited role that data on money GDP can usefully play in the short term. It may help to interpret past monetary developments. But given the delay in its becoming available, the likelihood of significant revisions, and the need for forward looking information, it is of limited use in assessing current monetary conditions.

(ii) the general nature of the monetary ranges, and what they imply about action should monetary growth fall outside or threaten to do so. Explain that action is always conditional on the behaviour of other indicators.

(iii) a description of the particular problems with broad money and the background to the suspension of the £M3 target in the Mansion House Speech - the marked change in the relationship with money GDP since 1980; the difficulty of control (particularly in the short term) by means of short term interest rate policy; the unsustainability of attempting to control broad money by systematic overfunding of the PSBR.

(iv) an explanation of why narrow money has been more useful and why M0 is the preferred narrow aggregate; its more straightforward link with interest rates; its relatively stable velocity trend; and the more steady impact of financial innovation on that trend so far.

(v) the role of forward looking indicators, such as the exchange rate and asset prices. The exchange rate is important because of its rapid impact on money GDP, inflation and inflation expectations. Asset prices also provide early information on inflation prospects.

*fallen low no??*

15. The final part of the monetary policy section might discuss the monetary ranges set out in the table, and place them in the current context. It would need to deal with the time period covered - quite possibly different for broad and narrow money - and the status of the ranges, if any, for the later years.

16. It would also need to deal with the present roles of £M3 and M0. We could say that £M3 must play a less important role given its recent surprising behaviour. But should it move outside its range, we would think carefully about whether or not this reflected a velocity shift, and would tend to demand more convincing evidence from other indicators. M0 is likely to be more important in the immediate future although we recognise its weaknesses. In particular it leads money GDP by a relatively short period.

Fiscal Policy

17. On past form, this section would set out the expected PSBR outturn for 1985-86, the forecast for 1986-87, and the illustrative path thereafter. Sometimes - notably in 1984, but not last year - there has also been material on factors which are relevant in deciding the appropriate path for the PSBR, and hence the fiscal/monetary mix.

18. Given the speculation following your comment in last year's Budget Speech that there is nothing sacrosanct about the precise mix of policies, there may be some advantage this year in giving a little more detail on

*discuss* ?

your thinking in this area. This might throw light on the extent to which monetary policy is now thought to impose on fiscal policy, and help to dispel any impression that fiscal policy is now set in a more ad hoc fashion than in earlier years of the MTFS.

19. In addition, you might consider including some material on the implications for the appropriate PSBR path of:

- North Sea revenues. More rapid decline in revenues now projected may justify less rapid decline in PSBR path because of their relatively small impact on nominal demand, and their implications for future taxation and expenditure.
- Asset sales. Similar considerations to North Sea revenues, but in the opposite direction. Higher level of sales points to lower path for PSBR.
- Balance of arguments about the present policy mix, given world and UK real interest rates, the real exchange rate, and other factors such as the state of the cycle.

*discuss*

20. Also, you might consider whether to include a brief discussion of the appropriate responses to unexpected developments. This would naturally have to be very selective, but with the present uncertainty about oil prices it might be helpful to discuss the implications of changing oil revenues.

### Fiscal Projections

*✓*

21. There is no obvious reason to depart from the past format of these sections. Comparison with last year's projections could be relegated to an annex, as in 1985. We would have to think about how to describe the money GDP path - in previous years it has been an assumption, but now we may want to convey more the flavour of an objective.

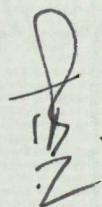


Conclusion

22. The purpose of this note has been to suggest a possible framework for this year's MTFS, and to list a number of issues that might be touched upon. Obviously you will want to give more weight to some and less - possibly none - to others. Coverage of all the issues listed could mean an MTFS as long as the record 1982 version.

23. We would very much welcome a discussion on how to proceed. In particular we would welcome your views on:

- the length of the MTFS, and in particular whether it should be slightly longer this year than last year, with more discussion of the thinking underlying the present operation of policy
- the coverage and organisation of the text
- the issues to be highlighted, and how much prominence should be given to those discussed in this note.



T BURNS

**ANNEX: ESTIMATED NUMBER OF WORDS IN PREVIOUS VERSIONS OF THE MTFIS**

<b><u>1980</u></b>	Objectives and Instruments	500
	Public Expenditure	142
	Revenue in the Medium Term	475
	Money Supply and Public Sector Borrowing	350
	Responses to alternative outcomes	187
	Total	<u>1654</u>
<b><u>1981</u></b>	Introduction	167
	Financial Developments in 1980/81	747
	The Path for monetary deceleration	205
	Fiscal Policy	345
	Public expenditure	238
	Revenue	278
	Money Supply and Public Sector Borrowing	695
	Total	<u>2675</u>
<b><u>1982</u></b>	Introduction	357
	The financial framework	425
	Recent financial conditions	450
	Monetary Policy	438
	Fiscal Policy	434
	Public expenditure	115
	Revenue	272
	Public Sector Borrowing	25
	Comparisons with 1981 revenue and expenditure projections	505
	Conclusion	155
	Total	<u>3176</u>
<b><u>1983</u></b>	Introduction	321
	Recent financial conditions	380
	Monetary Policy	300
	Fiscal Policy	500
	Public expenditure	36
	Revenue	162
	Public Sector Borrowing	90
	Comparison with 1982 revenue and expenditure projections	260
	Conclusion	237
	Total	<u>2286</u>

<u>1984</u>	Introduction	380
	Recent financial conditions	357
	Monetary Policy	460
	Fiscal Policy	600
	Public expenditure	156
	Revenue	178
	Public Sector Borrowing	85
	Comparison with 1983 revenue and expenditure projections	300
	Conclusion	131
	Total	<u>2647</u>

<u>1985</u>	Introduction	160
	Recent financial conditions	360
	Monetary policy	255
	Fiscal Policy	394
	Public expenditure	292
	Revenue	140
	Public Sector Borrowing	90
	Conclusion	91
	Annex	187
	Total	<u>1969</u>



FROM: MRS R LOMAX  
DATE: 6 FEBRUARY 1986

CHANCELLOR

**MEDIUM FINANCIAL STRATEGY**

There are three sets of papers for this meeting:-

i. **Policy implications of the forecast:** Terry's summary of the conclusions of your recent discussions. He gives a clear steer towards a £7 billion PSBR, with a "very small" fiscal adjustment, taking \$15 as the central case (para 32).

You will want to give people a chance to have their say on this important conclusion.

ii. **Issues for 1986 MTFS:** an attempt - largely inspired by Odling Smee and Riley - to get you to give them some steer before they start drafting the MTFS. Some (very broad) questions are set out in the final paragraph.

Peter and I privately think this is a rather doomed enterprise - it is difficult to see what will work, without an actual draft. But it would be much appreciated if you could indicate any issues about which you have strong feelings, including things you definitely don't want them to waste time on. The key issue for them is whether we are aiming for a short crisp MTFS, like last year, or something more discursive (assuming of course, that both are equally well written).

iii. **Fiscal arithmetic:** there will be two papers:-

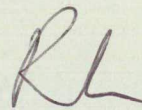
- ranges for money GDP

- assumptions for the MTFS (ie numbers).

They have not yet arrived. But with luck they should include a list of more concrete issues on which we should aim to take provisional decisions, to allow the number crunchers to start crunching numbers.

At the end of this meeting, you should have:-

- set the stage for unveiling Plan B on Monday;
- given MP the guidance they need to start drafting the MTFS with real numbers.



RACHEL LOMAX



4. UK fiscal and monetary policy were both tightened decisively a year ago. Interest rates rose sharply. The average level of 3 month interest rates in 1985 was more than 2 per cent higher than in 1984. The exchange rate recovered to the average level of 1983-84. And it now seems that the PSBR this year will turn out some £3 billion less than last year. This represents an unambiguous tightening of the fiscal stance as the special factors of the coal strike, VAT on imports, and privatisation receipts have a similar net effect in the two years.

5. World demand grew less rapidly in 1985. Although some of the more pronounced fears of slowdown did not emerge the average growth rate of the major 7 industrial countries seems to have fallen from  $4\frac{1}{2}$  per cent in 1984 to  $2\frac{1}{2}$  per cent. This slower growth was entirely due to US growth returning to a more sustainable rate.

6. UK output is estimated to have grown by  $3\frac{1}{2}$  per cent in 1985. This is close to the forecast shown in the 1984 Autumn Statement despite a higher than expected level of interest rates. But the profile of growth was unexpected. Output increased rapidly into the first quarter of 1985 but has grown less than expected since then.

7. The slower growth over the past year - both in the UK and for the average of the major 7 - has been accompanied by weak commodity prices and we are now seeing the benefits in lower inflation rates. This comes after a period of 3 years when little progress has been made in reducing UK inflation.

8. A comparison with recent figures for the other G7 countries shows UK output and domestic demand growth keeping up with the average. But inflation is now somewhat above average and the interest rate differential is rather larger than the inflation differential.

FORECAST

S E C R E T

THE FORECAST

9. The main features of the forecast based upon an oil price of \$20 dollars are as follows:

- weak inflationary pressures in the world economy helped by lower commodity prices, and more recently falling oil prices;

- steady world economic growth helped by modest falls in overseas interest rates, outside the US;

- UK non-oil output growing at 2 1/2 per cent a year in 1986 (after allowing for the coal strike) and 1987;

- inflation falling to 4 per cent by April and remaining around that level through 1986;

- unemployment showing little tendency to change but more likely to fall than rise;

- a balance of payments surplus on current account of £4 billion in 1986 and £1 1/2 billion in 1987;

- an average level for the exchange rate in 1986 some 3 per cent below the 1985 average;

- MO well inside its MTF5 target ranges up to 1987-88 given the maintenance of high short term interest rates both absolutely and relative to those overseas. Long rates are expected to remain steady at between 10 and 11 per cent;

- continued difficulty in interpreting the behaviour of £M3.

- a healthier fiscal prospect than we might have envisaged given the lower oil revenues. The PSBR for this year is put at £7 billion and the fiscal adjustment for next year at £1 1/2 to £2 billion.

later figs?  
?



S E C R E T

10. The risks to the forecast are not all one way. World activity may do somewhat better than we are expecting. The trivial inflation rates in Germany and Japan combined with the benefits of lower oil prices leave their Governments with room for lower interest rates. US demand is more at risk but the benefits of lower commodity prices, including oil, will enable the dollar to fall further without putting undue pressure on inflation. It is difficult to see any resolution of the payments imbalances between the big 3 economies without domestic demand in Japan and Germany growing much faster than in the US. The present circumstances make some adjustment in this direction likely. But it is only likely to scratch the surface of the problem.

11. It is also possible that our overseas trade performance will be better than expected. The forecasters have taken a fairly cautious line. Although they assume it will be better on average than in the post war years they have not continued the good performance that we saw from mid-1984 to mid-1985. Although things could go better I think this is the prudent course for the published forecast. It is consistent with another sizeable surplus on current account.

12. The risk to UK domestic demand is that high real interest rates will have a bigger impact than expected. The forecasters take the view that the adverse effects of high interest rates are partly offset by the ready availability of finance, especially in the private housing market. I worry that the cumulative impact of real rates at this level for so long may be rather greater; but we do not have much in the way of experience to go by.

13. The uncertainties over the prospect for unemployment are considerable. Systematically we have understated the growth of productivity which in manufacturing industry has risen by over  $3\frac{1}{2}$  per cent a year since 1979. If we are seeing a sustained move towards comparable productivity with other European countries this could continue. On the other hand the improved rate of return on capital should increasingly have a beneficial effect on the scale of economic capacity, and in turn the level of employment.

14. Inflation seems almost certain to fall. The only question is over the speed of decline in the months ahead and whether it will rise again. Most of the benefits of the lower oil prices are being cancelled out by a lower exchange rate and our performance in 1986 will again look disappointing compared with our G5 colleagues. Even so the UK should still see inflation at or below 4 per cent for much of 1986. This should be on a more sustainable basis than the previous low point of 3.7 per cent which owed much to falling mortgage rates and low food prices.

15. For this financial year we are now anticipating reaching the PSBR figure planned in the last budget despite a £2 billion shortfall on oil revenues. Non-oil revenues have been higher than expected this year and next year are expected to be £2<sup>1</sup>/<sub>2</sub> billion above the profile set out in the last MTFS. This substantially offsets the lost £4 billion oil revenues and means that we still have a projected fiscal adjustment of £2 billion in the forecast assuming a £7 1/2 billion PSBR and oil prices at \$20. Although the position has been helped by higher asset sales it is a rather better prospect than most observers are expecting. They may begin to revise their judgements when they see the latest monthly figures. This is an aspect of the forecast that has worried me most but I think the forecasters have made out a good case.

16. The behaviour of broad money continues to complicate the interpretation of monetary conditions. The forecast suggests that we shall have to live with these conflicts for sometime to come, with another year or two of rapid growth in £M3 ahead of us. Our explanation is in terms of the continuing effects of financial liberalisation and the turnaround from negative real interest rates in the 1970's to positive real rates in the 1980's. But these have been with us for some time now. The chart on page 59 is a salutary reminder of the enormous difficulties of predicting the velocity of wide aggregates and can usefully be shown to anyone who tries to convince you that the velocity of broad money has been other than unpredictable.

SECRET

## OIL PRICES

17. But it is the uncertainty about the behaviour of oil prices that makes the present position so difficult to analyse. We have been engaged in analytical preparations for this event for some years but this should not be allowed to hide the extent of the potential margin for error.

18. Forecasters in general did rather badly in the face of the first oil shock. They underestimated the cumulative impact on prices and the damage to output. They did rather better after the second oil shock as we had absorbed the lessons of the first one. The big unknown now is the extent to which oil shock 3 will be the obverse of oil shocks 1 and 2.

19. There are reasons for being wary about basing too much on the experience of the first two oil shocks. In particular some of the the damage to output following the oil price increases might have been the result of a large change to relative prices. This occurs whether oil prices are rising or falling. A second fear is that although wages and prices responded quickly to the effect of higher oil prices they may move more slowly in reverse.

20. There is probably something in both of these factors. Nevertheless I think that on balance the effects of the oil price fall will be beneficial, at least in the industrial countries as a whole. They had considerable trouble coping with upward pressures to prices. Real wages failed to adjust for the loss of national disposable income, profits were squeezed and the consequences for employment, investment and growth potential have been very obvious, especially in Europe.

21. With falling oil prices these countries will have considerable terms of trade gains; this will mean a rise in national disposable income and in the warranted real wage. Provided that this is not all absorbed in higher actual real wages we should see much improved profitability and investment. And this comes on top of some considerable progress in recent years in some of the G7 countries.

? only in  
a superficial  
sense [the  
necessary  
adjustments  
historically  
failed to  
take place  
in time.  
If this were  
happened  
again, the  
consequences  
would be  
damaging]  
See  
+ para 23.

22. Of course the oil producers will be in trouble and there will be some nasty moments. At times there will be fears that this may dominate the beneficial effects outlined above. One consolation is that the problems may be reasonably well isolated and capable of being dealt with on a case by case basis.

23. For the UK the short-term balance of costs and benefits is more touch and go. Our real national disposable income will fall a little but GDP should be broadly unaffected. The scale of the exchange rate depreciation we have seen is acceptable and should just about cancel out the benefits from lower crude prices. Manufacturing industry should benefit considerably from this change for the reasons set out above. Profitability should rise; the extent of excess wages should be diminished provided that real earnings do not rise in response to the higher profits. We stand to benefit from a more lively world demand and lower world inflation.

24. The longer-term effects should be beneficial as they help our adjustment to falling oil production. It is much easier to cope with falling output of a commodity that has substantially fallen in value. If we can demonstrate that we can cope with this shock it puts into the shade the issue of "what happens when the oil runs out". With the increased rate of return on manufacturing industry we should make some progress with the adjustment the House of Lords was worried about; and without the inflationary consequences of exchange rate depreciation as they are offset by the effects of falling oil prices and lower world inflation.

#### POLICY IMPLICATIONS

25. Rapid changes of relative prices tend to cause problems and this has the makings of a very big change. But on the basis of this analysis I see no urgent case for trying to prevent this happening by agreeing to cut North Sea oil production.

S E C R E T

26. But we have to consider if there is any action that will enable us to survive the uncertainty with minimum disruption. Saudi Arabia seems determined to try to bring us - and some of their wayward fellow members of OPEC - to heel by increasing production and forcing down prices. I see no rational way of being able to tell what will happen to prices. The concept of an equilibrium price in these circumstances is difficult to apply. It could require a very large fall to stimulate demand and persuade producers voluntarily to cut back on production.

27. Presumably at some point the other members of OPEC will call a halt if they see that we are not budging. That may not take long as some are desperately dependent on oil revenues to keep their public sector accounts in order and pay their import bills. But we cannot count on it.

28. If we could be sure of oil prices levelling out at \$20 dollars as shown in the main forecast I would see no problem in presenting the draft budget you have prepared. But we cannot be sure and therefore I am inclined to a more cautious approach.

29. So far our approach to monetary policy has been to resist recent pressures to raise interest rates and to allow the exchange rate to fall as long as the net effect of the oil price and exchange rate falls do not add to inflation. I am sure that is the appropriate response.

30. The design of fiscal policy is rather more complicated. We need to be prepared for a wide variety of possible outcomes. That includes a low price at budget time and the prospect of higher or lower prices afterwards.

31. My own conclusion is that we should do very little in the way of tax changes in the budget. That way we give ourselves the greatest room for manoeuvre afterwards.

32. Suppose we take as a central case an oil price of \$15 dollars. On the basis of the forecast this would be consistent with a PSBR of £7 billion but only a very small fiscal adjustment.

33. If the oil price falls below that level around Budget day or shortly afterwards the immediate response would be to take it on the PSBR. That should be possible as we would be starting from an obvious cautious position. If the lower prices persisted we would need to raise indirect taxes along the lines already discussed so that maybe half of the revenue loss was recovered and half taken on the PSBR. Obviously this would have to be reviewed according to the scale of the change.

✓  
34. If the oil price were to rise there would be a choice of responses. There would be the possibility of a Summer package to include some or all of the measures in the Budget we have had under consideration. The alternative would be to take the opportunity to reduce interest rates. This might be possible as sterling would probably be strengthening. It would be important to take action in one or other of these ways to avoid the danger of an excessive tightening of financial conditions and damage to the prospects for output growth.

✓  
35. This should be seen as a cautious fiscal stance. In these circumstances there is a stronger case for re-thinking our approach to the monetary target. Against the background of volatile oil prices it is unlikely that £M3 will give clear and correct signals for action on interest rates. One way to make sure that we would be able to respond correctly might be to follow Sir Peter Middleton's suggestion and abandon the £M3 target in the Budget. There would be a stronger case for doing so if the budget was based on a low oil price assumption. Alternatively if we decide to keep the £M3 target it must be made clear to the markets that we are likely to have to apply a considerable degree of judgement in interpreting the behaviour of broad money.

18  
Z

T BURNS

*put*

*Ch. I have put  
his meeting on early  
to give you time to read  
these papers.*



FROM: MRS R LOMAX  
DATE: 7 February 1986

CHANCELLOR

**MTFS MEETING**

*Re.  
7/2*

I attach the two remaining papers for this afternoon's meeting.

2. We now have 4 rather discursive papers, which are nowhere conveniently summarised. I have discussed handling the meeting with Peter and we suggest you try to cover the following ground:-

(i) what sort of Budget should we be thinking about in the light of Terry's paper on the policy implications of the forecast? Do others share his preference for a £7 billion PSBR in 1986/87 and a very small fiscal adjustment, based on a central oil price case for \$15 (see para 32).

(ii) are the economic assumptions for the 1986 MTFS (proposed in paragraphs 2-6 of John Odling-Smee's issues paper) acceptable? On past form we would publish in the FSBR the figures for:-

- inflation
- total output growth
- non North-Sea output growth
- money GDP growth.

(iii) can we take a provisional view about the PSBR profile for the MTFS period? It is too early to reach a firm decision. The path that is being used for working purposes is <sup>*virtually*</sup> ~~normally~~



last year's MTFS profile (plus one year) and is shown in the final table of John Odling-Smee's issues paper; and there is some discussion in paragraphs 22-24. I doubt whether a detailed discussion at this stage would be very fruitful.

(iv) how should we approach the drafting of the 1986 MTFS? On general issues, the relevant papers are Terry's note on issues in the 1986 MTFS and the note on money GDP ranges attached to John Odling-Smee's minute of today. The two main issues on which they particularly want guidance are:-

- the presentation of money GDP as a strategic objective. Is the general approach outlined in paragraph 8 of Terry's note broadly on the right lines? Do you agree that the idea of having ranges for money GDP growth can be ruled out?
  
- the explanation of how we operate monetary policy. Is the approach outlined in paragraph 14 of Terry's issues paper broadly on the right lines?

RACHEL LOMAX





JAP

RECORD  
OF  
7/2  
MTG

NOTE OF A MEETING IN HM TREASURY  
ON FRIDAY 7 FEBRUARY 1986 AT 4PM

Present:

Chancellor  
Chief Secretary  
Financial Secretary  
Economic Secretary  
Minister of State  
Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr Evans  
Mr Odling-Smee  
Mr Peretz  
Mr Scholar  
Mr Riley  
Mr Cropper  
Mr Lord  
Mr H Davies

---

**MEDIUM TERM FINANCIAL STRATEGY**

Papers

Policy implications of January forecast: Sir T Burns, 6 February.

Issues for the 1986 MTFs: Sir T Burns, 6 February

Issues for the 1986 MTFs: Mr Odling-Smee, 7 February.

A range for money GDP: Mr Odling-Smee, 7 February.

Policy implications of the forecast

2. Sir Terence Burns said that the approach to the Budget was greatly complicated by considerable uncertainty about the likely course of oil prices, and about the effects of the major change that had already taken place. The appropriate response should be flexible enough to cope with a wide variety of circumstances, in the run-up to the Budget and thereafter. There were risks in both directions: in different circumstances, the

BUDGET CONFIDENTIAL



Budget could prove too tight or too loose. It would be wrong to take decisions on the basis of a single "best guess".

3. In recent years much effort had been devoted to analysing the possible implications of a sharp fall in oil prices; but the result should still be treated with caution. A large fall in the oil price was outside the experience on which conventional economic relationships were based. The effects of lower oil prices were not necessarily the obverse of the two previous sharp rises.

4. On balance, there were clear gains to industrial countries as a whole from lower oil prices. In the short term the UK's position would be relatively unaffected though there would be significant differences between and within various sectors of the economy. The longer term effects should be beneficial; with lower oil prices the adjustment to falling oil production would be smoother and easier to cope with.

5. Against this background, it was right to approach the Budget with caution, to be prepared for a wide variety of possible outcomes, and to create as much room for manoeuvre after the Budget as possible.

6. The Chancellor said he had reached very similar conclusions. The outlook was highly uncertain. While the sharp fall in oil prices had reduced the scope for tax cuts, it was not necessarily bad for the economy. The political mood was also right for a cautious Budget. It would be important to consider how the policy stance might subsequently be adjusted, if the assumptions on which the Budget was based proved wrong. He would prefer to be faced with a need to relax policy - either by cutting tax or reducing interest rates - rather than to tighten up.

## BUDGET CONFIDENTIAL



7. Deliberate caution might be reflected in the assumptions chosen for oil prices or the PSBR - or a mixture of the two. In practice it would be very difficult to base the Budget figuring on an oil price which was significantly different from the prevailing price (spot or forward). A higher figure could easily look ridiculous; though it might be possible to go, say, \$2 below the current price.

8. With oil prices around their current level (\$17-18) he would be inclined to go for a PSBR of £7 billion (or perhaps a fraction under, for presentational reasons). It would be sensible to consider the scope for tax cuts within this figure on the assumption that oil prices might fall further - say to \$15. At this stage, he would rule out tax increases; a very much lower oil price - \$10-12 - would probably mean taking the strain on the PSBR. This did not seem very likely. At some stage oil prices could well rebound, and clearly the further the oil price fell, the smaller the risk of further falls.

9. In discussion, it was suggested that the correct response was to construct two parallel Budget packages consistent with a £7 billion PSBR, on different assumptions about oil prices. The existing package would still be feasible, with an oil price of around \$20; but it would also be right to look at a much smaller package - of around a £¼ to £½ billion. In practice, especially with the OPEC meeting on Budget Day itself, circumstances were likely to point to the smaller package. But were the oil price to recover during the course of the Finance Bill, it might be possible to introduce additional measures from the existing Budget package.

10. The Chief Secretary stressed the difficulty of announcing further tax cuts once the public expenditure round was under way. The Chancellor agreed that it would be desirable to make any changes during the course of the Finance Bill.



11. It was agreed that:-

(i) the working assumption for the PSBR in 1986/87 should be £7 million -  $1\frac{3}{4}$  per cent of GDP.

(ii) an alternative Budget package, of around £ $\frac{1}{2}$  billion, should be considered at the Overview meeting on Monday.

A range for money GDP

12. The Chancellor said that he wanted to give money GDP a higher profile in the 1986 MTFs. But he was convinced that having a target range for money GDP was not the way to do it. It might still be useful to publish some of the information about variability, and the extent of data and forecasting errors.

Economic assumptions for the MTFs

13. After a brief discussion, the assumptions proposed in paragraphs 2 to 7 of Mr Odling-Smee's paper were approved.

14. The Chancellor said he would be reluctant to publish the sort of profile for the annual fiscal adjustment shown in the table in paragraph 17 of Mr Odling-Smee's note; but he noted that the size of the fiscal adjustment would depend on the oil price assumption, and no decisions could be taken yet.

15. It was provisionally agreed that the MTFs should assume a PSBR of  $1\frac{3}{4}$  per cent of GDP in 1987/88, 1988/89 and  $1\frac{1}{2}$  per cent of GDP in 1989/90.

16. The Chancellor asked for a further note on the relationship between oil revenues and the PSBR; the TCSC would certainly ask how far oil revenues could be treated in the same way as other revenues, and what adjustments had been made to the PSBR to allow for the change in oil revenues. This would be important in presenting the PSBR profile in the MTFs, and in explaining

BUDGET CONFIDENTIAL



any subsequent adjustments, in the light of unexpected changes in oil prices.

Drafting the MTFS

17. The Chancellor said the underlying aim should be to reaffirm the importance of the MTFS. Money GDP was at the heart of the policy, though it could not be an operational target. He doubted whether it would be possible to describe the operation of monetary policy in any great detail in the MTFS itself; it would require a longer exposition and he was therefore considering making a major speech on the subject shortly after the Budget. He was quite attracted to moving the section on recent financial developments to Part III of the FSBR.

18. On the description of fiscal policy, the Chancellor doubted whether he would want to expand on his comment in last year's Budget Speech that there is nothing sacrosanct about the precise mix of fiscal and monetary policy; but he invited Mr Odling-Smee to prepare a draft for consideration. There should probably be some discussion of the implications for the appropriate PSBR path of North Sea oil revenues and asset sales, as in the past; but this need not be very elaborate. Discussion of the appropriate responses to unexpected developments might be better handled in the Budget Speech; he was not inclined to cover this ground in the MTFS.

19. It was agreed to use last year's format for the fiscal projections.

*Rh.*

RACHEL LOMAX  
11 February 1986

Distribution

Those present  
Mr Sedgwick (or)  
Mr Walsh

SECRET

From: J ODLING-SMEE  
7th February 1986

CHANCELLOR OF THE EXCHEQUER

cc Chief Secretary  
Financial Secretary  
Economic Secretary  
Minister of State  
Sir Peter Middleton  
Sir Terence Burns  
Sir Geoffrey Littler  
Mr F E R Butler  
Mr Cassell  
Mr Evans  
Mr Peretz  
Mr Scholar  
Mr Sedgwick o.r  
Miss Peirson  
Mr Riley  
Mr Cropper  
Mr Lord  
Mr H Davies

ISSUES FOR THE 1986 MTFS (FISCAL ARITHMETIC)

I attach copies of the two notes mentioned by Sir Terence Burns in his minute of 6th February. The fiscal prospects are set out in paragraphs 13-21 of the note on medium-term projections and fiscal prospects.

2. I am sorry that it was not possible to circulate these last night.

DL OS

J ODLING-SMEE

ISSUES  
FOR THE  
1986  
MTFS  
(FISCAL  
ARITH-  
METIC)

SECRET

**MEDIUM-TERM PROJECTIONS AND FISCAL PROSPECTS**

This minute presents our first estimates of the fiscal prospects over the MTFS period. Economic developments and fiscal prospects to mid-1987 are assumed to be identical to those in the forecast reported by Mr Evans on 30th January. Beyond that the economy follows the medium-term path implied by the MTFS assumptions. The fiscal prospects for 1987-88 and 1988-89 therefore differ from those shown in Miss Peirson's report of 30th January.

**Economic Assumptions**

2. The assumptions for inflation that you have asked us to use, together with those in the 1985 MTFS and the January forecast, are:

**Growth of GDP Price Deflator**

(percentage changes on previous financial year)

	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
1986 MTFS (proposed)	4 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	4	4	3 <sup>1</sup> / <sub>2</sub>	3
January forecast	4 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	4	4 <sup>1</sup> / <sub>2</sub>	5	
1985 MTFS	4 <sup>1</sup> / <sub>2</sub>	5	4 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	3	

3. Although the inflation assumption is higher than envisaged in Sir Terence Burns' Chevening paper, there is no strong reason for altering the output assumptions suggested there. These reflected a view about supply side and labour market developments over the medium term, and a small change in inflation does not alter it significantly.

4. The proposed output growth assumptions compared with those in the 1985 MTFS and the January forecast are therefore:

**Growth of Real GDP**

(percentage changes on previous financial year)

	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
1986 MTFS (proposed)	2 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>
January forecast	2 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	2	1 <sup>3</sup> / <sub>4</sub>	
1985 MTFS	2 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	2	2	2	

Economic Assumptions PARAS 2-6

SECRET

The slower GDP growth in 1986-87 than in later years reflects a relatively rapid reduction in oil production and the forecasters' judgment that the slowdown in 1985 is likely to persist for another year or so.

5. In Sir Terence Burns' Chevening paper part of the increase in output growth since the 1985 MTFS was expected to come from a slower rundown of oil production and part from faster growth of the non-oil economy:

*1/2 1/2 1/2 1/2 1/2 1/2  
1988-89 (1/2 1/2)*

Growth of Non-North Sea Real GDP

(percentage changes on previous financial year)

	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
1986 MTFS (proposed)	2 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>
1985 MTFS	2	3 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	

6. The money GDP figures that go with the above assumptions for inflation and output growth are:

Growth of Money GDP

(percentage changes on previous financial year)

	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
1986 MTFS (proposed)	7	9	6 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	6	5 <sup>1</sup> / <sub>2</sub>
January forecast	7	9	6 <sup>3</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>4</sub>	7	
1985 MTFS	6 <sup>3</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	5	

7. If we followed last year's precedent we would publish in the FSBR the figures for inflation, total output growth, non-North Sea output growth, and money GDP growth in paragraphs 2, 4, 5 and 6.

Medium-Term Projections

8. We have prepared a coherent set of projections of the economy consistent with the proposed economic assumptions. They assume that the oil price is \$20 in 1986 and 1987 and then rises in line with the general level of world prices, and that the PSBR to GDP ratio is as in the 1985 MTFS, extended to 1<sup>1</sup>/<sub>2</sub>% in 1989-90. Other key assumptions relate to the exchange rate and interest rates, and to productivity growth and labour market adjustment.

*assumes  
subject  
to  
various  
assumptions*

9. We assume that, given fiscal policy, high real interest rates will continue to be required to keep money GDP growth on a downward path. Some

*oil  
low  
high*



decline in real rates is envisaged so that nominal short-term rates come down to 8% at the end of the MTFS period:

Interest Rates and the Exchange Rate

	1985-86	1986-87	1989-90
Short-term interest rates (%)			
nominal	12	12	8
real	6 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	5
Exchange rate index (1980 = 100)			
nominal	79 <sup>1</sup> / <sub>2</sub>	75 <sup>1</sup> / <sub>2</sub>	71
real	85	81 <sup>1</sup> / <sub>2</sub>	79
Memo:			
GDP deflator growth (%)	5 <sup>1</sup> / <sub>2</sub>	4	3

The exchange rate drifts gradually downwards, consistent with the formula we usually publish: "It is assumed that there is no major change in the sterling exchange rate index from year to year". Some decline in the real exchange rate is to be expected as oil production falls and the labour market adjusts.

10. As discussed in Sir Terence Burns' Chevening paper, productivity growth is assumed to be slightly higher than in 1979-85. It is assumed to account for about 60% of the output growth in 1985-89, with 40% being associated with employment growth. The latter proportion is higher than it has been since the war:

Productivity and Employment Growth in Non-North Sea Economy

	1973-79	1979-85*	1985*-89
Output	1 <sub>2</sub>	1	2 <sup>3</sup> / <sub>4</sub>
Productivity	1 <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>
Employment	1 <sub>4</sub>	- 3 <sub>4</sub>	1
Labour supply	1 <sub>2</sub>	1 <sub>2</sub>	3 <sub>4</sub>

\*Adjusted for the coal strike

11. With employment growing at 1% a year and labour supply, taking account of the expected rise in participation, at about 3<sup>3</sup>/<sub>4</sub>%, some fall in unemployment is envisaged. Some of the rise in employment in excess of the

increase in labour supply is associated with a reduction in non-claimant unemployment, and so claimant unemployment falls by less than 40,000 a year.

12. The labour market projections and the conclusion that unemployment will fall slightly represent an area of considerable uncertainty. If real earnings were to grow more slowly - after 1986 they are assumed to grow in line with productivity - employment would grow faster. But there is an obvious danger that the rapid rate of growth of real earnings - 2<sup>3</sup>/<sub>4</sub>% a year since the end of 1982 - will continue into the MTF period. If so, the effect would be to raise both productivity growth and unemployment. In previous MTF projections we have often under-estimated the extent of future growth in real wages and productivity. This was the main reason why the output-inflation split of money GDP growth has more often than not turned out better than expected but unemployment has been worse.

### Fiscal Prospects

13. The public sector accounts have been projected on two separate assumptions about public expenditure:

**The Forecast case.** This makes the same type of assumptions about overspending as in Miss Peirson's report of 30th January. However, inflation is below that in the January forecast, and so the level and growth of public expenditure in cash terms are lower. The planning total in 1989-90, the year beyond the PEWP period, is projected to grow at a similar rate in real terms to that in the earlier years.

**The Plans case.** This assumes that the public expenditure planning total is as in the 1986 White Paper. It is assumed to be 3% higher in cash terms in 1989-90 than in 1988-89, that is, constant in real terms.

14. We regard the Forecast case as being the more realistic - indeed expenditure could well turn out still higher. In practice the published plans have nearly always been exceeded, at least in the later years. This is especially likely to be the case with the upward revision of the inflation assumption. This will increase the pressure on the existing cash plans through formal price uprating and attempts to avoid cuts in real terms. In other words, part of the fiscal adjustment in projections based

on the Plans case should be expected to be allocated to expenditure increases rather than to tax cuts. The tables published in the MTFS are normally based on the Plans case and therefore overstate the likely scope for tax cuts.

15. The Forecast and Plans public expenditure planning totals, together with those in the January forecast and 1985 MTFS, are:

Public Expenditure Planning Total

	£ billion				
	1985-86	1986-87	1987-88	1988-89	1989-90
Forecast case	134.0	138.9	145.8	152.1	158.2
Plans case*	134.0	139.1	143.9	148.7	153.2
January forecast	133.9	139.0	146.2	154.1	
1985 MTFS	134.2	139.0	143.9	148.2	

\*As in 1986 PEWP for 1986-87 to 1988-89; 1989-90 3% above 1988-89.

The cumulative difference between the Forecast and Plans cases is about £5 billion.

16. The PSBR is assumed to decline to 13 $\frac{1}{4}$ % of GDP in 1988-89 as in the 1985 MTFS, and then to 11 $\frac{1}{2}$ % of GDP in 1989-90. North Sea oil revenues are projected to decline as in the January forecast: from £11.8 billion in 1985-86 and £7.8 billion in 1986-87 to £6.2 billion in 1989-90. Of course this projection is particularly uncertain, and subject to significant change before the Budget. Non-oil revenues are projected on the usual MTFS assumptions of constant tax and contribution rates and allowances and full indexation and revalorisation.

17. The detailed fiscal projections are shown in the Annex tables. The summary for the Forecast case is:

Expenditure, Receipts and Borrowing

	£ billion				
	1985-86	1986-87	1987-88	1988-89	1989-90
General Government expenditure	157.8	163.6	171.2	178.3	184.8
General Government receipts	149.4	157.9	168.7	178.6	186.0
Fiscal adjustments from					
previous years	-	-	2.6	5.4	8.9
Annual fiscal adjustment	-	2.6	2.8	3.5	0.2
PCs' market and overseas					
borrowing	-1.3	-0.7	-0.8	-1.1	-1.1
PSBR (£ billion)	7.1	7.6	7.1	7.5	6.8
(% of GDP)	2.0	2.0	1.75	1.75	1.5
Money GDP at market prices	356	380	405	430	453

18. According to these projections, there is a cumulative fiscal adjustment of £9 billion over the MTFs period. It is larger with the lower expenditure in the Plans case: in the Forecast case some of the fiscal adjustment is being allocated to increases in expenditure:

Cumulative Fiscal Adjustment

	£ billion			
	1986-87	1987-88	1988-89	1989-90
Forecast case	2.5	5.4	8.9	9.1
Plans case	2.4	7.3	12.3	14.2
1985 MTFs	3.7	6.6	10.0	

The fiscal adjustment in the Plans case is, by the end of the period, somewhat higher than that in the 1985 MTFs. This reflects an almost identical path for the planning total (paragraph 16 above), and lower oil revenues more than offset by higher non-oil revenues. The higher non-oil revenues in both Forecast and Plans cases than in the 1985 MTFs reflect the higher level and growth rate of money GDP - both output growth and inflation are assumed to be higher - than in the 1985 MTFs projections. It is perhaps unrealistic to assume the same planning total in cash terms in the face of higher inflation.

19. As usual, the fiscal adjustment is attributable mainly to public expenditure restraint (including the benefits from privatisation). This is clear from a comparison of the main items (in the Forecast case) compared with money GDP:

**Expenditure and Receipts Relative to Money GDP**

(per cent of GDP)

	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
Public expenditure					
planning total	37.6	36.5	36.0	35.4	34.9
Other expenditure	6.7	6.5	6.2	6.1	5.9
<b>General Government Expenditure</b>	<b>44.3</b>	<b>43.0</b>	<b>42.2</b>	<b>41.5</b>	<b>40.8</b>
Taxes on Income, Expenditure					
and capital*	31.9	31.6	31.9	32.0	31.7
Other receipts	10.0	9.9	9.7	9.6	9.4
<b>General Government Receipts</b>	<b>41.9</b>	<b>41.5</b>	<b>41.6</b>	<b>41.6</b>	<b>41.1</b>
Cumulative Fiscal Adjustment	-	-0.7	-1.3	-2.1	-2.0
PCs Market and Overseas					
Borrowing	-0.4	-0.2	-0.2	-0.3	-0.3
<b>PSBR</b>	<b>2.0</b>	<b>2.0</b>	<b>1.7</b>	<b>1.7</b>	<b>1.5</b>
<b>*of which:</b>					
North Sea Taxes	3.3	2.0	1.6	1.5	1.4

20. The planning total declines by 2<sup>1</sup>/<sub>2</sub>-3 percentage points of GDP by the end of the period. With some decline also in debt interest (included in other expenditure), general government expenditure falls by 3<sup>1</sup>/<sub>2</sub> percentage points. Over half of this is available for tax cuts - the cumulative fiscal adjustment is 2% of GDP. The rest contributes to the reduction in the PSBR (1<sup>1</sup>/<sub>2</sub>%), the decline in interest and other receipts (1<sup>1</sup>/<sub>2</sub>%), and minor items. The remarkable feature is that there is no significant decline in the total of North Sea and non-North Sea taxation relative to GDP - not even in 1986-87 when North Sea taxation falls by 40%. The buoyancy of non-North Sea revenues has already been noted in the short-term forecast.

21. Rough calculations of the fiscal prospects with lower oil prices suggest that, with the same PSBR path, the cumulative fiscal adjustment would be about £2<sup>1</sup>/<sub>2</sub>-3 billion on the Forecast case if the oil price was \$5 lower throughout.

WBS

The PSBR Path

22. These medium-term projections assume the same PSBR as in the 1985 MTFS. If it is decided to reduce the PSBR in 1986-87 because of the increase in privatisation proceeds, the uncertainty over the oil price, the high interest rates or for other reasons, consideration will have to be given to the subsequent path of the PSBR. To the extent that the reduction in 1986-87 reflected privatisation proceeds or interest rates, there would be a case for reducing the path by much the same amount throughout the period because these factors are projected to persist. A lower level of the PSBR throughout would not alter the annual fiscal adjustments in 1987-88 and later years.

23. Oil price uncertainty on its own does not necessarily point to a different PSBR path once the uncertainty has been removed. But oil price developments have another implication. We have argued that one reason for having only a very gradual decline in the PSBR over the MTFS period was the fall in oil revenues. But we are now expecting a much slower fall in oil revenues after 1986-87 than formerly, from 2.0% of GDP in 1986-87 to 1.4% in 1989-90\*. This suggests that the decline in the PSBR after 1986-87 might be slightly faster than in the 1985 MTFS.

24. These are issues to return to when the view about the 1986-87 PSBR becomes firmer.

Handwritten notes in red ink: a large bracket on the left side of paragraphs 23 and 24, and several vertical lines with numbers like 3/4, 1/2, 1 1/2, 1 1/2, 1 1/2, 1 1/2.

\*In the 1985 MTFS they were projected to fall from 3.1% of GDP in 1986-87 to 2.0% in 1988-89.

## PLANS CASE

Fiscal Arithmetic in Cash Terms

£ billion

	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
<u>General Government Expenditure</u>					
1 Public Expenditure Planning Total	134.0	139.1	143.9	148.7	153.2
2 Interest Payments	17.5	18.3	18.6	19.0	19.2
3 Other Adjustments	6.3	6.4	6.8	7.2	7.3
<b>4 Total General Government Expenditure</b>	<b>157.8</b>	<b>163.8</b>	<b>169.2</b>	<b>174.9</b>	<b>179.7</b>
<u>General Government Receipts</u>					
5 Taxes on Income, Expenditure and Capital	113.6	120.1	129.3	137.3	143.5
6 National Insurance and Other Contributions	24.3	26.2	28.1	29.9	31.6
7 Interest and Other Receipts	12.1	11.9	11.8	11.5	11.5
8 Accruals Adjustment	-0.5	-0.4	-0.5	-0.1	-0.5
<b>9 Total General Government Receipts</b>	<b>149.4</b>	<b>157.9</b>	<b>168.7</b>	<b>178.6</b>	<b>186.0</b>
10 Of which: North Sea Tax	11.8	7.8	6.5	6.6	6.2
<u>Public Sector Borrowing</u>					
11 General Government Expenditure	157.8	163.8	169.2	174.9	179.7
12 General Government Receipts	149.4	157.9	168.7	178.6	186.0
13 <sup>respective</sup> Implied Fiscal Adjustment (annual)	-	2.4	7.3(4.9)	12.3(5.0)	14.2(1.9)
14 General Government Borrowing Requirement	8.4	8.3	7.9	8.6	7.9
15 PCs Market and Overseas Borrowing	-1.3	-0.7	-0.8	-1.1	-1.1
<b>16 Public Sector Borrowing Requirement</b>	<b>7.1</b>	<b>7.6</b>	<b>7.1</b>	<b>7.5</b>	<b>6.8</b>
17 - As % of GDP	2.0	2.0	1.75	1.75	1.5
18 Money GDP at Market Prices (£bn)	357	380	405	430	453

FISCAL  
ARITH-  
METIC  
IN CASH  
TERMSPLANS  
CASE

These figures will clearly change (eg we may well have a different set of price assumptions). You are now being asked to agree them now.

## FORECAST CASE

Fiscal Arithmetic in Cash Terms

	£ billion				
	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
<u>General Government Expenditure</u>					
1 Public Expenditure Planning Total	134.0	138.9	145.8	152.1	158.2
2 Interest Payments	17.5	18.3	18.6	19.0	19.2
3 Other Adjustments	6.3	6.4	6.8	7.2	7.3
<b>4 Total General Government Expenditure</b>	<b>157.8</b>	<b>163.6</b>	<b>171.2</b>	<b>178.3</b>	<b>184.8</b>
<u>General Government Receipts</u>					
5 Taxes on Income, Expenditure and Capital	113.6	120.1	129.3	137.3	143.5
6 National Insurance and Other Contributions	24.3	26.2	28.1	29.9	31.6
7 Interest and Other Receipts	12.1	11.9	11.8	11.5	11.5
8 Accruals Adjustment	-0.5	-0.4	-0.5	-0.1	-0.5
<b>9 Total General Government Receipts</b>	<b>149.4</b>	<b>157.9</b>	<b>168.7</b>	<b>178.6</b>	<b>186.0</b>
10 Of which: North Sea Tax	11.8	7.8	6.5	6.6	6.2
<u>Public Sector Borrowing</u>					
11 General Government Expenditure	157.8	163.6	171.2	178.3	184.8
12 General Government Receipts	149.4	157.9	168.7	178.6	186.0
<b>13 Implied Fiscal Adjustment</b>	<b>-</b>	<b>2.6</b>	<b>5.4</b>	<b>8.9</b>	<b>9.1</b>
14 General Government Borrowing Requirement	8.4	8.3	7.9	8.6	7.9
15 PCs Market and Overseas Borrowing	-1.3	-0.7	-0.8	-1.1	-1.1
<b>16 Public Sector Borrowing Requirement</b>	<b>7.1</b>	<b>7.6</b>	<b>7.1</b>	<b>7.5</b>	<b>6.8</b>
17 - As % of GDP	2.0	2.0	1.75	1.74	1.5
18 Money GDP at Market Prices (£bn)	357	380	405	430	453

FORECAST CASE



STATUS OF MONEY  
GDP/ERRORS +  
VARIABILITY OF DATA

RANGE FOR  
MONEY GDP

## A RANGE FOR MONEY GDP

### Introduction

This note considers the arguments for and against setting ranges for money GDP in the MTFs. It is assumed that money GDP figures would continue to be given for all four years of the MTFs.

### The Status of Money GDP

2. In all previous versions of the MTFs, the figures for money GDP have been presented as assumptions, rather than objectives or targets. It is intended, however, that a higher profile should be given to them in the 1986 version. But we are still agreed that it would not be appropriate for money GDP to be a target.

3. Therefore this note assumes that it will be included in the MTFs as a statement of the Government's strategic medium term objective for nominal demand. In addition money GDP may play a relatively limited role in monitoring monetary conditions in the short term.

### Errors and Variability in the Data

4. Before considering the arguments about ranges, it is helpful to look at information on the size of data and forecasting errors and variations in money GDP growth about its trend. This indicates the sort of fluctuations in money GDP growth that might be expected.

5. The CSO published an analysis of past data errors for both real and money GDP in the July 1985 issue of Economic Trends, and this is used to indicate the range of values of the data after revision which is consistent with first published quarterly estimates. For money GDP the width of the range is currently 2%, consistent with a two thirds probability of the final revised data lying within it.

6. In looking at the variability of money GDP growth and forecast errors there is a good case for concentrating on the period since 1979-80. The policy background in the 1970s was materially different from the present framework of the MTFs; there was less emphasis on controlling the growth of nominal demand; and the general rate of inflation and nominal income

growth was higher. This would lead us to expect less variation in money GDP growth now than in the 1970s, and hence lower average forecasting errors. The data for the 1970s would be expected to be towards the upper bound of the necessary range.

7. A further consideration is whether the measures of variability and forecast error should include or exclude major shocks, or should exclude only shocks of a certain nature. For example they might exclude readily identifiable supply shocks - such as the miners' strike, the three-day week or the short term impact of the oil shock in 1979-80. The case for doing this is that we wish to measure "normal" variability and error only. If the Government were in fact to have ranges for money GDP, it would probably be necessary to accommodate major shocks or to reassess both forecasts and policies. There is a parallel here with the monetary ranges: it is to be expected that major shocks such as the ending of the corset would take monetary growth outside the ranges.

8. In practice, adjusting for the miners' strike makes very little difference to the figures for the last five years. Figures are thus given only on a strike adjusted basis. But inclusion or otherwise of 1979-80 does make a difference, so figures are given on both bases. The table below gives figures for the variability of money GDP growth about its trend, and deviations of outturn from the forecasts made each year at Budget time.

9. The variability of money GDP growth is clearly lower in the 1980s than in the 1970s, as one would expect. This is true for both financial year and quarterly data, with the standard deviation over the last five years for year on year changes put at around 1%. Variability of the quarterly data is slightly greater than for the financial year data, as one would expect, but the standard deviation is still only about 1 $\frac{1}{4}$ % for the period since 1980-81.

Money GDP Growth: Variability and Forecast Errors\*

	Standard deviation of money GDP growth about its trend		Root mean square forecast error, for year-on-year growth	
	<u>Year on Year</u>	<u>Quarter on a year earlier</u>	<u>One year ahead</u>	<u>Two years ahead</u>
1971-72 to 1979-80	3.2	4.2	2.5	6.5**
1980-81 to 1984-85	0.9	1.3	1.6	1.3
1980-81 to 1985-86	1.0	1.3	1.5	1.2

\* Strike adjusted.

\*\* 1972-73 to 1979-80

10. The same picture emerges when looking at forecast errors. Using financial year data, the root mean square error of the one year ahead forecast of money GDP growth in the 1970s - using the factor cost measure - was about 2<sup>1</sup>/<sub>2</sub>% when looking one year ahead, compared with 1<sup>1</sup>/<sub>2</sub>% in the 1980s.

11. The implication of these figures is that there is a 95% probability that money GDP growth will lie within a range of 4-6 percentage points around the central figure, assuming the experience since 1980-81 were to be repeated. There is a roughly two-thirds chance that it will lie within a range of 2-3 percentage points.

12. These ranges would be wider if more weight was given to the experience of the 1970s. The change in policy since 1979 - designed to bring inflation down and maintain a stable nominal framework - seems to have succeeded in reducing variability and forecast error. Since 1981 the money GDP path has been remarkably stable. But this is a short period on which to base any firm conclusions. We should not necessarily assume that the path of money GDP will be as smooth in the future as it has been in the last few years.

Possible Reasons for Setting Ranges for Money GDP

13. With monetary aggregates, the upper and lower points of the target range are essentially triggers for the Government to take action - or at least triggers for thought. For money GDP the situation would be rather different because its operational role in the short term is more limited. There would be more emphasis on thought and less on action. With this in mind it is possible to set out a number of possible reasons for money GDP ranges.

14. The range could indicate the likely range of forecasting error, with no presumption of either thought or action should money GDP fall outside it. But this objective could be achieved just as well by giving general information on margins of error, which would depend on how far ahead the Government was forecasting, along the lines of Table 3.7 and 3.8 of the FSBR (copy attached).

15. The range could reflect the normal variation of annual money GDP growth about its trend, given the policy framework, again with no presumption of action should money GDP fall outside. But it is not clear what purpose this would serve as it would not take into account the extent to which the variation could be forecast.

16. The range could reflect the extent of average errors in the data, and so give an indication of the range of actual growth rates compatible with any given recorded growth rate. This could certainly be useful to commentators and markets. Indeed, such information would be essential for interpretation of out-turn data in relation to the government's forecast. But again it is not clear that providing ranges in the MTFB would be the best means of promulgating this information.

17. The range could describe the variation in money GDP growth which the Government would regard as acceptable in the short term, given its strategic objectives in the medium term. In this case there clearly would be some presumption that action would be taken if money GDP growth fell outside the range, though it would not follow that action would be taken within the year.

18. This would be rather different in nature from the other three reasons. This interpretation of the ranges would not simply provide information on

the degree of uncertainty underlying the projections; the ranges would also indicate to the markets and to commentators the sort of conditions which would occasion a policy response from the Government. They would therefore be of considerably greater significance and should presumably play a greater role in the formation of expectations.

19. It is far from clear, however, that setting ranges for money GDP on this basis would be helpful to the Government in implementing its policies. If money GDP growth were to fall outside the range for the current year, it would not necessarily be desirable that action should be taken within the year to bring it back within the range - though of course it may be. Since money GDP is a strategic objective relating to the medium term, it does not carry the same significance in the short term as the monetary aggregates. It may be that action to bring it back onto track should be taken in the next Budget rather than within the year. Alternatively, it may be that the objective for money GDP should itself be altered.

20. The Government would wish to take account of what was happening to the split of money GDP, as well as the overall growth rate, before deciding on the appropriate monetary and fiscal responses. This is quite unlike situations where the monetary aggregates move outside their target ranges, which indicate - in principle at least - the need for a fairly immediate monetary response.

21. Giving ranges for money GDP thus runs the risk of misleading the markets, since there would be an inevitable tendency for the end points of the ranges to be seen as trigger points. This may result in destabilising behaviour unless it can be made clear that the ranges for money GDP carried different implications from the ranges for the monetary aggregates. The government might have some difficulty in making this distinction clear to the markets.

Conclusion

22. The main conclusions of this note are as follows:

- (i) There is little to be gained from having ranges for money GDP growth to indicate the variability of the series, or the extent of data and forecasting errors. It may well be useful for such information to be given, but this can be done by other means.
- (ii) It would be potentially more useful to give ranges for money GDP which indicate the government's willingness to tolerate short term divergences from the desired medium term path.
- (iii) But money GDP has a different status from the monetary aggregates. The limits of a range for it may not necessarily indicate the need for a policy response within the year, and would contain no information about the desirable mix of monetary and fiscal responses. It runs the risk, therefore, of misleading the markets and causing destabilising behaviour.

**Table 3.7 Forecast and outturn**

	Forecast	Outturn	Average error from past forecasts
RPI: per cent increase between the fourth quarters of 1983 and 1984	4½	4½	2
	Forecast	Latest estimate/forecast	Average errors from past forecasts
Total output: per cent change between 1983 and 1984	3	2½ (3½)*	1
Current account of the balance of payments in 1984, £ billion	2	0 (2½)*	2½
PSBR, financial year 1984-85, £ billion	7½	10½ (7½)*	4½

\* Figures in brackets adjust the latest estimates for the direct effects of the coal strike.

**Table 3.8 Short-term economic prospects**

	Forecast	Average errors from past forecasts*
<b>A. Output and expenditure at constant 1980 prices</b>		
Per cent changes between 1984 and 1985:		
Gross domestic product (at factor cost)	3½	1
Consumers' expenditure	3	1
General Government consumption	2	1½
Fixed investment	2	2
Exports of goods and services	6½	2½
Imports of goods and services	3½	2½
Change in stockbuilding (as per cent of level of GDP)	0	½
<b>B. Balance of Payments on current account</b>		
£ billion:		
1984	0	—
1985	3	2½
1986 first half (at an annual rate)	3	4
<b>C. Public Sector Borrowing Requirement</b>		
£ billion (in brackets per cent of GDP at market prices):		
Financial year 1984-85	10½ (3½)	1 (½)
Financial year 1985-86	7(2)	4½ (1½)
<b>D. Retail Prices Index</b>		
Per cent change:		
Fourth quarter 1984 to fourth quarter 1985	5	2
Second quarter 1985 to second quarter 1986	4½	3½

\* The errors relate to the average differences (on either side of the central figure) between forecast and outturn. The method of calculating these errors has been explained in earlier publications and government forecasts (see Economic Progress Report June 1981). The calculations for the constant price variables are derived from forecasts made during the period between June 1965 and October 1982. For the current balance and the retail prices index, forecasts made between June 1970 and October 1982 are used. For the PSBR, Budget forecasts since 1967 are used. The errors are after adjustment for the effects of major changes in fiscal policy where excluded from the forecasts.

FORE-  
CAST +  
OUTTURN  
SHORT  
TERM  
Economic  
PROSPECTS

GERMAN  
MONETARY  
TARGETS FOR  
1986

RP2.7

CONFIDENTIAL

*by for  
MTFS (monetary  
section) meeting  
c. 20 Feb (p/chacl)*



FROM: P WYNN OWEN  
DATE: 10 February 1986

*1- R  
2- P*

PS/SIR P MIDDLETON

*Meeting on 2/2.  
10.00.*

- cc PS/Chief Secretary
- PS/Financial Secretary
- PS/Economic Secretary
- PS/Minister of State
- Sir T Burns
- Mr Cassell
- Mr Peretz
- Mr Scholar
- Mr Walsh
- Mr Wood
- Mr Cropper
- Mr Davies
- Mr Lord

**GERMAN MONETARY TARGETS FOR 1986**

... The Chancellor has seen the attached section (marked X) in the Monthly Report of the Deutsche Bundesbank. He notes this is relevant to the monetary section of the MTFS (and his subsequent speech).

*P.*

P WYNN OWEN



# Monetary target for 1986 and revision of the minimum reserve regulations

## Monetary target for 1986

13

At its meeting on December 19, 1985 the Central Bank Council of the Deutsche Bundesbank adopted the monetary target for 1986. It provides that the expansion of the central bank money stock between the fourth quarter of 1985 and the fourth quarter of 1986 is to be kept within a range of  $3\frac{1}{2}$  to  $5\frac{1}{2}\%$ . Through this envisaged increase in the money supply, strong real growth of the economy is facilitated from the monetary angle while the virtual price stability already achieved is safeguarded. As in the previous year, the derivation of the monetary target was based on the expected average annual rise in production potential calculated at current prices. For the present year this rise was put at  $4\frac{1}{2}\%$ .

When estimating the production potential, it was found that in the current year the scope for real economic growth will expand by about  $2\frac{1}{2}\%$  and that at the same time it will be possible to restrict the increase in the overall price level, as measured by the GNP deflator, to  $2\%$ . The rise in "real" production potential, i.e. the expansion of productive capacity and the labour potential, will probably be slightly greater in the present year than in the last two years. The overall supply of labour is growing because of a further inflow of manpower to the labour market (a mounting proportion of women, in particular, in the labour force and a consistently strong influx of young people wishing to start work), and in the next twelve months the stock of utilisable fixed assets is likely to go up slightly faster than hitherto, benefiting from the high level of investment in machinery and equipment and the upturn in construction investment. This stronger expansion of overall production potential has enabled the Bundesbank to raise the target corridor for the growth of the central bank money stock by  $\frac{1}{2}$  percentage point compared with 1985. The price component included corresponds to the actual increase in the GNP deflator in 1985. This normative targeting on the price side certainly involves an ambitious stabilisation policy stance, since the level of prices towards the end of 1985 alone would mean that, given complete price stability during 1986, on an annual average the deflator would turn out  $\frac{3}{4}$  percentage point higher in 1986 than it did last year. In the fourth year of the economic upswing, which has now started, prices and costs will undoubtedly be exposed to some pressure, for in numerous areas of the manufacturing sector, and especially in the capital goods field,

production is beginning to come up against capacity barriers. Moreover, the outcome of this year's wage round is still uncertain.

From the monetary angle, the envisaged expansion of the central bank money stock will not only permit the growth of real GNP to continue but also allow available productive reserves to be utilised as well; this is likely if — as widely expected — real GNP increases by 3 to 3½% in 1986. This will tend to enable employment to rise even more strongly than before. Any such rise will owe a good deal to the fact that in 1986 exports will not play such an unduly prominent part in the expansion of demand. Besides the continuation of the strong upswing in capital spending, a recovery of consumer demand and demand for construction work is to be expected in the course of this year. The industries which will derive particular benefit from this tend to be labour-intensive. At the same time the Federal Republic of Germany, through the strengthening of its domestic demand and the expected acceleration of its economic growth compared with the previous year, will make a major contribution to the revival of global business activity and the containment of its external surpluses.

Favourable economic trends at home presuppose, however, that domestically determined prices and costs remain nearly stable (as was assumed when deriving the monetary target). Under this condition monetary policy can continue to be conducted in the same way as in the year which has just ended, when the central bank money stock increased by 4½% between the fourth quarter of 1984 and the fourth quarter of 1985 (see page 6 of this Report). The average annual growth of likewise 4½% in the money supply aimed at in the present year is matched by a similar four-quarter growth rate of the central bank money stock (between the fourth quarter of 1985 and the fourth quarter of 1986). This yields in purely arithmetical terms the adopted target corridor of 3½ to 5½%, if a target range of 2 percentage points is retained for the current year, as it has been for the last two years. This range has proved to be sufficient to absorb statistical fluctuations in such a complex aggregate as the central bank money stock.

The envisaged expansion of the central bank money stock in the course of this year is on roughly the same scale as in the last two years. Hence the Bundesbank's policy is in practice largely complying

with the recommendation to adopt a medium-term orientation of monetary targeting that has repeatedly been made by the German Council of Economic Experts. In formal terms, however, the Bundesbank is not following the advice to set a monetary target for several years ahead, since the underlying domestic and external conditions cannot be foreseen over the longer term. This is why, for the present year, the Bundesbank has abided by its practice of setting the monetary target for only one year at a time.

#### Revision of the minimum reserve regulations

At its meeting on December 19, 1985 the Central Bank Council of the Deutsche Bundesbank took a decision of principle concerning the future revision of the minimum reserve regulations. This decision is not primarily motivated by monetary policy aims but is mainly intended to take account of recent developments in national and international financial markets by means of an appropriate amendment of the minimum reserve regulations.

In order to make German financial centres more competitive, the Bundesbank considers it justifiable to lower noticeably the reserve ratios for time liabilities and savings deposits. For the same reason the pattern of reserve ratios is to be altered simultaneously.<sup>1</sup> In addition, banks' foreign currency liabilities to non-residents are to be largely (i.e. to the extent of their book claims on non-residents in foreign currency with maturities of less than four years) exempted from reserve requirements as part of an offsetting arrangement.

Especially in the case of large-scale time deposits, which are not subject to minimum reserve requirements in the Euro-markets but constitute a major means of funding international lending operations, foreign money-dealing centres have an interest rate advantage that varies according to the interest rate level and the reserve ratios. This advantage tends to favour banking transactions in financial centres abroad where minimum reserves are not required. The planned substantial reduction of the minimum reserve burden on time liabilities and savings deposits (which are linked with such liabilities in a certain sense) as well as the extended offsetting arrangements for foreign currency liabilities will help to lessen the competitive advantages of foreign banking centres; even so, certain other advantages enjoyed by these centres — some of which may

<sup>1</sup> The new pattern of reserve ratios is expected to be as follows:

(a) Reserve ratios for liabilities to residents:

Sight liabilities	
up to DM 10 million	6.0 %
over DM 10 million to DM 100 million	9.0 %
over DM 100 million	11.0 %
Time liabilities	4.5 %

Savings deposits	3.75 %
(b) Reserve ratios for liabilities to non-residents:	
Sight liabilities	11.0 %
Time liabilities	4.5 %
Savings deposits	3.75 %
without any differentiation by stages on the progressive scale.	

be very important — (such as easy supervisory rules, tax incentives and locational benefits) will remain effective. Upon the entry into force of the new regulations the minimum reserves required of the banks will go down by a total of about DM 8 billion, but as no relaxation of monetary policy is intended thereby, this “release effect” will have to be neutralised in due course by liquidity-absorbing measures in the opposite direction (such as cuts in the rediscount quotas and the non-renewal of securities repurchase agreements).

As soon as the revision of the minimum reserve regulations has come into force, the Bundesbank will not raise any further objections to the issue by banks licensed in Germany of bonds denominated in Deutsche Mark which have the characteristics of certificates of deposit. However, the Bundesbank attaches importance to any future market for such paper being based in Germany and hence to DM-denominated certificates of deposit being issued only in this country. By authorising the issue of such paper the Bundesbank is continuing the policy it initiated last May of further enhancing the attractiveness of domestic financial centres by allowing internationally well-established financial instruments to be used in Germany as well. Following the introduction of variable rate notes, zero-coupon bonds and bond issues in conjunction with swap agreements, the possibility of issuing, in future, certificates of deposit denominated in Deutsche Mark represents a further enrichment of the range of bank products available in Germany to domestic and foreign investors.

In connection with the new approach planned for DM-denominated certificates of deposit, the Bundesbank expressly reaffirms that the minimum reserve regulations must be retained as an effective monetary policy instrument. In recent years, it is true, the minimum reserve instrument has no longer had to be used for the short-term control of bank liquidity, since the Bundesbank has devised for this purpose open market instruments that can be wielded more flexibly. But another important feature of the minimum reserve regulations is that the banks' obligation to maintain deposits at the Bundesbank over and above the “working balances” they need for current payments acts as a “brake on money creation”. This is because any increase in required minimum reserves generates a demand among the banks for additional central bank balances, and the Bundesbank is able to decide how

and at what rates it will satisfy this demand. This objective is underlined by the fact that bearer and order bonds newly issued by banks and with original maturities of less than two years which form part of an overall issue arrangement will in future be subject to minimum reserve requirements in accordance with section 16 of the Deutsche Bundesbank Act. Hence the reserve ratios for banks' time liabilities will apply in future to DM-denominated certificates of deposit issued in this form, too. Without this extension of the application of section 16 of the Bundesbank Act to bank bonds with original maturities of less than two years there would have been reason to fear that deposits subject to minimum reserve requirements would be shifted in future into short-dated DM-denominated certificates of deposit and thus taken out of the reach of the minimum reserve instrument. Already at times in the past the banks were seen to be issuing more short-dated bonds with maturities of about one year and offering them to non-banks as a “substitute” for short-term time deposits, which were subject to minimum reserve requirements. To this extent the planned revision will close an existing “gap” in the minimum reserve regulations which has placed those banks which issue no shorter-dated bank bonds at a disadvantage.

The measures adopted will come into force in a few months. Further details will be communicated to the banks in good time.

From: K F MURPHY

Date: 19 February 1986

Jamp.

NOTE OF A MEETING HELD ON TUESDAY 18 FEBRUARY 1986, IN SIR PETER MIDDLETON'S ROOM, HM TREASURY

**Present:** Sir Peter Middleton  
Sir Terence Burns  
Mr Cassell  
Mr Peretz  
Mr Scholar  
Mr Odling-Smee  
Mr Riley  
Mr Walsh  
Dr Rowlatt

MTFS

The meeting had before it Mr Riley's note of 17 February with drafts for the 1986 MTFS, Dr Rowlatt's note of the same date on possible ranges for monetary aggregates in the MTFS and Mr George's draft MTFS section.

2. Sir Peter Middleton said he would like to focus first on the money GDP figures given in Mr Riley's note. These had been discussed with the Chancellor and provisionally agreed. The figures were higher than the previous year's MTFS. But they were bound to be different on a \$15 oil price variant; the money GDP growth rate in 1986-87 would be higher, while in succeeding years it would be lower, compared to last year. There was a policy decision for the Chancellor as to whether he wished to publish such figures which were, at least in later years, counterintuitive as effects of a rapid decline in oil prices. The Chancellor might wish to show a different split in future years between output and inflation.

3. It was agreed that a number of options for the published money GDP figures would have to be submitted to the Chancellor.

In preparing the analysis, it would be useful to distinguish between the oil and non-oil economy. Sir Peter Middleton said that it would be desirable to add a section on money GDP to Dr Rowlatt's paper for submission on Thursday. Sir T Burns pointed out that it would not be possible to produce the numbers for the Chancellor's meeting on Friday. It was agreed, therefore, that Dr Rowlatt's paper would not include the money GDP analysis. Rather, it would be necessary to put a covering note on the paper to the effect that, while the Chancellor would receive a note during the course of the following week on the precise options for the money GDP path, the figures would not be dramatically different from those in the present note.

4. The meeting turned to consider the £M3 figures and the options set out in Dr Rowlatt's note. It was agreed that the analysis in Dr Rowlatt's note reinforced the argument that £M3 would not be a good target. Four possible ranges were offered. There was a case for widening the target range from four to five percentage points on the grounds that the change in velocity of £M3 was faster in the recent past than over the last few years. And a range of 10-15% had an approximate ring to it in keeping with the downgraded status of £M3 relative to last year's MTFS. But Sir T Burns and Sir Peter Middleton argued that changing the size of the range from previous years would draw attention to £M3 and suggest that the authorities had a specific reason for so doing. There was not a compelling reason for a change in the range on operational grounds. They argued that a range of 11-15% would be the most appropriate if the February £M3 figure were, as expected, to be around 15%. If the February figure should turn out at nearer 14%, a range of 10-14% might be more appropriate. Sir Peter Middleton said that Dr Rowlatt's paper should retain the alternative options, but lean towards a range of 11-15% on the assumption that the February figure was 15%.

5. The meeting turned to consider the options for M0 in Dr Rowlatt's paper. Sir T Burns said that he would be hesitant about keeping the same path as last year. If it were necessary to publish a row of figures for future years, he would be inclined to pick a path which declined by one percentage point every 2

years such that the 1986-87 range would be 2-6, the 1987-88 range also 2-6, but the 1988-89 and 1989-90 ranges 1-5. He believed that to publish figures of  $\frac{1}{2}$  percentage points indicated a degree of fine tuning which was inappropriate. Mr Odling-Smee argued that  $\frac{1}{2}$  percentage point figures were quoted for money GDP. It was not clear why they could not also be given for M0. Other countries had published  $\frac{1}{2}$  percentage point figures for M0. In addition, the ranges for the future years were illustrative not targets and a reduction of  $\frac{1}{2}$  percentage point in each year would convey the impression of a gradual reduction. Sir T Burns replied that the use of  $\frac{1}{2}$  percentage points gave a precision to the boundaries of the range which was very considerable relative to the width of the range. Summing up, Sir Peter Middleton said that it would be necessary to look again at the M0 figures in relation to the option chosen for the money GDP path. There was a consensus in sticking to a range of 2-6 for 1986-87. He would be content for table 5 in Dr Rowlatt's note to be retained, but the text might indicate an emphasis on the option which reduced the range by one percentage point every other year. This ought to be included in table 7.

6. The meeting turned to consider the draft MTFS texts attached to Mr Riley's note of 17 February. Sir Peter Middleton said that there was a case for including the paragraphs on recent financial conditions at the start of the MTFS, as in previous years. But these paragraphs might also fit in the section on the forecast. He assumed that the introduction to the MTFS section would be similar to that in previous years. But he thought that paragraph 2.03 brought the importance of money GDP in this year's MTFS too much to the fore. It was too starkly different from previous years' MTFS. He suggested that one alternative might be to begin the section with the standard sentences on the objects of the MTFS. The introductory paragraph might go on to argue that the success of the MTFS could be gauged by the effect on money GDP - a fall from 20% to 8%. The argument might continue then as in the first sentence of paragraph 2.04 emphasising the improved split between inflation and output. Such a presentation would succeed in giving money GDP the desired higher profile, but would do so as an explanation of recent history.

7. Sir T Burns and Mr Cassell said that the first chart showing the growth in money GDP and the target aggregates looked very unusual. It would be preferable, if there were such a chart, to remove the money GDP line. The important point on money GDP was in any event made in the chart on the second page. The first chart could, as an indication of the growth in the target aggregates, be moved to a later part of the MTFS section.

8. It was agreed that the opening should be redrafted along the lines Sir Peter Middleton had suggested. The usual section on recent financial developments might then be put at the start of the forecast section of the FSBR.

9. The meeting turned to consider the remainder of Mr Riley's draft paragraph by paragraph. The square bracketed section of paragraph 2.04, while true, was not very convincing and might better be deleted.

10. The meeting turned to consider the latter half of paragraph 2.05. Such an argument had not been presented in previous FSBRs, but had been set out in an EPR article. It was agreed that the penultimate sentence might be redrafted to read "If the Government's estimate of potential output growth compatible with a given inflation objective changes, it may be appropriate to review the money GDP path". The last sentence could then be deleted.

11. On paragraph 2.06, it was agreed that the phrase "nominal demand" in line 4 ought to be removed. After a brief discussion it was suggested that the paragraph might read along the following lines:

"The money GDP path underlying this year's MTFS is shown in table 2.1. Fluctuations about this path will inevitably occur without necessarily requiring a policy response. The figures reflect the Government objectives for financial policy over the medium term. They are not targets."

*Operational*

It would be possible to split up the second sentence to reflect the two points in the current draft viz. that changes in policy instruments may not bring money GDP back on path quickly and that external changes may affect the money GDP path without it being appropriate for the Government to react. Mr Riley was invited to redraft the paragraph along these lines.

12. On paragraph 2.07, it was agreed that the second sentence was broadly consistent with the Chancellor's previous pronouncements which had been in terms of the mix of monetary and fiscal policy being "not sacrosanct". It was agreed to replace the word "change" in the third sentence by "review".

13. On paragraph 2.08, it was agreed to add at the end of the last sentence the phrase "particularly the exchange rate". It would be appropriate to have the first chart in Mr Riley's draft, stripped of its money GDP line, inserted after paragraph 2.08.

14. On paragraph 2.09, Mr Peretz suggested that the last sentence should begin "This has proved consistent with ...".

15. On paragraph 2.10, Sir Peter Middleton suggested deletion of the first sentence and, in the second sentence, adding the words "of broad money" after the word "response" in the second sentence.

16. In paragraph 2.11, it was agreed that the reference to overfunding becoming a way of life should be deleted. The second sentence should be redrafted along the lines that "The authorities have offset some of the expansionary effects on broad money by heavy funding". The next sentence could then read "But systematic overfunding can make monetary policy harder to operate ...". It would not be appropriate to refer to the Mansion House Speech in the FSBR; the words "in his Mansion House Speech" should therefore be deleted. Finally in that sentence it would be desirable to move the word "recorded".

17. There was a discussion of whether it was necessary to retain paragraph 2.12. Mr Riley argued that it was needed in order



to establish the need for retaining M0. Sir T Burns suggested that there should be a reference to the fact that M2 data had been collected only for a short time period.

18. On paragraph 2.16, Mr Cassell said that the importance of asset prices was overstated. It might be preferable to say "Asset prices can provide a warning of ...".

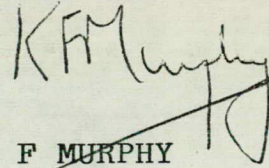
19. On paragraph 2.17, Sir Peter Middleton said that there was a need to include a reference to present policy which implied that if £M3 were to move outside its range and this was regarded as an indicator of changed monetary conditions, it might be necessary to take action which might have an offsetting effect on M0. Mr Odling-Smee said that this might best be done by including a reference to changes in short term interest rates as a tool of monetary policy in the last sentence to the effect that they were more likely to affect M0 than £M3. In the first sentence it was agreed to remove the words "a presumption that" and also to retain the passage in square brackets.

20. In a brief discussion of versions B and C of the draft, Sir Peter Middleton said that version B required a few sentences to explain why figures for a run of years for M0 were not being provided. The table looked very bare at present. One solution might be to remove the money GDP figures from it and to have the table focussing merely on the monetary aggregates. On version C, there should again be an explanation for why M0 figures were not provided for later years. In the text, it would be preferable to retain a range for £M3 rather than to quote a spot figure. And in paragraph 2.18 of version C, it was agreed to remove the second set of square brackets.

21. Finally, there was a brief discussion of next steps. It was agreed to submit Dr Rowlatt's note to the Chancellor by Thursday evening for his meeting on Friday. This note would need to contain a health warning that the figures for money GDP in it while close to those which would be publishable in the MTFS, were subject to change in a further submission in the following week. Additionally, Mr Riley should redraft the MTFS

SECRET

sections attached to his note of 17 February along the lines discussed in the meeting and submit them again to the Chancellor by Thursday evening for his meeting on Friday. It would be desirable to invite Professor Griffiths to the Chancellor's meeting on Friday. The outcome of Friday's meeting could be reflected in a further draft to go to the Chancellor along with the remaining paragraphs of the MTFS section of the FSBR on Tuesday evening of next week. They would then go to the printers. Also on Tuesday evening, Mr Evans would be submitting the forecast update. At about the same time, the revised GDP figures would be available for submission to the Chancellor. It would therefore be possible for a further meeting to be held with the Chancellor later next week to discuss and agree the precise path for money GDP in the MTFS and any changes which that necessitated in the presentation of the monetary section of the MTFS. On the basis of this meeting it would be possible to send a draft section to the Bank of England by the end of next week, with a view to a meeting between the Chancellor and the Bank in the following week.



K F MURPHY

Private Secretary

Circulation: Those present

FROM: PENELOPE A ROWLATT  
DATE: 20 FEBRUARY 1986

CHANCELLOR OF THE EXCHEQUER —

cc EST  
Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr Odling-Smee  
Mr Peretz  
Mr Scholar  
Mr Riley  
Mr Walsh  
Mr Culpin  
Mr Cropper  
Mr H Davies  
Prof B Griffiths

**MONETARY TARGET RANGES**

Attached is a note about the factors affecting the choice of the target ranges for the monetary aggregates in the 1986 MTFs. It is for discussion at your meeting on 21 February.

*Penelope A Rowlatt*

PENELOPE A ROWLATT

CONFIDENTIAL

**CHOICE OF TARGET RANGES FOR MONEY GROWTH IN THE 1986 MTF5**

This note considers factors relevant to the choice of ranges for money GDP growth in the 1986 MTF5. It assumes that a target range for £M3 will be published for 1986-87 only and that a range or ranges for M0 will be published either just for 1986-87 or for the whole of the MTF5 period.

2. In this note the numbers for 1986-87 come from the main January forecast, which had an oil price of \$20, while those for the later years are based on the money GDP and other assumptions agreed with the Chancellor at his meeting on 7 February. However, further work is now being done on a \$15 case and as a result there may be changes in these numbers. It is unlikely that the changes in money GDP growth will be much more than  $\frac{1}{2}$  per cent. Even without the final figures it may be possible to come to some provisional conclusions about appropriate target ranges based on the calculations in this paper. When the final figures are available early next week new numbers will be calculated and a further submission presented.

**Targetting £M3 - past performance**

3. Table 1 shows the target ranges set in previous MTF5s along with the one year ahead predictions for nominal GDP that were available at the time the targets were set. The following features of target setting in the past are clearly apparent.

(i) For 1980-81 and 1981-82 the forecast for nominal GDP was well above the target range for £M3 in the first year, implying that considerable downward pressure would be exerted on the broad money aggregates.

(ii) In the subsequent years, on each occasion, the target range for the first year encompassed the projection for money GDP.

## CONFIDENTIAL

TABLE 1 : £M3 TARGETS AND OUTCOMES

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
<u>Published ranges for £M3 targets</u>									
1980 MTFS	7-11	6-10	5-9	4-8					
1981 MTFS		6-10	5-9	4-8					
1982 MTFS			8-12	7-11	6-10				
1983 MTFS				7-11	6-10	5-9			
1984 MTFS					6-10	5-9	4-8	3-7	2-6
1985 MTFS						5-9	4-8	3-7	2-6
(1)									
<u>Outcome for £M3 - percentage change to Q1</u>									
	18	14	11	8	12	13 <sup>(3)</sup>			
<u>Forecast of money GDP growth to Q1 of next year in MTFSS</u>									
	16	11½	8½	9	6½	7½			
(2)									
<u>Outcome for money GDP<sup>(2)</sup> growth</u>									
to Q1	10	10½	10	7	7½	8½ <sup>(3)</sup>			
financial year									
averages	14	10	9½	8	7	9 <sup>(3)</sup>			

(1) Derived from latest break-adjusted, calendar quarter data - not the precise measure that was targeted.

(2) Market prices not strike adjusted. (3) Estimate.

(iii) In each MTFS the convention has been to reduce the level of the range by 1 percentage point a year over the MTFS period.

(iv) The width of the range has always been  $\pm 2$  percentage points.

(v) The target ranges have been revised upwards only once, in the Budget of 1982.

Taken at face value the target levels set in the first two years implied that a sharp rise in velocity was expected (see table 2), while targets set for subsequent years suggest that little change in velocity was foreseen.

4. The outcome figures indicate that the velocity of  $\pounds 3$  has in fact fallen in each of the years covered (see table 2). However, it fell relatively little in 1982-83 and 1983-84, and these were the only two years in which  $\pounds 3$  growth did not exceed the top of the target range. There was a near miss in 1984-85. It is interesting to note that nominal GDP growth has been close to or within the  $\pounds 3$  target range in every year during this period and is virtually certain to be so again in 1985-86. Forecast errors of nominal GDP growth have generally been small so this confirms that the problem has been with the forecasts of velocity change.

TABLE 2 : GROWTH OF VELOCITY OF  $\pounds 3$ <sup>(1)</sup>

(percentage change Q1, on year before)

	1980-81	81-82	82-83	83-84	84-85	85-86
Implied by centre of MTFS range given forecast of nominal GDP to Q1 of next year	+7	+3½	-1½	0	-1½	½
Outturn	-8	-3½	-1	-½	-3½	-5 <sup>(2)</sup>

(1) End-quarter data for  $\pounds 3$

(2) Estimate

- The centre of the £M3 range for 1986-87

5. There are two approaches that can be taken to presenting the choice of a level for the centre of the £M3 target range. It can be viewed as depending on a projection of the demand for money or it can be derived in an ad hoc assessment of the trend in velocity combined with a projection of money GDP growth.

6. A projection for the demand for money which is made in the context of a fully articulated forecast of the whole economy will incorporate what is likely to happen to interest rates, nominal income, wealth and so on. This forecast would have to be consistent with the government's broad aims for inflation, money GDP growth and interest rates if the growth of money relative to the target ranges was to give the right signals. The Treasury's internal forecast provides such an estimate for £M3, namely 12½ per cent for the average four-quarter rise to financial year 1986-87. This average is the appropriate figure on which to base the level of the target range now that targets apply to the 12 month rates of growth of the aggregates through the financial year.

7. There are disadvantages to this approach. As always, there is a possibility of quite substantial errors in the forecast - in particular, money demand functions are notoriously unstable. However the main disadvantage relates to the difficulty of presenting and explaining the factors taken into account in arriving at the chosen level.

8. An alternative way of presenting a level for the centre of the target range would be to base it on the growth of nominal GDP making an adjustment for any trend change in velocity. This avoids the use of a (possibly controversial) £M3 equation and of forecasts of interest rates and so on. But there is then the problem of assessing the appropriate figure to use for the trend in velocity:

- (i) the average (trend) decline in velocity over the six years since 1980-81 is 3½ per cent a year (given the projected value of 5 per cent for the year to 1986 Q1);

(ii) since the downward trend has accelerated during the last few years it might be thought appropriate to project a continuation of the latest rate, that is, the 5 per cent fall expected in 1985-86.

9. There are three reasons for expecting £M3 velocity to continue to decline fairly rapidly, as in 1985-86, rather than to return to the trend of the whole six years. First, financial innovation in the form of high interest accounts within £M3 may encourage relatively rapid growth of £M3. The distinction between the assets included in £M3 and some of those excluded is becoming eroded: the money that would have flowed into building society accounts in earlier years may be split more evenly between banks and building societies, swelling the growth of £M3.

10. Secondly the present high real interest rates may increase the tendency on the part of companies to invest in financial rather than physical assets. This may be partly offset by the incentives given by the high interest rates to switch from the non-interest bearing element of £M3 into interest bearing assets outside £M3.

11. Finally, there is the possibility that the decision to end overfunding will mean a faster growth in £M3 for a given path of nominal GDP (ie a larger decline in velocity) than was the case during the years 1980 to 1985.

12. These considerations, which are automatically incorporated in the money demand projection, do seem to suggest that the decline in velocity will be above the 5 year moving average, at around 4-6 per cent say. Combined with the pre-Budget forecast projection of an average  $6\frac{3}{4}$  per cent rise in nominal GDP during financial year 1986-87, this would imply a figure around 11 to 13 per cent for the centre of the target range for £M3 growth in 1986-87, broadly in line with the forecast. This suggests that 9-13 per cent, 10-14 per cent or 11-15 per cent would be realistic target ranges for £M3 in 1986-87. Given the magnitude of the upward revision to the range involved with any of these, there is probably a greater cost to coming out of the top of the range than out of the bottom so a higher one is, on balance, to be preferred.



13. On information currently available the February figure for £M3 growth (provisionals published in March) is expected to be 14 or 15 per cent. The rates currently expected for March and April are 16 per cent and 13½ per cent (the sharp rise in April 1985 will come out of the 12-month comparison). It may be that the £M3 target range would lack credibility if the latest published figures were outside its upper limit so the final choice should perhaps await these figures (first guess due on 28 February).

#### Targeting MO - past performance

14. The projections for the growth of MO given in the 1984 and 1985 MTFS are shown in table 3 along with the outcome for 1984-85, the estimate for 1985-86 and the projections for the years to 1989-90 consistent with the provisional 1986 MTFS. Figures for the growth of nominal GDP and for MO velocity growth are also shown.

TABLE 3 : MO TARGETS, OUTCOMES AND FORECASTS

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
1984 and 1985 MTFS	4-8	3-7	2-6	1-5	0-4	
MO growth Outcome/ projected <sup>(1)</sup>	5.5	4½	3	3½	5	4
Money GDP growth Outcome/ projected <sup>(1)</sup>	7.3	8¾	6¾	6½	6	5½
MO velocity growth Outcome/ projected	1½	4½	3¾	3	1	1½

(1) Average growth in financial year (GDP not strike adjusted)

15. The choice of levels for the target ranges for MO is not so problematic as that for £M3. MO has been more predictable and, so far, has stayed comfortably within its target range.

- The M0 target range for 1986-87

16. There would seem to be no case on economic grounds for altering the 2-6 per cent range for 1986-87 of previous MTFSS. The projection for the growth of the demand for M0 through 1986-87 in the pre-Budget forecast varies between  $2\frac{1}{2}$  and 4 per cent, averaging 3 per cent. This projection reflects the assumption of a continuing high level of interest rates along with nominal GDP growth of around 8 per cent at the start of the period falling to 6 per cent by 1987 Q1. It also incorporates the forecasters' view on the continuing effects of innovation on M0. It is broadly consistent with an extrapolation of the past trend in M0 velocity. On average, in recent years, this has increased at around 4 per cent (the figure for 1984-85 is unusually low) suggesting M0 growth of around 2 to 4 per cent in 1986-87.

17. As the expected growth for M0 is in the bottom half of the 2-6 per cent range there is a case for considering reducing it to 1-5 per cent. Moreover one could argue that a one point downward adjustment to the range would help expectations at a time when the £M3 target range was being raised. However, the risk of finding M0 above its range in 1986-87, for example because of unexpected developments in financial innovation, might be considered a worse outcome than finding it below the range - given the scale of the present uncertainty on £M3. This suggests that, whatever the decision on the £M3 range, the 2-6 per cent range for M0 in 1986-87 should probably remain in place. This would have the further advantage of minimising the changes to the MTFSS.

- The later years

18. In the later years the growth in M0 is not expected to fall as much as nominal GDP growth over the MTFSS period because of declining interest rates. As nominal GDP growth is projected to fall by around  $\frac{1}{2}$  per cent a year this suggests very little decline in M0 growth. Despite this, the projections for the growth in M0 demand in table 3 are within the ranges published in 1984 and 1985 until 1988-89.

19. The figure for MO growth implied by a simple extrapolation of the velocity trend - which has been fairly steady at around 4 per cent for some years - would suggest a slightly slower growth of MO than that given in the MTFs projection for the later years. The effect on the growth of MO of the projected fall in short-term interest rates - at about  $\frac{1}{2}$  a percentage point in 1986-87 followed by 4 percentage points during the period to 1990 - is shown in table 4.

TABLE 4 : MO PROJECTION BASED ON TREND VELOCITY AND PATH OF INTEREST RATE

	1986-87	1987-88	1988-89	1989-90
Money GDP growth	$6\frac{3}{4}$	$6\frac{1}{2}$	6	$5\frac{1}{2}$
Velocity trend	4	4	4	4
Allowance for fall in interest rate	$\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$
Implied MO growth	$3\frac{1}{4}$	4	$3\frac{1}{2}$	3

20. These figures all suggest that if the 1985 MTFs target ranges are kept unchanged, the growth of MO is likely to move up to or out of the top of the range by 1988-89. A decline of  $\frac{1}{2}$  per cent a year in the target range, or a 1 point decline every other year, would reduce the likelihood of this. It would also be in line with the projected path for nominal GDP growth and could be presented as such. Possible ranges are shown in table 5.

TABLE 5 : POSSIBLE MO RANGES

	1985-86	1986-87	1987-88	1988-89	1989-90
1985 MTFS	3-7	2-6	1-5	0-4	
<i>down or back then /</i> ½ point	3-7	2-6	1½-5½	1-5	½-4½
a year	3-7	1½-5½	1-5	½-4½	0-4
1 point every	3-7	2-6	2-6	1-5	1-5
second year	3-7	2-6	1-5	1-5	0-4
		1-5	1-5	0-4	0-4
		<i>2-6</i>	<i>2-5</i>	<i>1-5</i>	<i>1-4</i>
1 point every	3-7	2-6	1-5	0-4	-1-3
year					

MO growth

MTFS projection	4½	3	3½	5	4
Trend velocity with adjustment for interest rate		3¼	4	3½	3

The width of target ranges

21. The table below shows, over various periods, the average trend in velocity growth of £M3 and MO and the standard deviation of the variations around the trends, along with the growth of nominal GDP and its standard deviation. The trend velocity of MO has varied less than that of £M3 (columns 1 and 2).

TABLE 6 : VELOCITY GROWTH VOLATILITY FOR £M3 AND MO

	Annual percentage growth of			Volatility of growth of <sup>(1)</sup>		
	£M3	MO	Nominal	£M3	MO	Nominal
	Velocity	Velocity	GDP <sup>(3)</sup>	Velocity	Velocity	GDP <sup>(3)</sup>
	1	2	3	4	5	6
1964Q1-68Q2 <sup>(2)</sup>	½	2	7	2½	1½	1½
1968Q3-70Q4	3½	4½	9	2	1½	1½
1971Q1-74Q2	-6½	2½	12½	4½	3½	2½
1974Q3-80Q2	7	5½	18½	5½	3½	3½
1980Q3-85Q2	-3	4	9½	1½	2	2

(1) Measured by standard deviation about average growth over relevant period. The average growth is shown in the first three columns.

(2) The periods have been chosen with reference to the turning points in the £M3 trend velocity.

(3) Not strike adjusted.

22. A range width based on a standard deviation encompasses two-thirds of random fluctuations. It is clear from the table (columns 4 and 5) that target widths of  $\pm 2$  per cent would have contained a large proportion of the fluctuations in £M3 and MO velocity in recent years, assuming that the trend change in velocity was correctly foreseen. However, in periods of rapid change in velocity - during the early 1970s when £M3 velocity fell steeply and in the later 1970s when it rose sharply - the volatility of £M3 velocity growth was much greater. The above suggests that in normal circumstances a target width of  $\pm 2$  per cent is probably appropriate.

### Concluding remarks

23. The principles determining the choice of target ranges for the 1986 MTFs are the following:

- (i) the levels and widths should be realistic - so that the probability of the margins being breached with policy assessed to be on course is kept as low as possible;

(ii) the levels need to carry the message of a continuing commitment to sound financial conditions and steady downward pressure on inflation;

(iii) they need to maintain the credibility of the continuing MTFs strategy by minimising the change from one MTFs to the next.

For £M3 there has to be a change from last year and it has to be a substantial upward shift, so the concern is simply that it should be realistic. This suggests that 10-14 per cent or 11-15 per cent should be chosen. The 12-month growth rate is expected to be near the top of these ranges, possibly over the top, in February and March of 1986, but should decline later in the year. The final choice could be made after the February provisional figures are available. For MO no change would mean that the path of the centre of the ranges was out of line with the profile of the MTFs projection for money GDP. Further, there would be a distinct possibility that MO growth would move out of the top of the range as interest rates come down. The table below incorporates a slower decline in the MO range than in previous MTFs.

**TABLE 7: GROWTH OF THE MONEY SUPPLY AND MONEY GDP**

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
MO	5.3	3½	2-6	2-6	1-5	1-5
£M3	9.2	15	11-15 (or 10-14)			
Money GDP <sup>(1)</sup>	7.3(8.7)	8½ (7½)	6½	6½	6	5½

(1)

Figures in brackets are adjusted for the coal strike

CONFIDENTIAL

FROM: C J RILEY  
DATE: 20 February 1986

*pcwp*

CHANCELLOR ✓

cc Economic Secretary  
Sir Peter Middleton  
Sir Terence Burns  
Mr Cassell  
Mr Odling-Smee  
Mr Peretz  
Mr Scholar  
Mr Walsh  
Mr Culpin  
Mrs Rowlatt  
Mr Cropper  
Mr H Davies  
Professor Griffiths - No.10

RILEY  
→  
CH/EX  
20/2

**MONETARY SECTIONS OF THE 1986 MTFS**

I attach a draft of the monetary sections of the MTFS, for discussion at your meeting tomorrow morning. It reflects comments by Sir Peter Middleton, Sir Terence Burns and others on an earlier version.

2. The main text is based on the assumption that ranges will be given for M0 covering the whole of the MTFS period, and for £M3 in 1986-87 only. Versions of some paragraphs are also provided (at the end) on alternative assumptions:

Version B - a range is given for one year only for both M0 and £M3

Version C - £M3 growth after 1985-86 is discussed in the text but not given in the table.

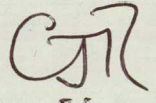
3. The draft assumes that the target range for £M3 in 1986-87, if there is to be one, will be 11-15%. The presentational issues would be fairly similar if the range chosen were marginally different - say 10-14%. The M0 range for 1986-87 is assumed to be as in last year's MTFS. The ranges are discussed in detail in an accompanying note by Mrs Rowlatt.

*below*

CONFIDENTIAL

4. The draft follows the broad approach outlined by Sir Terence Burns in his minute of 6 February. It reflects your intention to give money GDP a higher profile than in previous versions of the MTFs. It assumes that a section on financial developments over the last year, part of the MTFs in previous versions, will this year be included in part 3 on recent developments and prospects.

5. You should note that moving to a \$15 oil price assumption would have implications for the money GDP path. The assumptions provisionally agreed at your meeting on 7 February were based on \$20, and showed a steady decline in money GDP growth over the period. With a \$15 assumption, the figure for money GDP growth in 1986-87 may need to be lower, without any necessary presumption that the figures for later years should be changed. We intend to submit a note early next week on the issues involved, including the monetary implication, but in the meantime the text tries to avoid formulations which necessarily imply a steady decline in money GDP growth.



C J RILEY



DRAFT OF 20 FEBRUARY

MEDIUM-TERM FINANCIAL STRATEGY

2.01 The Medium Term Financial Strategy (MTFS) provides the framework for macro-economic policy. It is designed to achieve falling inflation by means of firm financial policies [ , with lower monetary growth supported by lower public sector borrowing]. It is complemented by micro-economic policies that encourage enterprise, efficiency and flexibility, enhancing the growth of output and the creation of jobs. These policies are succeeding, and the Government will continue with them.

2.02 The success of the MTFS since its introduction in 1980 can be gauged from the paths of money GDP and inflation. Over the past six years, money GDP growth has declined from nearly 20% to around 8%, broadly in line with the assumptions underlying successive versions of the MTFS. The division of money GDP between output growth and inflation has improved considerably. Inflation has come down to 5% and is set to fall further. The economy is well into its <sup>sixth</sup> fifth successive year of growth, the longest period of growth since the 1973 oil crisis.

2.03 Numbers in work are up by around 600 thousand since mid-1983, and productivity has improved considerably. The growth in new jobs, however, has not fully matched the growth in the labour force, and unemployment has remained high. Moderation in pay increases would help to

"What is the MTFS?"  
 "The government - mainly  
 in the form of  
 the money stock & interest rates"

We had this  
 last year  
 (+ a bit to  
 state price)

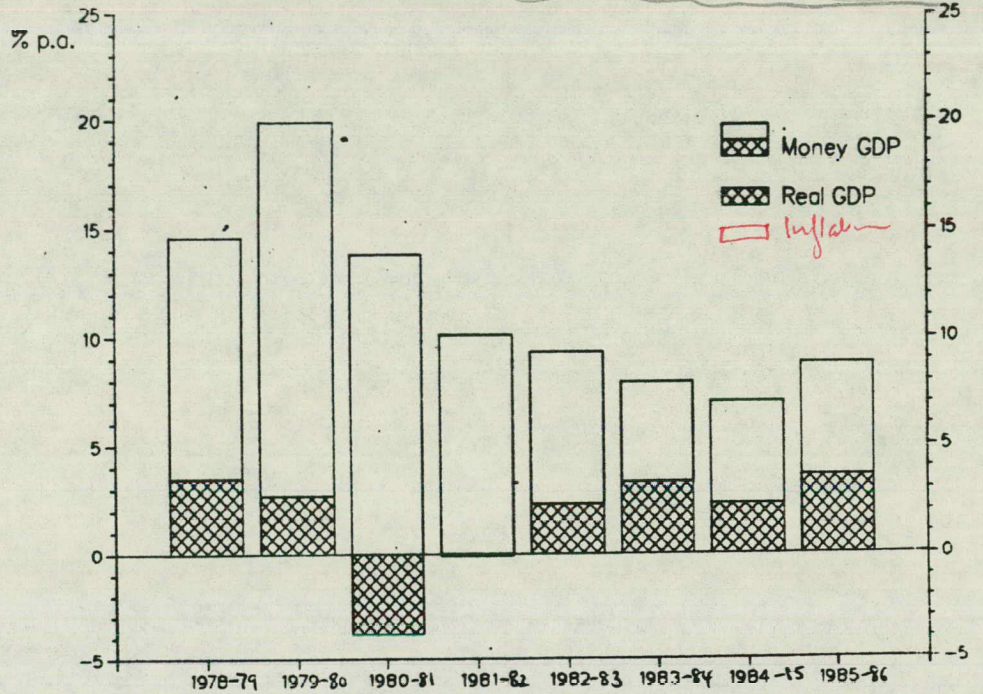
INT. GROSS  
 & INT. RATE

Alternative

in the way  
 of  
 the

~~ensure~~ that rising prosperity was reflected in lower unemployment as well as in higher living standards for those in work.

Money GDP growth and the Output Inflation Division



Objectives and the Framework of Policy

*Look to appendix  
of section 2.04, 1  
don't use this section  
The first sentence could come  
earlier.*

2.04 The MTFIS is designed to ensure that the growth of nominal demand is neither excessive nor deficient. The path set out for money GDP in Table 2.1 reflects the underlying objective for inflation and the growth of output that is considered sustainable in the medium term. [If the government's estimate of potential output changes it may be appropriate to review the money GDP path.]

**The money GDP path**

2.05 Fluctuations around the path of money GDP shown in Table 2.1 will inevitably occur, without necessarily requiring any policy response. [And because the economy takes time to adjust to changes in policy instruments, money GDP

cannot necessarily be brought back to its medium term path very quickly.] The figures indicate broad medium term objectives; they are not targets.

*Process*

*for money cost?*

*Can't give M3 target m.m. M3 target*

**Table 2.1 Growth of the Money Supply and Money GDP**

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
Money GDP (1)(2)	7.3(8.7)	8 <sup>3</sup> / <sub>4</sub> (7 <sup>1</sup> / <sub>2</sub> )	6 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	6	5 <sup>1</sup> / <sub>2</sub>
M0(3)	5.3	3 <sup>3</sup> / <sub>4</sub>	2-6	2-6	1-5	1-5
£M3(3)	9.2	15	11-15			

*Process & output*

*was down*

- (1) The money GDP figure for 1986-87 is a forecast; and in subsequent years the figures describe the government's objective for nominal demand.
- (2) Percentage change on previous financial year. See Table [2.4] for further detail. Figures in brackets for 1984-85 and 1985-86 are adjusted for the coal strike. Rounded to nearest 1/4 per cent.
- (3) 1984-85: percentage change during the year (mid-March to mid-March).  
1985-86: percentage change from mid-February to mid-February.

**Monetary and Fiscal policy**

*Do we need this?*

*So that it looks as if we may be deeply significant - a change spurs the link between money GDP + monetary conditions.*

2.06 Monetary and fiscal policies both affect money GDP. There is some scope for varying the balance between them, consistent with any given money GDP path. The Budget provides the main opportunity to review fiscal policy. At other times interest rates are the principle means of influencing money GDP. [And money supply?]

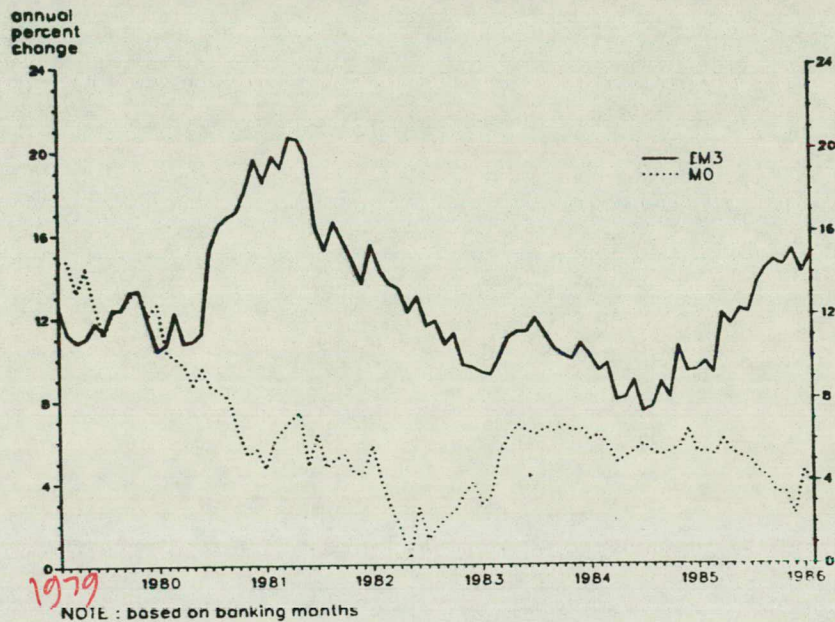
*but see para 2.01 which looks different*

**Monetary Policy**

2.07 Monetary policy is directed to maintaining monetary conditions that are consistent with the government's money GDP objective. Monetary conditions are assessed in the light of move-

ments in the monetary aggregates, in relation to their targets, and the behaviour of other indicators, particularly the exchange rate.

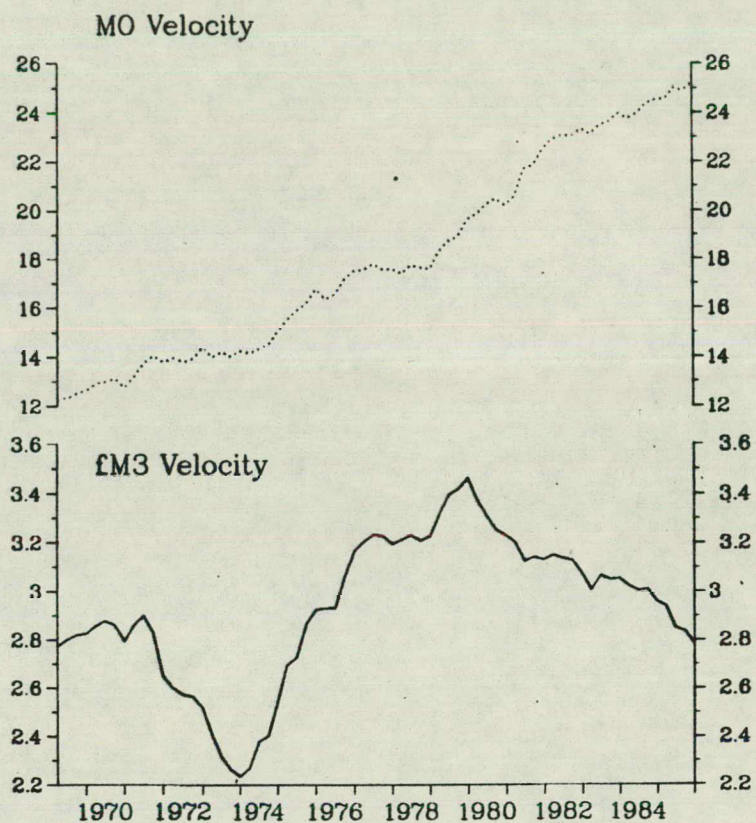
MONETARY GROWTH



**Broad Money**

2.08 Broad and narrow money have grown at very different rates. Measures of broad money have persistently grown faster than money GDP over the last six years, unlike the experience of the 1970s. High real interest rates have increased the relative attractiveness of financial assets; and financial liberalisation and increased competition between banks and building societies have led to a rapid build up of both liquidity and debt. This has proved consistent with declining inflation and money GDP growth.

# Monetary Velocity



2.09 The high proportion of interest bearing deposits means a highly uncertain response of broad money, both in size and direction, to changes in short term interest rates. And the full effects take a considerable time to come through.

2.10 Since the ending of controls over the banking system in 1980, bank lending has grown rapidly. In recent years the authorities have offset some of the expansionary effects on broad money by heavy funding. But systematic overfunding of the PSBR can make monetary policy harder to operate, and is not a sustainable approach. The Chancellor therefore announced in October 1985 that the authorities would no longer seek to control the growth of £M3 by this means.

*meaning?*

## Narrow Money

2.11 There have been significant differences in the behaviour of the various measures of narrow money. The growth of M1 has fluctuated greatly, in part due to interest rate changes.

*interest bearing accounts*

*Monetary  
- of us*

In recent years it has been inflated by the rapid growth of its interest bearing component; and the boundary between interest bearing and non-interest bearing accounts has been subject to considerable short term variation. The growth of M2 has been more stable, but data has been available only since late 1981 and the figures are subject to frequent sizeable revisions.

2.12 M0 has behaved in a much more stable fashion than the other narrow aggregates. Since it is wholly non-interest bearing it responds in an unambiguous manner to changes in short term interest rates, though by rather less than non-interest bearing M1. Its velocity trend has been rising as institutional change and technological improvements lead to a progressive reduction in the use of cash. But the upward trend has been very steady, and not subject to wide variation. Although it contains only a small proportion of total non-interest bearing transactions balances, it has proved a good indicator of monetary conditions in recent years. It remains the government's preferred measure of narrow money.

**Monetary targets**

VERSION A

*higher  
'targets'*

2.13 The government is setting targets in 1986-87 for M0, as a measure of narrow money, and £M3 as a measure of broad money. They are shown in Table 2.1. [For M0 the target range is the same as indicated in last year's MTFS. For £M3, the range has been raised to reflect the rapid fall in velocity observed during the last six years and the end of overfunding.]

*Version A*

2.14 For the later years, illustrative ranges are given for M0. Precise target ranges will be decided nearer the time, taking into account any changes in the trend of velocity. Illustrative ranges for future years are not given for £M3 because of the uncertainties surrounding its velocity trend. Targets for the later years will be chosen, consistent with the government's strategic objective for money GDP, so as to maintain downward pressure on inflation.

*for a while*

**Interpretation of Monetary Conditions**

2.15 In implementing policy and making decisions about interest rates, the government has to make a careful assessment of monetary conditions. This involves judging the behaviour of the monetary aggregates in the light of other indicators. The exchange rate is an important indicator because of its implications for inflation and money GDP, though its movements have to be interpreted in the light of external developments such as changes in oil prices. Asset prices can provide a warning of future inflation. Money GDP is of fairly limited use in this context because it mainly reflects monetary conditions in the past rather than the present; and reliable measures of it are available only with a considerable delay.

*check the 1985 version*

*discuss. now?*

2.16 If the underlying growth of M0 were to move significantly outside its target range, the government would take action designed to bring it back inside unless other indicators suggested clearly that monetary conditions remained satisfactory. If £M3 were to move outside its target range, more convincing evidence would be required from other indicators that monetary conditions were

*now*

*but quite the point we've discussed. Economic growth in EMS establishes a presumption that the government will bring M0 back within target range.*

*ms*

satisfactory. Changes in short term interest rates required to keep monetary conditions on track are more likely to affect M0 growth than £M3 growth in the short term.



Table 2.1 Growth of the Money Supply and Money GDP

	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
Money GDP (1)(2)	7.3(8.7)	8 <sup>3</sup> / <sub>4</sub> (7 <sup>1</sup> / <sub>2</sub> )	6 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	6	5 <sup>1</sup> / <sub>2</sub>
M0(3)	5.3	3 <sup>3</sup> / <sub>4</sub>	2-6			
£M3(3)	9.2	15	11-15			

- 
- (1) The money GDP figure for 1986-87 is a forecast; and in subsequent years the figures describe the government's objective for nominal demand.
  - (2) Percentage change on previous financial year. See Table [2.4] for further detail. Figures in brackets for 1984-85 and 1985-86 are adjusted for the coal strike. Rounded to nearest <sup>1</sup>/<sub>4</sub> per cent.
  - (3) 1984-85: percentage change during the year (mid-March to mid-March).  
1985-86: percentage change from mid-February to mid-February.
- 

**Monetary targets**

2.13 The government is setting targets in 1986-87 for M0, as a measure of narrow money, and £M3 as a measure of broad money. They are shown in table 2.1. [For M0 the target range is the same as indicated in last year's MTFS. For £M3, the range has been raised to reflect the rapid fall in velocity observed during the last six years and the end of overfunding.]

2.14 Illustrative ranges are not being given for the later years. This reflects uncertainty about trends in velocity at a time of rapid financial innovation. Appropriate targets will continue to be set at Budget time for the year ahead. They will be chosen to be consistent with the government's strategic objective for money GDP taking into account any changes in velocity trends. The overriding aim

*WMA  
LV  
gms  
d.*

*discuss apply  
bmo  
(use para 2.12)*

*Version 8*

will be to to maintain downward pressure on inflation.

**Interpretation of  
Monetary Conditions**

2.15 In implementing policy and making decisions about interest rates the government has to make a careful assessment of monetary conditions. This involves judging the behaviour of the monetary aggregates in the light of other indicators. The exchange rate is an important indicator because of its implications for inflation and money GDP, though its movements have to be interpreted in the light of external developments such as changes in oil prices. Asset prices can provide a warning of future inflation. Money GDP is of fairly limited use in this context because it mainly reflects monetary conditions in the past rather than the present; and reliable measures of it are available only with a considerable delay.

2.16 If the underlying growth of M0 were to move significantly outside its target range, the government would take action designed to bring it back inside unless other indicators suggested clearly that monetary conditions remained satisfactory. If £M3 were to move outside its range, more convincing evidence would be required from other indicators that monetary conditions were satisfactory. Changes in short term interest rates required to keep monetary conditions on track are more likely to affect M0 growth than £M3 growth in the short term.

VERSION C

Table 2.1 Growth of the Money Supply and Money GDP

	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
Money GDP (1)(2)	7.3(8.7)	8 $\frac{3}{4}$ (7 $\frac{1}{2}$ )	6 $\frac{3}{4}$	6 $\frac{1}{2}$	6	5 $\frac{1}{2}$
M0(3)	5.3	3 $\frac{3}{4}$	2-6	[ 2-6	1-5	1-5 ]
[ £M3(3)	9.2	15 ]				

- (1) The money GDP figure for 1986-87 is a forecast; and in subsequent years the figures describe the government's objective for nominal demand.
- (2) Percentage change on previous financial year. See Table [2.4] for further detail. Figures in brackets for 1984-85 and 1985-86 are adjusted for the coal strike. Rounded to nearest  $\frac{1}{4}$  per cent.
- (3) 1984-85: percentage change during the year (mid-March to mid-March).  
1985-86: percentage change from mid-February to mid-February.

**Monetary targets**

2.13 The government will continue to set targets for M0, as a measure of narrow money. The target for 1986-87, shown in Table 2.1, is the same as in last year's MTFS. In implementing policy the government will continue to take particular account of the growth of broad money and movements in the exchange rate. [In both cases the aim will be to avoid sharp changes.]

2.14 Given the recent behaviour of velocity, the rate of growth of £M3 is now expected to be above the illustrative range in last year's MTFS - perhaps in the range 10-15%. Other measures of broad money may grow at about the same rate, though the margin of error is considerable for all the broad aggregates.

2.15 Illustrative ranges are not being given for M0 in the later years because of uncertainty about the trend in velocity at a time of rapid

is this a  
forecast?  
does not vary  
with para  
2.12

VERSION  
C

financial innovation. Appropriate targets will continue to be set at Budget time for the year ahead. They will be chosen to be consistent with the government's strategic objective for money GDP, taking into account any changes in velocity trends. The overriding aim will be to maintain downward pressure on inflation.

**Interpretation of  
Monetary Conditions**

2.16 In implementing policy and making decisions about interest rates the government has to make a careful assessment of money conditions. This involves judging the behaviour of the monetary aggregates in the light of other indicators. The exchange rate is an important indicator because of its implications for inflation and money GDP, though its movements have to be interpreted in the light of external developments such as changes in oil prices. Asset prices can provide a warning of future inflation. Money GDP is of fairly limited use in this context because it mainly reflects monetary conditions in the past rather than the present; and reliable measures of it are available only with a considerable delay.

2.17 If the underlying growth of M0 were to move significantly outside its target range, the government would take action designed to bring it back inside unless other indicators suggested clearly that monetary conditions remained satisfactory. If £M3 growth were to differ greatly from expectations, more convincing evidence would be required from other indicators that monetary conditions were satisfactory. Changes in short term interest rates required to keep monetary conditions on track are more likely to affect M0 growth than £M3 growth in the short term.



21/2  
PSP

CHANCELLOR OF THE EXCHEQUER'S OFFICE: MEETING

SUBJECT	MTFS (Monetary Sections)
DATE AND TIME	Friday 21 February - 10.00am
VENUE	Chancellor's Room, Treasury/ <del>No 11/Conference Room/House of Commons</del>
PAPERS	To be circulated by Sir P. Middleton
THOSE ATTENDING	<p>EST          Sir P. Middleton          Sir T. Burns          Mr Cassell          Mr Peretz          Mr Odling-Smee          Mr Riley ← Mr Schlar          Mr Walsh          Mr Davies          Mr Cropper          Mr Culpin          Prof Griffiths          Dr Rowlatt</p> <p>cc. Mrs Lomax</p>



21/2

CHANCELLOR OF THE EXCHEQUER'S OFFICE: MEETING

SUBJECT	MTFS (Monetary Sections)
DATE AND TIME	Friday 21 February — 10.00am
VENUE	Chancellor's Room, Treasury/ <del>No. 11/Conference Room/</del> House of Commons
PAPERS	To be circulated by Sir P. Middleton
THOSE ATTENDING	EST Sir P. Middleton Sir T. Burns Mr Cassell Mr Peretz Mr Odling-Smee Mr Riley Mr Walsh Mr Daves cc. Mrs Lomax



CHANCELLOR OF THE EXCHEQUER'S OFFICE: MEETING

SUBJECT	MTFS (Monetary Sections)
DATE AND TIME	Friday 21 February — 10.00am
VENUE	Chancellor's Room, Treasury/ <del>No. 11/Conference Room/House of Commons</del>
PAPERS	To be circulated by Sir P. Middleton
THOSE ATTENDING	EST Sir P. Middleton Sir T. Burns Mr Cassell Mr Peretz Mr Odling-Smee Mr Riley Mr Walsh Mr Daves cc. Mrs Lomax







NOTE OF A MEETING IN HM TREASURY ON FRIDAY 21 FEBRUARY 1986 AT  
10.00 AM

Present      Chancellor Economic Secretary  
              Sir Peter Middleton  
              Sir T Burns  
              Mr Cassell  
              Mr Odling-Smee  
              Mr Peretz  
              Mr Scholar  
              Mr Culpin  
              Mr Riley  
              Mr Walsh  
              Mrs Rowlatt  
              Mr H Davies

**MONETARY SECTIONS OF THE 1986 MTFS**

Papers

Monetary Sections of the 1986 MTFS: Mr C J Riley, 20 February.

Monetary target ranges: Mrs Rowlatt, 20 February.

Monetary targets: alternative presentations.

1. Mr Riley's draft MTFS included three presentations of the ranges for M0 and sterling M3 on the following assumptions:-

Version A: Target ranges for both M0 and Sterling M3 in 1986/87; but illustrative ranges for the later years for M0 only.

Version B: Target ranges for both M0 and sterling M3 in 1986/87; no ranges for either aggregate in the later years.

Version C: An M0 target for 1986/87, shown in table 2.1: no figures for sterling M3 in the table but discussion of a range for 1986/87 in the text. (This option might also include illustrative ranges for M0 in the later years.)

READ  
OF  
21/2  
MTG

CONFIDENTIAL



2. Sir Terence Burns said that his initial preference had been Version B. But there was a real difficulty in providing a convincing explanation for dropping illustrative ranges for MO in the later years. For this reason, he had come round to Version A. In discussion, it was suggested that a possible justification for dropping all monetary ranges in the later years was that other countries did not provide medium term monetary targets. On the other hand, this had not prevented the UK from publishing illustrative ranges in any previous versions of the MTFs: a change of practice now would require some explanation.

3. Sir Peter Middleton said his first preference was Version C, though he would include illustrative ranges for MO covering the whole MTFs period. This would be consistent with a presentation which made it clear that money GDP was the objective of policy, MO was a proper monetary target, whilst sterling M3 held a subsidiary position - as an indicator which was taken into account, but not a target in the same sense as MO. If the eventual aim was to drop sterling M3 altogether, it would be far better not to reinforce its position by including it in the table. He saw no merit in Version B; it was presentationally bad, and extremely difficult to explain. His second choice would therefore be Version A.

4. The Economic Secretary thought that dropping sterling M3 from the table altogether would be running ahead of the the market's perceptions. The status of sterling M3 would be down graded by simply dropping illustrative ranges for the future years; this would leave open the option of dropping it altogether at some future date. The difficulty with Version B was that it appeared to equate MO and sterling M3. His first preference was therefore Version A.

5. The Chancellor suggested that Version B was closer to reality. The aim of the MTFs was to reduce inflation, which implied a medium term strategy for money GDP. Annual money targets were a means to that end. In practice they were reconsidered each year. In discussion, it was pointed out that in reality MO and Sterling



M3 were not of equal status, as Version B implied. And the dropping of all figures for money supply in the later years gave the figures for money GDP undue prominence. On the whole, Version B was too sharp a break from past experience and as such was open to misinterpretation.

6. The Chancellor concluded that the best option on offer was Version A. The explanation of the ranges given in paragraph 2.14 of Mr Riley's draft would need some expansion. In particular, the text should not concede, explicitly or implicitly, that equal account was taken of M0 and sterling M3 in taking operational decisions.

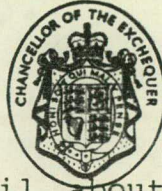
**Table 2.1**

7. The Chancellor noted that Mrs Rowlatt's paper made a case for setting illustrative ranges for M0 such that the mid-points fell by half per cent a year. Final decisions about the ranges were subject to the forecast. But he was not attracted to setting ranges which included halves. A better solution might be to have ranges of varying widths, such as:-

	1986-87	1987-88	1988-89	1989-90
M0	2-6	2-5	1-5	1-4

8. In discussion, it was suggested that while there was some justification for narrower ranges, given lower rates of monetary growth, ranges of varying widths might look peculiar and over precise. The text would anyhow need to explain that the projected path of nominal GDP would be consistent with only a very gradual decline in M0. It might be simpler to rest on this explanation, and present broadbrush ranges in table 2.1, rounded to the nearest whole digit (as in Mr Riley's present draft).

9. The Chancellor said that table 2.1 should draw a clearer distinction between past monetary growth and future ranges; there



should be either more detail about the past or less. There was also a case for comparing outturn with target in previous years. Following a brief discussion, it was agreed that figures for the past (including target ranges) should be shown separately, maybe in an Annex table. Table 2.1 should begin in 1985/86.

### Draft Text

10. The Chancellor made the following points:

(i) The text should begin with a clear statement of the purpose and nature of the MTFs and the role of micro economic policies, before analysing performance since 1980.

(ii) Interest rate policy should feature more prominently, covering both the importance of interest rates as an instrument of policy, and a description of the factors taken into account in setting them.

(iii) There should be a clearer description of the difference between the nature of M0 and sterling M3 ranges. M0 was the target: and the aim was to keep it within the target range by varying short term interest rates. By contrast, an excessive growth in sterling M3 would establish a presumption in favour of tightening policy, but there would be no expectation that higher short term interest rates would bring sterling M3 back within the target range.

(iv) The reference to the role of the exchange rate in paragraph 2.15 was too dissimilar to what had been said last year: the second half of the third sentence should therefore be deleted.

(v) The reference to asset prices in paragraph 2.15 should either be deleted, or expanded into a more general statement about other factors taken into account in setting interest rates.



(vi) The reference to overfunding (in paragraph 2.10) should be made more convincing and should make it clear that the authorities' instrument for influencing monetary conditions was short term interest rates (as in the Mansion House speech).

(vii) The analysis of the behaviour of narrow money in paragraph 2.11 should include some reference to financial innovation, and maybe to similar experience in the United States.

(viii) The description in the effect of short term interest rates on broad money (in paragraph 2.09) should be toned down; in the first sentence, the phrase "both in size and duration" should be deleted.

11. The precise published ranges for M0 and sterling M3 were for later consideration. The aim would be to choose figures that were both achievable (and possibly allow some safety margin) whilst offering some prospect of deceleration from present rates of growth. There was some presumption in favour of a range for sterling M3 of 11-15 per cent.

### Next Steps

12. The Chancellor asked Sir Terence Burns to submit a revised draft of the monetary sections of the MTFs, incorporating the specification of monetary targets in Version A, for discussion at a future meeting with the Bank. Alternative text and tables consistent with Version B should also be included, though the covering note should give a strong steer to Version A.

*Rh*  
RACHEL LOMAX

Distribution those present

PS/Chief Secretary  
PS/Financial Secretary  
PS/Minister of State  
Professor Griffiths No 10