

3. The rationale of the Medium-Term Financial Strategy

The recession of late 1974 and early 1975, which followed the Barber boom, was the deepest in the post-war period until then. Like most recessions, it had a highly adverse effect on public sector finances, reducing tax revenues and increasing such items of expenditure as unemployment benefits and subsidies to nationalized industries. Partly as a result of these influences and partly because of an underlying increase in public expenditure as the new Labour Government honoured its election pledges, the budget deficit soared in 1974 and 1975. In the first quarter of 1975 the public sector's borrowing requirement reached 12 per cent of gross domestic product, the highest-ever level in peacetime. (It may give a sense of perspective to note that a PSBR/GDP ratio as high as this today would imply a PSBR of approaching £75 billion.)

The surge in public borrowing created a danger of long-run fiscal unsustainability. Concern about potentially explosive increases in debt interest was expressed in a number of reports from the House of Commons Expenditure Committee in 1974 and 1975. The large budget deficit in 1974/75 added to existing public debt and therefore increased debt interest costs in 1975/76. It was obvious that, unless there were economies in non-interest expenditure or higher taxes, these higher debt interest costs would raise the budget deficit in 1975/76, which would again increase debt interest costs and the budget deficit in 1976/77, and so on.

I reported on the Committee's activities for *The Times* and, as a result, became aware of the long-run debt interest problem. I had already learnt from attending the Committee that the practical operation of fiscal policy was very different from that described in the textbooks. In particular, the Committee had criticized the Treasury in 1974 because it had heavily under-spent on certain capital programmes in 1973. This under-spending, motivated by a wish to avoid paying too much on land and construction costs (which were at ludicrous levels because of the Barber boom), had been similar in size to the 'Budget judgement' in the 1973 Budget. (The Budget judgement is the amount that the Chancellor of the Exchequer injects into or withdraws demand from the economy by changing taxes.) I realized from this episode that very large expenditure slippage and/or revenue miscalculation were

common, and that in the hurly-burly of the real world the idea of precise fiscal fine-tuning was an illusion. My criticisms of Keynesian demand management, and my preference for monetary rules, were strongly influenced by these visits to the Expenditure Committee.

It seemed to me that a minimum requirement for a sustainable fiscal policy in the long run was that interest on public sector debt should not grow at a faster rate than national income. The idea is far from startling and can hardly be controversial. However, a tight constraint on fiscal policy is implied. With the ratio of debt to national income given at a moderate level (say, 50 per cent), and an official commitment to price stability (i.e., that the rise in nominal national income should be equal to the long-run real growth rate), it is easy to work out that the maximum sustainable ratio of the budget deficit (i.e., the PSBR) to national income is very low in a slow-growing economy like Britain's. (Formally, the maximum ratio of the budget deficit to national income is equal to the ratio of debt to national income multiplied by the growth rate in long-run steady state. If the debt/income ratio is 50 per cent and the growth rate is 2 per cent a year, the maximum deficit/income ratio compatible with price stability is a mere 1 per cent.)

I was also interested in the relationship between fiscal and monetary policy. In the mid-1970s the large PSBR was a threat to monetary restraint. When the Government was unable to finance the PSBR by sales of gilt-edged securities to non-banks, it had to borrow from the banks, which increased the money supply. Reductions in the PSBR seemed essential if monetary growth were to be reduced over the medium term. Of course, a large PSBR could be reconciled with low monetary growth if the private sector were discouraged from borrowing from the banks, either by quantitative credit restrictions or by high interest rates. But in that event anti-inflationary monetary policy would work only by 'crowding-out' private borrowers from the banking system and perhaps reducing private investment. I wrote a number of articles for *The Times* on 'crowding-out' in 1974 and 1975. (None of these articles is reprinted here.)

These two problems – the problem of potentially explosive growth in debt interest and the problem of crowding-out – argued that large reductions in the PSBR would be vital if inflation were ever to be brought under control. A PSBR/GDP ratio of 12 per cent was certainly not sustainable in an economy with a low inflation rate. The disaster of the Barber boom also emphasized that short-run discretionary adjustments of the fiscal position were inappropriate as a means of managing the economy. It would surely be better to lower the PSBR (or the PSBR/GDP ratio) gradually, so that financial policy as a whole (i.e., both the money supply target and the PSBR/GDP ratio) could be consistent with falling inflation over the medium term. Ideally, the Government should commit itself in advance to a declining path for both

monetary growth and the PSBR/GDP ratio, so that irresponsible reflationary episodes such as the Barber boom would never be repeated. At least, if politicians were to repeat them, the breach of the Government's own anti-inflationary guidelines would be clear and public, and would happen some quarters ahead of any resurgence in inflation.

These were some of the key ideas behind the Medium-Term Financial Strategy, which became the centrepiece of the Thatcher Government's anti-inflation programme in the early 1980s. The evolution of the ideas can be seen in my writings of the late 1970s. I benefited from my discussions with Mr Burns at the London Business School, who supported the principle of medium-term financial planning. I was delighted when he was appointed Chief Economic Adviser to the new Thatcher Government in 1979. The first MTFS was announced in the 1980 Budget. It was then regularly up-dated, with some revisions to the forward targets in the light of circumstances, throughout the 1980s. The 1981 Budget, which raised taxes in the middle of a recession and gave new credibility to the Government's anti-inflation programme, would have been inconceivable without the MTFS. Sadly, the revisions of the mid-1980s heavily diluted the financial restraint implicit in the original version. By the late 1980s it had become virtually meaningless as a constraint on politically-motivated monetary adventurism. The story of the breakdown of the MTFS is taken up later in the book.

Monetarism and the Budget Deficit

Paper given to the Money Study Group conference at Brasenose College, Oxford, on 14 September 1976. Not previously published.

This paper, which was written in a great hurry so as to be available in time for the 1976 Money Study Group conference, was very unsatisfactory in several respects and has not previously been published. It is perhaps best seen as a working paper for the final version of the paper 'The analytical foundations of the Medium-Term Financial Strategy', which was published nearly eight years later and is reprinted here on pp. 65–77.

However, the paper was important in two ways. First, it asked a newly pertinent question, 'if it is accepted that money supply targets should be central to macroeconomic policy, what is to be done about fiscal policy?'. Chicago-style monetarism had become rather vague about this issue by the 1970s. Secondly, it answered the question in terms of a long-run steady state, borrowing a technique commonly found in growth theory. (I had been interested in growth theory when I was at Oxford, where I had been fortunate to have some tutorials from Dr Walter Eltis.) The trick here was to take

the ratios of certain stocks to income (in this context, the ratios of public debt and money to income) as constant, so as to work out the implications for a flow variable (of the PSBR) to income. One consequence was to think about fiscal policy not as an aspect of a short-run stabilization problem, but as constrained by long-run stability considerations. In particular, it had to be consistent with anti-inflationary monetary policy. The shift of focus was vital in establishing a rationale for medium-term financial planning. (Incredibly, in the mid-1970s there were still some British economists who thought fiscal policy should be addressed to short-run demand management while the PSBR was over 10 per cent of GDP!).

The paper has had to be tidied up in various ways. First, the algebra behind the numerical answer (that, to defeat inflation, 'the maximum permissible ratio between the budget deficit and national income is between 2 and 2½ per cent') was a mess and has not been reprinted. (The reasoning, roughly, was that – with a debt/income ratio of 0.6 and a long-run real growth rate assumed optimistically at 3½ per cent – a budget deficit of 2.1 per cent of GDP would be sustainable. In addition, the paper conjectured – I now think wrongly – that the banking system needed some public sector assets for its reserve asset position, which justified a little extra deficit financing.) Secondly, I argued that budget deficits were required to support monetary growth, because banks had to have a proportion of safe, liquid assets (i.e., public sector obligations free from default risk) in their balance sheets for prudential reasons. These could increase, in line with economic growth, only if the Government ran a budget deficit. I now believe that this argument is incorrect. A portfolio of commercial bills 'accepted' by two good banking names should be quite sufficient, in normal circumstances, to provide the banking system with prudentially appropriate assets. But I have left the passage in, as the discussion is interesting.

The last few paragraphs, on 'the re-entry problem', are not a model of literary clarity. But there is no simple rule to fix the 'best' public debt/income ratio. To that extent, this approach to determining the right level of the budget deficit is arbitrary, as the paper concedes.

One of the most important changes in thinking about British economic policy in recent years has been a reaction against discretionary adjustment of the Government's financial position to control fluctuations in activity. Scepticism about 'fiscal fine-tuning' has developed partly because of its conspicuous inadequacy to meet the cyclical problems of the 1970s and partly because the current large public sector borrowing requirement is seen as a threat to financial stability. A preference for automatic rules, to be obeyed by the Government irrespective of the cyclical conjuncture, has been expressed in some quarters.

Public debate has concentrated on two main rule prescriptions. These are the monetarist recommendation that the money supply be regulated in order to keep its rate of growth in line with that of productive capacity, and the 'new Cambridge school' doctrine that the budget deficit be geared to medium-term balance-of-payments targets, being set equal to the private sector's equilibrium net acquisition of financial assets, which is said to exhibit considerable stability through time.¹ These two rules are concerned with different policy variables and they focus on different objectives. One consequence is that monetarism appears to give no guidance on the desirable size of the budget deficit. This impression is confirmed by the haphazard reference to the budget position from its supporters. Some monetarists seem to believe that fiscal rectitude consists of the restoration of balanced budgets; others profess an almost total indifference to the scale of the Government's borrowing needs.²

The purpose of this paper is to show that monetarism, loosely understood, can generate a framework for determining the permissible size of the budget deficit in relation to national income. The framework is theoretical, but it has direct policy applications. It accords high priority to the attainment of price stability. By contrast, other policy goals, such as full employment and balance-of-payments equilibrium, are not recognized in the analysis. Their exclusion could be justified on the assumptions that labour markets are self-equilibrating and that floating exchange rates are a sufficient answer to external imbalance. Some economists might disagree with these assumptions. However, they would probably accept that, if the budget deficit indicated by the present discussion is inconsistent with full employment or payments equilibrium, serious problems would arise for the conduct of economic policy. The viability of pursuing simultaneously the three objectives would be challenged.

The notion of 'monetarist equilibrium' is central to the analysis and must be defined at the outset. It is not to be understood as equilibrium in a behavioural sense; although it may be compatible with stable asset acquisition patterns, it is not intended as a partial specification of portfolio balance. Instead, it should be considered as equilibrium in a policy sense; it pertains to a state of affairs in which the Government is achieving price stability and can expect to continue doing so indefinitely into the future.

In the next two sections the conditions for monetarist equilibrium are discussed. They are that money supply growth should be related to the growth of productivity capacity and that the rate of increase of interest on the national debt should be equal to the rate of increase in national income. Given the institutional context in Britain and most other industrial countries, these conditions can only be satisfied if the budget deficit is of a particular size. Monetarist equilibrium may obtain in a stationary or growing economy,

but it is most interesting when set against the background of economic growth. The analysis is close, therefore, to the models of 'steady-state' expansion which play such a major role in the theoretical interpretation of growth. In the fourth section the problem of moving from the current disequilibrium towards equilibrium is considered.

In Britain the money supply is tied to a number of government liabilities and its growth is largely determined by the public sector borrowing requirement. Although the linkages may be familiar, they are important to the present argument and it may be helpful to recall them in more detail.

The money supply has two components, notes and coin in circulation with the public, and bank deposits. The first component is a liability of the Bank of England and, indirectly, of the Government. Since the public cannot ask for redemption except in the form of other notes and coin, this characterization may seem artificial. But it is at least true that a gap between the Government's expenditure and revenue is necessary for an increase in the issue of notes and coin; and, apart from Friedman's helicopter, no other route whereby they may enter the economy has been suggested.

Bank deposits are a liability of the banking system. However, the propensity of the banks to extend credit and add to both sides of their balance sheets is constrained by the quality of their assets. In particular, the structure of the financial system is such that deposit creation depends on the quantity of reserve assets in their portfolios, and reserve assets are preponderantly liabilities of the public sector. Consequently, deposit creation is related to the public sector's financial position.

It is instructive – and essential to the argument – to note that the private sector is unable to conceive on a sufficient scale either notes and coin or reserve assets. The objection to the private issue of notes and coin is that, when enforced by law, the seigniorage accrues to a company or institution; and it is not clear that any private body merits such an advantage. On the other hand, if private issue is not enforced by law it is not credible and cannot perform the function of a medium of exchange. The possibility of reserve assets being provided by the private sector is more substantial. Indeed, commercial bills, as high-quality private sector paper, do rank as reserve assets in Britain. But it is unlikely that the banks would feel safe if their operations were ultimately founded on the reputations of a small number of leading industrial companies. They must have government paper on their books. Only central government liabilities are altogether free from default risk.³

It follows, therefore, that a budget deficit is required to achieve money supply growth and that a deficit of a particular size is necessary for growth at

a particular rate. It follows also that the monetarist recommendation of stable monetary expansion has definite implications for fiscal policy.

Some remarks on the monetarist rule may be relevant here. The rule is normally proposed in the form 'the money supply should grow at a steady 3 to 5 per cent a year in line with the underlying rate of growth of national output'. This formulation is based on the observation that the money supply and money national income tend to move together over time. But to state the problem in this way has a drawback: the demand for money arises for private expenditures, not for money national income as a whole. Because the Government can 'print' money, the transactions under its control are not covered by running down holdings of bank deposits and it has no need to keep liquid assets of any type. Hence, if the share of national income accounted for by public expenditure increases, the demand for money declines. There are some difficulties with this assertion. For example, the private sector does build up balances in advance of tax payments and the status of public corporations and local authorities, which are not altogether protected from risk and therefore have some demand for liquidity, is uncertain. But these difficulties are incidental to the main argument and may be avoided by making the assumption that the ratio between public and private expenditure is constant. Until the last three years the assumption would have been realistic in the British case.

Although the demand for money may bear a stable relationship to private expenditures, it does not, of course, necessarily grow at the same rate. The income elasticity of demand for money may differ for one; and technical progress in the financial system may enable companies and individuals to economize on their liquid balances. These points are not incorporated in the relationships in the appendix [not published here], but the qualification is not important. If equilibrium obtains only when the money supply is increasing at a steady rate different from productive capacity the budget deficit necessary for monetary reasons may be adjusted accordingly.

One interesting, if obvious, outcome of the discussion so far is that balanced budgets and a monetary rule are not consistent, apart from the special case of a static economy. In general unbalanced budgets are appropriate and the degree of imbalance is a positive function of the growth rate. An exception would be feasible when illiquid liabilities of the Government, incurred in previous deficit phases, are coming due for redemption as the option to redeem in notes and coin, or reserve assets, would then be available. However, such a policy would have effects on the burden of debt interest, and it is to this topic that attention must now be directed.

The results of large national debts have been controversial for centuries and the subject remains among the most unsettled in economics. The purpose of

this section is not to revive the disputes, but to outline the reasoning behind the rather unsurprising principle that interest on the national debt must never, for any prolonged period of time, be allowed to grow at a faster rate than national income.

One of the more ancient perceptions of economic science is that a nation cannot be in debt to itself. In this trivial sense the national debt can never, no matter how large, impose a burden on society. But this does not mean that the size of the debt and its rate of growth can be ignored. The simplest and most entertaining demonstration of the dangers of a burgeoning national debt is to attempt the description of an economy where interest on the debt is equal to national income. The tale is an improbable one and perhaps it does not need to be said that the economy would break down long before debt interest had become so large. We may distinguish two cases – one where the debt interest is met from direct taxation; and one where it is met from indirect.

If debt interest is financed only from direct taxation, the rate of tax has to average at least 50 per cent on both earned and unearned income. With a 50 per cent rate the national income accounting identities are satisfied, as long as there is no Government expenditure apart from debt interest. Further expenditure would necessitate an even higher tax rate. It is doubtful that an efficient pattern of incentives would survive with these tax rates in force, but a decline in national income would exaggerate the problem. The piquancy of the Government's dilemma is heightened by distinguishing between the working taxpayer and the rentier. (The rentier is also a taxpayer, but he does not have to do anything to receive his income.) The working taxpayer obtains no return from half his output and probably has no compunction about evading tax. But, if the Government does not raise the revenue required, the rentier feels cheated, particularly as he has saved and made sacrifices to acquire his bonds.

If debt interest is paid for by indirect taxation the situation is a little easier. A 100 per cent rate of value added tax would again satisfy the national income accounting identities. The working taxpayer would still be doing half his day for no reward, but he might be under the optical illusion that he was being paid in full because there would be no deductions from his payslip. The snag here is less one of work incentives than of the attractiveness of carrying out transactions by barter or cash to avoid identification by the tax authorities. Successful evasion would, as in the direct tax case, magnify the Government's difficulties. The situation is untenable.

Clearly, there are upper bounds to the ratio between interest payments on the national debt and the national income. The binding constraint on deficit financing is that, when taken to extremes, it sows the seeds of social conflict between the taxpayer and the rentier.

These conclusions are not new. Indeed, they were a commonplace in the 1920s and 1930s and constituted the most persuasive justification for sound finance and balanced budgets. The effectiveness of sound finance principles in public debate at that time was largely attributable to the force of 'the limits of taxable capacity' argument. The financial traumas of several European governments after the First World War, which had left a legacy of enormous national debts, remained vivid in the minds of most contemporary economists. In France in the mid-1920s, for example, the greater part of government revenue was levied on behalf of the rentier, and the resulting social stresses became intolerable. Keynes wrote an article in *The Nation and Athenaeum* of 9 January 1926, with the rather impudent title 'An Open Letter to the French Minister of Finance (whoever he is or may be)', suggesting that a deliberate inflation of between 60 and 80 per cent be engineered to diminish the real value of the debt-servicing burden.⁴ The memory of this phase of its financial history may be responsible for France's high ratio of indirect to direct taxation and for its failure [until the 1980s] to establish an effective market in long-term government bonds.

If, therefore, debt interest threatens to rise indefinitely as a proportion of national income, corrective measures have to be taken and policy is not in equilibrium. There would, however, be no objection to keeping debt interest and national income growing at the same rate. This condition is chosen here as a characteristic of monetarist equilibrium.

It is important to note that the condition is not necessarily optimal; it may be that a large national debt occupies too prominent a position in the private sector's portfolio and 'crowds out' other asset holdings, such as equities and debentures, which would otherwise match a greater accumulation of real capital goods. But a situation in which debt interest and national income are growing at the same rate is sustainable and, for the purposes of this paper, that is what matters. The analysis is intended to find out the maximum size of the budget deficit compatible with zero inflation and political stability, not to indicate the economic results of having a smaller deficit.

The rule that debt interest should grow no more quickly than national income was mentioned in most manuals of public finance before the onset of Keynesian macroeconomics. It has tended to be disregarded since *The General Theory* because the popular assessment of Keynes's work is that uninhibited deficit financing is warranted by a deficiency of aggregate demand. In fact, no leading economist of Keynes's generation – and certainly not Keynes himself – thought that the size of the budget deficit could be divorced entirely from considerations of financial prudence. Indeed, the 1944 White Paper on *Employment Policy*, often described as the charter of discretionary demand management, contains an excellent paragraph on the approach to-

wards controlling the national debt in the long run. It deserves to be quoted in full:

Not only the national dead-weight debt in the narrow sense, but other public indebtedness which involves directly or indirectly a charge on the Exchequer or on the rates, reacts on the financial system. Interest and other charges thus falling on the Exchequer are often regarded as in the nature of a transfer income in the hands of the recipients and as imposing no real burden on the community on the whole. But the matter does not present itself in that light to the taxpayer, on whose individual effort and enterprise high taxation acts as a drag. At the same time, proper limits on public borrowing also depend on the magnitude of the debt charge in relation to the rate of growth of national income. In a country in which money income is increasing, the total debt can be allowed to increase by quite appreciable amounts without increasing the proportionate burden of the debt. Owing to the prolonged decline in the birth rate and the present age distribution of the population we can no longer rely, as in the past, on an increase in national income resulting solely from an increase in the number of income-earning persons. On the other hand, these difficulties would be more than offset by continued progress in technical efficiency, which is the dominating factor in the growth of real national income.

More remarkably still, the previous paragraph closed with the words: 'To the extent that the policies proposed in this Paper affect the balancing of the Budget in a particular year, they certainly do not contemplate any departure from the principle that the Budget must be balanced over a longer period'; and the following paragraph, almost anticipating what has been termed the 'fiscal frenzy' of 1974 and 1975, opened with the warning that, 'Both at home and abroad the handling of our monetary problems is regarded as a test of the general firmness of the policy of the Government. An undue growth in national indebtedness will have a quick result on confidence. But no less serious would be a budgetary deficit arising from a fall of revenues due to depressed industrial and commercial conditions.'⁵

The two conditions for monetarist equilibrium are combined in an appendix [not published here] and a simple algebraic solution for the maximum permissible ratio between the budget deficit and money national income is reached. The ratio depends on the growth rate and the income elasticity of demand for money, which cannot be manipulated by the authorities; and on the reserve asset ratio, and the ratios of private expenditure and the national debt to national income, which can be partly influenced by government action.

The role of the ratio of national debt to national income – or debt/income ratio, for short – is awkward, because it and the budget deficit interact. An argument could be made, that, since the ratio is an inheritance of history it

could reasonably be regarded as a datum, for present purposes. But this is unsatisfactory because, when the economy is out of monetarist equilibrium, the budget deficit causes variations in the ratio. Only in equilibrium is the ratio constant.

The interpretation of the debt/income ratio is critical for selecting the correct budget deficit figure. It obstructs the immediate application of the analysis to policy formation because the formula is not valid outside an ideal equilibrium context. The current state of affairs diverges rather conspicuously from such an ideal. More specifically, it would make little sense to favour stability of the ratio of debt interest to national income (debt interest/income ratio) in the present circumstances. Were inflation to be overcome, interest rates would fall sharply, perhaps to 3 or 3½ per cent on the type of assets which constitute the bulk of the national debt. Since the average rate of interest on the nominal value of the debt is at present about 7¼ per cent, a constant debt interest/income ratio would imply a doubling of the debt/income ratio. But this, in turn, would imply several years of deficit financing.

Two approaches to the 're-entry problem', of moving from disequilibrium towards equilibrium, might be suggested. The first is to take the debt/income ratio as a desideratum in its own right. It is most likely that the policy-maker would choose one close to the current ratio between the nominal value of the national debt and the national income (or nominal debt/income ratio). This course is recommended here because it minimizes disturbance to public sector finances and has the merit of simplicity. But there is a second approach which highlights the economic significance of policy options and might lead to a more reasoned discussion of alternatives. It is to note the essential respects in which equilibrium and disequilibrium differ.

There are two such respects. First, in equilibrium the nominal and market values of the national debt are identical, because interest rates are constant; in disequilibrium they may not be equal. Secondly, in the comparison of equilibria it is of no importance whether the debt interest/income ratio or debt/income ratio is chosen because they differ by equal proportionate amounts, but in the comparison of disequilibrium and equilibrium the choice of ratio affects the issue because changes in the ratios may not be proportional. This contrast hints at three possible objectives for a policy-maker faced by the re-entry problem:

1. Stability of the debt interest/income ratio. On the path to equilibrium the nominal debt/income and market debt/income ratios adjust.
2. Stability of the market debt/income ratio. The debt interest/income and nominal debt/income ratios adjust.
3. Stability of the nominal debt/income ratio. The debt interest/income and market debt/income ratios adjust.

In discriminating between these three objectives the policy-maker may have several considerations in mind. He may have political preferences for a low debt interest/income ratio from sheer dislike of the rentier class. Alternatively, he may feel that a high market debt/income ratio 'crowds out' the accumulation of capital goods by the private sector and discourages investment by satisfying savers' asset demands too completely. Another option is to decide that an abundance of public debt instruments adds flexibility to the financial system and, because of their suitability as collateral, encourages the taking of risks in industry and commerce. It is impossible to resolve these issues in the space available here. A much fuller and rather different discussion would be required before they could be adjudicated.

It is surely natural, nevertheless, for the Government in Britain today to pay most attention to the nominal debt/income ratio and to insert its present value – about 0.6 – into the formula. Stability of the debt interest/income and market debt/income ratios do not bear examination as objectives, unless wild upheavals in the Government's financial position on the path to equilibrium can be contemplated with equanimity.

If, therefore, the Government wants to pursue a permanent and sustainable anti-inflationary policy, the maximum permissible ratio between the budget deficit and national income is between 2 and $2\frac{1}{2}$ per cent. This fiscal recommendation is designed as an accompaniment to the monetary rule. It may be regarded as a step towards the more complete specification of monetarist stabilization policy.

The argument that the Government should rigidly adhere to a budget deficit of at most between 2 and $2\frac{1}{2}$ per cent year after year has not been made in this paper, but the reader may guess (rightly) that the author is in favour of this course. It would be strange, but not necessarily inconsistent to support an automatic monetary rule and discretionary fiscal policy. But even to a defender of fiscal 'fine-tuning' the paper's results may be valuable. In particular, an indication has been given of the average level around which the budget deficit may be allowed to fluctuate through each cycle if monetarist equilibrium – or, less tendentiously, price stability – is to be preserved from one cycle to the next.

It could be objected that the conclusion depends on an arbitrary value of the debt/income ratio. The objection is valid. But the argument could be hardened by appealing more definitely to the 'crowding-out' hypothesis that an increase in public debt substitutes for private debt issues that would otherwise have occurred, and thereby reduces investment. If this hypothesis is accepted the paper has effectively reinstated the pre-Keynesian 'Treasury view' that the inevitable results of increases in government expenditure, when unmatched by taxation, are higher inflation, less private expenditure or some combination of the two.⁶

Notes

1. See 'Public expenditure and the management of the economy' by F. Cripps, W.A.H. Godley and M. Fetherston in 9th Report from the Expenditure Committee *Public Expenditure, Inflation and the Balance of Payments* (London: H.M.S.O., 1974, particularly p. 4). No behavioural explanation for the stability of the private sector's acquisition of financial assets has been provided by the new Cambridge economists, an omission unsurprising in view of their neglect of monetary economics. Perhaps because of this weakness the new Cambridge school was unable to provide an explanation of the improvement in the balance of payments in 1975, concurrently with a marked widening of the public sector financial deficit. In any case the theory does not stand up as an insight into payments imbalance because it takes no account of the fiscal position in trade partners. Would Britain have a current account deficit equal to 3 per cent of national income if its public sector financial deficit were 4 or 5 per cent and that in other countries were 10 per cent?

The new Cambridge economists have performed a service, however, by pointing out the need for a theory of private sector asset acquisition. I would suggest that it can be divided into two parts – the acquisition of liquid assets; and the acquisition of illiquid assets. The acquisition of liquid assets in equilibrium is stable through time. This, after all, is the kernel of monetarism. The behaviour of illiquid asset acquisition is more uncertain. It clearly is influenced by both interest rates and changes in the value of private sector wealth. In 1974 and 1975 interest rates rose to unprecedented levels and the market value of most asset holdings collapsed. Perhaps it is not surprising that private sector acquisition of financial assets was very different from that in the 1960s and early 1970s.

A much fuller macroeconomic picture – incorporating the effects of monetary policy on economic activity and, hence, on the public sector's financial position – would be needed to assess the new Cambridge arguments properly.

2. Calls for balanced budgets are legion. For an example of indifference to the budget position see S. Brittan's comment in the *Financial Times* of 5 February 1976. 'Events in the last few months have shown that monetary control is the important element of "sound finance" and that the balanced budget doctrine is, for a thousand and one different reasons, as absurd as Keynes once thought it to be.'
3. The argument in this paragraph has an obvious relevance to Professor Hayek's advocacy of 'laissez-faire' in money in *Choice in Currency* (London: Institute of Economic Affairs: 1976). In fact, the historical evidence is that, by a process of natural selection, the financial system chooses one money, the liabilities of 'the lender of last resort'. The lender of last resort is always banker to the Government because it is the strongest and most reliable financial institution.
4. Reprinted in *The Collected Writings of John Maynard Keynes* vol. IX *Essays in Persuasion* (London: Macmillan, 1972), pp. 76–82.
5. White Paper on *Employment Policy* (London: H.M.S.O., 1944) pp. 25–26, paragraphs 77–79. The phrase 'fiscal frenzy' is used by David Rowan in a recent *Banca Nazionale del Lavoro Review*. I also recommend that the reader have a look at Sir Herbert Brittain's *The British Budgetary System* (London: Allen & Unwin, 1959), where the purpose of the above-the-line and below-the-line distinction is outlined by a traditional 'Treasury knight'. On p. 53 there is a pellucid explanation of the need to keep borrowing above-the-line under control. 'Over a period of years the Budget should certainly be balanced above-the-line; otherwise that part of the debt not covered by new assets will increase indefinitely.' The exceptional economic stability of the 1950s – the heyday of the so-called 'Keynesian Revolution' – may well have been the product of sound finance of a rather orthodox variety.
6. Three further sets of observations may be relegated to a final note.

First, there is the important practical question of the appropriate budget deficit concept. The vital distinction here is between public sector expenditures which are expected to be covered by taxation, and public sector expenditures which are expected to be

covered by ongoing commercial operations and the associated receipts. Borrowing incurred by nationalized industries should not be included in the budget deficit if it will be repaid by a subsequent financial surplus arising from such receipts.

Secondly, it has been pointed out to me that there is already a large literature on fiscal and monetary policy in long-run equilibrium, based on Tobin's model of portfolio balance. I can only say that such examples of this literature as I have read pay scant attention to institutional realities. Money drops like manna from heaven, bonds are issued to buy machines which are rented back to the private sector, and so on. That would not matter if more realistic assumptions were difficult to model – but, as I hope this paper shows, they can be analysed quite simply.

Thirdly, some interesting questions would arise for international finance theory if the budget deficits indicated by the present analysis differed from country to country. I suspect it could be shown that the conditions for monetarist equilibrium could not be satisfied in a fixed exchange rate world where different countries had different growth rates. See Robert A. Mundell *International Economics* (London: Macmillan, 1968), pp. 126–129, for a tentative account of the implications of growth rates for budget policy and the balance of payments. Mundell's analysis – in these pages, at least – is confined to the budget deficit necessary for monetary reasons, and does not take account of more long-term debt issues and the wider portfolio balance problems they would raise.

A Proposal for a Medium-Term Financial Plan

From a memorandum on the Expenditure White Paper, Cmnd 7049, submitted to the General Sub-Committee of the Expenditure Committee of the House of Commons in 1978.

After I left The Times in 1976 and stopped reporting on its proceedings, the Expenditure Committee of the House of Commons invited me to submit evidence on various aspects of the economic situation. The next paper is taken from a memorandum I wrote on the 1978 Expenditure White Paper. It set out more explicitly than the 1976 paper on 'Monetarism and the budget deficit' a proposal for a medium-term financial plan. But the sentence, 'If non-inflationary money supply growth and propitious conditions for business investment are to be achieved by the early 1980s, the PSBR must be reduced to about 2½ per cent of national income', clearly recalled one conclusion of the 1976 paper. The frequent references to the 'new industrial strategy', one of the then Labour Government's hobbyhorses, played to the political gallery. But the basic point – about the inconsistency between a large budget deficit and ample private sector finance for industry – was right.

The latest Public Expenditure White Paper gives much useful information on certain recent developments of great importance to the British economy, notably the size of the fall in expenditure in the 1976/77 and 1977/78 financial years. The fall has been much greater than envisaged in previous

White Papers, and is likely to attract considerable comment. However, in this note the emphasis will be placed rather on a new departure in the presentation of the White Papers – the attempt to place expenditure projections within the broader fiscal context and, more particularly, to provide estimates of the Government's borrowing needs in future financial years. Later in the memorandum a proposal is advanced for medium-term financial planning, in which borrowing requirement forecasts play a central role. The proposal is designed to achieve a better co-ordination of fiscal and monetary policy. It is particularly pertinent now that the Bank of England has committed itself to money supply targets and described them, in its July 1977 *Quarterly Bulletin*, as possibly marking 'a major step in the evolution of monetary policy'.

The main purpose of the concept of the public sector borrowing requirement is financial: it indicates the size of the gap between the public sector's incomings and outgoings which has to be covered by borrowings from other agents in the economy. Its significance for monetary policy has always been well understood. However, it has perhaps not been sufficiently noticed that the new practice of announced money supply targetry may be co-ordinated with budget deficit projections to form a medium-term financial plan, with many wide implications for macroeconomic policy.

It is generally agreed that if inflation is to be overcome, money supply growth will have to be brought down to that of productive potential, currently believed to be about $3\frac{1}{2}$ per cent a year. But there is a common view that too abrupt a deceleration from current rates will cause unnecessary reductions in output and employment, because of the shock to expectations. In the 1974/75 financial year, sterling M3 rose by 7.7 per cent; in 1975/76, by 7.1 per cent; and in 1976/77, by 7.8 per cent. In the present financial year an acceleration to about 10 or 11 per cent looks probable. It seems reasonable to propose as targets 8 per cent growth in 1978/79, 6 per cent in 1979/80 and 4 per cent in 1980/81. There would then be a real chance of achieving price stability in the early 1980s.

Money supply growth may be regarded as the sum of three credit counterparts – the PSBR minus sales of public sector debt to the non-bank public (the public sector contribution); bank lending to the private sector minus the increase in banks' non-deposit liabilities (the private sector contribution); and the increase in bank deposits arising from a variety of external transactions, of which the most important is usually intervention by the Exchange Equalization Account in the foreign exchange markets (the external contribution). In the next few years, the external contribution is likely to be small and positive, because of the need to acquire foreign currency to repay Britain's international debts. The key to medium-term financial planning is therefore

to obtain the right balance between the public and private sector contributions.

In paragraph 55 of volume I, the White Paper observes that, 'Along with a satisfactory balance of payments, the first claim on higher output must be investment. A rise in the proportion of national income devoted to industrial investment is essential both for underpinning a faster growth rate and more generally for increasing industrial efficiency and providing more employment.' The connection between this observation and the Government's financial intentions is not made evident. But, in fact, the connection is direct. An increase in investment can be financed either from companies' internal sources, principally retained profits, or external sources. With current low levels of industrial profitability, reliance has to be placed to a great extent on external sources, such as bank borrowing and sales of equity and fixed interest debt.

Here is the crux of the problem. For any given money supply target, the higher is the public sector contribution to monetary growth the lower must be the private sector contribution; and a lower private sector contribution entails less bank borrowing by industry, checking the recovery in investment. It might be argued that this does not require that the PSBR be reduced to make room for industry's financial needs because the public sector contribution as a whole can be reduced by sufficiently large sales of public sector debt to the non-bank public, for example, by skilful and adroit management of the gilt-edged market.

However, there are three objections to this argument. The first is that large sales of public sector debt constitute a major drain on the financial resources of the leading savings institutions, the pension funds and life assurance offices. These institutions therefore have less money available for buying debt issued by the corporate sector. It may be difficult for companies to raise capital by rights issues or offers of debentures and loan stock. The resulting inability to maintain a satisfactory ratio between long-term and short-term debt, and between equity and fixed interest liabilities may also inhibit companies' willingness to borrow from the banks.

Secondly, the rate of interest needed to promote the quantity of gilt-edged sales compatible with a money supply target may prohibit a significant revival in lending to industry. For example, in the December 1976 Letter of Intent to the International Monetary Fund, lip-service was paid to 'the essential needs of industry' as one of the desiderata of monetary policy. But the interest rates prevailing at that time – with Minimum Lending Rate at 14³/₄ per cent – were, although necessary to stimulate buying of gilts, certain to prevent any significant increase in bank loan demand.

Thirdly, a situation in which both the budget deficit and industrial demand for loans are high is liable to generate considerable financial instability. If,

because of a disappointing set of economic news, the gilt-edged market is reluctant to buy 'tap' stocks (i.e., new issues of government debt), the strength of the expansionary monetary forces is likely to cause bad money supply figures very quickly. The market's trepidation about the authorities' response exaggerates the difficulties in selling stock as pessimism becomes self-reinforcing. A sharp rise in interest rates is needed to restore confidence. The abrupt interest rate movements which have occurred on a number of occasions in the mid-1970s exemplify the problem. Interest rate volatility is in itself an evil, both because of the uncertainty engendered in business planning and because of the administrative inconvenience to financial institutions and their customers.

It follows, then, that large budget deficits, monetary restraint and the revival in lending to the private sector which is a precondition for industrial recovery cannot be reconciled. There should be progressive reductions in the PSBR in the next three years in order both to ensure monetary deceleration and to leave scope for increased availability of investment finance. The point can perhaps be given a more pungent and polemical tone by saying that 'expansionary' Keynesian fiscal policy and the 'new industrial strategy' are incompatible – unless the money supply is again to be allowed to grow at over 25 per cent a year as in 1972 and 1973.

In Table 3.1 an example of a medium-term financial plan is given. It respects both the aim of slowing monetary growth and allowing scope for a big rise in lending to the private sector.

No sophisticated justification for the figures suggested in Table 3.1 can be provided, and its primary function is illustrative. Nevertheless, a number of comments seem in order.

Priority is given in Table 3.1 to the private sector's borrowing needs. The greater part of bank advances are to productive concerns – roughly 30 per cent of the total is to industry, 25 per cent to services and 13 per cent to 'other production' – and, if they are to expand, the finance must be available. It is worth pointing out that the £3 billion totals for bank lending to the private sector which have been typical in recent years do not, in fact, necessarily represent finance for new projects. The reason is that interest charges – which will amount to about £3 billion to £3½ billion this year on a sterling bank advances total for the UK banking system of £30,013 million (16 November 1977) – increase banks' assets and liabilities even if there has been no genuine loan demand for investment or stockbuilding purposes.

One salient message from Table 3.1 is that, if non-inflationary money supply growth and propitious conditions for business investment are to be established by the early 1980s, the PSBR must be reduced to about 2½ per cent of national income. This conclusion may be contentious, but it follows from logic and arithmetic, not dogma and theory. The projections made in a

Table 3.1 A medium-term financial plan

	All figures in current price terms				
	1967-77	1977-78	1978-79	1979-80	1980-81
1976-77 figures from <i>Financial Statistics</i>	outturn [(£m)]	estimate [(£bn)]	estimate [(£bn)]	projections [(£bn)]	projections [(£bn)]
Sterling M3 (unadjusted) – end of financial year	40,439	44.7	48.3	51.2	53.2
Increase in year	7.6%	10.5%	8%	6%	4%
Amount of increase	2,828	4.2	3.6	2.9	2.0
Causes of increase					
1. Public sector contribution					
–PSBR	8,770	6.7	5.4	4.8	3.8
–Debt sales to non-banks	-7,450	-8.0	-6.0	-5.9	-5.5
2. Private sector contribution					
–Lending to private sector	3,414	3.3	3.6	3.9	3.9
–Lending to overseas	218	0.6	0.6	0.7	0.7
–Non-deposit liabilities	-776	-1.0	-1.0	-1.1	-1.1
3. External contribution	-1,348	2.6	1.0	0.5	0.2
Total	2,828	4.2	3.6	2.9	2.0

medium-term financial plan highlight the nature of the options facing the Government – and perhaps most important of all, they emphasize that fiscal, monetary and industrial policy should be viewed as an integrated whole.

There is an urgent need for the closer harmonization of monetary and fiscal policy. For much of the mid-1970s the two branches of macroeconomic policy have been in conflict. In 1974 and 1975, for example, Government expenditure rose dramatically, the budget deficit widened and fiscal policy was extremely lax. Monetary policy, on the other hand, was tightened with almost unparalleled severity. The British economy was being driven like a car with one foot on the accelerator and the other on the brake – and it is not surprising that the engine, the private industrial sector, responded badly.

The proposal for a medium-term financial plan accords with the spirit of the comment in the December 1977 Bank of England *Quarterly Bulletin* that, 'Both fiscal and monetary policy affect demand; there are thus important inter-connections between the two branches of policy. A more expansionary fiscal policy would increase the Government's borrowing requirement. One consideration is that beyond a point this would be difficult to finance without either leading to an expansion of the money stock that would seem excessive, or alternatively raising interest rates. The latter would in turn have negative effects on the private sector, partially offsetting those of the Budget itself. For these reasons fiscal and monetary policy need to be decided as part of a single policy.'

The approach being suggested here cannot be regarded as radical, 'extreme' or 'monetarist'; it would not represent a great departure from existing practice; it is simply a common-sense attempt to ensure that expenditure policy decisions, tax decisions and monetary decisions are not taken independently. Future annual expenditure White Papers could serve as a focus for public discussion of the interdependence of these decisions.

The latest Expenditure White Paper should be commended for its joint publication of figures for both revenue and expenditure. This may eventually prove to have been rather more than a minor presentational reform. Indeed, it may foreshadow a great improvement in the co-ordination of fiscal and monetary decisions in this country. After the inconsistencies and conflicts which have marred economic policy in recent years, this would be a very encouraging development.

Our recommendation of a medium-term financial plan designed to restore price stability and industrial prosperity by the early 1980s has implications which many economists would not like. For example, it would abolish discretionary fiscal policy as the prime instrument for regulating aggregate demand. Moreover, the pursuit of price stability by one country in an inflationary international environment might, according to some observers, create

structural adjustment difficulties for industry. At any rate, it is heartening that the annual Expenditure White Papers may now become the forum for a more well-informed debate on these and other issues.

The Medium-Term Financial Implications of North Sea Oil

From the June 1979 issue of L. Messel & Co.'s quarterly forecast of financial flows, Financial Analysis.

The economic prospect was changed radically in 1979 by two developments; the election of a radical right-wing Conservative Government under Mrs Thatcher, and a sharp rise in the price of oil following the Iranian Revolution. The new Government was more receptive to monetarist ideas than its predecessor. Meanwhile, the higher level of oil prices had made it easier to implement the fiscal element in the monetarist package, because it increased the value of tax revenues on North Sea oil profits. The ambitious fiscal agenda set by my 1976 Money Study Group paper and the 1978 proposal to the Expenditure Committee, which had seemed 'politically impossible', now became viable.

The following paper was published in the June 1979 issue of the L. Messel & Co. publication, Financial Analysis. It took the proposal for a medium-term financial plan quite a bit further, including more detail than the 1978 version submitted to the Expenditure Committee of the House of Commons. It was used as briefing material for a meeting of outside economists at the Treasury on 5 October 1979, where the idea of a Medium-Term Financial Strategy was discussed.

The paper provides a forward projection of a number of key financial variables, particularly the credit counterparts (the PSBR, gilt-edged sales, bank lending to the private sector) to broad money growth. In retrospect, the comments on the public sector contribution to monetary growth and external influences on the monetary situation were remarkably prescient. The section on the public sector's contribution clearly anticipated the later so-called problem of 'overfunding', with sales of public sector debt to non-banks ahead of the PSBR. The surmise that excess institutional liquidity might have to find its way into overseas assets, after the abolition of exchange controls, was also correct.

However, two parts of the projection were very wrong. First, bank lending to the private sector was much higher than I had foreseen, which made it virtually impossible to bring broad money growth into single digits in the early 1980s in the way that I had hoped. Secondly, instead of the ratio of broad money to national income falling in the early 1980s (as it had done in

the late 1970s), it rose substantially. Both these errors' – which were also made by the Government and other analysts – damaged the image of the MTFS. The consequences of the presentational embarrassments are discussed in more detail later on pp. 83–104.

The Conservative Government is committed to sound finance. Although, in his first Budget, Sir Geoffrey Howe placed more emphasis on restoring incentives than on setting the right financial climate, there has undoubtedly been a shift from the reluctant, 'pragmatic' monetarism of Mr Healey to a more full-blooded version. The effective £9¹/₄ billion PSBR in 1979/80 (i.e. after including £1 billion public sector asset sales) is disappointingly high and, in the next two years, the Government will face the same kind of difficulties as its Labour predecessor in reducing the budget deficit and money supply growth. However, its task thereafter will be considerably eased by tax revenues related to North Sea oil.

According to the Treasury, these revenues are expected to be about £4¹/₂ billion (at 1977 prices) by the mid-1980s. In current price terms, and given that the recent rise in oil prices sticks, the amount involved could be much larger. Unless the money is squandered on tax reductions or increases in public expenditure, Britain's financial position could be revolutionized. The public sector borrowing requirement might fall sharply, particularly as a proportion of national income, and the implications for financial markets would be exciting. The present paper concentrates on these possible medium-term developments.

The exercise could be criticized as an imaginative extravagance, since it depends on political decisions over the next few years. Some investors seem to prefer hearing gloomy prophecies about a 'confrontation' between union leaders and the Government, leading to an election within two years and another Labour Government which will spend the oil revenues on miscellaneous welfare hand-outs and wholesale nationalization. It could happen. But the balance of probabilities is against it and, extrapolating from Mr Healey's policies in 1976 and 1977, even a Labour Government would be likely to use the oil money in part to cut the PSBR. The consequences of a big reduction in the budget deficit over the next few years must be discussed. They are particularly important for long-term savings institutions whose strategy must look beyond the next 12 or 18 months.

Confidence in medium-term financial trends would be improved if the Government were to announce PSBR and money supply targets for several years ahead. These targets could serve as a barrier against ambitious spending ministers and opportunistic tax cuts in the later years of the present administration; they would strengthen the Chancellor's hand in the Cabinet. However, even if the Government's economic strategy is not to be determined by

quantified targets, we have decided to present a central case with specific numbers as a 'par for the course'. It helps as a benchmark for discussion and enables the analysis to be focused effectively. The numbers are in no sense precise forecasts, but they give some notion of the orders of magnitude involved.

The major unresolved issue can be stated straight away. In the 1978 calendar year, inflows into life offices and pension funds were £8,353 million. In the 1983/84 financial year, on plausible assumptions about inflation, they will approach £14 billion. Purchases of public sector debt by the institutions amounted to £3,988 million in the 1978 calendar year and, given the burst of gilt-edged buying in February and March, to perhaps £4,500 million in the 1978/79 financial year. With the PSBR declining to probably under £5 billion by 1983/84, compared to £9.2 billion in 1978/79, where will institutional cash be allocated? At first sight, there appears to be an impossible problem of reconciliation here. However, we will argue that developments such as a revival of debenture issues and outward portfolio investment after the abolition of exchange controls could make the numbers add up.

The analysis is important not only as a signpost to future changes in financial markets, but also to explain how the economy would respond if the PSBR were cut sharply. It is sometimes argued – notably by the more stalwart Keynesian economists at the National Institute of Economic and Social Research – that a reduction in the PSBR would be deflationary because private sector demand would not compensate for lower public expenditure. But our analysis shows there are several ways in which the financial markets will promote spending by companies and individuals. Indeed, the long-run effect of cutting the PSBR would be to transfer the task of allocating resources from the public sector, through industrial subsidies, employment grants and so on, to private financial institutions. The eventual benefits to productivity growth could be substantial.

Reductions in the PSBR form only one part of a sound financial policy. They are important not merely in their own right, but because they enable money supply growth to be lowered. In this section the implications for monetary growth over the medium term of lower budget deficits and control over other contributors to monetary expansion are analysed. The paper includes some specific numbers in a medium-term financial projection. The projection is given in Table 3.2. These numbers are generated by an analysis based on the money supply equation:

Increase in sterling M3 = PSBR – sales of public sector debt to the non-bank private sector + bank lending to the private sector and overseas – external and foreign currency finance – increase in non-deposit liabilities

Table 3.2 A medium-term financial projection

All figures in £bn	1979/80	1980/81	1981/82	1982/83	1983/84
Public sector borrowing requirement	+8.3	+6.1	+5.5	+4.3	+3.1
Public sector debt sales to non-banks	-8.2	-5.8	-5.3	-4.1	-2.9
Bank lending to private sector and overseas	+5.6	+5.3	+5.0	+4.6	+4.3
External and foreign currency finance	nil	nil	nil	nil	nil
Increase in non-deposit liabilities	-1.0	-1.0	-1.0	-1.0	-1.0
Increase in sterling M3	+4.7	+4.6	+4.2	+3.8	+3.5
Outstanding sterling M3 at beginning of year	51.3	56.0	60.6	64.8	68.6
Percentage rise in sterling M3	9.2	8.2	6.9	5.9	5.1

Notes

- (1) The PSBR figures are illustrative, but are much influenced by the prospective rise in North Sea tax revenues.
- (2) The outstanding total of bank lending to the private sector and overseas was about £45 billion at the beginning of the 1979/80 financial year. It is assumed to rise in line with the money national income figures given in Table 3.3.

The projection identifies the constraints on the authorities and explains the interaction between them. Clearly, the higher is the public sector contribution to monetary expansion, the less room there is for bank lending to the private sector within a given monetary target. The prospects for each of the components of the money supply equation are discussed in the following subsections.

The public sector contribution to monetary growth (PSBR – sales of public sector debt to the non-bank private sector)

The link between the budget deficit and monetary growth is familiar. It has become part of monetarist folklore in recent years and, as such, has quite rightly received much publicity. However, the public sector contribution to money supply growth need not be worrying if the authorities are able to sell substantial quantities of public sector debt outside the banking system. In these circumstances, an excess of government expenditure over revenue does not raise bank deposits or necessarily cause problems of monetary control. Indeed, such has been the success of the funding programme in Britain in the last three financial years that it has tended to offset the PSBR almost entirely. It follows that the main advantage of reducing the budget deficit would not be that money supply growth could be cut directly. The real benefit would instead be that the headaches created by the need to sell substantial quantities of public sector debt would be eased. Consequently, the interest rate levels required to control private sector credit could be lower and more stable.

The PSBR forecasts in Table 3.2 are to be regarded as a reasonable central case. A discussion of their political plausibility would be dominated by projections of North Sea oil revenues and here we will concentrate only on their economic implications. It will be seen from Table 3.2 that the PSBR declines from just over 5 per cent of gross domestic product in 1979/80 to about $1\frac{1}{2}$ per cent in 1983/84. In the 11 years from 1955 to 1966 the ratio averaged just over 3 per cent and was comparatively stable; in the subsequent 11 years, to 1977, it averaged about $4\frac{3}{4}$ per cent and was highly volatile from year to year. In other words, there is a distinct possibility that the PSBR/GDP ratio will be lower by the mid-1980s than has historically been normal. Indeed, a determined effort might succeed in eliminating the PSBR completely.

It could be argued, however, that a zero PSBR is an inappropriate objective because the public sector includes the nationalized industries. These are commercially run enterprises and, if they were in the private sector, it would be expected that over a period of years they would on balance incur financial liabilities to match their investment in fixed assets. The solution to this problem is to derive a separate budget deficit measure which is more specifi-

cally related to the central government and local authorities. It would be more sensible to aim for a balanced budget on this measure, while investment by the nationalized industries was financed by long-term borrowing in the market. However, this point is perhaps a detail in comparison to the distinct possibility that the PSBR/GDP ratio will be much lower in future than it has been for most of the 1970s.

But what about sales of public sector debt outside the banking system? The simplest approach in estimating their future level would be to assume that the same proportion of institutions' cash flow is allocated to gilt-edged securities as in the recent past, that personal sector investment in national savings grows roughly in line with inflation, and that sales of the miscellaneous forms of public sector debt (certificates of tax deposits, local authority bonds, Treasury bills, etc.) rise steadily. The difficulty is that, on any plausible projections of savings inflows into the institutions, this would soon lead to an impossible result.

The only way in which sales of public sector debt to the non-bank private sector can exceed the PSBR is by the Government reducing its indebtedness to either the banks or the overseas sector. This is the obvious result of accounting identities; it is just another way of saying that to every creditor there must be a debtor and that 2 plus 3 cannot make 4. Institutional cash flow in the early 1980s will exceed £10 billion. In recent years nearly 50 per cent has gone into public sector debt, principally gilts. If the same proportion were to continue, the acquisition of public sector debt by the institutions would be about £6 billion to £8 billion, compared with a PSBR declining to £4 billion in 1982/83 and £3 billion in 1983/84. Obviously, the two cannot be reconciled. In our estimates we have assumed, therefore, that public sector debt sales will be just less than the PSBR. The implication, even in this case, is an almost continuous reserve asset squeeze on the banks, since the Treasury bill issue should not rise much if the PSBR is more or less fully matched by gilt sales. An easy solution would be to increase the number of eligible commercial bills or banks' money-at-call with the discount houses.

The result is that the public sector contribution to monetary growth is tiny throughout the period. The explanation is that the private sector's appetite for government debt is so strong relative to the available supply. This may sound an extreme suggestion, but it is by no means unrealistic in view of recent experience. In the six banking months ending on 18 April this year, the non-bank private sector purchased about £5 billion of central government debt, a massive figure which exceeded the Central Government borrowing rate over the same period by a wide margin. The institutions and general public have become so habituated to investing in public sector debt in the 1970s that it will take some time before they switch to alternative savings outlets.

Bank lending to the private sector

In the 1970s bank lending to the private sector has been one of the most volatile components of monetary growth. A phase of very rapid expansion in the early 1970s was followed by contraction in the mid-1970s and more steady growth in 1977 and 1978. The fluctuations reflected both the swings in economic activity and the somewhat erratic conduct of interest rate policy by the Bank of England. We have assumed that in the early 1980s the outstanding total of bank advances rises in line with money national income and that it does so without deviations from its trend year by year. This seems the most neutral approach and is, to that extent, the most easy to defend. However, it has a significant and perhaps disappointing consequence. As the decline in inflation can be expected to follow the deceleration in monetary growth only with a lag, and as bank lending reflects inflation by assumption, it remains relatively high and is by far the biggest contributor to monetary growth throughout the early 1980s. It would be feasible to restrain bank lending more aggressively, and therefore bring money supply growth down to the 3 or 4 per cent level compatible with price stability more quickly, but only by obliging companies to reduce the real value of their bank borrowings. That would be more positively deflationary than the central case we have assumed.

There are grounds, nevertheless, for thinking that bank lending might show a weaker trend in the early 1980s than in the 1970s. Rapid inflation encourages borrowers because, of course, the real value of their liabilities is being continuously eroded. Were inflation to slow down markedly, as seems quite possible, there might be a change in corporate debt patterns with less reliance on bank debt and more on shareholders' funds or fixed interest bond debt. As we have seen, there would be a real problem in finding a destination for institutional funds if the PSBR were to decline drastically. An escape valve would be provided if some of that money went into the corporate sector via new equity, loan stock or debentures. Insofar as companies meet their external financing requirements in these ways, they have less need to resort to the banks, bank lending to the private sector can be lower and so, too, can money supply growth. Indeed there is a sort of virtuous circle at work here. Lower inflationary expectations discourage the incurrance of bank debt which helps monetary trends. This contributes to, and therefore reinforces, the deceleration of inflation. The process becomes self-validating.

External and foreign currency finance

The external contribution to monetary growth is the most difficult to predict, partly because it is contingent on exchange rate policy and partly because it is susceptible to monetary developments in other countries. There is also a major imponderable about official economic policy in this area as Britain

has a large volume of foreign debt coming due for payment in the early 1980s. It has not yet been decided whether the amounts involved will be paid back or 'rolled over'. In a speech in 1977, Mr Gordon (later Lord) Richardson, the Governor of the Bank of England, pointed out that the debts total about \$20 billion and they are heavily concentrated in the three years from 1982 to 1984. To eliminate them without dipping into the reserves, the Bank of England would have to be a persistent seller of sterling and buyer of other currencies in foreign exchange markets over the next few years. If this did happen, it would raise the money supply; and the more complete the attempted repayment of debt, the greater the problems of monetary control. In practice, it seems unlikely that the Government will make a determined effort to pay back the debt, partly for these monetary reasons and partly because of the rather persuasive welfare argument that the real value of the debt is falling every year because of inflation.

It follows that the assumption of a modest external impact on monetary growth is the most convincing. This would be consistent with the authorities allowing the exchange rate to float, with only slight intervention on occasions to smooth out what are deemed to be erratic fluctuations in the exchange rate.

External and foreign currency finance has three components – external financing of the public sector (mostly official intervention in the foreign exchange markets), the change in overseas sterling deposits, and the change in banks' net foreign currency deposits. There is a long-term tendency for foreign holding of sterling deposits to rise because they are mainly intended to meet the trading needs of multi-national companies, and these needs rise steadily with inflation. Thus, between 21 March 1973 and 21 March 1979, overseas sterling deposits rose from £2,457 million to £5,567 million, roughly matching the growth in money national income over that period. As a rise in overseas sterling deposits enables banks to increase their sterling assets without affecting the money supply, such increases are a negative influence on monetary growth. With inflation they can be expected to amount to about £500 million a year.

If so, the other two elements of external and foreign currency finance could be slightly positive. There is no systematic tendency in either direction in the banks' net foreign currency position, so it would be possible for external financing of the public sector to be slightly positive over this period without external factors having any overall effect on the money supply. Any resulting accruals of foreign currency could go some way towards repaying official debt.

Perhaps it does not need to be said that all this is rather academic given the turbulence of foreign exchange markets. It has frequently happened in recent years that official intervention on one either to support or to depress

the exchange rate has exceeded £200 million in one day. The difficulty is that it is impossible, from the standpoint of June 1979, to foresee what the scale, timing and direction of sterling crises (if any) will be in 1982 and 1983. So we just have to assume that they won't happen.

The projection in Table 3.2 is an indication of economic possibilities: what will actually happen depends on politics. However, a strong argument for formalizing such a projection into an official medium-term financial plan can be made. The argument has two aspects. First, it would act as a political constraint on spending ministers in future years. The present enthusiasm for cost-cutting exercises in the departments will almost certainly wane and, if spending growth is resumed, it will be difficult to hold down the PSBR. The other danger is that the revenue from North Sea oil will be used to cut income tax rather than reduce the PSBR. Sir Geoffrey Howe's statement in the Budget that the standard rate should be cut to 25p in the pound, presumably over a period of years, was ominous. A medium-term financial plan would, if publicly announced, serve as a check on political opportunism of this sort.

Secondly, a medium-term plan would indicate to industry that the Government is committed to sound financial policies. Of course, government ministers have often pledged that monetary restraint is here to stay, but fine words are not a substitute for quantified targets. A medium-term plan would help businesses to plan ahead and would give them reassurance about the continuity and rigour of financial policy over the next few years. It might also have a benign effect on inflation expectations and, in the battle to overcome inflation, the moulding of expectations is almost as important as the adoption of the appropriate underlying policies. If inflation expectations were lowered, the deflationary impact of monetary deceleration would be moderated.

Nevertheless, to plan the Government's finances several years ahead would involve several difficulties of both estimation and implementation. Not the least of these is that the PSBR varies with the level of economic activity. It follows that to forecast the PSBR several years ahead it is also necessary to forecast economic activity. In the past, such forecasts have not proved very successful. This problem could be evaded by estimating the PSBR on a constant employment-basis and stating the targets in those terms. They might then become politically sensitive if the degree of unemployment assumed was higher than 'socially acceptable'. However, this raises wider issues and it should be pointed out that our projections already incorporate a highly pessimistic view about unemployment.

In implementing PSBR targets, there have always been serious problems because the PSBR is the difference between two very large flows – the Government's expenditure and revenue. It may be asked what value a PSBR

target two or three years ahead would have if the Government has enough trouble in meeting a target only 12 months away. But the imprecision of a target variable does not mean that it is either unimportant or uncontrollable. Indeed, if PSBR targets cannot be attained, it would be difficult to see what value any quantified policy objectives would have. The argument degenerates into economic nihilism. In particular, Keynesianism, which relies on the 'fine-tuning' of fiscal policy and is usually advanced as the main alternative to focusing on monetary targets, would be invalidated.

The Government should consider publishing a medium-term financial plan because of the political and psychological benefits that would ensue. The estimation and technical problems in preparing it are not particularly serious and can be overcome.

In conclusion, a few words are needed on the economic consequences of the numbers given in the medium-term financial projection. Over the whole period the money supply grows more slowly than money national income, implying a persistent squeeze on real money balances (see Table 3.3). This might be thought to point to a continuous recession. However, the velocity of circulation has been rising steadily over recent years, perhaps because of technical progress in the financial system. If velocity is on a rising trend, the slight fall in real money balances should not prove difficult to accommodate. Indeed, the path portrayed in Table 3.3 is very stable in comparison to the violent swings in monetary conditions in recent years. It would produce a much more settled economic environment.

Table 3.3 Implications for velocity of circulation

	Percentage rise		
	Sterling M3	Money national income	Velocity of circulation
1979/80	9.2	13.1	+3.6
1980/81	8.2	11.0	+2.6
1981/82	6.9	9.3	+2.3
1982/83	5.9	8.0	+2.0
1983/84	5.1	7.0	+1.8

The main proviso relates to the next 18 months, when the pressures on the economy's liquidity are most severe. In 1979/80 we have assumed a 13.1 per cent rise in money national income, which may be thought on the low side,

but is realistic. However, the demand for money may rise more than this because of the rise in VAT to 15 per cent, announced in the 1979 Budget. (Higher indirect taxes increase the money value of transactions and so also the amount of liquidity needed to finance them.) In other words, a recession will occur in late 1979 and early 1980, as forecast by the Treasury in the *Financial Statement and Budget Report 1979/80*, and by most private forecasting bodies.

The Analytical Foundations of the Medium-Term Financial Strategy

From an article of the same name in the May 1984 issue of the Institute for Fiscal Studies' journal, Fiscal Studies.

This paper developed in an analytically acceptable way the ideas which had begun in the 1976 paper for the Money Study Group conference. Ironically, by 1984 they were of interest for their retrospective insight into past government decisions, not because they provided background reasoning for current policy. I did not know this when I was writing the paper and was only to recognize the early signs of the disintegration of the MTFs in early 1985. In the 1985 Budget speech Mr Lawson, the Chancellor of the Exchequer, said that: 'There is nothing sacrosanct about the precise mix of monetary and fiscal policies required to meet the objectives of the MTFs'. But the whole point of the MTFs had been to restrict the Government's scope to vary the budget deficit. Mr Lawson had therefore challenged the basic rationale of the centrepiece of the Government's economic strategy. More fundamental changes, particularly to targets for monetary growth, were to follow.

In truth, Mr Lawson saw no virtue in price stability as an objective of official policy and never had done. Deep down, he had always been a 'growth-man' of 1960s vintage, someone who wanted the Government to push Britain higher up the international league tables of economic growth. I realized this gradually in late 1984 and 1985, as a sequence of curious announcements came out. By mid-1986 I was extremely worried that he might throw away the Thatcher Government's two great economic achievements – the sharp drop in inflation and the restoration of a degree of stability to Britain's much-troubled economy.

Strangely, the one area where Mr Lawson did make a positive contribution was fiscal policy. The boom he presided over in 1987 and 1988 resulted in large budget surpluses and enabled the Government to repay debt for the first time in 20 years. Mr Lawson finally announced in the 1988 Budget that the Government would follow a rule of balancing the budget over the economic cycle. Perhaps the MTFs did some good after all.

Since the mid-1970s macroeconomic policy in Britain has changed in two main ways. First, the Government's overriding aim has become the reduction of inflation by financial control, in contrast to the previous emphasis on full employment. Secondly, both ultimate objectives (the inflation rate) and intermediate target variables (money supply growth and the budgetary position) have been specified over a medium-term time-horizon, usually three to five years. This represents a clear break from the practice of annual adjustments to the budget deficit associated with Keynesian fine-tuning in the 1960s and early 1970s.

The two changes are related. The rationale for a medium-term policy specification is to be sought in scepticism that any worthwhile impact on the inflation rate can be achieved by monetary restraint lasting only one year. The length and unreliability of lags in monetary policy suggest that the Government should instead adhere to a programme of money supply control lasting several years. It has also been argued that, although there is no mechanical link between the PSBR and money supply growth from year to year, the two variables are related over the medium term.¹ A logical accompaniment to setting monetary targets for some years ahead is therefore to state PSBR guidelines over a similar extended period.

These ideas were implicit in the Medium-Term Financial Strategy announced by Sir Geoffrey Howe in the March 1980 Budget. They remain highly relevant to the appraisal of Mr Lawson's 1984 Budget. In the *Financial Statement and Budget Report* (FSBR) published with the Budget, the Government mentions a 3 per cent figure for the GDP deflator in 1988/89. This is not exactly a target, but it is probably intended as rather more than a working assumption. The Government's eventual goal is purportedly to establish price stability. In evidence to the Treasury and Civil Service Committee on 28 March, Mr Lawson indicated that it was a ten-year aim.

In this paper we shall consider, in loosely theoretical terms, the relationship between fiscal policy and inflation. The purpose of the exercise is to provide analytical foundations for the Medium-Term Financial Strategy and a means for assessing the consistency of the Government's macroeconomic programme with its inflation objectives. The latest version of the MTFS, contained in the 1984/85 FSBR, is clearly central to this assessment, but a few passages in the Green Paper on *Public Expenditure in the 1990s* are perhaps of even greater interest. In conclusion, some remarks are ventured on where fiscal policy might go in the future.

Two possible channels of linkage between fiscal policy and inflation will be examined here. The first relates to the interaction between budget deficits and the debt interest burden. It was recognized many years ago and remains logically compelling. The second, which relies on the credit counterparts

arithmetic so basic to the conduct of monetary policy in Britain, may be more controversial.

One of the most ancient perceptions of economic science is that a nation cannot be in debt to itself. In this sense, the notion of a debt burden is a misunderstanding. However, interest has to be paid on government debt and taxation collected to meet the interest payments. Such taxation has the usual disincentive and allocation-distorting effects. If the national debt is 'too large' these effects become serious and people may be reluctant to pay their tax bills. Since difficulties in raising revenue discourage investment in government bonds, a higher real interest rate must be paid. The resulting increase in debt-servicing costs further aggravates taxpayer discontent. Sooner or later the situation deteriorates into ungovernability, with open political tension between the taxpayer and rentier classes. There is no absolute criterion for deciding when the debt interest/income ratio is excessive, as much depends on the structure of taxation and taxpayer ethics. France between the two World Wars illustrated the problem of unacceptable rentier claims with particular clarity.

The difficulties which arise from an increasing debt interest/income ratio have been discussed in a recent paper by Sargent and Wallace.² In their work an upper bound on the public's demand for government bonds is derived from an overlapping generations model of savings behaviour. The constraint on the debt interest/income ratio therefore stems from assumptions about the savings function rather than taxpayer resistance to rentier claims. The conclusion that there is a limit to the debt interest/income ratio – and so to the debt/income ratio – is reinforced by their alternative approach.

It is important to notice that both the constraints on the debt interest/income ratio identified here are 'real'. They would apply whatever the rate of money supply growth. However, the result of excessive budget deficits must still be inflation. If a government's budget deficit is so large that debt interest is increasing faster than money national income, the maximum debt interest/income ratio will eventually be reached. At that stage if the debt interest/income ratio is to remain constant, and the trend growth of productive capacity is unchanged, the rate of inflation must rise.

This argument suggests the principle that the maximum budget deficit/income ratio for a stable inflation rate (or stable prices) is one compatible with a constant debt interest/income ratio in the long run. The point was recognized in the 1944 White Paper on *Employment Policy*, but in the 1950s and 1960s it was more or less forgotten because the budget deficit was quite low and inflation eroded the real value of the national debt.³ But more recently they have become important. Table A.7 in the Green Paper shows that

the ratio of net debt interest to gross domestic produce rose from 2.2 per cent in 1975 to 3.7 per cent in 1981 and 3.4 per cent in 1982.

A simple algebraic argument can be outlined to determine the budget deficit/income ratio consistent with a constant debt interest/income ratio. If we assume that the interest rate is fixed, a constant debt interest/income ratio implies a constant debt/income ratio. Let 'a' denote the constant ratio of the national debt to income. Then:

$$D = aY$$

and

$$\Delta D = a\Delta Y$$

where D is the national debt and Y is national income and signifies changes in the variables. But the change in the debt is the same as the budget deficit (denoted by B), and so:

$$B/Y = a.\Delta Y/Y$$

Here $\Delta Y/Y$ is, of course, the rate of increase of money national income and is equal to the increase in prices plus the increase in real output, which may be denoted by i (inflation) and g (growth), respectively. We therefore have:

$$B/Y = a.(i + g)$$

As long as the budget deficit/income ratio is kept equal to the right-hand side of this equation year after year, the debt interest/income ratio will be constant.⁴

This is a useful result. Clearly, if the government wants to have stable prices (i.e. $i = 0$), it must keep:

$$B/Y = a.g$$

In an economy with a low underlying rate of economic growth, the message is that the government's scope for running budget deficits is very limited. The ratio of the national debt to income has never exceeded 2 for long periods in Britain. If we regard the economy's growth rate in the very long run as 2 per cent, the maximum budget deficit/income ratio consistent with stable prices and a constant debt interest burden at any state in our history emerges as 4 per cent. At present, the national debt/income ratio is about $1/2$. If we follow the Treasury's suggestion in the Green Paper of $2^{1/4}$ per cent a year

growth until 1988/89, and $1\frac{1}{2}$ to 2 per cent a year between 1988/89 and 1993/94, the implied maximum budget deficit/income ratio would seem to be about 1 per cent. In fact, the mechanical application of the formula is not legitimate because the average rate of interest on the national debt will undoubtedly change in coming years. However, the exercise does identify variables relevant to the specification of a medium-term fiscal strategy for inflation control.

Before moving on to the relationship between the fiscal stance and monetary growth, we should note the concept of the budget deficit relevant to the debt interest problem. Government debts matched by interest-paying financial assets (e.g. claims on the private sector) or which lead to investment in profitable or self-financing enterprises (e.g. public corporations' capital spending) should be deducted from the budget deficit since they have no net effect on the interest burden. In Britain the general government financial deficit is the closest approximation to this underlying idea.

The general government financial deficit is not, however, the appropriate concept for tracing the link between fiscal policy and money supply growth. Here the right measure is the potential addition to the money supply attributable to the budgetary position. This measure is the public sector borrowing requirement, since it is one item in the well-known credit counterparts identity for sterling M3:

Change in sterling M3 = PSBR + bank lending to private sector – sales of public debt to non-bank public – external items – increase in non-deposit liabilities

This identity can be expressed more concisely as:

$$\Delta M = B - \Delta S + \Delta L \quad (1)$$

where S is the stock of government debt held by the non-bank public and L is the outstanding total of bank advances to the private sector. This formulation excludes the external items, the analysis of which would introduce unnecessary complications. In developing another brief algebraic argument we shall make use of the monetarist assumption that the rates of growth of money national income and of the money supply are equal in the long run:

$$\Delta Y/Y = \Delta M/M \quad (2)$$

Now let us consider a steady-state situation in which the ratios of government debt and of the outstanding bank advances total to money national

income have constant values denoted by α and β , respectively.⁵ Then:

$$S = \alpha Y \quad (3)$$

$$L = \beta Y \quad (4)$$

Taking differences in (3) and (4), and substituting into (1) gives, after division by Y :

$$\frac{\Delta M}{M} - \frac{M}{Y} = -\frac{B}{Y} - \alpha \frac{\Delta Y}{Y} + \beta \frac{\Delta Y}{Y}$$

From (2), $\Delta M/M$ equals $\Delta Y/Y$ in long-run equilibrium, and hence:

$$\frac{\Delta M}{M} = \left\{ \frac{1}{(M/Y) + \alpha - \beta} \right\} \frac{B}{Y} \quad (5)$$

Equation (5) shows that the rate of money supply growth is a positive function of the PSBR/GDP ratio if:

$$\frac{M}{Y} + \alpha > \beta$$

This will always be true since the money stock is higher than the outstanding bank advances total. The equation also says that an increase in the PSBR/GDP ratio can – in a long-run steady state – be accompanied by no increase in the money supply growth rate only if one or other of the following three conditions is satisfied:

1. There is an increase in the ratio of the money supply to national income.
2. There is an increase in the ratio of public sector debt holdings to national income.
3. There is a reduction in the ratio of bank advances to national income.

As with the previous exercise, it is important to realize that the current values of the variables mentioned cannot be inserted mechanically in the equation to obtain the PSBR/GDP ratio consistent over the next few years with a particular growth rate of the money supply and money national income. The equation applies in a long-run steady state, a condition which

does not prevail in the British economy today. The advantage of the exercise is again that it identifies influences on the relationship between the budget deficit and money supply growth, and so gives analytical leverage on the theoretical issue. Real-world application is more problematic.

There are two particular hindrances to estimating the PSBR/GDP ratio consistent with a given inflation rate or price stability over the long run. First, considerable uncertainty exists about the determinants of the demand for public sector debt. It is not clear whether wealth-holders are more concerned about the market value or the nominal value of the debt. The natural assumption would seem to be that they focus on the market value of debt issued in the past, but the budget deficit represents new additions to the nominal value of the debt. The successful passage of the economy from high to low inflation would reduce interest rates, increasing the market value of the national debt but having no effect on the increase in the nominal debt associated with a particular budget deficit. More fundamentally, the national debt/income ratio has varied substantially in the post-1945 period. The London Business School has shown that the nominal value of public sector debt fell from 73 per cent of GDP in 1963 to 41 per cent in 1979.⁶ The decline would have been even greater if market value had been used instead.

Secondly, the ratios of both the money supply and bank lending to national income are not immutable for all time. The ratio of broad money to money national income has varied within a relatively narrow band (from 0.35 to 0.45) over the last 20 years, but the ratio of bank advances to national income has risen steadily. The rise in the bank advances/national income ratio reflects the attractiveness of bank finance for companies relative to capital market finance throughout the 1970s. The 1984 Budget has altered the balance again, since the scope for leasing business will decline after 1986 and the need to pay deferred tax will, by eroding banks' capital adequacy, tend to restrict lending growth. At present the bank advance/national income ratio is about 0.35, a figure unlikely to be exceeded for the foreseeable future.

The provisos about the real-world application of the equation must be recognized and understood. Nevertheless, some indication of the order of magnitude of the PSBR/GDP ratio consistent with different money supply growth rates can be given. The matrix in Table 3.4 relies on realistic assumptions about the money supply/money national income and bank advances/national income ratios to derive possible outcomes.

Is the 1984 version of the Medium-Term Financial Strategy consistent with the Government's inflation objectives until 1988/89?

In the 1984 Budget Mr Lawson decided that most of the Thatcher Government's hard work on reducing the budget deficit had been completed. Para-

Table 3.4 The relationship between the PSBR/GDP ratio and the growth rate of broad money: possible outcomes

Debt/income ratio (%) \ PSBR/GDP ratio (%)	1	2	3	4	5
0	20.0	40.0	60.0	80.0	100.0
25	3.3	6.7	10.0	13.3	16.7
50	1.8	3.6	5.5	7.3	9.1
75	1.3	2.5	3.8	5.0	6.3
100	1.0	1.9	2.9	3.8	4.8

Note

The figures in the matrix show the percentage growth of broad money associated with particular PSBR/GDP and debt/income ratios. For example, with a PSBR/GDP ratio of 2% and a debt/income ratio of 50%, broad money should grow by 3.6% a year. These calculations use equation (5) of the text.

Assumptions

- (1) Ratio of broad money to money national income: 0.40.
- (2) Ratio of bank advances to money national income: 0.35.

graph 56 of the Green Paper on Public Expenditure states that, disregarding net debt interest, 'the tax burden for the non-North Sea sector can be reduced to the extent that public expenditure falls more than North Sea tax revenues as a share of GDP'. In other words, success in controlling public spending other than debt interest will lead to tax cuts, not a lower PSBR/GDP ratio. This is a major change of direction from the unswerving commitment to PSBR reduction when Sir Geoffrey Howe was Chancellor of the Exchequer.

According to the Medium-Term Financial Strategy set out in the 1984/85 *Financial Statement and Budget Report*, the PSBR/GDP ratio is intended to decline from $3\frac{1}{4}$ per cent in 1983/84 to $2\frac{1}{4}$ per cent in 1984/85 and 2 per cent in 1985/86. Although figures of $1\frac{3}{4}$ per cent are given for 1987/88 and 1988/89, the difference between $2\frac{1}{4}$ and $1\frac{3}{4}$ per cent is less than the margin of error, and for all practical purposes can be ignored. Mr Lawson is, in effect, planning to stabilize the PSBR/GDP ratio at about 2 per cent for the rest of the Thatcher Government's second term.

The stabilization of the PSBR/GDP ratio contrasts with the aims to lower both the growth rate of broad money and inflation. The target range for sterling M3 growth is 6 to 10 per cent in 1984/85, falling by 1 per cent a year to 2 to 6 per cent in 1988/89. This is a significant deceleration. More modest are the inflation goals. The GDP deflator is put at $4\frac{3}{4}$ per cent in 1984/85, $4\frac{1}{4}$ per cent in 1985/86 and 4 per cent in 1986/87, and finally at 3 per cent in

1988/89. Curiously, these figures are assembled at no one point in the PSBR, almost as if the Government wanted to hide something, or at least confuse the outsider about its intentions. The GDP deflators in the years up to 1986/87 are presented in Table 5.5, while the 3 per cent number for 1988/89 appears in paragraph 2.19. Our own Table 3.5 brings together the various items in the 'programme', if such it may be called.

Table 3.5 The Government's Medium-Term Financial Strategy and inflation programme 1984/85 to 1988/89

	1984/85 (%)	1985/86 (%)	1986/87 (%)	1987/88 (%)	1988/89 (%)
PSBR/GDP ratio	2 ¹ / ₄	2	2	1 ³ / ₄	1 ³ / ₄
Growth of broad money as measured by sterling M3	6–10	5–9	4–8	3–7	2–6
Inflation rate as measured by GDP deflator	4 ³ / ₄	4 ¹ / ₄	4	3 ¹ / ₂	3

Source: 1984/85 Financial Statement and Budget Report

Whatever the reservations about applying the theoretical steady-state result to an actual situation, it is striking that the Government's fiscal plans and inflation objectives are very much in accordance with the 'ballpark' numbers given in Table 3.4. The national debt/income ratio is currently about $\frac{1}{2}$. Moreover, the market and nominal values of the debt are not at present very different, which simplifies analysis. Table 3.4 shows that, with a debt/income ratio of $\frac{1}{2}$, a PSBR/GDP ratio of 2 per cent would be accompanied – if realistic assumptions are made about the ratios of money and bank advances to GDP – by a rather low growth rate of broad money, about $3\frac{1}{2}$ per cent a year, in long-run steady state. This is beneath the target bands for 1985/86 and 1986/87 and within them for 1987/88 and 1988/89.

An alternative approach, which is a standard technique of financial analysis in Whitehall, the Bank of England and the City, is to consider the credit counterparts arithmetic in any particular year, making 'guesstimates' about the main components. The purpose is to find out how large official gilt sales must be if the money supply target is to be achieved. If required official gilt sales are excessive in relation to institutional cash flow, fiscal policy is deemed inconsistent with the money supply target and so with the Government's inflation objectives. There appears to be no major problem of reconciliation in 1984/85. Table 3.6 demonstrates that, with plausible assumptions about items

Table 3.6 The credit counterpart arithmetic in 1984/85: the consistency between the PSBR and money supply targets

<i>£M3 growth</i>	<i>PSBR</i>	<i>£5.2bn</i>	<i>£7.2bn</i>	<i>£9.1bn</i>
6%		6.1	8.1	10.1
8%		4.0	6.0	8.0
10%		2.0	4.0	6.0

Note

The above matrix shows the level of official gilt-edged sales required in 1984/85, for varying PSBR totals, to achieve the sterling M3 growth stated in the left-hand margin. The figures are required official gilt sales in £billion. They relate to annual periods and not the 14 months in which the target is stated. The estimates rely on the assumptions given below.

Assumptions

- (1) Bank lending to UK private sector: £13.5bn
- (2) Sales of other public sector debt: £3.0bn
- (3) External and foreign currency finance: -£1.5bn
- (4) Increase in banks' non-deposit liabilities: £2.5bn
- (5) Sterling M3 at mid-February 1984: £102 bn

in the credit counterparts identity, required official gilt sales are unlikely to have to exceed the total of £8.8 billion actually sold in the year to January 1984. Two qualifications to this sanguine conclusion should be mentioned. The first is that money needed for privatization issues will represent a bigger drain on institutional cash flow in 1984/85 than in any previous year; the second is that bank lending may be significantly above the £13.5 billion figure assumed if the economic recovery gathers more momentum than expected.

The path for the PSBR to 1988/89 set out in Mr Lawson's first Budget is, then, fully consistent with the Government's stated inflation goals. What about the general government financial deficit which, we argued earlier, is the appropriate budget concept for the debt interest problem? Is there any danger that the debt interest/national income ratio will rise even though money growth and inflation are under control? In fact, not much trouble is likely in this area. The national debt is dominated by gilt-edged securities, with the total amount in issue about £108 billion. Of this total, £66 billion was issued with coupons of 10¹/₂ per cent or more. It seems unlikely that debt with a coupon much above 10¹/₂ per cent will be needed over the next four years, as long as the Government's inflation projections are met. It follows that the debt interest/national income ratio should be declining as a result of lower coupons on stock issued to match redemptions. The size of this effect is such that the increase in the debt interest burden due to persisting deficit financing should be manageable.

A PSBR/GDP ratio of about 2 per cent is consistent with stable inflation of 5 per cent or a little less in the period up to 1988/89. But what fiscal policy is needed for price stability? And would the long-run fiscal policy described in the Green Paper be compatible, eventually, with price stability?

Perhaps the first point to emphasize is that these questions have clearly exercised the authors of the Green Paper. Paragraphs 53 to 56 are a brief statement of principles on 'Debt interest and public sector borrowing'. But the brevity of the remarks should not be taken as indicating that policy-makers attach little importance to them. Paragraph 56 makes the key statement about the intention to translate successful public expenditure restraint into tax cuts. Some very interesting sentences also appear in paragraph 55. 'There is inevitably some uncertainty about the precise PSBR path which would be consistent with the government's aims on inflation. But given the aim of stable prices, the scope for varying the PSBR as a share of GDP is relatively limited. If a higher path were followed a good deal of the apparent scope for increased spending or lower taxes would be pre-empted in the event by higher debt interest payments.' The Treasury is evidently well aware of the medium-term constraint on budget deficits imposed by the debt interest problem. Detailed work on the probable development of the debt interest/national income ratio is presented in Annex 4. Although this is the final section of the Green Paper, it takes up five pages and must have been the product of considerable thought.

Paragraph 8 of Annex 4 is optimistic about the debt interest burden over the next decade. The PSBR/GDP ratio 'is assumed to be low compared with the assumed growth of money GDP. Together with an assumed decline in both nominal and real interest rates as inflation is brought down further and pressure in financial markets eases, this implies a reduction in net debt interest payments'. Table A.8 quantifies the reduction as being from $3\frac{1}{2}$ per cent of GDP in 1983/84 to $1\frac{3}{4}$ per cent in 1993/94. It is this improvement which allows the Treasury to envisage a PSBR/GDP ratio of only 1 per cent in 1993/94, despite the official intention to use any decline in the ratio of public expenditure, apart from debt interest, to national income for tax cuts. To put the point more simply, the Government has in mind a clear dichotomy between genuine public expenditure programmes and debt interest. Success in controlling programmes will lead to tax cuts; success in reducing debt interest will lower the budget deficit.

A PSBR/GDP ratio of 1 per cent would be consistent with price stability. About that there can be no doubt. Table 3.4 shows that a budget deficit as small as that would, with a debt/income ratio of $\frac{1}{2}$ be accompanied by broad money growth at an annual rate of only 1.8 per cent. That is clearly no higher than the trend growth of productive capacity. Changes in assumptions about the debt/income and money supply/income ratios could alter the num-

bers, but the overall conclusion about the compatibility of such a low budget deficit with stable prices is surely robust. The general government financial deficit is usually less than the PSBR. If it were nil or a mere $\frac{1}{2}$ per cent of national income there would be no worries about an increasing debt interest burden. In this respect too, the Government's fiscal plans for the 1990s are consistent with price stability.⁷

The Government's medium-term fiscal strategy and its long-range expenditure plans for the 1990s can be reconciled with its inflation objectives. The Treasury has clearly recognized the debt interest constraint and thought about the need to make its fiscal programme consistent with declining money supply growth.

But Mr Lawson could have done more. PSBR/GDP ratios of 1 to 2 per cent are low not only in relation to the post-1945 average; they are also very small in relation to the margin of error in PSBR estimates. The announcement of a balanced budget rule, on either the PSBR or general government financial deficit definitions, would therefore have meant little difference in practical terms. But it would have had a far more worthwhile impact on expectations than the indefinite extension of the Medium-Term Financial Strategy. Mr Lawson apparently wants to give himself as much room as possible, within financial constraints, for tax cuts. As a journalist twenty years ago his enthusiasms were tax cuts, tax reform and economic growth. He had no time for sound money nostrums. In a *Sunday Telegraph* article on 11 March 1962 he wrote against 'the Eisenhower school of economic commentators, who see mystical significance in an overall budget balance, since this is a muddled amalgam of Gladstone and Keynes without the logical consistency of either'; on 28 April 1963 he judged that 'The great social justification, to my mind, for a mildly inflationary economy is that a society in which borrowers do better than lenders of money is fundamentally more attractive than one in which the reverse is true.'⁸ The quotations might be dismissed as those of a young man trying to cut a dash. But there are two reasons for taking them more seriously. First, in evidence to the House of Commons Treasury and Civil Service Committee on 28 March 1984, the same Mr Lawson said: 'There is no particular magic about a balanced budget'. Secondly, in the first Budget he presented as Chancellor of the Exchequer he sanctioned the continuation of mild inflation for the next five years.

But tax cuts do not change the burden of public expenditure. The increase in the budget deficit they must involve means merely that the burden damages the private sector in different ways (higher interest rates, higher inflation, debt debasement) from the disincentive effects associated with overt taxes raised by the Inland Revenue or the Customs and Excise.⁹ And, more fundamentally, what is the point of perpetuating the national debt? In a long-run

steady state the only beneficiaries of deficit financing are tax inspectors (who have to collect taxes to pay the interest), gilt-edged stockbrokers (who receive commission on transactions in the debt instruments) and macroeconomists (who pontificate on the pros and cons of particular fiscal policies). There is more useful work for these worthy members of society to do. A really radical Chancellor would think about extinguishing the national debt by a policy of deliberate budget surpluses. Financial markets could then concentrate on the important task of channelling the nation's savings into profitable and efficient private sector investments.

Notes

1. A. Budd and T. Burns, 'The role of the PSBR in controlling the money supply' *Economic Outlook* (Gower Publishing for the London Business School), November 1979, pp. 26–30. The subject was also considered in T. G. Congdon, 'Monetarism and the budget deficit', paper given to the fifth Money Study Group conference at Brasenose College, Oxford, in September 1976, and reprinted in this volume on pp. 38–49.
2. T. J. Sargent and N. Wallace, 'Some unpleasant monetarist arithmetic' *Federal Reserve Bank of Minneapolis Quarterly Review*, Fall 1981, pp. 1–17.
3. See above, p. 45.
4. The result is far from new. See p. 64 of M. Feldstein, *Inflation, Tax Rules and Capital Formation* (Chicago and London: University of Chicago Press, 1983) for an alternative derivation. The similarity with the Domar model of public debt, which says that in the limit the ratio D/Y tends towards B/Y divided by $\Delta Y/Y$, is also apparent.
5. The algebraic argument is also given at the end of the third chapter of T. G. Congdon, *Monetary Control in Britain* (London: Macmillan, 1982).
6. A. Budd and T. Burns, 'The role of the PSBR', pp. 26–27.
7. A PSBR/GDP ratio of 1 per cent was given as a prescription for long-run price stability in A. Budd and G. Dicks, 'A strategy for stable prices' *Economic Outlook* (Gower Publishing for the London Business School), July 1983, pp. 18–23.
8. R. Shepherd, 'Lawson's words for eating' *Investors Chronicle* 9 March 1984.
9. The argument was developed in T. G. Congdon's 'What's wrong with supply-side economics?' *Policy Review* (Washington: Heritage Foundation), Summer 1982.