THE PRINCIPLES AND PRACTICE OF FISCAL POLICY

1. INTRODUCTION

In assessing the appropriate size, timing and composition of government revenue and expenditure it is important to consider not only the needs and desires of the community for government provided goods and services, and the manner in which these can be attained most efficiently and equitably, but also the role of government revenue and expenditure in contributing to economic activity and economic stability more generally.

The immediate purpose of government spending on schools and hospitals, for example, may be to provide education and health care. But this expenditure also promotes further rounds of economic activity in the sense that it represents income to the builders of the schools and hospitals, who in turn spend it on materials and labour, and so a chain of income/expenditure effects is created. Thus the ultimate increase in the community's income resulting from an initial amount of government expenditure will usually be larger (by some positive multiple) than the original injection of government spending.

A taxation system may be designed with several aims in mind. There is the obvious need for government expenditure to be financed at least partly by taxes, which implies a revenue role for the tax system (although the financing of spending will normally be assisted also by charges being levied for some government provided goods and services, and by borrowing operations). In addition, the tax system may promote various redistributive effects with respect to income and wealth, such as by the use of progressive taxes, death duties, capital gains taxes, and so on. Incentive and disincentive effects can be set up by taxes, as in the case of high tax rates possibly discouraging the desire to work or save, and special tax incentives encouraging investment or exports. In an aggregate sense, taxation and government charges represent leakages or withdrawals from the private sector income/expenditure stream, whereas government expenditure represents an injection or addition to these flows.

The range of policy issues emerging from a consideration of the overall economic effects of government expenditure, taxation, and borrowing fall under the heading of fiscal policy. Because the components of fiscal policy are so inextricably interwoven, they are considered together in this article which is addressed particularly to the stabilisation role of fiscal policy.

Although the article deals mainly with fiscal policy, the close relationship of this to other forms of macroeconomic policy should be borne in mind. In particular, the stance of monetary policy, which is primarily concerned with the availability of money and credit, has important linkages to fiscal policy. Not the least of these arise from the need to finance the budgetary deficit before borrowing by the use of the instruments of monetary policy, such as either the various reserve asset ratios applied to financial institutions, or the central bank's open market operations which are directed to the sale (or purchase) of government securities. Similarly, the use of exchange rate policy carries implications for both fiscal and monetary policy.

The various policy instruments available to a government, of which fiscal policy is unquestionably a major one, are adjusted from time to time in an effort to achieve the range of economic objectives established by Government. The concentration of economic objectives is generally upon the desire for economic growth and full employment, and the need to avoid price inflation and balance of payments disequilibrium. But there are also other objectives with which governments are concerned, including distributional, social, cultural and strategic issues. In dealing with this multiplicity of aims, some of which are difficult to define adequately let alone achieve specifically, the policymaker is faced with a twofold dilemma. First, the relative importance of the objectives may change over time and, secondly, the achievement of one objective invariably means sacrifices or trade-offs with respect to some other objectives. Moreover, understanding of the nature of economic processes, and the lags inherent in these processes is far from perfect; and there are considerable difficulties and uncertainties forecasting what might happen to the economy in the future. These complexities not only inhibit the establishment and operation of an appropriate fiscal policy (or any other policy) at any point in time, but also complicate the assessment of fiscal policy even with the benefit of hindsight.

With these warnings in mind, this article sets out to describe the way in which fiscal policy bears upon the economy in general, at a highly aggregative level, and the role it can play in facilitating the achievement of the government's various economic objectives.

The article does not deal with questions concerning the size and growth of the government sector per se, other than to the extent that these issues bear on the stabilisation policy aspects. There is no discussion of such matters as government sector 'overload', the desirably form of government expenditure, the 'burden' of taxation or the public debt, and the respective roles of the government and private sectors in performing various functions. These are all matters beyond the scope of this article.

The structure of the article is as follows. The next section discusses the conceptual role of fiscal policy, sketching some of the theoretical issues and problems. Section 3 looks at some of the practical issues related to fiscal policy, including the various indicators which can be used to measure fiscal impact; the problem of assessing the stance of fiscal policy at different levels of economic activity relative to potential output (or full employment); the need to distinguish between the effect of fiscal action on the economy and the reverse influence of the economy itself on the fiscal variables; and the significance of the inter-relationship between the balance of payments, the economy and fiscal policy. The fourth section comments on the linkages between fiscal and monetary policies, particularly by way of the budgetary financing transactions, and then a summary set of policy implications are drawn together in the final section of the article.

1. This paper was prepared as background material for an address by Dr R. S. Deane, Chief Economist, Reserve Bank of New Zealand, to the Thirteenth SEANZA Central Bank Course, Jakarta, Indonesia, October 1980. It is based on the paper 'The Stabilisation Role of Fiscal Policy', New Zealand Planning Council, Planning Paper No. 5, Wellington, April 1980 written by Dr R. S. Deane and Mr R. G. Smith.
2. The Conceptual Role of Fiscal Policy

(a) The Multiplier Process

A community's gross national product (GNP) comprises the sum of private consumption and investment spending, government expenditure, and the difference between exports and imports of goods and services. Accordingly, an increase in government spending will normally lead to an increase in GNP. Because of the multiplier effects already mentioned, the ultimate increase in national income may well be greater than the initial amount of government expenditure, since this promotes successive rounds of spending and may trigger off increases in other elements of GNP, such as private sector consumption and investment (or imports, which would be an offset to the other changes).

If the economy is in a recessionary phase and operating at less than full capacity, higher government spending may assist in drawing forth increased real output and promote additional employment. This could help overcome a recession. Unfortunately, higher spending may also stimulate the demand for imports and thus worsen the balance of payments. In this sense, the state of the balance of payments may constitute a constraint, often a serious one, on the Government's ability to use fiscal policy to lift an economy out of a recession.

On the other hand, if government expenditure increases during a period when the economy is operating at close to full capacity, or even when particular sectors or industries are in this situation, then there is a greater risk that the higher spending will create an overall level of demand in excess of the available supply of goods and services, with this excess spending spilling over into price rises and higher inflation rates, and/or into imports.

Even during a recession government spending may contribute to higher rates of inflation if, for example, it results in a fiscal deficit which in turn boosts private sector liquidity and provides a base for excessive monetary and credit expansion. In other words, an excessive accumulation of liquidity may simply accommodate or even encourage prevailing cost/price pressures. Similarly, higher government spending which takes the form of increased salaries for civil servants may encourage private sector employees to seek further wage increases themselves on the basis of maintaining their relative position vis-a-vis government employees. If such claims were successful then this too may add to any existing wage/price pressures and so contribute to inflation. The risks of such an institutionalized process developing must be higher in a situation where government wage rates are more or less automatically linked to movements in private sector rates. If additional government expenditure is financed by increased government charges for services or by forms of taxation which are readily passed on in the form of higher prices then these processes may also contribute directly to a faster rate of price inflation.

To assess the ultimate effect of any change in the fiscal position on increases in real output on the one hand and stronger inflationary pressures on the other hand is a difficult task since a multitude of primary and secondary influences may be at work. The inflationary pressures may be reflected in either higher domestic prices or a larger external deficit, with this being the consequence of higher imports and possibly reduced export volumes. The latter effect arises because stronger domestic demand may attract some output from export to local consumption, where such substitution is possible, and because inflation may erode the profitability of exporting and thus eventually reduce export volumes below what they might otherwise have been. In considering these effects, there is a need to take into account the country's exchange rate policy, and the pace of domestic inflation vis-a-vis inflation rates in the economies with which the country trades.

Different forms of government outlays have different multiplier effects, both because the recipients of the expenditures have different spending/saving patterns and because the lags involved vary greatly. For instance, wage earners are normally thought to have a relatively high propensity to consume, and thus the multiplier impact of a dollar spent on higher wages for government employees may be larger and quicker than a dollar spent on, say, a government office block or a hydro-electric dam where the gestation periods can be very long and where the recipients, business firms and corporations, may perhaps spend less and save more in relative terms than wage earners.

The method of financing the government spending, whether it be by income or indirect taxes, domestic or overseas borrowing, bank or non-bank borrowing, also has an important bearing on the ultimate impact on the expenditure. Whereas the expenditure represents an injection to the general spending stream, taxes constitute a withdrawal of funds from the private sector, reducing disposable incomes and discouraging consumption and investment. Taxes too may have multiplier type effects, with the ultimate impact of a tax possibly being greater than the initial amount of the tax. Taxes not only reduce disposable incomes directly but may also have secondary effects such as on prices (most obviously seen in the case of indirect taxes) and on the financial system. Tax flows to Government lower the reserve base of the banking system, and thus reduce the banks' ability to create credit.

The size and timing of multiplier effects depend on a variety of factors and differ from country to country. However, empirical research has indicated the following points of principle.

First, the lags between a change in fiscal policy and the effect of this change on the economy can be very long, stretching over several years and thus possibly also spanning more than one cyclical period. For example, an easing of fiscal policy to stimulate the economy during a recession may still be having significant effects on activity some years later when a tightening of fiscal policy might be in order for some reason. In some cases the cycles of activity are strongly related to external events and these can alter rapidly and without warning.

Secondly, the multiplier effects on both GNP and the balance of payments can be strong and of differing direction. So a rise in government spending to stimulate the economy may harm the overseas exchange position. The latter thus emerges as a major constraint on such policy in many countries.

Thirdly, the effects of fiscal action differ significantly according to the phase of the cycle in which the change occurs. The magnitude of the multipliers may vary with the direction of the change in policy and the state of the economy, especially the degree of capacity utilisation. In this sense capacity refers to both plant capacity and the availability of labour. This means that the effects on employment and prices of a change in government expenditure will differ too according to when the policy change takes place, and its direction.

Fourthly, multiplier effects vary according to the way in which any change in government spending is financed,
whether it be by bank or other forms of credit, or by taxation.

(b) Monetary Effects

Government net domestic borrowing constitutes a withdrawal of funds from the private sector, although the effects on the income/expenditure flows are different from those prevailing in the case of taxes. For one thing, the private sector acquires a claim on government when it buys government securities, a claim which is transferable and at some stage repayable. The sale of securities by Government is achieved either forcibly, by higher reserve ratio requirements being imposed on financial institutions, or voluntarily, by Government offering sufficiently attractive interest rates on securities to encourage the private sector to acquire these. In either case, pressures on interest rates carry broader implications for the private sector, such as by making loans more expensive and discouraging spending.

Monetary effects of the Government budget are in fact complex, and serve to emphasise the inter-relation of fiscal and monetary policy. A fiscal deficit, for example, will have the income/expenditure multiplier effects already discussed, but these take place through the medium of the financial system which itself may contribute to the chain of events. The deficit will have a twofold inter-related monetary impact. First, the money supply will tend to rise, thereby influencing the private sector’s wealth and that sector’s asset portfolio decisions with respect to financial and real assets of various forms. The choices will be between consumption and investment, deposits and securities, and so on. In turn, interest rates will be affected, as also will be Government’s own financing arrangements as far as its deficit is concerned. Interest rates influence expenditures through a range of channels, including the cost of credit, asset valuation factors, and credit availability effects. Financial ‘crowding-out’ phenomena may arise if Government’s demand for credit reduces the availability of finance for the private sector.

Secondly, as the contra to the rise in the money supply resulting from a fiscal deficit, the reserve base of the financial institutions will tend to increase and this will affect both their actual and potential behaviour, especially insofar as their ability to grant credit is concerned. If private sector economic activity is such as to call for additional credit expansion, and if the increase in financial institutions’ reserves is not absorbed or offset by monetary policy actions, then the supply of credit may grow and this too may contribute to further increases in the monetary aggregates and stimulate expenditures. The extent to which this process continues depends on a multitude of demand and supply elements, including the size of the fiscal deficit, its method of financing, the stance of monetary policy, and the extent of leakages (imports) through the foreign sector.

(c) Problems in Assessing Fiscal Policy

Various measures of the fiscal deficit or surplus can be used to summarise in a convenient, albeit oversimplified, way an indication of the net effect of Government spending and revenue operations. In a simple sense a fiscal deficit — an excess of expenditure over revenue — is normally considered expansionary and can be used to counter a recession; whereas a fiscal surplus is normally seen as contractionary and can be employed to dampen an economic boom. But whether fiscal policy in practice is successful in these ways is a debatable question, and one that is related to the authorities’ ability to understand what is happening to the economy at any particular time, what is likely to happen in the foreseeable future, the lags involved in the economic processes, and the willingness to take the appropriate action.

There are several phases in the time sequence of economic policy formulation. There is the publication lag, or the time elapsing between the occurrence of an event and the collection and release of statistics pertaining to it; the recognition lag, or the time it takes to appreciate the emergence of a problem; the decision lag, which is the time taken to assess and determine an appropriate change in policy; the implementation lag involved in acting on the chosen policy; and the adjustment or impact lag which ensues while the economy responds to the policy change. In sum these lags can be so long that by the time a policy change actually becomes effective the nature of the problem may have materially altered. Accurate forecasting may assist the process, but economic forecasting is itself a chancy business.

A further complication in the practical use of fiscal policy is the degree of flexibility inherent in Government operations. For example, much of Government’s expenditure is of a recurrent nature, involving commitments to widely accepted, longstanding policies where even the change in spending may be based on arrangements which are difficult to alter. These include the provision of basic law and order, education, defence, health and social services, and the payment of civil service salaries, where in each case a certain ‘establishment’ already exists, requires on-going maintenance, is generally thought to demand continuity of service, and may involve indexing arrangements designed to enhance the automaticity of the expenditure (e.g. government wages determined by a formula linking these to private sector wages; or monetary benefits linked to domestic wage or price rises). Moreover, the lags just mentioned not only imply that it may take quite some time to step up government spending, e.g. on a hydro-electric dam project where the gestation period can be several years, but also suggest the difficulties involved in unwinding or halting large scale projects once these are well in train. Development of projects can of itself be expensive in a variety of ways.

Taxation is in some respects a more flexible tool than expenditure. In many countries, both direct and indirect tax rates can be changed quite quickly, assuming a willingness to act between annual Budgets where necessary. But again important automatic elements influence tax receipts. Progressive taxes ensure that tax receipts rise proportionately more rapidly than incomes, as more taxpayers move into higher marginal tax brackets with rises in incomes. This effect is commonly known as ‘built-in flexibility’, ‘automatic stabilisation’ or ‘fiscal drag’, the choice of term depending on the economic circumstances and one’s point of view.

There is a need to distinguish between ‘automatic’ and ‘discretionary’ expenditure and tax changes in order to assess in an approximate fashion the respective effects of the economy on the Budget (the automatic built-in flexibility) and the Budget on the economy (the exercise of independent discretionary policy).

Apart from the income/expenditure and monetary effects of the Government budget, there is another body of effects which are extremely difficult to quantify and are not covered by this article. These are the fiscal incentive effects on labour supply, work effort, household and corporate savings, business investment, and export activity. Some of these effects emanate from the major elements of fiscal policy — such as the disincentive to work and save which may result from high income tax
rates — while others originate from complex selective fiscal measures, such as export tax incentives, special investment depreciation allowances, savings promotion arrangements, tariffs, employment subsidies, and input or output subsidies.

3. SOME PRACTICAL ISSUES

(a) Indicators of Fiscal Impact

It is possible to derive a variety of statistical indicators which give some impression of the effect of fiscal policy, and especially the way in which this changes over time. The most popular series used for this purpose would be the budget deficit (or surplus) measured as the excess of expenditure over current revenue but before taking into account borrowing transactions. Apart from looking at this simply in terms of a $ million (or equivalent currency) figure, the deficit can be measured as a percentage of GNP to provide some scaling factor.

It is also possible to make various adjustments to the deficit, such as by the exclusion of overseas receipts and spending, in order to obtain figures which more closely reflect the impact of the deficit on the domestic private sector. Similarly, transactions with the central bank may be excluded for the same reason. After appropriate scaling and adjustments, a deficit is normally considered expansionary — the larger the deficit, the greater the stimulus from fiscal operations and a surplus contractionary.

However, other measures may also be important, including the size, composition and rate of increase of both government expenditure and revenue, and the extent to which any deficit is financed by domestic borrowing. An internal deficit (or surplus) is sometimes defined as the deficit after domestic non-bank borrowing, which gives an indication of the overall injection (or withdrawal) of funds not only as a result of current revenue/expenditure operations but also after private sector borrowing transactions. The effects of different types of borrowing are discussed later in the article. Again, and adjusted internal deficit could be related to some aggregate economic variable, such as GNP.

It should be remembered that even though the budget deficit may be unchanged between two years, it is nevertheless possible for the fiscal impact to differ, since an unchanged deficit may be consistent with, say, higher rates of increase for both revenue and expenditure in the second year. These higher rates may have different net multiplier effects on economic activity as compared with lower rates of increase.

All of these indicators are of course no more than that: indicators. They are often best read in conjunction with each other to gain the clearest picture of the impact of fiscal policy. This impact can be assessed more comprehensively by the use of large computer-based econometric models, which can allow for a full range of inter-relationships amongst economic variables.

(b) The Capacity Utilisation Question

As a further refinement of the budget data, and as an aid to getting to grips with the effect of the level of activity in the economy on the budget, it is possible to construct budget indicators which are consistent with some hypothetical 'average' level of activity.

One example is the full employment budget surplus, which shows the hypothetical budget outcome if the economy had been in a state of full employment throughout the period for which the calculations are carried out. In a sense this is designed to 'clean' the budget data of the effects of different stages of the economic cycle or, alternatively, to place the statistics for each year on a common footing.

The full employment budget surplus procedure has been widely used, but it does have some major deficiencies. In particular, it suffers from the simplistic nature of any single indicator. More importantly, it places much emphasis on full employment as the common base on which to measure budgets against one another when, in at least some cases, some other objective may overwhelm the full employment one (such as the state of the balance of payments). If there is a large external deficit and high domestic unemployment, it may be of only academic interest to know what the budget position might have been had 'full employment' prevailed. A further difficulty with the concept is of course the measurement problem; how to define full employment and how to adjust the data to that assumed base.

An alternative approach is to use what is known as the 'cyclically neutral budget balance.' This suffers from much the same deficiencies as the full employment budget surplus idea, and differs from it primarily in the way the base is chosen. In some respects it is an even more simple measure, being based on a year which is arbitrarily chosen as being cyclically neutral. This does at least allow one to take the state of the balance of payments into account in selecting the base period. This method if often used by the I.M.F. to derive approximate budget indicators.

A budget is defined as cyclically neutral if government expenditure increases over time in proportion to the growth of potential output and government revenue changes in proportion to actual GNP. This idea of a neutral profile of the budget is supposed to allow for the effect of the economy on the budget, thus leaving one with an indication of the influence of the budget on the economy. This is derived by studying the difference between the actual budget balance and the so-called neutral balance. A positive CEB (cyclical effect of the budget) indicates an expansionary effect, where the actual deficit exceeds the neutral deficit, and vice versa.

(c) Automatic/Discretionary Effects

Taking the question of the effect on the budget of the economy a stage further, it is possible to calculate in an approximate fashion those parts of the budget which are the result of discretionary decisions and those which are basically related to the state of the economy (the automatic elements). Clearly, if the built-in flexibility of the budget is relatively large, and if a large proportion of expenditure and revenue changes derive from changes in economic activity, then the scope for discretionary fiscal policy is reduced. This might not only render fiscal policy less effective than it could otherwise be; it might also make it harder to interpret fiscal policy and changes in the various budget indicators.

The essential point is that the actual budget outturn might be quite different from what the policymakers intended. This can arise because of forecasting errors because of unexpected exogenous shocks to the economy (such as the very large oil price rises of 1973 and 1980), and as a result of the possible need to modify the stance of fiscal and other policies as the budget year progresses.

Some elements in the budget are at times directly linked to private sector indicators, such as social welfare
benefits which may be indexed to general price or wage movements. Other effects are indirect, including the influence of supply bottlenecks slowing the progress on government projects and the impact of inflation generally on the cost of those projects (and on civil servants’ salaries).

Other elements in the Budget are deliberately designed to be in effect ‘automatic stabilisers’. For instance, a progressive income tax system can generate rises in tax revenue which exceed the rate of increase of taxpayers’ incomes, thereby theoretically slowing the increase in disposable incomes in times of an economic expansion and thus dampening private sector spending. But this ‘fiscal drag’ process is only effective in this way if governments resist the temptation simply to lift their own expenditure in line with the higher tax take. The role of automatic stabilisers has become more dubious in recent years, especially where income movements tend to be dominated by inflation rather than real factors.

One method of forcing upon a government more explicit regular review and control of its own expenditure would be to ease the automaticity and particularly the progressivity of its revenue, such as by the introduction of indexation of the tax scales. Under an indexed system the tax schedule itself automatically adjusts upwards as incomes grow with inflation and so government revenues would expand at a rate more closely comparable with the rate of increase of incomes, rather than by a substantially more than proportionate rate. Under tax indexation procedures, progressivity in tax revenues could still be achieved but only by an explicit government decision to lift the schedule. Indexation would not only have the advantage of encouraging government to consider more carefully its taxing and spending policies, it would also encourage greater public debate on these issues (because of the need for regular explicit decisions and less automaticity) and probably also concentrate more attention upon other problems related to tax policies, such as the effects upon desires to work and save.

(d) The Balance of Payments

For many countries the major constraint on the level of economic activity is an external current account deficit. For primary commodities in particular, world prices can fluctuate substantially within relatively short periods of time and these changes can have significant unsettling effects on the domestic economy.

If strong cyclical movements emerge in the balance of payments, and if the exchange rate is not fully floating, then a range of questions arise as to whether or not fiscal and monetary policy should be used to forestall the domestic economy to adjust rapidly to an external deficit; or to maintain the level of domestic activity (and employment) in the face of the overseas deficit on the possible grounds that the latter is of a short term cyclical nature only; or to set a relatively stable or neutral course for both monetary and fiscal policies despite variations in the balance of payments.

There are no simple answers to these questions. But the response will depend in part on the sort of exchange rate regime a country operates; the extent and variability of capital flows from abroad; the weight given to the various economic objectives; the possible length and amplitude of the external cyclical movements; the strength of or otherwise of the country's foreign reserves position; and the capacity of the economy to adjust rapidly and flexibly to changed circumstances.

The main point is that if the balance of payments is an important constraint, then so too will the role of fiscal policy be constrained, especially in terms of its use to stimulate domestic spending.

4. THE MONETARY POLICY LINKAGE

(a) Some General Observations

The linkage between fiscal and monetary policies has already been touched upon. It arises most obviously in the form of the government budgetary borrowing requirement although the linkages are in practice diverse and complex, deriving also from the state of both the domestic economy and the balance of payments.

As far as government borrowing is concerned, this can be facilitated in two major ways through the medium of monetary policy: first, by the use of reserve ratio requirements imposed upon the financial institutions and, secondly, by Government competing for its loan funds on the open market by paying attractive interest rates and offering favourable forms of securities. This latter procedure, which places reliance upon the ability of reasonably well regulated financial markets, is generally regarded as more efficient, effective and equitable than the use of direct controls.

For present purposes the important consideration is the need for a co-ordinated approach to the determination of fiscal and monetary policies. The policy process is normally based on projections of likely money and credit growth rates against the background of forecasts of all other aspects of the economy. Given forecasts (or assumptions) about real growth, the rate of inflation, and overseas exchange and budgetary transactions, it is possible to derive the likely growth rate of the money supply and compare this rate with that which would be more appropriate if the target variables were to be altered, e.g. if inflation were to be reduced, or the external deficit lowered. Competing government and private sector credit claims can then be assessed and an appropriate monetary policy derived which involves some view about the desirably rate of growth of private sector credit and the financing needs of government. From this analysis can be derived a target for government securities sales, by either new issues or through open market operations, and in turn this raises implications for the setting of security interest rates and adjustments to reserve ratios.

The process is likely to be frustrated if too much reliance is placed on one form of policy to compensate for inadequacies in some other form. For example, it may be difficult to run an adequate monetary policy in the face of a very large fiscal deficit.

Apart from the primary monetary impact of a fiscal deficit leading to growth in the money supply and this in turn stimulating spending, secondary effects link the budget outcome to subsequent rounds of credit expansion. A fiscal deficit results in higher bank deposits (an important component of the money supply) and higher bank reserve assets (initially by higher bank balances at the Reserve Bank, which are generally then converted into government securities). These increased reserves may form the basis for additional bank lending if the demand for loans is also expanding, as it is likely to be in a situation of fiscal ease. Accordingly, there is a need to avoid excessively expansionary fiscal policies which generate not only their own multiplier effects on incomes and expenditures but also too often set in train subsequent rounds of money and credit expansion which often prove difficult to moderate.
(b) Financing the Deficit

The inter-relationship of fiscal and monetary policies can also be demonstrated by looking at the way in which the budget deficit before borrowing is financed. The options are:
- borrowing from the Reserve Bank or running down cash balances at the Reserve Bank;
- overseas borrowing;
- borrowing from the trading or commercial banks;
- borrowing from the non-bank private sector.

Under the first alternative, there is no offset to the effects of the deficit before borrowing. If the Reserve Bank buys securities from the Treasury, it credits the proceeds to the Government's account. So the effect of the deficit is simply to increase both the money supply and the reserve assets of the banking system.

Borrowing from the central bank is thus the residual form of deficit financing, usually to be resorted to only if other forms of borrowing yield insufficient funds, or if government wishes deliberately to create money to stimulate the economy. The risk is of course that the effects will be inflationary, and certainly this financing method carries the greatest potential risks of this kind. In effect, the deficit before borrowing would be fully 'monetised' if financed solely by borrowing from the Reserve Bank. In practice, this is an extreme case and other alternatives are invariably pursued to finance a major part of the deficit.

Overseas borrowing is often an important source of funds for government, although the primary justification for such borrowing is usually the existence of an overseas current account deficit which itself requires financing by raising loans abroad. When funds are borrowed overseas by government, a country's overseas assets increase (at least for a time) and the Government's account at the Reserve Bank is credited with the proceeds. Accordingly, in terms of its monetary impact on the private sector, the financing of a fiscal deficit by this means is initially much the same as selling securities to the Reserve Bank. There is no offset to a direct expansion of the money supply.

The foreign borrowing does have the advantage of helping to finance the overseas deficit, as the overseas assets created by the borrowing are run down. In this way, its ultimate effects are different from borrowing from the central bank which creates domestic money but not overseas assets. Although foreign borrowing may be thought to reduce the need to resort to other forms of financing, and particularly Reserve Bank financing, its monetary effects are in fact the same as the latter. It represents a direct monetisation of the budget deficit. However, it is generally resorted to in different circumstances i.e. where an external deficit exists. The external deficit, of course, reduces the domestic money supply so that in effect, a fiscal deficit financed in this way offsets the contractionary effect of the external deficit on the money supply.

Borrowing from the trading banks involves the exchange of cash balances held by the banks at the Reserve Bank for government securities or treasury bills. In other words, there is a change in the structure and profitability of the trading banks' asset portfolios. The difference between this and borrowing from the central bank itself is qualitative, and depends in part on institutional arrangements and policy reactions. For example, after meeting any cash ratio requirement, the initial reaction of the banks to an increase in their cash balances as a result of a budget deficit may be to use those balances to acquire Treasury bills or other securities. The secondary effects would then depend on the demand for credit, since the higher reserve holdings of the banks would enable them more readily to satisfy such demand, and the stance of monetary policy. The authorities may for instance act to offset some of the secondary effects by tightening reserve asset ratio policy. This could be done by reducing the margin of 'free' reserves held by the banking system, so discouraging them from increasing their lending too rapidly.

Alternatively, the Reserve Bank may undertake public debt sales or open market operations designed to sell securities to the non-bank sector. The non-bank financial institutions, and the public generally, pay for securities by utilizing deposit balances with banks, thereby reducing the money supply. The trading banks finance this flow of loan funds to the Reserve Bank either by running down their cash balances at the Reserve Bank or, if their cash holdings are insufficient, by selling their own holdings of securities to facilitate the transfer of funds.

Borrowing from the non-bank private sector thus reduces both the money supply and the reserve assets (cash balances, Treasury bills and government securities) of the banking system. The public is encouraged to hold government securities instead of money, or instead of private sector financial assets. This represents an offset to the monetary impact of the budget deficit before borrowing. The process assists in 'demonetising' the deficit.

The ultimate effectiveness of this approach depends on a variety of factors. Since the reserve base of the banking system is reduced by non-bank security sales, the potential for secondary credit expansion is also reduced. If the securities sold are relatively illiquid, such as 5 or 10 year bonds, and if these are paid for out of current account deposits, or by switches from other short term deposits, then the public's financial assets become less liquid. Their spending potential is thereby reduced. Similarly, if the sale of securities is achieved by privatising up interest rates, then interest sensitive private sector expenditures will be reduced and some private sector investment may be 'crowded out'.

On the other hand, if the securities sold by government are relatively liquid, and easily converted into money, the dampening effects may be somewhat less than those implied by the sale of long term bonds. Nevertheless, this process still maintains an advantage over borrowing from the Reserve Bank or the banking system, in that it eases the potential second round effects by reducing the banks' reserve assets.

Apart from these liquidity type considerations, the method of selling securities to the private sector is of some importance. For example, the bulk of the non-bank sales may be to captive institutions, which are forced by various government security ratio requirements to hold certain proportions of their deposits or total assets in government stock. The problem with this procedure is that the non-captive financial flows may grow rapidly relative to the funds of the major controlled institutions, and the effectiveness and efficiency of monetary policy can be thereby greatly impaired. Ratio obligations help government finance its budget deficit, but aggravate the growth of credit through non-regulated channels. This detracts from part of the point of borrowing from the public sector rather than from the banking system. These problems tend to be accentuated in financial systems where interest rate controls are prevalent.
The public's attitude to its holdings of government securities will depend also on a range of other factors such as general economic conditions, business confidence, the stance of monetary policy, interest rate and inflation levels, and expectations about each of these.

But the essential points are these. If a budget deficit is to be financed in a relatively non-inflationary way, with the least potential for monetary expansion, then borrowing from the non-bank private sector is the preferred method. This may involve increased interest rates on government securities which in turn will place pressure on interest rates generally. Against this problem must be weighed the disadvantages of financing the deficit by other means, each of which in varying degrees is likely to be of a discretionary rather than non-bank borrowing. The extent of overseas borrowing is usually determined by the size of the external current account deficit and the extent of any private capital flows. But the direct monetary effects of financing a budget deficit by these means are similar to those of borrowing from the banking system. The latter procedure monetises the fiscal deficit by adding to the money supply and increasing the financial system's reserve base. This may appear to place less pressure on interest rates, but it results in less control over the growth of money and credit and, ultimately, to a higher rate of inflation and a larger external deficit.

5. SUMMARY OF POLICY IMPLICATIONS

If the various strands of this article are brought together, a number of main implications emerge for the operation of fiscal policy. These are:

1. There is a need to strike a balance between the pursuit of a range of economic objectives and the use of a number of major policy instruments (of which fiscal policy is an important one).

2. In using fiscal policy to help achieve the objectives there is a number of complications, including:
   - imperfect understanding of economic inter-relationships;
   - forecasting problems, which apply to both the magnitude and direction of future changes;
   - lengthy and variable lags in the economic processes;
   - the availability of a variety of measures of fiscal impact, which need not all convey the same picture;
   - the constraint which may be imposed by balance of payments deficits;
   - the problem of determining the extent to which fiscal policy impacts on the real economy and/or on prices and inflation;
   - the fact that the inter-relationship between fiscal policy and the economy is a two-way one; and
   - the problem that large elements of government revenue and spending are of an automatic character, thus limiting the role of discretionary policy.

3. Fiscal policy has both a direct and indirect influence on the economy. These occur via the multiplier effects of government spending and taxes, and through the monetary impact of fiscal policy. A budget deficit tends to be expansionary; a surplus contractionary. The extent of the impact is partly dependent on the way a deficit is financed or a surplus is utilised.

4. As far as financing the budget deficit is concerned, the least inflationary method is by borrowing from the non-bank private sector. For this to be done effectively, it requires government to offer competitive interest rates on its securities and this may place pressure on private sector interest rates. This may be unpalatable but it is the only way to ensure reasonable control over the growth of money and credit. The other alternatives — borrowing overseas, from the trading banks, or from the Reserve Bank — each tend to be considerably more inflationary than non-bank domestic borrowing.

5. The complications involved in the use of fiscal policy hint at the difficulty of employing it actively in a discretionary anti-cyclical manner. These problems may be so severe as to suggest a need to avoid sharply variable year-to-year fiscal policies and instead aim for a relatively moderate, stable fiscal position over time, with changes generally being implemented gradually rather than abruptly.

6. This theme is analogous to that underlying the monetary policy debate of the past decade or so. It is now widely accepted that because of the long and variable lagged effects of changes in the money supply on the economy, policymakers should aim for relatively stable rates of growth for the monetary and credit aggregates. Moreover, these rates of increase should be gradually phased down if inflation is to be reduced. Clearly, too much variability in fiscal policy could seriously hamper the operation of this type of monetary policy.

6. CONCLUSION

The impact of fiscal policy on the economy depends on the state of the economy itself, the nature of the external constraint, the size of the various multiplier effects and the length of the lags involved in these, and the stance of other policy instruments. The operation and assessment of fiscal policy is thus a complicated business.

This suggests a need to adopt a longer term view of economic policy formation, and to pursue a co-ordinated approach to both long and short run problems. If such an approach is sacrificed to an emphasis on shorter term considerations, and if the relative weights attached to these immediate issues varies significantly within quite short time spans, then there is the risk of large swings in fiscal policy. Such an approach is likely to be ad hoc and take too little account of the magnitude of the effects of a change in fiscal policy on the economy and the greater length of time it takes for these effects to work their way through the system.

The preferred approach may well be analogous to that which is now widely accepted with respect to monetary policy, albeit in differing degrees as between different countries. This would involve the pursuit of relatively stable fiscal policies, consistent with the achievement of moderate and stable money supply growth rates, directed towards a set of agreed and maintained medium term economic objectives. This does not rule out variations in fiscal policy to assist anti-cyclical objectives, but it does imply that excessive variability should be avoided and that medium term objectives should normally receive more weight than short term considerations if fiscal policy is to help achieve the aims established for it.