CHAPTER 3

Fiscal and Monetary Policies

Fiscal policy plays a pivotal role in small open developing economies. It has direct effects on the main outcomes – growth, the balance of payments, inflation and social welfare; it offers a rich menu of choices and combinations, to address several targets; and there is a comparatively large area over which each fiscal policy instrument may range. In contrast, monetary and exchange rate policies are largely circumscribed because of the mobility of finance. In this chapter we discuss the effects of fiscal policy, an approach to fiscal policy making, the usefulness of monetary policy, and suggestions for monetary policy making.

The Bases for Fiscal Policy

Fiscal policy has real output effects arising from any change in the provision of government services – usually approximated by the change in government employment. It has aggregate demand effects – in addition to those that arise from any increase in output and income – measured by the additional supply of money that is generated by an increase in central bank credit to government (or any other increase in domestic finance for government which does not displace an equal amount of financing for the private sector). There are investment effects, from the incentives provided by tax rebates, exemptions, write-offs, etc. Government investment can improve the productivity of private investment. There are relative price effects, arising from the effects of tariffs on costs and on the prices of final goods, the inflationary effects of taxes on goods and services, the effects of income taxes on the relative prices of labour and leisure and on the relative returns to skilled labour at home and abroad, and the effect of tax incentives on the relative prices of capital and labour.

Fiscal policy also has income distribution effects. Income distribution is treated as a target variable in the present analysis. The desired pattern of income distribution, in so far as it relates to entitlements of basic services, helps to define the level of government expenditures and the structure of the income tax. Changes in income distribution by themselves are not thought to have significant effects on investment, the balance of payments, growth and inflation.

1. Output

An increase in the provision of government services is an increase in national output, unless it can be demonstrated that government has displaced private output of equal or greater value. Government may crowd out the private sector by taxing or borrowing away private resources, or by monetary expansion which raises domestic prices sufficiently relative to foreign prices that it displaces domestic production by imports. Whether there is crowding out, and by how much, depends on the counterfactual that you set up (in Buiter's (1985) phrase, crowding out is model-determined). For example, if government services expand by $10 million, we may think of several alternatives had government services remained constant. Taxes might have been $10 million lower, government might have borrowed less from locals or abroad, or there might have been a contraction in the monetary base, compared to its actual value. In the event taxes were lower we need to specify how the change would have been distributed among the available taxes. With this menu of arbitrary choices no definitive statement may be made about the extent of crowding out in practice, and we shall assume that fiscal choices may be so engineered that it is of no consequence.

2. Aggregate Demand

An increase in government expenditure which is financed by an addition to the money supply produces an increase in aggregate demand, with an unchanged marginal propensity to spend out of income. We assume that, to a useful approximation, taxes and spending have symmetrical effects on aggregate demand, and we abstract from the real output and relative price effects of government expenditure, which are treated separately above and below. A similar increase in aggregate demand is possible as a result of an autonomous increase in private spending, for example if there were a shift in the propensity to save as income per head or the age structure of the population changed. However, with the high propensity to import there would be an increase in imports, a decline in foreign exchange reserves and a resulting fall in the money supply, which would tend to correct for the increase in spending. (If it did not correct sufficiently the exchange rate would adjust to bring about the adjustment.) In the case of government spending the central bank aborts the self correction mechanism when it creates money to finance the government expenditure increase.

3. Investment Incentives

The sources of investment incentive are the tax system and the aspects of industrial and export strategy which are reflected in government expenditure. Institutional arrangements for export promotion may be the incentive most likely to procure additional investment. Production in the small economy's traded sector

is divided sharply between small enterprise for the local market (in the Caribbean this is meant to include the regional market as well) and medium-large enterprise for the export market. To increase investment in tradables from domestic sources government must finance the acquisition of knowledge, research and development costs and reorganisation costs to enable local firms to grow sufficiently large. It is important to specify the expected relationship between target investment and promotional expenditure in the government budget.

We may use established methodologies (see King and Fullerton, 1984, Lim, 1983) to measure the investment incentive offered by tax incentives and exemptions, but this calculation accounts only for local finance, in countries where major investment programmes usually involve foreign participation. Moreover, the relationship between the rate of return, which is the tax "handle", and investment, which is the government's objective, is obscured by the weight of other factors in the investment decision. The effects of tax incentives remain uncertain, but the need for investment is so crucial that no potential inducement may be neglected.

4. Government Investment

There is currently a debate as to whether government investment promotes or diminishes investment in the private sector. Probably all parties would agree that where infrastructure is very weak government investment does increase the productivity of private investment, but the effect diminishes as essential social and economic services reach some level of comprehensiveness and reliability. Many believe there is a point beyond which government investment is counterproductive. The argument is about where each country lies on this schedule. (There are individual government investments at all points on the schedule which are clearly counterproductive, and they are often erroneously used to infer that all or most government investment is inefficient.) Efforts have been made to derive rough estimates of the relationship of government and private investment for countries at differing income levels (Blejer and Khan, 1984); although they rely heavily on proxies and they use cross-section data that conceals important country peculiarities, this kind of analysis is the best guide we have at the moment. On balance, government investment seems to do more good than harm. More empirical work needs to be done to afford better guidance to policy makers in this area.

5. Relative Prices

Tariffs increase the relative price of tradables on the home market, and they inflate costs and the prices of final goods. They may be expected to depress output and increase prices. Output in the export sector may fall by more than does output in the non-traded sector because exporting firms have no way of influencing selling prices. For the usual magnitudes of tariff changes the effects on national aggregates may be quite small because of relatively weak price elasticities. However, there may be significant impact as a result of major tax reform. In many

countries the effects of tariffs on exports are mitigated by extensive exemptions for imported producers' goods, through free trade zones and incentives for industry and tourism.

Taxes on goods and services cause a one-shot increase in inflation and a fall in output. For reasons just given, the magnitudes are not large, except for a major tax reform. These indirect taxes are regressive, to an extent that depends on how revenues might have been raised in their absence, or how expenditure might have been adjusted to eliminate them. Since we begin with an income distribution target, we would suggest that government survey household entitlements to basic services, determine whether the results of tax changes produce an acceptable distribution of benefits, and institute compensating action to remedy the deficiencies.

Income taxes affect the relative prices of labour and leisure, but the effects on the supply and quality of labour are too complex for generalisation, despite considerable research on the topic (Hausman, 1985, Saunders and Klau, 1985, Sumner, 1983). Some economists harbour the suspicion that a steeply progressive tax system may affect the supply of skills by provoking migration, but empirical work has not isolated this as an important motive for migration. The sporadic use of corporate tax rebates for job creation and the use of labour intensity criteria for tax benefit have not provided sufficient evidence of the effect of the tax system on labour intensities.

The Design of Fiscal Policy

The authorities in the small open economy have the task of designing fiscal policy which, supported by exchange rate and monetary policy, will secure a target rate of investment, economic stabilisation in the short run and a target income distribution (or provision and entitlements to basic services). We define fiscal policy as a package of taxes, their rates, structures and exemptions; the cost of providing government services; government investment; debt service; transfers; the size of the deficit; and government's foreign borrowing. (The content of the fiscal package is illustrated in Chart 3.1.) Small changes in the fiscal package are made every year, with wholesale reforms from time to time. The analysis must be based alternately on large discrete changes and cumulative changes measured for a suitable interval of perhaps five years.

The authorities might proceed by calculating the rate of return which seems necessary to achieve the investment target, and the changes in the incentive system that might be implemented to achieve it, either through promotional expenditure or through the tax system. They should examine the consumption of basic goods and services by households, decide on targets to be achieved, a combination of tax changes and expenditures, and a schedule for implementation. Estimates of tax elasticities should be amended to reflect tax changes, and a projection made for revenues. Government investment should be projected, based on the deficit of essential infrastructure and the investment needed for the intended increase in

services. Expenditures may be projected on the following basis: employment at current levels, plus or minus changes in government services; wages at the levels expected to prevail in the economy generally; transfers at the current levels plus any changes set down in the target for entitlements; interest payments on the basis of actual and projected debt and expected interest rates; subsidies to firms at current levels plus any changes embodied in new investment incentives; and other expenditures at the rate of inflation. The fiscal deficit may be derived and a target set for the pattern of foreign borrowing over the plan horizon, using judgements about the desirable levels of debt servicing in relation to expected receipts from exports of goods and services. From estimates of the net supply of finance from the domestic private sector the authorities may deduce the amount of inflationary finance required, and determine whether it is within the economy's range of tolerance. If it is not, adjustments must be made and the exercise repeated.

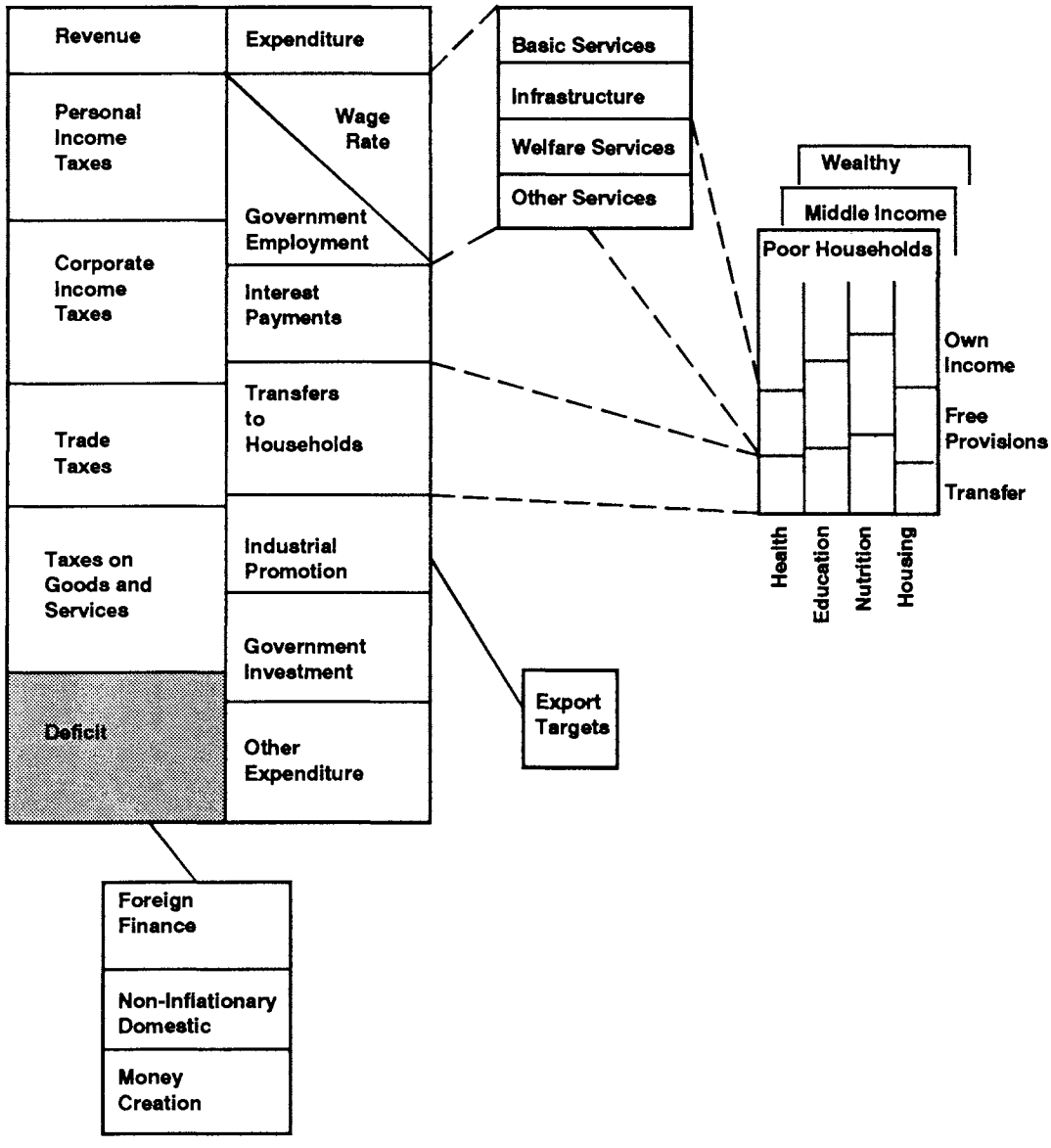
The principal effects of fiscal policies, expected over a plan period that may be five years or more, include investment incentives, basic social welfare and public services, and the stabilisation of the balance of payments. Investment incentives arise mainly from export development expenditure, with possible assistance from income tax rebates and allowances. Infrastructure and services targets are constrained by the allowable size of the deficit, and are pursued by juggling taxes and spending. The balance of payments determines the size of the overall deficit each year; it must not exceed what may be financed without such large increases in money supply that foreign exchange reserves decline below acceptable levels.

Monetary Policy

The financial levers available to address economic growth, balance of payments stability and inflation in small open economies are: stipulations by the central bank on any of a variety of interest rates (the discount rate, the rate for government securities, and loan or deposit rates); fixing of reserve requirements by the central bank; stipulations on lending to government by banks and other financial institutions; purchases and sales of securities by the central bank; exchange controls; and the provision of specialised financial services by government or state agencies.

All, except for the last mentioned, have their impact through changes in interest rates. Because it is so easy to move finance between small open economies and the nearest major financial centre (or major trading partner) only small interest rate disparities can persist. If the foreign-local rate differential is large, or if a modest differential persists for a long time, funds flow into or out of the country. Unless the authorities take timely action to bring the rate in line, an adjustment process is set in train which, though it may eventually restore local rates to comparability, may do so at the cost of major disequilibrium. (For high inflation countries, the comparison ought to be among "real" rates, for which the nominal

Chart 3.1
The Government Budget



rate less the current rate of inflation is the usual, though quite unsatisfactory, proxy; where the local economy maintains an inflation rate in line with that in nearby international financial centres the nominal rate is a satisfactory guide.)

For example, take the usual case where domestic rates are far below foreign rates and there is an outflow of finance. An unrelieved excess demand for foreign exchange causes exchange rate depreciation, inflation and a reduction in real income which depresses monetary liabilities and drives up the interest rate. (As explained below, if the exchange rate is held officially, funds are diverted through informal channels which feature higher rates.) The interest rate will eventually move into line with foreign rates if nothing is done, but the costs of adjustment are so high that the authorities are unlikely to allow this scenario to play itself out.

The domestic rate is determined by the foreign rate, but only approximately. There is limited scope for domestic interest rate setting. The margin arises because of the costs of making international financial transactions, uncertainties and differences of opinion in the market about the future of interest rates, and the uncertain relation between real and nominal inflation rates in high inflation countries. The authorities may use this margin to smooth the pattern of interest rate fluctuation, while tracking the trend in foreign rates. Because domestic financial markets are quite thin and oligopolies are the rule, the effects of interest rate variation are magnified if they are allowed to affect the market without a filter which highlights longer term trends.

This margin does not permit interest rate policy to stabilise the balance of payments, accelerate growth or curb inflation. The most promising line of attack might seem to be raising interest rates to attract financial inflow and bolster foreign reserves. This may temporarily improve the reserve position, but the resulting increase in the money supply may result in spending which reverses the reserve accumulation. Rather than a permanent improvement in the balance of payments the country experiences a violent upswing, followed by a reversal. At the same time the interest rate increase drives up production costs for firms which depend heavily on local bank finance for working capital; that may push up their prices and reduce their output, but the magnitude of these effects would have to be established.

It is often argued that a high interest rate may serve to increase financial saving, by increasing the real rate and diverting funds from such inflation hedges as real estate, precious metals and rarities. This view depends on the assumption that substitution effects dominate income effects in the motives for financial saving; there is no *a priori* reason why they should. Moreover, it may very well be the case that an increase in interest rates leads to expectations of higher rates of inflation. A high interest rate may be taken as evidence that the authorities expect inflation to quicken, in which case the increase would have a perverse effect on financial saving. Even if financial saving were to increase there is no effect on economic growth unless the rate of return on investment increases. An interest rate increase should not affect the returns for firms that depend mainly on foreign finance, and it might well increase the finance costs of firms that do borrow heavily

on the domestic market, reducing their profitability. An increase in financial saving under these circumstances is likely to be matched by increased consumption, as the demand for consumer credit tends to crowd out the demand for producers' credit at high interest rates.

Interest rates are not a useful anti-inflationary measure in small open economies. Low rates encourage capital outflow which could lead to an exchange rate depreciation and inflation. High rates encourage capital inflow and increase producers' costs. Both the cost increases and the addition to the money supply from the capital inflow tend to increase prices.

Monetary policy is left with limited objectives: to keep domestic interest rates within a band around the trend in foreign rates and to avoid destabilising exchange flows; and to identify short term volatility in foreign rates, so as to insulate domestic rates against these swings.

The several measures listed at the beginning of this section may be seen as alternative ways of securing these interest rate objectives, as explained below.

1. Direct Interest Rate Intervention

The central bank may stipulate any of a list of interest rates – its own discount rate, the rate for government securities, loan and deposit rates for financial institutions, etc. It makes no sense to try to structure interest rates, because of the fungibility of finance. The central bank should choose the rate which has the best chance of leading the market and allow all others to adjust to it. Requirements for financial restructuring will have to be addressed by other means such as institutional arrangements to foster greater competition among financial institutions and financial support for infant industry. The strongest interest rate candidates for central bank control are the rate on government securities, the minimum rate on savings deposits or some form of an average loan rate. The discount rate is ineffective except in a liquidity crunch, and the other rates are too difficult to administer.

2. Reserve Requirements

Reserve requirements are a cumbersome mechanism, and are best avoided. The oligopolistic banking systems of small open economies often feature large excess liquidity over long periods. To effect an interest rate change under these circumstances a substantial increase in requirements is needed. As the amount of excess reserves varies the requirement would have to be changed to ensure that it remained binding. If the requirement is binding and banks are short of liquidity they may find it profitable to borrow to make up the deficit, either from the central bank or abroad. The increase in the money supply in either case triggers a sequence of events that leads to an increase in interest rates (through the expansion of aggregate demand, the deterioration of the balance of payments, depreciation of the exchange rate, inflation and a fall in real income which reduces the demand for

money), if it is sustained; if it is not, its effects are innocuous.

If banks cut their credit rather than borrow to make up the reserve deficiency, the excess demand for credit should drive up the interest rate. By whichever mechanism, if the reserve requirement has an effect it will appear as an increase in interest rates. It is a clumsy device to achieve what might be done directly.

3. Lending to Government

Except where fiscal policy is deliberately expansionary, the central bank wants to avoid direct advances to government. With a given deficit and foreign borrowing capacity the policy will be to secure any additional financing from banks and the private sector, by increasing stipulations for the holding of government securities and/or raising the interest rate on government securities. In using stipulations the central bank faces a difficulty similar to the difficulty of managing reserve requirements. The requirement must first be adjusted to absorb all excess holding, both of securities and of cash at the central bank. If banks may buy government securities with excess cash holdings they will effectively be financing government out of net increases in the money base, with exactly the same effect as a direct advance to government by the central bank.

An increase in the requirement for government securities (after all excess has been cleared out) creates an excess demand for credit. This leads to credit rationing or an increase in interest rates, or both. Over time, if the loan rate is controlled, funds will be diverted to the higher-interest non-bank or informal financial markets. An effective increase in the community's cost of funds has not been avoided. Moreover, the strengthening of informal financial markets and non-banks may be quite undesirable, because of the absence or weakness of prudential safeguards in these markets. The informal market is also unevenly informed, sensitive to rumour, prone to excessive volatility, and therefore relatively inefficient.

Higher rates on government securities may achieve larger amounts of credit for government without boosting informal markets. The central bank may issue government paper at higher rates, invite tenders for increasing amounts of securities and/or sell from the bank's portfolio of government securities at a discount. It is less certain in this case that government will attract the required financing than in the case of a binding requirement. Even though the loan rate rises as government competes for funds the demand for credit by the private sector may be relatively insensitive to the increase. However, from a macroeconomic viewpoint there is little to choose; in both cases an increase in the supply of money finances the government if the demand for credit by the private sector is strong. With an increase in the rate on government securities government fails in its bid to attract funding from the private sector; with an increase in the securities requirement banks borrow from the central bank to meet the demand from the private sector. If the demand for credit by the private sector is sufficiently strong

an increase in the central bank's discount rate will be readily passed on to the banks' customers; and if the central bank refuses advances to financial institutions, the informal sector grows in relative importance. The central bank will not wish to encourage disintermediation, so measures to increase private lending to government essentially turn out to be indirect policies to change the level of interest rates.

4. Purchases and Sales of Securities

The central bank may attempt to reduce the supply of finance by selling securities from its portfolio. In few developing countries does the central bank hold private securities; for the most part it is government securities that are for sale. By a process quite similar to that just described, this causes an increase in interest rates. The central bank will need to sell at prices which offer attractive returns. In response, firms and households competing with the central bank for the same pool of funds will be prepared to pay more. The disadvantage of this mechanism is that the market is so thin that the interest rate reaction may be exaggerated.

5. Credit Controls

Credit controls enjoyed a long and undeserved popularity; they are now in danger of being wholly discarded. But they may serve as a useful temporary stabilising device in credit markets, in circumstances where it is preferable to ration credit than to raise interest rates – for example, where there is a temporary excess demand for credit. Controls must be removed soon, even if it turns out that the reason for their imposition does not reverse itself as was expected. Continuing credit controls risks financial disintermediation and strengthening of informal finance. The excess demand for credit must be allowed to express itself as a higher interest rate. Controls on credit for particular sectors are ineffective, because of the fungibility of credit.

6. Exchange Controls

Exchange controls are often designed to isolate the domestic financial system from the international, but in small open economies this proves impossible because of the array of devices – legal, doubtful and illegal – which are available for the international transfer of funds. Transfers may be accomplished by placement of trade credits. If it is less expensive to borrow at home than abroad importers borrow at home and pay cash rather than accept credit from overseas suppliers, while exporters offer longer credit terms, since their customers are prepared to pay higher rates than the local banks offer. Firms may also over- or under-invoice exports and imports as necessary, accelerate profit repatriation, conceal interest payments as expenses, barter goods and services – including capital goods and business services – and relocate bases for providing internation-

ally traded services.

Exchange controls on the capital account and on some non-trade transactions may be useful for monitoring and providing an orderly framework for these transactions. The controls tend to break down when they are used as a rationing device. They work best when the guidelines are standardised and applied in a predictable manner. Exchange controls cannot be used to provide greater scope for domestic interest rate determination, independently of the foreign interest rate. Instead, they will lead to the marginalisation of the official foreign exchange institutions, as more and more business is transferred to the informal sector.

7. Specialised Financial Services

The specialised financial services which fledgling export firms in small developing nations may require include export credit, credit insurance, venture capital sources, selective credit re-scheduling, relatively long original maturity on credit for the purchase of durable producers' goods, incentives for equity participation, and finance linked to technical assistance, particularly for small firms. Improvements can be made in the financial system to accommodate these needs, and they will serve to complement fiscal incentives.

Government needs to contribute to the funding of *export credit* in the early stages of the export drive, when there are considerable development costs to be financed, and firms are still building up their store of knowledge of markets and production processes. To encourage banks to become involved in the financing of exports, it may be helpful to provide a scheme for guaranteeing export credits, especially when producers need credit to purchase raw materials and to finance working capital. In time, when the profitability of exporting has been established and firms have built up a track record, the need for short term export credit and insurance by government agencies will diminish, as the financial system sees dependable opportunities for profit. However, there may remain a role for official provision of some medium term export credit, if the country exports durable goods.

Most countries complain of a shortage of *venture capital*; developing countries are largely characterised by extremely undercapitalised firms. In a vibrant economy most venture capital will come from the private sector, and suitable tax incentives may be the most important factor in increasing the supply of such funds. However, an official contribution in the early years may serve as a catalyst for speeding up investment in new ventures.

Selective re-scheduling may be required in the early years of an export drive because of the high incidence of failure and set-back. If private markets are required to absorb the full loss the export sector may never reach a critical mass. There should be an evaluation system, perhaps by referral from private financial institutions, which carries out a case-by-case analysis and decides to refer to a re-structuring board only those cases which seem to have a future. The board devises

a rescue plan, imposes conditions on the borrower and sets up an officially sanctioned programme of re-scheduling and refinancing.

Financial markets in developing countries typically insist on relatively short maturities for the *financing of producers' durables*. The markets need more institutions that will perform the financial gearing function – merchant banks, mortgage banks and development banks. A mix of all three types probably works best, with mortgage banks providing highly specialised finance backed by conservative security, on very long terms; merchant banks providing medium term loans to companies; and development banks providing long term loans linked to technical assistance.

Very attractive tax treatment is probably the most effective way to encourage the growth of *equity* participation in firms. Typically, this participation will be by way of partnerships and privately held firms rather than by way of a stock exchange and subscription to public companies. Experience has shown that banks, public utility companies and large trading conglomerates can attract active participation on stock exchanges, but the many newer companies which are most seriously undercapitalised do not enjoy the public confidence that would make them candidates for stock market funding.

8. An Overview of Monetary Policy

Monetary policy reduces to the orderly management of interest rates, within the corridor set by transactions costs on either side of the foreign interest rate. The local rate can be managed with a combination of direct intervention to set some rate, and financial market intervention by auction, purchase or sale of securities. Reserve and securities requirements and credit controls are less effective and may have undesirable side effects. Exchange controls should not be used as a monetary control tool. The nurturing of specialised financial services makes an important contribution to the growth of output.