

FISCAL AND MONETARY POLICIES IN SMALL
ECONOMIES

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Fiscal and Monetary Policies in Small Economies

Even large industrial countries like the United States must be concerned about their ability to export, in today's very interdependent world. Small countries cannot grow at all if they are not able to sell additional output on international markets at competitive prices. Small open economies must identify a combination of policies which accords with their comparative advantage - actual or targetted. Alternatively, they should maintain a stable policy regime over time to which comparative advantage may be adjusted via suitable investment. The elements of the policy regime are numerous. It may be argued that the most important are micro-economic affecting the supply of skills, the choice of technology and the efficiency of resource use. My brief is to focus on fiscal and financial policies but there are specific associated policies, particularly microeconomic policies, without which the expected outcomes may not be attained.

Fiscal policy is rich in possibilities. As part of a well-tailored package it may play an important role in promoting strong growth in internationally traded goods. Monetary policy only helps in the short run to adjust expenditure plans temporarily. It has few lasting effects.

Economic Characteristics of the Caribbean

Dualism

Output in Caribbean countries may be divided into those goods which may be traded among countries, such as clothing, agricultural products and tourism, and goods which by their nature must be provided locally such as government services and public utilities. Small economies must accept the ruling selling price of traded goods. Anything they produce is too trifling in amount to make a difference to the international price. When their production costs change firms in the traded sector have to change levels of output, use new kinds of organization, marketing and technology if they are to survive and prosper.

Firms in the non-traded sector may adopt similar strategies but in addition they may change the price at which they offer to sell. The market will tolerate some change in price depending on the strength of demand; consumers have no option to appeal to cheaper foreign suppliers.

Fiscal and monetary policies will have different effects on the traded and non traded sectors. For example, measures to reduce costs such as lower tariffs on inputs and reduced lending rates should lead to an increase in the output of tradables, but the effect on non-tradables is ambiguous. For items where the country only needs as much as it already consumes prices may fall instead.

Serious policy error will result if the effects on traded and non-traded production are not separately measured. The extent of supply response may be overestimated. More crucially, the extent to which an increase in output arises in the traded sector may be miscalculated and we may then expect too large an improvement in the balance of payments. The fact that the expected foreign reserve gain may not materialise could threaten the entire policy package.

The Mobility of Capital

Because finance moves readily across borders in search of the most profitable locus of investment, domestic saving does not act as a brake on the possibilities for growth. The limitation to investment is failure to identify areas of comparative advantage where domestic firms are able to supply products of internationally acceptable quality. Once such opportunities are perceived investment funds are available from international sources in unlimited quantity. There is clear evidence throughout the Caribbean in support of this contention.

Why then is there not a surge in investment in Guyana, the country with the greatest wealth of natural resources in the Caribbean? The answer lies with the existing social and political unease in the country and the decline of basic infrastructure. The prerequisites for investment are an orderly, stable society with obvious legitimate political authority, dependable public

utilities and transport and basically sound education, health and social services. Once these are provided for, investment follows profitability.

This self-evident position is considered dangerous heresy by orthodox economists. We are all taught to believe that domestic savings are the key to sustained economic growth. That is true if the country chooses not to admit overseas investment. There are no Caribbean countries remaining in that category. It is also true if investment is directed to the non-tradable sector where it does not generate the foreign exchange necessary to service the foreign debt. In fact there are only a few instances of major foreign investment in non-tradables in the Caribbean and they are concentrated by and large in public utilities.

The implications of my position are that where infrastructure is inadequate fiscal resources must be allocated to bring it to the required minimum. Tax and other incentives which enhance the rate of return on investment should feature prominently in a growth oriented strategy. It is important to establish which incentives make for a meaningfully large enhancement of profitability. The tax regime in the investor's country of origin must also be taken into account. Specifically, will his own tax authorities allow him to make deductions for local taxes forgiven just as though he had paid that tax? Bilateral arrangements govern these matters. Such allowance is possible

under some double taxation agreements but agreements have not been signed with all countries from which investors may come.

Efforts to raise the domestic savings rate in the absence of demonstrated investment opportunities have no value. The real savings rate will not rise even if people try to increase their holdings of bank deposits and other financial "savings". Since there is no one to invest banks lend out the additional funds for consumption. The increase financial "savings" is matched with increased consumption, not more investment. If for any reason the demand for consumer credit is weak banks will accumulate reserves with the Central Bank, destroying money and dampening expenditure. The result is again a frustration of the desire to increase savings.

Limits to Imports Substitution

For small non-subsistence economies importables are a small percentage of national output, usually less than 10%. (If we treat the Caribbean as a single market in defining importables that percentage is no different though for single countries the Caricom market may be highly significant.) Non-subsistence economies require a wide range of goods and services. If any small economy tried to produce more than a handful of these items we would see a multitude of tiny producing plants each one much too small to attain the economies of scale required to sell at world market prices. The list of items for which the domestic

market is sufficiently large or the economies of scale sufficiently small is soon exhausted.

Import substitution is not a realistic policy option for the Caribbean. Attempts to stimulate import substitution by fiat have all failed. They result in high prices, inconsistent quality and a parallel market of international trade in competing products. A few import substitution activities find themselves able to compete domestically usually with the aid of a moderate tariff. They are to be encouraged so as to enhance employment generation and economic growth. But the overall contribution of import substitution to national output will remain small so long as the economy does not revert to subsistence.

Endogenous Exchange Rate Adjustment

Small countries with very large richer neighbours do not have much discretion in their choice of exchange rate. Most economists pretend otherwise but the value of Papua New Guinea currency in Australian dollars, the value of Botswana currency in South African Rand, the value of the Dutch Guilder in Deutch Mark and the value of the Jamaica dollar in US dollars are all determined by the small country's foreign exchange reserves and balance of payments performance. If, with whatever value of domestic currency people have grown used to, fiscal and monetary policies are so designed as to secure adequate foreign exchange reserves, the value of the currency may remain the same forever.

Elimination of exchange rate uncertainty encourages trade and investment flows. Other circumstances such as relative factor use, technology, marketing and choice of products adapt over time to this well-known relationship, thereby preserving comparative advantage. The only really favourable circumstance for a currency change by a small country is a very high level of foreign exchange reserves and a strong underlying economic growth trend. But there is little incentive to change the exchange rate under such circumstances.

If, on the other hand, foreign exchange reserves are low and the balance of payments weakens, the local currency will be devalued. The authorities do not have much choice in the matter. They may wish to insist that the currency's value remains unchanged - and they often do - but they have no foreign exchange to sell at that rate. Increasingly over time the market ignores the central bank and traders set their own rates for buying and selling among themselves. The longer the central bank delays devaluation the smaller its share of the foreign exchange market. Ultimately, it will command foreign exchange only from primary exporters.

These views contrast with what economists usually learn and teach: that exchange rate is an instrument to be used to improve balance of payments performance and stimulate growth. Economists believe that the exchange rate determines the balance of payments outcome; the truth is just the reverse. The naive version of

conventional economists' view is that devaluation makes home goods cheaper and foreign goods more expensive. Both locals and foreigners buy more home goods and fewer foreign goods; hence the balance of payments improves and home output rises. This sounds too good to be true and it is. It never happens that way in small economies. It is impossible to produce home goods to substitute for more than a fraction of imports and the demand for major exports is determined by quotas and administrative arrangements. The increased cost of foreign inputs drives up the prices of home goods so, instead of cheaper home goods, one usually finds inflation and little improvement in the balance of payments. As a result, not many economists still believe this naive version.

More sophisticated economists now view devaluation as a device to gain temporary advantage, to be exploited by an increased supply of export goods and a decline in living standards at least for some (hopefully more affluent) segments of society. Domestic costs do tend to catch up in time but there is an interval when costs are lower and exporters have an advantage which may be turned into additional sales. Admittedly, domestic substitutes are not available but the country will have to make do with fewer of the more expensive imports until there is renewed growth in income. The new rationale for exchange rate adjustment is no more convincing than the old. Why should anyone invest in technologies which are certain to become non-competitive in time?

And the argument suffers from the same fundamental error of assuming that the authorities may choose an exchange rate.

Endogenous Money

Central banks in small open economies find themselves frustrated at every turn in attempts to regulate the amount of finance. In the end, the amount of finance depends on government borrowing and foreign exchange reserve accumulation whatever the central bank chooses to do. There is a level of finance which is the result of the economic situation. It is money deposited with the financial institutions and lent out to support the existing levels of activity. This level of finance rises and falls in some way in sympathy with economic performance. Central banks try to influence economic performance by changing the amount of finance or its allocation but the means at their disposal are not effective, as will be explained later in this paper. The government budget is the most effective way to influence economic activity.

The budget outcome is reflected in the supply of finance. The comparative performance of the traded and non-traded sectors affects the balance of payments and this also helps to determine the quantity of money. The increase in the supply of money is fully determined by government borrowing from the central bank and the increase in foreign exchange reserves.

Wage and Price Formation

Domestic inflation has a large import element and wages are sensitive to inflation. This circumscribes the extent of domestic cost adjustment where wages are a substantial proportion of total costs. The leeway for cost adjustment depends on how far wage increases lag behind price increases, on technical change affecting labour productivity and on the level of unemployment, which affects workers' bargaining strength. Fiscal and monetary policies for increasing domestic competitiveness should work on the narrow wedge between domestic inflation and the price of imports rather than by increased unemployment. It is also desirable to upgrade technology and enhance productivity as a means of increasing domestic competitiveness.

A Model of the Small Open Economy

A simple model of the small open economy is presented in Table 1 and explained in this section.

National Output

The quantity of tradables depends on wage costs and the costs of financing working capital compared with the prices available for final sales. When costs rise relative to selling prices firms trim their output and vice versa. In time profitable firms will improve their technology with new investment to compensate for cost increases.

The quantity of non-tradables responds to demand (intended supply) and to the relative prices of tradables and non-tradables. Although very few non-tradable goods directly substitute for tradables the contents of the consumption basket may be altered in response to changes in relative prices. The actual amount supplied is adjusted to demand with a lag. Production is equal to last year's output plus a proportion of the discrepancy between that output and this year's demand. Non-tradable goods are sold at a price which reflects the costs of producing the level of supply. The costs include the price of imported inputs along with wage and finance costs.

The Balance of Payments

Foreign exchange changes are the value of exports of goods and services less the value of imports of goods and services plus capital inflows. Changes in import substitution make a negligible contribution to the balance of payments and exports of goods and services are assumed to be approximately the same as sales of tradable goods. Imports of goods and services are determined by demand i.e. by absorption and the relative prices of tradables and non-tradables. Imports are in unlimited supply at international prices.

If the foreign exchange loss is less than some level of reserves which is considered adequate by the private sector there is no change in the exchange rate. But when the foreign exchange loss

is greater than this the exchange rate depreciates at a rate which is determined by the expected loss of foreign exchange reserves. Exchange rate depreciation raises the price of tradables, affecting the profitability of investment in the tradable sector, the cost of non-tradable goods, the demand for imports and for non-tradables, domestic inflation and wages.

Wages, Prices and Interest Rates

Prices are simply a weighted sum of the prices of tradables and of non-tradables. Fiscal and monetary policies influence inflation via the price of non-tradables. Wages adjust to inflation with a lag. The extent of adjustment depends on labour productivity and the rate of unemployment. Employment varies with output and with the rate of technical change.

The interest rate is linked to interest rates in international markets but not rigidly. There will be differentials, within limits, in response principally to the government's demand for domestic finance.

Intended Spending

The amount which the economy plans to spend during a given period is the sum of output plus expected real increases in the supply of money. The supply of money is the sum of government borrowings from the central bank and the accumulation of foreign exchange reserves.

Growth

Output will stagnate, whatever the demand at home and abroad, if there is insufficient investment in the modernization of systems and the implementation of competitive technologies. Furthermore, if the increase in output of traded goods is inadequate, the exchange rate depreciates and drives output down via reduced real demand for non-tradable goods. Investment in tradables to maintain the growth of output of tradables is the effective way to raise the ceiling on the expansion of national output. Investment in tradables depends on the after tax return on the production of tradables assuming the necessary infrastructure has already been provided.

This simple macro model incorporates the features of the small economy discussed in the previous section and may be used to simulate a path of expansion of output over time. We may derive the rate of investment in tradables which is necessary to ensure that growth does not come to a halt because of capacity limitation in the tradable sector. The model may also be used to gain insight into the magnitude of responses to some global policy measures such as increased government borrowing from the central bank or changes in interest rates.

Fiscal Policies and Expected Effects

Fiscal policies have effects that may be grouped under the categories of stabilization, growth and income distribution.

Stabilization refers to the short-term adjustment of national spending. Growth addresses the longer term trend of output and involves incentives for investment, particularly investment in tradables. Income distribution is concerned to ensure a minimum standard of household welfare. We assume that the target is to put a floor on the provision of basic surfaces to all households, especially the disadvantaged. Each aspect of fiscal policy will be examined in relation to these objectives. In the end we need a total package which offers the best compromise among them.

The Personal Income Tax

The economic impact of the personal income tax depends on the average rate, the degree of progressivity and the nature of allowances. A higher average personal income tax rate dampens spending and acts as a stabilizer in times of excess foreign exchange spending. There is no reason to expect higher rates to reduce the supply of labour or work effort, popular myths notwithstanding. The labour market is not such that a worker may decide to work 36 hours per week if his tax rate is at a certain level and 40 hours per week if it is lower. The work week is 40 hours long. The worker decides whether to work or not. Where there is widespread unemployment someone else is standing ready to replace him should he decide not to work. The few trivial examples of workers refusing overtime because of tax deductions do not affect the argument. A negligible amount of the national product is produced in overtime. Work effort depends on the

organization of jobs within the firm and the quality of management. Among the self-employed some may choose to vary their activity in response to tax structure. Typically, however, they adjust activity between taxable and tax-exempt activity.

An efficiently administered, progressive income tax is the most straight-forward way to redistribute income. But a market economy will adjust to subvert income redistribution via the progressive income tax if the rate of progression exceeds what is socially desirable. Those affected will resort to political lobbies, and seek out tax shelters and legal loopholes in order to frustrate the excessive progression. If government reacts in a hostile fashion to block these avenues, those affected begin to leave the country. In a small country the proportion of skilled people who may be lost in this way is often quite significant. The progressive income tax is an important instrument for income distribution but progressivity must not be taken beyond what society accepts as reasonable (which may vary from time to time).

Many of the allowances, exemptions and rebates provided for under the personal income tax regime are designed to redistribute income - for example, the personal allowance, allowances for mortgage interest payments and health related deductions. The level at which they ought to be set should be determined in the light of the degree of income distribution desired and the other means available for achieving it.

Allowances may also be used to encourage investment - for example, rebates on export profits, allowances against equity investment and credits that dividend recipients may claim for taxes paid by firms before distribution. These allowances have an important role to play in encouraging the investment which may lead to increased competitiveness. Most tax regimes in the Caribbean also include incentives for financial accumulation. From my perspective they have no justification.

A well-designed personal income tax serves all three objectives of fiscal policy. The rate may be adjusted to the requirements of overall economic activity and spending. Progression may be adjusted to secure income distribution targets along with other ways of achieving welfare levels. Allowances may also contribute to income distribution but they have a potentially more important role as incentives for investment.

The Corporate Income Tax

Like the personal income tax the corporate tax may be used to dampen expenditure for short run stabilization purposes. It may also serve to redistribute income. It adds to the progressivity of the personal income tax because it reduces dividends accruing to owners of the firm except where the full amount of corporate tax is allowed against personal income tax paid by dividend recipients. However the most important role of the corporate income tax is as an investment incentive via the rules governing

taxation. Formulae may be devised to measure the incentive offered by a combination of the corporate tax rate, allowances, exemptions and other incentives which the tax system offers to the firm (See King & Fullerton, 1984; Worrell, 1989). These would include such things as accelerated depreciation allowances, special performance rebates for exports and new industries, write-offs against future profits, investment grants and so forth. One may calculate the effective incentive for various kinds of activity and adjust the structure of the corporation tax so as to ensure that investment in the tradables sector receives the highest stimulus.

Taxes on Imports and Exports

Taxes on imports may be used to adjust expenditure and they may also provide for additional import substitution. It has been argued that high import tariffs give perverse incentives for investment in importables rather than in exportables, the so-called "anti-export bias". If the argument is of substance it must be the case that investment which is diverted to import substitution would otherwise have gone for the production of exports. But there is unlimited finance available for investment in exports whether or not the profitability of exports is less than the profitability of import substitution. Even if a small country makes import substitutes too profitable and investors take up all available opportunities for import substitution, there are still investment funds available in New York and San

Juan, if not in Port-of-Spain, to take up the additional profitable opportunities in the export sector. What is more, the scale of investment in import substitution is trivial compared to the scale of investment in exports. No matter how profitable import substitution may be investment will be quite small - of the order of a few million at most - and easily financed from local sources. In contrast, export investment is sizable, reaching US\$10 million or more. An investor with the required finance might easily take up import substitution possibilities as an afterthought to his main export interest. There is a sound argument against overprotection of import substitutes. It is based on hardship and excessive expense to the consumer, not on the effect on exports. Moderate import tariffs may be used to adjust expenditure in the light of economic performance and to encourage reasonable investment in import substitutes.

It is possible to effect some income redistribution via differential tariffs on classes of imports. The Caricom Common External Tariff generally has highest tariffs on consumer durables and lower imposts on machinery, raw materials and basic foods. But many have questioned the effectiveness of such income distribution efforts. There is a great deal of market discretion between the tariff and the sale to the final consumer. For instance, it is possible to impose higher mark-ups on low tax items to make up for lower mark-ups on high tax items which one does not wish to sell at exorbitant prices.

In the Caribbean there are few taxes on exports because of the need to maintain competitiveness. It might be desirable to have negative taxes on exports where international regulations permit. Small economies have nothing to lose and much to gain from such taxes, in contrast to large countries for which negative export taxes are a form of "beggar thy neighbour" policy.

Consumption Taxes, Sales Taxes and Excises

These taxes may have useful stabilizing effects provided the revenues they raise go to reduce the fiscal deficit. They reduce the volume of goods and services, including imported goods and services, which may be purchased with a given national income though in the process they add to inflation. Taxes on spending are regressive in spite of the usual provisions for higher rates for consumer durables and luxuries.

There is a popular but specious argument that taxes on spending increase the propensity to save. Is it reasonable to presume that households will abandon plans to acquire commodities to which they aspire and accumulate funds instead because the goods have become more expensive? They may be forced to postpone major purchases so there may be a temporary slowdown in spending. Any additional funds accumulated in this period will soon be contributed towards the down payment on the intended purchase as soon as financial savings have brought the household once more within reach of the purchase price.

Firms in the non-traded sector may pass on to consumers some price changes resulting from taxes on spending. There may be a reduction in output accompanying the price increases. Firms in the traded sector may not raise selling prices so their output may decline.

The Government Wages Bill

Government expenditure may be used as a stabilisation tool, to reduce the deficit and contain national expenditure.

To reduce the wages bill, which everywhere in the Caribbean accounts for over 50% of government expenditure, government will have to cut back on the services it provides. The average wage of government workers generally remains in some relationship to wage movements in the overall economy though there may be differences in timing. So the only way to manage government wages is to manipulate national wages, which very few countries are able to do by government policy directive. Government must therefore accept the ruling wage and trim the civil service rolls in order to keep its wages bill on target.

Valiant attempts have been made in many countries including Jamaica, Guyana and Grenada in the Caribbean to shed civil servants without drastically reducing the quantity and quality of public service. In the Caribbean cases the majority of popular opinion does not find any improvement in public service and in

Jamaica and Guyana social indicators such as nutrition, mortality and educational achievement show a decline.

Any government which decides on a reduction in the wages bill should determine in advance which services will be reduced or eliminated. If it fails to do so, health and education are most likely to deteriorate because they command the largest share of government expenditure. In any country which faces a large economic adjustment problem, government should plan to contain the wages bill because wages and salary payments account for so much of government expenditure. If this may not be achieved a major reduction in government spending is out of reach.

A reduction in government services may have very damaging consequences for economic growth and income distribution. Government provides the essential foundation for economic progress in the form of communications facilities, education, health services, law and order, the regulation of commercial transactions, the determination of national standards and so forth. Unless these services are delivered with proficiency, economic stagnation is inevitable.

Many government services redistribute income in desirable ways, to provide housing and health services for the old, for children of unstable households and persons with disability, to provide

education for the poor and the illiterate, to provide healthy recreation for communities in depressed circumstances.

The choice of programmes to be cut in an era of fiscal austerity is not simple or painless. To aid its decision, government should maintain ongoing, up-to-date surveys of the population to measure the consumption of essential goods and services at various income levels and sources from which this consumption is derived. To what extent do households purchase essential services out of their own income? To what extent do they rely on free provision by government, on government subsidised provision and on other sources of provision? From this information, one may assess the effect on the consumption of basics if government withdraws any of its provisions.

It is perhaps more difficult to determine where cuts in government expenditure begin to prejudice eventual growth prospects but there are measures that may help to inform the decision, for example educational achievement, crime statistics, major health indicators and reports on the maintenance of infrastructure. If such indicators are monitored carefully it will be possible to anticipate serious erosion of the country's capacity to sustain investment.

Purchases

There is not much scope for manipulating government purchases to secure an overall expenditure target. The level of purchases is decided by the extent of government activity which is already fixed so as to adjust the wages bill in accordance with the considerations just discussed. Only temporary economies in purchase of goods and services are possible.

Transfers to Households

The main function of transfers is to improve the distribution of income. Whether economies can be made in these expenditures depends on the level of provision of services which are affected and the other delivery systems that satisfy these targets. The tradeoffs may be evaluated along with other factors affecting income distribution using social indicators recommended earlier. (Transfers to firms may be considered a negative corporate income tax in terms of their economic effects.)

Interest Payments

Government will have no discretion in the level of current interest payments. But projected interest costs are an important factor determining the strategy for financing the government deficit. It should influence the extent of current borrowing, both local and foreign.

Government Investment

The level of government investment that provides for the strongest rate of growth will depend on how extensive is state ownership of production. Much economic analysis, ultimately fruitless, has been spent in determining what government ought to own. The only convincing answer is that government ought to own what citizens, expressing themselves through legitimate government representatives, decide it should own. Other positions have vigorous defenders. There are those who argue for only minimal government, concentrating on law and order, health, education, roads and ports. Among them there is an argument as to whether all of these should be included in the minimum list. Others object that we should not allow the private sector to exploit citizens via natural monopolies such as public utilities. But is it better to own public utilities or to regulate privately owned public utilities?

Beyond this, why should not government own productive enterprise? Government is large and we may need considerable resources to launch novel investment initiatives. Exports are an example. It is futile to expect the typical small furniture manufacturer who has difficulty maintaining delivery schedules to nearby outlets on home territory to venture successfully into exports. The popular notion that private enterprise is more efficient than government is too often based on biased comparisons between inefficient government and state corporations on the one hand and

relatively more efficient private enterprises on the other. Many examples might be cited to exactly the opposite end.

I am therefore inclined to a strictly commonsense view of the scope of government investment. There is not much sentiment in the Caribbean to divest government of its basic functions of education, health, social security and law and order. In addition, the ownership of public utilities should remain as is so long as service is efficient or ways may be found to make it efficient. "As is" may be state owned, privately owned and state regulated or a combination of these. Government should eschew 100% ownership of producing firms unless there is a need for fiscal expansion. The overall degree of government investment beyond basic government services may have to be varied in response to the stabilisation needs of the economy. So long as no inroads are made on the investment required for basic government services the adjustment of government investment should have little effect on long-term growth and the distribution of income.

Borrowing

Invariably, government must manage its deficit and borrowings so that there is little need to borrow from the central bank. Often over-borrowing from the central bank in previous periods must be reversed.

If foreign debt service is low (less than 10% of revenues from the export of goods and services) and the projected export growth is strong, foreign borrowing on sensible terms might be sought as a first option. The terms should include maturities approaching 10 years and the best available international market interest rates. Targets for foreign borrowing might be established on the basis of debt service projections under various scenarios taking account of possible future foreign borrowings as well. The targets would have to be adjusted to the extent that available credit terms fall short of what is desired. Lower targets must be set if the debt service ratio initially is higher. Provided the deficit is not too large an extra dollar of foreign borrowing is preferred to an extra dollar of domestic borrowing because the foreign borrowing provides foreign exchange to finance the import content of government expenditure. But if the fiscal deficit is too large efforts must be made to attract domestic finance.

Domestic finance may be considered a substitute for direct taxes but such finance may not be forthcoming in sufficient quantity. Government is then forced to borrow from the central bank, creating new money which funds spending, driving up imports faster than foreign exchange receipts and weakening the balance of payments. Additional non-expansionary domestic finance may be secured if government's borrowing requirements crowd out the private sector. Government may use increases in interest rates and increases in the requirements to hold government securities

to attract finance. If these measures crowd out private sector credit and expenditures they will serve to assist the adjustment process. However, too often measures to attract finance to government do not crowd out the private sector. Private demand for consumer credit remains high despite interest rate increases and banks borrow from the central bank to satisfy the requirement to hold government securities without reducing the credit to the private sector. The results are the same as if government had borrowed directly from the central bank.

Overview of Fiscal Policy

Fiscal policy is complicated by the many tools available and their disparate effects. However, this offers rich scope for tailoring fiscal policy to a variety of ends. For a given deficit the extent of income distribution and the mix of incentives for investment may be varied in response to the country's needs. Fiscal policy must be assessed in a medium term framework. Certain policies - for example, incentives for investment - need to be sustained for several years if they are to have the intended effects. Also, the current year's fiscal policy should be varied in response to expected economic performance and previous economic performance as well as the current year's outcome. For example, a one year fiscal expansion to compensate for temporary loss in export demand is quite reasonable whereas a long term down trend in export demand should not be compensated for in this way.

Monetary and Financial Policies

Interest Rates

There is a sharp divergence between the interest rate orthodoxy of international financial institutions and the analysis which informs interest rate policy at the Central Bank of Barbados. The international financial institution orthodoxy is that higher interest rates stimulate savings. As discussed earlier there is no reason to expect them to. Even where interest rates encourage the accumulation of financial assets, they will not improve the return on investment; if there is no more investment there is no more real saving. The IFIs also argue that the interest rate is an efficient credit rationing device. More competitive firms bid credit away from the less competitive by accepting higher loan rates. As we know, it is far more likely that consumers will bid credit away from all firms, both competitive and non-competitive, if willingness to bid up the interest rate is the main criterion. Moreover, tradable firms are least able to accommodate to rising finance costs because they cannot raise their selling prices; so high interest rates inhibit growth and destabilise the economy by encouraging consumption at the expense of production and non-tradables at the expense of tradables.

In any case, central banks in small countries do not have much choice in the determination of interest rates. If Caribbean interest rates are more than a few points higher or lower than comparable rates in New York, Miami and London, short-term

capital moves into or out of the region. There are a variety of perfectly legal ways to move funds even in countries with the most stringent exchange controls. For example, a firm may elect to borrow at home and to make cash payments for imports rather than negotiate suppliers' credit if it is much cheaper to borrow locally. When enough firms do that the balance of trade credits becomes negative and the country is financing all its transactions with foreigners rather than making use of a foreign exchange float provided by foreigners. In addition, there are numerous illegal channels for the flow of finance which central banks and national governments have no effective means of detecting even when balance of payments statistics turn up evidence of their existence.

In the publications of the Central Bank of Barbados one finds an interest rate policy which stresses that interest rates should be kept at the minimum level consistent with the underlying trend in international interest rates. The policy is to avoid erratic fluctuations to which international interest rates are subject, at the same time, not to allow wide gaps between local and foreign interest rates to be sustained for long enough to encourage short-term capital flows. It is a policy which is highly recommended.

Reserve Requirements

The use of reserve requirements in many economic adjustment programmes in the Caribbean is based on their presumed effect of reducing credit to the private sector. How may this be achieved? An increase in the reserve requirement, if banks do not hold excess reserves, results in a switch from government securities in the first instance. The central bank has to replace the finance which the banks previously provided for government and there is no effect on credit for the private sector. To make the increase in reserves effective, credit to government by the banks must be locked in as well. The financial system will then resort to discounts from the central bank and to foreign borrowing to satisfy an active demand for credit by the private sector. Both these avenues must be cut off by regulation.

We now appear to have a straightjacket on the supply of credit, but that is an illusion. The scarcity of credit drives up interest rates, widening the gap between local and foreign rates and attracting short-term foreign finance to augment the supply of loanable funds. In some instances the increase in reserve requirements may dampen the demand for credit temporarily but we should not expect that effect to last.

Lending to Government

Efforts to divert funds to government, often desirable for adjustment purposes as mentioned earlier, are likely to have a

similar outcome. The measures used are: increased requirements by the central bank for financial institutions to hold government securities and increased interest rates on government securities. In either case, financial institutions must be denied access to other sources of funding for credit to the private sector when they are forced to divert funds to government. As a scarcity of funds emerges it is likely to provoke an increase in interest rates and an inflow of foreign short-term finance.

Central Bank Sales and Purchases of Government Securities

Open market operations have essentially the same result. The central bank offers government securities for sale to financial institutions at attractive discounts. Funds are diverted from credit to the private sector, the private sector bids up the interest rate and short-term funds flow into the economy.

Credit Controls, Global and Selective

Credit controls may be a temporary damper on credit and perhaps expenditure, either globally or in selected areas such as consumer credit. But if the controls remain in force for any length of time they are circumvented by informal financial arrangements of one kind or another. Devices which have sprung up in the Caribbean include a revival of partnerships and "sou-sous", direct lending which bypasses the financial system, lease and buy-back arrangements and new institutions registered under

non-financial legislation to carry out what are essentially financial operations.

Specialised Financial Services

The provision of special discount facilities, exchange rate guarantees and export guarantees are the central bank policies with potential to support the expansion of the tradables sector. However, so far their impact in Caribbean countries has been quite small. The promotion of stock markets, another much heralded financial innovation, has also had limited impact. Perhaps little better could be expected given the small size of Caribbean economies.

Exchange Controls

Exchange controls increase the cost of making foreign exchange transactions; they have no other effect. They fail completely in the initial intention to ration foreign exchange. Anyone denied foreign exchange under the official ration, offers to buy from unofficial channels. If it is too difficult or dangerous to buy locally, foreign exchange is always available for local currency in North America where such transactions are perfectly legal, if one is prepared to pay the hefty discount. Once foreign exchange earners recognise that they may profit substantially by selling unofficially, they may fairly readily make arrangements to divert much of their earnings from official foreign exchange repositories.

Overview of Monetary and Financial Policies

There are very few financial policy levers that actually work. Credit controls, reserve requirements and exchange controls may have a short-term impact on credit and may cause a pause in the growth of national expenditure. Government needs to put other expenditure adjustment measures in place during this breathing space. If they continue to rely on financial measures the private sector will soon make necessary adjustments and expenditure will revive. Innovative financial services may help to support exports and the growth of output though they cannot be depended upon as the main stimulus.

The Recommended Policy Regime

In determining upon fiscal and monetary policies, governments must first establish a framework of analysis which provides a picture of those policies which show promise and those policies which are not applicable. That is the intention of our simple model. It also allows the authorities to identify possible limits to economic growth. One then requires a detailed assessment of the main fiscal adjustment measures with respect to revenue, expenditure and financing and their impact on the growth of income, the adjustment of the balance of payments and the distribution of income. Governments require associated policy information on the consumption of essential services and the state of the infrastructure. They may then establish fiscal targets for a chosen multi-year horizon, simulate and deduce the

associated exchange rate and monetary adjustments that might facilitate the targets.

The policy regime must be tailored to fit the country's circumstances. Countries which are suffering from a prolonged debilitating economic crisis will need to drastically reduce the scope of government until they arrive at a core of public services, however few, that may be effectively delivered by the existing government machinery. Countries with severe balance of payments disequilibrium will need to reduce the fiscal deficit, skewing expenditure towards basic services and infrastructure. They may need to accompany the fiscal adjustment with devaluation and higher interest rates if the market views the current levels as unsustainable. Countries with mild balance of payments disequilibrium may need no more than a reduction in the fiscal deficit. Countries with no balance of payments adjustment problem should seek to stimulate investment in the tradable sector directly or by suitable incentives and to enhance the welfare of their least advantaged citizens.

References

King, Mervyn and Don Fullerton, The Taxation of Income from Capital, Chicago and London, University of Chicago Press, 1984.

Worrell, Delisle, 'Taxation and Investment Incentives,' Central Bank of Barbados (mimeo), March 1989.

Table 1

The Model

$$Q_t = Q_t (P_t, w, r)$$

$$Q_n = Q_n (a, P_t/P_n, Q_n (-1))$$

$$P_n = P_n (Q_n, P_t, r)$$

$$m = m (a, P_t/P_n)$$

$$dR = P_t (Q_t - m) + K$$

$$de = \begin{cases} 0 & dR < \bar{R} \\ f(dR) & dR > \bar{R} \end{cases}$$

$$P_t = e P_f$$

$$w = w (P (-i), dQ/dN, (L-N)/L)$$

$$N = N (Q)$$

$$P = b_1 P_t + b_2 P_n$$

$$r = r_f + f (dMO/P)$$

$$Q = Q + dMO/P$$

$$dMO = Ag + dR$$

$$Q = Q_t + Q_n$$

$$Q_t (+i)/Q_t = Q(I_t)$$

$$I_t = f^1 (PI, \text{tax} (PI))$$

Symbols

Q_t : Output of tradables

P_t : Price " "

W : Wages

r : Interest rate

a : Intended spending

P_n : Price of non-tradables

Q_n : Output " " "

m : real imports

dR : change in foreign exchange reserves

K : foreign capital, net

de : exchange rate change

N : employment

L : labour force

Q : national output

P : price index

MO : money

Ag : central bank lending to gov't

P_f : foreign price index

I_t : Investment in tradables

PI : Rate of return

$\text{tax} (PI)$: Corporate tax rate