CHAPTER 2

Economic Characteristics of the Caribbean

Dualism

Output in Caribbean countries may be divided into those goods and services which may be traded among countries, such as clothing, agricultural products and tourism, and those 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, and use new kinds of organisation, 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 of 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. Policy error will result if the effects on traded and non-traded production are not separately measured. The extent of supply response may be over-estimated or the extent to which an increase in output arises in the traded sector may be miscalculated, causing an over-optimistic forecast for the improvement in the balance of payments. When the expected foreign reserve gain does not materialise the entire policy package may be threatened.

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 evidence throughout the Caribbean in support of this contention, most obviously in the tourism sector. The prerequisites for investment are an orderly, stable society with

legitimate political authority, dependable public utilities and transport and basically sound education, health and social services. Once these are provided for, investment may be expected to follow profitability.

Many economists still believe that domestic savings are the key to sustained economic growth. That is true if the country chooses not to admit overseas investment, but 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, concentrated by and large in public utilities. (They can be said to have a payoff in foreign exchange in the long run, to the extent that they are essential for investment in the export sector.)

Where infrastructure is inadequate fiscal resources should 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. For overseas investors 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? Such allowance is possible under some double taxation agreements.

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". Where there is no urge to invest banks lend any additional funds for consumption. The increased financial "savings" are matched with increased consumption, not more investment. If the demand for consumer credit is weak banks will accumulate reserves with the Central Bank, destroying money and dampening expenditure rather than increasing savings.

Limits to Import 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 the percentage is no higher, though for single countries the Caricom market may be highly significant.) Non-subsistence economies require a wide range of consumption 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.

Attempts to stimulate import substitution in the Caribbean by administrative decree 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 to nurture entrepreneurship. But the overall contribution of import substitution to national output will remain small so long as the economy does not revert to subsistence levels of consumption. Small countries therefore need not be concerned about incidental "anti-export bias" which might arise from justifiable tariff policy. The import substitutes which become profitable as a result account for such a trivial proportion of human and financial resources that they do not inhibit investment in export production.

Endogenous Exchange Rate Adjustment

Small countries with very large richer neighbours do not have much discretion in their choice of exchange rate. The value of Papua New Guinea Kina in Australian dollars, the value of Botswana Pula in South African Rand, the value of the Dutch guilder in Deutschemark and the value of the Jamaican 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 unchanged indefinitely. 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 in 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 insufficient foreign exchange to sell at that rate. Increasingly over time the market ignores the central bank and traders set rates for buying and selling among themselves. The longer the central bank delays devaluation the more its share of the foreign exchange market dwindles. Ultimately, it will command foreign exchange only from primary exporters.

Endogenous Money

Central banks in small open economies have little effective control over the supply of money because of the international mobility of finance. Currency controls have very limited power to influence these flows; their effects are more likely to be on the proportion of financial transactions that pass through formal channels than on the supply of money.

The mechanisms of money supply adjustment are discussed in Chapter 3. The stock of money is determined by the demand for transactions balances, the accumulation of foreign exchange reserves and government borrowing. Attempts to set interest rates and limit the availability of credit have no lasting effect on economic outcomes. Monetary policy is effectively a subset of fiscal policy, depending on government's requirement for financing from the central bank.

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. These factors may be influenced by fiscal policy, for example by providing incentives for investment in techniques with higher labour productivity or by slowing the pace of wage reaction through leadership in the government sector. Fiscal policy may also weaken wage reaction if it results in an increase in unemployment.

Background to the Model

A point of departure for the construction of a model of the archetypical Caribbean economy is the equilibrium of internal and external balance defined through the relationship between relative prices and output. (Such models, in the tradition of Mundell-Fleming, are commonly used in the analysis of adjustment policies. For recent examples see Reinhart, 1989, Edwards, 1988 and Minford and Walters, 1989.) The external balance schedule may be regarded as a locus of equilibria between the supply of foreign exchange, determined by the production of tradable goods, and the demand for foreign exchange to purchase imports, which depend on relative prices and output. Internal balance is determined by the demand and supply for non-tradable goods. Demand is an increasing function of relative prices (defined as the price of tradables divided by the price of non-tradables) and supply is a decreasing function. The shape of the internal balance schedule depends on the elasticities of demand and supply. In the static economy we may presume that an equilibrium exists which defines output and relative prices.

A more useful framework envisages a dynamic economy with adjustment processes where the patterns of growth of tradables and non-tradables are defined over time. We assume no capacity limit and speedy adjustment of supply, both of tradables and non-tradables. The adjustment process involves wages and exchange rate changes. Wages react to changes in relative prices in ways that may dampen the initial relative price effect, effectively raising domestic prices in

response to foreign prices. A decrease in the relative price of tradables precipitates a loss of foreign exchange reserves and a depreciation in the exchange rate which also dampens the relative price effect. Both adjustments are asymmetrical. A fall in relative prices seldom leads to a decline in wages and a rise in relative prices will not cause an appreciation of the exchange rate.

The expansion paths for tradables and non-tradables are interdependent via the balance of payments. Expansion of tradables generates a net supply of foreign exchange while the expansion of non-tradables generates a demand. The demand and supply of foreign exchange will equate via exchange rate depreciation when there is an excess demand but foreign exchange reserves will accumulate when there is excess supply. To attain external balance of supply and demand often requires income contraction because of the relatively inelastic supply of foreign exchange with respect to relative prices. However, once the exchange rate stabilises for some time, foreign exchange begins to accumulate.

Supply is thought to be more elastic in the medium term. The capacity constraint is relieved by new investment in the tradable sector in response to changes in relative prices. This leads to the familiar J curve effect. We may more confidently expect an improvement in the balance of payments in the medium term than in the short run as new capacity provides for a more robust supply response from the tradable sector. If a persistent excess supply of foreign exchange builds up, the authorities may accelerate growth by increasing the demand for non-tradables. The most obvious tool for generating additional demand is a money financed fiscal deficit of moderate proportions.

The expansion paths are also interdependent by way of wages. A change in relative prices affects wages because of the high import content of the consumption basket, but the wage reaction may be delayed. On the other hand, anticipation of a wage reaction may cause investment to be postponed or delayed and the expected supply response may not materialise.

In summary, the dynamic model provides for growth paths of tradables and non-tradables linked via asymmetrical exchange rate and wage adjustment with lags in the adjustment process. The mechanisms are partly self-correcting. There is some tendency to frustrate the original policy and there are possibilities of J curve reactions.

In real world circumstances, economies are subject to ongoing shocks and are never on an equilibrium growth path. The shocks may be policy induced (from an increase in the fiscal deficit), caused by changes in structure (changes in productivity, in the bargaining strength of unions or in the expectations of inflation) or they may be external (changes in the prices of tradables). For each displacement a new expansion path can be anticipated. Moreover, the system is subject to random, unexplained displacement with unpredictable effects. Policy-makers are acutely conscious that the fundamental problem of economics, not satisfactorily resolved, is to explain a disequilibrium world with some variant of equilibrium analysis.

Components of the Model

The model has the following features. Growth is limited by the expansion of tradables; there are different market adjustment mechanisms for tradables and non-tradables; wages react with a lag to prices and are endogenous; there is international mobility of capital and finance; and the exchange rate adjusts, but not continuously. The model is fully set out in Appendix I.

1. The Markets for Tradables and Non-Tradables

The output of tradables depends on their cost of production relative to the selling price on world markets. The cost of production includes unit labour costs, the unit price of capital goods and the unit costs of financial services. In the non-tradable market there is a tendency towards equilibrium of supply and demand according to adjustment norms which may be peculiar to each country. Demand is influenced by policy, in particular monetary policy, which may boost expenditures. The adjustment process affects relative prices and costs of production in the non-tradable sector. Output of tradables is subject to an upper limit which is defined by the existence of spare capacity and the amount of recent investment.

From knowledge of the price of tradables, unit labour costs, finance costs, investment, monetary expansion and the incremental capital output ratio, we may deduce the rate of growth of output and the rate of inflation from this segment of the model.

2. Investment

Because of the mobility of capital no investment takes place if the domestic rate of return is below the foreign rate. For local investment, a premium for country risk is needed above the foreign rate of return. The rate of return is the same in both the tradable and non-tradable sectors and is determined in the tradable sector. Investment in the non-tradable sector adjusts – given the productivity differentials between tradables and non-tradables – until the rate of profit in non-tradables equates to what is available in the tradable sector. If the social and political infrastructure is adequate, investment in the tradable sector is a function of the rate of return, provided that return exceeds the foreign rate plus the country risk premium. This investment sets the limit on the growth of output in the tradable sector.

3. The Labour Market

Factor markets are homogeneous and the same wage rate rules in both sectors. It is determined by expectations of inflation, by productivity and by the

bargaining strength of workers and employers. The supply price of labour depends on the existing wage and expected inflation while the demand price is influenced by labour productivity changes and expected inflation. The weight of demand and supply in the finally agreed market price depends on the bargaining strength of employers and workers. Labour market adjustment may vary from country to country. In some cases, the market may clear but in others there may be a lagged adjustment which never results in an equilibrium on the labour market. We may derive unit labour cost once we know the labour productivities, the expected prices and factors such as unemployment which may influence the relative bargaining strengths of workers and employers.

4. The Balance of Payments

Foreign exchange receipts are the sum of export sales of tradables minus small amounts of import substitutes and exogenous capital flows. Import substitutes are a very small subset of tradables and the supply curves rise very steeply for import substitutes. In aggregate analysis we may therefore assume that they are approximately equal to zero. From the export earnings we must deduct imports determined by a conventional demand function. If reserves accumulate there is no change in the exchange rate but if reserves fall to the point where the stock is seen as inadequate the exchange rate depreciates.

5. Money

Additions to the monetary base raise spending power over and above what is earned from the production of goods and services. This boosts demand for imports and for non-tradables. Fiscal policy and exogenous capital inflows are the sources of increases in the money supply. Capital inflows are not destabilising because they provide the country with foreign exchange with which to meet the additional import demand generated by the expansion in money. Fiscal expansion has the potential for destabilisation by generating an excess demand for foreign currency.

Growth Limited by Tradables

Suppose government primes the economy by fiscal expansion, causing an increase in base money. That generates additional expenditure and greater demand for imports and for non-tradables. Foreign exchange reserves decline and the prices of non-tradables rise. If the fiscal pressure is quickly removed and foreign exchange reserves are ample, no further reaction might occur. If the deficit continues to be financed by increases in money the loss of foreign reserves will trigger a depreciation of the exchange rate and general price rises. This leads to

wage increases in subsequent periods and an increase in unit labour costs.

The adjustment process continues through the balance of payments and labour cost adjustments. If there is spare capacity in tradables and the wage reaction is muted an increase in tradable output may restore balance of payments equilibrium and allow growth to continue. If there is no spare capacity and wage reaction is slow increases in profits may lead to investment in the tradable sector and eventually output growth may be resumed, but there is a temporary hiatus. If there is no spare capacity and vigorous wage reaction, investment in tradables stagnates; output does not increase and the exchange rate depreciates continuously.

Aggregate Demand and Inflation

Domestic inflationary pressure is exerted via the depreciation of the exchange rate. Domestic prices will not remain far out of line with foreign prices over time except the exchange rate depreciates. Consider an increase in the monetary base; if it is not sustained, a one-shot increase in non-tradable prices quickly peters out. If it is sustained, prices will not rise unless the exchange rate depreciates. If foreign exchange reserves are very considerable and there is a mild wage reaction there will be no large increase in domestic inflation. Strong inflation does not set in until the continuing reserve drain raises public apprehension about the stability of the exchange rate. At this point, there is a flight of capital, the exchange rate depreciates and domestic prices rise.

Domestic expansionary pressure has a potentially depressing effect via the output of tradables. In the non-tradable sector costs and prices may rise in response to demand. If these cost increases spill over to the tradable sector they will depress the output of tradables. The increase in non-tradable production will not make up for the lost output of tradables because it is foreign exchange using. As a result, the exchange rate may come under pressure and a change in relative prices may be needed to restore balance in the growth paths of tradables and non-tradables.