Financing Economic Growth: An Examination of Some Critical Issues with Special Reference to Jamaica

By

Karl M. Bennett
University of Waterloo

Presented at the Twentieth Annaual Conference
Regional Programme of Monetary Studies
Port of Spain, Trinidad
November, 1988

Financing Economic Growth: An Examination of Some Critical Issues with Special Reference to Jamaica

Introduction

The stagnation which has characterized the economic performance of most Caribbean countries since 1980 has highlighted the need to formulate effective strategies for the restoration of economic growth. Nevertheless, the evolution of the Jamaican economy between 1950 and 1973, underscored the fact that rapid economic growth could leave relatively unchanged such fundamental economic problems as high unemployment and widespread poverty. A consideration of the financial requirements for economic growth must then go beyond the narrow issue of how the necessary domestic and external funds might be mobilized to help achieve some target rate of growth. Attention must also be directed towards the issue of growth and structural change. Consequently, in this paper, attention will be directed towards the issues involved in mobilizing finance for investment, as well as, how investment ought to be targeted in order to achieve certain structural changes in the economy.

In the first section of the paper attention will be directed to the following issues. First, there will be the matter of determining the level of investment required to achieve a desired target rate of growth and the financing required for that level of investment. This will be followed by an exploration of what has been the major factor constraining growth over the past decade, namely the shortage of foreign exchange, and what must be done to alleviate the foreign exchange constraint. The second section of the paper will be concerned with such issues as the identification of sectoral investment priorities, the roles to be played by the public and private sector, as well as direct foreign investment in trying to ensure that growth is associated with structural change.

Financing Requirements for Economic Growth

Since 1981, the Jamaican economy experienced a phase of moderate expansion up to 1983, followed by stagflation in 1984 and 1985, and a return to positive growth in 1986. The overall result of this pattern of economic performance led to real Gross Domestic Product (GDP) in 1986 being at approximately the same level as in 1981. Preliminary estimates for 1987 suggested that there was a real rate of growth of 5 percent. In view of the fact that the annual average growth rate of the population has been 1.5 percent over the past 25 years and is expected to remain at approximately the same rate until the year 2000, the minimum acceptable long run annual average growth rate for the economy should be in the range of 3 percent. This would allow for some modest growth in real per capita income.

In this section of the paper the assessment of the financing requirements for growth will be based on a target growth rate of 3 percent per annum. Having established that growth target, the first issue to which attention will be directed concerns the rate of investment which would be necessary to facilitate an annual average growth rate of 3 percent. Estimates of the relationship between changes in gross fixed capital formation, GFCF and GDP over the period from 1973 to 1986 indicated that a 1 percent point change in the GFCF/GDP ratio would be associated with a .2 percentage point change in the growth rate of GDP[1]. In 1986 the GFCF/GDP ratio was 18.1 percent. In that year the economy recorded a real rate of growth of GDP of 2.1 percent. Given the relationship between the GFCF/GDP ratio and the growth rate of GDP mentioned above, in order to realize the target rate of growth of 3 percent the GFCF/GDP ratio would have to be increased by approximately 4 percentage points to 22 percent.

Estimates of the financing required to achieve the target real growth rate would have to incorporate some notion of an anticipated rate of inflation. A major factor determining the inflation rates in open economies, such as that of Jamaica, has been global inflationary trends. In addition, more recently, downward movements in the exchange rate associated with the operation of the exchange auction system in 1984 and 1985 contributed directly to the accelerated rate of inflation in those years. Given that the maintenance of relative price stability has been entrenched as a major policy goal of the industrialized countries, one might reasonably expect that the country is not likely to experience difficulty in combating externally generated inflation. In addition, the expected stability of petroleum prices over the next decade will also work to ease inflationary pressure. Consequently, the maintenance of the moderate reflationary monetary and fiscal measures introduced in 1986 combined with some modest adjustment in the exchange rate to stabilize the real rate, should make it possible to maintain an average long term rate of inflation of 10 percent. In Table 1 we have set out estimates of GDP and GFCF from 1987 through to 1996 based on a nominal annual average growth rate of 13 percent.

The major determinant of the performance of the economy over the years has been the availability of foreign exchange. The economic stagnation of the seventies and eighties can be directly linked to the scarcity of foreign exchange. Consequently, any assessment of the financial requirements for economic growth will rest on determining the foreign exchange required and the likelihood of meeting those requirements. The economy has traditionally been highly dependent on imports to satisfy both consumption and investment needs. Between 1980 and 1986, the ratio of imports to GDP ranged from a low of 40 percent in 1986 to a high of 56 percent in 1985. The average for the period was 46 percent. Even during the period from 1973 to 1979 when there was an annual average negative growth rate of 2.5 percent, the import/GDP ratio averaged 35 percent. It is our view that the import GDP ratio of the eighties is likely to be a more accurate reflection of the nature of the relationship over the period from 1987 to 1996. Accordingly we proceeded to estimate outlays on imports for that period on the assumption that on average imports would amount to 45 percent of GDP. In Table 2 we have set out estimates of GDP and the associated outlays on imports in US dollars.[2]

This extrapolation of the potential value of import outlays can obviously be challenged on the grounds that it seems to make no allowance for growth being associated with some economization on import outlays. Specifically, the question might be raised as to whether import substitution in food ought not to be a central feature of any growth strategy. There would also, as well, appear to be some scope for import substitution in other consumer goods. In Table 3 is set out outlays on imports by economic function from 1974 through to 1987. During the late seventies there was a dramatic decline in import spending on food. Spending on food imports in 1977 was approximately 41 percent of that in 1974. Moreover, even in the period of high spending from 1981 through 1983, the amounts spent were significantly less than in 1974. The decline in import spending on food in the late seventies was associated with a substantial increase in the production of root crops and other primary products not destined for the export market. Real output of these items was 32 percent higher in 1978 than in 1976. In the period of high import spending in the early eighties real output remained below that of the period from 1977 to 1979. There would appear to be a strong potential for savings on food imports. With respect to consumer goods in general, total import spending in 1987 was approximately the same as in 1974. Moreover, since 1980, there have been wide year to year fluctuations in spending. A part of the pattern can be attributed to trends in food imports. In general there would appear to be some potential for controlling outlays on imports of consumer goods.

In an effort to arrive at an estimate of what might more accurately be viewed as non-discretionary spending on imports, an effort was made to estimate import outlays which would be linked directly to investment. First, we proceeded to determine the relationship between imports of capital goods and Gross Fixed Capital Formation, GFCF. In the thirteen year period from 1974 to 1986 the value of imports of capital goods amounted to 52 percent of GFCF. The lowest value was in 1974 when capital goods imports amounted to 44 percent of GFCF. Moreover, in nine of thirteen years the import ratio was at least 50 percent. Accordingly, we have assumed that imports of capital goods will account for 50 percent of GFCF over the period from 1987 to 1996. In Table 4 we have set out estimates of GFCF and spending on imports of capital goods in US dollars based on the assumption that during the period such spending will represent 50 percent of capital outlays.

Apart from the foreign input requirement in capital formation, there is also the factor of the very heavy dependence of the manufacturing sector on imported raw materials. Between 1980 and 1986 spending on imported raw materials represented on average 80 percent of the value of output of the manufacturing sector. There was, however, considerable year to year variation. It has also to be borne in mind that imports of raw materials in any given year would not be totally absorbed in production in that year. In estimating potential outlays on imports of raw materials for use in manufacturing we adopted the following procedure. First, it was assumed that output of the manufacturing sector will represent on average 18 percent of GDP. This is reflective of the relationship during the eighties. Second, it was also decided that an assumption that imported raw materials would on average represent 75 percent of the value of GDP in manufacturing was reasonable. In Table 5 is set out estimates of GDP in manufacturing as well as spending on imported raw materials used in manufacturing.

In summary, the procedure adopted provides a range of estimates of foreign financing requirements, which would be consistent with achieving a growth target of 3 percent. The issue towards which attention will now be directed concerns the implications of meeting these requirements.

Availability of Finance

At this stage attention will be directed towards the issue of the potential availability of foreign exchange necessary to satisfy the demand outlined in the previous section. The principal sources of foreign exchange are the earnings from exports of goods and services, direct foreign investment and foreign borrowing. It will be indicated below that there will be severe constraints on the reliance on foreign borrowing as a source of foreign exchange. In assessing potential foreign exchange earnings from exports of goods and services it is important to distinguish between the recorded value of these exports and the actual foreign exchange or cash flows to the economy. The country's major exports for most of the period since the second World War were bauxite and alumina. However, the gross value of these export sales cannot be taken as being indicative of a pool of foreign exchange available to finance imports. Given the dominance of foreign firms in the production and export of these items only a portion of this revenue, essentially the local expenditures of these companies, for example, wages and salaries, taxes and royalties, account for the foreign exchange flows associated with that sector. Accordingly, we will be concerned with an assessment of the potential cash flow realized from exports of goods and services.

The cash flow realized from exports of goods and services grew at an annual average rate of 6.9 percent between 1980 and 1987. However, there were two distinct patterns to the flows over the period. Between 1980 and 1983 there was a significant decline in cash inflows. In 1983 cash inflows associated with exports of goods and services amounted to only 66 percent of that in 1980.[3] In 1983, there was the major revision of the exchange rate system with the introduction of an auction to determine the exchange rate. Since that time, as shown in Table 6, there has been a major increase in cash inflows. The greatest single year increase was in 1984, when foreign exchange flows through the banking system rose by 37 percent. From 1985 through 1987 the annual increases averaged 21 percent.

The rapid growth in foreign exchange earnings from exports of goods and services since 1984 can be attributed to the growth in tourism, as well as in exports of manufactured products, primarily garments. Receipts from Tourism increased from US $175 million in 1984 to US $527.1 million based on preliminary estimates for 1987. At the same time earnings from the bauxite/alumina sector which had declined precipitously between 1980 and 1984, to the point where earnings in 1984 were only 21 percent of that in 1980, showed signs of a strong recovery in 1987. Earnings in 1987 amounted to 63 percent of that of 1980 (Bank of Jamaica, Report and Statement of Accounts 1987).

In spite of the growth in foreign exchange receipts from exports of goods and services since 1983, the foreign exchange available for financing imports from that source, has been constrained by the fact that on average 57 percent of these receipts annually, have been used to service the external public debt. Moreover, as shown in Table 7, if one were to take into consideration arrears and hence the accrued obligations, debt service would have absorbed 88 percent of the cash inflow in 1985 and 1986. Even in 1987, where according to preliminary estimates receipts rose by 30 percent, the accrued debt service obligations would have absorbed 81 percent of export earnings.

The increase in the burden of debt service charges during the period can be linked to the growth in the external public debt. This came about, in part, as a result of the government of the day being obliged to shoulder the responsibility of financing the economic recovery in the absence of direct investment inflows. From December 1980 to December 1983 the external public debt rose by US $1,400 million. The external debt which had stood at US $1,866.8 million at the end of 1980 had risen on the basis of preliminary estimates to US $4,013.39 million at the end of 1987. Although one might expect rescheduling arrangement to allow for some partial easing of the debt service burden, the best that might reasonably be hoped for over the next five to ten years is a lowering of the actual debt service ratio from the present range of close to 60 percent to something closer to 30 percent.

In light of the current debt service situation, the success in maintaining a desired positive growth rate will rest primarily on the extent to which earnings from exports of goods and service can grow at an adequate rate. A continuation of the strong growth in earnings from tourism and exports of manufactured products, which started in 1984, combined with a recovery of earnings from the bauxite/alumina sector towards that of 1980, could in this best case scenario allow for a 20 percent annual average rate of growth in export earnings. In Table 8 estimates are provided of cash receipts from exports of good and services based on a 20 percent annual growth rate, using 1986 receipts as the base value. In addition, included in the table are the earlier estimates of total spending on imports, as well as import outlays on capital goods and raw materials, which would be consistent with the 3 percent growth target. It can be observed that even with the projected high rate of growth of foreign exchange earnings, the major share of receipts would go towards financing imports over the ten year period. There is, of course, the matter of the debt service obligations. It was pointed out above that in the circumstances prevailing in the mid-eighties the best that might be hoped for is a reduction of the debt service ratio to something in the area of 30 percent. The estimates in the table indicate that it would not be until 1994 that spending on imports would amount to less than 70 percent of export receipts. It is then clear that the projected pattern of import spending would not be consistent with the country meeting its external debt obligations. This dilemma could only be avoided if there was a major flow of direct foreign investment to supplement regular foreign exchange earnings from exports of goods and services.

It was pointed out earlier that it might be possible to economize on import spending on food and other consumer goods. To that extent it would be possible to reduce total outlays while maintaining a level of spending on imported capital goods and raw materials necessary to realize the growth target. In the last three columns of Table 8 we have shown estimates of the share of foreign exchange earnings which would be absorbed by imports of capital goods and raw materials. It would seem that if spending on imports of consumer goods could be controlled, the imports necessary to support investment could be sustained and leave sufficient funds which given reasonable rescheduling arrangements could also allow the country to meet its debt service obligations. It must be repeated, however, that this tentative conclusion is based on an exceedingly optimistic assumption concerning the growth in foreign exchange earnings.

In summary, success in establishing the economy on a positive secular growth path will depend on the extent to which adequate foreign exchange is available. The post 1984 experience suggests that there is some scope for the country to enhance its foreign exchange earnings from tourism and the export of manufactured products. However, the heavy external debt overlay indicates, that even allowing for a dynamic growth in foreign exchange earnings, problems could be experienced in simultaneously satisfying debt service obligations and financing the imports of capital goods and raw materials necessary to support growth. The country is clearly not in a position where it could continue to rely heavily on official borrowing to supplement the supply of foreign exchange. The attraction of direct foreign investment is clearly an alternative. The attraction of foreign direct investment has been a central feature of development strategy of the country since the fifties. It declined in prominence during the seventies, but has been revived with great fanfare during the eighties. Very limited success has been realized in attracting such investment since 1980. It would then seem that a growth strategy has to incorporate as a central feature an economization in the use of foreign exchange. This means that, of necessity, growth must incorporate change in the traditional way in which the economy has performed in the past. In the next section an exploration will be conducted of the type of structural changes which might be required to set the economy on a stable growth path.

Growth and Structural Change

In this section we begin by raising the question, growth for whom? Studies which have been conducted on the performance of the Jamaican economy during the nineteen fifties and sixties have shown that in spite of the rapid rate of growth, averaging approximately 5 percent per annum, on a per capita basis, the level of unemployment remained high and there were wide disparities in the distribution of income. (See, for example, Jefferson, 1972.) A more recent study (Boyd 1988) has also underscored the fact that not only did the condition of the poor not improve significantly during periods of prosperity, they were also major losers during the economic downturn of the seventies. Furthermore, it was argued that the poor seemed to have borne a disproportionate share of the adjustment costs associated with the stabilization programme which was carried out between 1983 and 1985.

In the previous section attention was directed towards assessing the foreign exchange financing which would be required to promote growth on the assumption that the economy was characterized by a given set of structural features. However, in view of the fact that high economic growth in the past has been associated with high unemployment and widespread poverty, a growth strategy must in the contemporary period, be framed to directly address these issues, if the past experience is not to be repeated. The previous growth pattern, undoubtedly, was a reflection on certain basic structural characteristics of the economy. The realization of a different growth pattern would then seem inevitably to call for certain structural changes. This, in turn, raises the question as to what have been identified as the major structural shortcomings which would require correction. The widely held view is that the fundamental problem of the Jamaican economy, like that of many other small economies can be linked directly to its extreme openness. The inherent weakness in this situation arises fromthe fact that the economy is heavily dependent on the state of international markets for a narrow range of products and services, such as, bauxite, alumina and tourism. At the same time production and consumption embodies a very high import content. This leads to the question as to what special initiatives ought to be pursued in formulating a growth strategy and implicitly the role to be played by government.

The Jamaican government has, since 1980, emphasized a growth strategy based on the private sector playing the dominant role. Consequently, the role of government has been restricted to that of creating the proper investment climate. Government policy initiatives have been aimed at liberalizing the economy in areas such as, exchange rate management, commercial policy, as well as, initiating changes in the operation of monetary and fiscal policy which are all geared ostensibly toward improving the efficiency of the market mechanism. The freer market environment was expected to stimulate economic growth and all would share in this growth through the 'trickle down' effect.

Although the record of government involvement in the provision of goods and services in the decade of the seventies was far from impressive, as evidenced by the generally poor performance of state enterprises, it is hard to visualize how the current approach, even under ideal circumstances, could result in anything other than the unbalanced growth of the past. All countries which have been successful in achieving broadly based growth in recent years, have used their instruments of monetary, fiscal and commercial policies to influence directly activities in various productive sectors. The role of government will then have to extend beyond the creation of the appropriate investment climate, to that of close coordination with productive agents in carrying out the growth strategy. This leads to the question as to what ought to be the priorities in the growth strategy which must be aimed at reducing the extreme openness of the economy.

First, the problems of poverty and unemployment can be directly related to problems in the agricultural sector. Rural underdevelopment has contributed to the rural/urban migration, which in turn has deepened the urban unemployment problem. Rural poverty reflects the general low level of agricultural productivity which can be linked directly to the high degree of inequality in land ownership. For example, in 1979 farms under five acres accounted for 82 percent of all farm holdings but only 16 percent of farm acreage (Boyd, 1988, p. 90).

The government had announced in 1982 that it planned to address many of the major weaknesses in the agricultural sector as part of its programme of structural adjustment. In 1983 it launched what was called the AGRO 21 Programme in which it claimed a fundamentally different approach to domestic agriculture was being initiated. The programme called for bringing in to productive use some 250,000 acres of unutilized or under-utilized land over a four year period. The centre piece of the programme was the goal of producing twenty seven crops, with the aid of advanced technology, for markets in the United States and Europe (Bank of Jamaica, Report and Statement of Accounts 1983, p. 3).

The main thrust of the programme with its emphasis on advanced technology was clearly not directed at the vast number of peasant farmers with inadequate land holdings. In essence, the programme seemed to have been aimed at bringing into farming a new class of farming entrepreneurs. Any benefits which the peasant farmer might realize from the programme would be determined by the extent to which he could become engaged in the production of crops which could be sold through these modern agricultural enterprises on the export market.

Marketing problems have resulted in the expected goals of the programme not being realized. The center piece of the programme, the Spring Plain project, which had involved substantial government participation failed, after a short period. In any event since the programme was not geared towards addressing a basic cause of rural poverty, namely, land scarcity, it is likely that even if the programme had been a major success we would have witnessed a repetition of past experience of growth with no substantial inroads into poverty.

A central element in any rural growth strategy must be that of trying to exploit more effectively the potential of those groups which have been peripheral to the growth process in the past. Emphasis must be placed on the development of innovative credit schemes which would allow peasant farmers to increase the size of their land holdings. At the same time it would also be necessary to provide a more dynamic market for their produce to enhance their income earning potential. This would mean that although a major role for the small farmer should be that of satisfying domestic food requirements a serious effort should also be made to involve them in export activity.

The export of fresh produce entails a high measure of marketing risk. This is especially so when exports are geared to markets in industrial countries where rigid standards have to be maintained with respect to product quality and, frequently, product size. These conditions make it very difficult for peasant farmers to participate in selling fresh produce to these major markets. The standards for fresh produce becomes an issue of less importance in the case of exports of processed products. The export market for processed domestic food products has been exploited to only a limited degree. Special emphasis should be placed in any growth strategy on expanding the sale of processed domestic produce. Since this would reduce the importance of standardization it would be possible to incorporate the less sophisticated rural farmers in export activity and provide a relatively stable market for their output. There would also be more general benefits in that food processing would create additional employment, raise the level of domestic value added and potentially increase foreign exchange earnings.

Any attempt to formulate a rural growth strategy cannot ignore the role of sugar. The sugar industry has been chronically depressed for almost two decades. Production of 175.3 thousand tons in 1987 was less than 50 percent of the level of production 356.3 thousand tons in 1976 (Bank of Jamaica, Statistical Digest, monthly). The industry is faced with a stagnant market, in part attributable to the widespread use of artificial sweeteners. The question can be raised as to whether there is any real future for the industry, where, apart from the depressed market, prices under the guaranteed marketing arrangements have not been sufficiently high to cover costs of production. A resort to radical measures such as a major reduction in the overall size of the sector, or working to improve efficiency and lower costs through mechanization, usually brings to the fore the issue of the large numbers of workers likely to be displaced by such actions. An approach which might potentially revive the industry without being associated with large numbers of workers being displaced could be achieved through a major diversification programme designed to make more effective use of the industry's by products (see Worrell, 1987, p. 120).

The promotion of manufacturing industry has in the past and will certainly continue in the future to be an important part of any strategy designed to promote economic growth. The structure of the manufacturing sector has been criticized on the grounds of the very limited contribution it has made to employment and income. This has been attributed to the fact that reliance has been placed on the use of relatively capital intensive foreign technology. In addition, the dependence on foreign direct investment has resulted in a high rate of usage of imported capital goods and raw materials in production. Consequently, the level of domestic value added in manufacturing has been very low. Ideally, a new strategy for the manufacturing sector should be directed towards addressing these deficiencies. However, this would require the development of new technologies and new products, which can be seen in the context of a long run policy objective, but could not realistically be seen as a realizable goal in the short run.

In recent years the country has achieved some success in attracting producers of garments from overseas to establish plants in the freezone. In addition, several US based garment manufacturers have established plants in the country to take advantage of the provisions under Item 807 of the US tariff schedule. The attractiveness of Jamaica to foreign garment producers is related to the country's low wage rates, as well as it proximity to the United States. The changes in the competitive environment in which firms in major industrial countries have found themselves since the seventies has led them to seek out locations in developing countries where labour costs are lower to which they could transfer their most labour intensive activities. The substantial devaluation of the Jamaican dollar since 1984 has enhanced the attractiveness of the country to those firms, particularly US firms, seeking a location where they can minimize their labour costs.

Several thousand jobs have been created in these plants. In light of the structures of their operations, the contribution which these plants make to national income is essentially determined by the size of the wage bill. However, given the very high national rates of unemployment, the rate in 1987 was estimated to be around 21 percent, any activity which has a high job creating potential clearly embodies a substantial social benefit. Moreover, most of the jobs created were for female workers and the rate of unemployment among females has historically been significantly higher than for males (see Boyd 1988, p. 12).

This experience indicates that it is possible to pursue a strategy in manufacturing where the emphasis will be on maximizing employment in the short run. The attraction of so called 807 factories, as well as additional firms to the freezone should continue to be pursued aggressively, given the positive contributions these activities can make to employment.

Although a continued reduction in the rate of unemployment has to be a major objective of a growth strategy, it is inconceivable that growth in low paying jobs could be a desirable long term objective. Moreover, in the Jamaican environment with its free trade unions, wage rates will not remain repressed. The attraction of Jamaica as a site for offshore production will fall as labour costs rise. Consequently, an effort must be made to take the steps necessary to develop a more broadly based manufacturing sector which can incorporate in its operations a substantial input of domestic resources. These issues were highlighted more than twenty years ago and hence at this stage it is worthwhile to consider whether the solution recommended at that time might still yet be valid. The proposed solution rested very heavily on adopting a regional approach to industrialization. It was expected that through regional sectoral planning it would be possible to create a manufacturing sector which was significantly less dependent on foreign inputs.

The practical difficulties in the way of formulating a regional industrialization strategy are as great or greater in the eighties than they were in the sixties. That regional approach incorporating as it did a high measure of government regulatory activity is not consistent with the free market ethic currently on the ascendancy in the region. Moreover, of even greater importance is the fact that the depressed state of many countries in the region has led governments to seek out extra regional sources for a solution to their economic problems, thus weakening the sentiment for regional collaboration. Nevertheless, governments must be made to realize that regional collaboration is an important complement to the outward looking strategies to which they all subscribe.

The economic decline of the seventies was associated with the growth of what has become to be known as the informal sector. This sector incorporates a large number of self employed persons, most of whom are engaged in retailing imported consumer goods. Given the large numbers involved in what, despite the name, has become an institutionalized form of economic activity, it is reasonable to question what are the implications of the existence of this large sector for the growth process.

The sales of imported consumer goods by participants in this sector is financed in part by the sale of domestic produce in non-traditional markets, such as Panama. Nevertheless, as long as an avenue is open which permits consumption of a wide range of non-essential imported consumer goods, there will be negative consequences for the potential expansion in production of domestic substitutes. However, the government clearly cannot act to constrain activities in the sector, in a situation where there are no alternative sources of employment and income. At the same time the unbridled growth of the sector will make it more difficult to channel additional foreign exchange earnings towards supporting investment rather than consumption. A major challenge, which will have to be met if an effective growth strategy is to be implemented, might very well involve working out how to channel the energies of those engaged in the informal sector towards a greater support of production rather than purely consumption.

TABLE 1

Estimates of GDP and GFCF
J $ M

Year	GDP	GFCF
1987	15,060.8	3313.4
1988	17,018.7	3744.1
1989	19,231.1	4230.8
1990	21,731.1	4780.8
1991	24,556.2	5402.4
1992	27,748.5	6104.7
1993	31,355.8	6898.3
1994	35,432.0	7795.0
1995	40,038.2	8808.4
1996	45,243.1	9953.5

TABLE 2

Estimates of GDP and Import Outlays
US $ M

Year	GDP	GFCF
1987	2737.5	1231.9
1988	3093.4	1392.0
1989	3495.6	1573.0
1990	3950.0	1777.5
1991	4463.5	2008.6
1992	5043.7	2269.7
1993	5699.4	2564.7
1994	6440.3	2898.1
1995	7277.6	3274.9
1996	8223.7	3700.7

TABLE 3

Imports By Economic Function
US $ M

Year	Consumer Goods	Food	Raw Materials	Fuels	Capital Goods	Total
1974	234.1	131.2	470.9	195.1	230.6	935.9
1975	233.9	129.9	543.7	215.1	346.0	1123.2
1976	164.5	88.0	514.4	203.5	233.9	912.8
1977	96.4	53.6	496.2	225.6	154.2	746.8
1978	129.9	76.1	537.0	193.9	197.8	864.7
1979	121.0	65.7	668.5	331.2	213.3	1002.8
1980	131.9	72.7	841.1	446.5	198.3	1171.3
1981	190.1	101.9	987.3	488.8	295.2	1472.6
1982	230.9	119.4	824.5	406.8	325.7	1381.1
1983	206.9	110.4	780.0	397.3	294.2	1281.1
1984	163.7	98.9	732.3	349.0	287.3	1183.3
1985	158.2	82.1	702.9	367.8	282.5	1143.6
1986	200.9	97.2	529.5	198.5	245.9	976.3
1987	233.1	93.4	633.8	217.6	349.2	1216.1

Source: Bank of Jamaica, Report and Statement of Accounts, Annual, Monthly Statistical Digest

TABLE 4

Estimates of GFCF and Imports of Capital Goods
US $ Mn

Year	GFCF	Imports Capital Goods
1987	602.3	301.2
1988	680.5	340.3
1989	769.0	384.5
1990	869.0	434.5
1991	982.0	491.0
1992	1109.6	554.8
1993	1253.9	627.0
1994	1416.9	708.5
1995	1809.2	904.6

TABLE 5

Estimates of GDP in Manufacturing and Imports of Raw Materials

US $ Mn

Year	GDP Manufacturing	Imports Raw Materials
1987	492.8	369.6
1988	556.8	417.6
1989	629.2	471.9
1990	711.0	533.3
1991	803.4	602.6
1992	907.9	680.9
1993	1025.9	769.4
1994	1159.3	869.5
1995	1310.0	982.5
1996	1480.3	1110.2

TABLE 6

Foreign Exchange Cash Flow
US $ M

Year	Bauxite/Alumina	Other Exports	Tourism	Other	Total
1980	367.8	164.8	160.1	107.2	799.9
1981	333.2	121.8	168.3	136.0	759.3
1982	284.4	141.9	183.9	144.1	754.3
1983	216.6	113.9	120.8	73.9	525.2
1984	179.2	78.1	175.0	288.0	720.3
1985	86.0	154.0	315.9	272.1	828.0
1986	98.5	190.2	422.9	269.6	981.2
1987*	230.9	258.1	527.1	258.2	1274.3

*Preliminary

Source: Foreign Exchange Budget Reported in Bank of Jamaica Report and Statement of Accounts Annual.

TABLE 7

External Public Debt and Debt Service Obligations

US $ M

Year	External Public Debt.	Debt Service Actual	Debt Service Accrued	Cash Flow From Export Goods and Services	Debt Service Ratio:Actual	Debt Service Ratio Accrued
1980	1,866.8	263.3		799.9	29.2	
1981	2,293.1	437.8		759.3	57.7	
1982	2,739.9	408.4		750.7	54.7	
1983	3,266.9	371.4		525.2	70.7	
1984	3,261.6	394.8		720.3	54.8	
1985	3,587.0	448.4	729.0	828.0	54.2	88.0
1986	3,575.8	598.2	862.5	981.2	61.0	87.9
1987*	4,013.4	725.6	1036.9	1274.3	56.9	81.4

*Provisional

Source: Bank of Jamaica: Statistical Digest Monthly Report and Statement of Accounts Annual.

TABLE 8

Estimates of Cash Receipts from Exports of Goods and Services and Import Outlay by Economic Function

US $ Mn

Year	1 Total Imports	2 Capital Goods	3 Raw Materials	4 Export Goods and Services	Percent Shares 1 ÷ 4	2 ÷ 4	3 ÷ 4
1987	1231.9	301.2	369.6	1177.4	104.6	25.6	31.4
1988	1392.0	340.3	417.6	1412.9	98.5	24.1	29.6
1989	1573.0	384.5	471.9	1695.5	92.8	22.7	27.8
1990	1777.5	434.5	533.3	2034.6	87.4	21.4	26.2
1991	2008.6	491.0	602.6	2441.5	82.2	20.1	24.7
1992	2269.7	554.8	680.9	2929.8	77.5	18.9	23.2
1993	2564.7	627.0	769.4	3515.8	72.9	17.8	21.9
1994	2898.1	708.5	869.5	4219.0	68.7	16.8	20.6
1995	3274.9	800.6	982.5	5062.8	64.7	15.8	19.4
1996	3700.7	904.6	1110.2	6075.3	60.9	14.9	18.3

END NOTES

1. The equation was the following:

$$\dot{GDP} = -4.99 + 1.99 \left(\frac{GFCF}{GDP}\right)$$

This is consistent with the estimates reported in Khan and Knight (1985), Table 4, p. 15.

2. The US dollar GDP estimates were based on extrapolating the GDP estimates for 1986 in US dollars at an annual growth rate of 13 percent. The estimate for 1986 was determined by the value of imports, usually reported in US dollars and the share of imports in GDP.

3. This sharp decline might be explained by the diversion of funds to the so called 'parallel market' for foreign exchange.

REFERENCES

Bank of Jamaica, Report and Statement of Accounts Annual.

Bank of Jamaica, Statistical Digest Monthly.

Boyd, D.A.C., Economic Management, Income Distribution and Poverty in Jamaica, Praeger Publishers, New York, 1988.

International Monetary Fund, International Financial Statistics Supplement on Economic Indicators, Supplement no. 10, 1985.

International Monetary Fund, Theoretical Aspects of the Design of Fund Supported Adjustment Programs, Occasional Paper 55.

Jefferson, O., The Post War Economic Development of Jamaica, Institute of Social and Economic Research, Mona, Jamaica, 1972.

Khan, M.S. and M.D. Knight, Fund Supported Adjustment Programs and Economic Growth, Occasional Paper 41, Internatinal Monetary Fund, Washington, D.C. 1985.

Worrell, D., Small Island Economies, Praeger, New York, 1987.