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## CHAPTER 18

### Capital flight, and its implications for Caribbean development

*Karl Bennett*

A major problem facing CARICOM countries is that of mobilising adequate finance to help restore their economies to a positive growth path for the remaining years of this century. In this study, special attention will be directed towards an identification of the kinds of policy initiatives necessary to ensure that the financing problems with which these countries will have to cope will not be compounded by capital flight.

The first section of the study will be devoted to an assessment of the magnitude of capital flight from Barbados, Guyana, Jamaica and Trinidad and Tobago, from 1976 to 1986. During this period each of these countries has experienced economic difficulties. The Barbadian economy, after experiencing an annual average growth rate of GDP in excess of 4% between 1976 and 1980, went into decline in 1981 and 1982 and the slow subsequent recovery has resulted in real GDP at the end of 1986 being approximately the same as at the end of 1980. The Guyanese economy declined throughout the period. The Jamaican economy experienced negative growth rates up to 1980 and since that time a modest recovery was followed by a decline associated with the slump in the bauxite/alumina industry. Consequently, real GDP in 1986 was at approximately the same level as in 1981. The economy of Trinidad and Tobago, after undergoing a petroleum driven boom up to 1981, has experienced negative growth with the severe weakening of the international petroleum market after 1982.

In assessing the magnitude of capital flight from these countries, an attempt will be made to estimate not only the value of outflows of financial assets but, in addition, the value of human capital outflows. With respect to the latter, a specific effort will be made to arrive at an estimate of the cost to the countries arising from the emigration of highly trained personnel. Emigration of this type of personnel has important implications for countries in the region, in that it is widely acknowledged that one of the major impediments to growth is the scarcity of highly skilled individuals. This will be followed by an effort to identify the major causes of capital flight. This will provide important insights into what might be appropriate measures for limiting such outflows in the future, as well as potentially reversing

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Using the various ways in which the savings of Caribbean expatriates could be tapped to support economic growth in the region.

## Estimating financial outflows

Economic principles do not provide a guide to a unique or natural definition of capital flight (Cumby and Levich, 1987, p. 4). As a consequence, there is an unavoidable element of arbitrariness involved in the estimating procedures which have been adopted in the past. One of the broadest concepts of capital flight has been that used by the World Bank in its studies. Their estimation procedure is based on the residual method and does not distinguish between so-called normal and abnormal capital outflows. The World Bank estimates capital flight from a country by subtracting from capital inflows in the form of increases in external debt and net foreign direct investment, the deficit on current account and increases in official reserves. Another version of the residual approach has been used by Morgan Guaranty. In addition to the current account deficit and increases in official reserves, the increase in short-term assets of the banking system is also subtracted from total capital inflows (Cumby and Levich, 1987, p. 10). The Morgan approach is frequently criticised on the basis that there is no obvious justification for treating the acquisition of short-term assets by non-bank agents as capital flight while not including similar acquisitions by the banking system.

In this study two estimates of capital flight will be reported for each of the countries. The first estimate will be based on the World Bank procedure subject to the following amendments when estimates are reported for Guyana and Jamaica. In both countries during the period covered there were years in which there were substantial payments arrears, as well as special financing received in support of the balance of payments. Consequently, these types of transactions, which are recorded in the *Balance of Payments Yearbook* as exceptional financing, will be treated as an additional financing source to external borrowing and net direct investment. Hence capital flight was estimated for Barbados and Trinidad and Tobago as:

$$K_F = X_D + C_B + DFI + R \quad (1)$$

and for Guyana and Jamaica:

$$K_F = X_D + EF + CB + DFI + R \quad (2)$$

where,

$X_D$  = the change in external debt.

$CB$  = the balance on current account.

$DFI$  = net direct foreign investment.

$R$  = the change in official reserves.

$EF$  = exceptional balance of payments financing.

recorded or illegal capital outflows. In so doing, the broader concept of net private capital transactions was substituted for net direct foreign investment. Hence all recorded capital movements supplying or using foreign exchange would be exempted from capital flight. Accordingly, for Barbados and Trinidad and Tobago, estimates of unrecorded or illegal capital outflows would be:

$$K_1F = X_D \pm C_B \pm NP_C \pm R \quad (3)$$

and for Guyana and Jamaica:

$$K_1F = X_D + EF + CB + NP_C + R \quad (4)$$

where,

$K_1F$  = illegal or unrecorded outflows.

$NP_C$  = net private capital movements.

The use of this technique is likely to provide a significant upward bias to the estimates of capital flight for Guyana. As indicated earlier, there was a major decline in the economy of the country in the period covered by the study. This period of decline was associated with a major expansion of the informal sector. Many of the participants in the informal sector were involved in the retailing of consumer goods, including imported consumer goods.

One would normally expect that a period of economic decline would be associated with a reduction in imports of all goods, including consumer goods. However, the reported decline in imports for Guyana in this period would lead one to believe that the activities of the informal sector were not fully reflected in the official statistics. The total volume of imports in 1984 was only 43% of that in 1976.<sup>1</sup> Furthermore the amount reported as being spent on imported consumer goods in 1984 was one-third of that for 1976.<sup>2</sup>

Since it is widely acknowledged that the informal sector in Guyana is of major significance, it would seem reasonable to conclude that the current account deficits reported in official publications which were used in our estimates were too low. Consequently, a part of what was estimated as capital flight was likely used to finance imports distributed through the informal sector. Given the size of informal sector activity, it is likely that actual spending on imported consumer products during the 1980s might have been as much as 50% more than the amounts reported in official statistics. To place such an adjustment in context, this would still leave such spending below that of 1976. In light of these considerations concerning spending on imported consumer goods, the actual amounts spent on all imports might have been 5% more than that reported. Consequently, the capital flight estimates reported in Table 18.1 might be subject to a margin of error of approximately 15%.

Estimates of capital outflows for the four countries using the estimating techniques described above are presented in Table 18.1. In the case of

Barbados, capital outflows using the World Bank method would appear to be insignificant for the entire 1976-86 period. In fact, the alternative method revealed a small net inflow. However, when one considers the sub-period 1981-6, a period (as reported earlier) of relative economic stagnation in the country, the outflow as estimated by the World Bank method amounted to US\$151.6 million. The alternative measure geared towards estimating illegal movements was much less, amounting to US\$68.7 million. Over this same period, the external debt of the country rose by US\$394 million. During the 1976-80 period, when the country experienced high annual growth rates, there were annual net inflows of capital and very little growth in external debt. This is in keeping with what one would expect with a growing economy. The outflows of the later period are also consistent with what one would expect in a depressed economic environment with associated limited attractive investment opportunities.

In the case of Guyana, capital outflows over the period were clearly significant. However, as was the case with Barbados, most of the outflows occurred during the 1980s. By 1981 the country found itself in a position where it was no longer able to negotiate any further external loans of significance. Between 1982 and 1985 net additional external borrowing amounted to only US\$31 million. However, because of the country's inability to meet interest and amortisation payments, there was a rapid build-up of arrears. As a result, the public debt, inclusive of arrears, increased by approximately US\$915.2 million between 1981 and 1986. As the economic situation worsened during the 1980s there was an increase in capital outflows.

There were very large capital outflows from Jamaica during the period. Estimated outflows using the World Bank technique amounted to US\$1,611.9 million. The alternative technique geared towards estimating illegal outflows yielded an estimate of US\$1,323.8 million. At the same time, there was an increase of US\$2,788.6 million in public and publicly-guaranteed external debt. This suggests that around one-half of the funds borrowed was lost through capital outflows. The periods of massive outflows occurred during the second term of the Manley government, between 1977 and 1980, and during the first term of the Seaga government, between 1981 and 1983. The outflows were generally higher in the latter period. The differences were most noticeable in the estimating procedure geared towards determining illegal outflows. Outflows which were estimated at US\$893 million between 1981 and 1983 were more than twice that, estimated at US\$429 million, between 1977 and 1980. The period from 1981 to 1983 also witnessed a dramatic increase in external public indebtedness of US\$1,400 million.

The post-1983 period was associated with radical changes in the administration of exchange rate and monetary policies. An auction system

Table 18.1. Estimates of capital outflows (Barbados, Guyana, Jamaica, Trinidad and Tobago), 1976-86 (US\$ million)

Country	1976-86	1976-80	1981-6	1977-80	1981-3
Barbados					
$K_F$	18.2	-133.4	151.6		
$K_F^1$	-26.4	-95.1	68.7		
Guyana					
$K_F$	622.8	104.3	518.5		
$K_F^1$	769.9	124.2	645.7		
Jamaica					
$K_F$	1611.9	924.3	687.6	833.1	952.2
$K_F^1$	1323.8	486.7	837.1	429.2	892.9
Trinidad/Tobago					
$K_F$	947.3	83.8	863.5		
$K_F^1$	1255.5	359.4	896.1		

(-) Capital inflows.

$K_F$  World Bank method.

$K_F^1$  Alternative method.

Sources: Calculated from data in Central Bank of Barbados, *Annual Statistical Digest*; IMF, *Balance of Payments Yearbook*; IDB, *Economic & Social Progress in Latin America*.

was adopted for exchange rate determination, which signalled a desire on the part of the government to place more reliance on market forces in setting rates. This led to a substantial depreciation in the exchange rate. At the same time, the introduction of highly restrictive monetary measures led to dramatic increases in interest rates. There was no net public external borrowing in 1984 and the amounts borrowed in 1985 and 1986 were far below the US\$400-\$500 million of the earlier period. The capital outflows of the earlier period were reversed dramatically in 1984. Estimated inflows based on the World Bank method amounted to US\$453 million and by the alternative method US\$346 million. The capital inflows, against a background of a major depreciation in the exchange rate combined with a steep rise in interest rates, would appear to be consistent with one of the standard explanations of capital flows. It is often argued that a major cause of capital flight is that the rate of return on domestic financial assets is kept artificially low because of policies which keep interest rates depressed and an ex-

the basis of the World Bank estimating method, there were also inflows in 1985, the return to major outflows in 1986, against a background of a deceleration in the rate of inflation, suggests that it might be premature to draw any conclusions concerning the linkage between rate of return on assets and capital movements, in this context.

Trinidad and Tobago also experienced substantial capital outflows between 1976 and 1986. Most of the outflows occurred in the post-1982 period, in particular 1984 and 1985. This period, as indicated earlier, was coincidental with the decline in the country's economy arising from the depression in the international petroleum market. There was also a substantial increase in the level of external public indebtedness, between 1981 and 1986, of US\$1,091.5 million. Estimates of capital outflows for the same period suggest they amounted to approximately 79% of the increase in debt.

The alternative estimating technique which is geared towards illegal outflows results in the estimated outflows for the period rising by more than US\$300 million to US\$1,255.5 million. Although, as mentioned above, the heaviest outflows were in the 1980s, there were, as shown in the table, substantial outflows between 1976 and 1980. These large outflows occurred at a time of rapid expansion in the economy. Consequently, unlike the situation in Guyana and Jamaica where capital outflows were linked to the poor performance of the economy, in this instance capital outflows might be attributed to limited domestic absorptive capacity.

In summary, it would appear that, with the exception of Barbados, there were significant outflows of capital from the countries under consideration. There were also a number of factors which seemed common to all countries. The heaviest outflows occurred in the post-1980 period. The periods associated with the heaviest outflows were also the ones in which there occurred the largest increases in external debt. In all instances, the growth in external debt was associated with a downturn in the economies of the respective countries.

### *Human capital outflows*

There is widespread agreement that a scarcity of human resources is a major impediment to economic growth in the region. This scarcity is particularly acute in the professional and managerial categories, as well as among skilled workers. In this section, attention is directed to the level of emigration of individuals from the four countries falling within those occupational categories, and the potential cost to the economies of those countries arising from this emigration. The cost estimates will be based on the implicit assumption that these people would have been fully employed had they not emigrated.

From these two groups for the 1976-86 period and for two sub-periods, Jamaica had by far the largest number of emigrants. Guyana ranked a distant second, but when it is considered that the population of Guyana is approximately one-third that of Jamaica, the relative levels of emigration were quite similar. A proper assessment of the significance of the numbers presented in the table, would require some knowledge as to the total number of individuals turned out by both domestic and foreign educational institutions, who would fall within those occupational groups. Such comprehensive information is, unfortunately, not available. There is, however, some less complete information which can provide some useful insights. A study conducted on Jamaican emigration to North America during the 1970s concluded that between 1977 and 1980 the number of emigrants falling in the occupational category of managerial, professional and technical, amounted to 38% of the output of institutions in the country producing such individuals.<sup>3</sup> The annual average rate of emigration of technical, professional and managerial personnel between 1976 and 1986 was slightly in excess of 2,000. Such persons would all be graduates of tertiary institutions. The UNESCO *Statistical Yearbook* provides periodic data on the number of graduates from tertiary institutions. In 1980, the total number of graduates was 4,266 and in 1986, 3,537. If one were to assume the number of graduates averaged 4,000 per year over the 1976-86 period, then the findings for the 1977-80 sub-period might be deemed to be representative of the entire period, with at least one-half of the individuals produced locally with these skills lost to emigration.

In the case of Guyana, emigration of managerial, professional and technical personnel was at an annual average rate of approximately 700 between 1976 and 1980 and 800 between 1981 and 1986. In four of the five years from 1981 to 1985, the total number of graduates from tertiary institutions ranged from a low of 511 to a high of 791, averaging 667. In 1978, 965 individuals graduated from tertiary institutions.<sup>4</sup> It would then appear that output from these institutions during the period was completely offset by emigration.

Over an eight-year period, 1975-6 to 1982-3, 2,804 Trinidadians, an average of 350 per year, graduated from the St Augustine campus of the University of the West Indies.<sup>5</sup> It is recognised that not all emigrants in the technical, professional and management category, would be university graduates. Furthermore, the St Augustine campus is clearly not the sole source of graduates for the country. However, it is noteworthy that between 1976 and 1986 emigration of managerial, professional and technical personnel averaged 471 per year.

There were, on an annual average basis, approximately 200 Barbadian emigrants who fell in the managerial professional, technical category, during the period. Unlike the other countries, emigration relative to the total

Table 18.2 Emigration to North America in the occupational categories managerial, professional and technical and skilled workers (Barbados, Guyana, Jamaica, Trinidad and Tobago), 1976-86.

Country/occupational group	Total 1976-86	Average annual	Total 1976-80	Average annual	Total 1981-6	Average annual
<b>Barbados</b>						
Managerial, professional technical	2,321	211	1,287	257	1,034	172
Skilled workers	1,957	178	1,075	215	882	147
<b>Guyana</b>						
Managerial, professional technical	8,471	770	3,554	711	4,917	820
Skilled workers	5,950	541	2,195	439	3,755	626
<b>Jamaica</b>						
Managerial, professional technical	22,512	2,047	10,592	2,118	11,920	1,987
Skilled workers	16,070	1,461	5,478	1,096	10,592	1,765
<b>Trinidad and Tobago</b>						
Managerial, professional technical	5,181	471	2,906	581	2,275	379
Skilled workers	3,614	329	2,178	436	1,436	239

Sources: Employment and Immigration Canada, *Immigration Statistics*, Annual.

Jamaica National Planning Agency, *Emigration to North America from Jamaica 1910-1980*.

US Department of Justice, Immigration and Naturalisation Service, *Statistical Yearbook*, Annual.

number of graduates from tertiary institutions, does not appear to be particularly large. For example, in 1983 and 1984 there were 1,486 and 1,764 graduates respectively from tertiary institutions.<sup>6</sup> Emigration would appear to have had a relatively small impact on the supply of individuals with such skills.

Turning to the second category, skilled workers, Jamaica, once again, had the largest number of emigrants, averaging just under 1,500 per year. It was estimated that emigration offset 54% of the output of training institutions producing both skilled and semi-skilled workers between 1977 and 1980.<sup>7</sup> Emigration levels averaging in excess of 500 per year for Guyana and 300 per year for Trinidad would seem quite significant given the generally acknowledged scarcity of skilled workers.

The emigration data suggests that in quantitative terms the losses to three of the four countries in these two broad occupational categories was significant. We will now turn to a consideration of the economic costs associated with the reported levels of emigration.

The overall costs to the economies of the respective countries would comprise a direct replacement cost associated with training individuals to replace those lost to emigration. In addition, there would be an opportunity cost representing the contribution to national income which would have been made by the emigrants. In estimating the direct replacement costs for individuals in the managerial, professional and technical category, it was assumed that all these emigrants were graduates of tertiary institutions. Consequently, replacing the emigrants would involve absorbing additional graduates from the secondary level into tertiary institutions. It was also assumed that skilled workers are graduates of secondary level institutions and hence their replacement would involve absorbing a larger number of primary level graduates into these institutions.

The costs to the respective countries for replacing the emigrants are set out in Table 18.3. The cost estimates were derived in the following way. In the first column, the direct costs for Barbados, Guyana and Trinidad and Tobago were derived from estimates reported in the UNESCO *Statistical Yearbook* on current expenditures at the secondary and tertiary educational levels during 1982. It was assumed that, on average, students would take five years to complete the secondary level and three years for the tertiary level. Per capita spending estimates during 1982 were then multiplied by the respective number of years to estimate the incremental direct costs associated with training a student to the two levels indicated. These per capita costs were then multiplied by the number of emigrants to determine total direct costs. The Jamaican cost estimates were derived from a National Planning Agency study, which provided estimates on costs associated with different levels of training during the 1981-2 period.<sup>8</sup> In the Jamaican case the costs include capital expenditures.

(Barbados, Guyana, Jamaica, Trinidad and Tobago), 1976-86 (US\$000's)

Country/ Occupational group	Direct replacement costs	Opportunity costs	Total costs
<i>Barbados</i>			
Managerial, professional technical	14,266	5,777	20,043
Skilled workers	6,240	6,866	13,106
<i>Total</i>	20,506	12,643	33,149
<i>Guyana</i>			
Managerial, professional technical	61,838	25,040	86,878
Skilled workers	3,738	4,113	7,851
<i>Total</i>	65,576	29,153	94,729
<i>Jamaica</i>			
Managerial, professional technical	327,528	132,625	460,153
Skilled workers	81,248	89,401	170,649
<i>Total</i>	408,776	222,026	630,802
<i>Trinidad and Tobago</i>			
Managerial, professional technical	88,326	35,766	124,092
Skilled workers	25,479	28,036	53,515
<i>Total</i>	113,805	63,802	177,607

Sources: Calculated from data in UNESCO *Statistical Yearbook*, Jamaica, National Planning Agency Study, 1982.

The opportunity cost estimates were derived in the following way. These costs, as indicated earlier, are a reflection of income foregone during the period when individuals are being trained to replace the emigrants. The social rate of return was deemed to be the appropriate measure of the contribution to national output by individuals. The marginal social rates of return to education at the tertiary and secondary level were used for the two occupational groups. The actual rates used were 12% for the tertiary level and 16% for secondary level education. These were reflective of average

(1985). The estimates for the managerial, professional and technical group were then derived by applying the 12% social rate of return to the direct cost outlay for three years. The estimates for skilled workers were arrived at by applying the 16% social rate of return to the direct cost outlay for five years. This approach to estimating the costs to the economy from emigration is based on the assumption that there would be full employment within these occupational groups in each country.

The full employment assumption might be challenged on the grounds that the period of economic decline which started for Guyana and Jamaica during the late 1970s, and which was experienced by all countries during the 1980s, would likely have resulted in some measure of open unemployment or under-employment of individuals in these occupations. Nevertheless, throughout this period officials in both the public as well as private sectors complained of a shortage of individuals with managerial and technical skills. One must then conclude that unemployment rates among emigrants if they had remained at home would have been considerably below national averages. National average rates of unemployment during this period ranged between 12 - 30%. Barbados and Trinidad and Tobago for most of the period experienced rates at the lower end. In the circumstances, the opportunity cost estimates might be subject to a margin of error of 10% in the case of Guyana and Jamaica and 5% for Barbados and Trinidad and Tobago.

The total cost to the Jamaican economy for replacing these designated emigrants would be US\$630.8 million in terms of 1981-2 costs. Given the earlier estimates of financial outflows, the inclusion of human capital would raise the value of outflows by at least 40%. Alternatively, the estimated cost to the economy would amount to 26% of GDP for 1986. In the case of Guyana, the country which ranked second in terms of total number of emigrants in these categories, the total replacement cost was estimated at US\$95 million. This represents approximately 15% of our estimates of capital outflows over the 1976-86 period and 43% of the value of GDP in 1986. The cost to the economy of Trinidad and Tobago was estimated at US\$178 million over the period. This would increase the estimates of capital outflows from that country by a minimum of 15%. In the case of Barbados where, as reported earlier, the outflows were concentrated in the 1981-6 period, the US\$33 million replacement cost would represent 22% or 48% respectively, of the estimated outflows in that period depending on whether the World Bank or alternative estimation procedure was used.

These estimates, in so far as they consider as part of the cost to the economy only the output foregone while replacements are being trained, are clearly biased in a downward direction. Given the scarcities of individuals

with these high-level skills, it might be argued that this cost element should be based on the remaining productive working life of the emigrant. Furthermore, it is also the case that because of the additional scarcities created in the short run through emigration, additional costs in some instances might have been incurred in the recruitment of foreigners to offset temporary shortages. Such bottlenecks might have been particularly acute in the managerial professional category, given the high rate of emigration relative to output of graduates from tertiary institutions. Nevertheless, our cost estimates were significant for all countries, with the possible exception of Barbados.

### *Causes of capital flight*

It is usually the case that when consideration is given to the causes of capital flight, whether in the form of financial assets or human capital, attention is directed to differentials in rates of return to capital in the home country, as opposed to foreign centres. In the case of financial assets, the following factors are usually put forward to explain differentials in rates of return. The existence of financial repression, as reflected in interest rate ceilings on both loans and deposits, could give rise to a situation where the real rate of return on financial assets could be zero or negative, particularly in countries experiencing high rates of inflation. Another causal factor could be exchange rate overvaluation. This usually occurs when a country operates a fixed or managed exchange rate regime and fails to make adjustments in the rate to reflect changes in the international competitive position of the country. This could arise, for example, from differences in inflation rates between the country and its major trading partners. Further evidence of an inappropriate level for the exchange rate is claimed to be found, where in the face of a severe shortage of foreign exchange, rigid controls are employed to guide allocation of foreign exchange.

Another factor which has a significant bearing on capital flight is the risk of loss of asset value. This risk is related to such things as unanticipated inflation and currency devaluation, the imposition of limits on the convertibility of domestic assets, confiscatory taxation, as well as the possibility of outright confiscation of assets (Williamson and Lessard, 1987). Capital flight will then occur when the risk-adjusted rate of return on assets is not sufficient to encourage residents of the country to hold domestic financial assets.

A number of empirical studies have been conducted to determine whether the factors cited above were indeed major contributors to capital flight. Cuddington, for example, investigated the cause of capital flight for a number of countries, four of which, Argentina, Mexico, Uruguay and

Venezuela, had experienced large outflows (Cuddington, 1986). The model he used was a portfolio adjustment model in which an investor's decisions are based on relative rates of return and perceived risk. He then proceeded to try to establish the extent to which capital flight could be explained by domestic interest rates, the domestic inflation rate and the foreign interest rate augmented by the expected rate of depreciation of the domestic currency (Cuddington, 1986, Chapter 4).

He found that for each of the four countries the extent of currency overvaluation was a highly significant determinant of capital flight. However, he also argued that in the cases of Argentina and Uruguay, although in the late 1970s and early 1980s domestic interest rates exceeded foreign interest rates by margins much higher than the expected depreciation of domestic currencies, uncertainty with respect to the government's ability to manage the domestic financial system triggered massive capital flight. Cuddington's findings were in keeping with those of other studies which concluded that by and large, capital flight was a consequence of macro-economic mismanagement by the governments of the various countries (Williamson and Lessard, 1987, p. 25).

As for the factors which might have contributed to capital flight from four Caribbean countries, a recent empirical study (Bennett, 1988) attempted to determine whether differentials in rates of return on domestic and foreign assets were a major determinant of capital flight. The approach adopted in the study was somewhat indirect for the following reasons. In the Caribbean, the principal financial assets are bank balances. The capital flight issue was then approached by considering what were the major determinants of the demand for money balances. Quarterly money demand functions, using both  $M_1$  and  $M_2$  as dependent variables were estimated for each of the four countries. The independent variables used were real exports as a proxy for national income, the 90-day US treasury bill rate and the 90-day treasury bill rate for each of the countries, and as a proxy for expected depreciation of the exchange rate, changes in the domestic rate of inflation. Inflation lowers the value of domestic financial assets and consequently should encourage capital flight. Furthermore, in view of the fact that most domestic products of those countries are substitutes for foreign products, an increase in the rate of inflation would encourage residents to make a greater effort to secure foreign exchange to support their general spending.

The equations were estimated for Barbados and Jamaica covering a period from the second quarter of 1977 through the fourth quarter of 1985, and for Guyana and Trinidad and Tobago from the second quarter of 1977 through the third and fourth quarters, respectively, of 1984.

Changes in the domestic rate of inflation were found in all instances to be a highly significant determinant of the demand for real money balances. Neither the income proxy nor the rate of return variables were found to have



motivated by a desire to secure or to defend asset values rather than by a desire to earn a higher rate of return. This is in keeping with some of the earlier findings referred to above where it was government mismanagement of the economy, or a public perception of government inability to manage the economy, which contributed to capital flight.

This matter of lack of confidence in the ability of government to manage the economy also appeared to have played a role in the flight of human capital from the region. This certainly appears to have been the case for the two countries with the highest emigration levels, Guyana and Jamaica. In the case of Guyana, economic conditions became increasingly worse during the period. The average annual rates of emigration for the two categories of emigrants reported in Table 18.2, were higher during the 1981-6 period than between 1976 and 1980. In the case of Jamaica, the highest emigration levels among the managerial, professional and technical group took place between 1976 and 1980. This was a period characterised by a severe decline in the performance of the economy which was attributed directly to government mismanagement. There was also an escalation in crime and political violence which the government seemed unable to control. The outflow of skilled workers was at its highest level after 1982. The inability of the government to cope with the problems created for the economy arising from the collapse of the bauxite/alumina industry between 1982 and 1985 did nothing to enhance public confidence in the government.

### *Policy implications*

It was suggested that changes in the domestic rate of inflation appeared to have been an important contributor to capital flight from the Caribbean. Increases in the domestic rate of inflation, in the context of a fixed exchange rate regime, contribute to currency overvaluation. The more the currency becomes overvalued the greater would be the expectation of a devaluation. Governments, in order to avoid currency overvaluation, should then not hesitate to adjust exchange rates.

The three countries most seriously affected by capital flight all devalued their currencies during the period covered by the study. The Guyana exchange rate, which stood at G\$2.55 = US\$1 at the end of 1980, had fallen to G\$10 = US\$1 by 1987. These devaluations had no discernible impact on the outflow of capital from the country. The Guyanese situation suggests that an attempt to correct a deficiency in the application of a policy instrument will be unsuccessful where there is a basic lack of confidence on the part of the public in the government's ability to manage the economy.

tion raising the rate from J\$2.40 = US\$1 to J\$3.60 = US\$1 was the first adjustment in the exchange rate in a decade. In view of the fact that over the same period consumer prices, as reflected in changes in the consumer price index, had more than tripled, the public might still have considered the currency to be overvalued after the devaluation. There was no significant improvement in the external payments position of the country, and there was a further devaluation in 1988 leaving the rate at TT\$4.24 = US\$1.

The Jamaican dollar was devalued on four occasions between April 1977 and May 1978. Then, as part of an IMF stabilisation package, there was a series of monthly devaluations from June 1978 to May 1979 of 1.5% for the first four months and 1% subsequently. These devaluations did little to halt the large outflows of capital from the country during the 1977-80 period. The situation in Jamaica at that time, like that of Guyana for the entire period, could be attributed to a lack of confidence in government ability to manage the economy. In November 1983, there was a further 77% devaluation of the currency. At the same time, it was decided to introduce an auction system for setting the level of the exchange rate in the future. The currency depreciated rapidly in the two-year period following the introduction of the auction, falling from J\$3.15 = US\$1 in November 1983 to J\$6.40 = US\$1 in October 1985. The substantial devaluation combined with the application of highly restrictive monetary measures was associated with very large inflows of capital during 1984. This lends some support to the notion that eliminating currency overvaluation can work to curtail capital flight.

Since November 1985, the government has succeeded, primarily through the pursuit of strict demand management, in stabilising the exchange rate. Consequently, although the outward trappings of an auction system was retained, the government had in a real sense returned to a managed exchange rate standard. A true auction is unlikely in the Caribbean context to be an appropriate mechanism for avoiding currency overvaluation. The existing imbalances between the demand and supply of foreign exchange would in an unrestrained auction system inevitably lead to an open-ended downward movement in the exchange rate. Given the extreme openness of these economies, such a development would inevitably lead to an increase in the rate of inflation. The avoidance of currency overvaluation would have to be achieved through discrete adjustment in the exchange rate where the impact would be on the price level rather than on the rate of inflation. As argued elsewhere (Bennett, 1985), this could be achieved by means of a crawling peg exchange rate regime.

## Policy initiatives

Before turning to some of the policy initiatives which might be undertaken to reverse capital flight, it seems clear that the following conditions would have to be satisfied in order to make it attractive for residents to repatriate external asset holdings. They would have to be convinced that no major obstacles would be imposed on future conversion of repatriated assets. Furthermore, the rate of return which could be realised from repatriated assets would have to be comparable to that which could have been earned abroad. In other words, residents would have to be satisfied that they could realise their objectives with respect to yield, risk and liquidity.

One initiative which has been tried by the Jamaican government, is to allow residents of the country to maintain foreign currency accounts in the domestic banking system. This scheme was introduced in 1984. Such accounts could be opened with funds transferred from abroad through the banking system. All earnings on these deposits would be credited in foreign currency. There were no restrictions on the disposition of funds held in these accounts. Although these accounts seemed to embody the requisite element of liquidity and would seem to expose the holder to minimum risk, the available evidence suggests that this measure did not contribute to significant inflows of funds from abroad. For example, in 1987, deposits to all types of foreign currency accounts amounted to only US\$35.2 million, with a balance of US\$13.2 million remaining as of 31 December.<sup>9</sup> One must conclude that the small amounts in these accounts relative to our estimates of capital outflows, indicates a lingering concern on the part of residents with respect to the security of holding assets at home.

Raising interest rates to premium levels would create other problems. With high interest rates paid in foreign exchange, loans would have to be channelled to borrowers who were foreign exchange earners. This might mean directing loans to firms engaged in export activity, which, on the surface, would appear to be an ideal way to employ such funds. However, such firms faced with paying what would amount to premium borrowing rates, would find themselves at a distinct disadvantage in competing for export markets.

In all countries, periods when capital flight was at a peak also witnessed substantial growth in external indebtedness. A similar association has also been noted in many of the heavily-indebted Latin American countries. A number of those countries have employed debt/equity swap arrangements as part of a strategy designed to bring about a reversal of capital outflows. The Chilean scheme embodied special provisions for residents of the country. It is claimed to have been successful in bringing about a return flow of US\$1.6 billion over a 19-month period from June 1985 through to

the end of January 1987 (Davies, 1988, p. 155). The Chilean scheme was alleged to suffer from a serious flaw in that it encouraged so-called 'round tripping'. This occurs when residents who purchased debt at a discount use the local currency proceeds to purchase foreign exchange on the black market. These black market purchases are then transferred out of the country. Nevertheless, it was estimated that the amount of capital repatriated amounted to, approximately, 5% of the country's external debt (Williamson and Lessard, 1987, p. 51).

Jamaica introduced a debt/equity swap arrangement in 1987. The Jamaica scheme was aimed at reducing the amount owed to commercial banks, which at the time was US\$400 million, to US\$200 million over a five-year period. Residents of the country were explicitly prevented from participating in the programme, and hence it was clearly not directed at repatriating capital, along with reducing external indebtedness. The programme was aimed at attracting additional investment proceeds into certain designated economic sectors, such as tourism and manufacturing. The programme was monitored in an effort to ensure that funds which would normally be invested in the country would not be subsidised.

There was a very positive response on the part of external investors to the programme. In the first year of its operation, applications in excess of US\$100 million were received and six applications amounting to US\$60.1 million were approved. Actual conversions of US\$2.1 million had been completed.<sup>10</sup> The strong response on the part of foreign investors and the high rate of approvals is worthy of note, given the emphasis on directing investments into specific areas and excluding those investors who would normally have invested in the country. The basic thinking which guided the formulation of the operational principles appeared sound. However, in spite of the monitoring one must retain some serious doubts as to whether such principles could in fact be enforced. Residents of the country were excluded from participation because of fear of 'round tripping'. However, the Chilean experience would suggest that the potential benefits to be derived from the repatriation of funds by opening the scheme to residents outweigh the potential costs which might arise from 'round tripping'.

The question as to whether other Caribbean countries ought to pursue a debt conversion strategy as a means of repatriating capital and mobilising funds for investment will depend on the amount of external debt owed to foreign private sector lenders. In the case of Trinidad and Tobago, a country which has experienced substantial capital outflows and where a major portion of the external debt is owed to the private sector, such a strategy ought to be pursued. The major part of the Guyanese external debt is owed to foreign governments and international institutions. Consequently, debt conversion schemes would likely make a minimal contribution to debt reduction and capital repatriation.

investment in a country will depend on the range of attractive investment opportunities which exist there. Although schemes such as debt/equity swaps could conceivably work to repatriate capital, they do provide a reward to those who might have illegally exported capital in the past. Having been rewarded in this fashion, residents might be encouraged to again resort to illegal capital outflows at the onset of a subsequent crisis. Consequently, it would be a mistake to place too much emphasis on capital repatriation schemes. In the final analysis capital flight will most likely be curtailed and potentially reversed, if governments in the region could succeed in restoring their respective economies to a stable growth path. Success in the realisation of this objective will depend on how far they can succeed in mobilising sufficient external financing.

### *Mobilising external capital*

A successful mobilisation effort requires an ability to identify the appropriate group towards which the effort should be directed. In addition, a range of financial instruments must be provided which are sufficiently broad to satisfy differential needs in terms of earnings, liquidity and risk avoidance.

The Caribbean community resident in North America would seem to be an ideal group on which to base the mobilisation effort. Between 1976 and 1986 Caribbean emigration to the area from Barbados, Guyana, Jamaica and Trinidad and Tobago amounted to 436,000 persons. Of that number, 189,000, approximately 43%, entered directly into the labour force. Large-scale emigration from the Caribbean to North America started in the late 1960s. In addition, the size of the community has been supplemented by a movement to North America by some emigrants and their dependants who had settled in the United Kingdom at an earlier date. Taking all of these factors into consideration, it would be reasonable to estimate the size of the Caribbean community in North America to be at least 1 million, of whom a minimum of 40% would be in the labour force. This group would be dominated by first generation emigrants with strong ties to the Caribbean and hence could be persuaded to devote a part of their savings to support development in the region.

As for the potential size of the pool of savings which could be tapped from the Caribbean community in North America, a rough approximation might be derived from an examination of the occupational breakdown and earnings potential of emigrants over the 1976-86 period. In Table 18.4 are set out the cumulative totals of emigrants to North America falling within occupational categories which account for 95% of emigrants entering di-

Table 18.4 and their estimated earnings in 1986, by occupational groups.

<i>Occupational group</i>	<i>Total number emigrants</i>	<i>Estimated<sup>1</sup> US earnings 1986 (\$M)</i>
Managerial	13,460	353.6
Professional technical	25,025	540.8
Clerical	32,114	499.2
Sales	6,707	124.8
Skilled workers	27,591	587.6
Labourers	34,301	535.5
Service	40,151	468.0
TOTAL	179,349	3,109.5

<sup>1</sup> Based on median weekly earnings in the United States.

*Sources:* Employment and Immigration Canada, *Immigration Statistics, Annual*; Jamaica National Planning Agency, *Emigration to North America from Jamaica 1970-1980*; United States Department of Commerce, *Statistical Abstract of the United States, 1988*; United States Department of Justice, Immigration and Naturalisation Service, *Statistical Yearbook, Annual*.

rectly into the labour force. The actual number of labour force participants in the categories listed arising from the flow of emigrants over the period would have been greater than the total indicated in the table. In each year more than 50% of emigrants, many of whom were dependant children, did not enter the labour force directly. Several of those would, by 1986, be labour force participants.

In the second column on Table 18.4 estimates of earnings in 1986 are reported for the flow of emigrants over the 1976-86 period in the designated occupational categories. These estimates were based on the median weekly earnings of workers falling within these occupational categories in the United States during 1986. The North American Caribbean community is resident both in the United States and Canada. The largest portion of the community is resident in the United States. Earnings across occupational groups are similar in the two countries. Consequently, use of United States earnings data is reasonable in this context. The estimates reported in the table are based on an implicit assumption of full employment. However, as indicated above, these estimates of the number of participants in the various

occupational categories is likely to be on the low side, since they did not allow for those who were originally dependants entering the labour force.

Total earnings associated with emigrants arriving in North America between 1976 and 1986 were estimated at US\$3,109.5 million. However, as indicated earlier, the actual size of the Caribbean community in North America and labour force is likely to be at least twice the size of that reflected in the flow of emigrants between 1976 and 1986. It is also the case that the percentage share of emigrants in the various occupational categories remained fairly constant in each year during that period. Consequently, we would estimate gross earnings of the community in 1986 to be around US\$6,000 million. If one were to assume that members of this community on average saved between 5% and 10% of their income, this would imply a potential pool of savings in 1986 of between US\$300 million to US\$600 million.

With regard to the strategies which might be adopted to tap this pool of savings, it would appear that emphasis should be placed on encouraging Caribbean expatriates to use a part of their long-term savings to support economic growth in the region. This would involve each country directing its efforts towards its nationals. The strategy, especially in the case of the larger economies, should involve both public and private sector participation in the mobilisation of funds.

The public-sector effort should be geared towards attracting long-term support for development institutions such as agricultural and industrial development banks. Moreover, in the promotional effort emphasis should be placed on encouraging overseas nationals to act more as investors rather than as creditors to the country. The financial instrument which should be marketed by these institutions is par value preferred shares, as opposed to traditional bond financing. Such instruments would have no specific date of maturity, relieving governments of amortisation obligations. Such securities would be attractive to the expatriate community only if they embodied the necessary elements of yield, liquidity and risk.

These shares would have to pay a return reflecting yields on comparable instruments on North American financial markets (e.g. long-term government bonds) at time of issue. The dividend should be set for an initial period of seven years. Subsequently, the dividend could be adjusted to reflect more closely earnings on the investments of the development institutions. Moreover, in order to provide liquidity to the shares in the absence of a secondary market, the government could guarantee that after the seven-year period of the dividend guarantee had expired, it would be prepared to repurchase at par value, up to a minimum value of, for example, \$10,000 worth of shares offered by any individual. This guarantee could be supported by an insurance provision which might be financed through a premium charged to dividends payable to shareholders. This provision should prove

to be particularly attractive to those with modest incomes who might desire to retain a part of their retirement savings in this form, but at the same time would need the assurance that their savings were not at risk.

An added incentive for holding such instruments as part of retirement savings would be provided if Caribbean governments could work out an agreement with governments of the United States and Canada, which would allow holders of these shares to accumulate up to \$1,000 in any given year in a retirement account and gain a tax exemption on the outlay.

Turning to private-sector initiatives, the emphasis here should be on developing ways in which expatriates could invest in firms in the region. India has established a mutual fund which has allowed their expatriates to invest in Indian industry. In the Caribbean, the industrial base is very small and in most countries there is a great deal of concentration of economic power in the private sector. The dominant firms have no difficulty in financing their operations; the critical shortage is in the availability of venture capital to assist in the establishment of new firms and the expansion of smaller businesses. The merchant banks and possibly the insurance companies should establish a mutual fund which would be geared towards the acquisition of minority ownership positions in what might be called non-traditional companies. The portfolio of such a fund would also incorporate some of the equity of the dominant companies in order to maintain some reasonable balance between yield, liquidity and risk. Units of such a fund would be marketed to expatriates who would be willing to expose themselves to the risk inherent in such investments in the hope of realising potentially high returns. The success of such a venture would be clearly dependent on the ability of the fund managers to identify the winners among the new firms wishing to commence or expand operations.

Another area in which the private sector could attempt to mobilise savings would be to make it possible for expatriates who intend to reside, either on a full or part-time basis, in the region after retirement to save towards the purchase of a retirement property. Such a programme has already been initiated by the Jamaican building societies. Apart from the matter of retirement property, it is also the case that restrictions on the extension of mortgages to non-residents could be eased as a means of encouraging a greater flow of non-resident savings into residential and non-residential developments.

In conclusion, the savings of the large Caribbean expatriate community represents a potential major source of finance which could be tapped to support economic growth in the region. Given adequate promotion, measures of the type suggested above should be successful in encouraging the non-resident community to invest a part of their savings in the region. There is, however, a clear need to foster development of capital markets in the region offering a broad range of financial instruments. Specifically, there is

Notes

- 1 IMF, *IFS Supplement on Trade Statistics*, no. 15.
- 2 ECLA, *Economic Survey of Latin America and the Caribbean*, Vol. 11, 1984.
- 3 National Planning Agency, 1982, Table 1.2, p. 3.
- 4 UNESCO, *Statistical Yearbook*, Annual.
- 5 Central Statistical Office, Trinidad and Tobago, *Statistical Digest*, 1985.
- 6 UNESCO, *Statistical Yearbook*.
- 7 National Planning Agency, 1982, Table 1.2, p. 3.
- 8 *ibid.*
- 9 Bank of Jamaica, *Report and Statement of Accounts*, 1987, p. 30.
- 10 *ibid.*

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