# 6.1. MIGRATION AND REMITTANCES: A CASE STUDY OF THE CARIBBEAN

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## INTRODUCTION

Caribbean people have always had migratory instincts. The earliest inhabitants migrated to avoid their enemies but present day migration is largely motivated by economic reasons. In recent times there has been three distinct periods of migration. In the 1930's, there was a wave of migration to Central America to work on the construction of the Panama Canal. The 1950's and 1960's saw a shift in the focus of migrant workers to the United Kingdom to work mainly as nurses and in public transportation and the most recent wave of migration has been directed to the United States and to a lesser extent, Canada. While the waves of migration may have focussed on a particular geographical area at a given time, smaller flows of immigrants to other countries would have continued.

A logical consequence of the migration of workers is a reverse flow of remittances to support dependent relatives, repayment of loans, investment and other purposes. While it is usually asserted that migrant remittances have contributed in no small measure to the economic and social development of the Caribbean, much of the discussion is largely anecdotal. The accuracy of the estimates of migrant remittances is rather doubtful and very little empirical work has been done on the evaluation of contribution of remittances to economic development. Data on remittances are collected largely to estimate balance of payments flows and no attempt is usually made to relate such flows to income generation in the local economy. Thus there is usually no distinction between current and capital remittances.

The analysis of remittances, in the absence of a theoretical framework which relates remittances to household optimization, saving and investment will not fully explain the flow of remittances or give guidance on the factors which would influence sustained inflows necessary for development. This paper would attempt to outline a framework for analysis of remittances and identify some of the variables, which would determine sustained inflows for development purposes. The first section of the paper discusses the concept of remittances and examines the major factors that influence the level of remittances. Section II discusses recent trend in migration in the Caribbean, and Section III provides some information on the order of the magnitude of remittance flows to selected Caribbean Countries. The contribution of remittances to development is the subject of Section IV, and Section V identifies some measures, which would improve the level and consistency of remittances. The final section consists of some concluding remarks.

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## THE CONCEPT OF REMITTANCES

Remittances refer to transfers made from earnings or the accumulated stock of wealth by individual migrants to their country of origin. In can be viewed as a form of co-insurance payments, which arises from an implicit contract between the individual migrant and his family. Resources are remitted for support of dependents, repayment of loans, investment or other purpose. Given that a typical sum is transferred with a set of instructions about its disposition between various uses, it is extremely difficult to apportion these amounts into current and capital transfers.

A useful taxonomy of remittances is provided in Wahba (1991) who divides remittances into four types:

1. **Potential Remittances** -- savings available to the migrant once all expenses in the host country have been met. These represent the maximum the migrant can transfer at any time.

2. **Fixed Remittances** -- the minimum the migrant needs to transfer in order to satisfy her family's basic needs and other contractual obligations.

3. **Discretionary Remittances** -- transfers in excess of fixed remittances. These together with fixed remittances constitute the level of actual remittances.

4. **Saved Remittances (or retained savings)** -- the difference between potential remittances and the amount remitted during the period. These flows are accumulated into a stock of resources, which can be used to supplement actual remittances at a later date. This stock of wealth is a result of a portfolio decision by the emigrant and she may be encouraged to make these resources available for the development of her country of origin.

This classification is extremely important for the analysis of remittances and the resulting policy actions since the different components are driven by completely different motivations. Some further insights may be uncovered by pursuing the implications of this classification a little further.

The concept of potential remittances is pretty straight forward and need not attract further comment. Fixed remittances arise from the basic motivation for migration, such as diversification of sources of income, household size and other contractual obligations. These will be discussed in greater detail in the next section.

The flow of discretionary remittances on the other hand is determined by the relative attractiveness of maintaining a store of value either in the host country or the country of origin. The relative attractiveness depends on the differential between real interest rates in the two countries, expected movements in exchange rates, general macroeconomic stability, the ease of conversion of one currency into the next and the efficiency of the payments mechanisms (especially money transfer facilities) between the two countries. In particular, higher real rates of interest and stable exchange rates would be conducive to an increase in the flow of discretionary remittances.

Saved remittances are the other side of the coin to discretionary remittances. An increase in the level of discretionary remittances, other things equal would reduced the flow of saved remittances and hence slow the rate of increase of the stock of retained earnings. It is this stock of wealth which has the greatest potential to assist in the development of the Caribbean countries if measures can be instituted to encourage the diaspora to maintain their stock of wealth or store of value in their country of origin.

**Migration and Remittances**

The issue of remittances arises only because there was a prior decision to migrate, thus the analysis of remittances cannot be divorced from an analysis of the factors which motivate migration. It is this analysis of migration that provides part of the rationale for fixed remittances. This brief section of the paper cannot do justice to the multi-faceted issue of migration and its motivating factors. Thus, rather than focus on the factors which determine migration for its own sake, this section of the paper would examine the influence of the motivating factors on the decision to remit.

In spite of the voluminous literature on migration and the importance of remittances to many developing countries, there are very few attempts to develop a systematic theory of remittances. The Seminal works of Lucas and Stark (1985) and Stark (1991) are notable exceptions. Lucas and Stark (1985) divide theories of remittances into three groups, i.e., Pure Altruism, Pure Self-interest and Tempered Altruism or Enlightened Self-interest.

In the Pure Altruism model, the migrant derives utility from the utility of the rest of her household in the country of origin. The utility of the household depends on its per capita consumption. The migrants utility function depends on her own consumption and on the weighted utility of the rest of the household in the country of origin. The migrant chooses the level of remittances that maximizes her utility function. This model yields two testable hypotheses, (1) remittances increase with the migrants wage level; and (2) remittances decrease with the level of income of the household (i.e. remittances to less well-off households would be higher). The impact of household size on the level of remittances can be either positive or negative depending on presence of economies or diseconomies of scale in consumption, the rate of decline in marginal utility of home consumption and whether the migrant has a preference for a subset of the household in the home country.

Pure Self-interest generates three motives for remittances. The first arises from the belief that if she takes care of the family a larger portion of the family wealth would be bequeathed to her. This motive predicts larger remittances the larger the potential inheritance. The second motive is to build up assets at home such as land, houses and livestock, which would necessitate that family member act as an agent to purchase the assets and maintain them in good condition. The third motive may arise from an intent to return home at a later stage which would require investment in fixed assets, in a business or in community projects if the migrant has political aspirations. The last objective illustrates the difficulty of separating altruistic and self-interest motives.

Neither of the two theories above is sufficient to explain the extent and variability of remittances. Thus Lucas and Stark developed a theory that views remittances as part of an inter-temporal, mutually beneficial contractual arrangement between the migrant and the household in the country of origin. Such contractual arrangements are based on investment and risk. In the case of investment the family bears the cost of educating the migrant worker who is expected to repay the investment in the form of remittances. This motive not only predicts that remittances could be higher for more educated workers but also that remittances from children of the head of the household would be higher than from in-laws and even spouses.

The risk motive gives rise to a much richer theoretical analysis which utilizes portfolio investment theory. In most developing countries both financial markets and insurance markets are not well developed. In addition, income, especially agricultural income is subject to a significant variability due to natural disasters, hurricanes, droughts etc. In these circumstances the decision to migrate is a rational decision to reduce risk by diversifying the household's stock of human wealth over activity and space. Provided that the shocks that affect the host country and the country of origin are not highly correlated positively, it would be mutually beneficial for the migrant and her family to enter a co-insurance contract. The migrant would remit relatively more when the home country is beset by natural disasters and similarly the family would take care of her obligations at home or even make transfers to the migrant if she becomes temporarily unemployed.

Such contractual arrangements are voluntary and hence, must be self-enforcing. The mechanism for self-enforcement could be mutual altruism, which explains why such arrangements are usually struck between members of a household. The aspiration to inherit, the desire to return home and the need to have reliable agent to assist in the accumulation and maintenance of assets are additional considerations for self-enforcement.

A number of well documented observations about migration and remittances can be explained by this theory of Enlightened Altruism. These include:

**The Structure and Performance of the Economy**

(i) A high ratio of Agriculture to GDP is associated with higher rates of migration. Agricultural income is more variable and hence the greater need for coinsurance;

(ii) The decline of an industry induces higher migration since income prospects in the home country would decline hence the need for spatial diversification;

(iii) Economic downturn in the host country reduces the flow of remittances (insurance payments), but this may be moderated by drawing down the stock of accumulated wealth;

(iv) Natural disasters in the country of origin induce a larger flow of remittances. This is also predicted by pure altruism but enlightened self-interest would predict that such flows would be higher for households with more assets;

**Education**

(i) Migration would be higher among the more educated members of the household, not only would their job opportunities and income prospects be greater, they represent the stock of human capital which is part of the policy of diversification;

(ii) The level of remittances from the more educated is greater, not only because their earning would be higher, but also because the remittances represent higher implicit loan repayments to the family, which has invested in their education.

**Other**

(i) Remittances are positively related to the size of the family at home;

(ii) Remittances are higher among the younger migrants because their income prospects are higher and have to repay the investment in their education;

(iii) Remittances decline with the duration of time abroad but would not cease, even if they are reunited with their immediate family in the host country, as long as there is an inheritance motive or a desire to return home;

(iv) Female migrants tend remit more for care of the family, but males in families with assets would tend to remit more to maintain their favoured status in the line of inheritance.

## TRENDS IN MIGRATION IN THE CARIBBEAN

Recent trends in Caribbean migration have been reviewed in Guengant (1993) and Simmons and Guengant (1992). In his 1993 paper Guengant estimated that net migration from the Caribbean region amounted to 5.6 million during the period 1950 to 1990. This figure represents 16 percent of the region's population in 1990 or 32 percent of the 1950 population. Of this, 1.4 million occurred in the 1980's, slightly less than the 1.7 million net population loss in the 1970's.

Quite naturally the highest absolute loss of population occurred among the countries with the highest population. Jamaica and Haiti recorded losses in population of approximately one million each to top the region. Other countries that recorded significant losses were Puerto Rico (about 800,000), Cuba and the Dominican Republic (700,000 each) and Guyana and Trinidad and Tobago (300, 000 each). However, some of the smaller Caribbean states experienced the highest rates of population losses. Dominica, Grenada, St. Kitts-Nevis, St. Lucia and St. Vincent & the Grenadines experienced net migration losses equivalent to more that 80 per cent of their populations in 1950. For the CARICOM countries as a group, excluding the Bahamas, the weighted rate of migration loss was 62 per cent of their 1950 population vastly exceeding the 32 per cent average for the wider Caribbean Region.

The major host nations for Caribbean migrants are the United States and Canada. The European countries also received significant amounts of Caribbean migrants. The United States and Canada were the recipients of 2.7 million legal immigrants from all of the Caribbean countries. This figure excludes the approximately 800,000 migrants from Puerto Rico who have moved to the United

States. However in contrast to the USA and Canada, European migration was largely determined by colonial ties. Thus the United Kingdom received migrants from the English speaking Caribbean, France from the Francophone Caribbean and the Netherlands from the Dutch speaking countries.

Intra-Caribbean migration has been minuscule compared with the volume of extra-regional migration. Simmons and Guengant (1992) estimated that in 1980 there were 307,000 intra-regional migrants in the Caribbean amounting to approximately 1 per cent of the total Caribbean population and 7 per cent of the region's loss of population during the period 1950 to 1980. They further noted three features of the intra-regional movement of people.

(a) The bulk of intra-regional migrants originate in just a few countries. Some of these origin countries, such as Haiti, have very large base populations such that the outflow has had relatively little impact on the sending nation but major impacts on the receiving nations. Others, such as several small islands in the Eastern Caribbean, have small base populations such that the large outflow has had a major impact on them and an impact on the receiving countries in the region as well, since several of these tend also to be smaller countries.

(b) Migrant flows tend to be directed toward a few principal destination countries. The bulk of intra-regional movers circa 1980 are found in the Dominican Republic, Puerto Rico, Trinidad & Tobago, the U.S. Virgin Islands, the Bahamas, French Guyana and Guadeloupe.

(c) The migrants themselves have distinctive educational, income and occupational profiles which suggest they play unique roles in the in the economies of the destination countries.

According to Simmons and Guengant (1992), Intra-Caribbean migrants hail principally from Haiti, the Dominican Republic, Cuba, Grenada and St. Vincent and the Grenadines. These account for slightly more than 60 percent of all intra-Caribbean migrants, of which almost a third were born in Haiti. In absolute terms Haiti, the Dominican Republic and Cuba are significant contributors to intra-regional migration, but because of their huge populations relative to the rest of the Caribbean, the proportion of migration relative to their total population is quite small. The authors estimate that only 2.3 percent of the Haitian population are living in the region. By contrast the countries of Grenada and St. Vincent and the Grenadines which are among the top five contributors to intra-regional migration, approximately 21 per cent and 16 percent respectively of their populations are resident in other Caribbean countries. These two Windward Islands, together with St. Kitts-Nevis, the British Virgin Islands (BVI), Turks and Caicos Islands and Anguilla represent the countries that show a high propensity to migrate to other Caribbean countries. The proportion of their migrants within the region as a percentage of total population exceeds 15 per cent.

The major destinations for intra-Caribbean migration are (see Table 2 extracted from Simmons and Guengant (1992)):

**The Bahamas** with its higher standard of living based on tourism and off-shore financial services has been a major destination for migrants from Jamaica, Haiti and the Turks and Caicos Islands.

Migration to **Cuba** occurred prior to the Second World War to assist in the harvesting of sugar cane and also for professional and business reasons. These migrants hailed mainly from Jamaica and Haiti. These migrants are now elderly and are rapidly dying off.

**The Dominican Republic** is an important destination for Haitian agricultural workers.

**Puerto Rico** represents a major destination for migrants from the Dominican Republic and Cuba, where they work in industry and urban services.

In order to service its growing tourism industry and satisfy its demand for other professional and skilled workers, **The US Virgin Islands** has absorbed significant numbers of migrants from the British Virgin Islands and other Eastern Caribbean countries (Anguilla, St. Kitts-Nevis, Antigua, Dominica and St. Lucia). It also hosts a small number of Puerto Rican nationals.

**Barbados** is a preferred destination for migrants from St. Vincent and the Grenadines and St. Lucia but its position of host for a number of regional educational and commercial institutions has also attracted migrants from other CARICOM countries.

The boom and bust of the petroleum sector in **Trinidad and Tobago** and its consequent impact on employment opportunities creates incentives and disincentives for the inflow migrants particularly from Grenada, St. Vincent and the Grenadines and Guyana. Trinidad and Tobago is probably the only Caribbean country which has experienced a large overall net population loss to Europe and North America while at the same time absorbing significant numbers of migrants from other Caribbean countries.

**Guadeloupe** with its relatively strong economy attracts migrants from the other Departments in the French West Indies in addition to Dominica and Haiti.

Data on the occupational status of intra-Caribbean migrants is sparse, but in general they occupy lower rounds of socio-economic ladder in their host countries. They are usually engaged in low paying manual labor in the leading sectors of their host countries. There are very few intra-regional migrants professional and managerial positions and even when they are they usually command salaries that are less remunerative than residents of the host countries.

There is significant diversity between Caribbean countries in terms of the preferred destination for their migrants. Jamaica, Suriname and Barbados tend to migrate extra-regionally. For example, of Jamaica's net migration representing 35 per cent of its 1980 population only about 2 per cent of the net loss migrated to Caribbean destinations. On the contrary, Grenada, St. Lucia and St. Vincent and the Grenadines, which have also experienced significant net migration, about 25 to 45 percent of their net migration has been within the Caribbean. A similar pattern is observed for other OECS countries excluding Montserrat.

Several of the countries that have small intra-regional migration relative to total migration have strong links to 'mother' countries. For example Puerto Rico (United States) Guadeloupe (France) and Suriname (Netherlands). Other countries such as Barbados, Guyana, Trinidad and Jamaica have well-developed educational systems, which allowed them greater initial access to Europe and North America. This allowed them to build up kinship networks at an earlier stage than the other countries. The countries that have relatively more migrants in other Caribbean countries are the less developed countries with the least connection to patrons in the developed countries.

## THE MAGNITUDE OF REMITTANCES

The data on remittances were obtained from the published Balance of Payments for the Caribbean Countries. In the case of the Eastern Caribbean Central Bank (ECCB) member countries, the data were taken from the ECCB Balance of Payments 1999 and Barbados' data were taken from Barbados Balance of Payments 1994 and the International Monetary Fund Balance of Payments Statistics Yearbook, 1999. Data for all of the other countries except the BVI were taken from various issues of the Balance of Payments Statistics Yearbook , of the International Monetary Fund. In the case of the BVI the Ministry of Finance provided the data.

The figure for remittances comprises Worker Remittances, Migrant Transfers and Other Current Transfers. The last two categories include transactions of both cash and kind. The actual estimation of remittances differs from country to country depending on the peculiarities of the local situation. The coverage of the transactions is far from complete since many of the transactions do not go through the official channels. For example transfers of cash which are sent through the mail or with a friend or relative may not be recorded. Thus recorded remittances is likely to be an understatement of actual remittances.

The uncertainty of coverage of the transactions that constitute remittances in addition to the usual errors of measurement and categorization suggests that the data should only be used as indicative of the magnitude of flows of remittances. Moreover, given the importance of remittances to some Caribbean countries and the potential importance for all of the countries consequent on the levels of net migration indicated in Section II and the potential financial flows they represent, countries should endeavour to improve the measurement of these flows.

Data on the magnitude of flows of remittances to selected Caribbean countries between 1989 and 1998 are reported in Tables 2 - 4. The general direction of flows of remittances accords with the theory of remittances developed in the previous and data on net migration discussed in Section II. However, the magnitude of the flows does not accord with the phenomenal amount of migration which, has been experienced in the last thirty years. If remittances are viewed as the return on the export of human capital, it would be very low. This would suggest some under-recording or that Caribbean people are less likely to remit than their counterparts in other countries. There is some anecdotal evidence, which suggests that this is not the case.

Table 2 provides information on the absolute value of net remittances for 18 Caribbean countries. The table focuses on net remittances, the difference between inflows and outflows, for two reasons. Firstly, it is easier to relate net inflows to the discussion on net migration in Section II, and secondly it is net value of remittances, which is the measure of the injection of these flows into the economy.

Given the size of its population and absolute amount of net migration over the last 40 years, it is not surprising that the Dominican Republic has the highest level of remittances amounting to US$ 1846 million in 1998. Similarly, in Jamaica which is among the leading countries in the region in terms of net migration remittances amounted to US$ 600 million in 1998. Remittances to these two countries seem to have increased rapidly since liberalization of the exchange control regimes, which suggests that more remittances are flowing through the official channels[2].

Four countries recorded negative flows for most of the period, viz. The Bahamas, the British Virgin Islands, Suriname and Trinidad and Tobago. The Bahamas case accords with the discussion on the magnitude of migration flows, since it is not included in the countries which has experienced significant net out-migration but has been the recipient of significant amounts of migration from the rest of the region. The other countries have recorded significant amounts of out-migration but the inflows seem to be small relative to their populations living abroad. For example Trinidad and Tobago lost about 300,000 compared with its receipt of about 47,000 migrants from the Caribbean yet inflows are minuscule compared with outflows. The same holds for the BVI and Suriname. This seems to suggest that countries are able to record outflows of remittances more efficiently than inflows. In fact there would be a natural tendency to do this, given the closer scrutiny on outgoing flows since the authorities tend to pay more attention to items which can have a negative impact on the balance of payments. In the cases of Guyana and Suriname the existence of a parallel foreign exchange markets during the earlier part of the period would have reduced recorded inflows.

For the other countries the direction of the remittances seems to accord with the level of net migration experienced. One observation that would be returned to later is the apparent variability of the flows. This is consistent with the theoretical proposition that remittances would vary with the developments in the country of origin and the performance of the host country. The OECS countries that were hit by hurricanes recorded increased flows in 1989, 1995 and 1997 and most countries showed a slowdown in the growth of remittances during the recession in the USA during 1990 to 1993.

Table 3 provides information on the on the ratio of remittances to the nominal Gross Domestic Product (GDP) at market prices for the Caribbean countries. Among the countries with positive net remittances, the contribution of remittances to economic activity was highest in Montserrat Haiti and the Dominican Republic. Except for the statistical blip in 1989 associated with hurricane Hugo, remittances represented between 13 and 20 percent of GDP up to 1991 and then falls off and even turned negative as a result of the volcanic activity in that country as two-thirds of the population migrated. For the other OECS countries except Antigua and Barbuda and the BVI net remittances averaged between 5 to 8 per cent of GDP. From the discussion in Section II, these countries have experienced high levels of net migration thus, this observation is not surprising. In the case of Antigua and Barbuda remittances inflows are consistent with the other OECS countries but their level of outflows are also higher given that in recent years they have been the recipient of significant migratory flows from Dominica and the Dominican Republic.

[2] An Increase in the level of recorded remittances does not necessarily mean that they have increased but that more is being captured in the statistics.

Three of the countries (The Bahamas, Trinidad and Tobago and Suriname) which have negative flows of remittances have ratios of less that one per cent of GDP. In the case of the BVI the net outflows represented about 8 per cent of GDP up to the point where data are available. As noted earlier, although the BVI is host to significant quantities of workers mainly from the other OECS countries, significant amounts of migrants from this country are also abroad, but the coverage of these inflows may be less than required.

A pattern similar to that observed for the ratio of remittances to GDP emerges in Tables 4, which reports on the ratios of remittances to exports of goods and services. Table 4 indicates that, Haiti, the Dominican Republic and the OECS countries except Antigua & Barbuda, the BVI and St. Lucia have the highest ratios. In Montserrat the ratio peaked at 194 percent in 1989, averaged over 50 per cent up to 1991 and declines thereafter. The Dominican Republic also has a high ratio (averaging about 18 percent) given its lower ratio of trade to GDP. The ratio of remittances to export of goods and services has risen steadily in Jamaica since 1993 to about 15%. The percentage of net remittances to merchandise trade was extremely exaggerated for the tourist-oriented economies. Given the high contribution of services in overall trade, the ratios seem to explode, particularly for Montserrat, Anguilla, and the BVI.

## THE CONTRIBUTION OF REMITTANCES TO DEVELOPMENT

The contribution of remittances to development depends on the uses to which the remittances are put. If the resources are used for conspicuous consumption there is very little contribution to economic development and given the high import content in the consumption pattern of the Caribbean countries, the impact on the balance of payments can be negative. On the other hand if the resources are used for investment and essential consumption to improve the health and productivity of the society, the development of the society may be enhanced. There are several ways in which remittances may contribute to the development of Caribbean economies both directly and indirectly. Some of these are discussed in this section of the paper.

The inflow of remittances can be viewed as an injection into a Keynesian type circular flow of income. Injections into the circular flow increases economic activity by increasing the level of aggregate expenditure, while withdrawals from the circular flow reduces economic activity. Outflows of remittances are withdrawals from the circular flow and hence reduce economic activity. Thus it is the net remittances that measures the effect on the level of real economic activity. Other things equal, positive net remittances increase real economic activity while negative net remittances have the opposite effect. However, economic development goes beyond increases in real economic activity related to injections into the economy. Economic development requires that the economy be transformed to permanently increase its capacity to produce real output. In addition, this should be supplemented by more equitable distribution of income and greater diversification of the economy. This would result in an improvement of the quality of life of the members of the society.

The most direct way in which remittances contribute to economic and social development is the improvement in the living standards of the recipient. As discussed in Section I, the decision to migrate may be conscious choice to improve the income prospects of the household and to reduce risk associated with income instability. To the extent that this decision is successful remittances would improve the living standard of the household enabling a higher level of consumption and increased educational opportunities for the rest of the household.

Consumption by itself is not a productive activity. However, to the extent that increased consumption by poor households improves their productivity by improving health or improves the capacity of young children in these households to learn and hence acquire better education it may contribute to development. On the contrary conspicuous consumption results in a depletion of the foreign exchange which came into the country when the funds are initially remitted. Remittances in kind, which are in the nature of conspicuous consumption goods can also have a negative effect to the extent that it creates an imitative demand by other members of the society for these goods. It also increases complementary demand by the receiving households for imported goods which are used jointly with the initial gift.

The improvement in educational opportunities for the rest of the household is beneficial both to the household and the country since this would create better job opportunities for the individual, and the country gets a more productive worker. One drawback is that with an existing kinship link in the developed country the likelihood that the more educated members of the household would also migrate is even greater. However, this may create a second-generation flow of remittances in later years.

A logical consequence of the flow of remittances to poor households is the improvement in the distribution of income in the society, if as the theory predicts remittances would be higher for poorer households. Moreover such resources can be invested in education and business to improve the income prospects of the household even further. While the debate on the effect of migration and remittances on the distribution is far from settled in the literature, a number of studies internationally point to the favorable effects of remittances on the distribution of income (see Stark et al, 1988). Improvements in the distribution of income not only increase the welfare of the individual but has externalities which increases the social development of the society.

The investment of remittances in new businesses or into the expansion of existing family businesses is one of the ways that these flows contribute to economic development. These remittances need not be in the form of cash but may be in the form of capital goods, inventory or raw material. For many low income households access to credit is effectively closed, since formal credit markets do not recognize human wealth as collateral. Thus, the flow of remittances may be the only source of finance for investment in small businesses.

While the contribution of remittances to investment in new businesses is pretty straightforward in terms of the concept, the contribution to investment in existing family businesses has three aspects. The first can be related to inheritance motive, desire to return home for a comfortable retirement, altruism or profit motive. To satisfy these motives, resources in cash or kind are remitted for investment in the family business.

The second aspect is related to the co-insurance that the 'contract' with the migrant provides to his family. It allows the household to undertake risky investments, for example in the improvement in agricultural practices, which would not have been undertaken if the household depended solely on the farm income. These investments would be undertaken with the knowledge that if the venture went sour or the pay back period was longer than expected there would be income support from the migrant.

Assistance in disaster recovery provides a third aspect of remittances being invested in the family business. Although this is related to the co-insurance contract discussed in the preceding paragraph, the distinction here is that resources actually flow to assist in the rehabilitation of the business whereas resources need not flow in the second aspect. The security provided by the contract results in behavior modification, which leads to economic expansion.

Not all households are entrepreneurial by nature, but if a proportion of remittances is saved, it provides a pool of investible resources that the less risk-averse members of the society can use to develop the economy. Remittances in kind can contribute indirectly to the pool of savings if their consumption permits a higher level of saving by the receiving households. To contribute to development in this way, remittances must supplement domestic saving. It is quite possible that remittances can replace domestic saving by permitting a higher level of consumption. Because the flow remittances relaxes the household's liquidity constraint there is usually a strong temptation to undertake higher levels of consumption than is necessary.

At the level of the economy the flow of remittances eases the balance of payments constraints by either providing foreign exchange directly in the case of cash or by reducing the demand for imported goods where remittances are in kind. The caveat here is the demonstration effect on the consumption of the rest of the society associated with the receipt of such goods. As reported in Section IV, both the absolute level of remittances and the ratios relative to export earnings are quite significant to a number of Caribbean countries. Such flows give the economy command over real foreign resources, which can be used in the development effort.

The foreign exchange provided by flow of cash remittances (or saved by remittances in kind) permits the importation of capital goods and raw material necessary for economic development. None of the Caribbean countries have well developed capital goods sectors, thus most capital goods have to be imported. Similarly much of the raw material for industry and tourism have to be imported. The flow of remittances can play a critical role in the development process since the finance of expansion purely from domestic resources would run into the foreign exchange constraint.

While the flow of remittances back to the Caribbean contributes to the development of these countries in a narrow sense, a wider interpretation of the role of migrant resources in the development process would include migrant investment in activities for expansion of the exports of the Caribbean in the host country. Such activities would include facilities for the distribution of Caribbean goods and, restaurants that use Caribbean products, the promotion of tourism and cultural services. This wider interpretation is posited by Henry (1990) who views the utilization of all migrant resources whether at home or in the host country as a potential contribution to economic development.

## MEASURES TO IMPROVE THE FLOW OF REMITTANCES

Any discussion on measures to improve the flow of remittances must take cognizance of the distinction between the various types of remittances discussed in Section I. There is not a lot that policy makers can do about fixed remittances as these are related motives and contractual obligations which are outside the control of the authorities. The same is not true for discretionary remittances, which are associated with the level of saved remittances. These two magnitudes are related to portfolio choices made by the migrants concerning the diversification of her wealth. Thus, measures aimed at influencing the flow of remittances must be aimed at influencing the factors that affect the portfolio choices of the migrant.

The way in which the data on remittances are captured seems to suggest that they have been largely current rather than capital flows. This may be a bit misleading. While in principle it is possible to separate out the major types of remittances, in practice it is extremely difficult. A typical sum of money may be remitted with the following instructions: from this $500, one hundred for my insurance, $50 to pay my Friendly Society book for the next six months, $200 for the mortgage, $100 for my account at NCB, $20 for grand father's birthday and the rest just in case Junior needs anything urgently. The multiplicity of purposes (gift, saving, investment and precautionary) means that categorization of any observed figure is almost impossible. Fortunately it is not necessary to be able to categorize the flows. All that is required is that some aspect of the flows respond to the measures.

For flows of remittances to play a significant role in the development process they have to be systematic, predictable and consistent. Policy makers and business would need to be able to plan for these with some degree of predictability or they would continue to play a marginal role. The variability of net remittances can be observed in the in Table 2 and is consistent with the theoretical literature. The measures to increase the flow of remittances must also try to address the variability. It is recognized that some amount of variability is associated with co-insurance and altruistic considerations but the portfolio choice considerations of discretionary remittances would react fairly predictably to the underlying variables. Some of these measures are identified below.

(i) The efficiency of the money transfer mechanisms: The introduction of Western Union now makes it less costly, safer and more convenient to remit funds from the USA to the Caribbean and it is most likely to result in an increase in recorded remittances. It reduces some of problems with the existing money transfer services including the high costs, fraud, theft, timeliness, language difficulties and inconvenience.

(ii) The exchange control regime: A more liberal exchange control regime would reduce the incentive to hoard foreign exchange and more will pass through the official channels.

(iii) In order to attract more of the migrants saved remittances financial institutions in the Caribbean will have to offer more attractive rates of interest. If the rate of interest is less that the inflation rate the real return on remitted funds will be negative and there will be no incentive for additional funds to flow in. The abatement of inflation in the countries with fixed exchange rates in the 1990's and the liberalization of interest rates in Guyana and

Jamaica have resulted in mildly positive real interest rates. In particular the liberalization of interest rates in Jamaica along with the liberalization of exchange controls have resulted in a significant inflow of remittances and other capital inflows.

(iv) Governments may wish to consider favorable tax treatment for migrant investment in securities and offer the same tax treatment offered to foreign investors for certain classes of investment.

(v) The establishment of branches of regional financial institutions in the host countries can provide a way of tapping into the resources of migrants. Branches of commercial banks and insurance companies are avenues for reaching the lower income, less sophisticated members of the migrant population. Familiar institutions with good track records will help to engender the confidence of the usually suspicious migrant worker. The development of investment vehicles to mobilize the saved remittances of the more sophisticated migrant investors would be an additional mechanism to increase these flows. Such vehicles can either allow for the direct investment in the shares of Caribbean companies or be investment vehicles developed by financial intermediaries that lend to productive enterprises.

(vi) The development of efficient domestic money and capital markets is required to attract significant amounts of portfolio investment through which international capital now moves. The development of efficient money and capital markets would also give the migrant sufficient flexibility to move funds around.

(vii) The issuance US dollar denominated securities to complement foreign currency accounts would reduce exchange rate risks.

(viii) Credible macro-policy is required to ensure low inflation and stable exchange rates. The major aim of macroeconomic policy would be to ensure that the domestic currency is as at least as good a store of value than the foreign currency, by avoiding inflation and devaluation. If the foreign currency is seen as a better store of value, there would be very little inflow of discretionary remittances.

## CONCLUSION

This paper looks at issues related to migration and remittances in the Caribbean. It discusses various types of remittances with a view to develop a set of policy measures for affecting the level of remittances. The decision to remit is based on a prior decision to migrate, hence the paper discusses the relationship between migration and remittances and briefly reviews the main trends in Caribbean migration. This serves as a backdrop for the analysis of the data on remittances that is provided for eighteen Caribbean countries for the period 1989 to 1998.

The data reveal that in general the remittance flows accord qualitatively with the migration flows experienced by most of the Caribbean countries. However, the level of remittances appears to be low given the magnitude of net migration experienced by the countries. The recorded flows exhibit some level of variability which could be related to errors of measurement resulting from the coverage of the transactions which are classified as remittances. Based on the ratio of net remittances to GDP and to exports, remittances play a very significant role in the level of economic activity in the countries that have experienced high net migration, especially the Dominican Republic, Jamaica, Haiti and the OECS countries (except the BVI and Antigua and Barbuda)

Notwithstanding the importance of remittances to some of the countries, the contribution of remittances can be improved by increasing the flow and consistency of remittances. Some of the ways in which remittances can contribute to the level of economic and social development are discussed and measures to improve the flow of remittances are identified. These include: improving the money transfer services; offering higher real interest rates, favourable tax treatment for investment by migrants, providing better vehicles for migrant investment in their home country and reducing exchange rate and inflation risks.

The saved remittances of migrants represent a potential pool of funds, which can be mobilized for the development of Caribbean countries. The countries need to develop creative ways to utilize both the financial and human resources of the diaspora. Our understanding of what motivates the portfolio choices of Caribbean migrants is extremely limited and the analysis is hindered by the paucity of information on the flow of remittances. Countries may need to systematically improve the volume and accuracy of the information available to undertake the analysis, which would inform policy action in this area.

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Table 1
Migration Balances, Caribbean Countries, 1950-89

| | Migration balances (000s) | | | | Total |
|---|---|---|---|---|---|
| Country | 1950-59 | 1960-69 | 1970-79 | 1980-89 | 1950-89 |
| Cuba | -10,0 | -475,0 | -222,6 | -19,9 | -727,5 |
| Dominican Republic | -54,0 | -175,0 | -220,0 | -240,0 | -689,0 |
| Haiti | -70,0 | -220,0 | -350,0 | -400,0 | -1040,0 |
| Peurto Rico | -469,8 | -211,9 | -41,1 | -110,1 | -832,9 |
| Jamaica | -165,1 | -289,5 | -270,8 | -246,5 | -971,9 |
| Trinidad & Tobago | -0,4 | -110,1 | -94,7 | -75,0 | -280,2 |
| Barbados | -20,2 | -38,2 | -14,7 | -10,7 | -83,8 |
| Guyana | -4,3 | -53,1 | -129,5 | -121,6 | -308,5 |
| Grenada | -12,4 | -18,5 | -21,4 | -19,5 | -71,8 |
| St. Vincent & the Grenadines | -9,3 | -20,0 | -15,1 | -13,1 | -57,5 |
| St. Lucia | -13,4 | -17,8 | -18,5 | -13,0 | -62,7 |
| Dominica | -5,5 | -9,7 | -12,5 | -15,8 | -43,5 |
| Antigua & Barbuda | -2,7 | -5,0 | -7,1 | -7,1 | -21,9 |
| St. Kitts-Nevis | -6,1 | -16,9 | -8,0 | -7,4 | -38,4 |
| Montserrat | -4,5 | -2,6 | -0,8 | -1,6 | -9,5 |
| Belize | -0,8 | -7,1 | -19,5 | -14,7 | -42,1 |
| The Bahamas | 13,6 | 23,9 | 3,9 | 7,4 | 48,8 |
| Bermuda | 0,0 | 0,0 | -2,3 | -1,1 | -3,4 |
| U.S. Virgin Islands | -1,0 | 26,5 | 1,8 | -13,1 | 14,2 |
| Curacao | -4,5 | -18,3 | -16,9 | -20,4 | -60,1 |
| Aruba | -13,0 | -9,9 | -5,5 | -5,6 | -34,0 |
| Suriname | -4,4 | -27,8 | -97,6 | -33,5 | -163,3 |
| Guadeloupe | -3,4 | -25,3 | -50,3 | -14,0 | -65,0 |
| Martinique | -4,5 | -30,9 | -46,5 | -4,3 | -86,2 |
| French Guyana | 2,5 | 8,2 | 7,9 | 25,7 | 44,3 |
| Caribbean Islands | -856,2 | -1644,2 | -1413,1 | -1202,8 | -5116,3 |
| CARICOM Countries | -231,1 | -564,6 | -608,7 | -538,6 | -1943,0 |
| Caribbean Region | -863,2 | -1724,0 | -1651,8 | -1346,9 | -5585,9 |

TABLE 2
NET REMITTANES FOR SELECTED CARIBBEAN COUNTRIES

| COUNTRY | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|---|---|---|
| Anguilla | NA | 1,89 | 0,52 | 0,93 | 1,18 | 1,28 | 18,36 | 8,34 | -0,40 | -0,19 |
| Antigua & Barbuda | 15,25 | 12,27 | 5,05 | 2,34 | 0,65 | 3,55 | 72,32 | 34,16 | 84,26 | 84,09 |
| British Virgin Islands | -11,12 | -14,01 | -13,26 | -13,22 | -18,54 | -21,50 | -24,60 | -24,80 | -28,01 | -31,45 |
| Dominica | 10,10 | 9,95 | 10,77 | 11,09 | 12,36 | 9,71 | 11,69 | 12,94 | 11,75 | 11,96 |
| Grenada | 15,89 | 17,00 | 18,36 | 18,24 | 17,27 | 23,89 | 34,16 | 39,63 | 38,31 | 38,39 |
| Montserrat | 32,39 | 14,10 | 7,90 | 7,36 | 5,33 | 5,57 | 9,79 | -9,93 | 2,71 | -4,37 |
| St. Kitts/Nevis | 13,93 | 10,41 | 10,77 | 11,37 | 10,92 | 14,11 | 21,85 | 54,65 | 19,67 | 34,14 |
| St. Lucia | 10,29 | 11,10 | 15,75 | 11,60 | 4,60 | 13,36 | 19,04 | 13,07 | 14,73 | 16,77 |
| St. Vincent/Grenadines | 10,14 | 12,16 | 10,29 | 9,19 | 9,06 | 13,44 | 12,37 | 13,95 | 14,24 | 14,93 |
| OECS | | 74,86 | 66,15 | 58,89 | 42,82 | 84,91 | 174,99 | 142,02 | 157,25 | 164,25 |
| | | | | | | | | | | |
| The Bahamas | -17,90 | -10,60 | -7,80 | -12,80 | -12,60 | -1,80 | -1,10 | -3,40 | -3,80 | -4,70 |
| Barbados | 35,20 | 39,25 | 34,15 | 41,25 | 26,15 | 40,90 | 34,90 | 41,70 | 50,20 | 56,80 |
| Belize | 20,70 | 16,30 | 15,40 | 17,70 | 15,40 | 14,50 | 16,80 | 20,60 | 25,00 | 26,60 |
| Guyana | 14,00 | 13,00 | 12,70 | 14,00 | 14,90 | 48,90 | 56,20 | | | |
| | | | | | | | | NA | NA | NA |
| Jamaica | 135,20 | 155,40 | 153,30 | 248,20 | 306,40 | 481,60 | 565,40 | 592,90 | 594,90 | 600,60 |
| Suriname | -5,70 | -7,50 | -7,40 | -7,30 | 14,70 | 4,80 | 8,30 | | | |
| Trinidad & Tobago | -19,00 | -21,00 | -15,90 | -15,70 | -6,70 | 3,30 | -14,40 | -5,90 | 3,50 | 15,90 |
| | | | | | | | | | | |
| The Dominican Republic | 300,50 | 314,80 | 329,50 | 346,60 | 361,80 | 911,50 | 928,70 | 1098,90 | 1284,50 | 1846,00 |
| Haiti | 59,30 | 61,00 | 69,50 | 70,00 | 73,40 | 42,90 | 108,50 | 152,00 | 256,00 | 293,00 |

Source: ECCB Balance of Payments 1999
Central Bank of Barbados, Balance of Payments of Barbados 1994
IMF Balance of Payments Statistics Yearbook, various issues
Bank of Jamaica

TABLE 3
NET REMITTANES FOR SELECTED CARIBBEAN COUNTRIES

| COUNTRY | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|---|---|---|
| Anguilla | NA | 3,6 | 1,0 | 1,6 | 1,8 | 1,8 | 30,06 | 12,62 | -0,56 | -0,25 |
| Antigua & Barbuda | 4,8 | 3,1 | 1,2 | 0,5 | 0,1 | 0,7 | 17,44 | 7,56 | 17,29 | 16,16 |
| British Virgin Islands | -7,1 | -8,3 | -7,6 | -7,4 | -10,0 | NA | NA | NA | NA | NA |
| Dominica | 6,6 | 6,0 | 5,9 | 5,7 | 6,1 | 4,6 | 6,19 | 6,43 | 5,61 | 5,39 |
| Grenada | 8,7 | 7,7 | 7,6 | 7,3 | 6,7 | 8,8 | 14,66 | 16,13 | 14,65 | 13,71 |
| Montserrat | 68,3 | 20,8 | 14,0 | 12,9 | 8,9 | 8,7 | 18,99 | -23,70 | 8,33 | -13,77 |
| St. Kitts/Nevis | 10,7 | 6,8 | 6,8 | 6,5 | 5,7 | 6,8 | 11,31 | 26,50 | 8,49 | 14,09 |
| St. Lucia | 3,4 | 2,8 | 3,7 | 2,4 | 0,9 | 2,6 | 3,72 | 2,72 | 2,96 | 3,16 |
| St. Vincent/Grenadines | 5,8 | 6,2 | 4,9 | 4,0 | 3,8 | 5,6 | 5,54 | 5,93 | 5,77 | 5,59 |
| | | | | | | | | | | |
| The Bahamas | -0,6 | -0,3 | -0,3 | -0,4 | -0,4 | -0,06 | -0,04 | NA | NA | NA |
| Barbados | 2,1 | 2,3 | 2,0 | 2,6 | 1,6 | 2,35 | 1,87 | 2,46 | 2,30 | 2,43 |
| Belize | 5,7 | 4,6 | 3,6 | 3,7 | 2,9 | 2,63 | 2,86 | 3,41 | 4,06 | 4,22 |
| Guyana | 3,7 | 3,3 | 3,6 | 3,7 | 3,3 | 9,24 | 8,95 | NA | NA | NA |
| Jamaica | 4,0 | 4,8 | 6,1 | 12,9 | 10,5 | 12,08 | 13,16 | 10,16 | 9,82 | 8,87 |
| Suriname | -0,4 | -0,4 | -0,4 | -0,3 | 0,0 | NA | 1,76 | NA | NA | NA |
| Trinidad & Tobago | -0,4 | -0,4 | -0,3 | -0,3 | -0,1 | 0,07 | -0,27 | -0,11 | 0,06 | 0,54 |
| | | | | | | | | | | |
| The Dominican Republic | 4,5 | 5,5 | 4,2 | 3,9 | 3,8 | 8,68 | 7,73 | 8,44 | 8,60 | 12,06 |
| Haiti | 2,8 | 2,6 | 2,6 | 2,6 | 2,3 | 1,98 | 4,61 | 4,84 | 7,94 | 7,43 |

Source: ECCB Balance of Payments 1999
Central Bank of Barbados, Balance of Payments of Barbados 1994
IMF Balance of Payments Statistics Yearbook, various issues
Bank of Jamaica
IMF International Financial Statistics, various issues

TABLE 4
NET REMITTANCES AS A RATIO OF EXPORT OF GOODS
AND SERVICES FOR SELECTED CARIBBEAN COUNTRIES

| COUNTRY | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|---|---|---|
| Anguilla | NA | 7,3 | 2,3 | 5,2 | 4,9 | 4,3 | 8,46 | 4,18 | -0,15 | -0,07 |
| Antigua & Barbuda | 5,2 | 3,4 | 1,3 | 0,6 | 0,1 | 0,8 | 6,67 | 3,14 | 4,23 | 7,44 |
| British Virgin Islands | -6,4 | -7,3 | -7,6 | -6,6 | -5,9 | NA | NA | NA | NA | NA |
| Dominica | 14,0 | 11,0 | 11,4 | 9,7 | 9,0 | 8,5 | 4,16 | 4,20 | 3,39 | 3,20 |
| Grenada | 18,5 | 18,1 | 18,5 | 18,2 | 15,5 | 18,5 | 10,23 | 11,14 | 10,25 | 8,65 |
| Montserrat | 193,6 | 73,4 | 39,3 | 33,4 | 20,3 | 18,2 | 7,11 | -5,08 | 2,29 | -3,93 |
| St. Kitts/Nevis | 17,6 | 12,6 | 11,1 | 10,1 | 9,4 | 11,7 | 5,44 | 13,49 | 4,25 | 6,54 |
| St. Lucia | 4,1 | 3,9 | 5,5 | 3,6 | 1,4 | 3,9 | 1,85 | 1,37 | 1,52 | 1,62 |
| St. Vincent/Grenadines | 8,8 | 9,3 | 9,0 | 7,1 | 8,4 | 16,1 | 3,36 | 3,55 | 3,70 | 3,37 |
| The Bahamas | -0,7 | -0,4 | -0,4 | -0,6 | -0,6 | -0,11 | -0,06 | -0,18 | -0,20 | -0,25 |
| Barbados | 3,8 | 4,4 | 4,0 | 4,9 | 2,9 | 4,07 | 3,01 | 3,34 | 4,02 | 4,43 |
| Belize | 9,5 | 7,1 | 6,1 | 6,2 | 5,1 | 5,23 | 5,64 | 6,67 | 7,55 | 8,16 |
| Guyana | 6,1 | 4,8 | 4,8 | 3,7 | 3,6 | 8,37 | 8,93 | NA | NA | NA |
| Jamaica | 7,2 | 7,0 | 9,3 | 11,2 | 13,4 | 15,82 | 16,59 | 17,72 | 17,42 | 17,75 |
| Suriname | -1,0 | -1,5 | -2,0 | -2,0 | 0,0 | 1,31 | 1,60 | NA | NA | NA |
| Trinidad & Tobago | -1,0 | -0,9 | -0,7 | -0,7 | -0,4 | 0,16 | -0,51 | -0,21 | 0,12 | 0,54 |
| The Dominican Republic | 14,5 | 21,2 | 17,7 | 18,0 | 16,6 | 17,39 | 16,20 | 17,74 | 18,19 | 24,67 |
| Haiti | 13,8 | 12,1 | 9,4 | 20,6 | 15,2 | 64,03 | 56,51 | 79,17 | 67,55 | 61,17 |

Source: ECCB Balance of Payments 1999
Central Bank of Barbados, Balance of Payments of Barbados 1994
IMF Balance of Payments Statistics Yearbook, various issues
Bank of Jamaica