



**Some Interesting Thoughts on Non-Tourism Services  
in Barbados from 1970 to 1996**

by

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**INTRODUCTION**

Prior to 1970, earnings from exports of goods were the primary source of foreign receipts in Barbados. Since then, services have earned more foreign exchange than sales of goods which have been domestically produced. Travel has been undoubtedly the major category of these source items, accounting for approximately 65% of service inflows. As the Barbadian tourism product matures to a stage where rapid growth is limited, it will become necessary to maximize our foreign exchange potential from non-tourism services. In this regard, increasing contributions are already being made by the data processing, communications and financial services sectors, to name a few. However, the remaining categories of services can also impact considerably on Barbados' foreign exchange earning capacity and therefore cannot be overlooked.

Since 1970, non-tourism services have contributed an average of 25.5% of total service inflows and 82% of total service payments. These ratios have originated since the switch from the Fourth Edition of the IMF Manual to the Fifth Edition. When the fourth edition was in operation, the ratio of non-tourism inflows to service receipts actually fell between 35% to 40%. This was because port disbursements (especially sales of oil and bunker fuel to ships and aircrafts) and investment income fell under this category. However, port disbursements are now treated under the goods category, while income from investment and personal sources are recorded under the income table which is a recent addition in the balance of payments. Non-tourism payments were somewhat lower under the previous edition of the IMF Manual, accounting for approximately 55% of service payments to non-residents. However, the ratio of these payments to total outflows has risen significantly due to the inclusion of a new sub-component, freight payments, originally captured under merchandise imports. One can therefore easily conclude from the above statistics that non-tourism services have generally placed pressure on the balance of payments and by extension, the country's foreign reserves.

This paper analyzes the role of non-tourism services in the Barbadian economy over the period 1970 to 1996. Given the significant contribution of these services to foreign exchange movements and employment, this study provides important insights not only of the origin and nature of non-

tourism service flows, but also an indication of their long term growth trend. To our knowledge, there are no previous studies of such on the Barbadian economy.

The remainder of this paper is organized as follows. Section 2 takes a brief look at services as whole. Section 3 examines to some extent the components and definitions of the non-tourism service sectors, while section 4 addresses the relationships between some of the items of non-tourism services and the Barbadian economy. The following section describes the data sources and presents some regressions results. This is followed by a conclusion.

## 2. A BRIEF LOOK AT SERVICES AS A WHOLE

During the last century when the theory of trade was first formulated by David Ricardo, it dealt essentially with trade in commodities or goods. However with the passage of time, considerable changes have occurred to the global economy to the extent that increasing trade in goods has led to higher demand for services which account for a large proportion of international transactions. The study of the service sector in the Barbadian economy is therefore critical to the understanding of the economic health and development of the country (see Clarkson and Craigwell, 1997). However one of the main problems associated with services is that there is no consensus on its definition. This situation has occurred on account of the fact that services constitute a heterogeneous bunch of activities, a feature that creates difficulties in formulating a definition which is universally applicable. Perhaps the most common characteristic of services is their intangibility. (see Charles, 1994). Charles argues that one of the critical issues related to the further development and management of the services sector is that of measurement. According to her, measurement problems abound in services, given their peculiar characteristics. These are compounded in the Caribbean by the highly aggregated nature of the data. Furthermore she states that the presence of the residual category "other services" limits meaningful analysis, since data on a number of activities of interest, for example, the non-traditional services are not readily available. Specific reference is made to offshore banking activities.

Another problem with respect to services is that there is still no universally-accepted rule that determines that services are actually internationally-traded. According to Codrington (1993), this is a consequence of the continuing debate over which characteristics distinguish services from goods. Sapir and Lutz (1980) even suggested that services sold within the domestic economy to foreigners were not traded. These difficulties have made international transactions in trade more problematic to record than international trade in commodities. They have also affected efforts to standardize the recording of international transactions in services. Accordingly, several classifications systems exist, but reference will be made to three approaches used in the article by Codrington, namely (a) the functional method, (b) the embodiment method, (c) the locations approach.

The functional method groups traded services according to the tasks they perform. It has been promoted and refined by the IMF and is used largely by balance of payments compilers in its member countries, including Barbados. This allows for easy comparison of data from different countries. This approach also allows for making important distinctions between factor and non-factor services. A substantial part of service transactions is income earned directly from the employment of factors of production, namely labour and property. Under the previous edition, investments would also have been included. After these deductions have been made, the residual items, non-factor services, are considered by some authors (for example, Kindleberger, 1963), to be a more accurate reflection of trade.

Functional classification also allows traded services to be separated into primary services (that is, unskilled labour services such as domestic help, guards etc), intermediate services (for example, transport, non-life insurance, advertising, communications, databases and business services) and final services such as travel, life insurance and real estate rentals.

The embodiment approach which was best articulated by Bhagwati (1984) and Grubel (1987), groups internationally-traded services according to physical characteristics with which they are associated when the transaction occurs. One can think of factor-embodied services, goods-

embodied services and people-embodied services. Examples of factor-embodied services are tourism (where the factor is consumption related or construction, when the factor is production-related (a piece of equipment)). In this situation, these services bring together consumer and producer when either of them is internationally mobile for a short period (see Codrington, pages 14 and 15). Goods-embodied services, to quote Gray (1989), facilitate the use of the service by a consumer who is "separated in time and space" from the producer. An example of this type of service is a computer programme which must be embodied in or used with goods at the point of sale. People-embodied services are exchanged with non-residents through telecommunications, of which data processing is an example.

The locations approach, advanced by individuals such as Gray suggests that trade in services may be classified according to locational characteristics. In this regard, the following were identified by Gray:

- (1) services which require the supplier to move to the location of the user;
- (2) services which require the user to move to the location of the supplier;
- (3) services which are location-joining, such as communications.
- (4) professional services which can be made available to consumers abroad by transmission over communications equipment or by being temporarily embodied in a good, for example, information stored on a computer disk (Codrington, pages 15 and 16).

### 3.A DESCRIPTION OF THE COMPONENTS OF NON-TOURISM SERVICES

In Barbados, non-tourism services presently comprise categories such as transportation, government services (not included elsewhere) and other services. This composition is consistent with the Fifth Edition of the IMF Manual which was published in 1993, but implemented by Barbados two years later. As a result of this edition, new types of services have been included

in some of the categories and it would be of some interest to see the performance of these components as compared to the traditional components.

#### 3.1 Transportation

This category covers in most cases transportation services (sea, air and other) performed by residents of one economy for those of another. Transportation is further sub-divided into passenger services, freight and other transportation.

Passenger services include, among other things, international transportation of non-residents by resident carriers outside of resident economies and that of residents by non-resident carriers outside of their economic boundaries. It is one of the traditional items of non-tourism services. In Barbados, such information is provided by airlines, travel agents and shipping companies. Activity in passenger services results in a net balance of payments debit since Barbadians incur significantly more expenditure in passenger fares to abroad than foreigners to Barbados. Prior to 1995, passenger fares paid by Barbadians represented the major transportation item on the debit side.

Freight transportation is a new service item appearing in the above category, the result of the implementation of the fifth edition. Previously, on the credit side, this item was one of the components which formed part of miscellaneous services while on the debit side, it was included under imports in the merchandise trade account. On the credit side, information on freight is supplied from direct enquiry, whereas on the debit side, freight is currently estimated at 10% of total imports. This rate of 10% replaced the original rate of 7% used prior to 1986. Freight has now replaced passenger services as the largest debit item under transportation and, like passenger services, leads to severe non-tourism service outflows. As a result of the direct link between merchandise imports and freight payments, any movements in imports will directly affect net transportation flows.

Other transportation includes items such as rentals of vessels, freight cars and other commercial vehicles with crews for limited periods (such as a single voyage), towing, cargo handling, landing

fees and harbour dues, to name a few. The landing rate fee and rate of harbour dues are predetermined by the Government of Barbados.

### *3.2 Government Services (not included elsewhere)*

Government services comprise of transactions between the Government of Barbados and non-residents on the one hand, and residents of Barbados and the agencies of foreign bodies on the other. Such transactions became important just after Independence when a deepening of international links resulted in a rapid increase in the number of diplomats stationed in Barbados. Government services include mainly wage payments to locals/foreigners by foreign/local embassies, services under aid programmes, real estate rentals and diplomatic personal expenditure, provided that such expenditure is incurred in the particular country of operation. Although there have been fluctuations in net foreign receipts from Government services, this category has remained a net foreign exchange earner for Barbados over the twenty six year period under discussion.

### *3.3 Other Services*

This category includes all those services not accounted for in the previous categories. Some of the items recorded under this heading include insurance services, financial services, computer and information services, communication services, construction services, management fees, cultural and recreation services, and miscellaneous business services.

Insurance services are further sub-divided in Barbados' Balance of Payments Publication into life insurance and pension funds, freight insurance (originally part of merchandise imports under the fourth edition) and other types of insurance (e.g. housing and marine). Presently, Barbados calculates insurance services based on the difference between premiums and claims. However, this is somewhat at variance with the Fifth Edition of the IMF Manual. Under this edition, life and non-life insurance are calculated differently.

In the case of non-life insurance, the service charge is recorded in the same manner (in Barbados)

as done for the exporter, but for the importer, insurance service charge is computed as gross premiums paid to non-residents insurers multiplied by the ratio of insurance services to gross premiums for exports of services. If claims exceed premiums for the export of insurance services, implying a negative service charge, then the service charge is calculated using a long-term relationship between premiums and claims. The difference between total premiums and the service charge is then treated as a current transfer.

As far as the insurance service on life insurance is concerned, the Fifth Edition states that service charges are a relatively small percentage of premiums. Hence, if this is the case, the service can be ignored altogether, otherwise ratios from Balance of Payments (BOP) compilers in the other countries can be used to determine this item. The difference between total premiums and the service charge in this case is treated as a financial transaction.

Financial services represent the most important item recorded under other services as far as Barbados is concerned. Such services comprise, for example, commissions and fees for letters of credit, financial leasing services, brokerage services, and the transactions of off-shore companies, which are of major importance to Barbados.

In the 1960s, the first fiscal incentives were introduced to Barbados to attract light industries such as assembly operations for the computer industry. The Government of Barbados was encouraged by the benefits of this initiative to develop an International Business and Financial sector as part of a strategy to widen the economic base and to generate additional revenues, foreign exchange and employment opportunities. However, according to the Ernst and Young (1994) Study, it was not until the mid-1980s that the industry began to develop rapidly, the result of, among other factors, the passing of legislation to govern the operation of Offshore Banks, Exempt Insurance Companies, Foreign Sales Corporations and Shipping Companies. In addition, the study reports that by the end of 1988 the number of incorporations in the International Business Sector totalled 966. International Business Companies (IBCs) accounted for 439, Foreign Sales Corporations (FSCs) 330, Exempt Insurance Companies (EICs) 153, Exempt Insurance Management Companies

as accounting, legal, advertising and marketing research, architectural, management consulting and other services not mentioned previously.

It is of some interest to examine some of the traditional and new components of other services to see how their foreign activities impact on foreign exchange movements in Barbados.

Some of the traditional components falling under this category are insurance services, communication services, management fees, agents' commissions and royalties and licence fees while the new ones comprise financial services, computer and information services construction services and personal, cultural and recreational services. Between 1970 and 1996, the balance on insurance services has been negative except on three occasions, emphasising the extent to which non-resident insurers have been penetrating the local market. Net outflows moved from a mere \$16 million in 1990 to \$63 million three years later, mainly because of rising insurance premiums introduced after a spate of disasters within that period.

Communication services have always been a net earner of foreign exchange for Barbados. Indeed this component picked up significantly in the mid-1980's when it was facilitated by the modernization of telecommunications facilities which made Barbados the regional leader in this field.

Barbados has received net foreign earnings from management fees during the period 1982 to 1992 but the pattern has been reversed since then, while with the exception of 1986 and 1989, net foreign exchange receipts have been received from agents' commission.

The new sectors have been performing excellently for Barbados to date. Financial services have provided Barbados with net foreign revenue of almost \$100 million within the last three years while an average of approximately \$35 million can be attributed to computer and information services. Although the foreign exchange from construction services and personal, cultural and recreational services can in no way be compared with the above the two services just discussed,

their activities still result in balance of payments credits to this country.

#### 4. THE LINKAGES BETWEEN SOME COMPONENTS OF NON-TOURISM SERVICES AND OTHER SECTORS OF THE BARBADOS ECONOMY

While transactions in non-tourism services will directly affect the BOP through the current account, their impact on the other sectors of the Barbadian economy cannot be overlooked and as such, some attempt will now be made to see how some of the main components of non-tourism services can be related to these other sectors.

Since the removal of port disbursements from the transportation account, this table is now dominated by outflows, thereby becoming a strain on Barbados' foreign reserves. Indeed, in 1981, transportation payments to non-residents were four times higher than inflows and this ratio has risen sharply ever since then to approximately nine times higher. The major items responsible for this level of expenditure undertaken by Barbadians are in the first instance, freight transport, and in the second case, passenger fares. Freight transport is linked directly to the trade account since it is estimated at 10% of total imports. However when an increase in imports occurs, it is reflected immediately in the non-traded sector since this is the sector which uses foreign exchange. It means that an indirect link exists between freight transport and the non-traded sector. In addition, rising imports would also affect the financial sector by way of a decline in liquidity either through an increase in private sector credit or reduced deposits, implying an indirect relationship between liquidity and freight. With a fall in liquidity in the banking system, there would be more reliance on Central Bank to finance Government's fiscal deficit. Freight and the fiscal account could also be connected if the movement in imports, and by extension, freight was due on one hand to higher wages and salaries which would affect current expenditure, or on the other hand to Government's capital works programme, which would impact on capital expenditure.

Passenger fares paid by Barbadians normally occur depending on individuals' level of income, deposits or credit availability. If this income originates from Government's wage bill, then the

(EIMCs) 39, and Off-Shore Banks (Obs) 5. Five years later, the number of licensed companies, as recorded by the Financial Services Unit of the Ministry of Finance, rose to 2,338. IBCs increased to 1,171, FSCs to 926, EICs to 190, EICs and EICMs to 190 and 19, respectively. By the end of 1996, the number stood at 4,137.

Since the 1990-92 recession, it was estimated that the off-shore sector had grown by an annual average of 3.3% and generated a significant number of jobs for Barbadians. In the mid-1980s, the sector employed approximately 21,300 persons or 22% of total persons employed. By 1996, the number of employed persons in that sector had increased by approximately 67% to 35,900 persons or 31.3% of the total employed labour force (see the Central Bank of Barbados Annual Report, 1996).

Companies incorporated under the IBCs Act are subject to rates of tax varying from 1% to 2.5% on income earned from their activities. Some of these activities include:

1. General trading of goods;
2. Financing;
3. Publishing;
4. Information or data processing; and
5. Manufacturing electronics.

EICs are exempt from Barbadian taxes and were first established in 1986. These companies are subject to strict reporting requirements and regulations. Audited financial statements must be filed with the Supervisor of Insurance, in addition to a report from the auditors stating whether the company has met the solvency requirements of the Act.

Offshore banks were established in Barbados in 1979 with the passing of the Offshore Banking Act. This genre of bank differs from a regular commercial bank in that it may not accept deposits from, or manage assets of residents of Barbados. As long as it is granted a licence to operate, the

Offshore bank is required to submit to the Central Bank of Barbados quarterly statements of its assets and liabilities and also any returns as may be requested by the Central Bank. The profits of Offshore banks are subject to tax rates ranging from 1% to 2.5%.

Foreign Sales Corporations are of US origin and are principally engaged in foreign trade transactions. These companies are not required to pay taxes in Barbados. Instead, they contribute to Government revenue through the payment of initial fees ranging from \$1025 to \$1525 in addition to licence fees of \$500 or \$1000, depending on their sizes.

Communication services include international settlements for the use of postal, telegraph, telephone and satellite services. Construction services cover construction and installation project work on a temporary basis. On the other hand, management fees take into consideration the share of branches in head offices, expenses of parent companies as well as payment for services under management contracts.

Computer and information services relate to hardware consultancy, software implementation (i.e. data processing, data base services, etc) and maintenance and repair of computers and other related equipment.

Other Business Services covers merchanting and other trade related services, operating leasing and miscellaneous business, professional and technical services. Merchanting is the purchase of a good by a resident from a non-resident and the subsequent sale of that good to another non-resident. During this process, the good in question does not enter or leave Barbados. The difference between the value of goods when acquired and when sold is the value of the merchanting services. In Barbados, the main sub-component of other trade-related services is agents' commissions. Operational leasing (which excludes financial leasing) is the rental of items such as aircrafts, cars, vessels (without crew) by residents to non-residents for limited purposes, such as a single voyage, particularly in the case of a vessel. Miscellaneous business, professional and technical services address transactions between residents and non-residents in services such

relationship between the fiscal position and passenger fares goes without saying whereas the other two items relate passenger fares to the financial sector.

With regard to the components of Government services (not included elsewhere), services provided by and to Barbados under aid programmes will also be included under current transfers. Earnings from real estate rentals by the Government of Barbados will be captured in the fiscal account under non-tax revenue while expenditure incurred by foreign diplomats in Barbados will result in a rise in domestic deposits, thereby leading to higher liquidity in the banking system. On the other hand, wage payments made by the Government of Barbados to foreign embassy employees in addition to the rental of its overseas embassy office form part of Government's current expenditure and reduce the level of domestic liquidity in the commercial banking system.

The final category, namely other services, comprises components which mainly serve either to increase domestic liquidity in the case of inflows or reduce liquidity where there are payments.

## 5. POSSIBLE DETERMINANTS OF NON-TOURISM SERVICES IN BARBADOS

Prior to making forecasts on non-tourism services, it is desirable that a brief discussion take place on some of the possible explanatory variables of this category. In the absence of any economic theory on this subject, the variables immediately coming to mind are the change in national income of Barbados and the USA, respectively, proxied the respective real gross domestic product (GDP) growth rates of these countries, total credit extended to various sectors in Barbados by commercial banks and relative prices (defined as the ratio of the consumer price index of Barbados to the consumer price index of its major trading partner, the USA).

One should expect a negative relationship between real growth GDP and net non-tourism services. This is the case because as real GDP growth expands, residents of Barbados have more income available to them, resulting in higher import demand and other services abroad. Due to the direct relationship between imports and freight transport, rising imports will lead to an increase in freight payments and coupled with a similar pattern in overseas services will lead to a rise in non-

tourism debits, thereby worsening the net non-tourism balance. On the contrary, an increase in real GDP growth of the USA should improve non-tourism services since more residents of the USA would be in a better position to purchase non-tourism services provided by Barbadians, which would improve non-tourism foreign receipts and the net non-tourism table.

A rise in total commercial bank credit to residents of Barbados would worsen the non-tourism services balances since firms and individuals would be in a better position to increase their purchases of commodities from abroad in addition to other components from overseas. An inverse relationship should occur between relative prices and non-tourism services since as the price of Barbados' products rise, assuming that the price of USA's goods remain constant, it would be more attractive for Barbadians to purchase products from overseas. This would have the effect of increasing non-tourism payments abroad, in the meantime worsening net non-tourism services.

### 5.1 Model Specification

In the absence of a well-defined theory of the determinants of non-tourism service activity in Barbados, several plausible explanatory variables and behavioural relationships were tried. Initially, each component of the non-tourism service sector (both on the credit and debit sides) was regressed on variables such as real and nominal GDP, both of Barbados and the United States, relative prices, tourist arrivals, and imports, but poor regression results were obtained for most components.

Our *a priori* expectations were then guided by the notion that the major movements in non-tourism service activity were mainly demand-side determined and driven by changes in the transportation and other services sub-sectors. With the bulk of activity in the transportation sub-sector arising from freight payments, then imports would be one of the likely explanatory variables of transportation payments. Others would include real national income of Barbados and commercial bank credit. Therefore, we can postulate a long-run model of the transportation sector as:

$$TRD = \alpha_1 + \alpha_2 Y_B + \alpha_3 IMP + \alpha_4 TC \quad (1)$$

where TRD represents transportation debits,  $Y_B$  is the level of real income of Barbados, IMP are total imports, and TC is total domestic credit by commercial banks. Transportation payments is expected to be positively related to all of the variables.

$$NTSN = N(Y_B, Y_{us}, TC); \quad N_{Y_B} < 0 \quad N_{Y_{us}} > 0 \quad N_{TC} < 0 \quad (2)$$

Formally, a provisional model of the non-tourism service sector can be represented where NTSN represents the net balance on the non-tourism service account,  $Y_{us}$  measures real income of the United States,  $Y_B$  and TC are described as before.

Increases in the real incomes of Barbadians, *ceteris paribus*, is expected to result in lower net earnings from non-tourism services since an increase in the purchasing power of Barbadians usually results in a higher demand for imports and services from abroad. Moreover, due to the direct relationship between imports and freight transport, higher imports leads to increased freight payments which has an effect of worsening the net non-tourism balance. On the contrary, an increase in the real income of the United States, *ceteris paribus*, should improve non-tourism services. This is because an improvement in the purchasing power of U.S. residents is expected to lead to higher non-tourism foreign receipts and a positive net balance. Higher disbursements of credit worsens the non-tourism service balance since individuals and firms usually increase their consumption of goods and services from abroad as a result of an expansion in credit.

### 5.2 Data and Variables

The data analyzed in this study are annual observations and span the last two and a half decades from 1970 to 1996. Our preliminary investigations of the non-tourism service sector were initially undertaken over the period 1980 to 1995, but the regression results were quite unsatisfactory.

This was probably because of the short length of the data series used in the regressions.

Various issues of the Balance of Payments of Barbados, -the Annual Statistical Digest, both published by the Central Bank of Barbados, and the International Financial Statistics were used to compile the data set. The series for the net non-tourism service balance was calculated as the difference between net revenue from total services and net earnings from tourism services. The real incomes of Barbados and the U.S.A. are estimated at base years of 1974 and 1990, respectively. Credit disbursed by non-bank financial institutions were not included in the data set since in our view, total commercial bank credit represents the major source of financing to the non-tourism sector. All estimations were performed using the quantitative software package Eviews 2.0.

### 5.3 Results

The Augmented Dickey-Fuller (ADF) test was used to determine the order of integration of each data series. This is a test of the null hypothesis of non-stationarity or a unit root [integrated of order  $d$ ,  $I(d)$ , where  $d \geq 1$ ] against the alternative hypothesis of stationarity [or integration of order zero,  $I(0)$ ]. In addition to this test, charts of the raw and differenced data as well as plots of the respective sample correlograms were also used as corroborating evidence of the order of integration. The ADF test employed different lagged structures as was necessary to eliminate any serial correlation in the residuals of each series.

The ADF tests as well as plots of the sample correlograms of the first differences of each variable indicate that all are  $I(1)$ . The OLS regression of model 1 is reported as equation 3. All of the variables have the correct a priori signs and the numbers which are shown in parenthesis directly under the variables are the respective "t" statistics.

$$TRD = -205.42 + 0.854IMP + 0.2694Y_B + 0.053TC \quad (3)$$

$$(-4.129) \quad (4.951) \quad (3.076) \quad (2.284)$$

$$R^2 = 0.97 \quad D.W. = 1.55 \quad S.S.E. = 10.5 \quad ADF = -3.3529 \quad (-3.029)$$

The Durbin Watson statistic does not indicate any first order serial correlation and the residuals are white noise. The results show that transportation payments are influenced most by merchandise imports. Indeed, the data also show that if real income of Barbadians and commercial bank credit remain constant, then a unit increase in imports is accompanied by a 0.85 unit increase in transportation payments. This result is not surprising since freight payments represent a significant percentage of transportation payments to non-residents. In the case of real income, the data indicate that if imports and commercial bank credit are held constant, twenty six cents out of every additional dollar to residents of Barbados will be used to pay foreigners who provide transportation while Barbadians will incur fifty three cents in transportation payments to foreigners out of every dollar in commercial bank credit extended to them, assuming that no changes occur to imports and real income.

The OLS regression of model 2 is presented as equation 4.

$$NTSN = -217.78 + 0.077Y_{US} + 0.0292Y_B - 0.2622TC \quad (4)$$

$$(-1.369) \quad (1.816) \quad (0.194) \quad (-2.737)$$

$$Adj R^2 = 0.63 \quad D.W = 2.05 \quad ADF = -5.2004 \quad (-2.9850) \quad PP = -5.1027 \quad (-2.9798)$$

In the case of equation 4, the data provide suggest that the variables which are significant in explaining net non-tourism services are real GDP of the USA and commercial bank credit. A

\$1 increase in commercial bank credit will result in a worsening of non-tourism services by twenty-six cents if all other explanatory variables remain constant whereas non-tourism services will improve by seven cents for each per unit-rise in real-GDP of the USA, provided that the remaining explanatory variables are unchanged.

### CONCLUSION

This paper has attempted to explain several issues which relate to non-tourism services in Barbados between 1970 and 1996. One of the important points of the study is that non-tourism services has, for the most part, been generally a net user of foreign exchange for Barbados. The main variables responsible for this development are freight, passenger services and insurance payments. One must therefore wonder whether non-tourism services can be relied on in the future as a replacement for tourism. The answer to this question is not obvious. Efforts were made to explain the short run dynamics of non-tourism services but the results were unsatisfactory. Therefore the long run impact is presented in the paper. Any future research in this area will therefore investigate the short run effects as well as forecasting by some appropriate time series technique, non-tourism credits and debits. By doing so, we will be in a better position to determine whether non-tourism services can sustain us in the long run.

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