

**SOME OBSERVATIONS ON NON-TOURISM SERVICES
IN BARBADOS FROM 1980 TO 1995**

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1. 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 flows. As the Barbadian tourism product matures to a stage where rapid growth is limited, it will become necessary to maximise 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 1980, 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 (that is, sales of stores and bunker fuel to ships and aircrafts) and investment income fell under this category. However, port disbursements are now treated under the category goods, while income from investment and personal sources are recorded under the income category which is a new table. 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.

This paper analyses the role of non-tourism services in the Barbadian economy over the period 1980 to 1995. Given the significant contribution of these services to foreign exchange earnings 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 organised as follows. Section 2 examines to some extent the components and definitions of the non-tourism service sectors, while section 3 describes the data sources and presents the time regressions results. A summary and conclusion then follow in Section 4.

2. 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.

2.1 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. In Barbados, such information is provided by airlines and shipping companies. Prior

to 1995, overseas travel by Barbadians represented the major transportation item on the debit side.

Freight transportation is a new 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 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. Therefore, any significant movements in imports will directly affect net transportation earnings.

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.

2.2 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.

2.3 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 is 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 (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, EIMCs to 190 and Obs to 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. Operating 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 as accounting, legal, advertising and marketing research, architectural, management consulting and other services not mentioned previously.

3. DATA AND RESULTS

The data analysed are annual observations over the sample period 1980 to 1995. Various issues of the Balance of Payments of Barbados were used to compile the data set. All estimations are performed in the statistical software package EVIEWS 2.0.

As mentioned earlier, transportation comprises passenger services, freight and other forms of transport, either by sea, air or any other forms. Actual data for these sub-components were obtained only for 1994, which has been one of the problems encountered with some items now occurring in the Balance of Payments. However, because information submitted for that year appeared to be a true reflection of transportation patterns in Barbados, the ratio of each sub-component to the respective category for 1994 was used as a guide in estimating prior years.

Problems were also experienced with the other services category. For example, data on the financial services sub-category, one of the new but important items highlighted under the new Manual, were particularly difficult to obtain for the years prior to 1995.

In this study, we estimated time regression models for each category of the non-tourism sector. This was done in order to infer their possible long run growth trend. The time variable was constructed as follows: the years 1987 and 1988 were assigned values of negative and positive one-half, respectively (that is, 1987=-0.5 and 1988=0.5). All those years prior to 1987 were given negative values beginning with 1.5, then 2.5, 3.5 etc. In other words, 1986=-1.5, 1985=-2.5, 1984=-3.5 and so on. Conversely, each year prior to 1988 was assigned a positive value (i.e. 1989=1.5, 1990=2.5 etc).

The time regressions estimates for each sub-component are reported in Table 1. Two important observations were noticed in the results.

First, the time variable was significant in explaining each sub-component. Second, and more important, non-tourism service outflows are anticipated to be higher than inflows, which is clearly not an encouraging sign for the economy.

TABLE 1
TIME REGRESSION RESULTS

DEPENDENT VARIABLE	CONSTANT	TIME
TRC	27.1 (11.063)	-1.57 (3.249)
TRD	167.8 (46.469)	5.15 (7.218)
GSC	47.4 (26.214)	1.43 (4.025)
GSD	26.3 (19.351)	1.39 (5.151)
OSC	211.7 (23.504)	14.6 (8.189)
OSD	157.1 (16.424)	11.3 (5.9905)
NTSC	286.2 (29.479)	14.44 (7.526)
NTSD	350.4 (29.444)	17.69 (7.527)

Notes: TRC = Transportation Credits, TRD = Transportation Debits, GSC = Government Services Credits, GSD = Government Services Debits, OSC = Other Services Credits, OSD = Other Services Debits, NTSC = Non-Tourism Services Credits, NTSD = Non-Tourism Services Debits. The figures in parentheses below the estimated coefficients are t-statistics.

In general, the time estimates suggest that over the long-run net receipts from each sub-category will be lower than net payments, with the exception of other services. Net earnings from transportation are estimated to decline by approximately \$3.6 million, which is not an encouraging sign for an economy heavily dependent on services for revenue. While this may appear discouraging for the economy, one cannot forget that some elements of tourism are included in transportation receipts. For example, tourist expenditure in Barbados from package tours are captured under transportation receipts. Against this background, a negative sign on the time coefficient of transportation receipts may imply that visitors may be more willing to undertake expenditure after arriving in Barbados (which is captured under travel) as opposed to a package tour arrangement (where the expenditure here is captured under transportation).

The positive signs on both time coefficients for Government services credits and debits, respectively indicate an estimated increase in Government's receipts from non-residents in addition to a rise in public sector payments to non-residents, with the latter being less desirable particularly from a fiscal perspective. Receipts from other services are expected to grow by \$14.6 million annually, whereas payments are estimated to rise by only \$11.3 million. This implies that for this category, Barbados will be a net earner of foreign exchange.

The time estimates for non-tourism services credits and debits suggest that over the long run Barbados should earn an additional \$14.4 million from non-tourist services flows, but will incur further expenditure of some \$17.7 million. The implications here are that a tremendous responsibility will continue to fall on the traditional sectors to earn foreign exchange for the country in future years. However, taking into consideration that earnings from financial services have been compiled for only one year, that is in

1995, and if these services continue to rise and be a leading component of the other services category, then net earnings from non-tourism services might make a more meaningful contribution to foreign exchange movements for Barbados than the data seem to suggest. In this regard, receipts from the offshore sector will be crucial in this exercise.

4. SUMMARY AND CONCLUSION

This paper has attempted to examine some aspects of non-tourism services flows in Barbados over the last fifteen years. Time regressions for each sub-component of the non-tourism service sector were performed in order to infer their long run growth trend. Using data from 1980 to 1995, it is shown that while Barbados is expected to be a net foreign exchange earner from other services, non-tourism services outflows are estimated to grow at a faster rate than inflows. This means that non-tourism services will be a net foreign exchange user for Barbados. Therefore, Barbados cannot afford to ignore the development of its traditional foreign exchange earning sectors (tourism, sugar and merchandise exports) if only in the interest of maintaining its foreign reserves. However, these conclusions must be taken with some caution since the performance of the offshore sector will be of great importance as to whether this prediction will hold.

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TABLE 2
TRANSPORTATION FLOWS
(BDS \$ MILLIONS)

YEAR	CREDITS	DEBITS
1980	48.3	125.7
1981	36.9	135.2
1982	43.5	137.3
1983	36.8	137.5
1984	39.8	141.2
1985	36.9	131.5
1986	35.5	168.4
1987	11.0	155.3
1988	14.1	168.2
1989	12.3	194.0
1990	13.1	191.4
1991	17.3	191.2
1992	18.5	156.9
1993	19.1	173.9
1994	28.8	194.6
1995	32.8	233.8

Source: Balance of Payments of Barbados, Central Bank of Barbados

TABLE 3
GOVERNMENT SERVICES (N.I.E)
(BDS\$ MILLIONS)

YEAR	CREDITS	YEAR
1980	27.4	1980
1981	39.9	1981
1982	35.3	1982
1983	31.1	1983
1984	42.7	1984
1985	36.8	1985
1986	51.9	1986
1987	60.5	1987
1988	56.7	1988
1989	52.6	1989
1990	53.4	1990
1991	47.2	1991
1992	56.9	1992
1993	53.9	1993
1994	57.2	1994
1995	45.5	1995

Source: Balance of Payments of Barbados, Central Bank of Barbados

TABLE 4
OTHER SERVICES
(BDS \$ MILLIONS)

YEAR	CREDITS	DEBITS
1980	99.9	78.0
1981	95.8	127.5
1982	127.5	103.8
1983	134.9	91.5
1984	144.1	103.4
1985	171.6	108.1
1986	186.9	129.9
1987	194.6	165.9
1988	200.1	111.8
1989	264.0	158.8
1990	224.5	184.4
1991	236.7	136.0
1992	221.9	148.1
1993	237.2	217.8
1994	335.1	285.5
1995	410.3	317.8

Source: Balance of Payments of Barbados, Central Bank of Barbados

TABLE 5
NON-TOURISM SERVICES
(BDS \$MILLIONS)

YEAR	CREDITS	DEBITS
1980	175.7	219.6
1981	172.6	242.0
1982	206.3	255.9
1983	202.8	248.1
1984	226.5	268.3
1985	245.2	262.5
1986	274.3	322.3
1987	266.1	351.0
1988	271.0	309.2
1989	328.9	377.9
1990	291.0	401.2
1991	301.2	347.5
1992	297.3	335.0
1993	310.2	438.6
1994	421.1	519.6
1995	488.6	584.3

Source: Balance of Payments of Barbados, Central Bank of Barbados

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