



**Assessing the
Direct Economic Impact
of
Cruise Tourism
on the Belizean Economy**

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Abstract

This paper analyzes the direct economic impact of cruise tourism in Belize by measuring direct payments from cruise ships and cruise visitors to domestic providers of goods and services, direct employment and government tax earnings. This assessment also looks at the distribution of the first round of spending among the various domestic suppliers selling directly to cruise ships and tourists. The study found evidence of market concentration where the majority of revenues accrued to the minority of tour operators and shop owners. This analysis also revealed that a substantial portion of cruise visitors' shopping expenditure goes on imported goods, representing an immediate leakage from the economy. The paper estimated direct employment in the cruise industry during the peak season and showed that the tax base was very modest. This paper is a first step towards developing multipliers for the local cruise industry so the indirect and induced effects of cruise tourism can be estimated.

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1.1 Introduction

The development of tourism in Belize was premised originally on the niche marketing of the country to high end, stay-over visitors interested in a pristine, natural, land and marine environment, otherwise known as eco-tourism. In the late 1990's, mass market, cruise tourism started up in Belize and experienced a relatively, short-lived phase of unanticipated, exponential growth in the early 2000's. The consequent pressures on tourism facilities, sites and regulatory capacity generated by these day visitors sparked controversial debates on the potential negative impact on the niche stay-over market segment, highlighted the problems arising from the lack of a cohesive, comprehensive, national framework for tourism/cruise development and raised questions on the actual net benefits accruing to Belize from mass market, cruise tourism.

Dwyer and Forsyth (1996) classify the measurement of tourism's economic impact on an area into three categories:

- direct effects
- indirect effects
- induced effects

The direct effects measure the changes in economic activity of entities selling directly to tourists and receiving the first round of spending. The indirect effects, arising from subsequent spending rounds, measure the changes in sales, income and employment created in backward linked firms that supply goods and services to those entities selling directly to tourists. Induced effects measure the increased sales, income and employment generated by households spending their wages and salaries (income) earned in tourism and supporting industries. Measurement of the indirect and induced effects of tourist spending usually necessitates the use of multipliers derived from an input/output table to estimate sales, income and employment arising from second and later spending rounds (Stynes J. Daniel, 1997).

Several data constraints limit the depth and accuracy of any analysis on cruise tourism's economic impact. Like many other countries, Belize lacks a Tourism Satellite Account (TSA) that collates the value added of tourism activities across all the standard industrial classification (SIC) sectors reflected in the production approach of the Gross Domestic Product (GDP). A crude estimate of tourism GDP could be obtained from summing the value added of the "Hotels

and Restaurants” category and that portion of the value added under the “Transport and Communication” category which captures the activities of tour operators and tour guides. Such an estimate, however, would provide only an aggregate number, as the Statistical Institute of Belize (SIB) does not currently collect information that would enable the separation of the value added attributable to the cruise and stay-over market segments. Furthermore, an input/output table on tourism has not yet been developed, so a credible source for deriving appropriate multipliers to estimate the indirect and induced effects of cruise tourism is lacking. Applying multipliers calculated for other countries even if these appear to have similar characteristics to Belize is also not recommended (Frechtling, Douglas, 1994).

Notwithstanding the preceding data limitations, two studies were done that assessed the economic impact of cruise tourism in Belize. The first was carried out in 2005 by the Centre on Ecotourism and Sustainable Development (CESD) of Stanford University in partnership with the INCAE Business School of Costa Rica, the Belize Tourism Board (BTB) and the Protected Areas Conservation Trust (PACT). The other study conducted in 2006 by Business Research and Economic Advisors (BREA) was funded by the Florida-Caribbean Cruise Association (FCCA) and 19 participating cruise destinations/governments¹.

A major objective of the CESD study was to examine the economic, social and environmental impacts of cruise tourism by conducting field surveys and relying on the results of visitor expenditure surveys undertaken for the Central Bank and BTB by the SIB. The total economic impact (the direct, indirect and induced effects) of cruise tourism was determined by estimating direct spending on tours (which excluded the commission that the cruise lines collected on the sale of tours onboard) and non-tours by cruise passengers and then applying a multiplier of 1.4 that had been estimated for the Costa Rican tourism sector. An anecdotal source was quoted for employment generated by cruise tourism of one out of every ten workers in the tourism industry. This study only captured part of the direct cruise spending in the country, since it ignored spending by the cruise ships and focused only on cruise passenger spending. Furthermore, measurement errors are introduced if the Costa Rican multiplier used is different from that

¹ The 19 participating destinations were Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cartagena-Colombia, Curacao, Costa Maya-Mexico, Cozumel, Dominica, Grenada, Key West, Martinique, San Juan – Puerto Rico, St. Kitts and Nevis, St. Lucia, St. Maarten, and U.S. Virgin Islands.

specific to the cruise industry in Belize, and this raises questions on the validity and meaning of the resulting gross economic impact (Frechtling, Douglas, 1994).

The objective of the BREA study was confined to analysing the economic impact of cruise tourism on Belize. This study, in contrast to that of the CESD, included expenditures by the cruise lines for port fees, navigational fees and all other expenses while in port and spending by the crew and passengers. It also factored in a leakage factor due to imports and estimated total employment and wage income generated by this broader measure of direct spending. The study's overall estimates of direct spending in 2006 were approximately 50.0% higher than the Central Bank estimates. The estimated multipliers of 1.55 for total employment and 1.54 for total income were developed from aggregated national statistics such as GDP, employment and average wage by SIC sector, as well as the importance of imports to the economy. If the estimates of direct spending are inflated, and the error in multipliers derived from aggregated national data is significant, then the total economic impact quantified in this study would likely be grossly overestimated.

Given the shortcomings of the previous studies and the data constraints, this paper will focus on assessing the direct effects of cruise expenditures on Belize as a first step in supporting further work to develop specific multipliers for the cruise industry. This analysis will look at the actual flows of money from market transactions in the first spending round, namely, direct payments from the cruise lines and cruise visitors to domestic providers of goods and services. It will also look at the distribution of the first spending round among the domestic goods and services providers. Estimates of direct employment, central government's tax receipts and leakages due to imports will be made.

This paper will proceed as follows:

- a brief description of the structure of the Belizean economy and the importance of tourism in the economy
- a description of the tourism policy framework
- a brief review of the growth of cruise tourism in Belize
- an analysis of the economic impact of cruise tourism based on its direct effects

- a conclusion highlighting the main findings of this paper and recommendations for more in-depth, future work

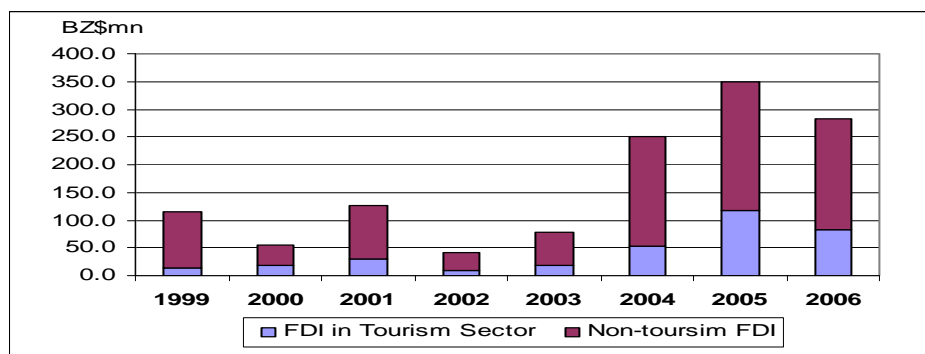
2.0 Structure of Economy and Importance of Tourism

With GDP of US\$1.1bn in 2006, Belize is a small, open economy, characterized by a narrow production base, heavy reliance on imports, small range of mostly primary, export commodities and a manufacturing capacity (excluding export sugar and citrus juice manufacturing) limited to production which can profitably meet the domestic demand of its small population base (0.3 million people in 2006).

Up to the 1980's, the country was highly dependent on sugar exports that accounted for more than 40.0% on average of domestic merchandise exports. Following the oil shock in the late 1970's and plummeting sugar prices in the early 1980's, the development of the tourism industry was encouraged as part of a general strategy to diversify the economy, increase foreign exchange earnings, generate employment and so improve the country's resilience to external shocks.

After more than two decades, some success in reducing dependence on sugar exports and in expanding the tourism industry was achieved. Sugar as a share of domestic exports went from 44.7% in 1984 to 18.4% in 2006 in response to higher production of other traditional exports such as citrus and banana and development of nontraditional commodities such as papaya, farmed shrimp and petroleum. Meanwhile, significant foreign and local investments into tourism since the 1980's have gradually raised its economic importance and have contributed to its current substantial level.

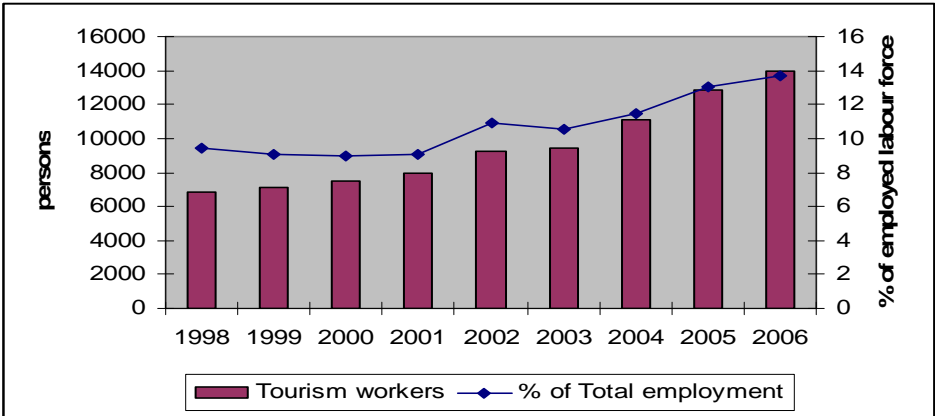
Chart 1: Foreign Direct Investment



Source: Central Bank of Belize

The results of the continued tourism expansions are evident. Foreign exchange earnings as a percent of exports of goods and services went from 5.8% in 1984 to 32.3% in 2006. Using the SIC categories of “Hotel and Restaurants” and “Transportation” to proxy tourism’s contribution to GDP, the industry averaged annual real growth of 6.8% between 1990 and 2006, with its real value added almost tripled from \$60.2mn in 1990 to \$172.4mn in 2006. Its share of GDP increased from 6.5% to 7.5% over the same period. Employment in tourism has risen steadily with time. Available data since 1998 showed that employment in tourism rose from one out of every 11 persons in 1998 to almost one out of every seven persons by 2006.

Chart 2: Employment in the Tourism Sector



Source: Statistical Institute of Belize

3.0 Policy Framework

3.1 Institutional Framework

The Belize Tourism Board (BTB) is the implementing arm of the Ministry of Tourism. Responsibility for planning, developing, promoting and regulating the growth of the tourist industry lies with this statutory body whose Board of Directors is comprised of private sector representatives and whose budget is funded through industry taxes. At least 71.0% of its revenue comes from the stay-over market by way of an accommodation tax. Revenue from cruise taxes contributed 23.8% in the 2006/2007 fiscal year, moving up from a mere 9.2% in 2005/2006 with an increase in the cruise head tax from US\$5.00 to US\$7.00. Marketing and product development accounted for approximately 72.0% (\$9.0 million) of total expenditures in 2006 (BTB, 2007).

In addition to the work of the BTB, Government provides assistance mostly through loan funded projects that address critical infrastructural constraints. Between 2000 and 2004, the Government, through a combination of loan, grant and counterpart funds, invested approximately US\$15.0 million to develop and improve a number of major archaeological sites and provide training mostly to tour guides and other service providers. Notably, the improvements to the archaeological sites were designed for a combined maximum of 300,000 cruise and stay-over visitors and did not cater for the explosive growth in cruise arrivals that began in 2002.

Various private sector associations, funded through membership fees, protect and lobby for their interests. The Belize Tourism Industry Association (BTIA) was initially set up as an umbrella organization for all service providers. Its membership includes various smaller associations such as the Hotel and Tour Guides Association. The Federation of Cruise Associations of Belize is a recently formed breakaway group consisting of some 800 members spread across 19 associations that include tendering, taxis, handicraft and transportation. The members of this federation did not want their interests diluted by biases in favour of stay-over market interests.

3.2 Policy Framework

Recognizing the need for a comprehensive framework and more pro-active approach to developing the tourism industry, the Ministry of Tourism commissioned the Blackstone Corporation in 1998 to develop a ten year strategy and action plan to stimulate economic growth, while protecting the country's environmental and heritage resources and ensuring benefits for the local people.

This first national tourism strategy recommended the continued niche marketing of the country to high-end spenders on an eco-tourism platform that promoted small scale, environmental, cultural and community tourism with strong inter-sectoral linkages. The Blackstone report considered and discarded a mass tourism scenario aimed at quadrupling arrivals to 400,000 by 2008, because it was felt that the environmental degradation and negative cultural impact could destroy the country's eco-tourism niche. Instead, the proposed strategy opted for a lower, average, annual growth of 4.0% or minimum target of 120,000 visitors by the end of the first 5 years and a minimum of 140,000 visitors by the end of 2008.

Three pitfalls undermined this strategy's effectiveness as a framework for tourism development. The strategy grossly underestimated the growth in stay-over tourists who numbered 177,120 by 2002 or year 5 of the strategy. Furthermore, focused solely on the stay-over market, the plan completely disregarded cruise tourism so the country was ill prepared to deal with its explosive growth. Finally, and perhaps most importantly, the strategy did not achieve full buy-in at the highest level of government. Consequently, ministries other than the Tourism Ministry did not incorporate their expected, contributory efforts into annual work plans and budgets, while regulatory and infrastructural developments lagged significantly behind the growth in tourist arrivals.

An updated national tourism policy (BTB, 2005) was crafted in 2005 that recommended the non-conflicting co-existence of the niche, stay-over and mass market, cruise segments. The policy assumed that cruise arrivals would stabilize at an annual rate of 1.0mn visitors and cautioned that the expansion of the cruise industry should not jeopardize Belize's status as an eco-tourism destination. It suggested that selected sites should be designated primarily as cruise visitors' sites or new sites catering specifically to the cruise market should be developed. Another recommendation was the immediate implementation of ceilings or capacity limits on the number of cruise visitors to designated sites. This policy also called for the development of a long term Tourism Master Plan (a plan of action, cutting across all government ministries and even some private sector stakeholders) to implement the recommendations suggested in the policy paper. To date, no sites have been designated specifically for cruise tourists, neither has capacity limits been adhered to and financing constraints have delayed development of the master plan. The Government, however, is currently seeking to secure a loan to finance tourism oriented infrastructural projects in selected destinations and to produce the tourism master plan. It remains to be seen if the needed multi-disciplinary buy-in will be obtained to implement the entire policy rather than just those sections that fall within the purview of the tourism ministry and the BTB, as happened with the 1998 strategy.

Belize also has a cruise tourism policy (BTB, 2003), whose purpose is to guide the development of this sub-sector in a sustainable and environmentally responsible manner, and whose stated objectives are:

- To increase the number of cruise ship calls and passenger arrivals in a sustainable manner based on properly researched acceptable visitation limits for the available tourism sites in Belize.
- To optimize the revenues generated from cruise passengers.
- To increase the overall benefits from cruise tourism by creating and strengthening inter-sectoral linkages, whereby cruise lines source needed supplies of goods and services from Belizean suppliers.
- To expand the absorptive capacity of the country by developing existing and new visitor attractions.
- To further develop present port facilities and to explore other ports
- To identify suitable anchorage sites on the coast of Belize.
- To develop and implement appropriate promotional programs that effectively convert cruise passengers to overnight visitors.

To maximize the benefits of cruise tourism on the local economy, the policy outlines the following requirements for cruise lines, the port agents and tour operators:

- Suspend all forms of entertainment activities on board while the cruise ship is in the port.
- Encourage shore visitation by passengers.
- Promote overnight stays and multiple destination visits to encourage and maximize visitor satisfaction.
- Utilize the services of a wide cross section of individuals and businesses across the country to prevent the creation and growth of monopolies.
- Encourage the creation of unique local activities that will enrich the visitor experience.

Notwithstanding the existence of this policy, the sentiment is widely felt especially among the stakeholders in the stay-over market that the explosive growth of cruise tourism has put at risk the country's niche positioning as a high-end provider of an eco-based tourist experience, and its development has not proceeded in a sustainable and environmentally responsible manner. An example cited is the raising of the daily limit for disembarkations from 3,000 to 8,000 cruise passengers to accommodate the surge in arrivals with little or no effort to minimize the subsequent, negative effects of too many tourists at the various tourist destinations. Furthermore, the benefits achieved from the requirements placed on the cruise lines, port agents and tour operators have been below expectations. The cruise ships generally only promote and sell tours onboard for a hefty mark-up. The Carnival website explicitly recommends that guests do not buy excursions, tours or activities that are not sold through Carnival. Vendors who work just outside the gates of the entry facility for cruise visitors - called the Fort Street Tourism Village (FSTV) - complain that cruise passengers regularly comment that the ship crew advise them to buy tours, merchandise or services onboard ship or from vendors within the FSTV. The efforts geared

towards converting cruise tourists into stay-over visitors have been only mildly successful, as survey data revealed that approximately only 5.0% of overnight visitors came previously to Belize on a cruise ship.

4.0 Growth of Cruise Ship Tourism in Belize

Between 1998 and 2006, cruise ship visitors surged from 14,183 to 655,931, with the growth spurt concentrated between 2002 and 2004 and peaking in the latter year.

With the initial focus being on the high-end, stay-over, eco-based tourism, the BTB placed little emphasis on the mass market, cruise tourism until the latter half of the 1990's when the BTB and local cruise port agents began to lobby to attract major cruise lines to the country. Part of these efforts included the reduction of the cruise passenger head tax from US\$10 to US\$5 in 1998. The noticeable increase in cruise tourists started with small cruise ships (average carrying capacity below 1,000 passengers per ship) which the limited infrastructure could accommodate at the time.

Table 1: Stay-over Tourists and Cruise Ship Disembarkations to Belize, 1998 -2006

Tourist Arrivals	1998	1999	2000	2001	2002	2003	2004	2005	2006
Stay-over ¹	154,928	159,744	172,451	176,033	177,120	209,179	220,359	227,036	237,839
Cruise Ship	14,183	34,130	58,131	48,116	319,690	575,196	851,436	800,333	655,931
Total Arrivals	169,111	193,874	230,582	224,149	496,810	784,375	1,071,795	1,027,369	893,770
Cruise ship % of Arrivals	8.4	17.6	25.2	21.5	64.3	73.3	79.4	77.9	73.4
Cruise Ship Port Calls	25	52	70	48	200	315	406	370	295

Source: *BTB Tourism & Travel Statistics 2006, Central Bank of Belize*

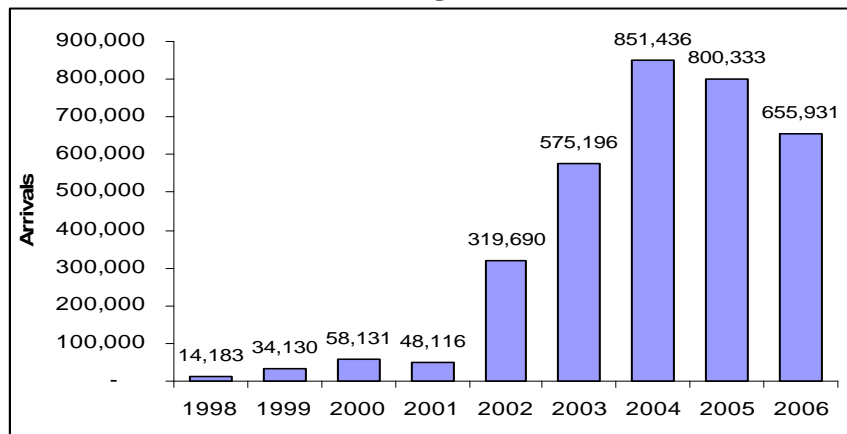
1. Reflects Central Banks adjusted stay-over arrivals to account for multiple entries.

By 2000, three cruise lines, including Norwegian and Carnival, were operating in Belize, and cruise disembarkations had tripled from 8.4% of total tourist visitors in 1998 to 25.2% by 2000. The bankruptcy of one of the cruise lines led to a temporary dip in disembarkations in 2001. In 2002, however, a number of fortuitous circumstances combined to cause explosive growth where visitor numbers surged from 48,116 to 319,690, and port calls rose from 48 to 200. The opening of the FSTV in late 2001 provided facilities that could accommodate larger flows of cruise tourists. With Belize's allure as its multi-faceted marine and land attractions, Royal Caribbean

came into the market in 2002 and lobbying efforts to encourage more port calls from existing cruise lines continued. Concurrently, security concerns of American citizens raised by the terrorist attacks of September 11, 2001, caused several cruise lines to redirect their ships from the Mediterranean to the Caribbean. The net result was the start of year round port calls in 2002, a major shift from the previous seasonal arrivals of ships between October and April/May. That year also set the present trend of cruise ship disembarkations far surpassing stay-over arrivals.

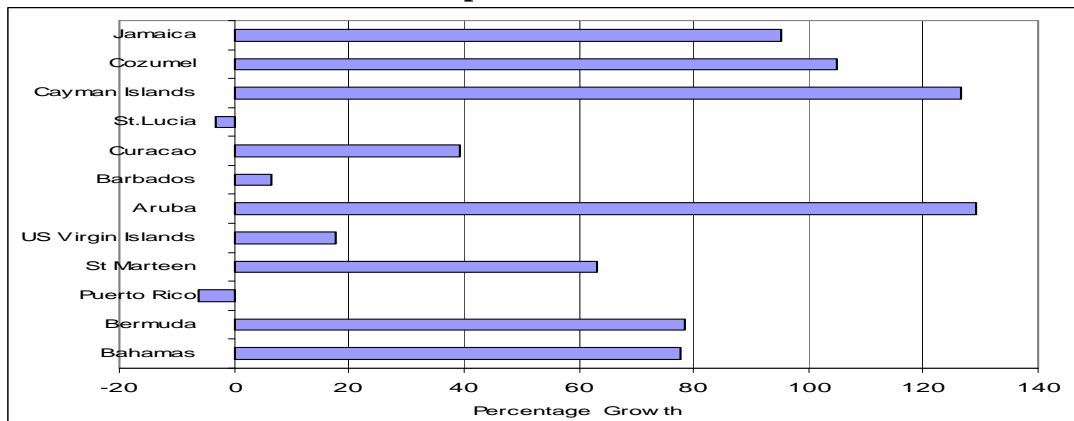
Over the next two years, disembarkations more than doubled, peaking at 851,436 visitors with port calls numbering 406. In the subsequent two years, disembarkations declined due to the extremely active hurricane season in 2005 and the redeployment of ships to the Mediterranean. Notwithstanding the declining trend since 2005, future plans to build a cruise ship docking facility by 2009 could well stoke another growth surge.

Chart 3: Cruise Passenger Arrivals, 1998-2006



The surge in cruise traffic was not confined only to Belize. Cruise ship arrivals to the Caribbean region grew by 66.9% to 1.8 million between 1998 and 2006 (Caribbean Tourism Organization, 2007). In comparison, Belize’s growth was a forty-five fold increase during the same time frame, equivalent to an average annual growth of 61.5%. As was the case with Belize, most of this growth occurred after 2001. Excepting Puerto Rico and St. Lucia, arrivals to all major destinations increased with the Bahamas, Cozumel and the Cayman Islands together accounting for almost half of this total growth.

**Chart 4: Change in Arrivals for Selected Caribbean destinations
2006 Compared to 1998 Arrivals**



Source: Caribbean Tourism Organization (CTO)

Belize’s cruise ship industry is dominated by three major cruise lines: Carnival, accounting for about 50.0% of the total passenger arrivals, followed by Royal Caribbean and Norwegian with each accounting for about 20% of total arrivals. Other smaller cruise lines (such as Aida, Costa Cruise, Fred Olson Cruise, Festival Cruise, Regal Cruise, and Royal Olympic Cruise) make up the remaining 10%.

Notwithstanding the start of year round port calls in 2002, distinct high and low seasons occur. The high season runs from November to April while the low season typically runs from May to October with September having the lowest arrivals.

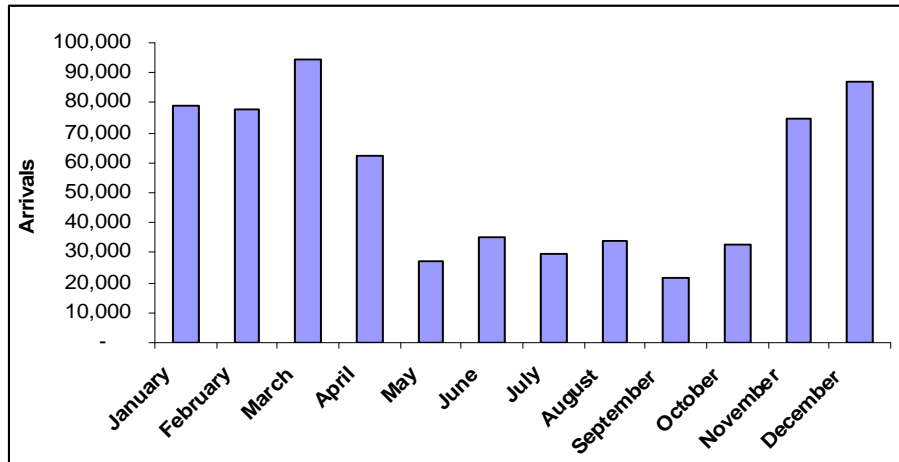
Table 2: Monthly Cruise Passenger Disembarkations to Belize, 1998-2006

Tourist Arrivals	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	-	2,926	10,485	4,653	18,448	56,689	94,861	94,774	79,077
February	1,779	3,579	11,665	7,584	19,056	48,172	87,532	96,667	77,569
March	975	3,725	13,271	8,648	21,822	54,151	89,807	122,802	94,631
April	692	5,526	6,695	3,517	23,989	46,401	72,260	73,327	62,399
May	-	2,489	4,750	-	22,973	24,413	50,642	48,013	27,346
June	167	-	899	-	17,473	33,623	57,160	55,432	35,335
July	83	-	-	-	20,502	30,602	56,794	33,140	29,443
August	-	-	-	-	16,072	38,809	57,018	48,518	33,875
September	100	-	-	-	23,095	31,430	45,132	32,554	21,431
October	873	2,302	696	-	33,810	47,356	58,961	23,481	32,551
November	2,387	2,145	3,648	8,548	46,377	70,377	77,579	73,175	74,960
December	7,127	11,438	6,022	15,166	56,073	93,173	103,690	98,450	87,314
Totals	14,183	34,130	58,131	48,116	319,690	575,196	851,436	800,333	655,931

Source: BTB Tourism & Travel Statistics 2006

The disembarkation rates were between 85% and 90% in 2006.

Chart 5: Monthly Cruise Passenger Arrivals to Belize in 2006



5.0 Direct Economic Impact Analysis

5.1 Cruise Industry Market Structure

The direct providers of goods and services to the cruise ships and cruise visitors are as follows:

Buyer of Goods and Services

Cruise Ships

Cruise Visitors

Direct Providers of Goods and Services

Belize Port Authority
 Port of Belize Limited (PBL)
 Port Agents
 Tender service providers

Tour operators
 Fort Street Tourism Village
 Tourism Zone
 Tour Guides

The Belize Port Authority, a regulatory body, and PBL are the first contact points for cruise ships entering Belizean waters. The regulatory body charges fees for services such as harbour anchorage, navigational aids, the boarding/clearing of vessels and security checks. The PBL charges for pilotage. The lack of portside docking facilities causes cruise ships to anchor about five miles offshore between early morning and late afternoon, when they leave.

Port agents are shipping agents who have been contracted by the cruise lines to act as their local agents that provide the ships with supplies, organize and supervise tendering services, make provision for medical services to crew and passengers and assist with immigration issues, among other things. The port agents are listed below.

Table 3: Belize City Port Agents for Cruise Lines

Cruise Line	Port Agent
Carnival Others -Aida, Costa Cruise, Fred Olson Cruise, Festival Cruise, Regal Cruise, and Royal Olympic Cruise	EuroCaribe Shipping Service Ltd.
Royal Caribbean	Marine and Service Ltd.
Norwegian	Caribbean Shipping Agencies Ltd.

Tendering services are provided by boats that ferry passengers to and from the large cruise ships to the FSTV. Presently, about 20 boats are in operation with capacities ranging from 80 to 200 passengers. The port agents rotate the use of tender service providers. Nine of the tenders are owned or controlled by two of the port agents, one is owned by Royal Caribbean Cruise Lines, and the rest are owned by other Belizean entrepreneurs.

The sale of tours is done onboard the cruise ships, onshore and through the internet. Four large tour operators, controlling most of the market, sell tours directly to the cruise ships at a fixed, wholesale price negotiated every two years. The cruise ships add markups that range from 80% to over 100% and sell these tours onboard or through their website. The purchase contract between the cruise lines and these large tour operators avoids direct competition between the two by preventing the latter from selling their tours onshore or through the internet. Some of these operators still sell tours mostly through the internet under a different company. The large operators indicated during interviews that competition among themselves to capture a larger share of the onboard market has caused a decline in their average wholesale prices, and their profit margins under the two year fixed price arrangement have been squeezed in recent years by the surge in fuel and other operating costs.

The other 51 licensed tour operators located in the mainland Belize district are a medley of small operators who sell tours onshore or through the internet. Most of the onshore tours are bought from tour companies operating in the FSTV; the minority is sold by very small “one taxi or van”

operators doing business in the tourism zone. Tour operators selling through the internet are a combination of large and small companies.

The FSTV was built specifically as the entry point for cruise visitors. Prior to its construction, cruise passengers travelled from their cruise ships on small boats or tenders that docked at the pier of a major hotel. The FSTV has four terminals and court yards with approximately 37,000 square feet of rental space which includes duty free stores, jewelry shops, arts and craft stores, souvenir shops, restaurants, pharmacies, banks and tour service companies, among other amenities, all catering to cruise tourists. It is “anchored” by four or five “preferred” shops, including Diamonds International. In 2006, some 112 businesses operated on the premises. Security measures include a fence around the entire compound and security guards that allow only tourists and employees of the businesses in the village to enter the premises.

In December 2000, the local investor who built the tourism village signed a 15-year exclusive license/agreement with the Government and the BTB. The key benefits of this exclusivity were in designating the tourism village as the only gateway for disembarking cruise passengers and as the recipient of US\$4 out of the US\$5 cruise head tax. Out of its share of the head tax, the tourism village was to pay BZ\$0.4 million annually to the BTB. Prior to this, the head tax had been shared between the BTB (US\$4) and PACT (US\$1). In addition, the BTB was to have a seat on the company’s Board of Directors. Furthermore, concessionary rates for a special area in the tourism village were to be provided to small operators such as land taxis and arts & craft vendors that had been using a nearby public park as their business base. The tourism village started operations in October 2001, in time for the start of the 2001/2002 cruise ship season. In 2004, it was bought over by Royal Caribbean Cruise Lines and Diamonds International Ltd. with the 15-year exclusive agreement and benefits transferred to these foreign investors.

The FSTV key benefits under the 15 year exclusive agreement spawned controversy and have been major stumbling blocks to other entrepreneurs, Port of Belize Limited and the Stake Bank developer, interested in developing other gateways with needed portside docking facilities. The FSTV has legally contested challenges to their exclusivity, particularly as the Government itself, in light of the threat from the cruise lines to pull out of Belize if a portside docking facility is not

provided by 2009, seemed to back track on its agreement by granting approvals or supporting the other entrepreneurs in their project bids.

The tourism zone is the area immediately outside the gates of the FSTV, along the adjacent streets. In this zone, individuals that for lack of rental space or who cannot afford the cost of rental space within the FSTV ply their trade in makeshift tents along the sidewalks leading to the downtown area of Belize City. The businesses in this area consist of mostly arts and crafts vendors, hair braiders, food vendors and very small, self-employed, tour operators who own small cars/taxis or 8 to 10-seater vans. While the number of entities working in the tourism zone fluctuates during the high and low seasons, information from the Belize City Council indicated that approximately 139 providers of goods and services operated during the 2006 peak season.

Tour guides are hired by the tour operators to accompany each tour expedition. The cruise ship policy requires one guide to every 15 tourists for land tours and one guide to every 8 tourists for marine and caving tours. In 2006, there were 1,145 licensed tour guides, of which some 52.8% mostly catered to cruise tourists.

5.2 Measurement of Direct Economic Impact

An economic impact analysis traces the flows of tourism spending in a region or country to identify changes in sales, tax revenues, income and jobs due to tourism activity (Stynes J. Daniel, 1997). To assess the impact of the first spending round on the cruise tourism industry, the following basic questions will be answered:

- How much money is earned in Belize from cruise tourism? This analysis will only quantify the money earned by the direct domestic providers of goods and services and will exclude the commission earned by cruise ships on tours which they sell.
- How is this expenditure distributed among the various domestic providers of goods and services? This will indicate if the domestic supply of goods and services to the cruise market is highly concentrated among a few, large businesses or distributed reasonably across the spectrum of domestic suppliers. An estimate will be made of the leakage attributable to the high import content of the mix of goods purchased by tourists.
- What is the direct employment generated by the cruise industry?
- How much tax revenue is generated from cruise tourism?

5.2.1. Direct spending by cruise ships and cruise visitors

The revenue earned in Belize from the direct spending of cruise ships and cruise visitors consists of cruise visitor expenditure, cruise passenger head tax, port fees paid to the Port Authority and PBL and cruise ship spending on port agents and tendering services.

The bulk of earnings come from visitor expenditures on tours, shopping and a gamut of services. Estimates of visitor expenditure were derived from a cruise visitor expenditure survey conducted in 2006 on behalf of the Central Bank of Belize and the BTB. This survey was done by placing questionnaires in the cabins of selected ships. The survey forms were completed by cruise passengers at their leisure after leaving the country. The forms were collected upon the return of the ships. This exercise yielded 438 completed survey forms, from which an average expenditure of \$111.40 per passenger was calculated. The latter expenditure excluded the commissions that the ships charged on tours which they sold.

The cruise head tax in 2006 was US\$7 per passenger.

Port fees are charged on a per ship basis. Information from the BTB and the Port Authority was used to estimate the fees collected in 2006.

Other expenditures of cruise ships are generally restricted to payments to their port agents and for tendering services. No backward links have been developed to date to supply cruise ships with food or any of their other needs. The cruise lines pay their port agents a negotiated fee for each port call. Consultations with the port agents indicated that an average charge per cruise ship port call was approximately \$1,100. Regarding charges for tendering services, discussions with the port agents and some providers of tender services approximate the average charge for tendering a cruise passenger at \$15.

In summary, direct spending by cruise ships and visitors in 2006 was estimated at \$92.1 million, the breakdown of which is given in Table 4. Visitor and cruise ship expenditures accounted for 71.4% and 28.6%, respectively, of all direct spending

Table 4: Direct Spending by Cruise Lines and Cruise Visitors in 2006

Spending category	BZ\$	Percent
Cruise visitor expenditure	\$65,762,288	71.4
Cruise head tax	\$9,183,034	10.0
Port fees	\$3,461,559	3.8
Port Agent fees	\$324,500	0.3
Tendering	\$13,406,550	14.5
Total revenues	\$92,137,931	100

5.2.2 Distribution of Direct Spending

5.2.2.1. *Distribution of the Cruise Passenger Head Tax*

The distribution of the head tax has been dictated by government agreement and is summarized in Table 5. Between 1998 to September 2001, the US\$5 head tax was divided between the BTB and PACT in a 4:1 split. After this period and up to 2004, the split remained the same but the FSTV received the US\$4 and only paid the BTB \$0.4 million per year from its share. Beginning 2005 with the increase in the cruise head tax from US\$5 to US\$7, the split consisted of US\$4 to the FSTV, US\$1.60 to the BTB and US\$1.40 to PACT. In 2007, the Belize City Council challenged the government on the sharing of the head tax which resulted in the FSTV, BTB and PACT each contributing US\$0.33 into a Belize City Tourism Development Fund for a total of US\$0.99. The smaller share of this tax going to PACT (20.0% in 2006) and the BTB (22.9% in 2006) severely limit their serious efforts to maintain, improve and protect the tourist infrastructure. Conversely, the FSTV share, at 57.1% in 2006, will allow the recovery of its investment costs long before the end of the 15 year agreement, after which its share will represent supernormal profits for the foreign investor.

Table 5: Distribution of Cruise Passenger Head Tax: 1998-2006

	Cruise Passenger Head Tax (BZ \$)	FSTV	PACT	BTB
1998	141,830	-	28,366	113,464
1999	341,300	-	68,260	273,040
2000	581,310	-	116,262	465,048
2001	481,160	189,712	96,232	195,216
2002	3,196,900	2,157,520	639,380	400,000
2003	5,751,960	4,201,568	1,150,392	400,000
2004	8,514,360	6,411,488	1,702,872	400,000
2005	11,204,662	6,402,664	2,240,932	2,561,066
2006	9,183,034	5,247,448	1,836,607	2,098,979
Total	39,396,516	24,610,400	7,879,303	6,906,813

5.2.2.2. *Distribution of Port Fees*

Following the pattern of the head tax, the majority of port fees have gone to the private company and owner of the port, PBL. In 2006, pilotage fees (76.7% of all port fees) went to PBL and the Port Authority received the remainder.

Table 6: Port Fees⁽¹⁾ (\$BZ)

FEES	2002	2003	2004	2005	2006	TOTAL
Harbour Fee for Anchor	80,000	126,000	162,400	148,000	118,000	634,400
Navigational Aid for Lights	175,000	275,625	355,250	323,750	258,125	1,387,750
Boarding & Clearing of Vessel	25,000	39,375	50,750	46,250	36,875	198,250
Pilotage Fees	1,800,000	2,835,000	3,654,000	3,330,000	2,655,000	14,274,000
Security Fees per passenger	191,814	345,118	510,862	480,200	393,559	1,921,552
TOTAL	2,271,814	3,621,118	4,733,262	4,328,200	3,461,559	18,415,952

(1) Port fees were estimated using an average fee charged per ship as provided by BTB.

5.2.2.3. *Distribution of Visitor Expenditure*

Results from the 2006 expenditure survey indicated that on average approximately 59.5% (\$39.2 million) of cruise passengers' expenditure went on tours, another 32.1% (\$21.1 million) was for shopping and the remaining 8.4% (\$5.5 million) went on other miscellaneous items, mostly services such as entertainment, restaurants, taxis and hair braiding. This spending pattern is some indication that Belize is not considered a shopping port, unlike other destinations such as Cozumel, and that the country's main attraction and strength is the variety of tours on offer.

Table 7: Breakdown of 2006 Cruise Passenger Expenditure

Category of Spending	Amount Spent Per Passenger (\$BZ)	Total Cruise Expenditure (\$BZ)	Percentage of Total Expenditure
Tours	66.33	39,157,113 ⁽¹⁾	59.5%
Shopping	35.70	21,075,063	32.1%
Other	9.37	5,530,112	8.4%
Expenditure	\$111.40	\$65,762,288	100%

⁽¹⁾ Markup that cruise ships earn from the sale of tours is not included in this number. This markup ranges from between 80% to over 100% above the wholesale price of a tour sold by the local operator to the cruise ship.

Tour Spending

The \$39.2 million spent on tours was distributed among the large tour operators (those selling onboard), small tour operators (those selling onshore) and businesses selling through the internet. Information from the 2006 expenditure survey indicated that 76.2% of disembarking cruise passengers bought tours. Of those who bought a tour, 69.5%, 15.5% and 15.0% bought tours onboard, onshore and through the internet, respectively.

Using an average tour price for onboard, onshore and internet tours obtained from the expenditure survey, the total expenditure on each type of tour was obtained by multiplying the number of persons buying that tour type by its corresponding average price.

The resulting distribution of tour spending for 2006 is summarized in Table 8.

Table 8: Earnings by Tour Operators in 2006

Tour Operator (number)	Number of tourists that bought tours	Average Tour Price (US\$)	Average Tour Price (\$BZ)	Total Expenditure (\$BZ)	Percent of Tour Expenditure
Large Operators (4)	312,195	42.72	85.44	26,673,941	68.1
Small Operators (51)	69,527	33.02	66.04	4,591,563	11.7
Tour Operators via Internet	67,908	58.10	116.21	7,891,609	20.2
Total	449,270			39,157,113	100.0

The average tour prices corroborate discussions with tour operators and observations on the ground. Small tour operators are not organized, compete intensively among themselves and consequently offer the lowest tour prices. Internet sellers have sufficient resources to invest into internet marketing, a tool that allows them to plan more effectively to meet and satisfy the needs

of their customers. Their tour prices are the closest to that of the cruise ships. The concentration of market power was clearly evident in the sale of tours where 7.3% of the operators controlled at least 68.1% of the revenue, while the majority (92.7%) accounted for a market share of at least 11.7%. (Information was not available to allocate internet sales between the large and small operators.).

Shopping and Other Miscellaneous Expenditures

Shopping by cruise visitors amounted to \$21.1 million in 2006. This expenditure was distributed among the FSTV (which includes duty-free shopping), in the tourism zone immediately outside the FSTV, in other areas of Belize City and at the various tour destinations.

A survey of the various zone workers conducted in mid 2007 was used to estimate the 2006 shopping expenditures within the tourism zone, in other areas of Belize City and at the tour destinations. The survey covered both goods and services providers.

Table 9: Coverage of Tourism Zone Survey

Category	# of Individuals	# of Individuals Interviewed
Arts and Craft	33	18
Food Vendors	4	1
Hair Braiders	21	4
Taxi Operators	39	5
Horse & Carriage	2	2
United Tours Union	38	4
Other	2	2
All Categories	139	36

Average earnings in the low and high season for goods vendors in the tourism zone were used to calculate the annual shopping expenditures in the zone for 2006. This was doubled to account for shopping at tour destinations and in other parts of the City based on indications from workers in the tourism zone that this area attracted a significant share of tourist expenditures on goods and services done outside the FSTV. The value of all shopping outside the FSTV was subtracted from the \$21.1 million to provide the shopping expenditures that occurred within the FSTV.

Other expenditures of \$5.5 million by cruise visitors during 2006 were mostly spending on restaurants, taxi services, hair braiding, entertainment and a gamut of miscellaneous services in the FSTV, tourism zone, other areas of the City and at tour destinations. Income information on

service providers obtained from the tourism zone survey was used to calculate the revenue earned during 2006 by workers in this area. This was doubled to account for earnings elsewhere, other than the FSTV. Like shopping expenditures, the value of all services expenditures outside the FSTV was subtracted from the \$5.5 million to estimate the share of expenditures accruing to the FSTV businesses.

The distribution of cruise visitor spending on shopping and miscellaneous services is summarized in Table 10.

Table 10: Distribution of Shopping and Other Expenditures

Area (number of businesses)	Shopping BZ\$ million	Percent of total	Other expenditures BZ\$ million	Percent of total
FSTV (112)	20.1	95.3%	4.7	85.5%
Tourism Zone/other (>139)	1.0	4.7%	0.8	14.5%
Total	\$21.1	100%	5.5	100%

The results confirmed that most of the non-tour expenditures on goods and services by cruise visitors took place in the FSTV that represented less than half of the total domestic suppliers. Only 4.7% of shopping and 14.5% of other expenditures occurred outside the FSTV.

Leakage Due to Cruise Visitor Shopping

Shopping by cruise visitors is the purchase of locally made and imported goods. Imported goods represent an immediate leakage from the country. Excluding the cost of imported goods from cruise visitors' shopping expenditures yields direct sales, which is defined as the local final demand accruing to the country for the payment of wages, rent, profits and taxes.

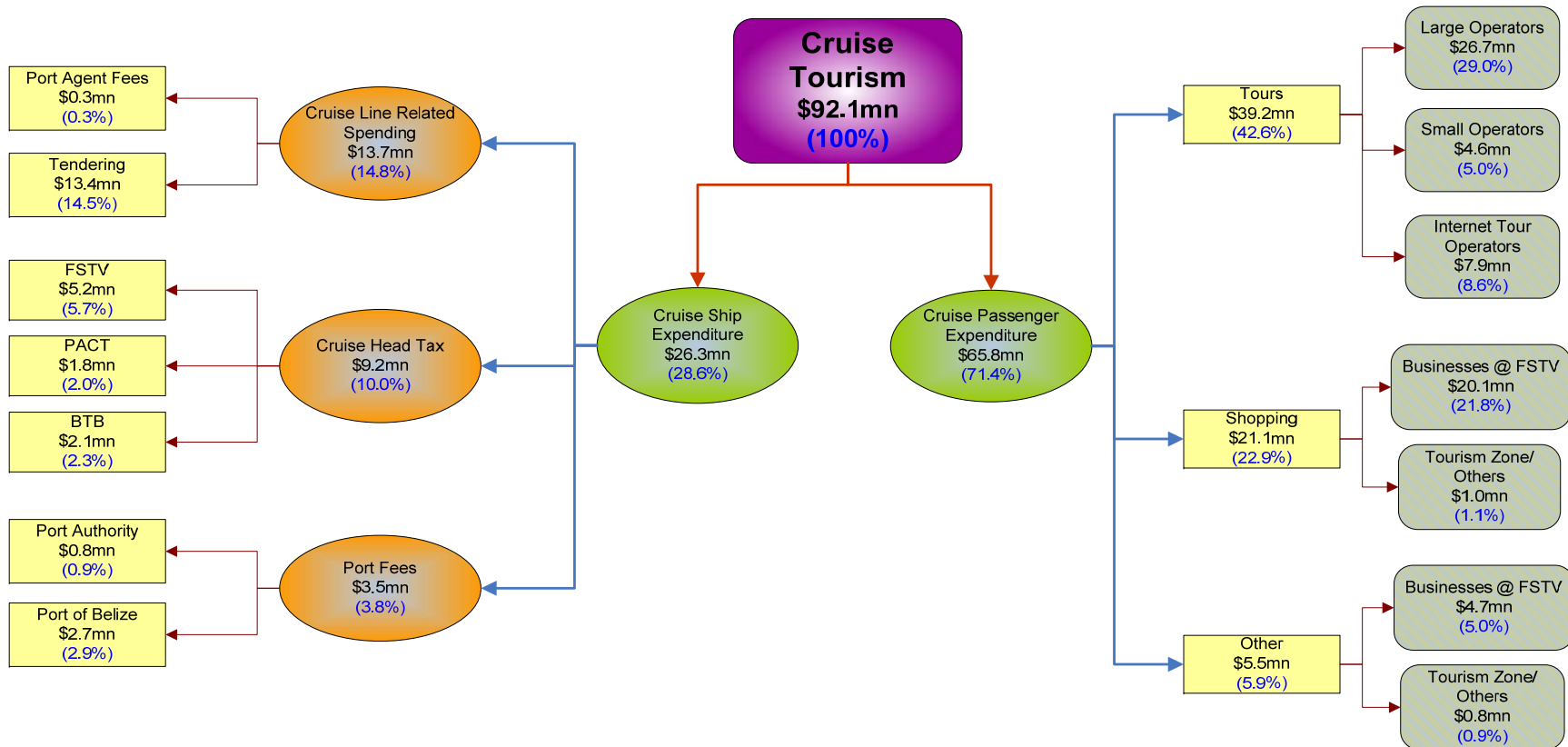
The bulk of the shopping takes place in the FSTV where a significant share of the goods sold is imported. The major "anchor" store, Diamonds International, sells all imported luxury items. A survey of stores in the FSTV indicated that approximately 10% of the sale volume generated by the FSTV businesses is from locally produced goods and 90% is from imports. The survey of the tourism zone indicated that the goods sold in this area were virtually all local products. Direct sales were therefore only calculated for visitor shopping in the FSTV since sales elsewhere were assumed to represent local final demand.

Direct sales were derived by adjusting shopping expenditures in the FSTV for the general sales tax (10%). The resulting gross value of turnover was separated into local product and import product sales. Using an average of 70% for the import content of retail sales obtained from the national accounts for the “Wholesale/retail trade” SIC category, the estimate of the import content of cruise visitors’ shopping expenditures in the FSTV was \$11.5 million on total sales of \$20.1 million. Direct sales therefore amounted to \$8.7 million or only 43.3% of the FSTV shopping expenditures and \$9.7 million on total shopping expenditures of \$21.1 million.

Distribution of Direct Spending

Chart 7 summarizes the distribution of the direct spending by cruise ships and cruise visitors. The major beneficiaries of the cruise industry are the businesses in the FSTV, the large tour operators, and the tender operators. The tour market showed clear evidence of market concentration with 7.3% of operators controlling 68.1% of the revenues. Approximately 93.2% of non-tour expenditures by cruise visitors accrued to the FSTV businesses which represented less than half of all the businesses/persons providing goods and services to the cruise tourists, indicating that the majority of domestic providers of goods and services were marginalized. Of note as well, is the small share of the cruise head tax going to the BTB which is a constraint on its investment efforts to improve the cruise tourism product and effectively regulate.

Chart 6: Distribution of First Spending round among Goods & Services Providers, 2006
(BZ \$ million (mn), % of total direct cruise spending)



Total Direct Cruise Expenditure in 2006 = \$92.1mn
Of Which: Total Direct Sales from Shopping = \$9.7mn
 Leakages from Shopping = \$11.5mn

5.2.3 Direct Employment from Cruise Tourism

Based on the tourism zone survey data and interviews with the FSTV management, the businesses/persons working in the tourism zone, tour operators, port agents and other industry insiders, it was estimated that the direct employment attributed to cruise tourism amounted to approximately 1,750 persons during the peak season. This represented about 12.5% of the total 2006 employment in tourism reported by the Statistical Institute of Belize. While some of these businesses also dealt with stay-over tourists, the field survey/interviews indicated that the volume of such business was negligible. During the low season, it is estimated that employment may be halved.

Table 11: Direct Employment from Cruise Tourism in 2006

Employment by Operations	Employment
Tourism Village	460
Tendering	105
Port Agents/Port	21
Tour Operations	359
Tour Guides	605
Tourism Zone	200
Total Direct Employment	1,750

5.2.4. Tax Revenues

Government taxes that are directly applied to earnings from cruise tourism would be a general sales tax (GST)² of 10% and a business tax of 1.75% charged on the gross annual business turnover, excluding the GST. The GST functions like a value added tax and is charged on the sale price of the item. Only businesses earning \$75,000 or more per annum have to charge the GST. Officials at the GST and income tax departments indicated that the GST and business tax are not collected from the many, very small businesses. Based on those discussions, it was assumed that the GST and business tax base of the cruise industry consisted of the revenues earned on tours sold by the large operators, tendering and all visitor expenditures within the FSTV.

² The General Sales Tax (GST) of 10% was implemented on the 1st July 2006. Prior to this, there was a sales tax of 9% so an average tax rate of 9.5% was used for 2006.

Excluding import taxes, tax revenues accruing to central government were estimated at \$6.6 million (or 1.3% of government's gross tax revenues) for 2006 as detailed in Table 12. This was equivalent to 7.2% of the direct spending generated by the cruise industry in the country.

Table 12: Central Government's Tax Revenue 2006

Source of Revenue	\$BZ million
From Tendering	1.4
From Tours	2.7
From Shopping	2.1
From Other Miscellaneous	0.4
Total Government Revenue	\$6.6

6.0 Conclusion

The direct economic impact of the cruise industry for 2006 indicated that foreign exchange earnings were an estimated \$92.1 million (5.9% of the total exports of goods and services), approximately 1,750 jobs (12.5% of tourism employment) during its peak season were supported and central government's taxes, excluding import taxes, amounted to \$6.6 million (1.3% of government's gross tax revenue) or 7.2% of total inflows. Certain areas of the cruise industry have taken on an oligopolistic nature. Tour spending and non-tour visitor spending were heavily skewed in favor of the minority, indicating a need for policies that would re-direct a greater share of direct spending to small tour operators and the small businesses that operate outside the gates of the tourism village and other areas that cruise tourists visit. While it is recognized that businesses with greater resources are best positioned to capture a larger share of the market, government should provide the facilities and infrastructural support to afford the small entrepreneurs the best opportunity possible to do business to the full extent of their capacity.

The skewing of the income flows from the head tax in favour of the owners of the FSTV reduces the share going to the BTB and limits its effectiveness in channelling resources into infrastructural developments in the tourism zone and other areas outside the FSTV. Furthermore, the BTB should focus efforts to even the flow of ships throughout the year and so reduce arrival peaks that place excessive stress on the public infrastructure and tourist site facilities.

Apart from security concerns when venturing outside the FSTV, cruise tourists complain about the rundown appearance of the city and harassment from competing vendors. The city's aesthetics need improvement, and the multitude of small vendors operating in the tourism zone points to the necessity

for an attractive facility, readily accessible to the tourists, to house these workers. Simultaneously, training programmes in customer service, public relations and financial management are needed.

Tour operators should organize themselves to increase their bargaining strength with the cruise lines. Furthermore, with organization and internal collaboration, small operators could stop competing among themselves to their detriment and improve the quality of the tour experience. The high leakage on imports indicates a tremendous opportunity for the further development of local handicraft and other products to exploit and expand the earning potential of the cruise market.

Lastly, more work is required to fine tune some economic indicators used in this study, allocate internet earnings between large and small operators, and develop specific multipliers to determine the secondary economic impact of the cruise industry. Notwithstanding the reluctance of businesses to provide information they consider sensitive and commercially confident, the relatively narrow range and easily identified domestic suppliers to this market make the development of reasonably good multipliers quite feasible.

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