Economic Impacts of Cruise Tourism: The Case of Costa Rica

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ABSTRACT
This paper provides an overview of the different impacts of cruise tourism in Costa Rica. The purpose of the study is to provide information, based on primary investigation collected by the Costa Rican Tourism Institute during the period 2006 – 2008, to help the decision making process and the establishment of policies and strategies for cruise ship tourism. We focus on cruise passenger demographic characteristics, preferences and expenditure behaviors, and we compare the expenditures of the average cruise passenger with the average land tourist that visits the country. We show that Costa Rica’s cruise tourists tend to visit the same attractions at the same time as the land tourist. We show that cruisers are older and less wealthy, and spend less time and money than the average tourist, raising some concerns as to whether cruise tourism in Costa Rica should be encouraged.

KEY WORDS
Cruise industry
Economic impacts
Costa Rica

ARTICLE HISTORY
Submitted: 17 December 2009
Resubmitted: 19 March 2010
Resubmitted: 01 June 2010
Accepted: 22 June 2010

INTRODUCTION
Cruise tourism can be traced back to the beginning of the 1960s coinciding with the decline of transoceanic ship travel and the introduction of the first nonstop air travels between USA and Europe. The 1970s and 1980s were a period of a moderate growth, increasing from half a million passengers in 1970 to 1.4 million passengers in 1980 and 3.8 million passengers in 1990. In the 1990s cruise tourism reached Europe, Asia and Oceania and started a period of high growth. The average annual growth rate in the number of worldwide cruise passengers for the period 1990–2007 was 7.4 percent. It has increased at almost twice the rate of growth of tourism overall and this growth is expected to continue in the future (Klein 2005; FCCA 2008). The Caribbean region con-
continues being the most preferred cruise destination, accounting for 41 percent of all itineraries (FCCA 2008). In 2007, Cruise Lines International Association members carried 12.56 million worldwide passengers. This represented an increase of 4.1 percent over the previous year. In particular, cruise passenger arrivals in the Caribbean region increased from 3 million in 1980 to more than 25 million in 2007.

Cruise ships arrivals are increasing both in number of passengers and size of the ships, conditioning the choice of location. The industry is also booming in Asia, Australia and Europe. The UK, Germany and Italy are experiencing considerable growth in the popularity of cruising and there is also significant development in Spain but less in France (Klein 2003). The worldwide growth on the demand for cruise tourism is attributable to the unique model that offers for tourism. Cruise ships today offer a great variety of activities that attract tourists of different age, place of residence and socioeconomic profile. Travel on a cruise ship is seen as a safe, cheap and easy option for vacations. Cruises represent the paradigm of globalization: physical mobility, international capital that can be relocated anywhere and at any time, crews coming from different countries at the same ship, favorable regulations, and marine registrations optimally selected. A cruise ship represents all four faces of the tourism industry: transportation, accommodation (including food and beverages), attractions and tour operators.

Cruise tourism is an important segment of the tourism sector in Costa Rica where there is a lack of information regarding the economic aspects of this activity. The economic, social, cultural and environmental impacts of cruise ship tourism have been studied very little. For this reason, countries as Costa Rica do not have the tools to establish strategies and policies to manage this type of tourism in an efficient manner. To the best of our knowledge, only one study (published twice) on cruise tourism in Costa Rica has been published to date, and uses data collected by the Costa Rican Tourism Institute -ICT- for 2004 (see Seidl, Guillano, and Pratt 2006, 2007). The measurement of the economic impact is an important point to evaluate whether cruise tourism is economically viable or not. To determine the economic impacts of the cruise activity on a destination we have to take into account the different types of cruise related expenditure. These include passenger and crew-related expenditure (retail spending during the visit, pre/post-cruise expenditure, shore excursions, incidentals, provedoring, departure tax), Vessel-related expenditure (passenger embarkation charges, fuel costs, port dues, port agency fees, pilotage, water, garbage, berthing, stevedoring, towage, miscellaneous expenses, dry dock charges, State conservancy dues) and supporting expenditure which includes direct payments by ship owners into the destination (see Dwyer and Forsyth 1998, Dwyer, Douglas, and Livaic 2004 and Brida and Zapata 2010 for a more detailed description). Cruise passengers, crew and cruise ships are, then, the sources of income for the port and the local communities. It is important to study the costs and benefits of cruise tourism to understand if the balance of the activity is positive or not. Certainly, in the final balance
not only economic aspects are be considered but also environmental, social and cultural impacts and the consequences of competition for spaces in a destination of cruise tourism with other kind of tourism. It could be necessary for the public sector to implement policies that lead to a sustainable development at the economic, social, cultural and environmental levels.

Attune to the dynamism evidenced by the cruise industry, it arises the interest in analyzing the relationship between cruise liners and destinations. In this case a Caribbean destination. As we show latter in this paper, cruise activity is small compared with other types of tourism but it is subject to study because of its relevance as a cruise ship port of call on the Central America coasts; because of the national tourism institute ICT provides sufficient amount of data, and because of the encouraging perspectives showed by data activity over the last years.

The aim of this paper is to describe the evolution of the cruise activity along the last years in Costa Rica. We quantify the average expenditures of cruise passengers and in particular we analyze the different types of expenditures. We segment the population of cruise passengers according to their different expenditures behavior into three different groups: (i) passengers who have previously purchased the tour on board or by internet; (ii) passengers who purchase the tour at destination and (iii) those who do not purchase tours. The criteria depend on the main expenditure of cruisers that corresponds to tours. We also compare cruisers and land tourists spending behavior. For this purpose, we first present a brief description of tourism in the country to illustrate the importance of this industry for the national economy. In particular we show that the contribution of tourism to the economic growth of Costa Rica is very relevant. As a result of the comparison we note that cruise tourism does not have a significant impact on the national economy. In this sense, we conclude the cruise activity has to be followed up by local governments and they have to analyze carefully whether cruise tourism in Costa Rica should be encouraged.

The paper is organized as follows. First, we describe the growth of the international tourism industry in Costa Rica. In section 3 we provide an overview of cruise tourism in the country, particularly for the last three years. Section 4 introduces a framework to classify the different expenditures of both cruise passengers and crew that is used to estimate the economic impacts of the cruise activity on the economy of Costa Rica. Some concluding remarks are included in the final section.

**METHODOLOGY**

The data used in this paper were compiled from the Costa Rican Tourism Institute (ICT in Spanish). A mix of primary and secondary data collection, including tourist surveys and descriptive analysis are appropriately applied in order to illuminate socio-economic issues and information surrounding cruise tourism. We used both international tourism and cruise tourism data
collected by them. In the case of cruise tourism data, this institute collects
tourist information via in-person surveys twice per year.

We begin with a measurement of the magnitude of the contribution of tour-
ism to the economic growth of Costa Rica. From the international tourism
data (that corresponds to the period 1991-2007) we intend to measure the por-
tion of the economic growth rate of the country that corresponds to the tour-
ism industry. To this purpose, we introduce a methodology that is explained
in the next section.

Next, we use both data collected through surveys by the ICT and the avail-
able secondary information published by the cruise lines (Royal Caribbean
International, Princess Cruises and Carnival Cruise Lines on their websites)
to provide a preliminary description of cruise tourist and crew expenditures
in Costa Rica. The tourism cruise data used in this study correspond to the
period 2006-2008. Each year the sample of the survey consists of about 1,200
cruise passengers interviewed at the Pacific ports of Calderas, Puntarenas and
Golfito and the Caribbean ports of Moin and Puerto Limon. In the survey,
information was requested about the tourists’ socio-demographic character-
istics, expenditure and satisfaction levels. The survey included the following
items: number of hours in land, quality of the port services, tourist attractions
(leisure, parks etc), quality of transportation, cleanliness and hygiene, the
presence of friends and/or relatives in the cruise, familiarity with the destina-
tion, safety, tranquility, prices, general satisfaction with the visit and amount
of the expenditures in tours, cultural activities, tourist attractions, souvenirs,
medical costs, transportation and restaurants.

Descriptive statistics was used to describe main characteristics of cruise
ship tourists and allow us to make some comparisons and find different cruis-
ers profiles. These profiles were segmented, a priory, according to the main
expenditure made by cruise passenger, this is the expenditure on tours. The
three segments are (i) passengers who purchase a prior tour, (ii) passengers
who purchase the tour when they arrive to Costa Rica at local agencies and
(iii) those who do not purchase tours.

International Tourism in Costa Rica

International tourism has expanded rapidly in Costa Rica since 1950. Inter-
national stay over arrivals have increased from 64,000 in 1964 to 2.1 millions
in 2008, while associated receipts grew from US$10 million to US$2 billion
(Weaver 1999; ICT 2007; Ministry of Tourism of Costa Rica 2009). By 1992,
tourism surpassed the banana trade as the country’s leading source of for-
eign exchange (Wood 1993; ICT 2007) and foreign exchange from tourism
(US$1,894.7 millions) was in 2007 more than three times the relative amount
for bananas (US$673.7 millions). During the period 2000-2007, the tourist sec-
tor participates, in average, with a 7.2 percent of the total GDP and a 20.9 per-
cent of the total exports according to the Central Bank of Costa Rica.
Tourism is the most important source of foreign exchange and one of the largest industries in the country. In 2008 the country received 2.1 millions of tourists, who generated more than 2 billion dollars in foreign income. From 2002 to 2007 the average number of international tourists was around 1.5 million and increases at an average growth rate of 8 percent, with a maximum of 17.3 percent in 2004. There was also an increase of total expenditures with an average growth rate of 9% but only in nominal terms. If we discount inflation, the increase of expenditure was not significant. As demand for tourism increases, Costa Rica needs to develop its tourism attractions (in particular natural areas) to meet tourist demand and maintain environmental quality. This outstanding performance is the reason why all governments and private sector efforts are focused on the strengthening of the sector.

Tourism is perceived as an industry that has a positive impact on economic growth. Economic benefits are probably the main reason why so many countries are interested in this sector; its contribution to the world economy is obviously important. In a recent paper, Ivanov and Webster (2007) present a methodology for measuring, ex post, the contribution of tourism to economic growth. The method uses the growth of real GDP per capita as a measure of economic growth and disaggregates it into economic growth generated by tourism and economic growth generated by other industries. Let \( g \) be the growth rate of real GDP per capita in constant prices as the measure of economic growth:

\[
g = \frac{\sum V_{t_r} - \sum V_{t_{r+1}}}{\frac{N_t}{N_{t+1}}}
\]

where \( N_t \) is the total GDP of the economy in the period \( r \) at prices (constant prices) and \( N_{t+1} \) is the population in period \( r \). Then, disaggregating the GDP of tourism from the GDP of the rest of the economy we obtain:

\[
g = \frac{\sum V_{t_r} Y_{t_r} - \sum V_{t_{r+1}} Y_{t_{r+1}}}{\frac{N_t}{N_{t+1}} \sum V_{t_r} - \sum V_{t_{r+1}} \sum Y_{t_{r+1}}}
\]

and the first component in this expression:

\[
g' = \frac{\sum V_{t_r} Y_{t_r} - \sum V_{t_{r+1}} Y_{t_{r+1}}}{\frac{N_t}{N_{t+1}}}
\]
represents the direct contribution of the tourism industry on economic growth in the period. Note that measures the part of growth of GDP produced by the tourism sector where this sector is formed. Table 1 shows the results of applying the methodology to data of Costa Rica for the period 1991-2007.

Note that only for the years 1991, 1996 and 1999 to 2002 the contribution of tourism to the economic growth of Costa Rica was negative and in four of these years the GDP of the country decreased. In average the tourism sector contribution to the economic growth was positive and 13 percent of the growth of the country is a consequence of tourism (0.39% of 2.94%). Then we can conclude that the tourism industry is very important for the economic growth of Costa Rica and 0.5 percent of this growth is a consequence of tourism. This growth has been the result of the national investment, legal framework and fiscal policy. Costa Rica has been very successful in utilizing forests, parks, beaches, and natural beauty to attract tourist dollars. The country has achieved to enhance and attract foreign tourism investors and get the establishment of international chains. In the same way, has increased national investment.

The ICT collects tourist information via in-person surveys twice times annually. Each survey is approximately one month in duration and the objective is to obtain a profile of the principal characteristics of visitors to Costa Rica, including: travel motivations, frequency of travel, mode of travel, length of stay, trip expenditures, type and location of lodging, age, gender, marital status, level of education and household income. According to the answers of

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Growth of all sectors (a)</td>
<td>-0.23%</td>
<td>6.52%</td>
<td>4.82%</td>
<td>2.26%</td>
<td>1.41%</td>
<td>-1.61%</td>
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<tr>
<td>Growth of tourism sector (b)</td>
<td>-2.24%</td>
<td>11.23%</td>
<td>6.65%</td>
<td>2.63%</td>
<td>0.95%</td>
<td>-3.03%</td>
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<tr>
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<td>1.98%</td>
<td>1.23%</td>
<td>0.49%</td>
<td>0.18%</td>
<td>-0.57%</td>
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<table>
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<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth of all sectors (a)</td>
<td>2.95%</td>
<td>5.71%</td>
<td>5.66%</td>
<td>-0.46%</td>
<td>-1.02%</td>
<td>0.86%</td>
</tr>
<tr>
<td>Growth of tourism sector (b)</td>
<td>3.49%</td>
<td>5.78%</td>
<td>-0.03%</td>
<td>-0.76%</td>
<td>-0.19%</td>
<td>-0.43%</td>
</tr>
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<td>1.07%</td>
<td>-0.01%</td>
<td>-0.13%</td>
<td>-0.03%</td>
<td>-0.08%</td>
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<table>
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<th>Years</th>
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<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>AVG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth of all sectors (a)</td>
<td>4.39%</td>
<td>2.37%</td>
<td>4.01%</td>
<td>6.91%</td>
<td>5.50%</td>
<td>2.94%</td>
</tr>
<tr>
<td>Growth of tourism sector (b)</td>
<td>1.41%</td>
<td>2.02%</td>
<td>2.22%</td>
<td>3.23%</td>
<td>4.88%</td>
<td>2.22%</td>
</tr>
<tr>
<td>Tourism contribution</td>
<td>0.25%</td>
<td>0.34%</td>
<td>0.37%</td>
<td>0.54%</td>
<td>0.78%</td>
<td>0.39%</td>
</tr>
</tbody>
</table>

During the period 1991-2007 the tourism sector contribution to the economic growth was in average positive and 13% of the growth of the country is a consequence of tourism. 

Source: Central Bank of Costa Rica.
land tourists to the questionnaires, the most enjoyable aspects of the stay were quality of protected areas, beaches and natural attractions. The brand of Costa Rica is natural beauty, agreeable climate and well educated population.

For long stay-tourists, Costa Rica offers visits to tropical, cloud and dry forests, Pacific and Caribbean beaches, active volcanoes, museums and adventure activities. Due to the time required and distances between attractions, as well as the age of the travelers, only some of these activities are available for cruise ship tourists. Considered as the most important tourist destination in Central America, the main distinctive feature of the Costa Rican tourism is the adoption of the concept of sustainability. A concept that has enabled it successfully placed itself as a ‘sustainable tourism’ destination, making it attractive in major developed markets, especially in USA (OMT, 2009). During the past decade Costa Rica has successfully promoted its tourist industry with an image of natural beauty and environmental consciousness, and has become one of the most popular ecological tourism destinations in the world (Hearne and Salinas 2002). The country has led certification processes for sustainable tourism (CST) in Latin America. This confirms its commitment with the environmental protection. According to a study done by Yale and Columbia universities in 2008, the country was ranked fifth worldwide on the EPI (Environmental Performance Index).

As in most destinations, ecotourism activity in Costa Rica is strongly associated with protected areas. More than 28 percent of the territory of the country is protected under the World Conservation Union classification system and around 30 percent of the territory remains in a forested state (Chape Spalding, and Jenkins 2008) and the success of Costa Rica’s tourism industry comes from its strategy of nature conservation. Nature conservation contributes to the tourism industry and tourism contributes to the national economy. Despite the fact that Costa Rica provides distinct nature-based tourist experiences throughout the country, tourist visits to National Parks are highly concentrated in three tourist destinations: Manuel Antonio National Park (NP), Poas Volcano NP, and Irazu Volcano NP, receive about two thirds of the visitors who come to Costa Rica (ICT 2007).

Cruise Tourism in Costa Rica

The luxury floating buildings in Costa Rica were just a far picture of the future waiting to be developed both in the Costa Rican Pacific and Caribbean ports. They never expected to be leading the cruise industry in the region, especially after seeing ships passing through Caribbean islands. In the last decade 70’s, seeing a cruise ship was an absolute phenomenon. Costa Rica has known how to compete in the fight for attracting cruise ships towards Caribbean ports. It has achieved to conquer cruise passengers attracted by destinations such Curacao, Barbados or Jamaica. This has not been an easy task if it is taken into account that most port of calls charges lowest or inexistent taxes. It is remarkable the case of Panama, a country that encourages cruise lines paying
them a monetary incentive for each disembarked passenger. Another future competitor in the Pacific waters could be Honduras which recently received the first cruise ship arrival in Amapala Pacific port. They expected four ships, per month, be docking in this port.

The cruise industry became strongest in Costa Rica in the 1990s. Table 2 shows the evolution of the cruise ship visits. Note that cruise ships arrivals have been irregular during the period 2002-2008, but the number of cruisers from 1996 has been increasing. This is a consequence of the growing capacity of the cruise ships (see Klein 2005). It can be also noted that the number of ships arriving in the Pacific ports decreases during the period 2002-2004 (this contradicts the findings in Seidl 2007), but increases at the period 2005-2008. Meanwhile, Caribbean ports have been decreasing for the same period, after having had an increasing performance during 2002-2004.

There is a strong potential for a further growth of the cruise shipping industry in Costa Rica. According to a survey conducted by the WTO, port and tourism authorities, and cruise companies forecast a maturity of the sector within 6 to 10 years. (OMT 2008) Despite this positive prediction, one thing is evident and is the fact that the impact of cruises to the economy of Costa Rica is still small with respect to land tourism. The number of cruise passengers arrived to Costa Rica was 1/6 of the number of stayover tourists. According to ICT (2008), the average cruise passenger spends $US63 per day while the average stayover tourists spend $US78 per day during an average stay of 12 days for a total expenditure of $US1345 in their visit.

Cruise passengers are visitors arriving in Costa Rica on board ship and returning to the ship each night to sleep on board. As they do not strictly spend the night in an accommodation structure in the country, they are not included in the category of tourists. From the other hand, the average duration of the stay of an overnight tourist was of 12 days. In addition, the high season of

<table>
<thead>
<tr>
<th>Year</th>
<th>Pacific Ports (Puntarenas, Caldera, Golfito) Ships</th>
<th>Caribbean Ports (Puerto Limon, Moin) Ships</th>
<th>Total Ships</th>
<th>Total passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>81</td>
<td>105</td>
<td>186</td>
<td>222,496</td>
</tr>
<tr>
<td>2003</td>
<td>74</td>
<td>128</td>
<td>202</td>
<td>275,090</td>
</tr>
<tr>
<td>2004</td>
<td>62</td>
<td>153</td>
<td>215</td>
<td>318,103</td>
</tr>
<tr>
<td>2005</td>
<td>72</td>
<td>120</td>
<td>192</td>
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</tr>
<tr>
<td>2006</td>
<td>97</td>
<td>140</td>
<td>237</td>
<td>345,646</td>
</tr>
<tr>
<td>2007</td>
<td>86</td>
<td>130</td>
<td>216</td>
<td>321,762</td>
</tr>
<tr>
<td>2008</td>
<td>103</td>
<td>135</td>
<td>238</td>
<td>319,705</td>
</tr>
</tbody>
</table>

In 2008 Costa Rica received more cruise ships than in 2007, however, the number of cruisers decreased. In average, the number of cruisers increased at an average rate of 7.2%.

cruise activity (December to March) coincides with the peak of other forms of tourism, diminishing the quality of tourist experience and creating congestion. Tourists arriving to Costa Rica demonstrated strong preferences for the inclusion of restrictions in the access to some trails (Hearne and Salinas 2002). They have also expressed concern that congestion did reduce the quality of their visit. This is an important point to be considered for the strategies of development of cruise tourism because cruise passengers also contribute in the congestion issue. This competition for the same attractions between cruise passengers and overnight tourist put tourism infrastructure under stress. This could produce negative impressions regarding the destination or the country for the long stayover tourists, affecting the arrival of high-value tourism. The economic costs of this aspect are difficult to measure, but could be significant.

One key factor for the successful performance of cruise activity in the recent decades has been the relationship between cruise liners and Costa Rica government (OMT 2008). Two cruise lines hold more that 70 percent of the cruise market in Costa Rica: Carnival and Royal Caribbean International (ICT 2007). This shows that the power of negotiating of these cruise lines is very high. The main ports in Costa Rica for the cruise ships are Puntarenas (in the Pacific) and Puerto Limón (in the Caribbean). Both have the capacity to accommodate 80 thousand tons vessels (4000 passengers). Both port alternatives are very attractive for those visitors in search of nature and adventure. This is the reason why cruisers carry out activities such canopy, rain forest visits, rafting, banana plantation tours, among others. The Costa Rican Pacific Ports Institute (IN-COP), the Caribbean Port Authority (JAPDEVA) in association with the Costa Rican Tourism Institute are responsible for attracting new cruises business and promoting cruise ships expansion in Costa Rica. Their goal is to stimulate economic growth both at Port Limon and Puntarenas. More and more, cruise lines are including Costa Rica in their itineraries. In 2007, the country won an award as the “best destination experience-organized tour” and “destination with de best tour guides” by the U.S magazine Dream World Destination. Costa Rican operates as a port of call (an intermediate stop as a part of cruise ships itineraries) and the following are its main ports.

Port Complex of Limon is located on the eastern coast of Costa Rica in the Caribbean Sea. The complex has a secondary port terminal called Moin (an important place for embarking cruise passengers who want to make a water journey). The port complex of Limon is the entrance door for the tourism coming from the Caribbean Islands and North America. Puerto Limon is famous for launching the first shipment of bananas to North America in the late 19th century. Through this port is moved over 80 percent of the exports (JAPDEVA).The port also receives a sizeable amount of cruise ship traffic, mostly, out of Miami, stop here as part of a larger tour. The harbor installations of Limon have been modified to create the conditions for the cruise ships docking. Thus, in 1987, 24 cruise ships docked in the port (JAPDEVA) while in 2007 the number of arrivals was 130.
Puntarenas is located on the western coast of Costa Rica in the Pacific Ocean. Puntarenas is the largest province. The principal attractions are on the Pacific coast itself. Puntarenas sits on a long and narrow peninsula in the Gulf of Nicoya. For years, it was the country’s principal port. Puerto Caldera is located 16 km south of the city of Puntarenas. There are no passenger facilities in Puerto Caldera except for a small, air-conditioned terminal with restrooms, information desk, public phones and a small selection of craft vendors. The regional port authority is the Costa Rican Pacific Ports Institute, INCOP (in Spanish). The Authority is responsible for the image promotion and positioning of Puntarenas as a cruise ship destination. The cruise shipping industry appears to have significant growth potential in this port regarding to Puerto Limon. Its new facilities will attract even more cruises to this renaissance town. According to the referenced database, about 60 percent of the tourists are US residents and more than 70 percent are North Americans. More than 50 percent of cruise passengers are older than 55 years old. About 73 percent of cruise passengers are married, traveling mainly in couples and some in company of their families. The majority of respondents have a high educational degree. More than ¾ are visiting Costa Rica for the first time and the passengers with income higher than US$75,000 are more than 25 percent of the total.

ECONOMIC ANALYSIS

Cruise tourism seems to have considerable potential as a source of economic benefits. When cruise visits are proposed to policy makers of a destination, the initial reaction is therefore likely to be positive. But, as all economic activities, cruise tourism brings both positive and negative impacts (see Brida and Zapata 2010). A number of factors must be considered. The arrival of cruise ships and their passengers may require considerable change involving the entire destination and its communities. Most of the economic impact of cruises is related to the tourists and their activities as we mentioned above. The industries which are most likely to benefit from the visitor activities are: transportation (taxis, buses), tour operators (including guides), attractions, shops (mainly those located close to the dock and in particular jewelry shops, craft merchants, local specialties shops). Other sectors related to tourism may not see significant gains. This is the case of hotels, restaurants (normally tourists return to the ship to eat food they have already paid for), liquor stores (most ships do not permit purchases for consumption on board), casinos (most ships have their own casinos), etc. Cruise lines create economic impacts through vessel related expenditure, crew expenditure and support expenditure including port charges such as navigation and berthing charges, piloting charges, towage charges, bunkering, supplies of food and water, services such as waste disposal and passenger related expenditures, such as security and baggage handling. From the surveys of ICT we have data of total expenditures of cruisers in Costa Rica for the period 1994-2007. Table 3 shows the evolution of these expenditures.
During 2008 total revenues from the cruise industry were US$16.4 million. These revenues from cruises have benefited the governments and their citizens and have created an indeterminate number of jobs. The government of Costa Rica has made a big effort in recent years to offer more favorable conditions for cruise ship companies in order to attract them. This includes a reduction in head tax and shipping lines port fees. These measures and policies have made it possible for the large cruise companies to reduce their costs and increase profits. During 2008 the overnight tourism expenditures were of US$2.144.2 million. If we compare with the US$16.4 millions cruise tourism expenditures, cruise ships represent less than 2 percent of the expenditures of land tourism. This is a measure of the size of the market showing that cruises are still a small portion of tourism expenditures in Costa Rica. From the other hand, the real revenues of the cruise industry are not totally clear. What is clear is that not all this US$16.4 millions remains in Costa Rica and the big portion of these expenditures is captured by the cruise lines. In fact, cruise ships’ boutiques stocks are based on the sorts of items they know passengers are likely to buy in the forthcoming ports; even better, cruisers can buy a postcard of a port on the itinerary and post it on the ship with a local stamp (Douglas and Douglas 2004). Authors also refer that some people prefer to buy onboard due to they feel more comfortable dealing in a quiet environment and in currencies known by them. From Table 3 we can also note that the total expenditure per cruiser in 2008 was US$63 each during their stay in Costa Rica.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cruisers</th>
<th>Growth rate</th>
<th>Expenditures (US$ millions)</th>
<th>Growth rate</th>
<th>Expenditures per cruiser (US$)</th>
<th>Growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>155584</td>
<td>14</td>
<td>90</td>
<td>2.2</td>
<td></td>
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</tr>
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<td>1995</td>
<td>139428</td>
<td>-10.4</td>
<td>12.8</td>
<td>-8.6</td>
<td>92</td>
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<td>201.386</td>
<td>26.9</td>
<td>18.3</td>
<td>22.8</td>
<td>93.0</td>
<td>-1.0</td>
</tr>
<tr>
<td>1998</td>
<td>224.405</td>
<td>11.4</td>
<td>21.4</td>
<td>16.9</td>
<td>100.0</td>
<td>7.5</td>
</tr>
<tr>
<td>1999</td>
<td>235.039</td>
<td>4.7</td>
<td>21.5</td>
<td>0.5</td>
<td>90.9</td>
<td>-9.1</td>
</tr>
<tr>
<td>2000</td>
<td>189.814</td>
<td>-19.2</td>
<td>18.7</td>
<td>-13.0</td>
<td>98.8</td>
<td>8.7</td>
</tr>
<tr>
<td>2001</td>
<td>188.596</td>
<td>-0.6</td>
<td>17.9</td>
<td>-4.3</td>
<td>95.0</td>
<td>-3.8</td>
</tr>
<tr>
<td>2002</td>
<td>222.496</td>
<td>18.0</td>
<td>21.1</td>
<td>18.1</td>
<td>95.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2003</td>
<td>275.585</td>
<td>23.9</td>
<td>26.2</td>
<td>23.9</td>
<td>95.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2004</td>
<td>318.103</td>
<td>15.4</td>
<td>31.7</td>
<td>21.3</td>
<td>99.8</td>
<td>5.1</td>
</tr>
<tr>
<td>2005</td>
<td>255.336</td>
<td>-19.7</td>
<td>28.9</td>
<td>-9.0</td>
<td>103.3</td>
<td>3.5</td>
</tr>
<tr>
<td>2006</td>
<td>345.646</td>
<td>35.4</td>
<td>13.8</td>
<td>-52.2</td>
<td>63.1</td>
<td>-38.9</td>
</tr>
</tbody>
</table>

In average, the cruise tourist spends US$89 each during their stay in Costa Rica. The average growth rate of expenditure was just 2.6% with a dramatic downturn in 2006 (-52%) and a year of positive growth rate (47.9 in 2008). But in real terms the expenditure decreases and the biggest portion of the expenditure remains to the cruise lines.

ta Rica. Total expenditures have varied little in nominal terms over the past decade, from about US$15 million in 1996 to more than US$31 million in 2004. However, expenditures per visitor have suffered a significance downturn in the last three year, regarding to 2005. According to Klein’s (2002) findings, in general, spending by cruise passengers in port communities has dropped by half since 1994 due to changes in demographics and on-board spending.

Cruise ships are in Costa Rican ports for around 12 hours per visit and in average 80 percent of the passengers disembark. About 33 percent (category 1) of the passengers that disembark purchase previously the tour on board or by internet, 6 percent (category 2) of cruisers purchase the tour at local agencies and the remaining 61 percent (category 3) does not purchase tours. Giving that the (ICT 2008) survey provides important data about the expenditure behavior of the different cruise passenger profiles, we segmented on table 4 cruisers into the mentioned three categories above.

Note that expenditure on tours is the main part of the contribution of cruise passengers to the economy of the destination. In particular, 2/3 of the total cruisers (those that do not enjoy tours) spend in average only US$28. With respect to those who reserved tours previously, they had a total expenditure on tours for US$26,171 and paid in average US$72 per tour. Regarding to the main categories in which passengers spend their money, we found that, since their average time off ship is 3 hours, all segments expenditures come mainly from crafts. Categories 2 and 3 also spend on food and clothes, while category 1 spends on coffee and touristic guides. The second category presented the highest expenditure on transport.

ICT survey does not differ from cruisers who purchase by internet or on-board, however, it can be deduced (giving the published prices on cruise line’s web sites and the results of the survey) that most of them acquired their tours by internet. The group of passengers acquiring the tour by internet presents expenditures on port additional to local tours. Their average expenditure per person is US$38. From the total number of passengers who had expenditure on port, 76 percent spent basically on crafts, clothes and tourist guide. Hav-

<table>
<thead>
<tr>
<th>Types of Cruise Passenger’s Expenditure</th>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of the total population</td>
<td>33%</td>
<td>6%</td>
<td>61%</td>
</tr>
<tr>
<td>Total tour expenditure</td>
<td>$ 26,171</td>
<td>$ 2,373</td>
<td>0</td>
</tr>
<tr>
<td>Average expenditure per person on tours</td>
<td>$ 72</td>
<td>$ 37</td>
<td>0</td>
</tr>
<tr>
<td>Average time off ship (in hours)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total expenditure on port</td>
<td>$ 19,184</td>
<td>$ 5,456</td>
<td>$ 29,349</td>
</tr>
<tr>
<td>Average expenditure per person (not including tours)</td>
<td>$ 38</td>
<td>$ 50</td>
<td>$ 28</td>
</tr>
</tbody>
</table>

Category 2 registered the highest expenditure per person on port regarding the others. Category 3 spent 50% more on total expenditure on port with respect to group 1. Source: Adapted from ICT 2008.
Passengers who purchased tours at local agencies (second category) registered the highest average expenditure per person (US$50). It can be noted in table 5 as the group is small, it is comprehensible they report the lowest amount of the total expenditure on port; but it is interesting the significant expenditure they have in transport and culture comparing to the others one. Passenger’s expenditure comes, mainly, from crafts, transport and food. This segment is benefited with a better price for a local tour. Being the most numerous group, cruisers of third category could have not only a higher participation in total expenditure on port but also on average expenditure per person. But the reality is different. They spent just almost an additional 50 percent with relation to category 1 and have the lowest expenditure per passenger. Since their average time off ship is 3 hours, all segments expenditures come mainly from crafts. Categories 2 and 3 also spend on food and clothes, while category 1 spends on coffee and touristic guides. Note the high spending on transport by cruisers of profile 2.

Source: Adapted from ICT 2008.

Table 5. Total Average Expenditure Additional to Tours (Different Categories in US$ and %).

<table>
<thead>
<tr>
<th>Expenditure type</th>
<th>Category 1 US$ %</th>
<th>Category 2 US$ %</th>
<th>Category 3 US$ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crafts</td>
<td>10979 57.23</td>
<td>1895 34.73</td>
<td>18870 64.30</td>
</tr>
<tr>
<td>Food</td>
<td>700 3.65</td>
<td>477 8.74</td>
<td>2127 7.25</td>
</tr>
<tr>
<td>Clothes</td>
<td>881 4.59</td>
<td>117 2.14</td>
<td>2620 8.93</td>
</tr>
<tr>
<td>Transport</td>
<td>816 4.25</td>
<td>1621 29.71</td>
<td>888 3.03</td>
</tr>
<tr>
<td>Touristic guide</td>
<td>1666 8.68</td>
<td>538 9.86</td>
<td>155 0.53</td>
</tr>
<tr>
<td>Liqueur</td>
<td>393 2.05</td>
<td>65 1.19</td>
<td>932 3.18</td>
</tr>
<tr>
<td>Coffee</td>
<td>991 5.17</td>
<td>52 0.95</td>
<td>708 2.41</td>
</tr>
<tr>
<td>Tobacco</td>
<td>176 0.92</td>
<td>110 2.02</td>
<td>498 1.70</td>
</tr>
<tr>
<td>Medical services</td>
<td>280 1.46</td>
<td>0 0</td>
<td>190 0.65</td>
</tr>
<tr>
<td>Culture</td>
<td>76 0.40</td>
<td>160 2.93</td>
<td>93 0.32</td>
</tr>
<tr>
<td>Others</td>
<td>2226 11.60</td>
<td>421 7.72</td>
<td>2268 7.73</td>
</tr>
<tr>
<td>Total</td>
<td>19184</td>
<td>5456</td>
<td>29349</td>
</tr>
</tbody>
</table>

Since their average time off ship is 3 hours, all segments expenditures come mainly from crafts. Categories 2 and 3 also spend on food and clothes, while category 1 spends on coffee and touristic guides. Note the high spending on transport by cruisers of profile 2.
a direct benefit due to passengers visit other places in the country. The results for this category suggest that Port towns do not have enough attractions to generate a relevant stay. Communities such Limon and Moin (Caribbean) depend economically on cruise tourism incomes. Specially those generated by the sales of crafts and souvenirs.

Some destinations have implemented policies to ensure that a larger percentage of passengers disembark. There is another important group included in the survey that corresponds to the cruise ship staff. Interestingly, the crew averaged the highest spending per person (US$42) on port in comparison with the rest of groups. This confirms (Seidl 2007) statement referring to crew expenditures should not be ignored in the assessment of cruise tourism’s economic impact. Just 5 percent of the respondents took a tour at local agencies with an average price of US$33. They also had a total expenditure additional to tours for US$4158. Cruise workers come from Philippines (29%), India (11%), South America (10%), North America (10%) and from other regions (40%) and, in average, they are 3 hours off the ship. In spite of they have less income than a cruise passenger they have significant expenditures. In fact, comparing to cruisers they spend more on food, liqueur and cultural services.

In general terms, the survey indicates that in addition to tour expenditures, each cruise passenger spends in average an amount between US$28 and US$50. That is, from US$63 that each cruiser spends during their stay in Costa Rica, only less than US$38 goes to local providers of goods and services. These expenditures are, mainly, on crafts, coffee, local transport, souvenirs, food, drinks and other expenditures.

The country, as many others, wants to include cruises as a key product for their national tourist portfolio and then, it is very important to know which are the benefits and costs of the activity. They also expect cruise activity brings a range of expenditures and benefits, including foreign exchange earnings, profit and taxes, employment, externalities, terms of trade and scale economies (Dwyer and Forsyth 1998). There are some hidden costs that are very difficult to measure. For example, in Costa Rica ports cargo vessels pay much higher fees than cruise ships, which have priority in port. This represents important losses for the transport industry which depends on the rapidity of transport of goods. From the economic viewpoint these losses caused by reduced cargo capacity and the loss from reduced port taxes are opportunity costs of the cruise industry. Literature related to economic impact of cruise industry in Costa Rica is practically non-existent. A first approach to an economic cruise activity assessment (Seidl 2006, 2007) was presented through a descriptive analysis. In our study we have compared the recent performance of Costa Rica with the results presented in (Seidl 2007) that uses data until 2004.

CONCLUSION AND IMPLICATIONS

This study provided an overview of the main economic issues of the cruise tourism in Costa Rica. The purpose of the paper was to solve the problem of
lack of objective information regarding the economic issues surrounding the cruise tourism industry in the country given that no published accounts exist of the activity of the cruise industry in Costa Rica. We provided a description of the profile of average cruise passengers focusing on cruise passenger demographics, preferences and purchase behavior and we compared land tourism expenditures with the expenditures of cruisers. We concluded that cruise activity does not have a significant economic impact on Costa Rica. Cruise tourism is of small (but increasing) importance in Costa Rica representing less than 2 percent of the expenditures of land tourism. In particular, the economic contribution of cruises is small compared with the stay over tourism. Costa Rica’s average cruise tourist is older, less educated and more American, and spends less per person day than its overnight tourists. The cruise tourism season peaks at the same time that other forms of tourism peak, diminishing the quality of the individual tourism experience under greater stress. This is an important point to be considered by the tourism authorities if they want to preserve stay over tourists.

We have shown that the contribution of the tourism industry to the economic growth of Costa Rica is very high and that also the participation of the sector to GDP is very high (around 20% of the economic growth of the country is a consequence of tourism). To maintain this high contribution to growth, policy makers must design a policy that avoids the negative impact of cruises to stay over tourism. Cruise passengers who currently disembark in Costa Rica could be increased as in other Caribbean countries. This will produce an increase of the expenditure in destination. From the other hand, the visits of cruise passengers to non fragile tourism attraction must be supported. Hence, policies of diversification of the tourist attractions must be implemented. This will reduce competition with overnight tourists and amortiguate the environmental impact of the visits. All these opportunities represent a high sum of lost revenue. With the rapid growth of cruise ship tourism in Central America and the Caribbean and the concentration of the business in an oligopoly of three big corporations, there is an urgent need for a regional cruise ship policy to be established. One possibility is to implement similar alternatives as Bermuda or Alaska (see Mak 2008; Brida and Zapata 2010), which allow them to ensure that a great portion of the cruise passenger expenditure remains in the local economy. Although data used in this study were collected by the Costa Rican Government, the Tourism Institute does not have any responsibility for any analysis and comments presented here. The information obtained in this study can help to inform both the marketing and management of the cruise tourism sector in Costa Rica.

REFERENCES


Economic Impacts of Cruise Tourism: The Case of Costa Rica


Consulted Websites

ACKNOWLEDGEMENT:
Our research was supported by the Autonomous Province of Bolzano, project “Tourism, growth, development and sustainability. The case of the South Tyrolean region” and the Free University of Bolzano, project “L’ impatto del turismo di crociere. Analisi empirico per il caso del Caraibi Colombiano”. A preliminary version of this paper was presented at the 2nd International Cruise Conference, 18th to 20th February 2010. University of Plymouth, UK.