# The Boom in Brazilians Traveling to the United States

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### Abstract

In this article, we examine the economic factors driving the recent boom in Brazilians traveling to the United States. First, we present several measures of the increase in Brazilian travelers and the consequent increase in U.S. services exports to Brazil. Then, we review the economics literature to identify factors that generally affect international tourism demand, including relative prices and income levels. Finally, we present statistical evidence and popular press accounts indicating the relevance and contribution of each of these factors to the recent boom in international travel from Brazil.

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## INTRODUCTION

Over the last decade, there has been a boom in the number of Brazilians traveling to the United States. How large is the tourism boom and the resulting growth in U.S. services exports to Brazil? We present a series of economic statistics that demonstrate that the boom has been economically significant. What are the causes of the tourism boom? We investigate this question in several steps. We review the economics literature to identify factors that generally affect international tourism demand, including relative prices and income levels. Then, we examine statistical evidence and popular press accounts of the recent boom in order to gauge the contribution of each of these economic factors to the boom in international travelers from Brazil. Finally, we discuss policy initiatives that may further facilitate the tourism boom.

### THE TOURISM BOOM

Between 2004 and 2011, the number of annual U.S. arrivals from Brazil increased by 292 percent, from 385,000 to 1,508,000.2 The U.S. share of Brazil's outbound travelers increased from 13 percent in 2004 to 18 percent in 2010.<sup>3</sup> The expenditures of these visitors are counted as U.S. services exports. These expenditures include purchases of travel and tourism-related goods and services like food, lodging, recreation, gifts, entertainment, and local transportation within the United States, as well as the fares paid to U.S. air carriers involved in the international travel.<sup>4</sup> In 2004, these expenditures totaled \$1.9 billion. By 2011, they had reached \$8.5 billion. These estimated expenditures are based on the Survey of International Air Travelers (SIAT) of the U.S. Department of Commerce.

Credit card charges provide an alternative measure of tourism expenditures that do not rely on the SIAT data. This is a narrower measure, however, since it is limited to spending that is financed with credit cards. It excludes cash expenditures. The credit card and financial company Visa reports that "Brazilians increased international tourism spending on their Visa accounts

<sup>&</sup>lt;sup>2</sup> These statistics are from U.S. Department of Commerce (2012a).

<sup>&</sup>lt;sup>3</sup> Tourism Australia reports the total number of outbound travelers from Brazil in these years in its Brazil market profile for 2012, available on-line at http://www.tourism.australia.com/en-au/downloads/Market Profiles2012 Brazil.pdf.

<sup>&</sup>lt;sup>4</sup> The list of items included in this account is published at http://tinet.ita.doc.gov/outreachpages/inbound-general-information-overview.html.

<sup>&</sup>lt;sup>5</sup> U.S. Department of Commerce (2012c). The Bureau of Economic Analysis statistics reported in Koncz-Bruner and Flatness (2011) indicate that international travel was the single largest category of U.S. exports of private services in 2010.

<sup>&</sup>lt;sup>6</sup> A second difference between the two measures of tourism expenditures is that the Visa reports on credit card charges are only available for 2010 and 2011.

by 32 percent in 2011, from \$4.8 billion in 2010 to more than \$6.3 billion in 2011. Of the total amount spent on their Visa accounts on travel, 43 percent took place in the United States." The most significant spending categories on the Visa cards of these tourists from Brazil are retailrelated purchases, such as electronic goods, at specialty retail stores and department stores.

Figure 1 reports the monthly profile of Brazilian arrivals in the United States in 2011, with the highest number of arrivals in December, followed by July, and then January. We expect that the economic impact of this international tourism -- through increased revenues and employment in U.S. tourism-related industries -- to be greatest during those months and to be geographically concentrated. For example, travelers from Brazil are much more likely to visit New York City (a focus of visitors from all over the world) and southern Florida, which is relatively close to Brazil. In 2011, out of the top ten destination cities for international travelers from Brazil, five were in the Unites States. These were Orlando, New York, Miami, Las Vegas, and Los Angeles. The non-U.S. cities in the top ten were Buenos Aires, London, Paris, Rome, and Santiago.8

According to the SIAT results reported in U.S. Department of Commerce (2012a), 66 percent of travelers from Brazil identified leisure, recreation, or holiday as the main purpose of their trip to the United States, while 16 percent identified business or professional activities as the main purpose (table 1). This is significantly greater than the leisure, recreation, or holiday share for all overseas visitors to the United States, which is 53 percent. On the other hand, the share whose main purpose was to visit friends or relatives was much lower for travelers from Brazil (9 percent) than for all overseas visitors to the United States (21 percent). The share of Brazilian visitors that identified business or conferences as the main purpose of their trip was very similar to the business or conferences share of all overseas visitors to the United States. The most common activities on trips to the United States were shopping (95 percent of visitors from Brazil), dining in restaurants (89 percent), visiting historical places (51 percent) and visiting amusement theme parks (47 percent). In all of these categories, the shares of Brazilian travelers were higher than the comparable average shares for all overseas visitors to the United States (table 2).

According to the same survey, the average length of stay in the United States, among all of the visitors from Brazil, was 16.7 nights in 2011. This was down from an average of 18.6 nights in 2004. Twenty-six percent of the visitors in 2011 reported that their trip to the United States was

<sup>&</sup>lt;sup>7</sup> Information on Brazil's financed transactions is available at http://corporate.visa.com/\_media/via-brazil-2012-report.pdf. With the April 2011 increase in the tax rate on international credit card transactions of Brazilians, from 2.4 percent to 6.4 percent, international purchases of Brazilians with credit cards have declined. Brazilian Central Bank authorities report that Brazilians continue to travel abroad in significant volumes, but they are now using cash more frequently. (http://g1.globo.com/economia/noticia/2011/06/gasto-de-brasileiros-no-exterior-sobe-45-ate-maio-e-bate-recorde.html.)

<sup>&</sup>lt;sup>8</sup> The top destination cities for international travelers from Brazil are listed in a March 14, 2012 article in InfoMoney, titled "Orlando e principal destino dos turistas brasileiros no exterior, revela pesquisa." Available on-line at http://economia.uol.com.br/ultimas-noticias/infomoney/2012/03/14/orlando-e-principal-destinodos-turistas-brasileiros-no-exterior-revela-pesquisa.jhtm.

<sup>&</sup>lt;sup>9</sup> The data on travelers from Brazil to the United States in 2004 are from the 2004 market profile for Brazil, available at http://tinet.ita.doc.gov/view/f-2004-141-001/index.html.

their first experience traveling abroad. This share increased sharply from 10 percent in 2004, as international travel became more broadly popular among Brazilians.

# ECONOMIC FACTORS IDENTIFIED IN THE LITERATURE

We are not aware of any econometric studies that specifically focus on the determinants of international travel from Brazil to the United States. However, there is a large body of academic literature that examines the economic determinants of international travel between other pairs of countries, typically countries for which there is greater data availability. The insights from this broader literature provide guidance for our analysis of the demand for travel from Brazil to the United States, as they highlight the economic factors that are most important to international tourism.

Eilat and Einav (2004) provide econometric estimates of the price and income elasticities of international tourism demand. They estimate a conditional logit econometric model of destination choice, using aggregate travel data for a large panel of countries for the period from 1985 to 1998.10 They find that the price elasticity of demand for travel to high income countries is approximately -1.0. This means that the number of travelers that choose a destination increases by 10 percent for every 10 percent reduction in the price of tourism services in the destination, holding fixed the prices of tourism services in the other international destinations. The authors also report that greater political risk and international distance have significant negative effects on international tourism, while an increase in the Gross National Product per capita of the country of origin has a significant positive effect.

Han, Durbarry, and Sinclair (2006) focus on the U.S. demand for travel to major European destinations. The authors estimate an almost ideal demand system (AIDS) model using aggregate travel data for the period from 1965 to 1996.11 They model the destination shares of France, Italy, Spain, and the United Kingdom as functions of relative prices, exchanges rates, and the total expenditure levels of the travelers. They also find that an increase in the general price level in the destination country has a significant negative effect on international tourism demand, with own-price elasticities of demand that range from -2.1 to -0.9, depending on the destination country, while increases in the travelers' income levels have a significant positive effect on the demand for international tourism.

<sup>&</sup>lt;sup>10</sup> Discrete choice econometric models like the conditional logit model are useful for modeling travelers' choice of international destination, but they are not models of travelers' expenditure levels.

<sup>11</sup> In contrast to the conditional logit models, AIDS models are well-suited for modeling the expenditure levels of the international travelers. The conditional logit models incorporate information about which destination is chosen but not how much is spent overseas. The AIDS models, on the other hand, incorporate data on the allocation of expenditures across the overseas destinations. The two types of models also adopt different mathematical assumptions about the functional form of international tourism demand curves.

Belenkiy and Riker (forthcoming) reexamines the determinants of international tourism demand using individual traveler data rather than aggregate data. The authors estimate a constant elasticity of substitution (CES) log-linear econometric model, using data on U.S. tourists who traveled to forty-three overseas countries in 2009.<sup>12</sup> They find that price increases in the destination countries had a significant negative effect on overseas expenditures, with a conditional price elasticity of international tourism demand equal to -0.8. The level of economic development of the destination country, the international distance, and the income and age of the individual travelers all had significant positive effects on the individual travelers' overseas expenditures.

Riker (forthcoming) examines the relationship between the aging of the population of the country of origin and international travel, using individual survey responses of overseas recreational travelers from the United States to seventy-seven overseas countries in 2009. The econometric analysis indicates that there are significant differences across age groups in the propensity to travel, the length of stay, and the level of expenditure overseas that are consistent with the different economic incentives and constraints that each age group faces. The oldest and youngest age groups have a lower opportunity cost of time and lower income on average, and this is reflected in longer but less expensive international trips. For this reason, the growth and aging of the population in the country of origin has a significant positive effect on aggregate international travel flows. The study uses the econometric models to project the changes in aggregate international travel expenditures that will likely result from anticipated demographic changes over the next decade. While Riker (forthcoming) specifically focuses on outbound travelers from the United States in 2009, it has broader implications for international travel. The study indicates that the aging of the population, as well as overall population growth in the country of origin, can have a significant positive effect on the travelers' average length of stay and the level of expenditures overseas. This is similar to findings for international tourists from Japan in Mak, Carlile, and Dai (2005).

Li, Song, and Witt (2005) and Song and Li (2008) provide comprehensive and insightful surveys of the entire literature on modeling international tourism demand. Like the individual studies described above, these reviews emphasize that international tourism demand is moderately sensitive to prices in the destination country, both in absolute levels and relative to prices in the country of origin. International tourism demand is also very sensitive to the level of the traveler's disposable income.

<sup>&</sup>lt;sup>12</sup> The CES econometric model provides direct estimates of the demand elasticities.

## RELEVANCE OF THE ECONOMIC FACTORS FOR TRAVEL FROM BRAZIL TO THE UNITED STATES

In this section, we examine the recent trends in Brazil's economic data, with a particular emphasis on the economic factors identified in the previous section, including incomes, relative prices, exchange rates, and population demographics.

As noted by Han, Durbarry, and Sinclair (2006), the Gross Domestic Product (GDP) of the country of origin is an important determinant of leisure travel. Table 3 reports the increase in incomes in Brazil between 2004 and 2011, in terms of total GDP and GDP per capita, and the coinciding increase in the number of Brazilians visiting the United States.<sup>13</sup> Brazil's per capita real GDP increased by 23 percent between 2004 and 2011, while the number of visitors to the United States increased by 292 percent.

Of the five countries with the most international tourist spending in the United States, Brazil exhibited the highest GDP growth rates in 2008, 2009, and 2010 and the second highest (after Mexico) in 2011. The relatively robust growth in the Brazilian economy helped to mitigate the overall downturn in the U.S. economy.<sup>14</sup> Table 4 reports the annual growth rates of GDP (in constant local currency) for Canada, Japan, the United Kingdom, Mexico, and Brazil. These are the top five countries of origin of travelers to the United States.

Popular press accounts attribute the tourism boom at least in part to the growth of the middle class in Brazil. 5 Since international trips are expensive, typically costing thousands of dollars, the rise of the new middle class influenced the tourism boom by making trips to the United States affordable for a greater share of the Brazilian population.<sup>16</sup>

Likewise, the significant appreciation of the Brazilian Real has likely contributed to the tourism boom by making international travel relatively less expensive and more attractive to Brazilians. Figure 2 shows the increase in the value of the Brazilian Real, in terms of U.S. dollars, between 2004 and 2011. Figure 3 shows the 88 percent appreciation of Brazil's real effective exchange rate (REER) between 2004 and 2011. The REER index is a trade-flow weighted average of the country's bilateral exchange rates, adjusted for the nominal price levels in Brazil and in its trade partners.

<sup>&</sup>lt;sup>13</sup> The income data are from the World Bank's World Development Indicators.

<sup>&</sup>lt;sup>14</sup> Ritchie, Molinar, and Frechtling (2010) find that the global financial crisis had a significant negative effect on tourism in the United States, with a drop in travel demand that was twice the rate of the decline in GDP. In turn, the economic downturn in the United States may have stimulated travel demand by reducing the relative prices of services in the United States.

<sup>15 &</sup>quot;Brazil's New Consumer Class Spending Time and Cash in the U.S." (March 12, 2012). Jenny Barchfield and Gisela Salomon reporting for the Associated Press. "The Brazil Shopping Spree." Ewa Josefsson reporting for Global Blue at http://www.global-blue.com/corporate/intelligence/the-brazilian-hopping-spree/. The size of Brazil's middle class has increased in part due to a series of policies described in Riker and Vila-Goulding (2012).

<sup>&</sup>lt;sup>16</sup> "Brazilians, the Real Spenders." (December 21, 2011). John Lyons and Paulo Trevisani reporting for the Wall Street Journal.

Figure 4 compares the cost of consumption in Brazil, based on the purchasing power parity indices in the most recent Penn World Table (version 7), to the cost of consumption in France, Japan, and the United States, three of the major overseas destinations of Brazilian tourists. The relative price of consumption in all three countries dropped sharply between 2004 and 2009, which made international travel more attractive to Brazilians. The one exception to this trend was in 2008, when the Brazilian Real briefly depreciated. The United States was consistently the lowest cost of the three international destinations in Figure 4.

Finally, recent demographic changes in Brazil have also contributed to the international tourism boom. Table 5 reports the increase in the total population of Brazil between 2004 and 2011 and the increase in the share of its population between the ages of 25 and 64, the age group with the highest propensity to travel. While the population of Brazil grew by 7.5 percent over the period, this age group grew by 16.1 percent. The share of the population between the ages of 25 and 64 increased from 47.2 percent of the total Brazilian population in 2004 to 51.0 percent in 2011. 17 Riker (forthcoming) demonstrates that this middle age group has a higher propensity to travel overseas than any other age group, and therefore this change in population demographics is likely to have further fueled the boom in international tourism.

## POLICY INITIATIVES TO FACILITATE THE BOOM

As part of its National Tourism and Travel Strategy, the federal government of the United States has initiated a series of programs targeted at facilitating international travel from Brazil to the United States. These actions include streamlining the visa process, expanding existing facilities, and increasing consular staffing. 18 These changes are intended to improve the speed of visa processing, with the hope that increased international tourism will contribute to the growth of the U.S. economy.<sup>19</sup> U.S. non-immigrant visa issuances to Brazilians increased by 57 percent in the first half of fiscal year 2012, relative to the first half of fiscal year 2011. These policy initiatives may have contributed to this increase.

<sup>&</sup>lt;sup>17</sup> These population estimates are from the International Population Database of the U.S. Census Bureau. They are available at www.census.gov/populations/international/data/idb.

<sup>&</sup>lt;sup>18</sup> See "Increasing International Tourism to the U.S.: A National Strategy." U.S. Department of State (May 10, 2012) at http://fpc.state.gov/189650.htm. Also "Fact Sheet: the United States and Brazil Facilitating Travel and Exchange." White House Office of the Press Secretary (April 9, 2012) at http://www.whitehouse.gov/ the-press-office/2012/04/09/fact-sheet-united-states-and-brazil-facilitating-travel-and-exchange.

<sup>&</sup>lt;sup>19</sup> See "Increasing International Tourism to the U.S.: A National Strategy." U.S. Department of State (May 10, 2012) at http://fpc.state.gov/189650.htm. Also "Fact Sheet: the United States and Brazil Facilitating Travel and Exchange." White House Office of the Press Secretary (April 9, 2012) at http://www.whitehouse.gov/ the-press-office/2012/04/09/fact-sheet-united-states-and-brazil-facilitating-travel-and-exchange.

## CONCLUSION

Several factors likely contributed to the recent boom in Brazilians traveling to the United States. First, incomes have risen for an increasing share of the Brazilian population. Second, the appreciation of the Brazilian currency has made international travel and overseas shopping more attractive and relatively more affordable. Finally, the demographic shift in Brazil has increased international travel.

The next step in this line of research is to quantify the individual contribution of each of these economic fundamentals to the tourism boom. An econometric model of international tourism demand like Belenkiy and Riker (forthcoming) would serve that purpose, though that particular model is based on outbound travel from the United States, and it would be preferable to re-estimate the model for inbound travel to the United States. With a forecast of future trends in these economic factors and an econometric model that relates these factors to international travel outcomes, it would be possible to estimate whether the boom in tourists from Brazil is transitory or is likely to continue unabated.

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Table 1: Main Purpose of the International Trip

Top Four Purposes	Travelers from Brazil in 2011	All Travelers from Overseas in 2011
Leisure, recreation, or holiday	66%	53%
Business or professional	16%	17%
Visit friends or relatives	9%	21%
Convention or conference	5%	4%

Source: U.S. Department of Commerce (2012a).

Table 2: Most Common Activities of International Travelers While in the United States

Activity (Multiple responses possible)	Travelers from Brazil in 2011	All Travelers from Overseas in 2011
Shopping	95%	88%
Dining in restaurants	89%	84%
Visit historical places	51%	41%
Amusement theme parks	47%	30%

Source: U.S. Department of Commerce (2012a).

Table 3: Income Levels and Income per Capita in Brazil

Year	GDP in Billions of Constant 2005 Dollars	GDP per Capita in Constant 2005 Dollars	Number of Visitors to the U.S. from Brazil in Thousands
2004	1,543	8,344	385
2005	1,583	8,509	485
2006	1,645	8,753	525
2007	1,745	9,196	639
2008	1,836	9,584	769
2009	1,830	9,468	893
2010	1,968	10,093	1,198
2011	2,201	10,278	1,508

Source: World Bank World Development Indicators database (http://data.worldbank.org/data-catalog/ world-development-indicators) and U.S. Department of Commerce (2012a).

Table 4: Annual GDP Growth Rates of the Top Five Countries of Origin of Travelers to the U.S.

Country of Origin	2008	2009	2010	2011
Canada	0.69%	(2.77%)	3.22%	2.46%
Japan	(1.04%)	(5.53%)	4.44%	(0.70%)
United Kingdom	(1.10%)	(4.37%)	2.09%	0.66%
Mexico	1.19%	(6.24%)	5.52%	3.94%
Brazil	5.17%	(0.33%)	7.53%	2.73%

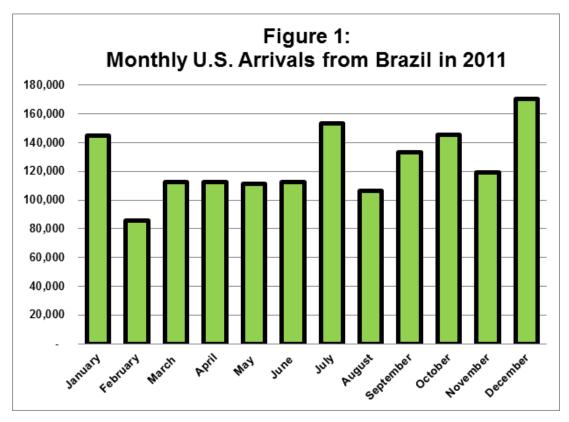
Note: The table reports the percentage annual growth rate of each country's GDP, in constant 2005 local currency units.

Source: World Bank World Development Indicators database. (http://data.worldbank.org/data-catalog/ world-development-indicators)

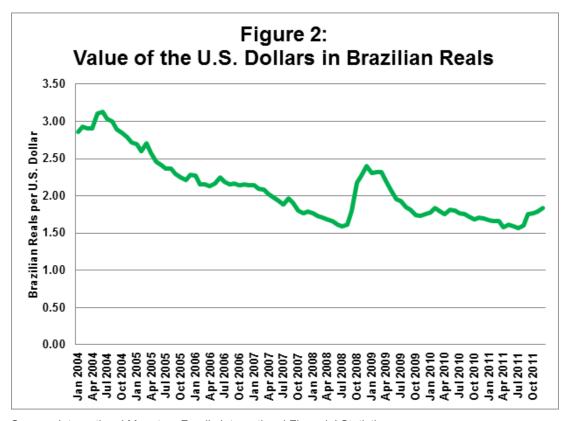
Table 5: Population and Population Shares of Middle Age Group in Brazil

Year	Total Population	Share of Population Between Ages 25 and 64
2004	183,827,544	47.16%
2005	186,020,004	47.71%
2006	188,131,059	48.25%
2007	190,167,417	48.80%
2008	192,130,270	49.36%
2009	194,019,058	49.93%
2010	195,834,188	50.47%
2011	197,595,498	50.95%

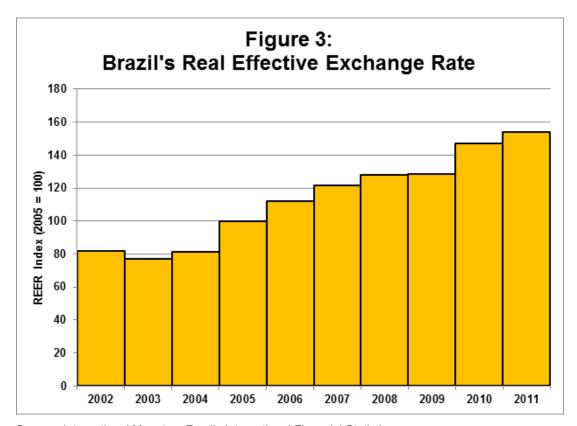
Source: International Population Database of the U.S. Census Bureau.



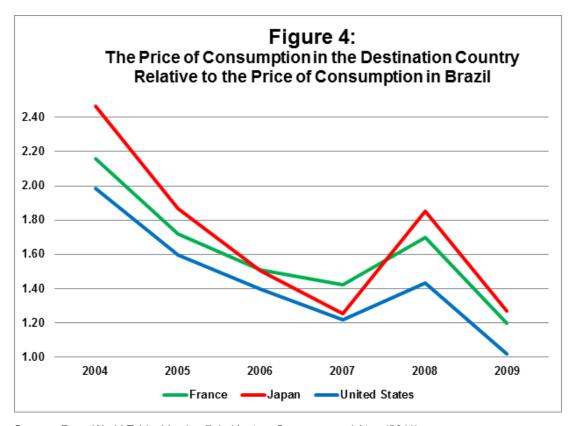
Source: U.S. Department of Commerce (2012a).



Source: International Monetary Fund's International Financial Statistics.



**Source:** International Monetary Fund's International Financial Statistics.



Source: Penn World Table, Version 7, in Heston, Summers, and Aten (2011).