



AIR PASSENGER TRANSPORTATION IN LATIN AMERICA

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Abstract

Until 2015, the Brazilian civil airport Guarulhos (GRU), was the busiest airport in Latin America. From 2016 to date, Mexico City International Airport (MEX) is the busiest airport in passenger transportation in Latin America. This article investigated air passenger transportation in Latin America, to discuss the evolution of civil aviation in recent years. This research investigated the N=10 busiest airports in Latin America compared with the ten busiest airports worldwide, through a descriptive case study. Data were collected through archival research on a government database and analyzed through content analysis. Key findings pointed out an increasing activity of Mexico City International Airport (MEX) in the last four years. Discussion and future research compile the present work.

Keywords: Aviation, passenger transportation, International Airport, Latin America

1.Introduction

This study investigated the civil aviation in Latin America. The fifteen busiest airports in Latin America, regarding air passenger transportation, are the unit of analysis (Yin, 1988).

This article has the objective to deepen the understanding of civil air transportation in Latin America through multiple methods approaches, such as content analysis, archival research, and case analysis. We compared the busiest Latin American airports throughout the last five years, detecting an increase in activities of Mexico International Airport, in comparison to other airports. We analyze and discuss the results in the following sections.

Moreover, recent studies have been attracting scholar attention on civil air transportation (Dias, M.O., 2019c, 2019d); also, e-business negotiation (Dias & Duzert, 2017); aircraft manufacturer industry (Dias, M., Teles, and Duzert, 2018; Dias, M.O. and Duzert, 2018), mining industry (Dias, M. O. & Davila, 2018); car manufacturer industry (Dias, M. O., Navarro and Valle, 2013, Dias, M. O., et al., 2014; Dias, M. O., et al., 2013); streaming video industry (Dias, M. O., & Navarro, 2018); craft beer industry (Dias, M.O. & Falconi, 2018; Dias, M. O., 2018); public administration (Dias, M. O., 2018); governmental business negotiation relations (Dias, M. O. & Navarro, 2017); copier machines industry (Dias, M.O., 2012); generational interactions in business interactions (Aylmer & Dias, M. O., 2018), and debt collection negotiations (Dias, M.O., 2019, 2019b; Dias, M.O. & Albergarias, 2019); NGOs (Paradela, Dias, M.O.; Assis; Oliveira, J.; Fonseca, R. (2019). Figure 1 depicts the current ten busiest airports worldwide, regarding air passenger transportation:

#	Airport	Location	Country	Passenger/year
1	Atlanta Airport International	Atlanta, Georgia	USA	104 171 935
2	Beijing Airport International	Beijing	China	94 393 454
3	Dubai Airport International	Dubai	UEA	83 654 250
4	Airport International de Los Angeles	Los Angeles	USA	80 921 527
5	Airport International Haneda	Tokyo	Japan	79 699 762
6	O'Hare Airport International	Chicago	USA	78 327 479
7	Heathrow Airport International	Hillingdon	UK	75 715 474
8	Hong Kong Airport International	Hong Kong	China	70 314 462
9	Pudong Airport International	Shanghai	China	66 002 414
10	Charles de Gaulle Airport International	Paris	France	65 933 145

Figure 1: Ten busiest airports worldwide, 2018. Source: IATA, 2019

Note in Figure 1 that Atlanta International Airport carries more than two times the busiest airport in Latin America, the Mexico International Airport, and Latin American airports are not among the ten busiest airports worldwide.

Observe that Atlanta Airport (ATL) has the largest passenger aviation traffic, carrying every year approximately one-third of the entire North American population (near 315 million people). In the next section, Methods and limitations are presented.

2. Methods and Limitations

This article is a qualitative, inductive interpretive and reasoning. Results were achieved through a multiple-methods approach, combining archival research with the descriptive, single case study, which unit of analysis is the civil airport network in Brazil (Yin, 1988). The sample was investigated in the IATA (2019) database regarding the N=10 busiest airports in Latin America, from 2014 to 2018, and the ten busiest airports worldwide.

This article is limited to civil aviation, specifically passenger transportation. Other activities, such as military aviation and cargo transportation, are not addressed in the present study. Also, activities such as shopping or parking lot administration are not within the scope of this work. Finally, this study is limited to the Latin American civil aviation legislation, as well as the IATA's international standards (IATA, 2019)

3. Civil aviation in Latin America: busiest airports

The ten busiest civil aviation airports in Latin America are depicted in the following Figure 2:

#	Airport	Location	Country	IATA	Passenger/year
1	Mexico City International Airport	Mexico City	Mexico	MEX	47,700,547
2	São Paulo-Guarulhos International Airport	São Paulo	Brazil	GRU	42,831,981
3	El Dorado International Airport	Bogotá	Colombia	BOG	32,716,468
4	Cancún International Airport	Cancún	Mexico	CUN	25,202,016
5	Jorge Chávez International Airport	Lima	Peru	LIM	23,659,196
6	Comodoro Arturo Merino Benítez International Airport	Santiago	Chile	SCL	23,324,306
7	São Paulo-Congonhas Airport	São Paulo	Brazil	CGH	21,546,480
8	Brasília International Airport	Brasília	Brazil	BSB	17,622,873
9	Tocumen International Airport	Panama City	Panama	PTY	16,242,679
10	Rio de Janeiro-Galeão International Airport	Rio de Janeiro	Brazil	GIG	15,005,304

Figure 2 Ten busiest Airports in Latin America in 2018. Source: IATA, 2019

Observe in Figure 2 that Mexico City International Airport (MEX) transported near 47 million passengers throughout 2018, five million more passengers than the second busiest airport, Guarulhos International (GRU). Rio de Janeiro International Airport (GIG) occupies the tenth position.

3. Civil air transportation in Latin America: 2014-2019¹

In this section, we described the last five years (2014-2019) of the ten busiest airports in Latin America, with the objective of providing a comparable performance on the evolution of civil air transportation in this period. Figure 3 depicts the ten busiest airports in Latin America in 2017:

¹ Data available until december 2018.

#	Airport	Location	Country	IATA	Passenger/year
1	Mexico City International Airport	Mexico City	Mexico	MEX	44,732,418
2	São Paulo-Guarulhos International Airport	São Paulo	Brazil	GRU	37,765,898
3	El Dorado International Airport	Bogotá	Colombia	BOG	30,989,932
4	Cancún International Airport	Cancún	Mexico	CUN	23,601,509
5	Jorge Chávez International Airport	Lima	Peru	LIM	22,046,042
6	São Paulo-Congonhas Airport	São Paulo	Brazil	CGH	21,859,453
7	Comodoro Arturo Merino Benítez International Airport	Santiago	Chile	SCL	21,426,871
8	Brasília International Airport	Brasília	Brazil	BSB	16,912,680
9	Rio de Janeiro-Galeão International Airport	Rio de Janeiro	Brazil	GIG	16,243,253
10	Tocumen International Airport	Panama City	Panama	PTY	15,616,065

Figure 3 Ten busiest Airports in Latin America in 2017. Source: IATA, 2019

Comparing Figures 2 and 3, observe that while civil air passenger transportation in Mexico International Airport (MEX) increased from near 44 to 47 million passengers transported (approximately 7 percent), the Guarulhos International Airport in Brazil increased its activities in 13 percent in one year (from 37 to 42 million passengers transported). Even with this remarkable performance, it was not enough to regain the first position from MEX. Figure 4 depicts the ten busiest airports in Latin America in 2016:

#	Airport	Location	Country	IATA	Passenger/year
1	Mexico City International Airport	Mexico City	Mexico	MEX	41,710,254
2	São Paulo-Guarulhos International Airport	São Paulo	Brazil	GRU	36,596,326
3	El Dorado International Airport	Bogotá	Colombia	BOG	31,041,841
4	Cancún International Airport	Cancún	Mexico	CUN	21,415,795
5	São Paulo-Congonhas Airport	São Paulo	Brazil	CGH	20,816,957
6	Jorge Chávez International Airport	Lima	Peru	LIM	19,286,158
7	Comodoro Arturo Merino Benítez International Airport	Santiago	Chile	SCL	18,943,231
8	Brasília International Airport	Brasília	Brazil	BSB	17,947,153
9	Rio de Janeiro-Galeão International Airport	Rio de Janeiro	Brazil	GIG	16,103,011
10	Tocumen International Airport	Panama City	Panama	PTY	14,741,937

Figure 4 Ten busiest Airports in Latin America in 2016. Source: IATA, 2019

Observe in the following Figure 5 and 6 that in 2015 and 2014, Guarulhos International Airport (GRU) in Brazil, was the busiest airport in Latin America:

#	Airport	Location	Country	IATA	Passenger/year
1	São Paulo-Guarulhos International Airport	São Paulo	Brazil	GRU	38,984,587
2	Mexico City International Airport	Mexico City	Mexico	MEX	38,433,078
3	El Dorado International Airport	Bogotá	Colombia	BOG	29,956,551
4	Brasília International Airport	Brasília	Brazil	BSB	19,821,796
5	Cancún International Airport	Cancún	Mexico	CUN	19,596,485
6	São Paulo-Congonhas Airport	São Paulo	Brazil	CGH	19,279,644
7	Jorge Chávez International Airport	Lima	Peru	LIM	17,575,919
8	Comodoro Arturo Merino Benítez International Airport	Santiago	Chile	SCL	17,230,567
9	Rio de Janeiro-Galeão International Airport	Rio de Janeiro	Brazil	GIG	16,942,229
10	Tocumen International Airport	Panama City	Panama	PTY	13,434,673

Figure 5 Ten busiest Airports in Latin America in 2015. Source: IATA, 2019

#	Airport	Location	Country	IATA	Passenger/year
1	São Paulo-Guarulhos International Airport	São Paulo	Brazil	GRU	39,573,000
2	Mexico City International Airport	Mexico City	Mexico	MEX	34,255,739
3	El Dorado International Airport	Bogotá	Colombia	BOG	27,430,266
4	Brasília International Airport	Brasília	Brazil	BSB	18,146,405
5	São Paulo-Congonhas Airport	São Paulo	Brazil	CGH	18,134,768
6	Cancún International Airport	Cancún	Mexico	CUN	17,455,353
7	Rio de Janeiro-Galeão International Airport	Rio de Janeiro	Brazil	GIG	17,261,873
8	Jorge Chávez International Airport	Lima	Peru	LIM	16,170,035
9	Comodoro Arturo Merino Benítez International Airport	Santiago	Chile	SCL	16,068,242
10	Tocumen International Airport[65]	Panama City	Panama	PTY	12,782,167

Figure 6 Ten busiest Airports in Latin America in 2014. Source: IATA, 2019

4. The evolution of civil air transportation in Latin America: analysis and discussion

In this section, we analyzed the data displayed in the previous sections. Observe in Figure 7 that the ten busiest airports in Latin American have transported more than one billion passengers (1,204101,411 passengers), increasing the activities in 22.3 percent approximately regarding the last five years:

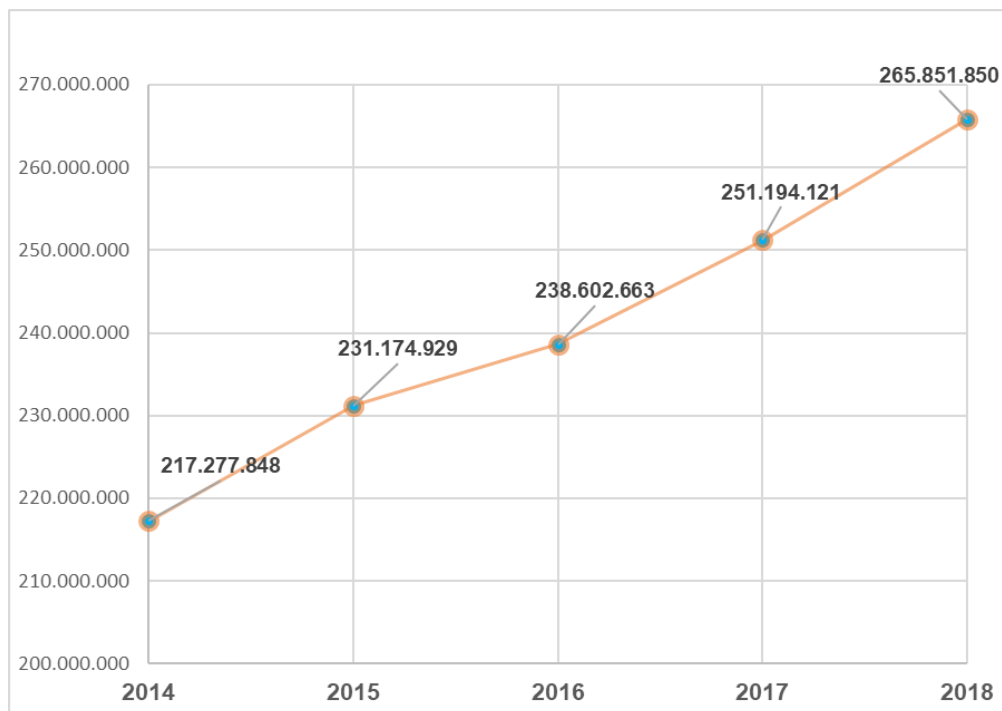


Figure 7 Ten busiest Airports in Latin America from 2014 to 2018. Source: IATA, 2019

A comparison between the two busiest airports, Mexico City International Airport (MEX) and São Paulo Guarulhos International Airport (GRU) is illustrated in the following Figure 8:

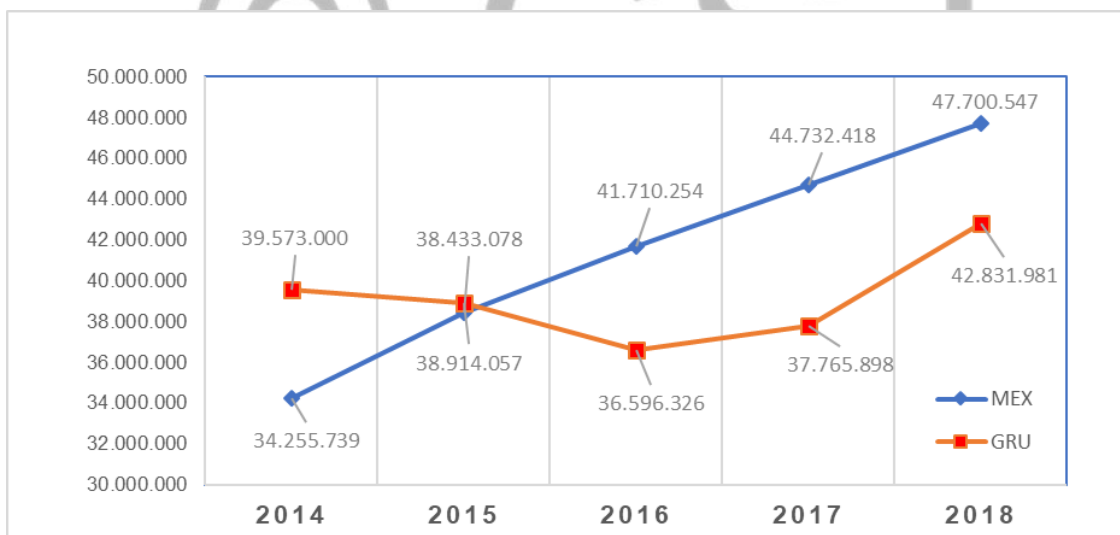


Figure 8 Comparison between MEX and GRU from 2014 to 2018. Source: IATA, 2019

Our analysis indicates a turning point occurred in 2015 when MEX overpassed GRU Airport in the number of passengers carried. The economic crisis in Brazil, combined with increasing touristic activity in Mexico, is the cause of such increasing. For instance, Mexico between 2016 and 2017, welcomed near 34 million tourists, while Brazil welcomed near 12 million tourists, approximately one-third of the tourists that entered in Mexico. The Olympics 2016, hosted in Rio de Janeiro, Brazil, was not enough to increase the number of passengers transported within the Brazilian airports.

Finally, we compared the ten busiest airports in Latin America, from 2014 to 2019, with data available on December 31, 2018, as illustrated in Figure 9, as follows:

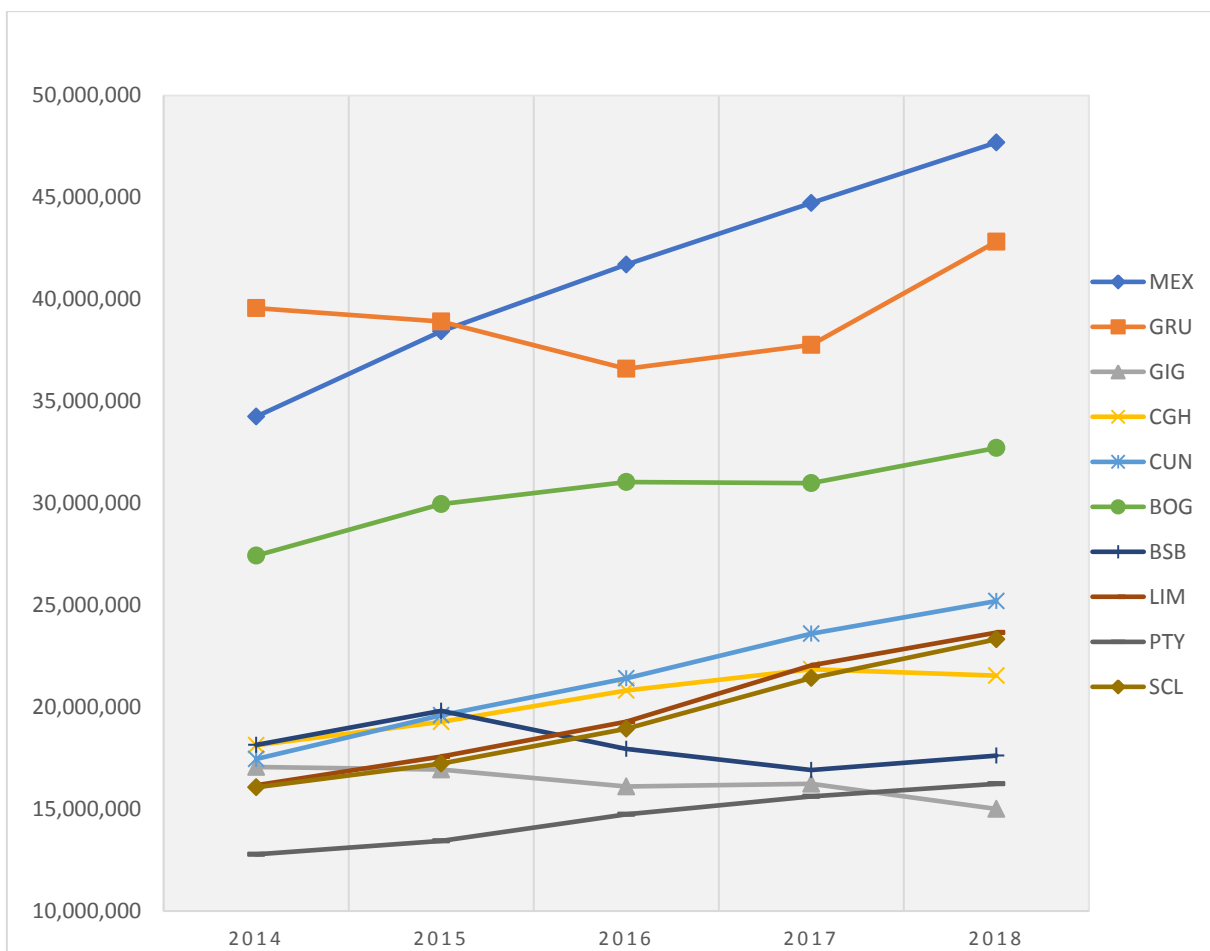


Figure 9 Comparison between the ten busiest Latin American airports, from 2014 to 2018. Source: IATA, 2019

Our analysis also indicated in Figure 9 that CUN, BSB, LIM, PTY, SCL, GIG, and CGH, in the last five years, did not overpass the amount of 25.5 million passengers transported in a year, while the three first positions, MEX, GRU, and BOG have transported the minimum of 27 million passengers approximately. Evidence also suggests that MEX, GRU, and BOG keep the distance from the seven airports as mentioned above up to 7 million passengers in 2019-2020. On average, the ten busiest airports in Latin America increased the number of passengers transported in the last five years by 5.02 percent per year, as shown in Figure 9.

Finally, the ups and downs are explained by an increase in tourist demand, especially MEX, CUN, BOG, or downturns in the Brazilian airports due to a decrease of touristic activity, motivated by urban uprising violence, economic crisis during the last five years.

5. Future Research

For future research, it is encouraged the investigation of the impact of tourism in the Latin American airport network, also comparing investments in airport expansion, such as conducted in 2019 by SCL and GIG, in turn, might shift the results for the next five years, for instance. Also, comparing the investments made in infrastructure combined with the federal concessions recently adopted, as GIG

recently (2014). The case will be revisited in the future to assess the Latin American airport network expansion. Also, we recommend the investigation of customer satisfaction for expanding the current knowledge and epistemology on airport networks in Latin America.

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