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FACILITATION OF TRANSPORT AND TRADE IN LATIN AMERICA AND THE CARIBBEAN

Air transport as a driver of sustainable development in Latin America and the Caribbean: challenges and policy proposals

Background

Aviation, which in 2014 contributed more than USD 167 billion to total GDP in Latin America and the Caribbean and provided 5.2 million jobs in the region, is a key enabler of economic activity. Air transport plays a leading role in tourism and trade, facilitating connections, social inclusion and the exchange of knowledge and ideas; it also supports economic competitiveness, productivity increases, improvements in efficiency and the promotion of innovation. There is, however, a reciprocal relationship at play: the operational and regulatory capacity of governmental agencies is necessary for the development of air connectivity.

The aviation market in Latin America and the Caribbean has enormous potential for growth, as regards both interregional connectivity and connections with the rest of the world. The potential of aviation in the region is significant for both the sector itself and the economy in general.

At the same time, in order to maximize aviation's benefits for national and regional development, the authorities of the region must foster an operational and regulatory framework that enables airlines to make the greatest possible economic and social contribution. This goal can be achieved by:

- Recognizing that aviation is a strategically important sector that supports many of the Sustainable Development Goals and, as such, must be an integral part of the development strategies adopted by the region's governments.
- Addressing infrastructure bottlenecks and, in particular, ensuring good planning in order to respond to growing passenger and cargo demand.

Continuing with the work of ECLAC on integrated and sustainable policies for logistics and mobility, this *FAL Bulletin* analyses the performance of air transport in Latin America and the Caribbean in terms of its economic and social impact and its contribution to sustainable development in the region. It offers a series of recommendations to bolster the development of air transport and allow the great potential for growth that exists in the aviation industry to be tapped.

The document was written by James Wiltshire, Head of Policy Analysis at the International Air Transport Association (IATA), and Azhar Jaimurzina, Head of the Infrastructure Services Unit of the Natural Resources and Infrastructure Division at ECLAC. The authors would like to thank Pablo Chauvet of the ECLAC Infrastructure Services Unit for his valuable comments.
For more information on this topic, contact azhar.jaimurzina@cepal.org.

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Natural Resources and Infrastructure Division, UNECLAC

- Addressing cost competitiveness by assessing the economic implications of fees and taxes on air travel, and ensuring that airport operators, the airline industry and consumers are all subject to economic regulation.
- Implementing sound regulatory policies for aviation that introduce new regulations only when there is a clearly identified need, require consultation with the industry and other stakeholders where regulation is required, and ensure that policy implementation complies with international best practices.

If governments were to adopt economic and regulatory policies that encouraged the development of air transport, demand could more than triple and the sector's economic contribution could rise to USD 530 billion in GDP and 11.9 million aviation-dependent jobs. Air transport and many other sectors (including tourism) are closely intertwined and, together, they have a multiplier effect on the economy. Comprehensive and sustainable policies are therefore essential, so that instead of fuelling conflicts, intersectoral complementarity can simultaneously benefit all sectors to the benefit of the economy and society.

In that context, this *FAL Bulletin* offer a series of considerations regarding air transport's contribution to regional development, together with a number of policy recommendations for Latin America and the Caribbean to achieve its potential as a vibrant and dynamic aviation market through an active and sustained partnership between governments, industry associations, the commercial sector and civil society. Since the environmental dimension of the air transport sector has already been examined in different studies, policy documents and ICAO environmental reports (ICAO, 2016), this bulletin will focus on topics related to the sector from the perspective of economic and social development. Likewise, the paper's focus on the benefits of air travel does not imply that this mode of transport is without negative externalities or that other forms of transport have been ignored; instead, it seeks to reshape some of the traditional perceptions of the sector that fail to take into consideration the full range of its current and potential contributions to sustainable development

I. Civil aviation in Latin America and the Caribbean: the economic value of its potential as one of the drivers of economic and social growth

Latin America and the Caribbean is one of the world's largest and most complex regions. Accordingly, as part of the transport and logistics sector, the air transport industry plays a vital role in connecting people and their communities, among themselves and with the rest of the world. According to the most recent figures from IATA, the aviation sector in Latin America and the Caribbean generates the equivalent of 2.7% of GDP (data for the year 2014, in current 2014 dollars), or USD 167 billion, and supports 5.2 million jobs.

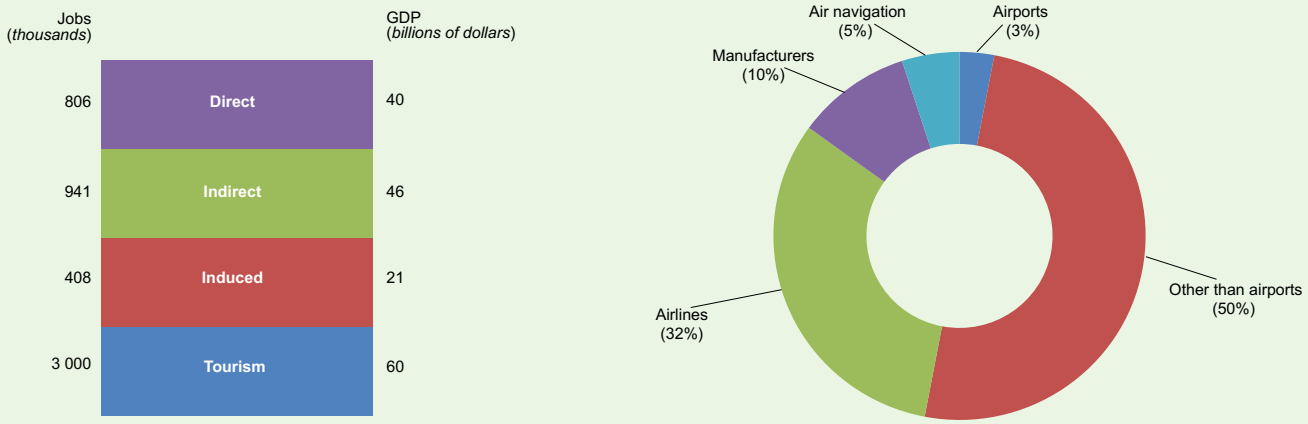
Air transport allows rapid and convenient travel, including journeys to remote areas not served by other modes of transport, and facilitates economic growth, trade and investment. The connectivity that air transport provides brings individuals and businesses together, makes global supply chains possible and connects families and communities. Air connectivity is also a measure of economic potential and opportunity. Countries with extensive air connections are better placed to capitalize on the economic and social benefits that air transport offers.

In just 10 years, between 2006 and 2016, commercial air traffic in Latin America and the Caribbean doubled and, over the same period, domestic traffic in several of the region's countries tripled. On average, air traffic in the region has grown at an annual rate of 6%. The airports of several major markets have also made great efforts to expand or optimize their capacity in order to adapt to the increasing demand for air transport.

Aviation makes an important contribution to the region's economy by creating jobs and generating wealth (see figure 1):

- According to the most recent available data, airlines, airport operators, businesses located at airports (restaurants and shops) and air navigation service providers employ 806,000 people in Latin America and the Caribbean. The industry also directly contributes USD 40 billion in gross added value to the region's GDP.
- In addition, by purchasing goods and services from local providers, the sector supports another 941,000 jobs and USD 45.9 billion dollars of GDP and, through the economic activity that it induces, the sector supports another 408,000 jobs and USD 21.3 billion dollars in GDP.
- Foreign tourists travelling to the region by air and spending their money in local economies support another 3 million jobs and contribute USD 60 billion to the region's economy.
- Airlines in Latin America and the Caribbean have invested vast sums of money to improve connectivity in the region, modernize their fleets, improve efficiency, reduce fuel consumption and curtail their emissions of carbon dioxide and other greenhouse gases.

Figure 1
Contribution of air transport to GDP and employment in Latin America and the Caribbean, 2014



Source: Air Transport Action Group (ATAG), *Aviation Benefits Beyond Borders*, Geneva, July, 2016; Oxford Economics, *Economic Impact of Constrained Passenger Growth in Latin America*, London, May 2017.

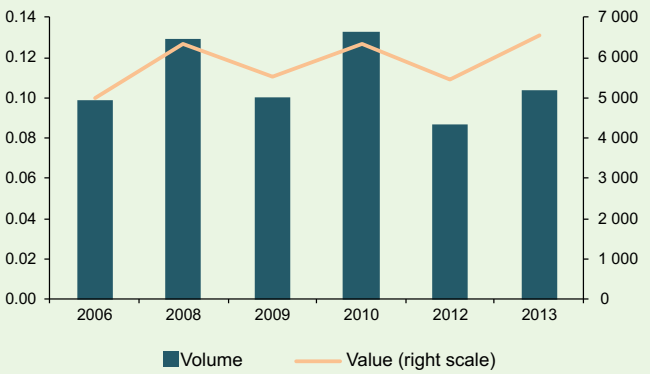
In addition to facilitating tourism, air transport allows companies to market their goods and services around the world and helps attract foreign investment. Air cargo accounts for 35% of the total value of global trade (ATAG, 2016). Air cargo is particularly important for perishable shipments, such as fish, fresh fruit and vegetables, and pharmaceuticals.

Air transport can also boost productivity in the economy as a whole:

- By expanding client bases: air transport enables companies to tap into economies of scale and reduce unit costs.
- By exposing domestic firms to greater foreign competition: it helps drive improvements in the efficiency of a country's businesses and keep them competitive.
- By improving efficiency: numerous industries depend on air transport to maintain their "just in time" production operations, which increase the flexibility of supply chains and reduce costs by minimizing inventories.
- By encouraging innovation: extensive air transport links facilitate the creation of professional networks and foster cooperation among businesses and researchers located in different parts of the world. Access to a wider range of markets also encourages companies to spend more on research and development, on account of the larger potential markets available for future sales.

Although air transport carries only 0.17% of the total volume of intraregional trade in South America, it has been playing a growing role in terms of the value of the goods it carries (figure 2) and its share in the total value of cargo transported (6.46%, according to 2013 data). It is the mode of transport with the highest per-ton cargo values: USD 63,008 per ton, compared to USD 2,126 per ton for cargo carried by road, USD 1,201 for ocean-going shipments and USD 833 for goods transported by rail (Wilmsmeier and Spengler, 2015).

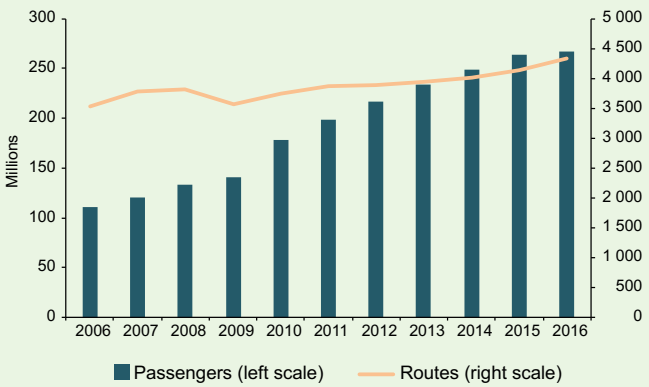
Figure 2
Intraregional trade in South America: cargo transported by air, 2006-2013
(Millions of tons and millions of dollars)



Source: Prepared by the authors on the basis of the Economic Commission for Latin America and the Caribbean (ECLAC) International Transport Database (BTI), several years, and G. Wilmsmeier and T. Spengler, "The evolution of modal split in freight transport in South America, 2000-2013", *FAL Bulletin*, No. 343, Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), July 2015.

Similarly, the number of air passengers in Latin America and the Caribbean has grown steadily over recent years, rising from 110 million in 2006 to over 266 million in 2016 (see figure 3).

Figure 3
Latin America and the Caribbean: growth in numbers of passengers (departures) and routes, 2002-2016



Source: Prepared by the authors on the basis of data from International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA), "Schedules Reference Service (SRS Analyser)" [online] http://www.iata.org/publications/srs/Pages/analyser.aspx.

Current projections show that over the next 10 to 15 years, air traffic volumes in the region could double once more, raising questions on the existence of the conditions needed to handle such passenger numbers and on the States' readiness to handle them.

An understanding of the capacity —or lack thereof— for managing the potential growth in passenger numbers would allow governments, airports, airlines and other industry stakeholders to proactively ensure that this growth is sustainable and maximize the potential benefits that a flourishing aviation industry could offer the regional economy. Improvements are needed in air traffic handling, air navigation, airport infrastructure, regulatory harmonization and in the use of technology for managing passengers.

More passengers, greater connectivity and faster economic growth trigger multiple benefits at all levels. The aviation industry could catalyse this opportunity, thereby helping the region's governments and other stakeholders involved in the pursuit of sustainable growth to take advantage of the sector's contribution to economic and social development in the twenty-first century.

While demand for air travel to, from and within Latin America and the Caribbean is expected to double over the next 20 years, the true potential is much greater. With favourable public policies, passenger numbers could rise to more than a billion a year (see figure 4).

Figure 4
Growth in passenger demand in the region, 2016-2036

Source: International Air Transport Association (IATA), "IATA Economics" [online] http://www.iata.org/publications/economics/pages/index.aspx, based on the TE/IATA Air Passengers Forecasts

This expanded demand would not only benefit the region's aviation sector: encouraging air transport and allowing national and international connectivity to reach its full potential would also provide a major boost for the region's economy and competitiveness.

According to studies by Oxford Economics (2017), the provision of a favourable operational and regulatory environment would, by 2035, raise the total number of aviation-dependent jobs to more than 11.9 million and increase the sector's contribution to GDP up to USD 500 billion.

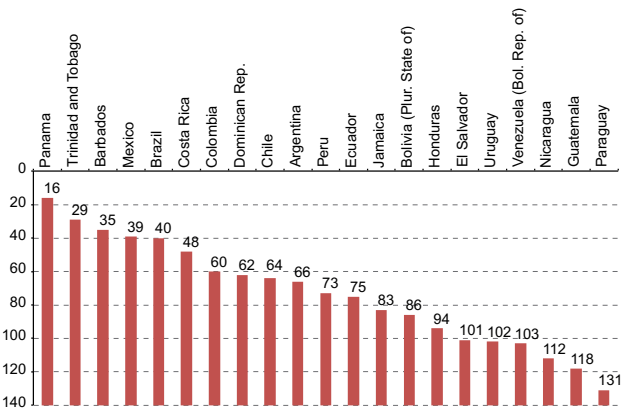
II. Towards a more dynamic industry with a leading role: the main challenges facing aviation competitiveness in the region

The World Economic Forum (WEF) has developed a global travel and tourism competitiveness index, which provides a major insight into the extent to which countries promote the development of their travel and tourism industries. The WEF index encompasses many of the factors needed to develop connectivity and create greater economic benefits in terms of productivity and economic growth. It

offers individual countries an indication of their relative standing regarding each factor and of how they compare to their neighbours and similar countries.

Figure 5 shows the rankings for a group of the region's countries. As can be seen, the results vary to a great extent.

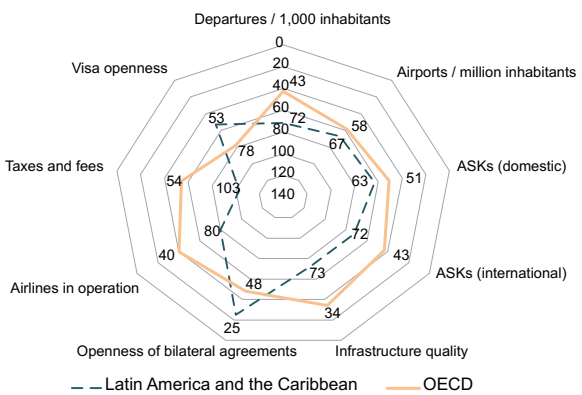
Figure 5
Aviation competitiveness (selected countries, global ranking of 140 countries)



Source: World Economic Forum (WEF).

Figure 6 provides a breakdown of the region's average ranking for the different aviation-related indicators that make up the travel and tourism competitiveness index, demonstrating how Latin America and the Caribbean compare to the OECD member countries.

Figure 6
Aviation competitiveness by indicator



Source: World Economic Forum (WEF).

Predictably, the OECD countries post better results than Latin America and the Caribbean for most of the indicators; the sole exceptions are bilateral arrangements and visa policies which, in general, are more liberal in Latin America and the Caribbean.

There are, however, three indicators where the differences are particularly significant:

- International connectivity, measured in available seat kilometres (ASKs).
- Airport infrastructure, in terms of both quality and quantity.
- Competitiveness of fares, measured by fees and taxes on airline tickets.

Given their central role in improving competitiveness, the issues of connectivity, infrastructure and cost competitiveness will be studied in greater detail in the following sections.

A. Air connectivity in Latin America and the Caribbean

Air connectivity is a measure of economic potential and opportunity. It is vitally important for companies seeking to access global value chains as well as for those competing to attract foreign direct investment. For example, when multinational corporations look to establish a regional headquarters in Latin America, one important factor is the ability to serve the rest of the region from a single facility, with a network that is broad and deep enough to allow trips to many different locations in one single day. As a result, countries with more air connections are better placed to capitalize on the economic and social benefits that air transport can offer.

There are many dimensions to air connectivity: the number of routes, the importance of the destinations served, the frequency with which routes operate and the quantity of seats available.

IATA has developed a connectivity index to measure how integrated countries fare within the global air transport network. It provides a qualitative measurement of the number and economic importance of the destinations served by a country's main airports, the frequency of the flights serving each destination and the number of ongoing connections that each of those destinations offers. A larger number of destinations, a greater frequency of services and/or a higher number of large airports and hubs served mean higher levels of connectivity.

The connectivity index is based on the number of seats available for each destination served during the first week of July. The number of seats available for each destination is then weighted by the size of the destination airport (measured by the number of passengers handled in a year). The weighting of each destination gives an indication of the economic importance of the destination airport and the number of indirect connections it can provide.

For example, Mexico City Airport, as the region's busiest, has a weight of 1, while Santiago Airport, which handles 48% of the passenger numbers that pass through Mexico City, is weighted at 0.48. Thus, if an airport has 1,000 seats available for Mexico City, it is given a weighted total of 1,000. However, if it also has 1,000 seats to Lima available, they are assigned a weighted total of 480.

The weighted totals for all destinations are added together to determine the connectivity index. The connectivity index can therefore be expressed as:

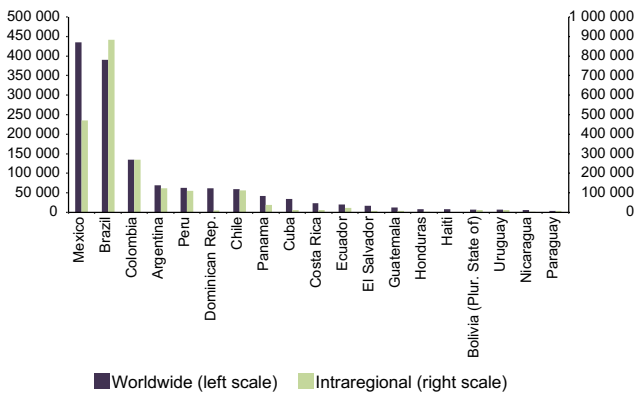
$\sum$ *(Frequencies *Number of seats per flight *Destination airport weighting)*

*(Frequencies *Number of seats per flight *Destination airport weighting)*

Higher connectivity index values represent increased access to the global air transport network. It is a qualitative indicator that reflects the importance not only of serving a large number of destinations, but of serving those destinations that have significant economic relevance and offer business travellers access to a large number of onward connections.

By way of illustration, figures 7 and 8 show 2017 connectivity indices in Latin America and the Caribbean for both worldwide and intraregional travel.

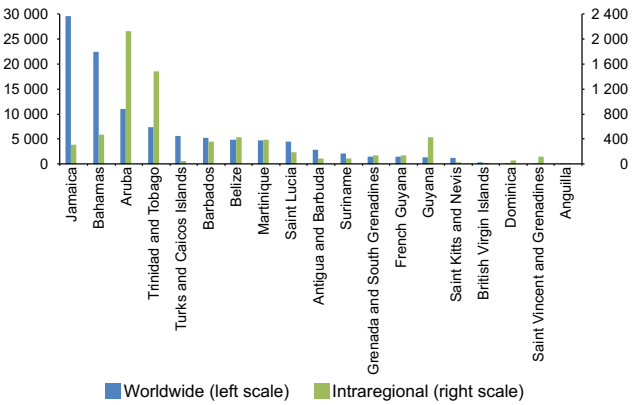
Figure 7
Latin America: air connectivity index (worldwide and intraregional, 2017)



Source: International Air Transport Association (IATA), "IATA Economics" [online] http://www.iata.org/publications/economics/pages/index.aspx.

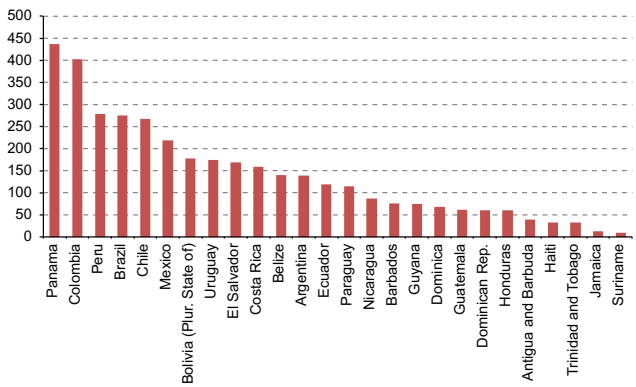
A country's connectivity depends, to some extent, on the size of its economy and on the number and size of the firms served by its aviation sector. Larger economies are naturally connected to more destinations and have more seats available, but quantity does not necessarily correlate with quality. The metric that must be examined is, therefore, the level of connectivity relative to GDP, which takes into consideration the relationship between access to the aviation network and productivity and economic growth.

Figure 8
Caribbean: air connectivity index (worldwide and intraregional, 2017)



Source: International Air Transport Association (IATA), "IATA Economics" [online] http://www.iata.org/publications/economics/pages/index.aspx.

Figure 9
Latin America and the Caribbean (selected countries): connectivity by GDP, 2015
(Billions of dollars)



Source: International Air Transport Association (IATA), "IATA Economics" [online] http://www.iata.org/publications/economics/pages/index.aspx.

Logically, in absolute terms, larger markets such as Brazil and Mexico have higher levels of connectivity than their neighbours. In relative terms, however, Panama stands out, as a comparatively small country that has made the most of its geographical location (see figure 9).

While many countries in South America have high levels of air connectivity with both the rest of the world and other countries in the region, the situation in the Caribbean is very different. The Caribbean countries are well connected to the United States and Europe (regions

that are sources of incoming tourism) but they have very limited connectivity with the rest of the Caribbean and Latin America. Even those countries with the highest levels of intraregional connectivity, such as Aruba and Trinidad and Tobago, have five times more connectivity with the rest of the world than with their neighbours.

B. Airport infrastructure

Meeting the growing demand for air transport requires investment in airport infrastructure and increased seat capacity on new or planned routes. Governments and authorities, airport operators, the aviation community and other stakeholders must work together to ensure the adequate and timely planning and implementation of projects to avoid bottlenecks in critical areas and to resolve those that already exist.

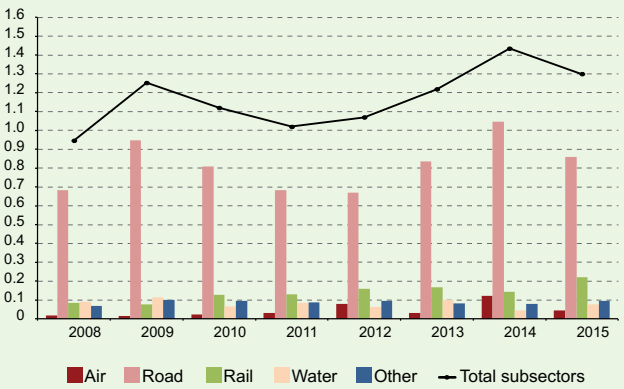
The countries of Latin America invested a total of just under USD 20 billion in air transport infrastructure between 2008 and 2015 (table 1), representing an average annual spend of 0.05% of the region's GDP. This means that aviation is the mode of transport that received the lowest amounts of both public and private investment (see figures 10 and 11).

Table 1
Latin America: investment in transport infrastructure, by subsector, 2008-2015
(Millions of dollars)

Type	Subsector	2008	2009	2010	2011	2012	2013	2014	2015
Private	Air	231	40	169	369	2 839	29	4 559	139
	Road	7 656	7 244	4 469	4 229	3 553	8 705	20 978	12 860
	Rail	1 558	685	2 241	3 933	5 653	6 731	4 979	7 340
	Water	2 564	2 374	1 240	2 684	1 351	3 208	184	1 418
Public	Air	511	561	909	1 390	1 451	1 768	2 100	2 001
	Road	19 381	27 482	32 760	32 505	32 522	37 685	36 487	27 241
	Rail	1 789	2 090	3 579	3 133	2 927	2 535	2 896	2 927
	Water	1 044	1 768	1 834	1 932	2 124	2 388	2 288	2 209
	n/d	2 728	3 657	4 434	4 716	5 209	4 621	4 324	4 514
Grand Total		37 461	45 900	51 635	54 891	57 627	67 671	78 795	60 648

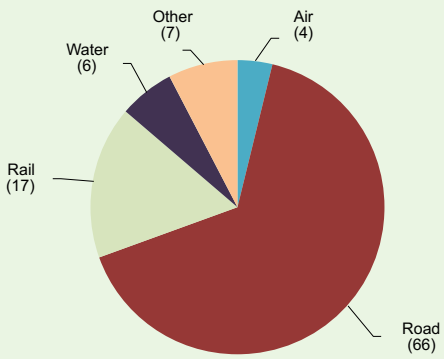
Source: Prepared by the authors on the basis of data from Economic Infrastructure Investment Data Latin America and the Caribbean (INFRALATAM) [online] http://infralatam.info/.

Figure 10
Latin America: investment in transport infrastructure, by subsector, 2008-2015
(Percentages of GDP)



Source: Prepared by the authors on the basis of data from Economic Infrastructure Investment Data Latin America and the Caribbean (INFRALATAM) [online] http://infralatam.info.

Figure 11
Latin America: share of investment in transport infrastructure, by subsector, 2015
(Percentages of total transport investment)



Source: Prepared by the authors on the basis of data from Economic Infrastructure Investment Data Latin America and the Caribbean (INFRALATAM) [online] http://infralatam.info.

A recent study by IATA in conjunction with ALTA and ACI-LAC assessed the economic impact of the restrictions on air transport capacity in Latin America, using two scenarios of "restricted" passenger growth. The scenarios considered the potential impact of the constraints affecting runway and terminal capacity. However, the results and implications of the analysis could be applied to any obstacle to passenger number growth: regulatory, fiscal, environmental or any other factor limiting the capacity of the sector as a whole to meet consumer demand.

The study concluded that the impact of the capacity constraints significantly reduced the potential passenger number growth rate in Latin America over the period covered by the forecast (2014–2034). It suggested that demand could rise by over 50 million passengers if investments were made in the airport capacity required to overcome the constraints. At the country level, the largest impact would be felt by Peru, where demand could be 44% higher than in the "do nothing" scenario if the infrastructure were built in a timely manner. Colombia came next, with a 39% differential in potential demand levels. The study estimated the aviation sector's economic contribution under the different scenarios. If the capacity needed to accommodate unrestricted passenger growth were made available, aviation's contribution to GDP could rise to USD 42 billion and, at the same time, the sector would create 900,000 more jobs than in the "do nothing" scenario.

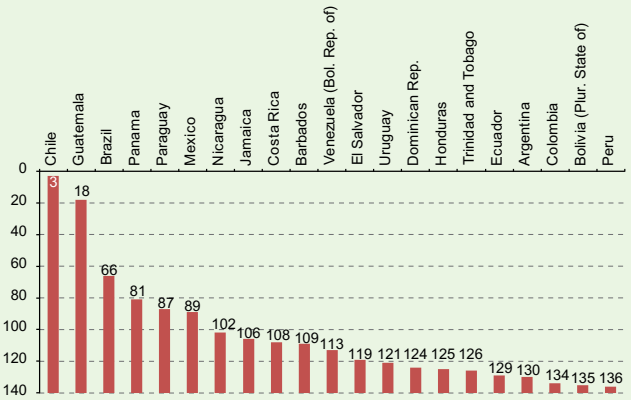
C. Cost competitiveness

Despite the economic value of increased air connectivity, many Latin American countries continue to see air transport as a luxury service for the affluent rather than as a catalyst for economic growth. As a result, aviation has been a key target for taxation. At the same time, the trend towards airport privatizations has led to higher airport fees in many countries, the result of the absence of effective regulatory structures to counteract the market power of airports that are natural monopolies. Both these factors increase the cost of air travel and weaken economic competitiveness.

There is a large variation between different countries in the region but, on average, fees and taxes can amount to between USD 10 and USD 15 on a one-way domestic flight and around USD 60 on a one-way international segment. Note that these figures solely include fees and taxes levied directly on tickets and exclude fees applied to aircraft or charged on fuel.

Figure 12 provides cost-competitiveness rankings for selected Latin American and Caribbean countries by comparing the impact of fees and taxes on airline tickets. It is clear that for many of the region's countries, fees are one area where a change in policy could yield a significant impact.

Figure 12
Cost competitiveness: fees and taxes (selected countries)



Source: World Economic Forum, *Global Competitiveness Report 2016-2017*, Geneva, 2016.

A study for IATA by the SEO Amsterdam Economics consulting company (2015) examined the extent to which taxes and fees functioned as a brake on economic competitiveness, in order to assess the potential of political reforms and stricter economic regulation in providing long-term benefits for passenger numbers, connectivity and the economy.

According to the study, passenger demand would be 15% higher if taxes were removed and fees reduced to competitive levels, which would equate to an additional 80 million passengers a year in 2035. In terms of its macroeconomic impact, the increased connectivity and related economic activity would lead to an increase of USD 135 billion in GDP and the creation of 1.4 million additional jobs.

The experience of Cartagena Airport in Colombia illustrates how excessive fees and taxes can constrain air connectivity and economic activities that depend on aviation. At the beginning of 2015, fees for international passengers were reduced from USD 92 to USD 38. The measure had an immediate impact: the number of international passengers rose by 26% and international visitor arrivals at Cartagena increased by 38%.

In addition, at the global level, the cost of airport infrastructure and airlines' costs have evolved along diametrically opposed paths. Competition in the aviation sector has forced airlines to cut costs in order to remain commercially viable, as per-passenger revenues have fallen. In contrast, as shown in the figure below, airport costs rose by 30% between 2010 and 2016 (see figure 13).

Figure 13
Airline operating costs (2000-2016)

Source: Airport Council International (ACI), International Civil Aviation Organization (ICAO), International Air Transport Association (IATA) and Federal Aviation Administration (FAA).

Challenges regarding connectivity, infrastructure provision and reduction of costs facing the aviation industry demand consolidated, comprehensive and sustained action by the region's governments. That would involve the implementation of economic, regulatory and infrastructure development policies that encourage the continued expansion of air transport and thereby increase its contributions to the economy and to job creation, as well as the other positive externalities of the airline industry.

III. Implications for logistics and mobility regulations, policies and governance in Latin America and the Caribbean

Because of the situation currently affecting the aviation industry in Latin America and the Caribbean —in particular, limited connectivity, shortages of airport infrastructure and instances of excessive regulation that generate unsustainable additional costs— the sector has emphasized the need for governments to adopt best practices in both the design and implementation of air transport policies. Recently, the International Civil Aviation Organization adopted the principles of the IATA Smarter Regulation initiative, a successful regulation whose aim is to deliver clearly defined, measurable policy objectives in the least burdensome way by means of a transparent, objective and consultation-based procedure.

The IATA approach is based on five principles for the design of laws and regulations:

- Consistency and coherence: Regulations should be consistent with existing (and planned) rules and practices that are applicable to regulated activities so that there are no overlaps and contradictions (nationally or internationally). They should also be predictable and applied with clear oversight responsibility and without discrimination against those being regulated.
- Proportionality: Regulations should be used only when their necessity is demonstrated and they should be proportional to the problems identified so that the costs of compliance are minimized by pursuing the most cost-effective solution.
- Risk oriented: Regulations should have specific and well-defined objectives that respond directly to the problems identified. Whenever appropriate, flexibility should be given to those being regulated to meet defined objectives.
- Fair and non-distortive: Regulations should be applied equitably and not create discriminatory burdens on any groups in particular.
- Clarity and certainty: Audiences subject to regulatory compliance need to clearly know the regulations that will apply, what is expected of them, and have sufficient time to be able to comply with new requirements.

IATA has expanded these principles by adding others, directed towards the processes of air policy:

- Defining a clear need: The objective of the regulation should be identified based on sound evidence and available alternatives must be considered to select the most appropriate solution.
- Impact assessment: There should be an assessment of the impacts from the regulation.
- Transparency: The drafting of the regulation should be based on the consultation of those who are potentially affected by it, and the decision-making process should be transparent and objective.
- Reducing burdens and regular reviews: The process of developing the regulation should focus on reducing the compliance burden and allow for regular and systematic review (and subsequent modification, if needed) to ensure that the regulation is still appropriate.
- Opportunity to respond and revise: There should be clear procedures to respond to adjudications and appeals and to revise the regulation if necessary.

As IATA points out, these principles for policy design and implementation are not restricted to aviation; they can and should be applied in all areas where government intervention is being considered. They can also be used in all aspects of the aviation business, from consumer protection to security provisions.

The airline industry's concerns and proposals are of heightened importance in the broader context of the performance of the logistics and mobility sector in Latin America and the Caribbean and its —at present, highly limited— contribution to the region's sustainable development.

The challenges facing the development of air transport described in the previous sections are an integral part of the organizational flaws of logistics and mobility services in Latin America and the Caribbean, which directly affect the region's competitiveness and social and environmental development. Low levels of investment in infrastructure, weaknesses in the regulation of infrastructure services and other shortcomings in infrastructure policies mean that the region continues to be characterized by persistent shortages in basic infrastructure, the squandering of the competitive advantages of different modal options and of technology and innovation, increasing negative externalities on the environment and the population, lack of security in ground transport operations and the absence of process facilitation in logistics operations.

In response to that situation, ECLAC has proposed a national and regional paradigm shift, through an approach that focuses on integrated and sustainable policies for logistics and mobility that are based on two fundamental principles: integrated vision and action, and sustainability. Using those two fundamental principles as its starting point, the policymaking process continues with the establishment of policy objectives that are aligned to the national development model and with the definition of working frameworks for matters relating to institutional structures, regulations and strategic planning; it then proceeds with the setting of guidelines for sectoral policies, such as modal policies, and, in the last phase, with the design of national programmes, plans and projects.

One of the core recommendations in this context is the use of the co-modality approach: that is, the selection of a mode or combination of modes for a journey or set of journeys —by people or by goods— that maximizes the efficiency of travel. This approach has fundamental implications for infrastructure development policies, in that it seeks to achieve a strategic planning process based on a co-modal assessment of infrastructure projects and analyses the real demand for mobility and the comparative merits of all the projects and/or feasible modal combinations. In the same vein, it proposes a regulatory policy that would assign the various modes of transport their full operating costs and would encourage economic efficiency along with the stability of investments, environmental protection and the well-being and safety of people and freight. The regulatory framework should include economic and technical regulations that encourage shifts from one mode to another, through rules that allow for externalities to be internalized in prices and for complementary infrastructure to be provided among modes, along with other measures (Jaimurzina, Pérez and Sánchez, 2015).

Accordingly, improvements to air transport policies and regulations in the region are an integral part of the process of improving national and regional policies for logistics and mobility as a whole. In that context, the region's governments could use the following as their starting points:

- A comprehensive and balanced consideration of the aviation sector's contributions to sustainable development: not only in economic and environmental terms but also as a driver of development and social inclusion.
- Greater integration of air transport policies into the wider and more strategic framework of national and regional policies for logistics and mobility.
- Prioritization of investments in infrastructure and co-modal planning that would make the best use of the sector's performance in synergy with other modes of transport.
- Processes for the continuous improvement of the regulatory policies that apply to the aviation industry and to the logistics and mobility sector as a whole.

The active involvement of the aviation industry is a key process, as inclusive, regular and systematized dialogue between the State, civil society and industry is one of the basic requirements for the correct governance of the infrastructure sector, improving all the processes that are in place, both for decision-making in the area of infrastructure and for the implementation of those decisions (Jaimurzina and Sánchez, 2017).

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