

Aviation Competitiveness

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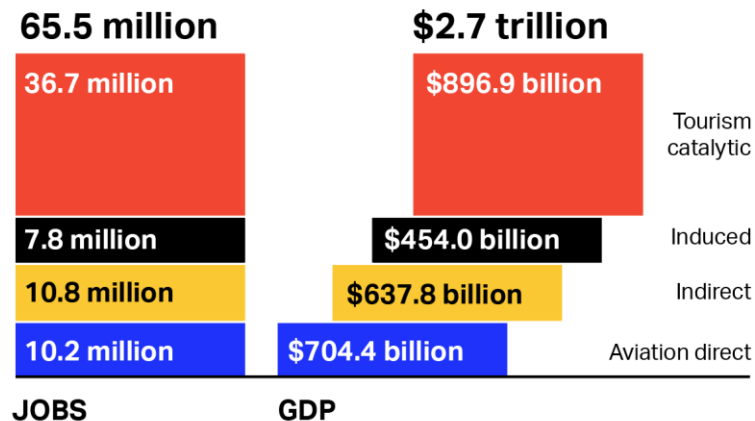
Air Connectivity and Competitiveness

- Aviation is a major enabler of economic activity and social cohesion
- **Air Connectivity** drives economic and social benefits:
 - More connectivity = more benefits
- Competitiveness captures those factors which influence connectivity, in order to
 - **Evaluate** policies and regulatory frameworks;
 - **Identify** policy priorities and develop common work agenda
 - **Facilitate** discussion and dialogue between Governments and industry
- Global toolkit in development; piloting in European markets

- Purpose of this session is to introduce two tools that we have been developing within the economics team at IATA, to support our dialogue with Governments.
- The two themes are **connectivity** and **competitiveness**. Both have become buzzwords in air transport in recent years.
- The purpose of these toolkits is to bring the concepts to life in order to understand how Governments can maximize the benefits of air transport in their countries.

Air connectivity drives economic benefits of aviation

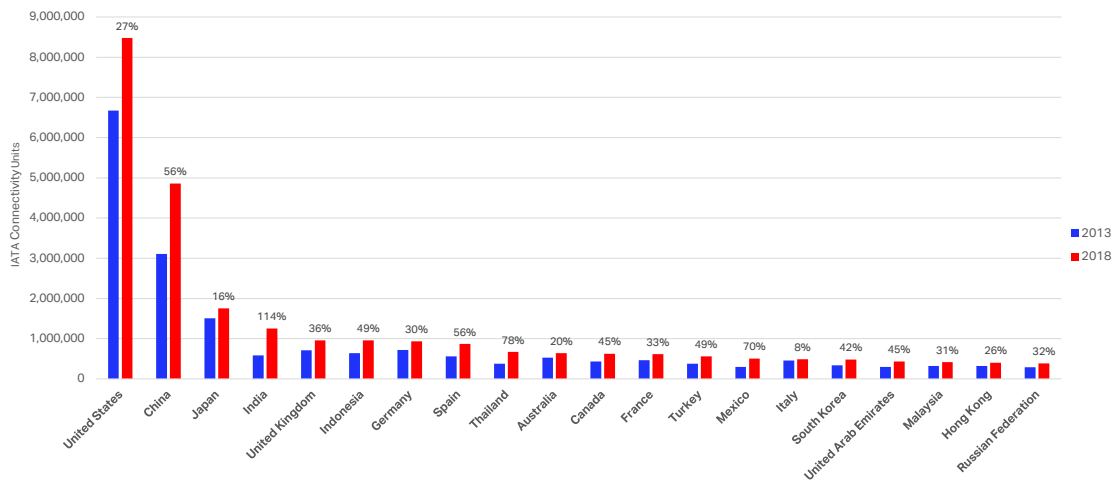
Aviation's global employment and GDP impact



Source: IATA Economics using data from SRS Analyser

- The benefits of air transport are well understood. According to our latest estimates, air transport supports more **65.5m jobs** and contributes to the creation of more than **\$2.7 trillion in GDP**.
- Air transport enables tourism, international trade, encourages inward investment, innovation, education, productivity etc, in addition to promoting social cohesion. All of these are key objectives of many Governments around the world.
- However, a question that we often get asked by Governments is 'what should I do to maximize the economic and social contribution of air transport in my country?'
- That's where our analysis of **connectivity** and **competitiveness** comes in

Air connectivity has grown rapidly in past 5 years

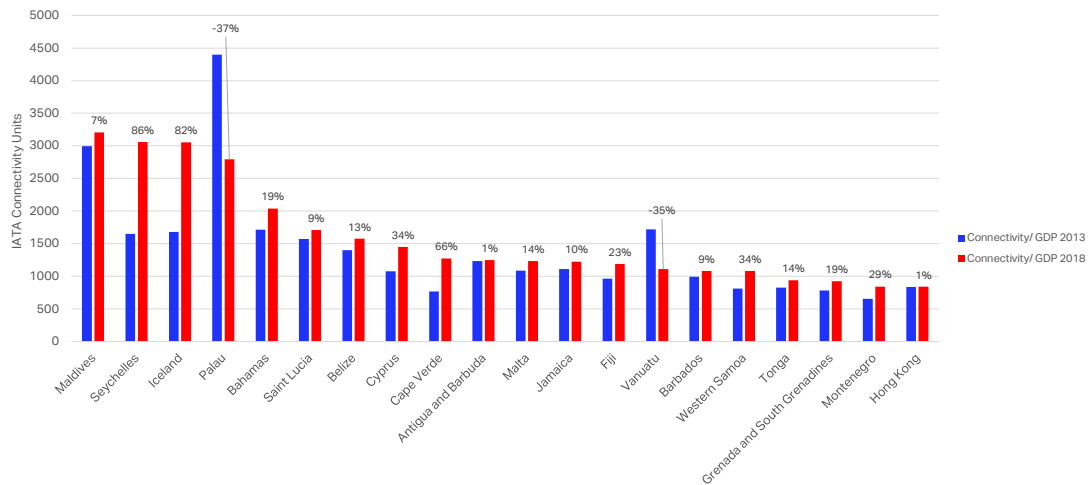


Source: IATA Economics using data from SRS Analyser

- Let's start with connectivity...
- We define connectivity as the 'extent to which a country is integrated into the global air transport network'
- There are a number of factors that contribute to connectivity – number of flights, seats, destinations. The index combines these different elements.
- One key feature is that not all destinations are equal – a flight to a major business center or a primary connecting hub creates more economic potential as well as onward connections than one to a more remote or peripheral location. For that reason our connectivity measure weights different destinations according to their economic importance.
- Unsurprisingly, the biggest countries and the largest markets are the most connected in terms of raw connectivity
- Connectivity has continued to grow across rapidly in the past 5 years by an average of around 30-35%.
- Many of the markets where connectivity has grown fastest, unsurprisingly are in Asia – India (114%), China, Indonesia...

- However, despite being 'mature markets' US, UK, Germany etc have also grown in line with the global average

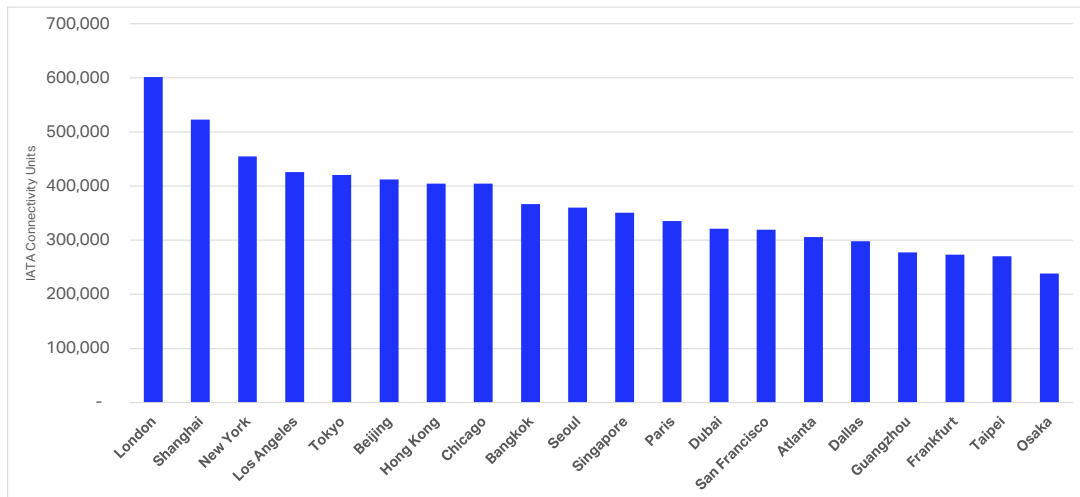
Controlling for country size highlights Small Island States



Source: IATA Economics using data from SRS Analyser

- The previous slide showed raw connectivity, and saw the larger countries rising to the top. But that shouldn't be a cause for concern for smaller countries;
- Absolute connectivity is less relevant to competitiveness than connectivity relative to size (of economy of population).
- An alternative way of assessing connectivity is to weight by GDP (we use purchasing power parity).
- According to this measure, the picture looks rather different.
 - Small Island States often over perform in terms of connectivity per GDP, reflecting the importance of air transport for inbound tourism which can be a crucial source of economic activity, foreign exchange etc.
- If we were to weight by population in place of GDP, you would see a different set of countries towards the top end including some of the relatively small states that have made it part of their economic strategy to be an aviation hub – Hong Kong, Singapore, Panama, UAE, Qatar etc. These are countries that have leveraged air connectivity by making competitiveness a key strength.

10 of Top 20 most connected Cities are in Asia



Source: IATA Economics using data from SRS Analyser

- Our connectivity index is a versatile tool and can be presented in many different ways.
- The final presentation we will show here is connectivity at city level.
- Firstly, London remains the world's most connected city. That may be surprising given the extent of capacity constraints at Heathrow and increasingly Gatwick airports. That points in part to the effective role that the WSG has played in ensuring that best use is made of scarce capacity
- Next, it is also interesting to see that while 6 of the Top 20 most connected cities are in the US, 10 are already in Asia – a trend that will only continue in coming years

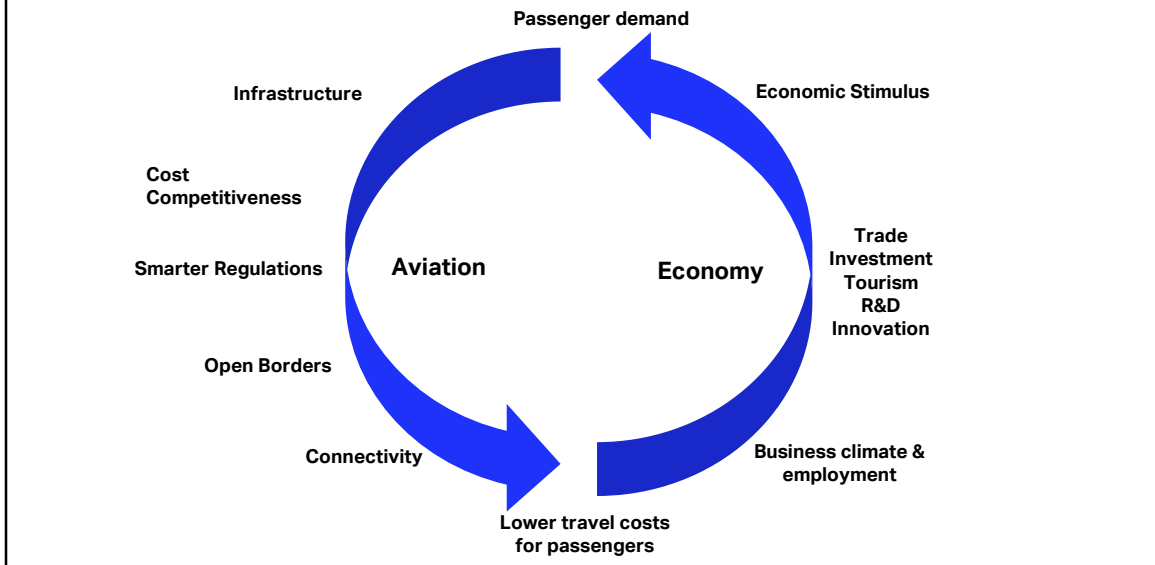
The center of gravity is shifting ever eastwards



Source: IATA / Tourism Economics

- If a decade ago the center of gravity of the global industry was pretty much on the same latitude as EUR, it is now moving inexorably eastwards. By 2036, we estimate that it will be somewhere over South Asia.
- While the North Atlantic market has historically been at the heart of global aviation, creating a natural source of competitive advantage for North America and Europe, this will no longer be the case. Countries in these markets that want to continue growing will have to work harder.
- Also within Asia and for markets that want to connect to emerging Asia, there will be competition for service in order to make the most of the enormous potential in that region.

Virtuous circle of connectivity and economic performance



- It is not new to argue that there is a symbiotic relationship between air connectivity and economic performance.
- Clearly there are some higher order factors that influence a country's level of air travel demand - GDP per capita is probably the single most significant. As we have stated geography and demographics are also important;
- But there are a number of factors that are important to connectivity that are within the influence of the Ministry of Transport and/or the CAA.
- In developing our new competitiveness toolkit, we have identified a number of key elements:
 - The availability of sufficient **infrastructure**, both on the ground and in the air, to enable the industry to develop. Where capacity is constrained, how it managed is important

- **Cost competitiveness.** The cost of air travel is a key driver of passenger demand. Excessive charges and burdensome taxes add to the cost of travel and inhibit connectivity.
- For those elements of the industry value chain that have market power such as airports and ANSPs, the presence of robust and independent economic regulation is important as is meaningful and transparent consultation.
- **Smart Regulation.** Aviation is and has always been a highly regulated industry. That's fine up to a point. But regulation should only be implemented where necessary, and regulation should be proportionate etc.
- Finally **borders processes** are important for both passengers and cargo. Visas not only add complexity, but also cost – just ask anyone who has applied for a UK visa! And

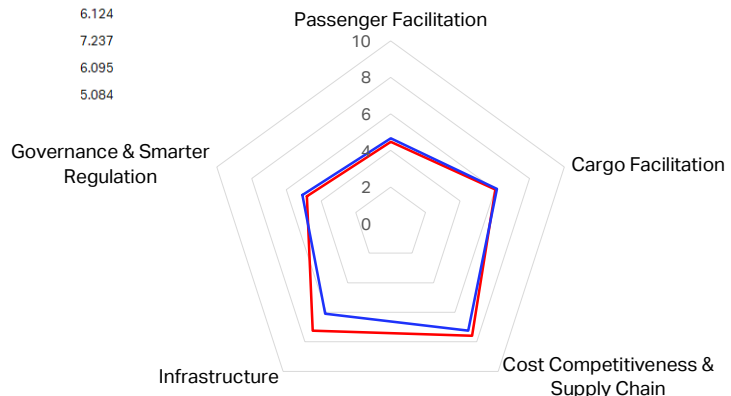
The underlying principle of our toolkit is that a country that has the right framework in place with regard to these different elements will create the conditions for strong connectivity growth, and for air transport to be a powerful economic enabler.

So what does our analysis show? We will show a couple of examples of emerging messages

Competitiveness – Spain example

Performance overview

Index Component	Spain	Europe
Air Transport Competitiveness Index	6.22	5.95
Passenger Facilitation	4.483	4.673
Cargo Facilitation	6.021	6.124
Cost Competitiveness & Supply Chain	7.581	7.237
Infrastructure	7.245	6.095
Governance & Smarter Regulation	4.812	5.084

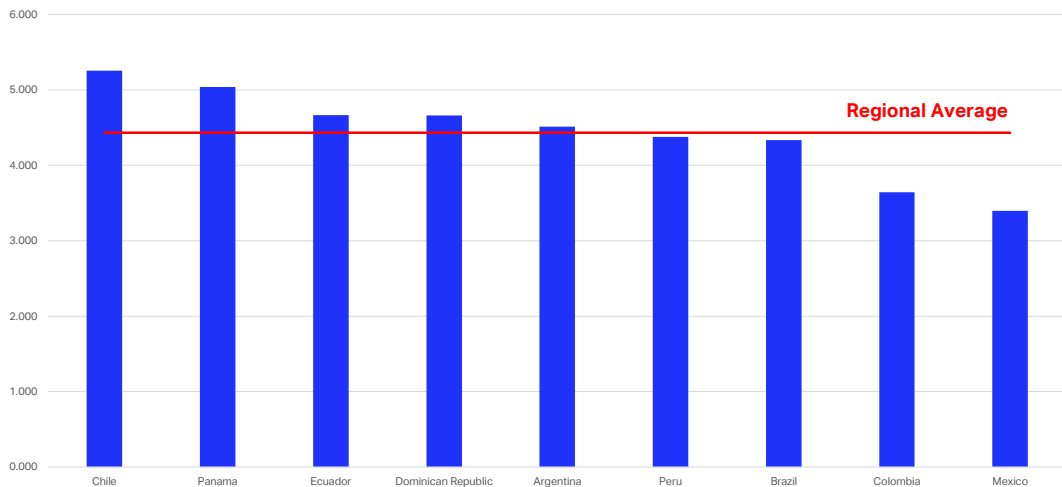


- We present two different ways in which the new competitiveness toolkit can be useful to Governments
- First, taking the example of Spain (a country that clearly depends on air transport to support its tourism industry) we present an overview of the five pillars.
 - Spain's scores for each measure are presented in **blue**, with the average for a peer group of 12 European countries presented as a comparator in **red**
 - Scores are presented on a 0-10 scale, with a higher score meaning better performance.
 - Note that in the chart, higher scores are reflected by being further towards the outer perimeter
- For example, we see that for airport infrastructure, Spain scores higher than its European peers. As I'm sure you will know, Spain invested heavily in

airport infrastructure in the 2000s and airport capacity is generally sufficient – although there are still problems with airspace and operating restrictions that limit the ability to make best use. But airport capacity is not likely to limit growth in Spanish air traffic in the way it may in some other European countries;

- On the other hand, for Governance and Smarter Regulation, Spain does not perform as well as its peer group. Air transport is subject to a bureaucratic policy making process that results in many burdensome regulation that affect the doing business environment. This creates potential for improvement to enhance the competitiveness of air transport in Spain.

Competitiveness – Latin America example



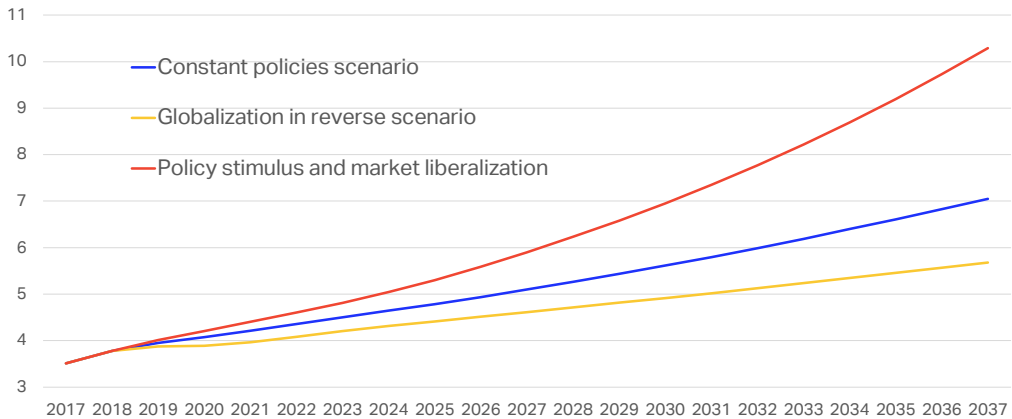
Source: IATA Economics

- A different way to deploy the toolkit is to perform a comparison across countries. In this case we give the example of Latin America.
- On the one hand, you can see the examples of Chile and Panama that perform well – in the case of Chile to deliver air connectivity in spite of challenging geography. And in the case of Panama, putting air transport at the heart of economic strategy (alongside the canal) to position Panama as a regional hub, with all the catalytic economic benefits that go with that.
- At the other extreme, we see countries such as Brazil, Colombia and Mexico which all have challenging operating and regulatory environments.
 - In the case of Brazil, political and economic factors have combined to result in a 40% decline in connectivity over the past 5 years – the only other country in the region where connectivity has declined is Venezuela. Cost competitiveness (in particular fuel taxes) and burdensome regulations are all challenges;
 - For Colombia there are multiple issues to address, but costs are a key problem with ticket taxes and airport charges often representing more than 50% of the air fare on medium-haul routes such as BOG-MIA

- For Mexico, infrastructure is the major challenge – particularly in Mexico City.

Competitiveness matters to consumers and the demand outlook

Passengers (billion, O-D basis)



Source: IATA / Tourism Economics

- A competitive regulatory and operating environment matters for air passenger demand, and the extent to which air transport can act as an enabler of the global economy.
- Looking at IATA's 20 year demand forecast the difference between a favorable and restrictive policy environment could be equivalent to as many as 4 Bn passengers by 2037

And it matters to aviation's contribution to the global economy

	Jobs supported in 2037	GDP supported in 2037 (2016 prices)
Reverse Globalization	90 million	\$4.6 trillion
Constant Policy	100 million	\$5.5 trillion
Maximum Liberalization	119 million	\$7.6 trillion

Source: IATA Economics

- Finally, going back to where this presentation started; air connectivity drives economic performance (GDP and jobs).
- Aviation is sensitive to policies that either support or undermine growth.
- Where Government's put in place policy frameworks that facilitate air transport, they will stimulate air connectivity.
- Encouraging air connectivity will generate high quality jobs, and economic activity dependent on global mobility.
- Therefore, as we roll these toolkits out in 2019, we encourage governments not to see air transport competitiveness as an aviation or a transport challenge, but as an economic opportunity.