ABR Aeroportos do Brasil

ACI AIRPORTS COUNCIL INTERNATIONAL LATIN AMERICA CARIBBEAN

Air Transport Market analysis in Brazil: Challenges and opportunities

Final report

2nd September 2025

ALG

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  - Extrinsic drivers of air transport market
  - Intrinsic drivers of air transport market
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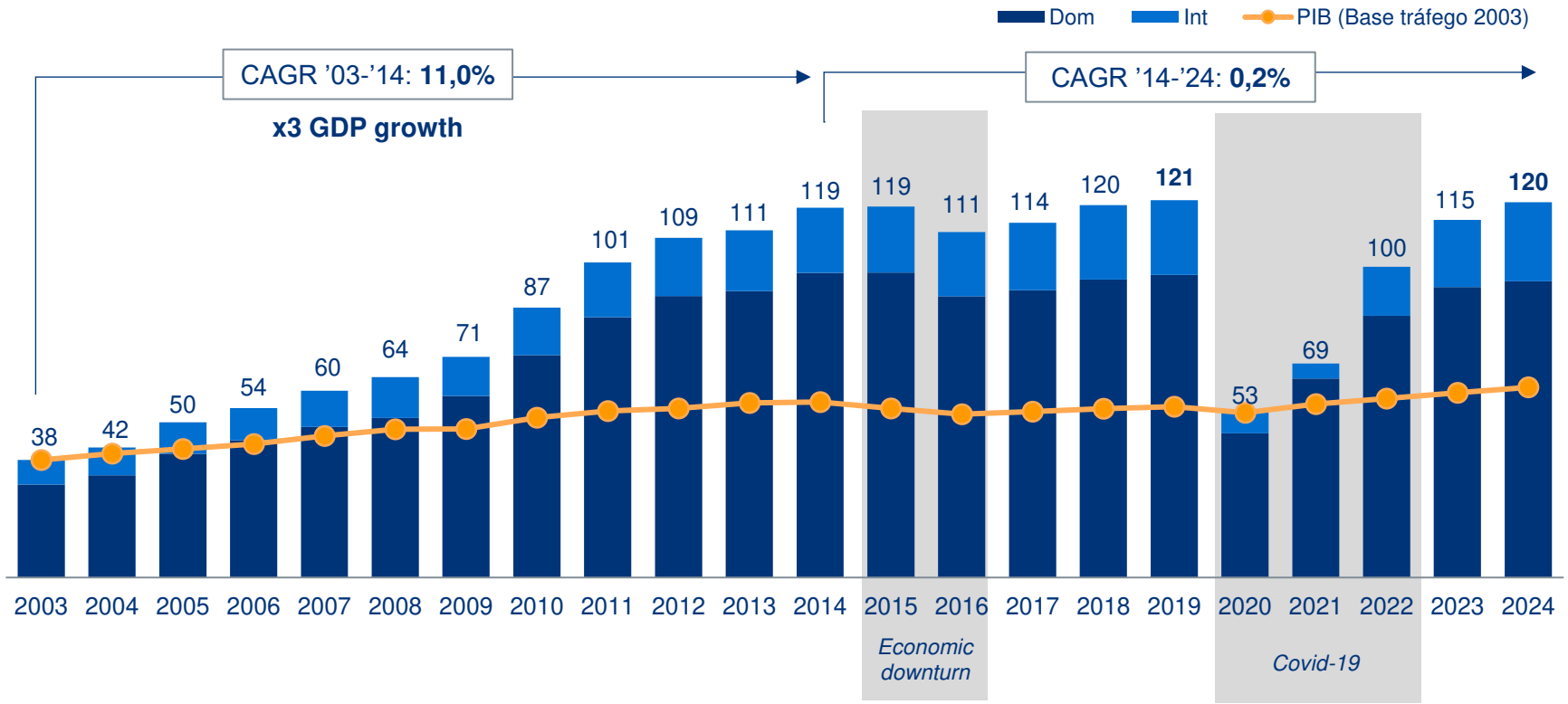
The Brazilian air transport sector experienced accelerated growth from 2003 to 2014, driven by economic expansion and reduced airfares. However, the sector has stagnated in recent years due to economic downturns and the pandemic

Air Transport historic passengers ('03-'24)

MPax



Source: ANAC, Oxford Economics, ALG Analysis

The factors driving air traffic growth in the region, particularly in Brazil, can be divided into extrinsic and intrinsic factors related to the aviation industry

Extrinsic to the aviation industry

1. Economic development in emerging countries
2. The expansion of middle class with a growing propensity to fly
3. Growing tourist demand and internationalization
4. Progressive air transport liberalization

Intrinsic to the aviation industry

5. Business environment (structural costs and bottlenecks)
6. Development of a LCC model
7. Airport infrastructure and the strengthening of hub & spoke

Source: ALG

Economic development is the main extrinsic factor, as GDP growth is strongly correlated with global air transport demand

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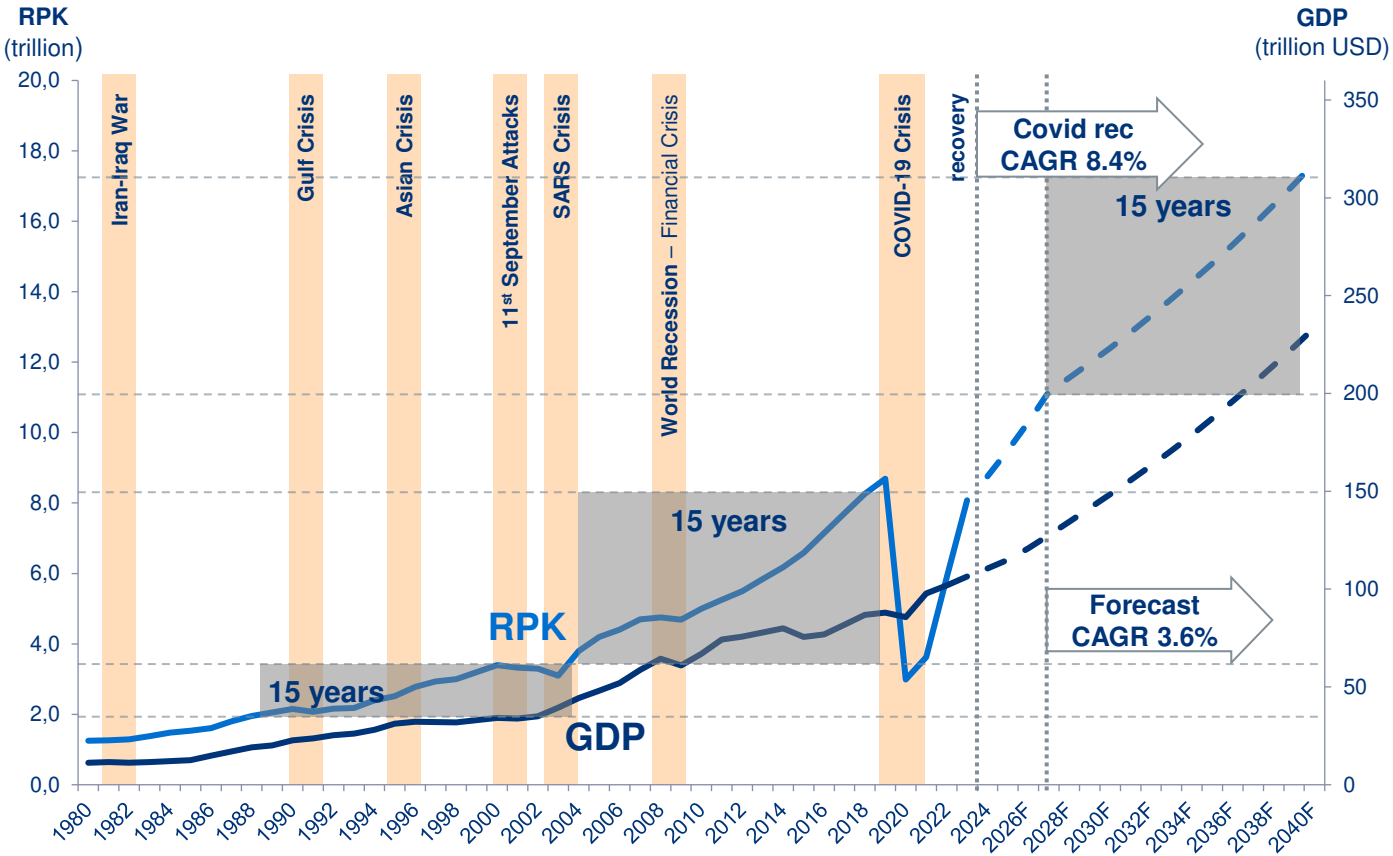
GDP Development and Global Air Transport Demand (RPKs [1] ; 1980–2040)



[1] RPK= Revenue Passenger Kilometre
Source: Airbus GMF 2024, Oxford Economics, ICAO, ALG Analysis

GDP growth in emerging countries translate into the expansion of the middle class and the increase in propensity to fly, which has lots of room to grow in Brazil

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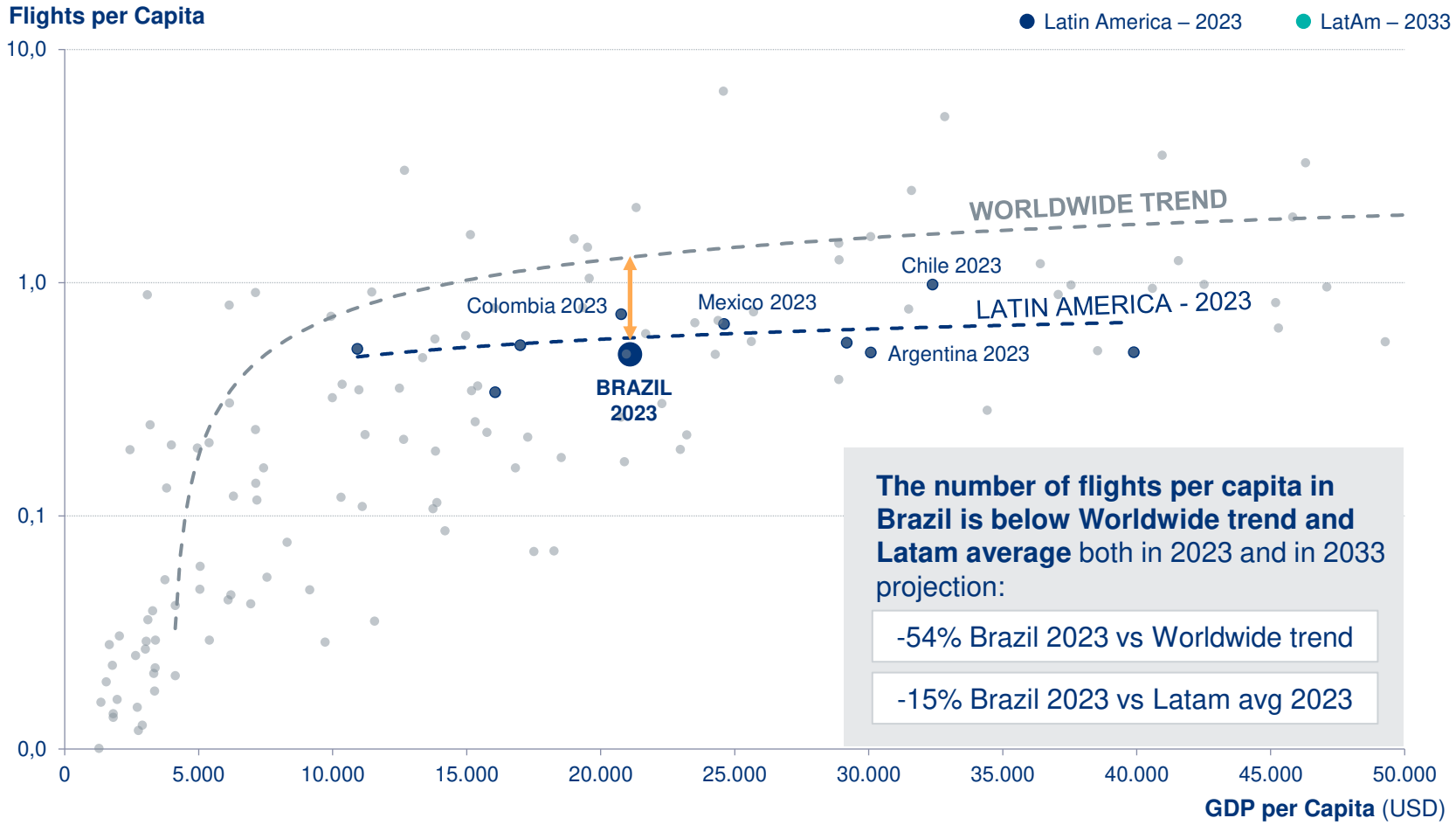

The number of flights per capita in Brazil is below Worldwide trend and Latam average both in 2023 and in 2033 projection:

- -54% Brazil 2023 vs Worldwide trend
- -15% Brazil 2023 vs Latam avg 2023

Note: The graph only shows "emerging" countries with GDP per capita lower than 50,000 USD, while the worldwide trend is calculated by also including "developed" countries. Brazil is not included in LatAm or World avg.
Source: Airbus Global Market Forecast 2024, Oxford Economics, ALG Analysis

Air transport in Brazil remains unaffordable for most, with high-income groups flying 1.2 trips/year, compared to just 0.3 trips/year for the middle class

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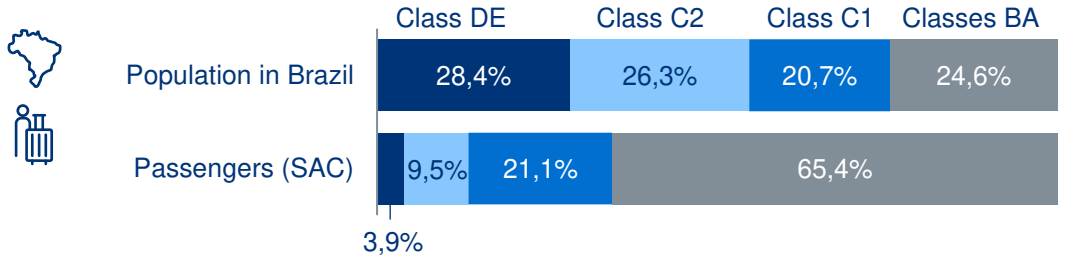
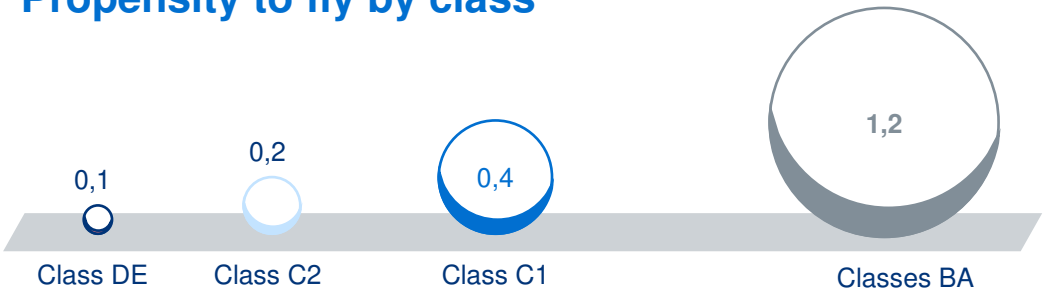
Analysis of Brazilian Population (%, 2023/24)

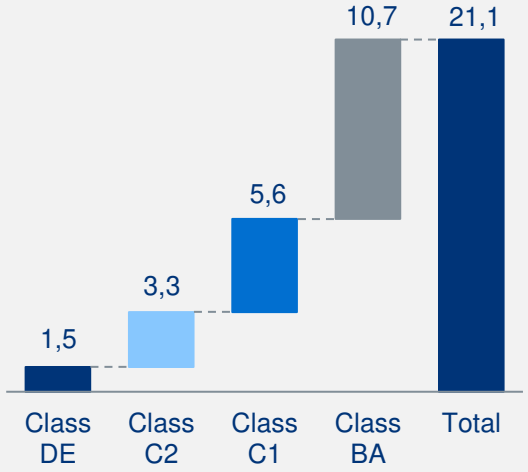


Propensity to fly by class



CPF flying per class

Mhab (estimation based on SAC survey)



Brazil has significant income inequality, which means a large portion of the population cannot afford air travel at current prices. As a result, the middle class (C1 and C2) shows a low propensity to fly

Source: PNAD Contínua Turismo 2020-2023, SAC (2024), ALG Analysis

Brazil´s inflow of international tourists is less than that of many cities in Europe and LatAm, due to barriers such as lack of international promotion, insecurity and regulation

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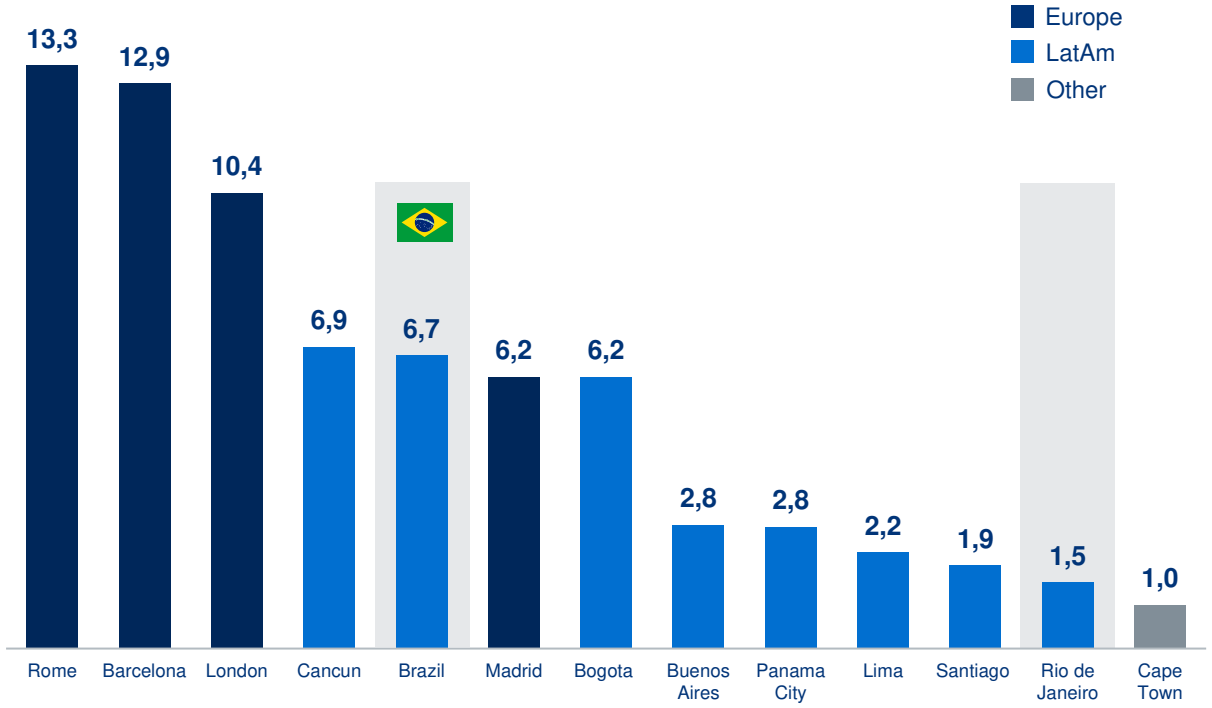
Tourism Situation in Brazil

Number of Inbound International Tourists by City (millions, 2024) **and Brazil total**



Brazil Overall Ranking

4,41
26°/119

6,19	Natural Resources
5,44	Cultural Resources
5,42	T&T Socioeconomic Impact
5,33	T&T Resources
5,32	Price Competitiveness
5,03	ICT Readiness
4,98	Environmental Sustainability
4,87	T&T Sustainability
4,72	T&T Policy and Enabling Conditions
4,69	Openness to T&T
4,43	Health and Hygiene
4,37	Non-Leisure Resources
4,32	Safety and Security
4,22	Enabling Environment
4,21	T&T Demand S
4,16	Prioritization of T&T
3,95	Human Resources and Labour Market
3,88	**Air Transport Infrastructure**
3,39	**Business Environment**
3,02	**Infrastructure and Services**
2,73	**Ground and Port Infrastructure**
2,45	**Tourist Services and Infrastructure**

Despite its strength on natural resources and ecotourism, Brazil presents a strong weakness on infrastructure and tourism-related services

Source: Republic of South Africa, Nation Thailand, gov.br, roadgenius, turismo.buenosaires, datatur, madrid-destino, observatori.barcelonaturisme, travelandtourworld, riotimes, Sectur, Folha de S.Paulo, jornal.usp, bbc, G1, WEF TTDI 2024, ALG Analysis

Recent effort through international campaigns that position Brazil as a welcoming destination have resulted in stronger performance in 2025, which is expected to be a new record for tourism in Brazil

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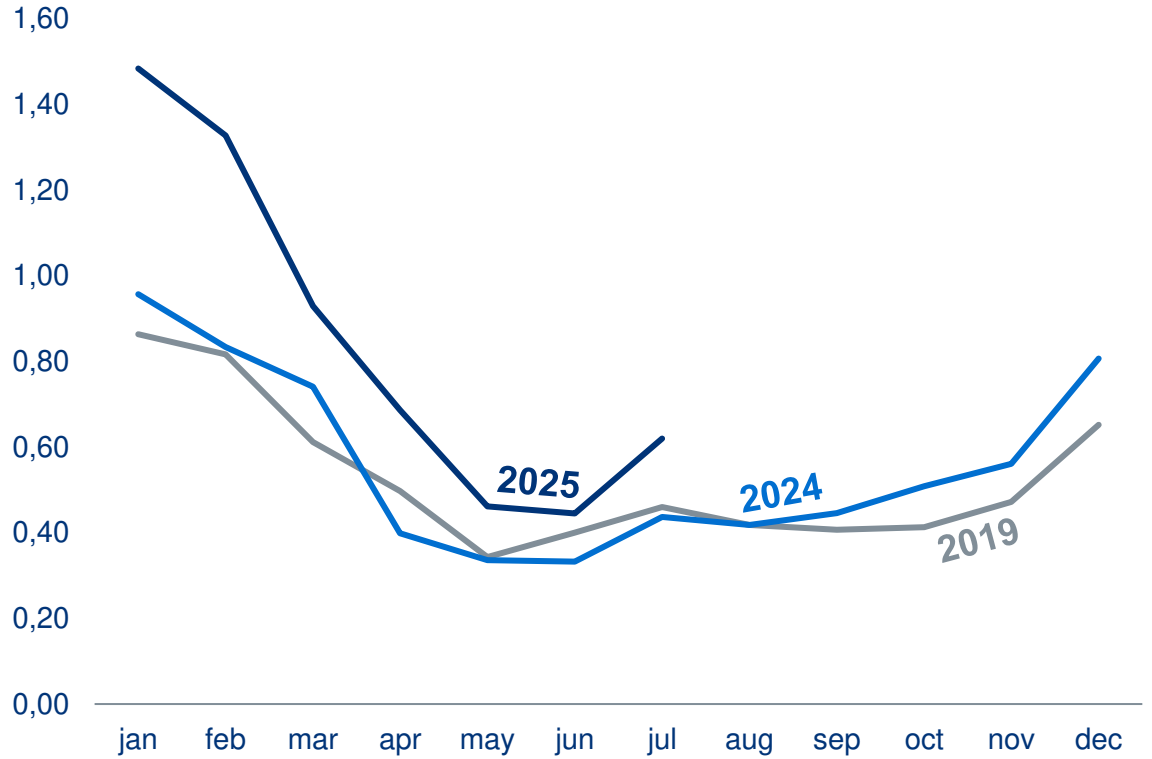
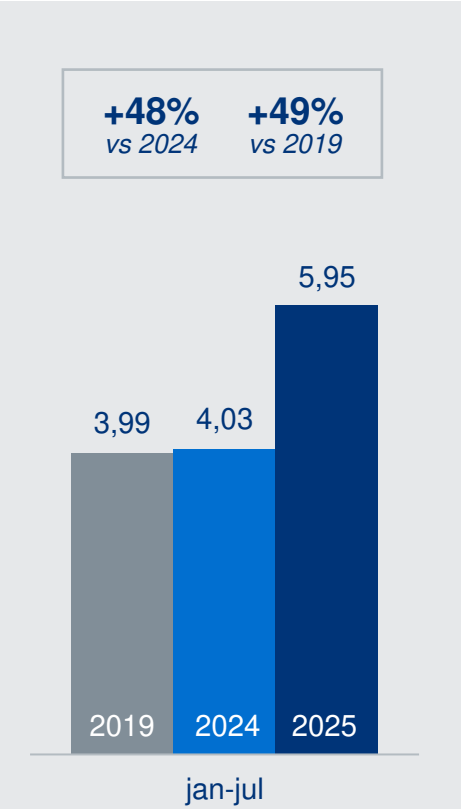
Monthly evolution of tourists in Brazil 2025 vs 2024 vs 2019

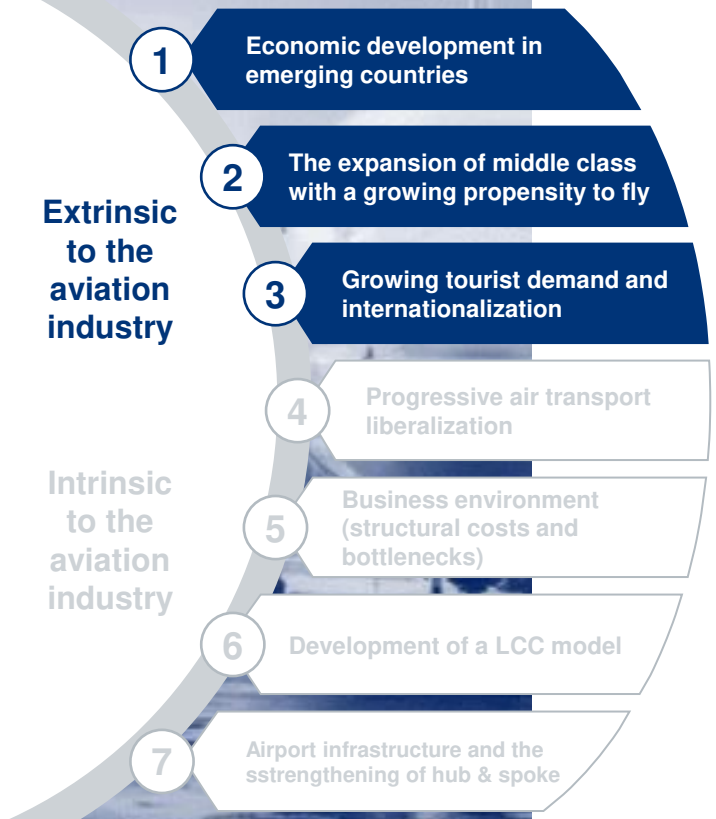
(million tourists)





Source: CAPA, ALG Analysis

Brazil's air transport market faces extrinsic challenges due to high-cost perceptions shaped by cultural factors and low purchasing power, as well as an underdeveloped tourism potential



Economic instability

- During the last decade Brazil faced several economic downturns (2015 domestic crisis and Covid) which led to an economic stagnation and impacted the air transport sector
- However, despite the region's macroeconomic challenges, the trend points to steady and consistent growth potential
- High USD/BRL exchange rate volatility. When USD is strong, INT traffic should increase, and vice versa; but this correlation is not observed

Low purchasing power

- Brazil has high income inequality, with a large share of the population unable to afford air transport tickets at current prices
- As a result, most of the population does not allocate their budget to air travel, which is mainly used by the upper classes, opting instead for other modes of transportation — which reduces the country's overall propensity to fly

Cultural perception of air travel as a Luxury/ expensive

- Although the country has a continental size, most of the population, even those with purchasing power perceive traveling and air transport as a luxury with around 20% of the class A and B appointing the cost as a barrier to use air transport

Underdeveloped international tourism

- Despite its strong tourism potential, Brazil faces low international demand — lower than other Latin American countries and comparable to smaller European cities
- In addition to higher air fares compared to the rest of Latin America, Brazil also faces several barriers such as limited air connectivity, lack of tourism infrastructure, high travel costs, insufficient international promotion, and regulatory challenges

Source: ALG Analysis

The air fare liberalization in 2001 resulted in an increase of competition with the entry of new players and a reduction of the domestic yields

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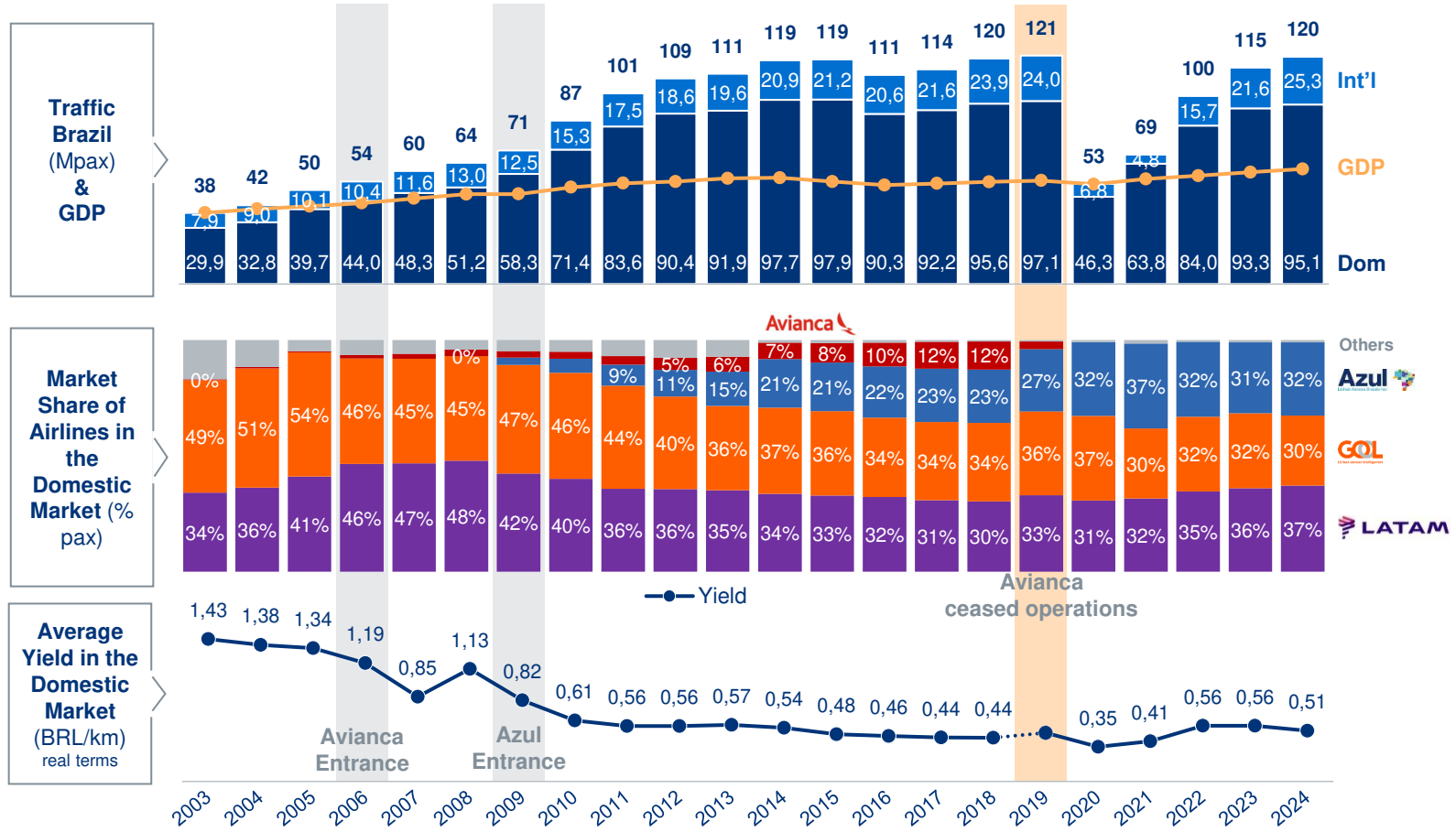
Evolution of the Air Transportation Market in Brazil



Source: ANAC, ALG analysis

Several elements in airlines' cost structure provide opportunities for policies stimulating a more efficient market environment

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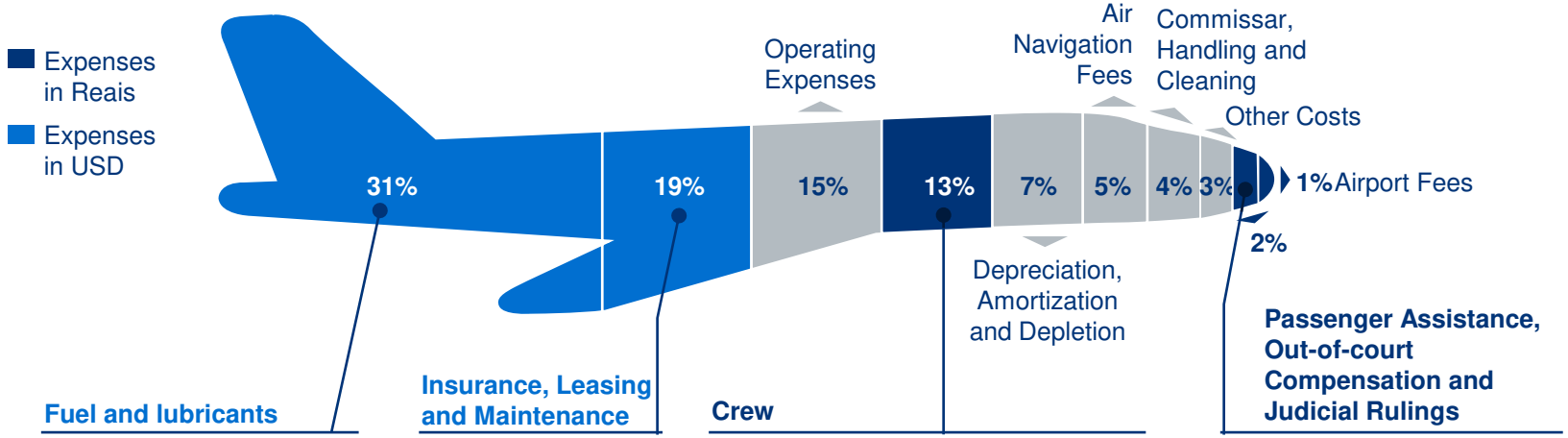
Existing inefficiencies

Distribution of Brazilian Airlines' Costs in 2024



Fuel and lubricants

To continue driving the industry forward, fuel prices must be transparent and cost-based. The best way to achieve this is through open competition distribution

Insurance, Leasing and Maintenance

IRRF on leasing is not only increasing the costs for airlines, but also the risk to invest in new fleet

Crew

Flight hour limit: ; Brazilian pilots fly less than their USA, Europe and other LatAm regions peers. Discussions about alignment in Brazil persist amid regulatory uncertainty. This result **in lower pilot productivity** compared to other regions

Passenger Assistance, Out-of-court Compensation and Judicial Rulings

Judicialization is one of the key unnecessary cost experienced in the market and it is also impacting highly the attractiveness of Brazil for a new airline

Around 57% of Brazilian airlines' costs (31% due to QAV) were tied to the USD while their revenues are mostly in BRL, resulting in considerable currency fluctuation exposure and additional costs due to the unexpected increase of IOF

Source: ABEAR, ANAC, ALG Analysis

Moreover, the upcoming tax reform and the SAF transition are expected to impact negatively the average airfare

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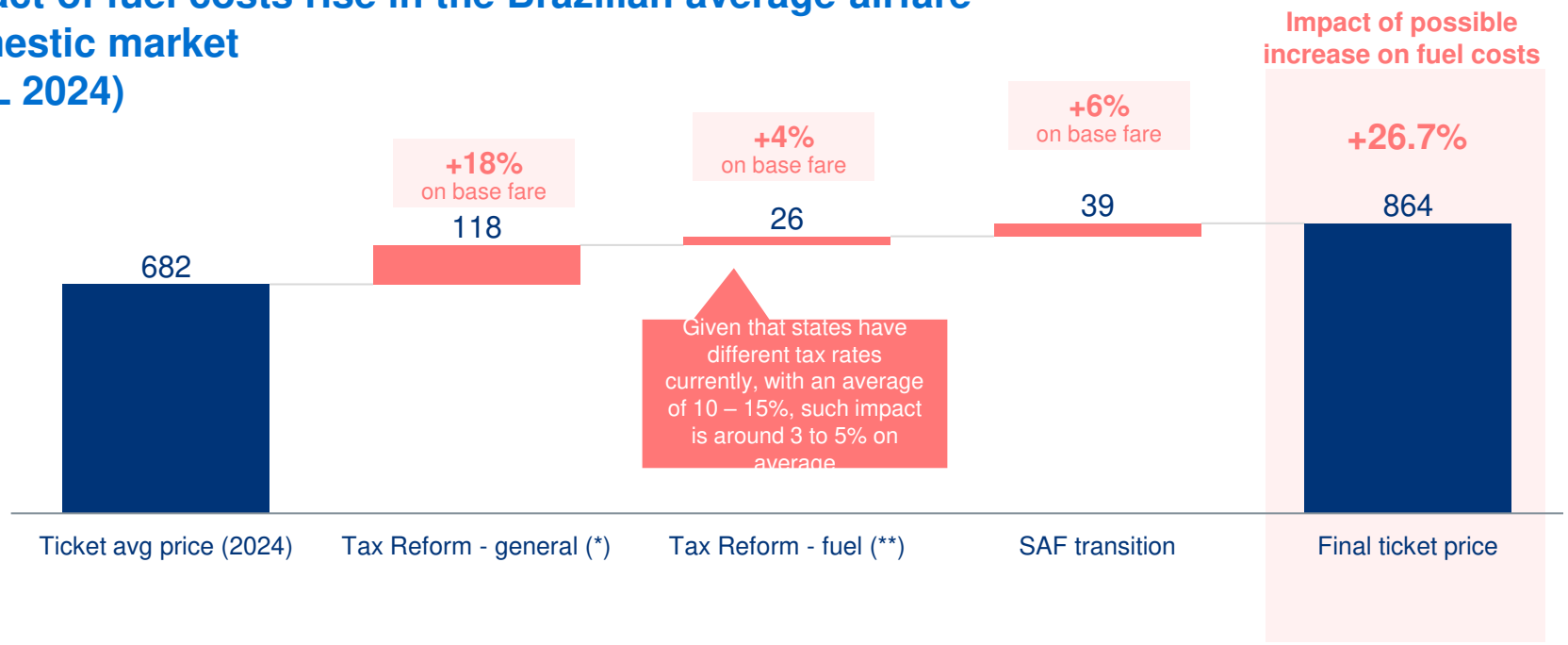
Impact of fuel costs rise in the Brazilian average airfare – Domestic market (BRL 2024)



Results	Tax Reform - general	Tax Reform - fuel	SAF transition	Cumulative Result
Total pax Impact	-8.53 Mpax	-1.87 Mpax	-2.82 Mpax	-13.23 Mpax
Total Jobs Impact	-115.22 K jobs	-25.29 K jobs	-38.09 K jobs	-178.60 K jobs
Total Economic Impact	-16.26 bn BRL	-3.57 bn BRL	-5.38 bn BRL	-25.21 bn BRL

Source: ALG analysis
(*)Note: For analytical purposes, the impact calculation consider the proposed tax rate of 26,5%
(**)Note: For analytical purposes, the impact calculation consider the average ICMS rate of 12%

Existing inefficiencies, uncertainties around regulation on ancillary services and judicialization result in Brazilian LCC's operating with FSC costs, which is not the case in other regions

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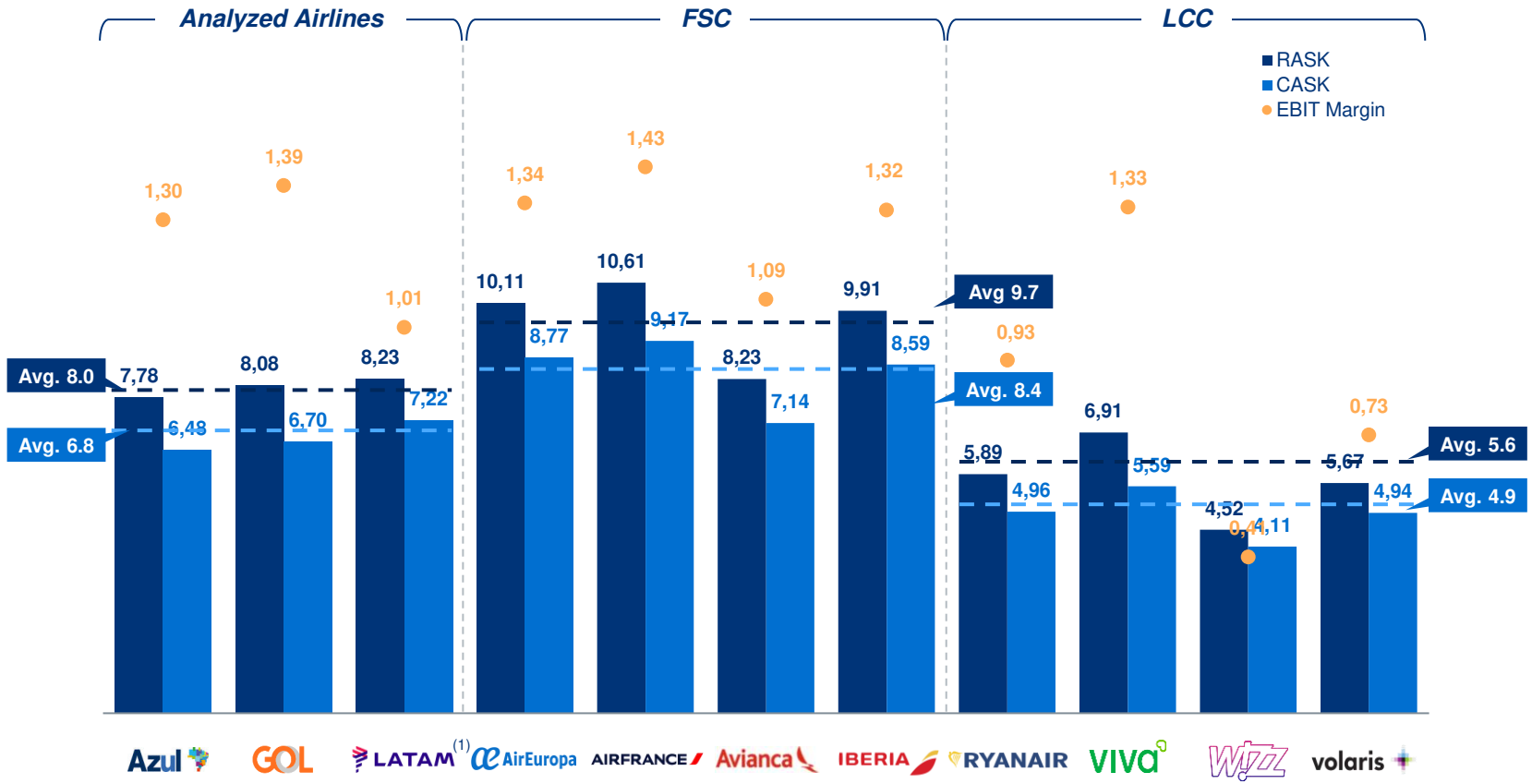
Yield Rates, CASKs and EBIT Margin (USD cents, 2024)



Source: CAPA, ALG Analysis

During the last decade, there were seven rounds of federal airport concessions resulting in a modernization and improvement of the airport infrastructure

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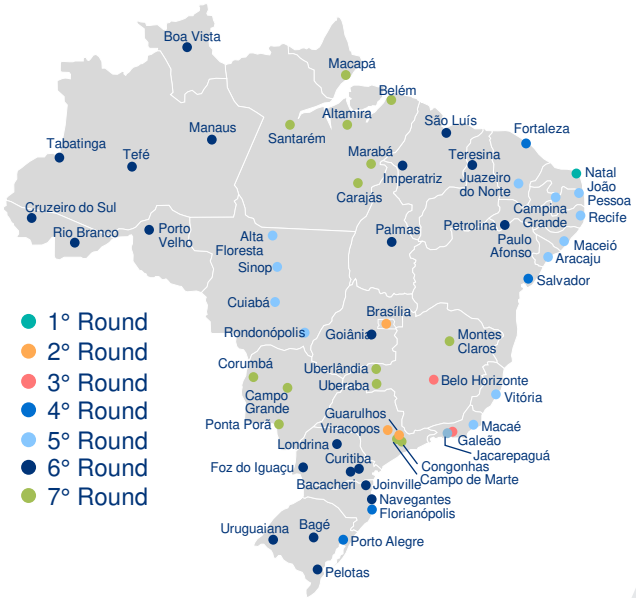


Brazilian Federal airports concession program

98% of air cargo moved in the country

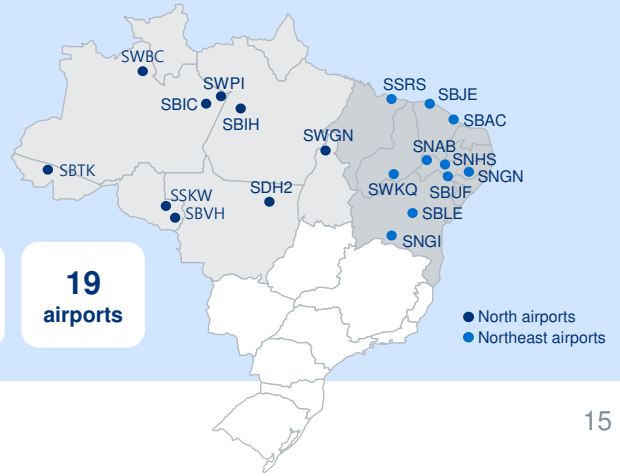
~90% of passengers traffic

59 concessioned airports

Concessionaries operating main airports

aena · Zurich Airport Brasil · BH Airport · GRU AIRPORT · PAX · INFRAMERICA · Fraport · VIRACOPOS · Socicam · motiva · RIOgaleão · VINCI AIRPORTS

Moreover, the current AmpliAR program will enable investments in regional airport in the following years, focused on improving airport infrastructure of remote zones



1.25 Bn BRL of total investments

19 airports

Source: Mpor, ANAC, ALG Analysis

However, São Paulo, concentrating Brazil's highest purchasing power and population, is already highly congested

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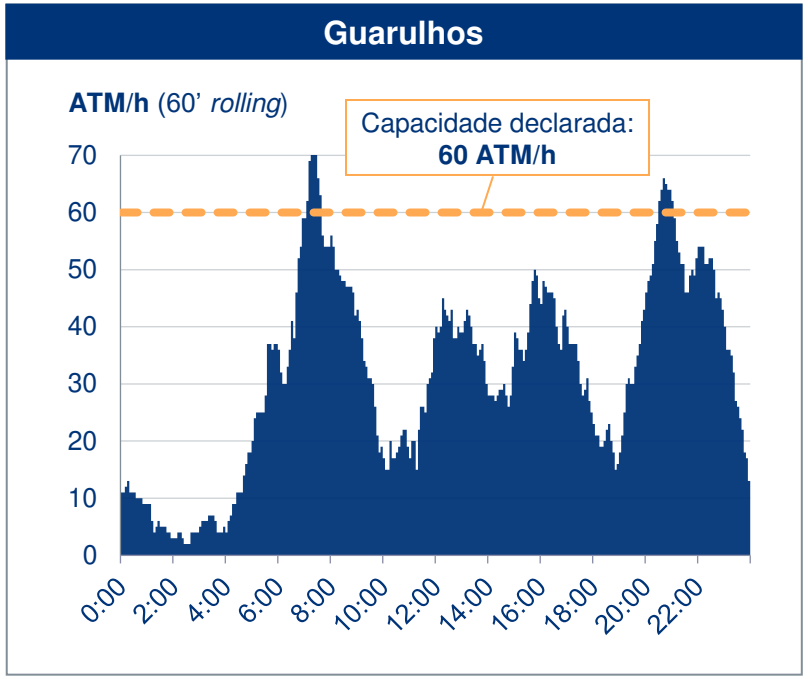
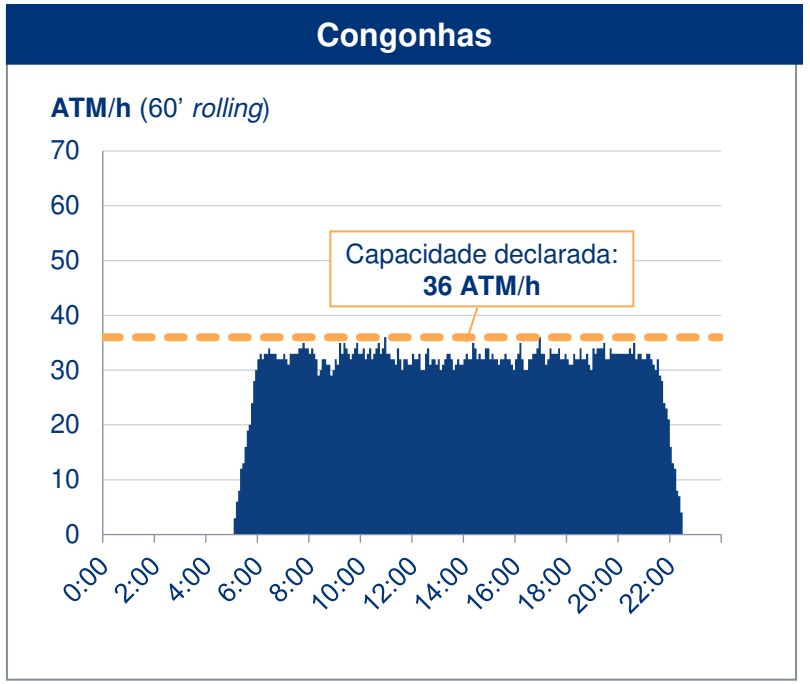
Perfil de operações (ATMs/h)





Both airports are currently planning expansions via operational optimization (Agile GRU) or via infrastructure expansion (CGH), which opens opportunities for new slots in the short/mid term

Source: ANAC, OAG, ALG Analysis

To attract new players, slots regulation should be reviewed to allow new entrants considering the capacity increase expected in both GRU and CGH

Slot Regulation and Limitations in Brazil

Slot coordination levels

- **Level 3 airports**: coordinated airports with compulsory slot allocation. Slots **managed by ANAC**. CGH, GRU, PLU, REC, SDU
- **Level 2 airports**: schedule-facilitated airports facing congestion during specific time periods. The **airport's administrative body is responsible for allocating infrastructure to planned operations**. BSB, CNF, FLN, FOR, GIG, POA, SSA, VCP
- **Level 1 airports**: non-coordinated airports. Airline can operate without previously approved slots

Slot management rules

- **Use-it-or-leave-it policy**: airlines must use at least 80% of their slots to maintain
- **Slot redistribution**: the loss of the right to operate a slot implies its relocation through an established process, where 50% of slots are redistributed to operating airlines and 50% are assigned to new entrants
- **Secondary slots market** in 2022, the **sale or transfer of slots between airlines was authorized under regulated conditions** to prevent excessive market concentration

Source: ANAC, ALG Analysis

Limitations of Current Slot Situation in Brazil

Limited access to São Paulo airports: major hubs operate at full hourly capacity, leaving no room for new entrants. The issue could be resolved by increasing infrastructure capacity, which is unlike, or by establishing regulations that facilitate market entry

Structural barrier to competition: incumbent airlines hold the majority of slots, while opportunities to retain new slots are limited and sporadic

High slot concentration: although ANAC aims to redistribute released slots to new players, the available slots volume remains insufficient. There is a **lack of available infrastructure**

Regulatory framework: current slot allocation criteria makes it virtually impossible for new entrants to establish themselves at CGH

In summary, the air transport market remains restricted due to high costs and structural constraints, limiting its full potential. This could be mitigated through targeted restructuring measures

Causes

Operational Costs - Supply of Services			Regulation	Airport Infrastructure		Socioeconomic			
Exchange rate pressure on leasing	• **High fuel costs** due to high tax rates of ICMS • Inefficient fuel pricing policy	**Excessive litigation** and barriers to competition	**Legal constraints** to the entrance of LCCs and legal insecurity	**Slot restriction** in SP and a slot allocation policy that hinder the entry of new airlines	**Legal and judicial changes** affecting costs (IPTU, legislative bills…)	**Economic instability** in Brazil	**Low purchasing power** of population	Cultural perception of air **travel as luxury**	**Under-developed interna-tional tourism**

Effects

Social			Economic		Aviation Market		
Lack of access of lower social classes to air transport (especially C and D)	**Low propensity to fly** in comparison to LatAm countries	**Difficulty of development of regional markets**	**Preference for road transport**, even in long routes (Accidents + "Brazil Cost")	**Barriers to business development and tourism attraction**, especially international	**Less capacity to attract investors, airlines and LCCs** to the market, with high concentration	**Difficulty to increase connectivity**, with traffic mainly concentrated at Hubs	**High yields and tickets price**, hindering the access to air transport

Solutions

Subsidies and government investments agenda			Market environment improvements agenda			Market environment improvements agenda	
Policies to ensure regional connectivity	**Incentives for low-income population**	**Tax reform and incentives**	**Fuel energetic transition**	**Regulation focus on competitivity**	**Fuel supply and costs**	**Tourism promotion**	**Touristic infrastructure and qualification**

To stimulate access to air transport, Brazil should develop an agenda focused on implementing a tax reform that recognizes aviation as an economic engine, while establishing incentives for regional aviation

Current scenario and recommendations – Government and incentives agenda

Current scenario

- Low purchasing power and hard access to air transport by lower classes
- Cultural perception of air transport as a luxury
- Low connectivity, with the most part of routes concentrated in hubs
- Risk of price increases after tax reform, increasing unaffordability

Threats

- **Lack of connectivity**
- **Affordability**
- **USD/BRL risks**
- **Tax reform and the end of tax incentives** to current unfeasible routes, reducing network connectivity even more

Recommendations: Government investment and incentives agenda

To support aviation**, it is essential to restructure the FNAC fund, enabling its budget to finance a variety of initiatives aimed at enhancing connectivity and market access**

(A) Subsidies through EAS – Route-based incentives combined with income class

- To enhance accessibility to air transport, **Brazil should establish a structured aviation incentive policy, such as an Essential Air Services (EAS) program**, to fund strategic regional routes and strengthen national connectivity
- **These subsidies could be financed through fiscal and tax incentives**, which should be preserved despite the ongoing tax reform, by creating state-level tax funds to support subsidies, or by allocating resources from the FNAC budget

(B) Incentives for traveling targeted at class C (Lines of credit for air travel and/or discounts)

- To strengthen Brazil's aviation sector**, it is essential to foster specific lines of credit in BRL**, **targeting both airlines and passengers**, through public or private banks
- **For airlines**, providing working capital credit lines in BRL with favorable interest rates **would support fleet renewal and the expansion of strategic routes decreasing the currency risk**. **For passengers, offering credit for domestic air tickets—featuring extended installment options and partial default guarantees**, with priority for trips to low-connectivity or tourism destinations—**would be key to improving network connectivity** and boosting domestic tourism

(C) Tax Reform (CRITIAL AGENDA)

- Considering the future tax reform and the end of the current ICMS-based incentives, **it is necessary to create municipal and/or state-level dedicated funds to finance strategic air routes, helping to foster connectivity and avoid a rupture of current hubs**
- It is key that the tax reform recognizes aviation as an economic enabler and a strategic asset for the integration of the country, driving socio-economic benefits for smaller and remote locations

In order to improve the market environment, some regulatory developments are required to reduce current costs (mainly QAV), and to incentivize the development of LCC services

Current scenario and recommendations – Market environment agenda

Current scenario

- **High fuel cost costs** driven by high tax rates and inefficient market structures
- **Legal constraints to the entrance of new airlines** in the market and LCC operation
- **Legal insecurity and excessive litigation**
- **Absence of available slots** in the main airports of São Paulo

Threats

- **Inefficient costs structure**
- **Legal insecurity,** with uncertainty about tax regime and regulation related to the main aviation stakeholders
- **Currency uncertainty,** affecting ~57% of total airlines operating costs, especially those related to fuel and leasing
- **Increase of fuel costs due** to the introduction of SAF in Brazilian fuel mix

Recommendations: Market environment agenda

(D) Cost optimization

- To reduce the pressure from high fuel costs and drive competition, it is essential to review the fuel production and distribution structures, while reviewing Petrobras' fuel pricing formula
- Considering the future tax reform and the end of the current ICMS-based incentives, it is necessary to create municipal and/or state-level dedicated funds to finance strategic air routes, helping to foster connectivity

(E) Regulation to increase competitiveness (new entrants and development of LCC)

To stimulate an increase of the aviation market and attract new airlines to operate in the country, it is crucial to promote the following structural regulation framework changes::

- **Review of Brazil's slot regime to facilitate the entrance of new airlines**
- **Allowing the charge of complementary services by airlines** in line with low-cost operations, such as baggage fee
- **Aligning judicial practices with international standards to reduce predatory litigation** and moral damage claims
- **Reviewing compensation obligations** to promote the cost structure of LCCs and providing legal certainty and balance in passenger rights

(F) SAF transition

Given the need to meet environmental targets and the potential cost impact of introducing SAF in Brazil, it is crucial to develop a structured plan for the energy transition and SAF scale-up, following these steps:

- Establishment of clear regulatory framework for SAF
- Creation of economic and tax incentives specifically for routes using SAF
- Development of national supply chain of SAF
- Integration into refining and distribution infrastructure of SAF

Moreover, Brazil can better exploit its tourism resources by improving the tourism experience in conjunction with campaigns aimed at targeted audiences with different objectives

Proposed Measures to Increase Connectivity and Propensity to Fly

Current scenario

- Abundant natural and cultural resources with strong potential to attract tourists
- Underdeveloped infrastructure, standards below world's leading destinations
- Public safety concerns negatively impact Brazil's image as a tourist destination
- Low proficiency in key foreign languages hindering the overall visitor experience

Threats

Regional competition, with countries such as:

- **Mexico, offering closer proximity** to major source markets (USA)
- **Chile and Argentina, perceived as safer and better organized destinations**, drawing tourists who might otherwise choose Brazil

Tourism agenda

Improve conditions to promote the tourism environment and invest in campaigns within Brazil and around the world to promote tourist destinations

(G) Tourism promotion

- To attract tourists to Brazilian destinations, it is necessary to **develop targeted marketing campaigns for distinct audience segments**, aimed at increasing both international and domestic travel demand:
  - **INT and DOM Stopover Programs**: Implement and promote stopover initiatives in major hub cities, encouraging travelers in transit to extend their stay. These programs should include incentives such as discounted accommodation, curated tour packages, and partnerships with airlines and local tourism boards to maximize economic impact and passenger engagement
  - **INT and DOM Tourism Promotion**: Launch comprehensive campaigns tailored to highlight Brazil's diverse tourist attractions, leveraging digital platforms, strategic partnerships with travel agencies, and participation in global tourism fairs to enhance the country's visibility and appeal in key source mar

(H) Touristic infrastructure and qualification

- Improving the tourist environment in Brazil requires actions across **safety, infrastructure, connectivity, and accessibility**. Enhancing public safety and investing in modern infrastructure – like airports and transport – are essential to improve mobility and visitor experience. Expanding connectivity to key destinations will facilitate both domestic and international travel
- At the same time, **reducing language and bureaucratic barriers** (through multilingual services and digital tools) can simplify visa and immigration processes and visitor experience. A more welcoming and efficient environment will boost Brazil's appeal, increase tourism revenues, and support economic growth.

Overall, an improvement on market environment would stimulate ~8 Mpax at no direct costs, while associated investments in incentives and tourism could additionally impact ~31 Mpax

	Government investments and incentives agenda	Market environment agenda		Tourism development agenda
	A	**D**	**E**	**G**
	Subsidies through EAS	**Costs optimization**	**Regulation to increase competitiveness**	**Tourism campaigns**
Premises	Subsidies to enable the access of class C and remote areas to air transportation, after market environment improvements	Review of Brazil's fuel production and distribution markets, implementation of a tax regime that stimulate the development of aviation and the elimination of predatory litigation	**Regulatory changes** allowing lower service costs while **reaching the same ancillary revenues share of LCCs** with 60-65% of LCC penetration	Impact based on benchmark of previous touristic campaigns of ~ 2 kpax/MBRL invested
Impact on traffic	**~10 to 30 Mpax**	**~3.0 Mpax**	**~4.0 to 5.0 Mpax**	**~0.2 to 1.0 Mpax**
Required investment	**~1.3 to 3.8 Bn BRL**	**NA**	**NA**	**~0.1 to 0.5 Bn BRL**

Note: For Every new passenger an economic impact of 1,9 kBRL was considered. For every new 1,000 passengers, 13,5 jobs are created

Total Results

Total investment
~1 to 4 bn BRL

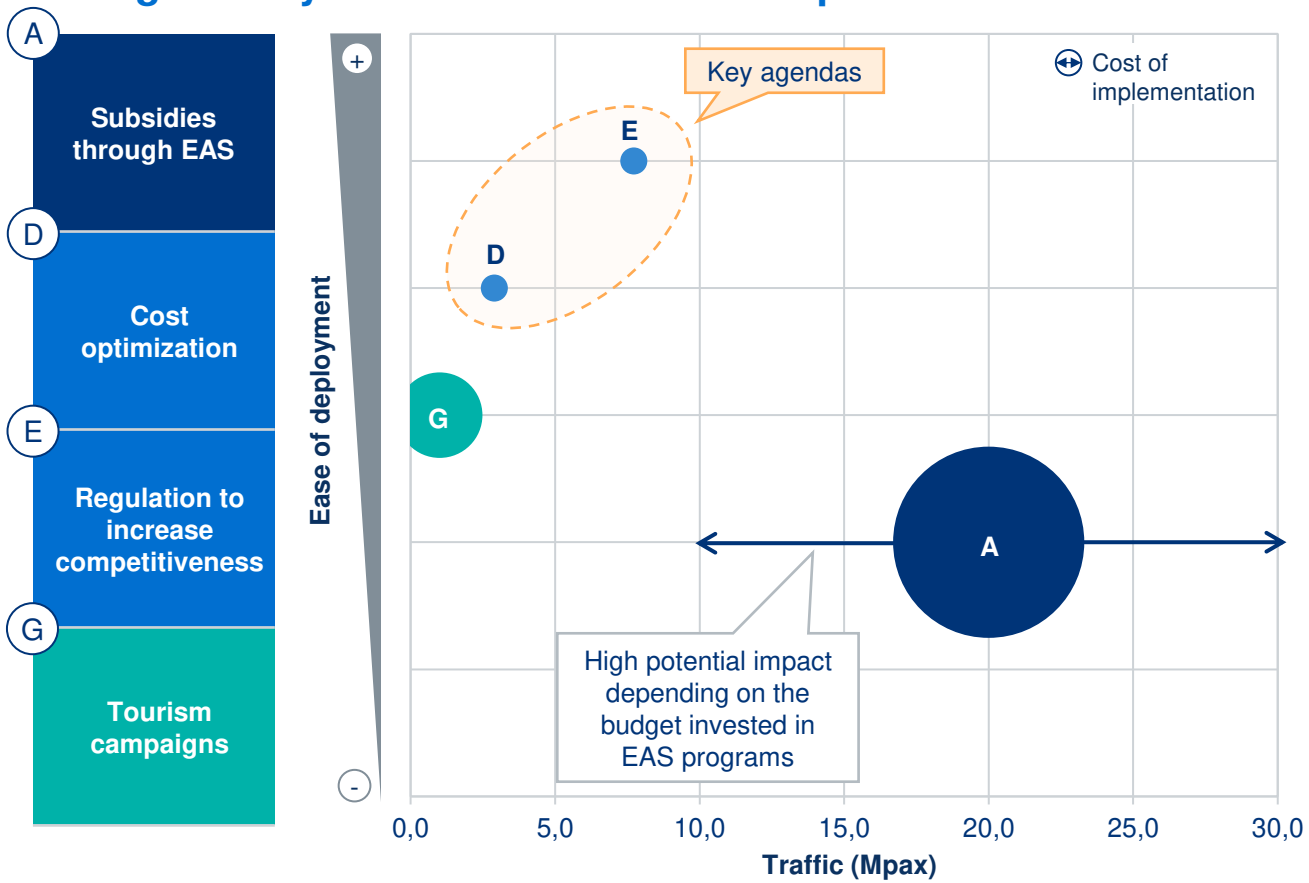
Total pax increase
~18-39 Mpax

Total Jobs
~290-520 K jobs

Total Economic Impact
~35-73 bn BRL

By comparing the opportunities to increase air transport market in Brazil, it is possible to categorize them by order of priority

Strategic Analysis of Mechanisms to Improve Market Liberalization

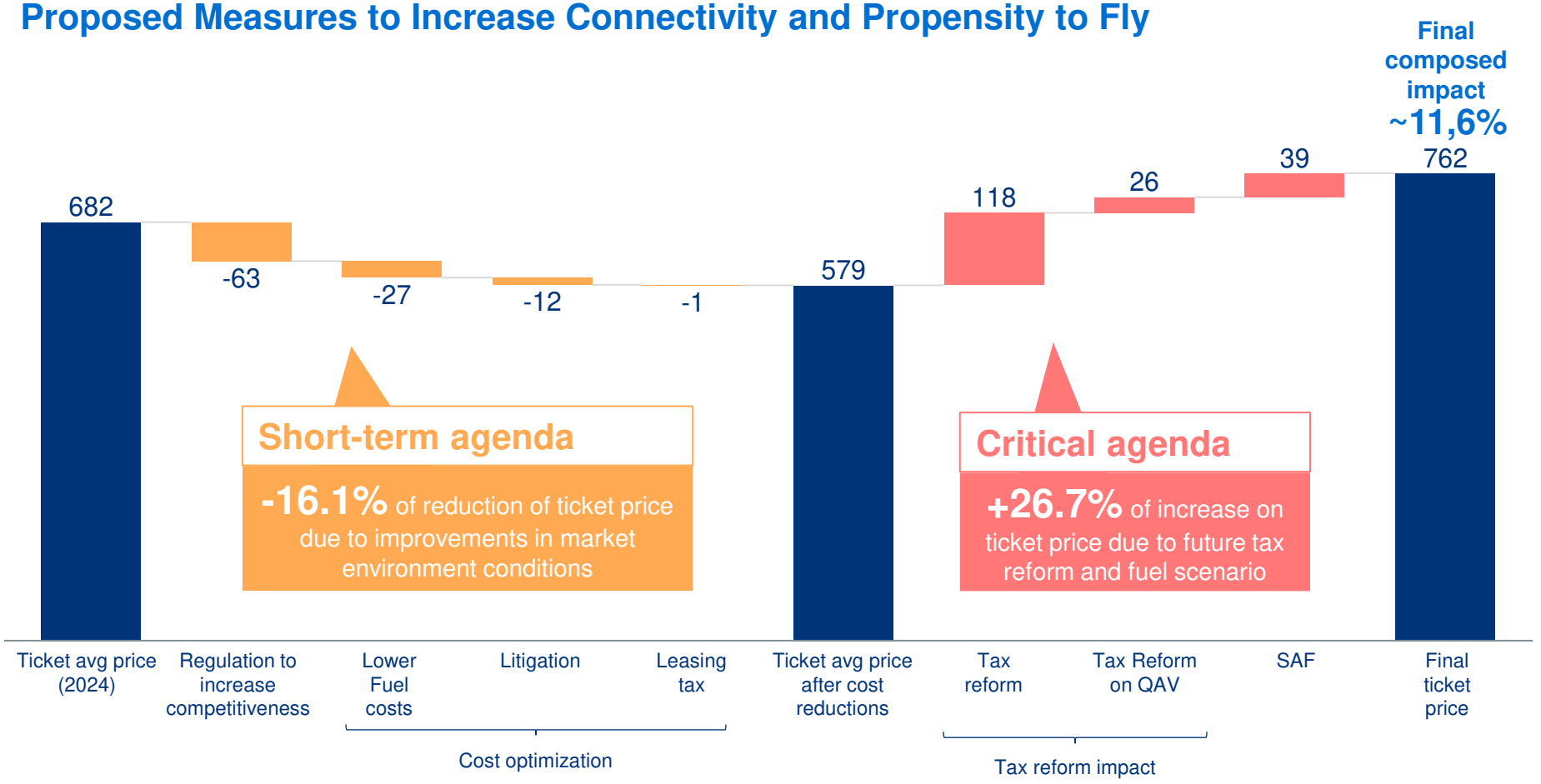


Main conclusions

- **By comparing the possible mechanisms** to increase market liberalization in Brazil, **it is possible to categorize them by order of priority**:
- **Quick wins:** Mechanisms with higher impact on traffic and with no costs of implementation, once they rely on regulation changes:
  - Cost optimization (focused on QAV)
  - Regulation for attraction of new entrants
- **Structural projects: The implementation of regional EAS incentive programs** has high potential impact, followed by market environment improvements, with required investments aligned with FNAC's current budget
- **Complementary projects:** Tourism campaigns can be developed as a complementary structuring mechanism to stimulate international traffic

Considering the risks of cost increase due to the tax reform and the introduction of SAF, efforts to ensure cost reductions are key

Proposed Measures to Increase Connectivity and Propensity to Fly



Source: ALG analysis
(*)Note: For analytical purposes, the impact calculation consider the proposed tax rate of 26,5%
(**)Note: For analytical purposes, the impact calculation consider the average ICMS rate of 12%

1 Key agenda

- Improve the market environment: costs reduction, slot regulation and ancillary revenues regulation
- The current inefficiencies do not require additional funds or investments but are costing to Brazil at least ~7.5 million passengers annually, which could generate approximately BRL 15 billion in economic impact and create ~100,000 jobs

2 Critical agenda

- Tax reform aligned with the industry's strategic nature and its critical role for the economic development — The primary goal should be to avoid any effective increase in the tax burden on the sector
- SAF transition — A balanced transition that matches the country's capabilities, combined with the short-term agenda for cost improvements, will ensure a smooth transition with minimal cost increases

Implementing this agenda will foster a healthier market environment for airlines, increase Brazil's attractiveness for new entrants, as well as the development of real low-cost carrier operations. However, it is essential to provide a clear and predictable path regarding the tax reform and the SAF transition to reduce uncertainty and further costs increase

3 Transformational agenda

- Provide subsidies to develop Essential Air Services to remote regions, complementing the current Ampliar program. Targeting the C-class population and less connected regions will not only improve national connectivity but also boost regional economies

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- Executive summary
- Market analysis
  - Extrinsic drivers of air transport market
  - Intrinsic drivers of air transport market
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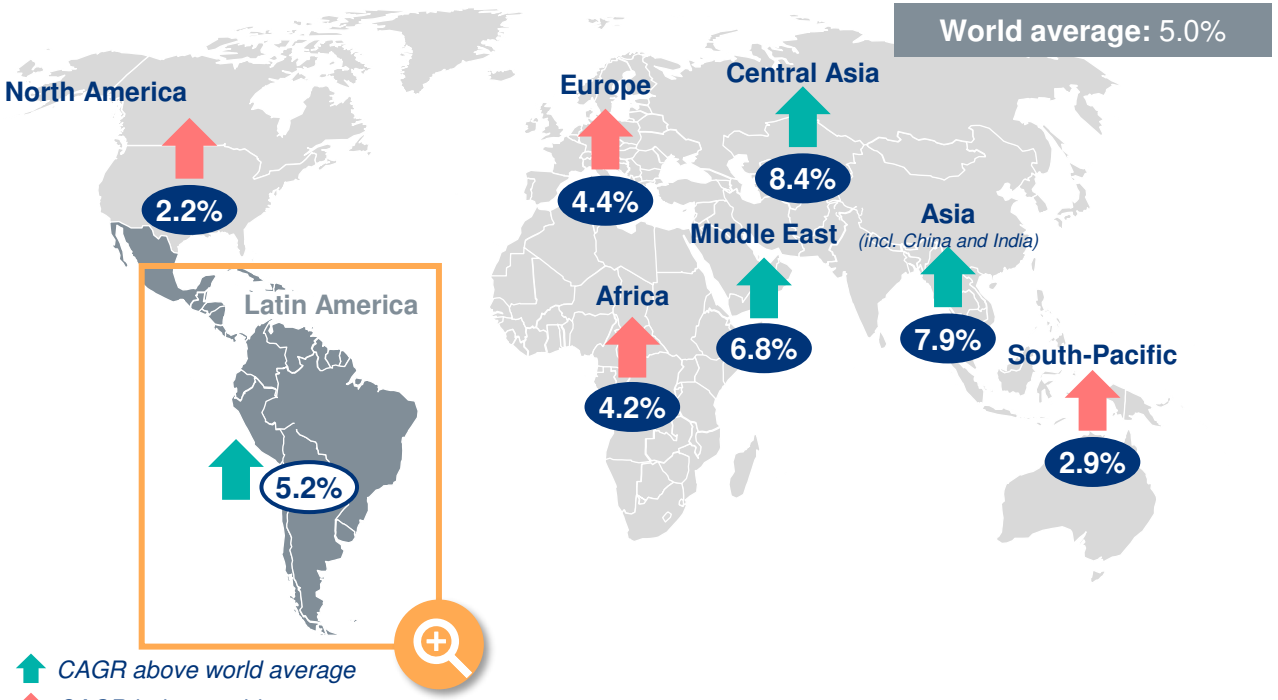
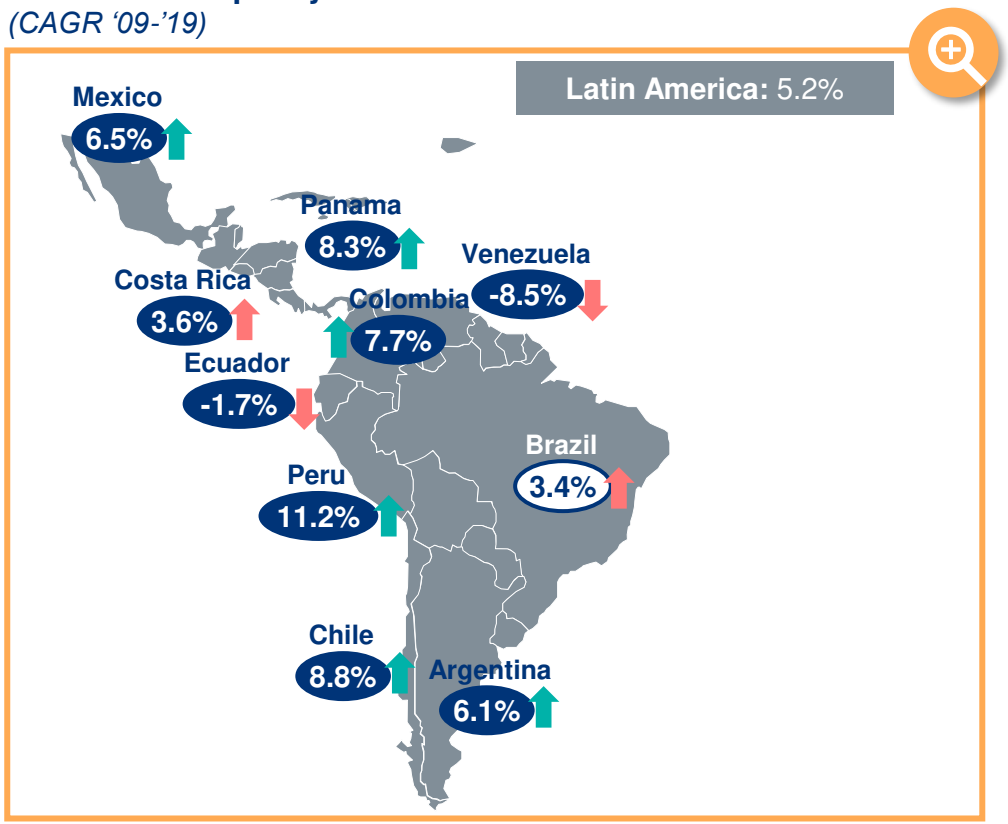
The aviation industry in Latin America grew above the world average, at a CAGR of 5.2% from 2009, despite the economic downturns experienced in some of the countries

Seat Capacity Evolution

Global Seat Capacity Evolution
(CAGR '09-'19)



LatAm Seat Capacity Evolution
(CAGR '09-'19)



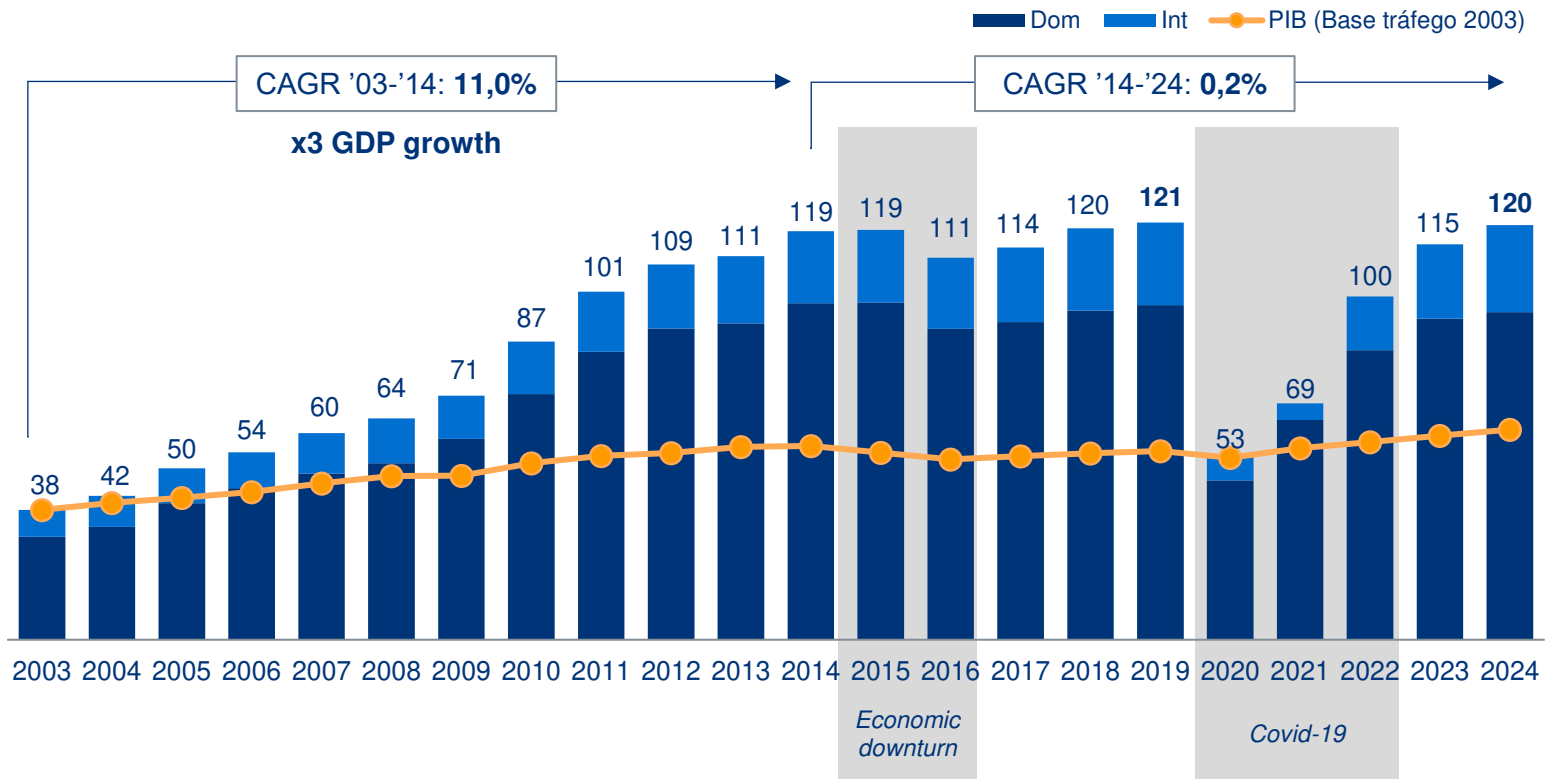
Between 2009 and 2019, Brazil grew below the region average due to the country's economic downturn in 2015; and in 2024, Brazil has not yet recovered the achieved figures before the Covid-19 Pandemic

Source: OAG, ALG Analysis

Brazilian air transport sector experienced an accelerated growth from 2003-2014 lead by economic growth and reduction in air fares, however with a stagnation in the recent years

Air Transport historic passengers (‘03-‘24)

MPax



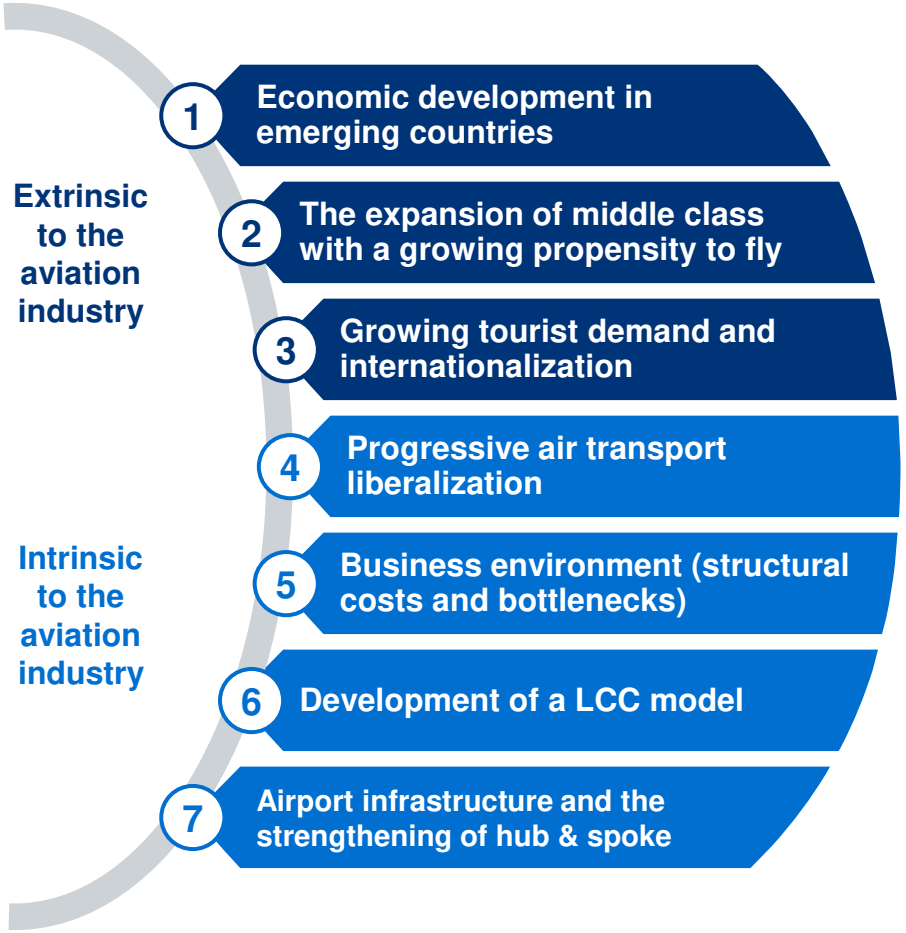
- **The economic growth and the liberalization process** lead the increase of air transport accessibility to middle social class **resulting in a strong air traffic growth in Brazil among 2000 and 2014**, 3 times higher than the GDP increase
- However, **the Brazilian market has shown low growth in recent years due to domestic crisis and covid**, with only 0.2 of GDP growth, which have **resulted in a fragile and stagnated industry**
- Such behavior underscores **the need for structural changes and measures to ensure the sustained future growth** of the Brazilian air transport industry, **beyond the influence of economic expansion**

In order to continue to expand, transforming the country accessibility and helping to boost the economy, some structural changes and measures are required, taking into acount the current bottlenecks of the air traffic drivers

Fonte: ANAC, Análise ALG

The factors driving air traffic growth in the region can be divided into extrinsic and intrinsic factors relative to the aviation industry

Factors of Air Traffic Growth in Latin America



- **Economic development** is the main driver for air traffic growth in emerging countries
- Economic growth in emerging countries has translated into the expansion of the **middle class**, which is the main factor contributing to the increase in **propensity to fly**
  - Global middle class is expected to multiply by 2.5 in the next 20 years
- Growing **inbound tourist demand** and internationalization is the main driver for international traffic
- Latin America is in a consolidation stage regarding **liberalization**, which is providing economic benefits due to cost reduction and making a significant impact on the aviation sector
- As **deregulation** occurs and carriers expand beyond national boundaries, the **airline industry's** structure changes
- During the last decade, the development of air transport in LatAm has been encouraged by the development **of new players with lower operating costs** (e.g., JetSmart, Viva Colombia)
  - However, there is still clear potential for further development of LCCs in LatAm, as low-cost airlines still have a limited presence compared to other more mature markets
  - Recent **new regulation** related to the air transport market opening to foreign capital already had an effect, with several airlines showing their interest in the Brazilian market
- The **use of air transport** has increased over the last decade **at the expense of the use of roadways** for long distance travel and this trend is expected to continue in the future

Source: ALG Analysis

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- **Market analysis**
  - **Extrinsic drivers of air transport market**
  - Intrinsic drivers of air transport market
- Strategies to stimulate Brazilian market
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Content

- **Market analysis**
  - **Extrinsic drivers of air transport market - Economic development**
  - Intrinsic drivers of air transport market
- Strategies to stimulate Brazilian market
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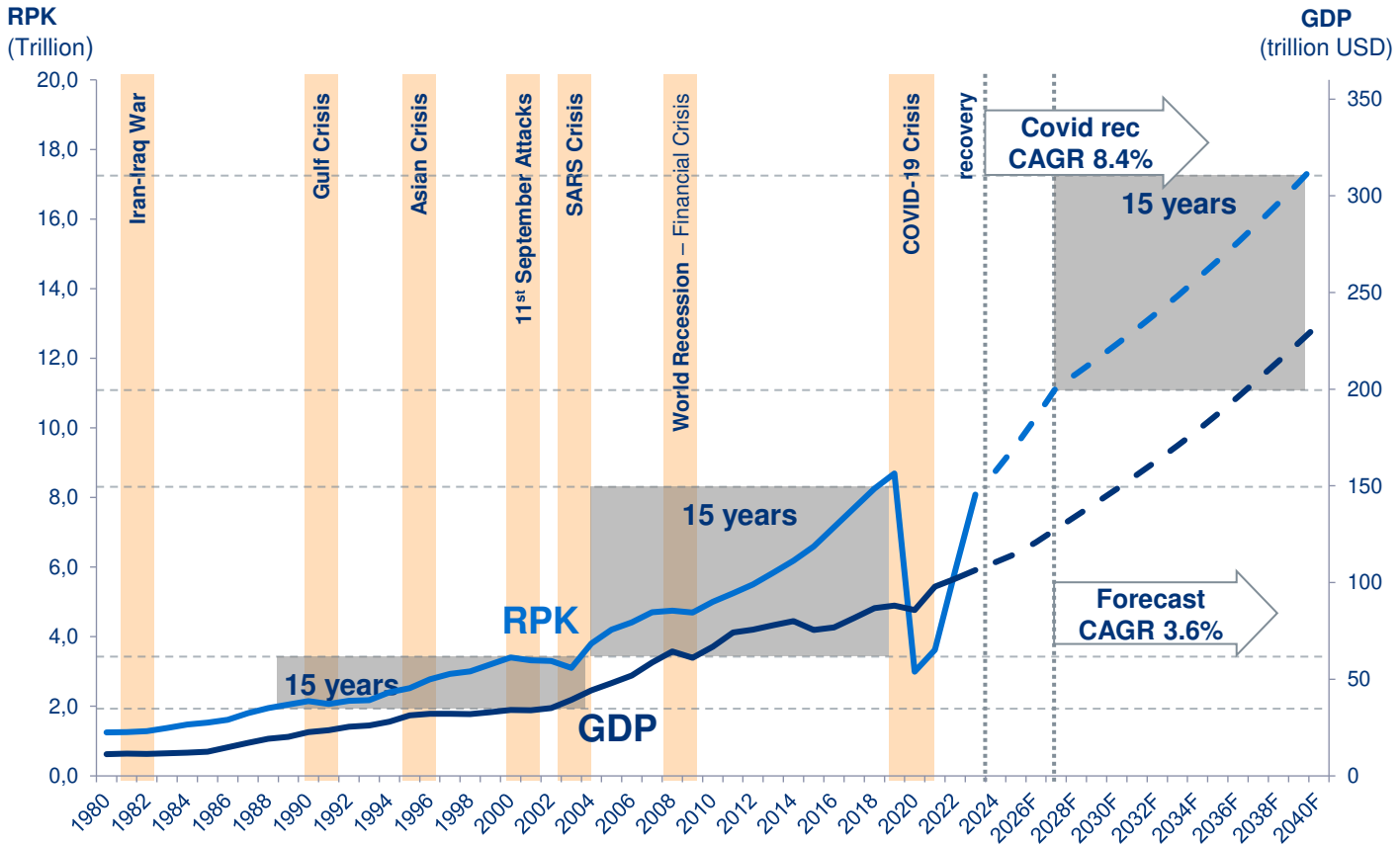
- Annex: Economic Impact of Aviation

Economic development is the main extrinsic factor, as GDP growth is strongly correlated with global air transport demand

GDP Development and Global Air Transport Demand (RPKs [1] ; 1980–2040)

1 Economic development in emerging countries

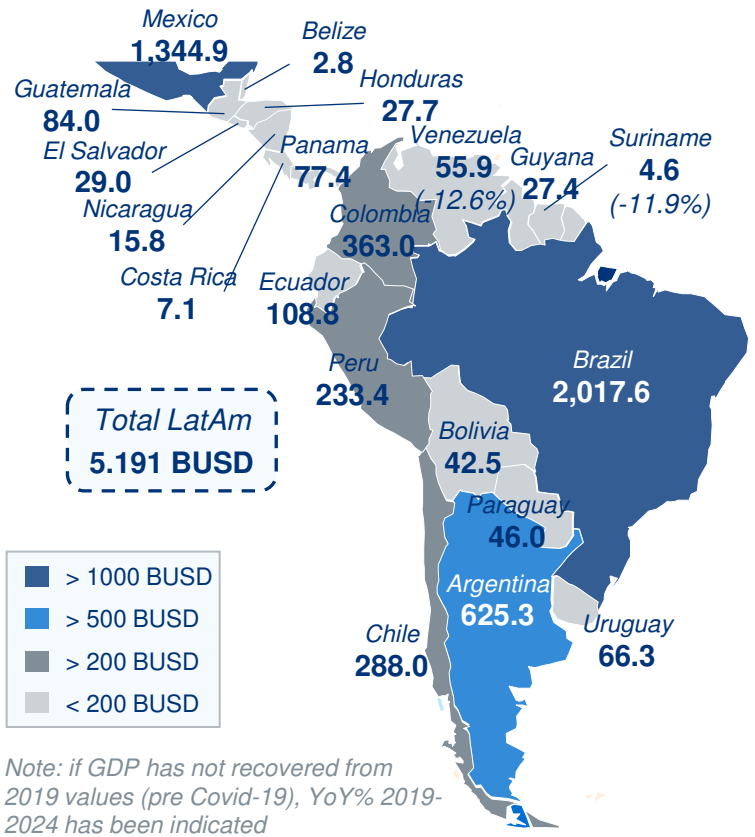


- The development of global commercial aviation is **highly correlated with economic growth** of its traffic generators -origins and destinations (O&D)
- The aviation sector has shown its ability to **recover from both global economic crisis** (2009) and **sector-specific crisis** (2001) throughout the years, usually recovering faster than the global economy
- Historically, **air transport demand has doubled every 15 years** – a trend which is expected to continue in the coming decades
- Consequently, airlines have significantly increased their operations and network coverage, **also doubling the number of routes and frequencies worldwide during last 15-20 years**
- However, in 2020, the **COVID-19 crisis** led to a significant decline in flights, from which **some countries are still recovering**
- It is expected that, in the future, a **similar growth trend** will continue at **macro level**, with particularities depending on the macro-region and local market dynamics

[1] RPK= Revenue Passenger Kilometre
Source: Airbus GMF 2024, Oxford Economics, ICAO, ALG Analysis

Brazil represents almost 40% of the total LatAm GDP, however with a growth forecast below the average of the region for the coming years

GDP in Constant Prices *(BUSD, 2024)*

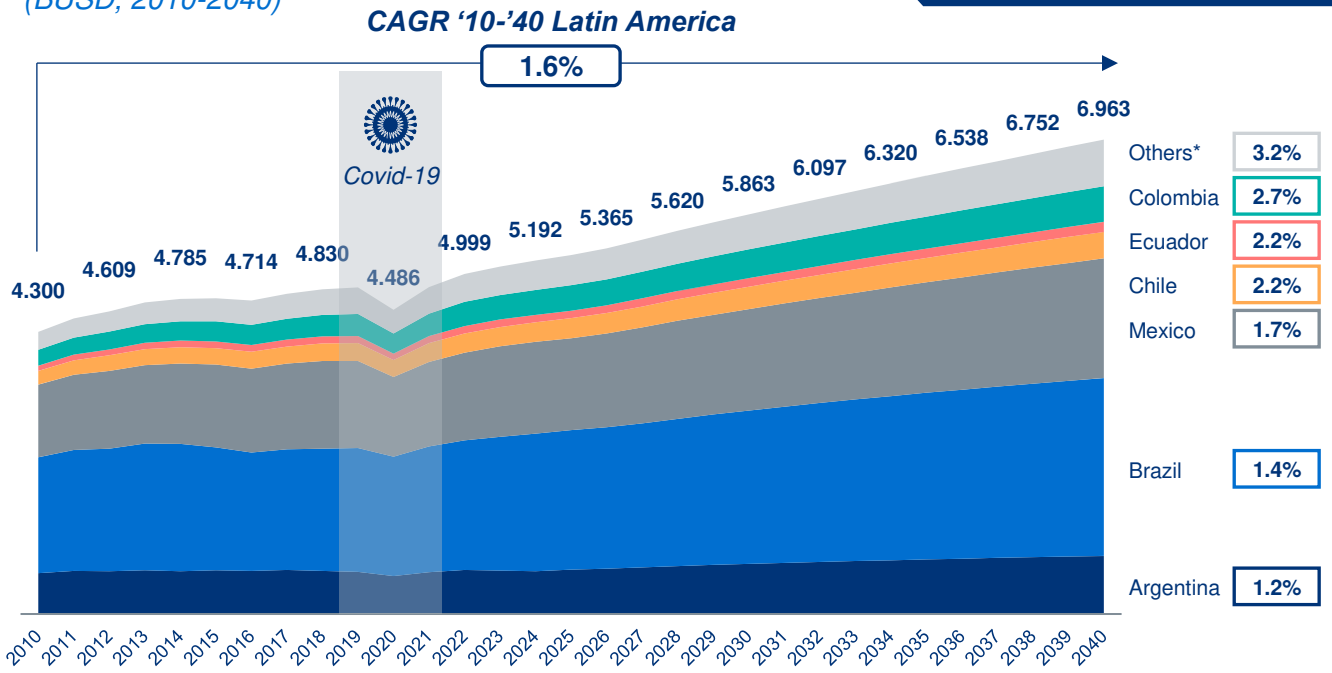


Note: if GDP has not recovered from 2019 values (pre Covid-19), YoY% 2019-2024 has been indicated

GDP Evolution in Constant Prices

(BUSD, 2010-2040)

1 Economic development in emerging countries



- According to Oxford Economics, the total LatAm GDP is expected to grow up to almost 7,000 BUSD in 2040, following a 1.6% CAGR since 2010
- The aggregate GDP of Brazil represents 38% of the overall of LatAm (averaged over the period of 2010-2040)

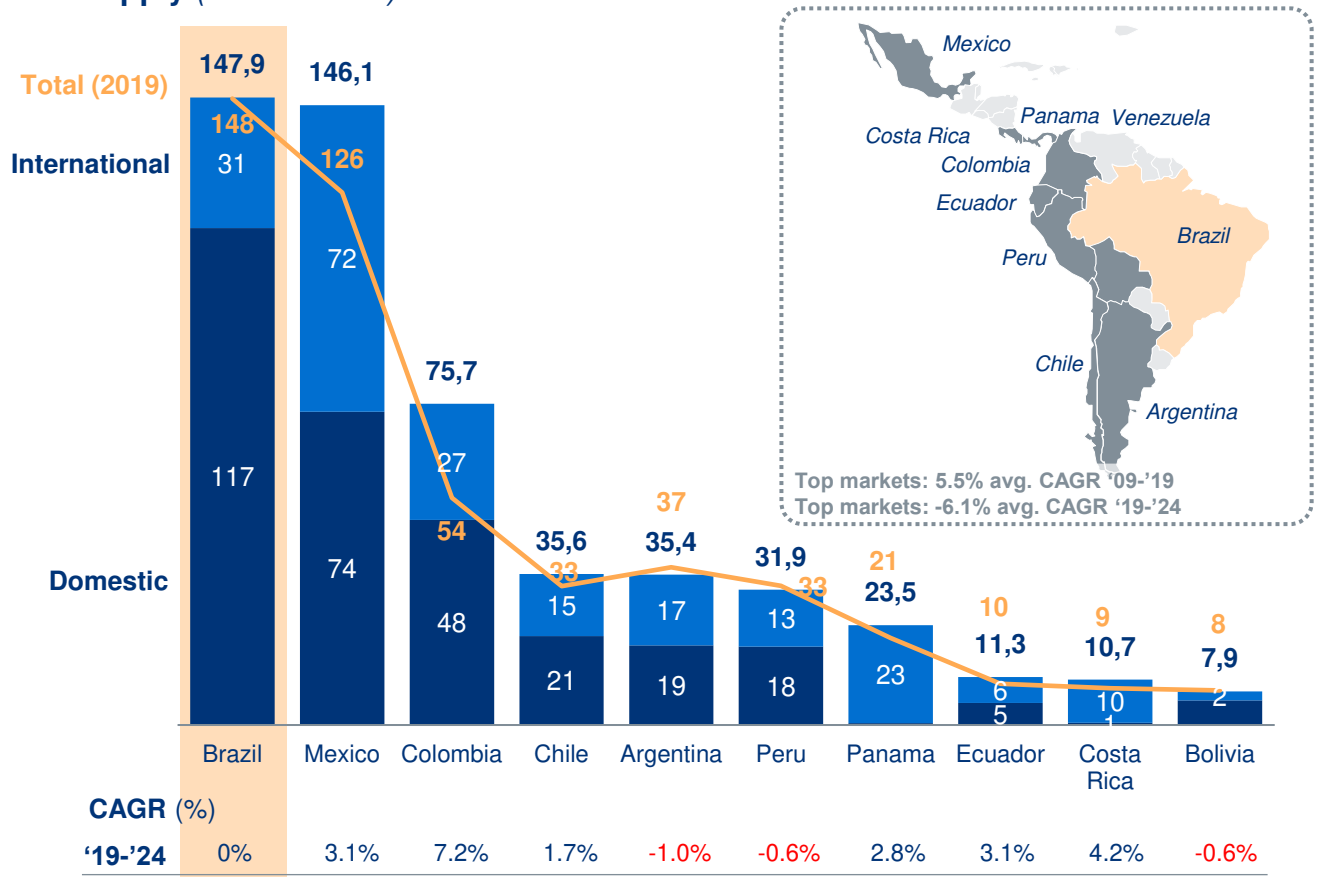
Brazil GDP is expected to grow at a conservative rate (1.4% CAGR in 2010-2040), slightly below the growth rate of Latin America

Source: Oxford Economics (base year for constant prices 2015, updated 2025), ALG Analysis
Note(*): "*Others*" includes Panama, Bolivia, Perú and Costa Rica. CAGR has been calculated using the sum of the GDP for each country in 2010 and 2040

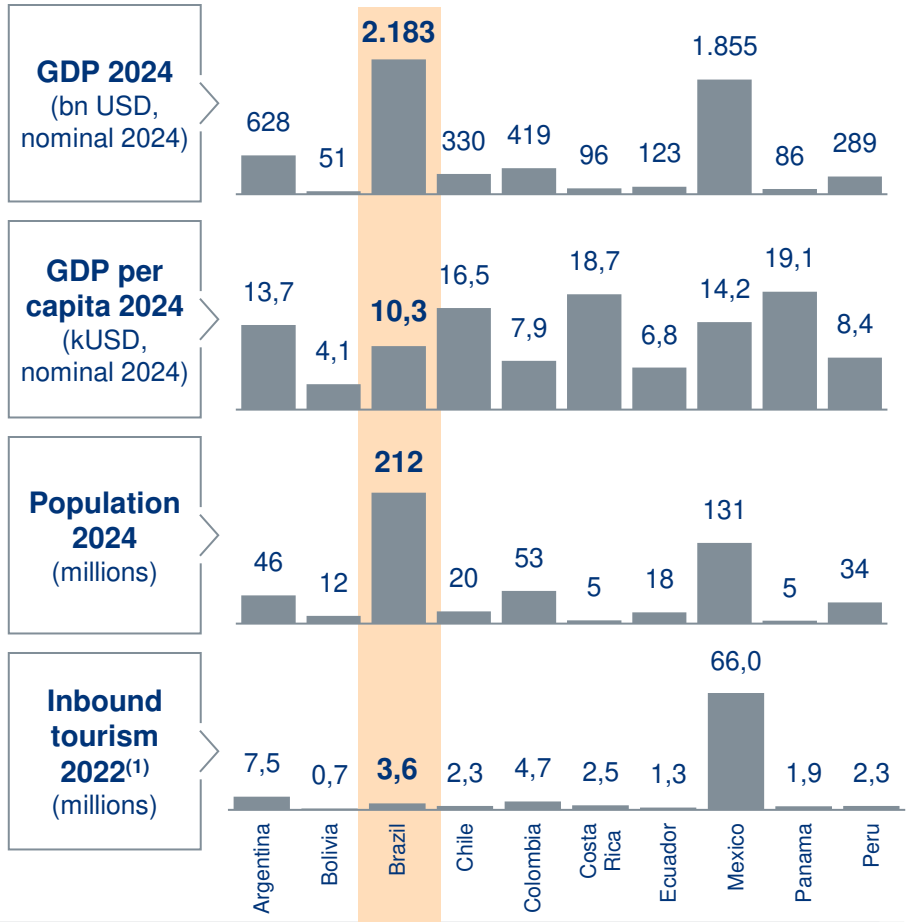
Also is the most populated country and one of the main economies in Latin America, holding the largest air traffic market given the high volume of the domestic segment

Top-10 Air Transport Markets in Latin America (Excluding Caribbean)

Seat Supply *(Million Seats)*



1 Economic development in emerging countries



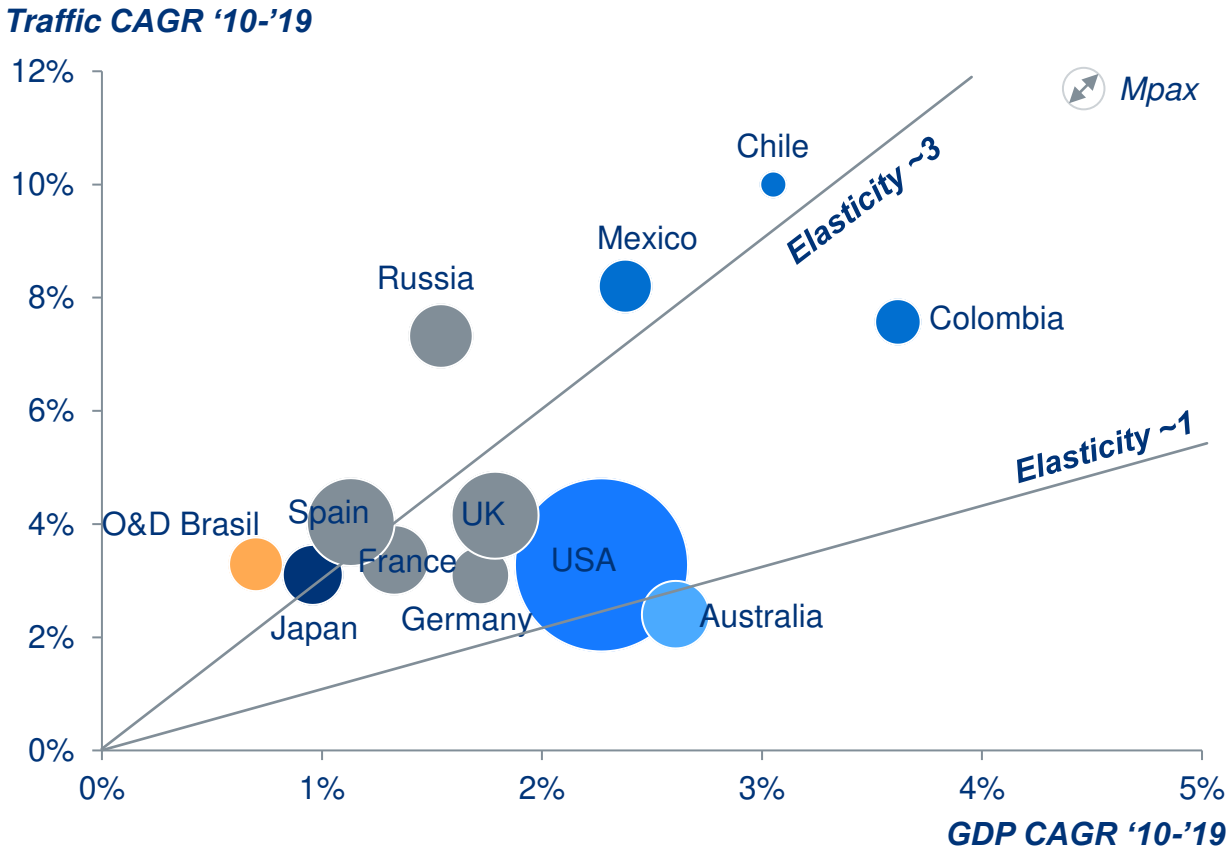
(1) Latest year available

Source: OAG, Oxford Economics, UNWTO Tourism Statistics Database, ALG Analysis

The resulting elasticities in Brazil indicate reflects the developing stage of the market, a pattern also observed in other developing countries

Benchmark % traffic vs. % GDP (CAGR 2010-2019)

1 Economic development in emerging countries



- Mature markets (USA, UK, Germany, Spain…) maintain growth rates around 2–4% with elasticities between 1–2 relative to GDP, reflecting market maturity and aligning with IATA benchmarks:

	References:
IATA Short distance	1.5 – 2.0
IATA Medium distance	1.6 – 2.0
IATA Long distance	1.7 – 2.2
BOEING South America:	2.0

- Developing countries (Colombia, Mexico, Chile, Russia…) show higher growth rates and elasticities
- The Brazilian market has shown low growth in recent years due to domestic crises, but high growth elasticities due to the market's limited maturity

Source: ALG Analysis

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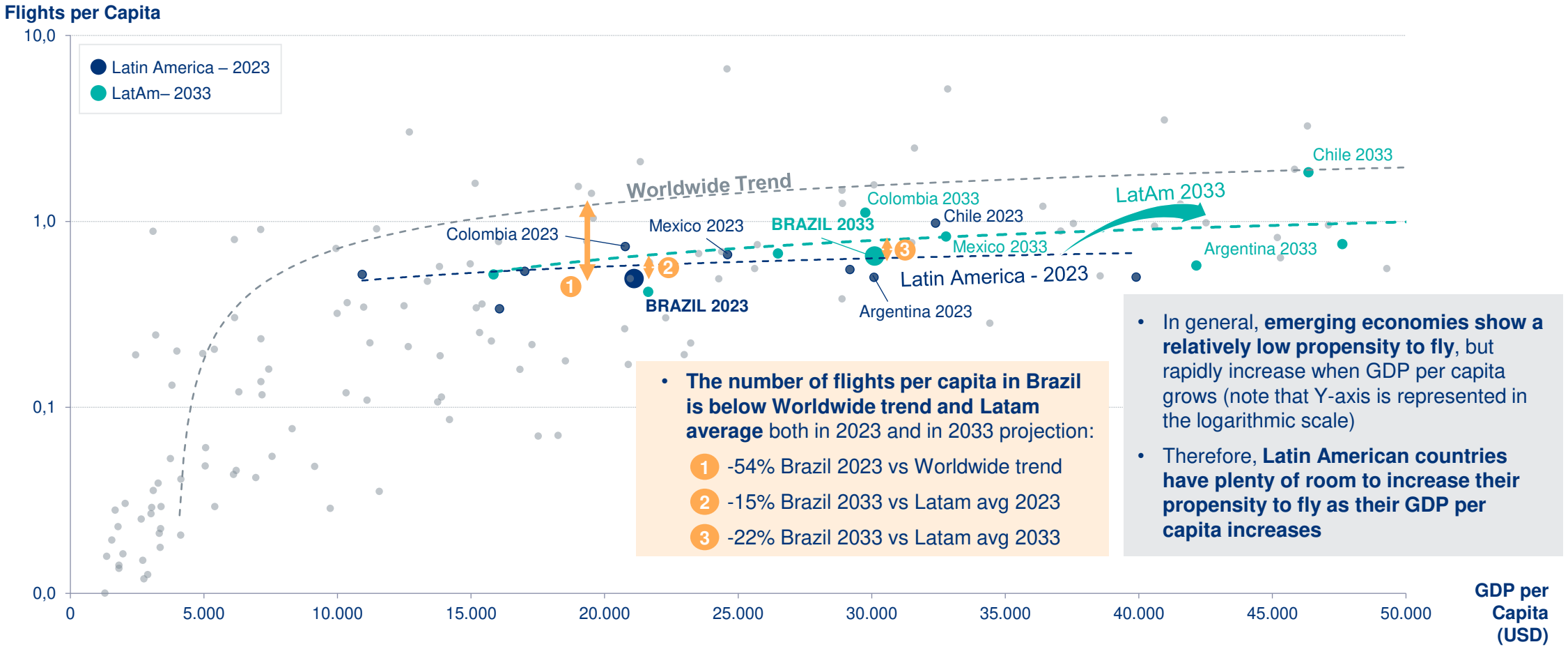
GDP growth in emerging countries translate into the expansion of the middle class and the increase in propensity to fly, which has lots of room to grow in LatAm countries

Analysis of Propensity to Fly of Latin America Countries (2023-2033)

2 The expansion of middle class with a growing propensity to fly



- **The number of flights per capita in Brazil is below Worldwide trend and Latam average** both in 2023 and in 2033 projection:
  - 1 -54% Brazil 2023 vs Worldwide trend
  - 2 -15% Brazil 2033 vs Latam avg 2023
  - 3 -22% Brazil 2033 vs Latam avg 2033

- In general, **emerging economies show a relatively low propensity to fly**, but rapidly increase when GDP per capita grows (note that Y-axis is represented in the logarithmic scale)
- Therefore, **Latin American countries have plenty of room to increase their propensity to fly as their GDP per capita increases**

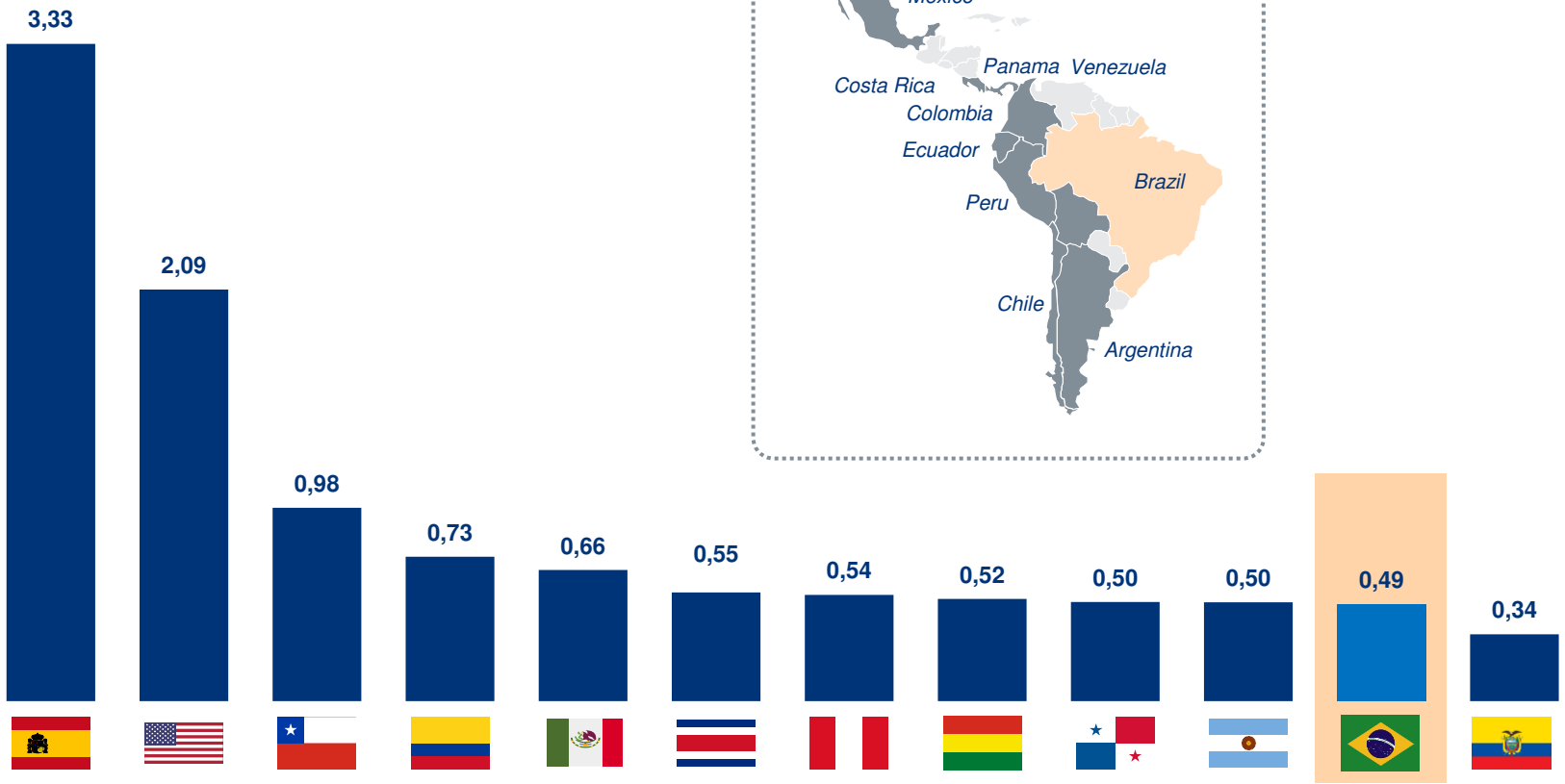
Note: The graph only shows "emerging" countries with GDP per capita lower than 50,000 USD, while the worldwide trend is calculated by also including "developed" countries. Brazil is not included in LatAm or World avg.
Source: ACI Projections, Airbus Global Market Forecast 2024, Oxford Economics, ALG Analysis

The propensity for air travel in Brazil is 0.49 flights per capita — 15% below the average for LATAM members

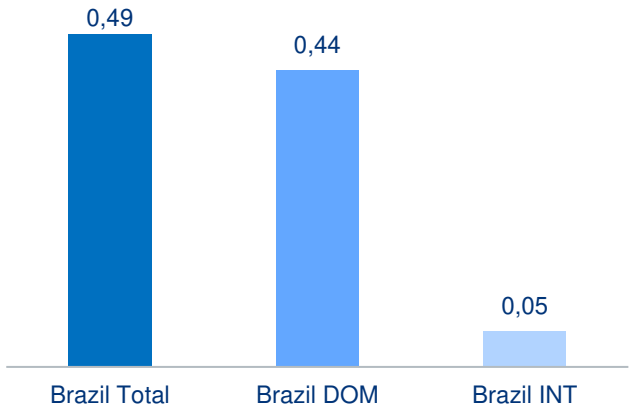
Analysis of Propensity to Fly Across Different Regions and Brazil's Breakdown (2023)

2 The expansion of middle class with a growing propensity to fly

Flights per Capita (total traffic)



Brazil Flights per Capita



In Brazil, **domestic demand (0.44) drives most trips, while international travel remains marginal at just 0.05** trips per capita, showing the few number of international trips in comparison to Brazil's population

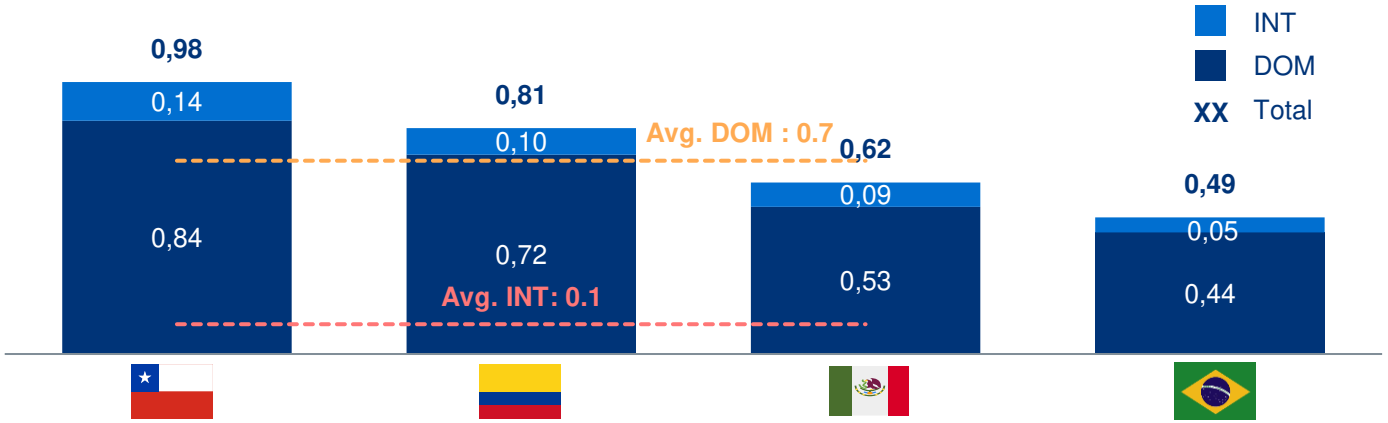
Source: ACI Projections, Airbus Global Market Forecast 2024, Oxford Economics, ALG Analysis

In both the domestic and international segments, Brazilians fly over 40% less often than the average for other Latin American countries

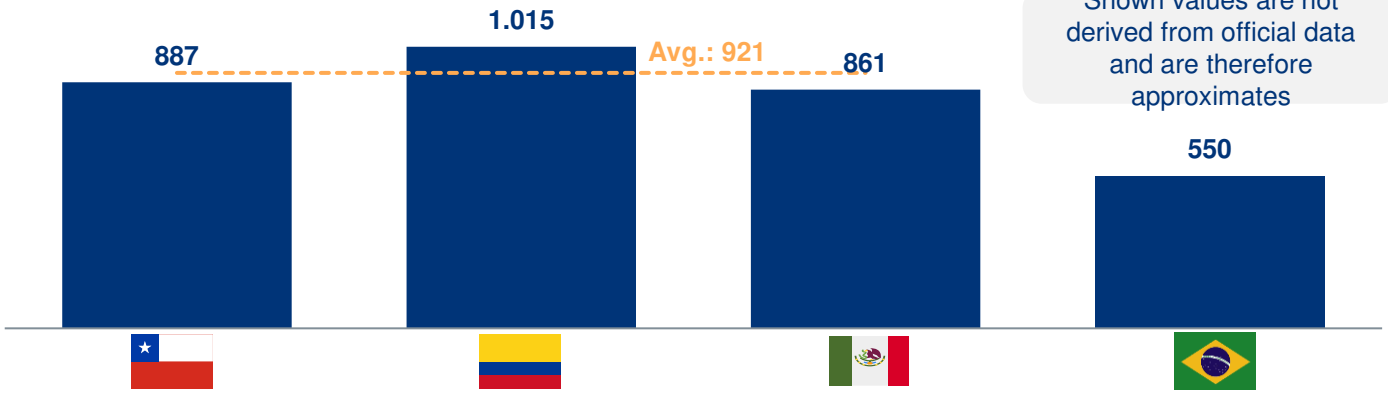
Analysis of Propensity to Fly Across Different LatAm Breakdown (2023)

2 The expansion of middle class with a growing propensity to fly

Flights per Capita (2023)



Average Net Monthly Salary (2023, USD)



Shown values are not derived from official data and are therefore approximates

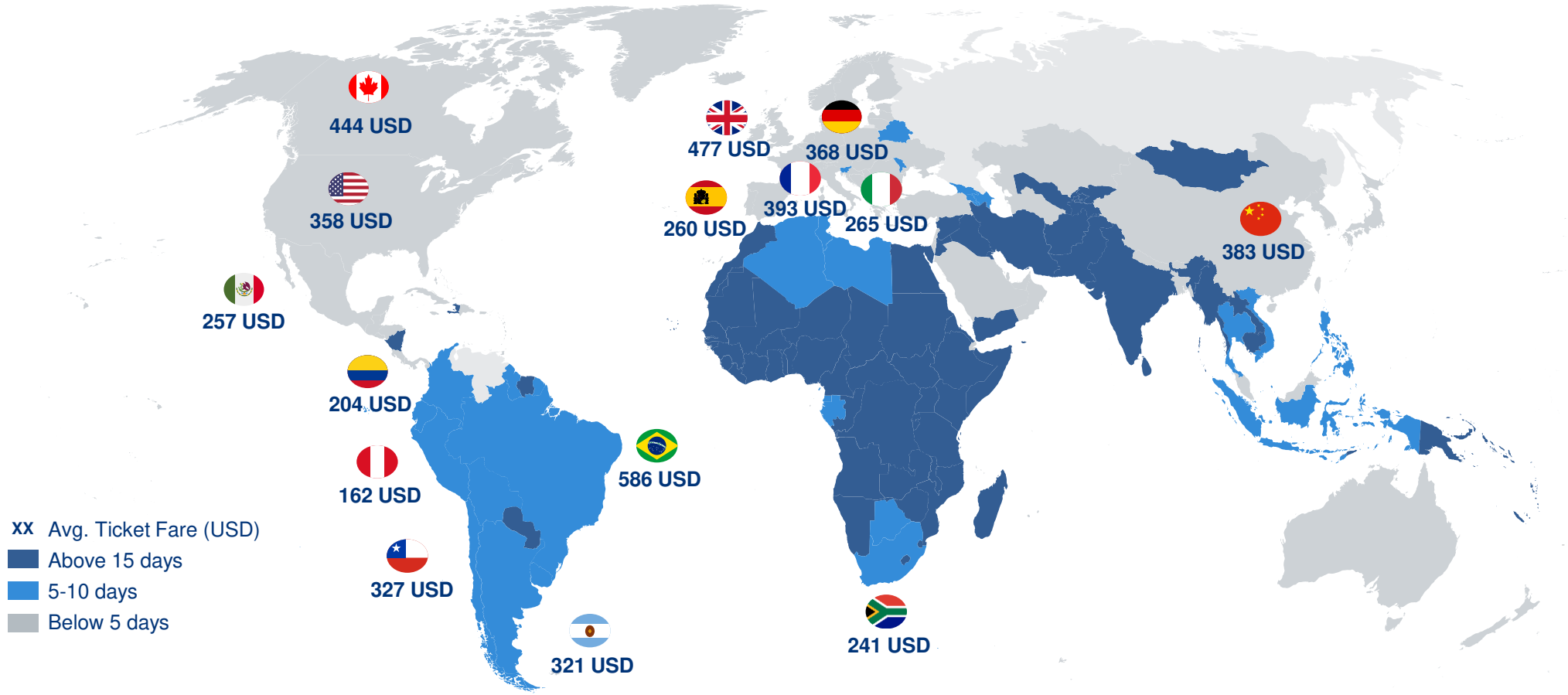
- In Brazil, **domestic demand (0.44) drives most trips, while international travel remains marginal at just 0.05** trips per capita, showing the few number of international trips in comparison to Brazil's population
- Across both domestic and international propensity to fly in LatAm countries, **Brazil has the lowest trips per capita**
- This may be because of **elevated average tariff prices** and **lower average wages**

Source: ACI Projections, Airbus Global Market Forecast 2024, Oxford Economics, Emol, ALG Analysis

Even though there is plenty of room for growth, LatAm's air market remains costly for its population, with an average of 5-10 days of work required to buy a DOM plane ticket

Time Required to Afford an Average Plane Ticket (2023)

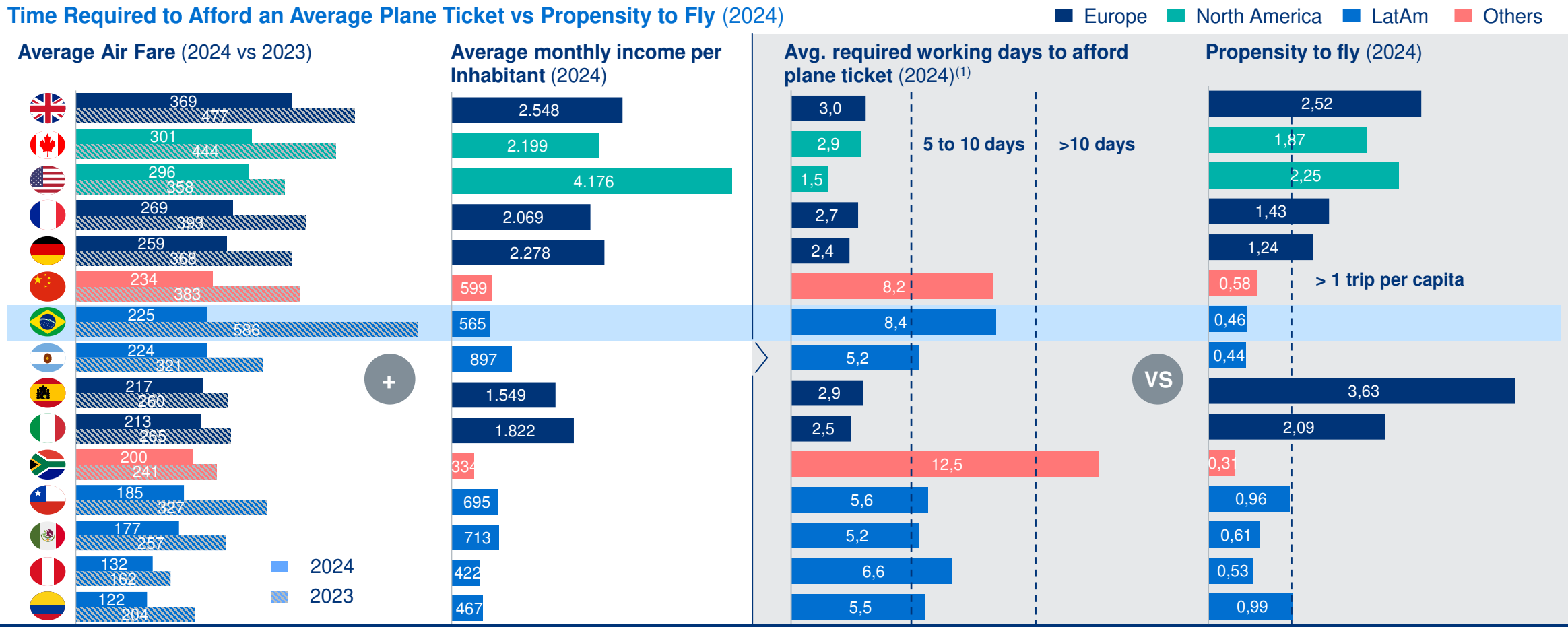
2 The expansion of middle class with a growing propensity to fly



Source: IATA (DDS) and World Bank, ANAC, OAG, ALG Analysis

Brazil has high average airfares and relatively low income compared to LatAm and other key markets, resulting in more days of work needed to afford tickets and fewer trips per capita

Time Required to Afford an Average Plane Ticket vs Propensity to Fly (2024)



The high number of days required to purchase tickets in Brazil highlights the gap between high airfares and low income, reflecting weaker purchasing power compared to other countries and limiting access to air transport

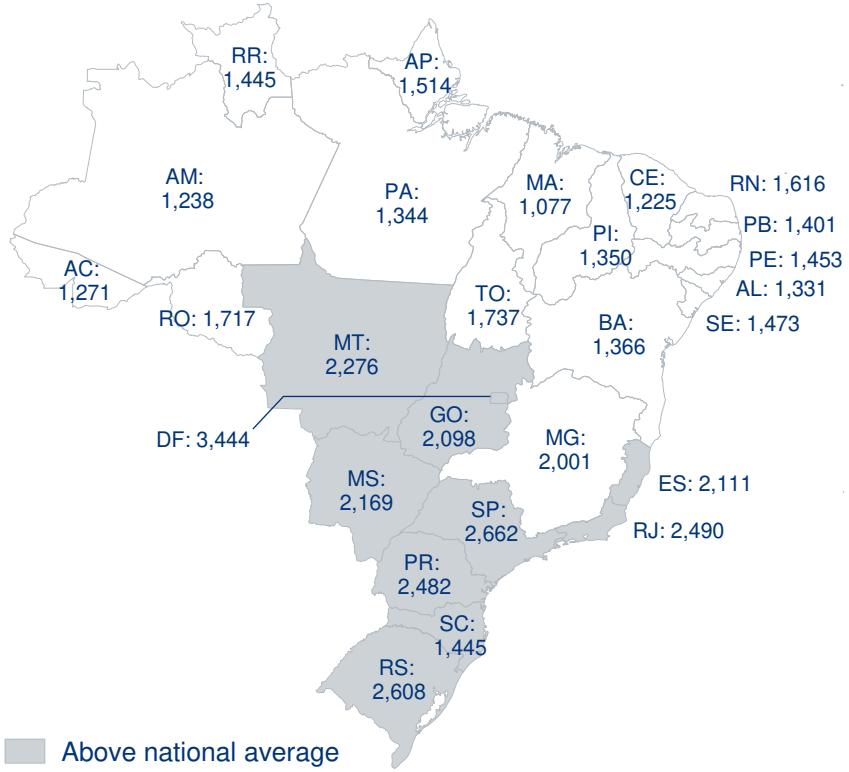
Source: OAG, Oxford Economics, ALG analysis

Note: (1) The days required to afford plane tickets were estimated using a fixed average of 21 working days and the average household size in 2024 released by Oxford Economics, which varies from 2 to 3 persons/household

The average nominal monthly household income per capita in Brazil is R$2,069, with 61% of the Brazilian states below the national average, most of them in the North and Northeast

2 The expansion of middle class with a growing propensity to fly

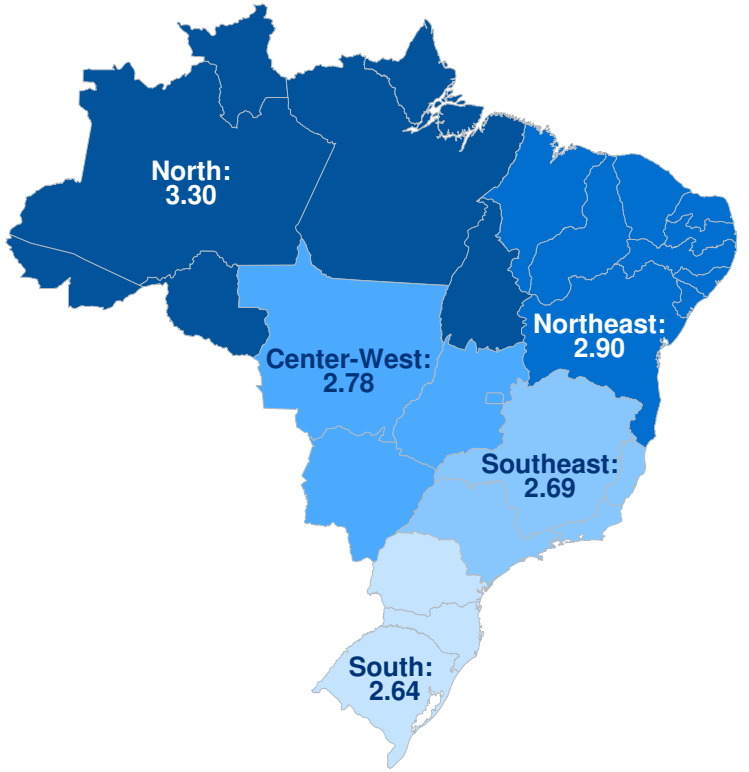
Monthly Nominal Household Income per Capita (BRL, 2023)



Brazil average

2,069 BRL

Average Number of Residents Household per Region (2022)



Brazil average

2.79

Both regions are also above the Brazilian average in the number of residents per dwelling, which also helps to understand why per capita income is lower compared to the states of the Central-West, Southeast and South

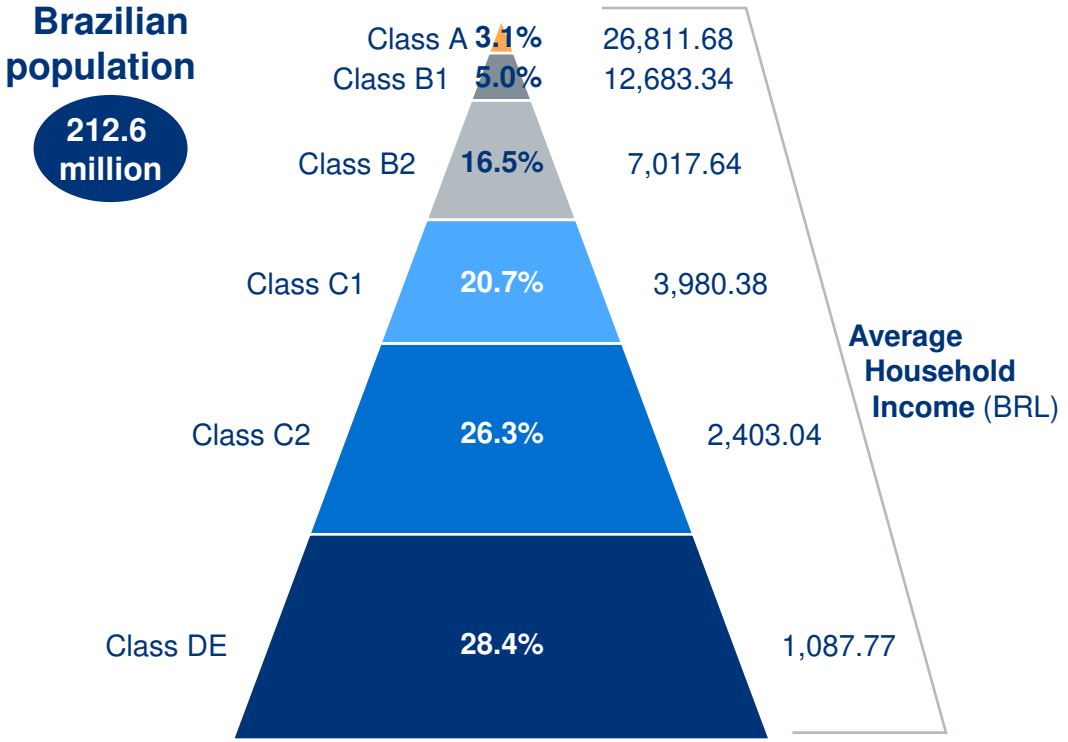
Source: PNAD Contínua, IBGE, CNN Brasil, ALG Analysis

It is estimated that class C in Brazil has around 100 million people with average incomes of 2.4k BRL for C2 and 3.9k BRL for C1, while class DE represent 28.4% of the total

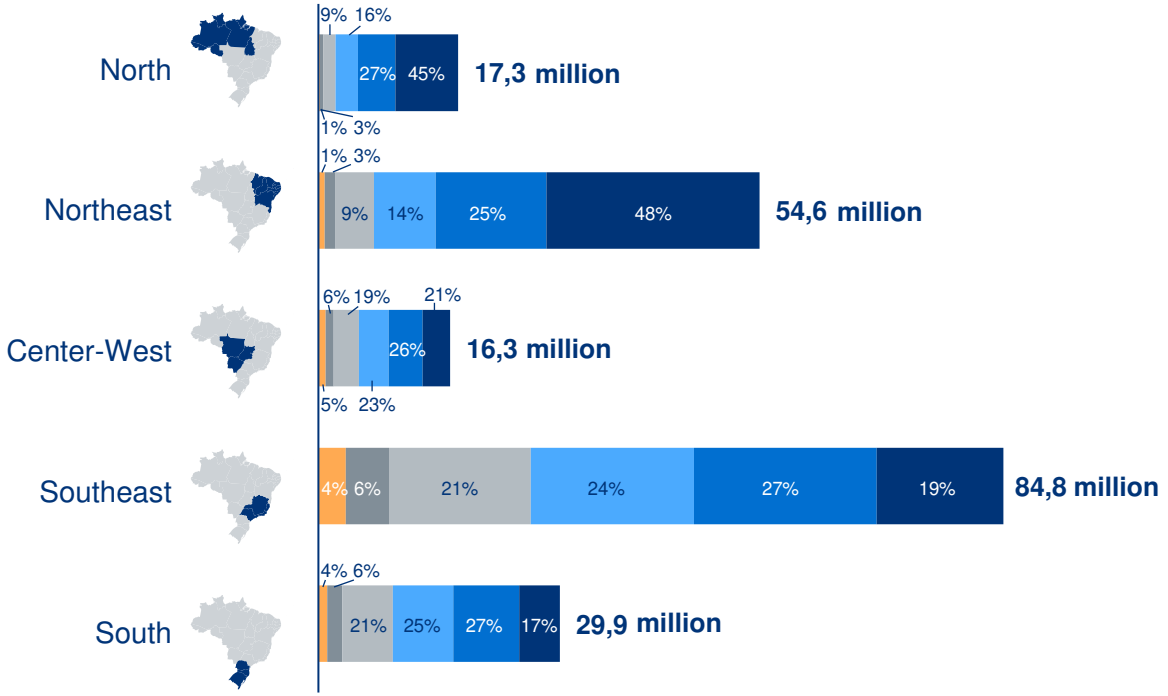
Stratification of the Brazilian Population

2 The expansion of middle class with a growing propensity to fly

In Brazil
(%, 2024)



Per region (%, 2024)

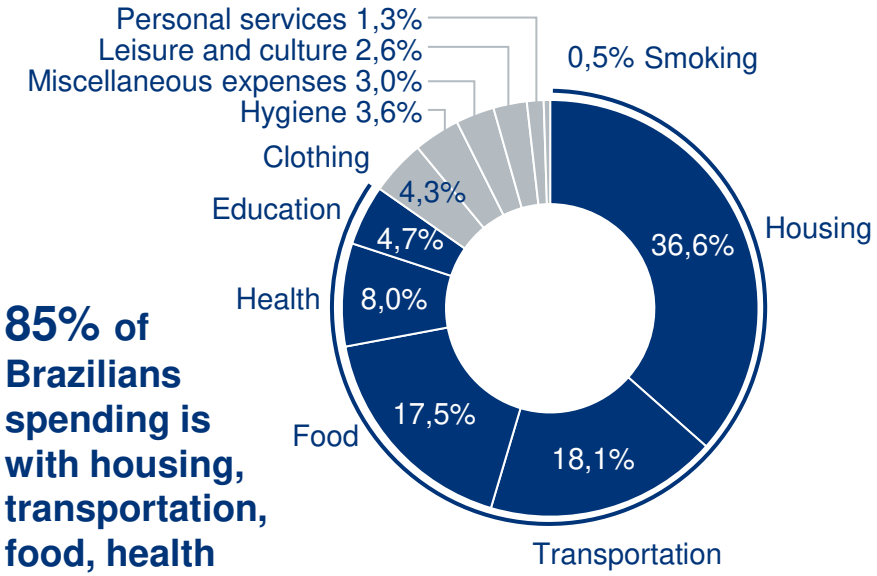


The percentage of class DE is higher in the North and Northeast regions, where it accounts for almost half the population. The classes A and B1, with a higher household income and higher propensity to fly, account for 17.2 million people, concentrated in the southernmost regions of Brazil

Source: Critério Brasil, ALG Analysis

This barrier becomes even greater when 85% of Brazilian families' costs are committed to basic expenses and with these costs pressured by inflation

Distribution of average monthly family consumption expenditure, by type of expenditure (%, 2017-2018)



85% of Brazilians spending is with housing, transportation, food, health and education

2 The expansion of middle class with a growing propensity to fly

Gazeta News

19 Feb 2025

Inflation Erodes Brazilians' Purchasing Power and Deepens Economic Crisis

Inflation in Brazil has proven to be a growing threat to the population's purchasing power, directly impacting households' budgets. Recent data from the Central Bank indicate that, in January 2025, **annual inflation reached 4.56%, remaining above the official target of 3%**, with a tolerance margin of 1.5 percentage points.

(…) **The effects of inflation are directly felt in the cost of living for Brazilians. Basic items, such as food, have seen significant increases, putting pressure on household budgets**. (…) Furthermore, **the devaluation of the Brazilian real**, which fell by more than 20% in 2024, reaching R$6.18 per dollar in December, **made imported products more expensive, contributing to higher consumer prices**. **The increase in fuel prices, which exceeded 25% last year, also impacted the entire production chain, affecting public transportation and freight costs**.

(…) **Inflation in Brazil** isn't just a statistic released monthly by economic agencies; **it's a harsh reality that primarily affects the lower class, which already lives on a shoestring budget**. With rising food prices, cooking gas, and basic services, **many families struggle to ensure adequate nutrition and maintain a minimally decent standard of living**. (…) This scenario **not only widens social inequality but also affects the country's long-term development,** as workers with less access to adequate nutrition and essential services face greater difficulties in remaining productive and healthy.

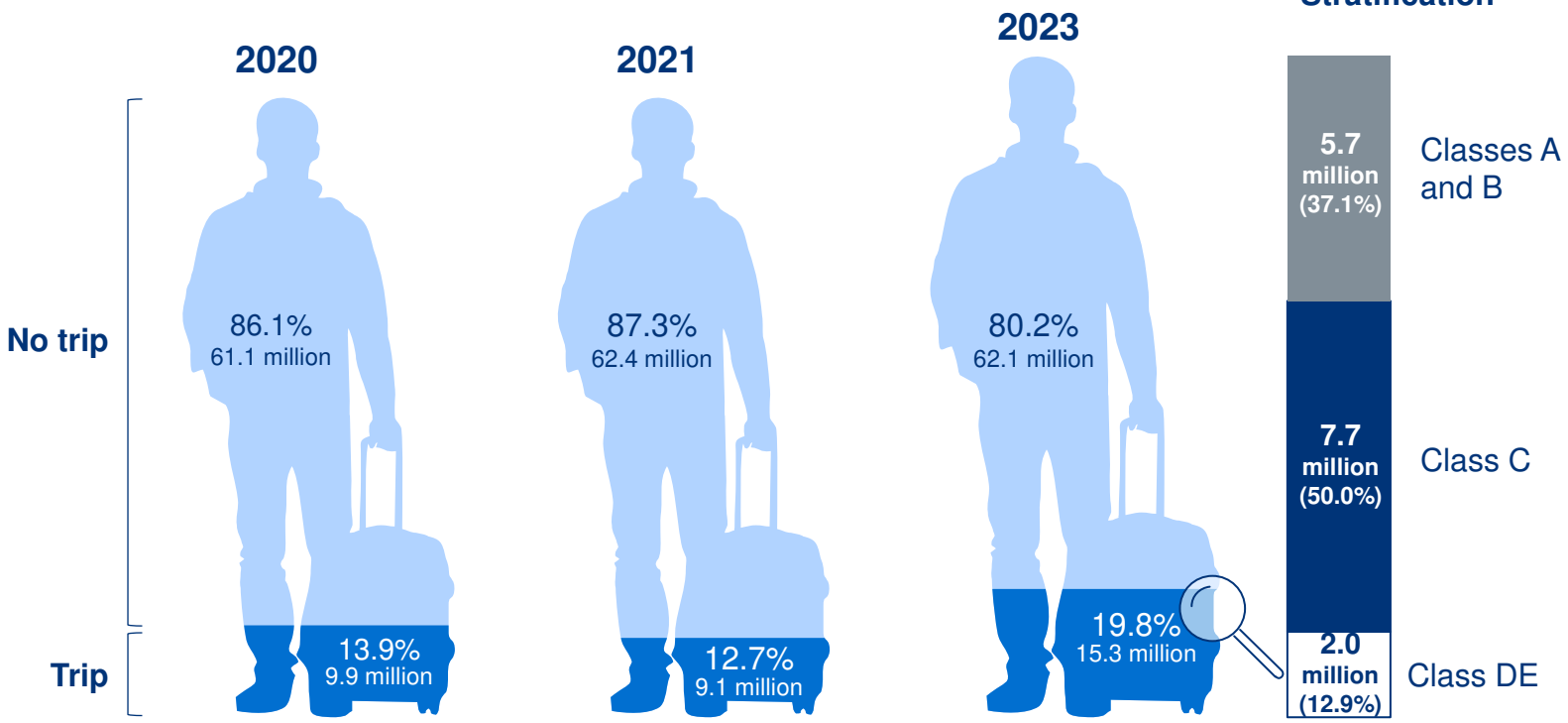
Inflation in Brazil primarily affects low-income families, who allocate larger percentages of their budgets to basic items and have no protection against rising prices. With inflation at 5.35% and the Selic rate at 15%, the cost of living has increased, while purchasing power has declined

Source: IBGE, Gazeta News, ALG Analysis

When looking at travel, the PNAD Contínua survey on tourism concluded that only 1 in 5 Brazilian households took at least one trip in 2023, representing only 15.3 million homes

Households Whose Residents Made at Least One Trip

(% of homes)

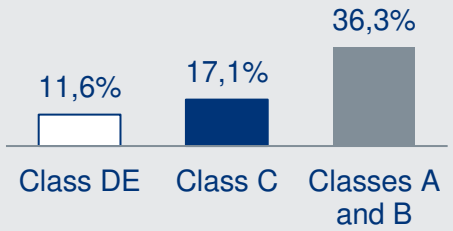


2023 per Capita Stratification

2 The expansion of middle class with a growing propensity to fly

- The PNAD Contínua survey on tourism revealed a 68.5% increase in the number of households that traveled with any means of transport, **reaching 19.8% of the total in Brazil, or 15.3 million**
- **The research also showed that the higher the salary, the higher the percentage of people who took at least one trip.** However, in classes A and B, only 36.3% of households travel at least once a year

Households with at least one trip by range of income (%)



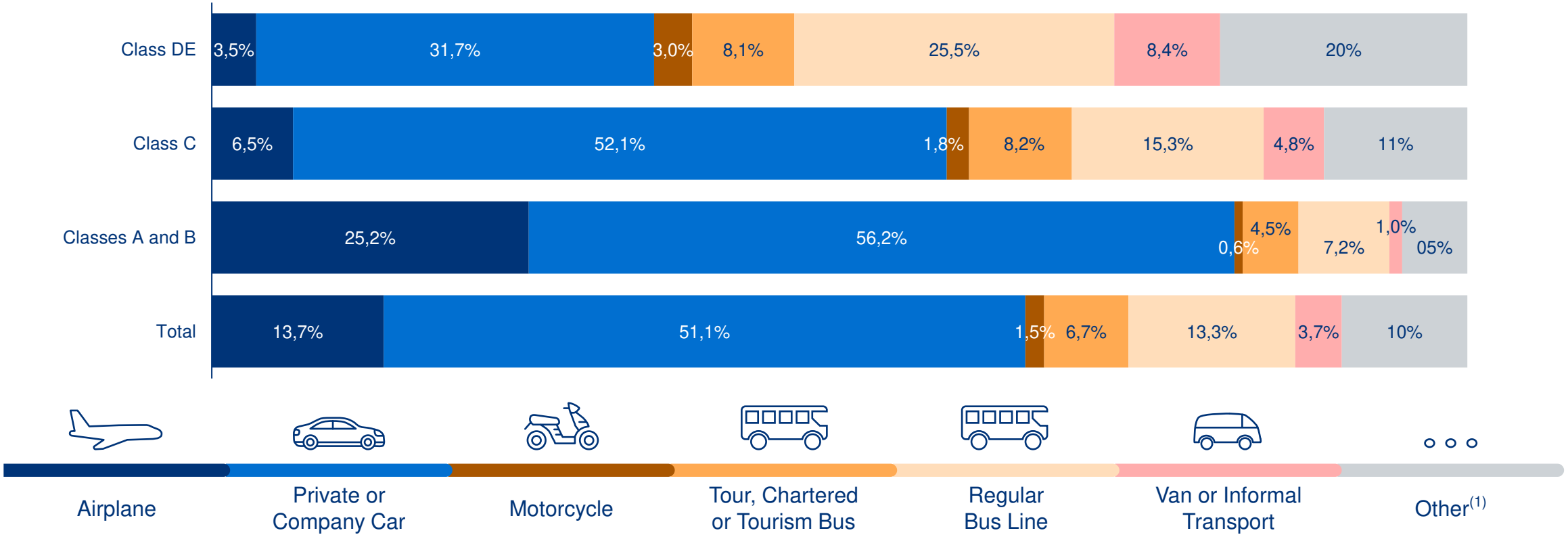
Classes A and B travel 2.1x more than Class C and 3.1x more than Class DE

Source: PNAD Contínua Turismo 2020-2023, ALG Analysis

When it comes to choosing the main mean of transport to travel, only 13.7% of Brazilians chose the plane; in Classes A and B households, this preference reaches 25.2%

Distribution of Main Mean of Transport, Acc. to Monthly Income per Capita (%, 2023)

2 The expansion of middle class with a growing propensity to fly



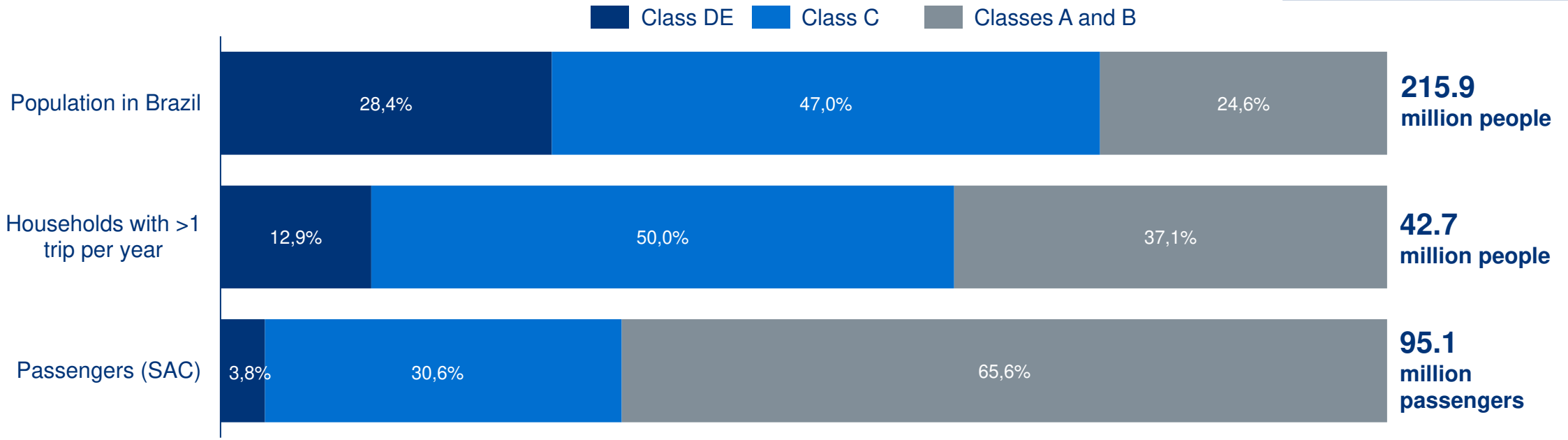
The choice of car as the main mean of transport for traveling is very present in the Brazilian population, reaching half of the population both in lower and in upper social classes

(1) The category ´Other´ includes car rentals, cruise or boat, taxi or transport app, train and other means of transport
Source: PNAD Contínua Turismo 2020-2023, ALG Analysis

Even though they are ~50% of the BR population and of those who travel >1 a year, class C accounts for only 31% of passengers, while classes A and B dominate with 66%

Analysis of Brazilian Population by per Capita Income (%, 2023/24)

2 The expansion of middle class with a growing propensity to fly



This shows that the higher classes have a higher frequency of flights than the lower ones, so as people's income increases and the number of people in higher classes increases, there will be more passengers flying in Brazil

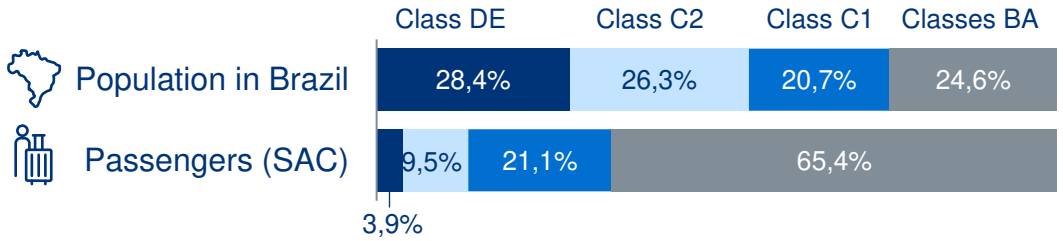
Source: PNAD Contínua Turismo 2020-2023, SAC (2024), ALG Analysis

Air transport in Brazil remains unaffordable for most, with high-income groups flying 1.2 trips/year, compared to just 0.3 trips/year for the middle class

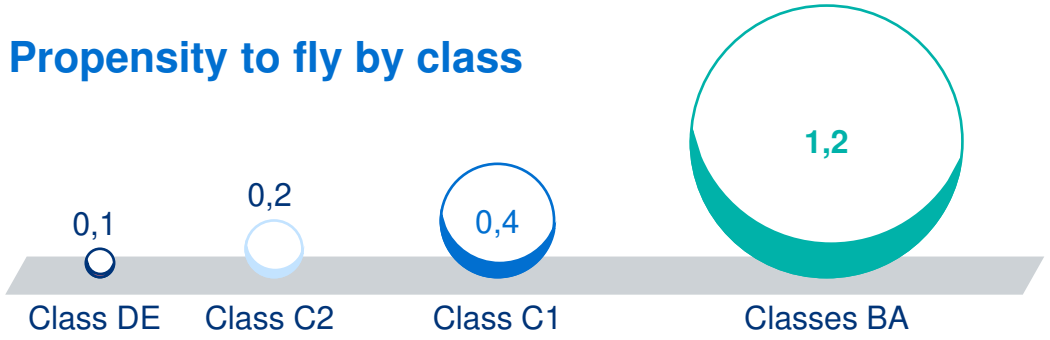
2 The expansion of middle class with a growing propensity to fly

Analysis of Brazilian Population by per Capita Income

(%, 2023/24)



Propensity to fly by class



CPF flying per class

(estimation based on SAC survey)

The propensity to fly among the middle class averages around 0.3, highlighting the limited accessibility to air transport

However, when we look more closely at the C1 socioeconomic segment—which represents 21% of the population—the gap with the higher BA class narrows. This suggests that **even minor tariff optimizations and new business models could significantly increase the propensity to fly and improve air transport accessibility for the middle class**

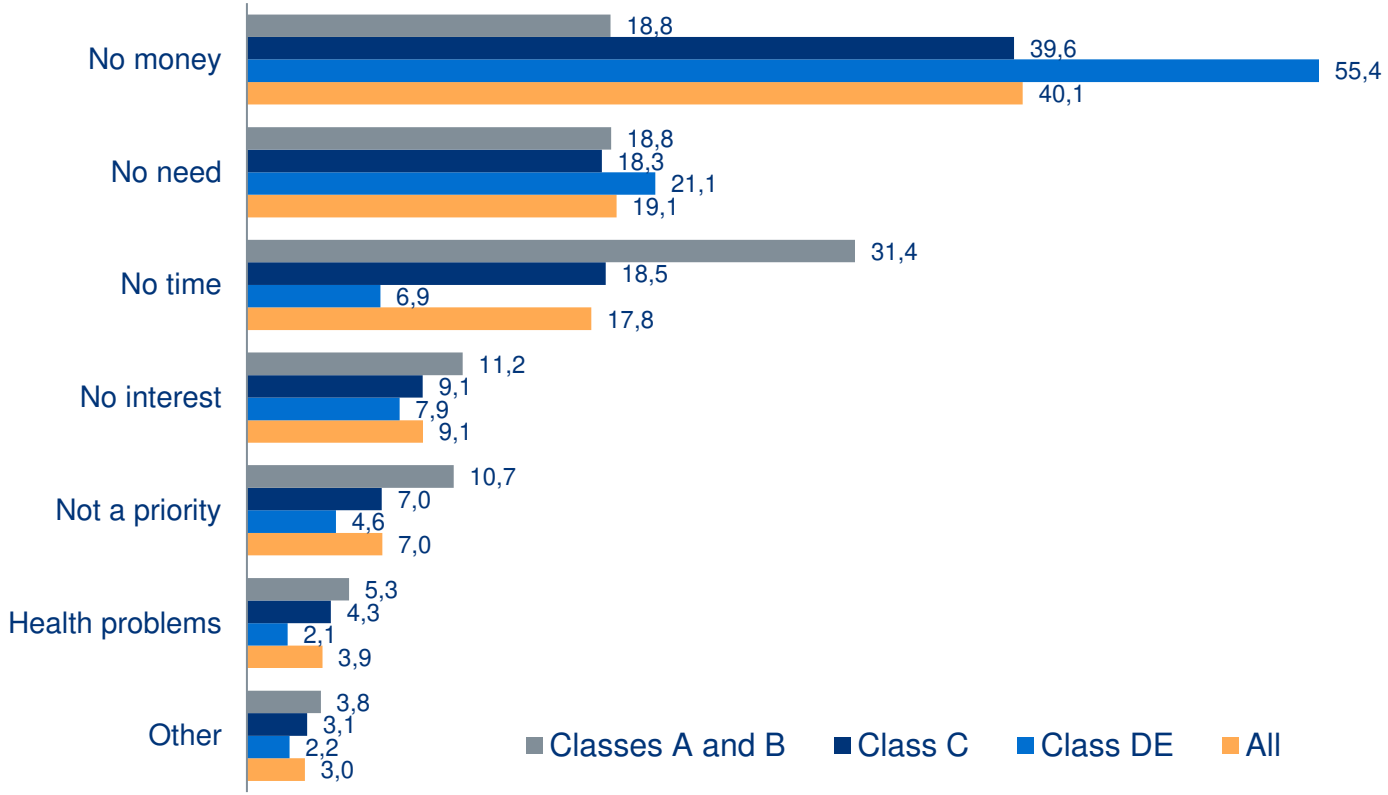
This shows that the higher classes have a higher frequency of flights than the lower ones, so as people's income increases and the number of people in higher classes increases, there will be more passengers flying in Brazil

Source: PNAD Contínua Turismo 2020-2023, SAC (2024), ALG Analysis

For 39.6% of Class C lack of money is the main reason for not traveling, while for Classes A and B the main reason is lack of time with 31.4%

Reasons for Not Travelling by Wage Group per Capita

2 The expansion of middle class with a growing propensity to fly



- The **main reason why Brazilians do not travel is lack of money, cited by 40.1% of the population** and reaching 39.6% in class C and 55.4 in Class DE
- **Among Classes A and B,** the **main impediment is lack of time** (31.4%)
- Reasons such as **"no need" and "no interest"** show little variation between wage groups, hovering around 20% and 10%, respectively, and indicate a cultural challenge or perception regarding the value of travel
- Given that almost half the Brazilian population is in Class C, it is estimated that **more than 40 million people do not travel due to lack of resources**, which limits the expansion of tourism and domestic aviation

Around half of Brazilians belong to Class C, meaning that 40 million people in this social class don't travel due to lack of resources. Even among higher earners, 18.8% feel unable to afford travel, accounting for another 8 million and reflecting a widespread perception of travel is expensive

Source: PNAD Contínua Turismo 2020-2023, ALG Analysis

Although it is safer and more efficient over longer distances, airplane loses out to car on practicality and to bus on price, even where travel time can take about the same

Comparative Matrix Between Airplane, Car and Tourism Bus

2 The expansion of middle class with a growing propensity to fly

	Boarding time	Travel time			Costs (R$/km)			Safety (death per Bpax-km)	Positive points	Negative points
		<300 km	300-900 km	>900km	<300 km	300-900 km	>900km			
Airplane	1 - 2h	1 h	1.5 - 2 h	>3h	1.0 - 1.5	0.8 - 1.0	0.2 - 0.6	0.001 to 0.005	Long distance in minimum time	Longer pre-traveling time Subject to delays and cancellations
Car	-	3 - 4 h	5 - 10 h	>12h	0.5 - 0.6	0.4 - 0.6	0.4 - 0.6	3 to 7	Direct transport to destination	Tiring Traffic conditions **Accidents**
Tourism Bus	15 - 30 min	4 - 5 h	6 - 12 h	>15h	Standard seat 0.35-0.45	Standard seat 0.35-0.45	Standard seat 0.35-0.45	0.05 to 0.1	Comfortability	Subject to traffic, longer travel time, undesired stops

O custo dos acidentes em rodovias federais no Brasil foi de R$ 22,3 bilhões em 2023, segundo a Confederação Nacional do Transporte (CNT)

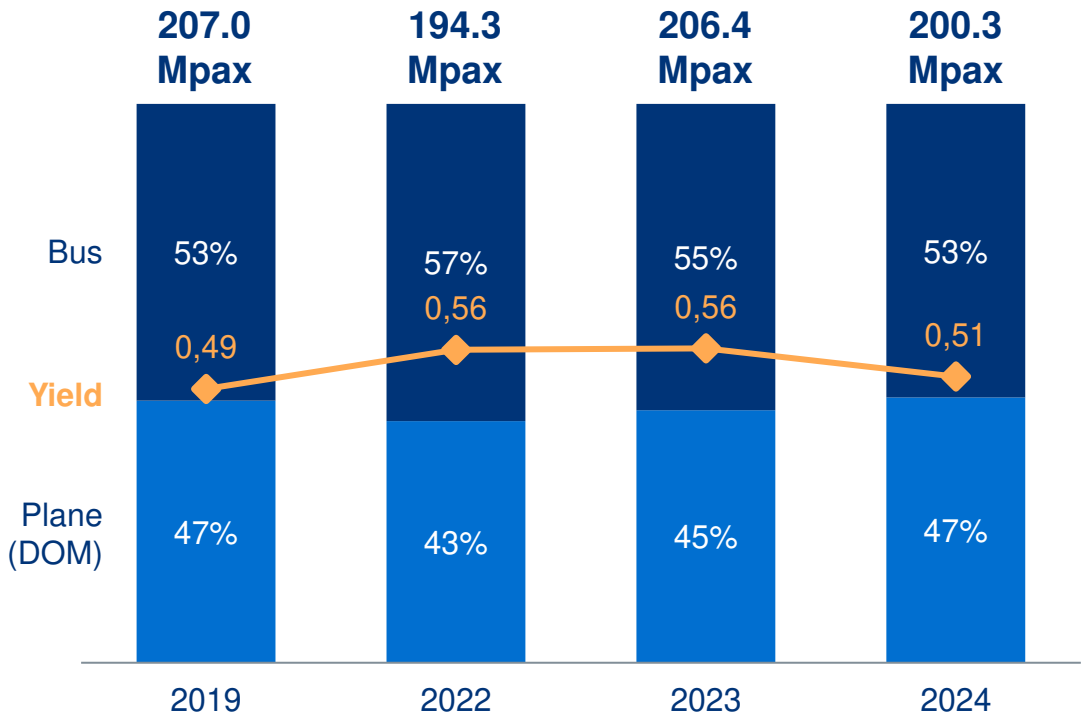
Flying by plane is much safer than other means of transportation and cheaper for long distances. However, the convenience of immediate travel and the perception of high prices through air transport seem to favor the car and bus, resulting in a lower propensity to fly in Brazil

Source: CNT, ALG Analysis

With rising airfares of the last years due to Covid and the reduction of flights offering, aviation lost market share to buses, highlighting the price sensitivity of Brazilian travelers

Proportion of Passengers Traveling by Bus and Plane vs. Average Annual Airline Yield (%, BRL/km)

2 The expansion of middle class with a growing propensity to fly



O Globo

17 Oct 2022

O GLOBO

With rising airfare prices, passengers are switching from planes to buses

Road transport activity is growing, also driven by business travelers

(…) Road travel is booming this year. From January to July, interstate and international bus passenger traffic in the country rose 60% compared to the same period in 2021, reaching 21.57 million. (…) **The routes with the highest traffic growth—Rio-São Paulo, São Paulo-Belo Horizonte, Rio-Belo Horizonte, São Paulo-Brasília, and Rio-Brasília—are concentrated between major capital cities**.

(…) **The switch from plane to bus is due to tight budgets and the increase in airfare prices.**

(…) "**In a crisis, the focus is price. If airfare is expensive to fly at the last minute, passengers switch to buses**. Buses offer good safety and prices, which have dropped even further with apps. **They're worth it for short and medium-distance routes, up to 500 kilometers**," says Marcus Quintella, director of FGV Transportes.

Eight out of ten people interviewed by Abrati in a September survey on social media **said they had opted for a bus instead of a plane at least once in 12 months. For 42%, the main reason was the ticket price**. (…)

This price sensitivity translates into rapid switches between air and bus travel when fares increase, as evidenced by an Abrati survey in which 8 in 10 made this change, with 42% citing cost as the main reason for it

Source: ANAC, ANTT, O Globo, ALG Analysis

Given such dynamic of change among transport modes, an elasticity analysis was carried out to assess the sensitivity of air traffic to variations in ticket prices and GDP

Analysis Methodology

2 The expansion of middle class with a growing propensity to fly

Data collection

- **Traffic data collection from ANAC and OAG**
- **Macroeconomics data collection** (GDP, exchange rate, etc) from Oxford Economics

Covid-19 data removal

- **Data corresponding to the Covid-19 period (2020-2023) was excluded** from the analysis due to its **nature as structural outliers** that disrupt historical patterns and underlying demand relationships

Multivariate regression

- **A multivariate log-log regression analysis** was performed **to capture the relationship between the selected variables and to estimate the elasticity of traffic with respect to each of them**, as represented by the corresponding regression coefficients

Elasticity analysis

- An **elasticity analysis** was conducted **to assess the sensitivity of air traffic to variations in relevant drivers**, and to **compare the results against standard IATA** elasticity values

Route distance segmentation

- The process was **repeated with a segmentation of route distances, dividing routes into those up to 500km and those over 500km**, in order to identify differences in traffic behavior in response to variable changes across each segment
- **Yield was considered constant** to both segments of routes

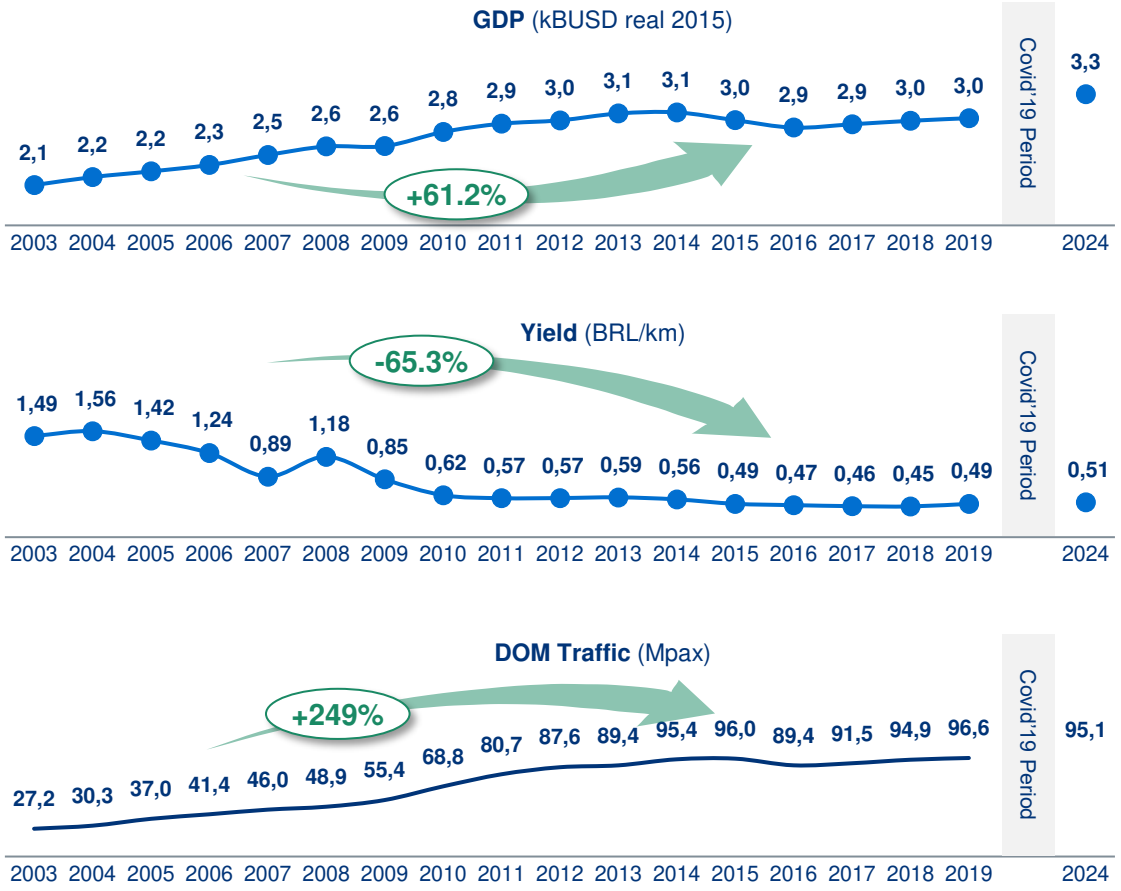
The price elasticity analysis methodology accounts for the behavior of domestic passengers in Brazil and further segments them based on route distance

Source: ALG Analysis

As a result, the price elasticity was found to be -0.5, below IATA values, reflecting that air travel is mostly accessible to the upper class, characterized by low price sensitivity

Traffic Elasticity to Price and GDP Analysis

2 The expansion of middle class with a growing propensity to fly



Traffic Elasticity to Variable

1.64
Variable: GDP

-0.50
Variable: Yield

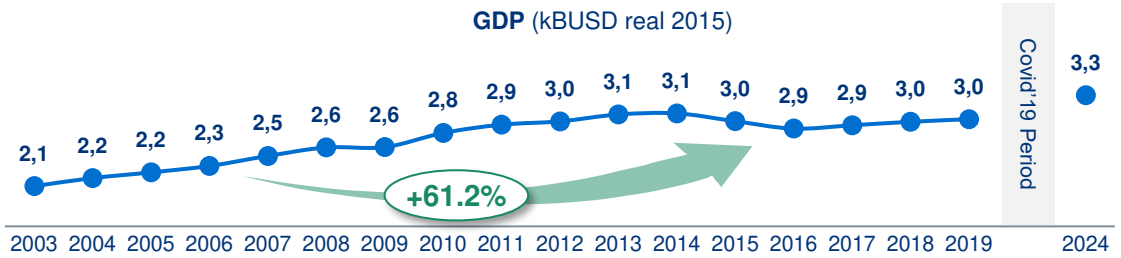
- At current fare levels, the **majority of passengers purchasing airline tickets belong to the upper class**, a segment that tends to exhibit relatively low sensitivity to price fluctuations. This means that **variations in ticket prices have a limited impact** on their decision to fly. As a result, the observed price elasticity of demand remains low in this segment.
- **Lower-income groups**—who generally **demonstrate higher price sensitivity**—face barriers to air travel due to fares not being sufficiently affordable. Because these **potential passengers are effectively excluded from the market, their higher elasticity does not significantly influence** the overall demand elasticity

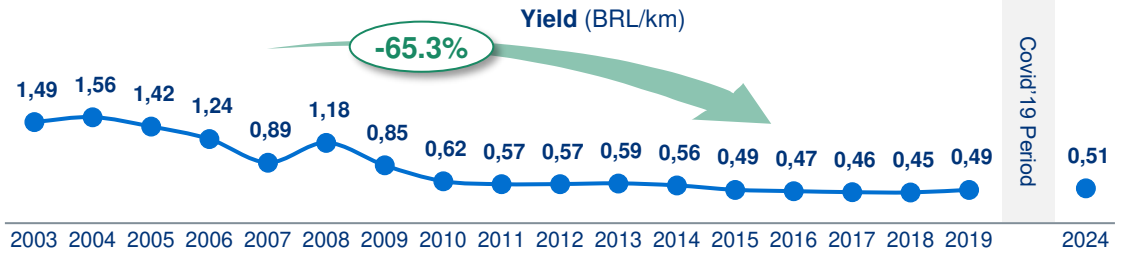
IATA establishes in its report 'Estimating Air Travel Demand Elasticities' **a national-level traffic elasticity with respect to yield of -0.8**, meaning that a 1% increase in yield leads to a 0.8% decrease in traffic

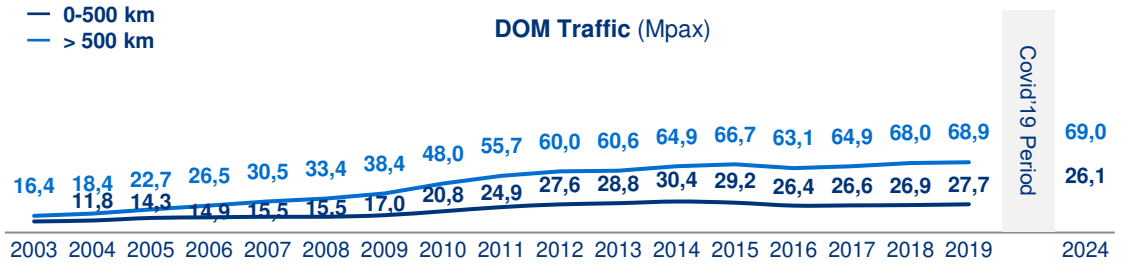
Source: ANAC, IATA, OAG, ALG Analysis

Segmented by distance, routes under 500km show lower price elasticity due to business travel, despite the ease of switching transport modes

Traffic Elasticity to Price and GDP Analysis- Segmented Routes







Traffic Elasticity to Variable

1.22 (0-500 km)	**1.87** (>500 km)
-0.39 (0-500 km)	**-0.55** (>500 km)

2 The expansion of middle class with a growing propensity to fly

- For the distance-segmented analysis, the **same yield as in the previous case was considered**, assuming constant behavior
- **Although a higher elasticity might be expected on routes under 500 km due to the ease of switching transport modes, the observed elasticity is actually lower** than in routes >500km. This is because the **majority of business flights, which exhibit low price elasticity, fall within this distance range**
- Compared to IATA standard elasticity to price, both segments are less sensible

IATA establishes in its report 'Estimating Air Travel Demand Elasticities' **a national-level traffic elasticity with respect to yield of -0.8**, meaning that a 1% increase in yield leads to a 0.8% decrease in traffic

Source: ANAC, IATA, OAG, ALG Analysis

Content

- **Market analysis**
  - **Extrinsic drivers of air transport market – Tourism and internazionalization**
  - Intrinsic drivers of air transport market
- Strategies to stimulate Brazilian market
- Conclusions
- Annex: Economic Impact of Aviation

Brazil ranks 26th out of 119 countries in the TTDI 2024 by the World Economic Forum. Of the top 12, 7 are in Europe, 2 in North America, 2 in Asia and 1 in Oceania

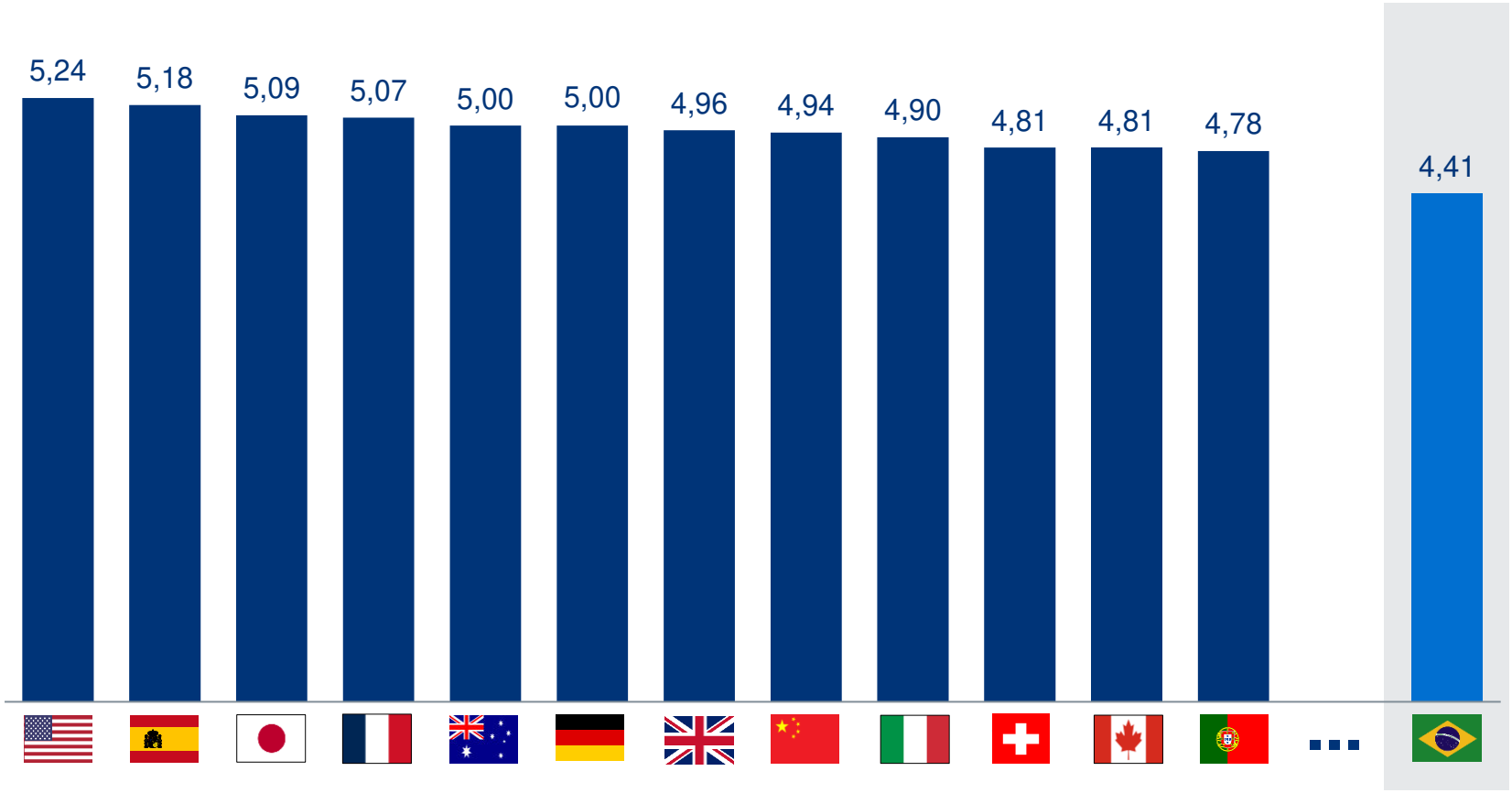
Brazil Overall Ranking

6,19	Natural Resources
5,44	Cultural Resources
5,42	T&T Socioeconomic Impact
5,33	T&T Resources
5,32	Price Competitiveness
5,03	ICT Readiness
4,98	Environmental Sustainability
4,87	T&T Sustainability
4,72	T&T Policy and Enabling Conditions
4,69	Openness to T&T
4,43	Health and Hygiene
4,37	Non-Leisure Resources
4,32	Safety and Security
4,22	Enabling Environment
4,21	T&T Demand S
4,16	Prioritization of T&T
3,95	Human Resources and Labour Market
3,88	Air Transport Infrastructure
3,39	Business Environment
3,02	Infrastructure and Services
2,73	Ground and Port Infrastructure
2,45	Tourist Services and Infrastructure

Countries by Overall Ranking

(Top 12 Countries + Brazil)

3 Growing tourist demand and internationalization

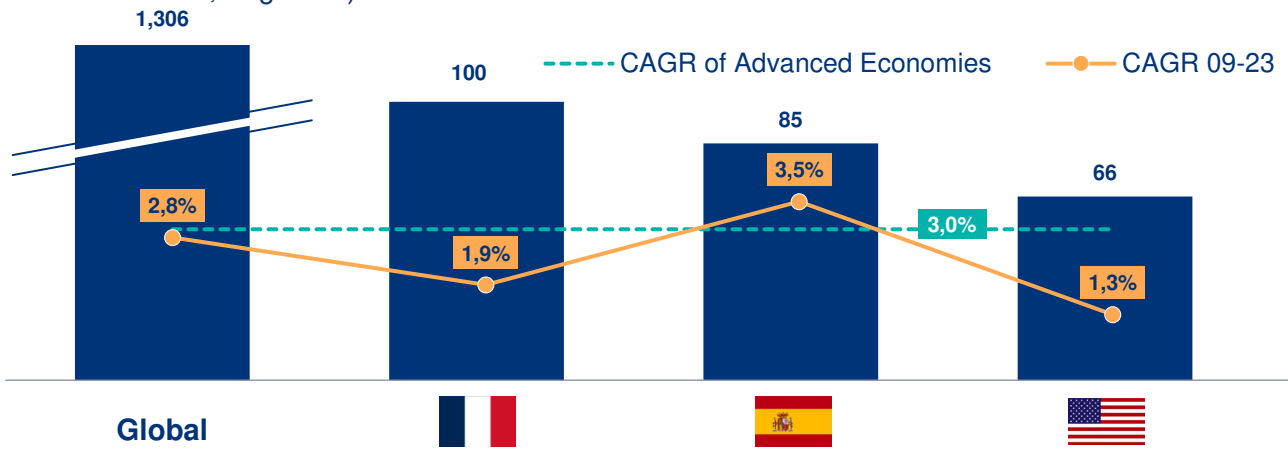


Source: WEF TTDI 2024, ALG Analysis

In terms of touristic demand, one of the main drivers for international traffic, Brazil was experiencing a much slower growth than most countries in LatAm and globally

Inbound Tourism in LatAm (2023)

TOP 3 Tourism Destinations by Number of Inbound Visitors and Global International Tourists
(millions of visitors 2023, % growth)

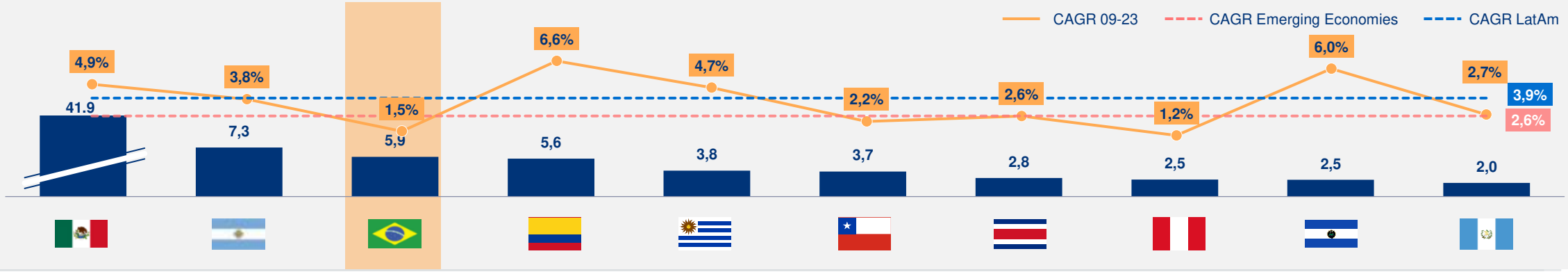


3 Growing tourist demand and internationalization

Brazil´s CAGR Comparison

- 1.3 p.p. Lower than World Average
- 1.1 p.p. Lower than Emerging Economies
- 2.4 p.p. Lower than Avg. of LatAm

TOP 10 LatAm Tourism Destinations by Number of Inbound Visitors and CAGR 09-23 (millions of visitors 2023, % growth)



Source: UN Tourism, ALG Analysis
Note: LatAm excluding The Caribbean, Emerging and Advanced Economies per IMF definition

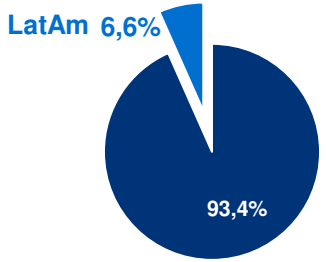
Despite its size and potential, Brazil remains underrepresented in LatAm's inbound tourism and has extremely low tourist density per capita compared to other countries

Inbound Tourism in LatAm (2023)

3 Growing tourist demand and internationalization

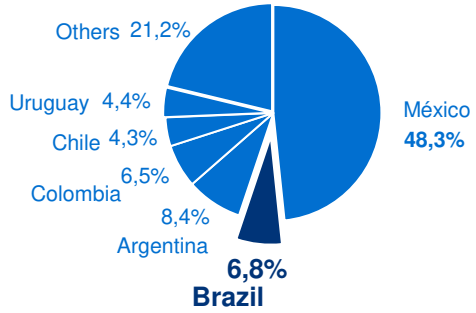
Inbound International Tourism Worldwide by Region

~1,305 millions of international inbound tourists

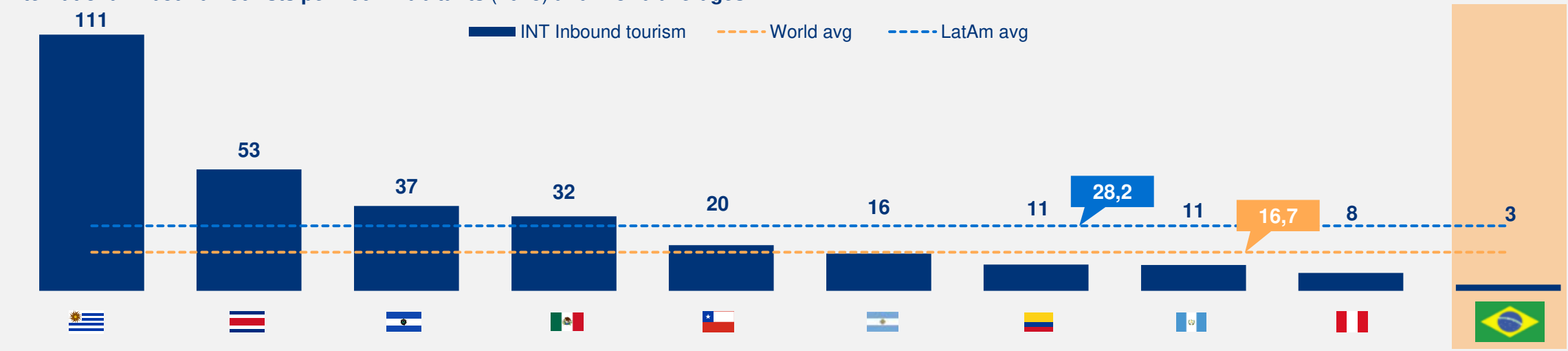


~87 millions of international inbound tourists

Inbound Tourism in LatAm by Country



International Inbound Tourists per 100 Inhabitants (2023) and World averages



Source: UN Tourism, US Census Bureau, ALG Analysis
Note: LatAm excluding The Caribbean

Embratur has turned visibility into sustained tourism growth through international campaigns that position Brazil as a welcoming destination, even though there are still some barriers

Embratur Tourism Promotional Activity

4 Tourism campaigns

IP Institutional Promotion
IC Image Campaigns
C Coordination
IF Institutional Fragmentation
DM Digital Modernization
TPS Targeted Promotion Strategy
BMC Budget, Metrics, and Continuity

Creation of Embratur

IP Founded as a federal body to promote Brazil abroad, promotion begins via international fairs and events

Institutional Presence Without Strategy

IP Participation in global fairs (ITB, WTM), with basic destination showcasing.
Promotion centered on nature and culture but lacked targeting and performance tracking

"Aquarela do Brasil" Campaign

IC Launch of emotional branding campaign using music and national identity, high visibility

Mega-Event Tourism Strategy

C Emphasis on promoting Brazil during 2014 World Cup and 2016 Olympics.

C Focus on infrastructure and hosting capability

DM Digital media to better foreign perception of Brazil, reaching 1.2 bn people. Message that it is a country of democracy, sustainability, dialogue and respect for nature

Agency Reform & "Visit Brasil" Relaunch

IP Embratur becomes a public agency, focused exclusively on international promotion. of "Visit Brasil" branding and digital outreach

IF Institutional Fragmentation with overlapping functions (e.g., Itamaraty)

DM Campaigns modernized

TPS More targeted campaigns such as promotion

Niche Targeting and Data Gaps

IP Present in fairs (WTM, ITB, etc., but with modest impact

TPS Promoted African heritage, gastronomy and luxury tourism, targeting US, Europe, and LatAm but with generic messages

BMC Continued tourism efforts show results, with a 7.5% growth in Brazil through in the first 11 months of 2023

Strategic Uncertainty and Restructuring

BMC Internal review of structure, possible transitioning to PPP, increase budget by 25%

DM Netflix cooperation agreement to boost audiovisual tourism in Brazil

IP Focus on sustainability and global events like COP30, showcasing Brazil's identity and soft power

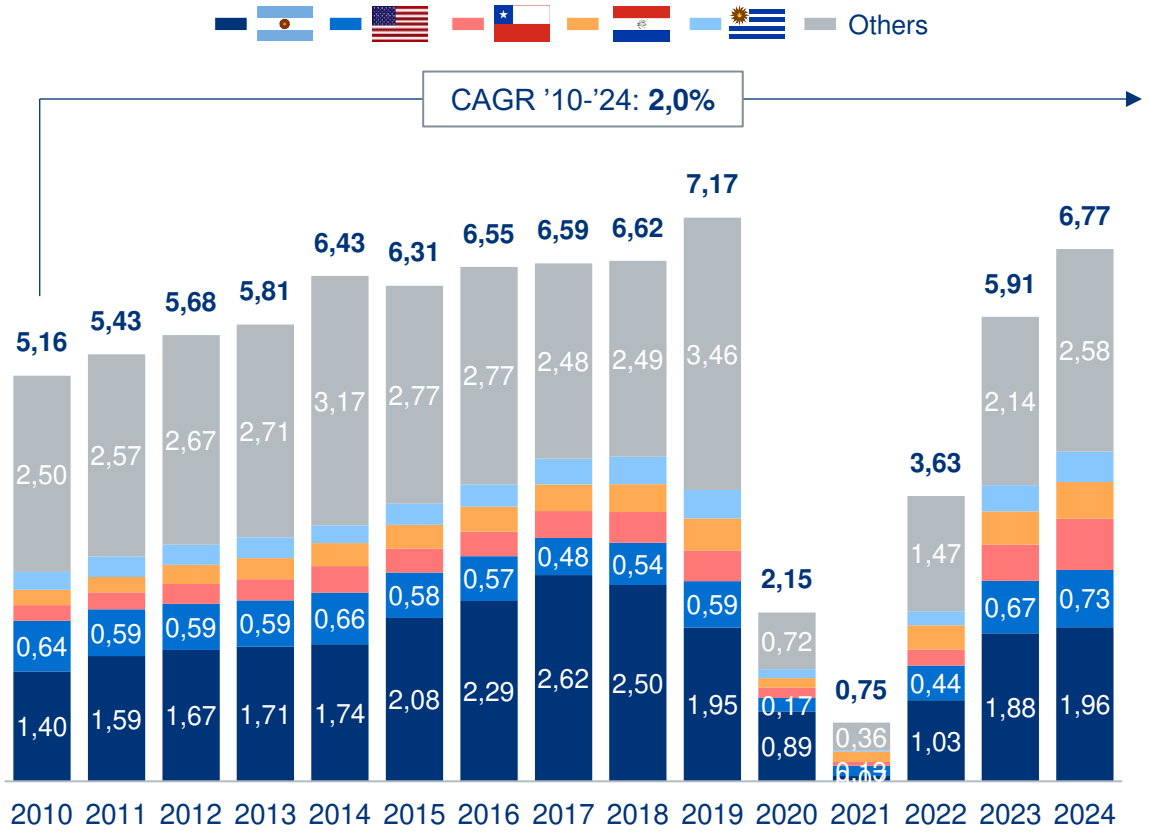
TPS National Tourism Plan 2024–2027, regionalized marketing, focus on Europe, the U.S., and South America, and brand partnerships

Source: embratur, visitbrasil, panrotas, planalto, Ministry of Tourism, unwto, FGV Journal, iITB, WTM, ALG Analysis

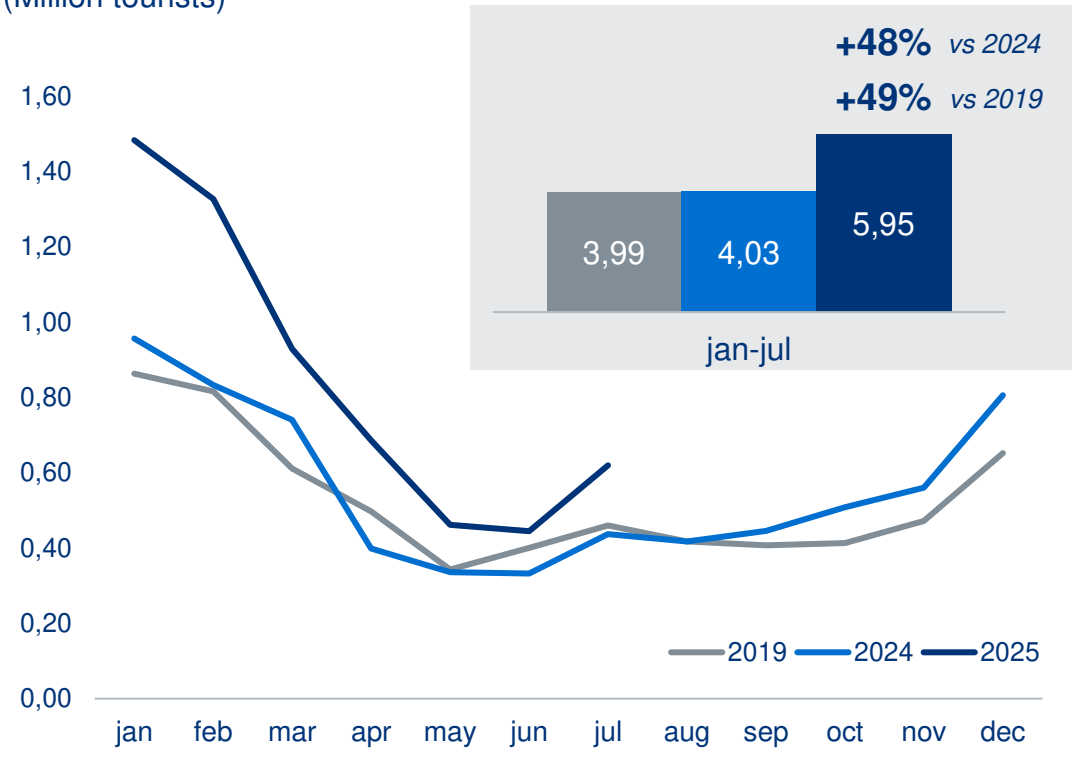
Such efforts have resulted in a sustained increase in total tourist arrivals, with a ~2% CAGR ’10-‘24, and a strong performance in ‘25 YTD, surpassing 2024 levels by 48% (Jan–Jul)

Evolution of visitors per country 2010 - 2024 (Million visitors)

3 Growing tourist demand and internationalization



Monthly evolution of tourists in Brazil 2025 vs 2024 vs 2019
(Million tourists)



When compared to 2019, the peak year in terms of total tourist arrivals, 2025 results (Jan–Jul) are 49% higher, indicating a clear growth trend and highlighting the effectiveness of current tourism campaigns

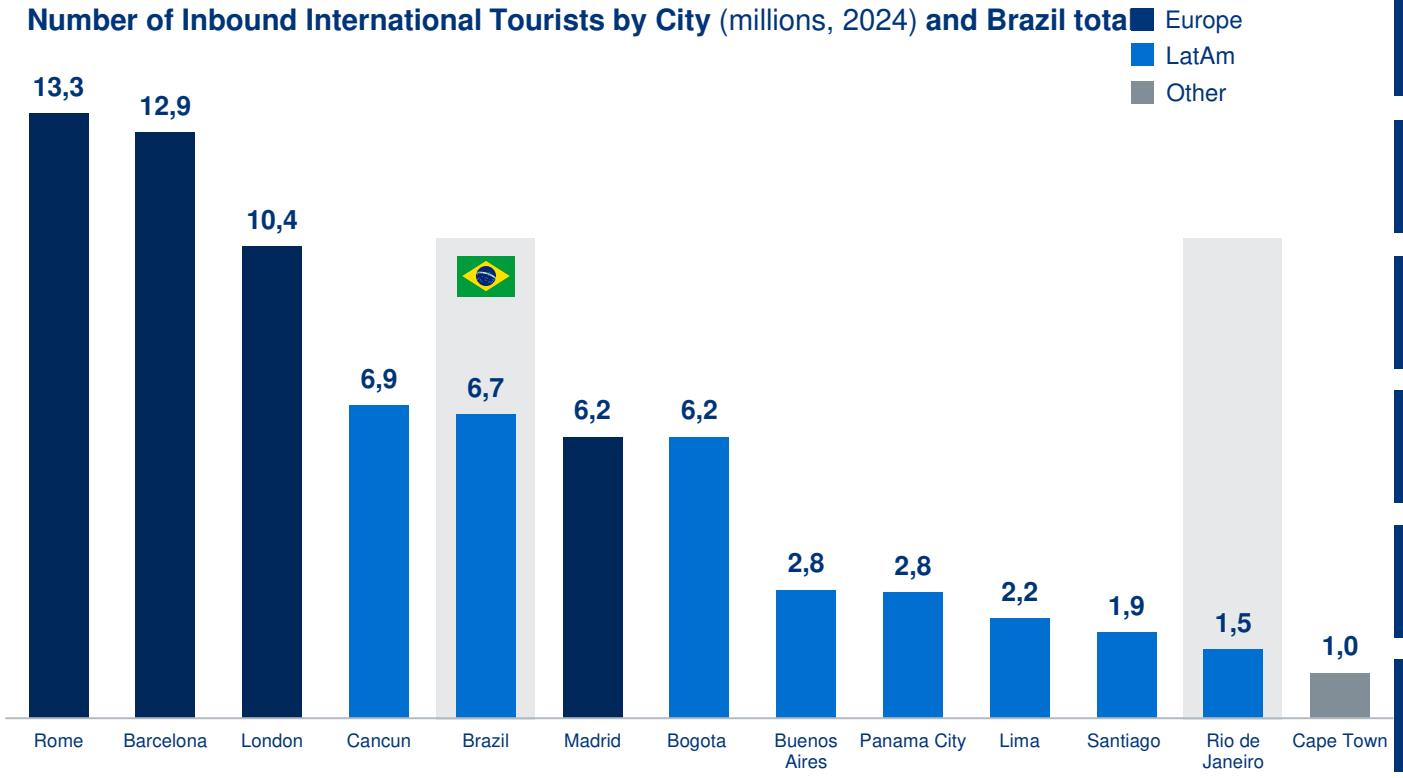
Source: CAPA, Ministério do Turismo, ALG Analysis

However, Brazil´s inflow of international tourists remains less than that of many cities in Europe and LatAm, due to barriers such as lack of international promotion, insecurity and regulation

3 Growing tourist demand and internationalization

Tourism Situation in Brazil

Number of Inbound International Tourists by City (millions, 2024) **and Brazil tota**



Barriers to Tourism Growth in Brazil

A	**Urban Violence and Insecurity**	Crime is the most cited deterrent, In 2025, the US embassy warned tourists of kidnapping risk
B	**Insufficient connectivity**	Many destinations are hard to reach due to lack of offering, limited road access, and weak public transport
C	**Lack of International Promotion**	Tourism websites and social media are underused, poorly interactive and lack multilingual content, lack of campaigns with Airline partnerships
D	**High Travel Costs and Geographic Distance**	Expensive airfare due to the “Brazilian Cost” that makes it less competitive than regional LatAm alternatives
E	**Restrictive Visa and Entry Policies**	Brazil reinstated visa requirements for American, Canadian and Australian tourists, reducing ease of travel
F	**Low Public Investment and Regulatory Barriers**	Low private and public investment in tourism infrastructure and lack of qualified workforce development due to high taxes and bureaucratic delays

2024 FDI in Mexico’s tourism: USD 2.87 bn; in Brazil´s: 360 MUSD

Source: Republic of South Africa, Nation Thailand, gov.br, roadgenius, turismo.buenosaires, datatur, madrid-destino, observatori.barcelonaturisme, travelandtourworld, riotimes, Sectur, Folha de S.Paulo, jornal.usp, bbc, G1, ALG Analysis

Moreover, tourism growth is constrained by fragmented policies and gaps in workforce qualification and infrastructure

Lack of Structure and Qualification of Hotel Sector in Brazil

3 Growing tourist demand and internationalization

Lack of structured public policies for tourism

Institutional fragmentation: the coordination between federal, state, and municipal levels remains weak, hindering the implementation of long-term, integrated strategies

Low sustained investment: budget allocation to tourism remains limited and volatile, hindering infrastructure planning, international promotion, and the development of emerging destinations

Lack of territorial planning: there is no clear policy for the development of priority tourist destinations, nor regional planning to decentralize tourist flows from traditional hubs

Weak international promotion: Brazil invests less than other countries in the region in global tourism marketing

Lack of structured sector-specific tax incentives: the tourism sector lack a clear and permanent incentive package to foster private investment

Qualification of the hotel sector

Limited professional training: a portion of hotel staff lacks specialized technical education, resulting in service quality issues

Low language proficiency: the level of English among sector workers is often insufficient, reducing the country's competitiveness as an international tourist destination

Lack of standards and certifications: there is limited enforcement or incentives for hotels to comply with internationally recognized quality standards

Regional disparity in hotel infrastructure: while cities such as São Paulo and Rio de Janeiro have a diversified supply, many regions with tourism potential lack adequate infrastructure

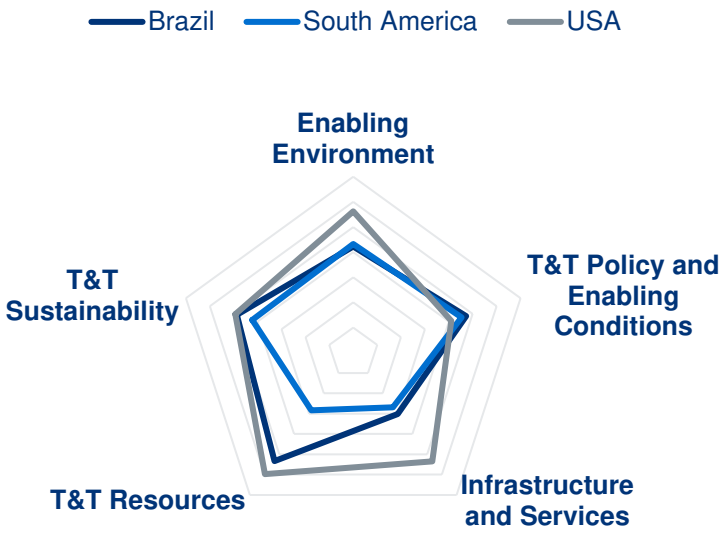
Weak digitalization and technological adaptation: a proportion of companies in the sector operate with low levels of digitalization, disconnecting them from global market

Source: Caderno Virtual de Turismo, Panrotas, ALG Analysis

According to WEF TTDI 2024, despite its strength on natural resources and ecotourism, Brazil presents a strong weakness on infrastructure and tourism-related services

Tourism Strengths and Weaknesses

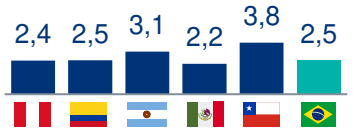
(Brazil vs Latam vs USA)



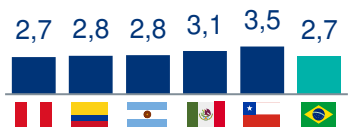
Tourism Main Strengths and Weaknesses in Brazil *(Brazil vs main Latam countries)*

3 Growing tourist demand and internationalization

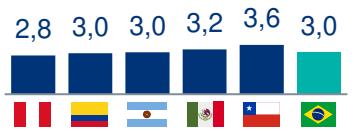
Tourist Services and Infrastructure



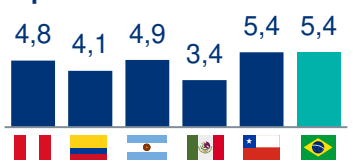
Ground and Port Infrastructure



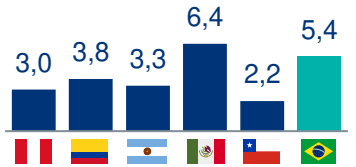
Infrastructure and Services



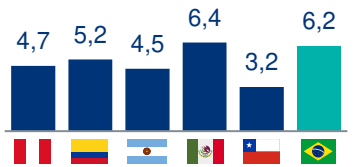
T&T Socioeconomic Impact



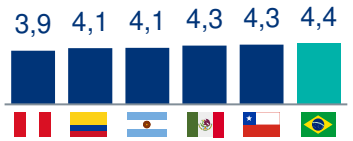
Cultural Resources



Natural Resources



Score



Although Mexico has similar scores to Brazil, the extensive border with the USA facilitates access for international tourists

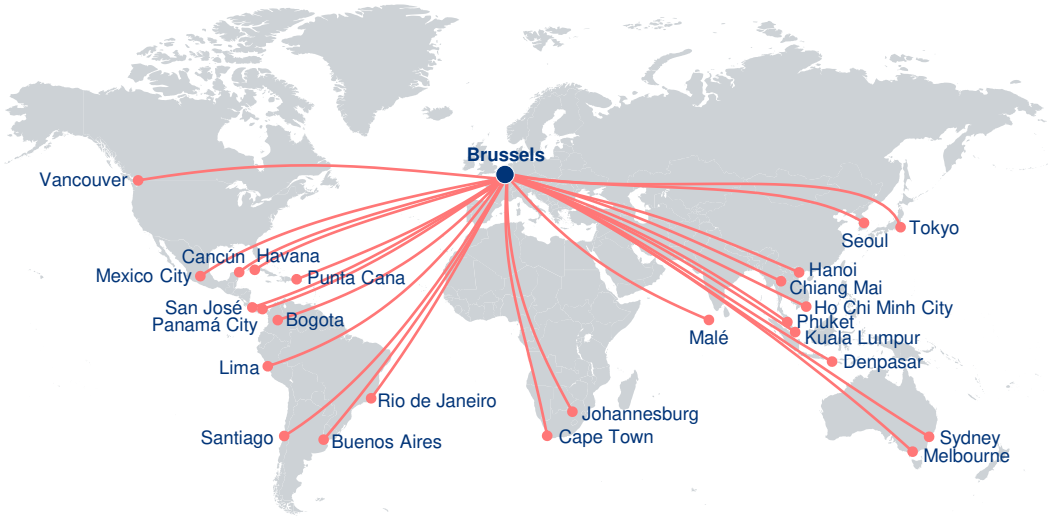
Even though Brazil has the highest general score among Latin America countries, showing its touristic potential, it lacks in terms of quality of services, infrastructure, connectivity, and business environment, leading to an underdeveloped touristic attraction

Source: WEF TTDI 2024, ALG Analysis

Brazil's limited tourist inflow goes beyond geographic distance, as other far-off destinations attract more visitors—indicating structural and perception issues

Brazil's Tourism and Geographical Distance

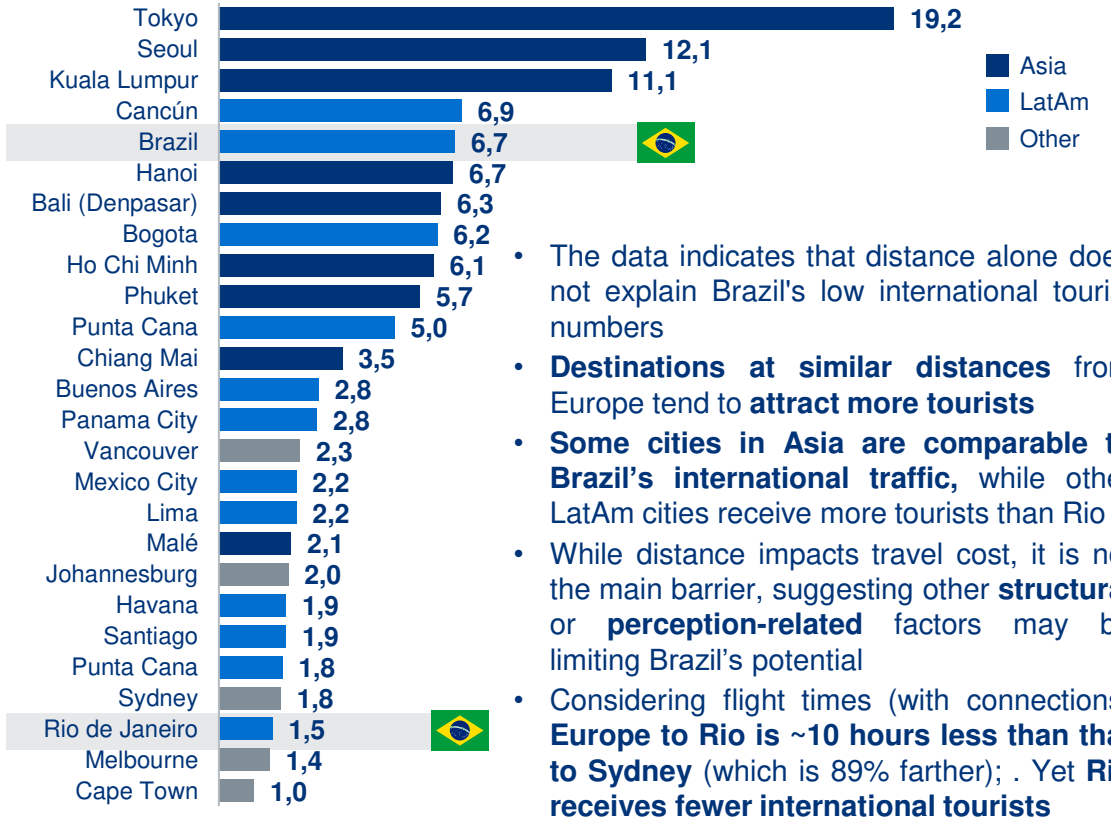
3 Growing tourist demand and internationalization



- Brussels was chosen as the reference point because it is known as the **"heart of Europe" and is centrally located, making it a representative departure hub of many international tourists, given that Europe is a liberalized market with a strong outbound tourism flow to other continents**
- To compare destinations at a similar distance to Brussels–Rio (9,400 km), a −18% range was used, with no upper limit, once longer distances are not likely to reduce tourists comparing long distance trips
- Destinations within this range were then compared based on their annual number of inbound international tourists

Number of Inbound International Tourists by City and Brazil Total

(millions, 2024)



- The data indicates that distance alone does not explain Brazil's low international tourist numbers
- **Destinations at similar distances** from Europe tend to **attract more tourists**
- **Some cities in Asia are comparable to Brazil's international traffic,** while other LatAm cities receive more tourists than Rio
- While distance impacts travel cost, it is not the main barrier, suggesting other **structural** or **perception-related** factors may be limiting Brazil's potential
- Considering flight times (with connections) **Europe to Rio is ~10 hours less than that to Sydney** (which is 89% farther); . Yet **Rio receives fewer international tourists**

Source: gcmap, koreanjoongangdaily,c9hotelworks, traveltrademaldives, centralamerica, tourismanalytics, datatur, destinationbc, statssa.gov,b-company, statista, balimanagement, cdn, ALG Analysis

In summary, Brazil's air transport market faces challenges due to high-cost perceptions shaped by cultural factors and low purchasing power, as well as an underdeveloped tourism potential

Main Challenges of Brazil's Air Market Extrinsic to the Aviation Industry

Economic instability

- During the last decade Brazil faced several economic downturns (2015 domestic crisis and Covid) which led to an economic stagnation and impacted the air transport sector
- However, despite the region's macroeconomic challenges, the trend points to steady and consistent growth potential
- High USD/BRL exchange rate volatility. When USD is strong, INT traffic should increase, and vice versa; but this correlation is not observed

Low purchasing power

- Brazil has high income inequality, with a large share of the population unable to afford air transport tickets at current prices
- As a result, most of the population does not allocate their budget to air travel, which is mainly used by the upper classes, opting instead for other modes of transportation — which reduces the country's overall propensity to fly

Cultural perception of air travel as a Luxury/ expensive

- Although the country has a continental size, most of the population, even those with purchasing power perceive traveling and air transport as a luxury with around 20% of the class A and B appointing the cost as a barrier to use air transport

Underdeveloped international tourism

- Despite its strong tourism potential, Brazil faces low international demand — lower than other Latin American countries and comparable to smaller European cities
- In addition to higher air fares compared to the rest of Latin America, Brazil also faces several barriers such as limited air connectivity, lack of tourism infrastructure, high travel costs, insufficient international promotion, and regulatory challenges

The extrinsic challenges show a range of opportunities for the market to keep growing and developing the air transport industry in the country

Source: ALG Analysis

Content

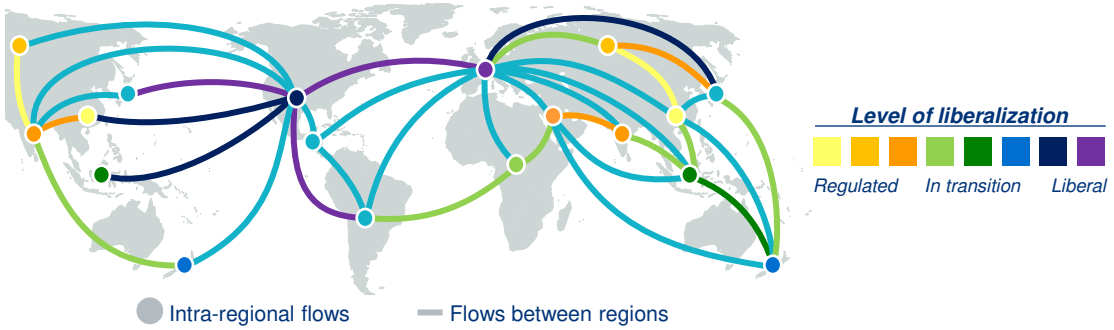
- **Market analysis**
  - Extrinsic drivers of air transport market
  - **Intrinsic drivers of air transport market - Liberalization**
- Strategies to stimulate Brazilian market
- Conclusions
- Annex: Economic Impact of Aviation

In the context of market liberalization, Latin American countries are progressively adopting measures aimed at increasing competition in the air transport industry

LatAm Liberalization

4 Progressive air transport liberalization

Levels of Liberalization between Regions (bilateral agreements)



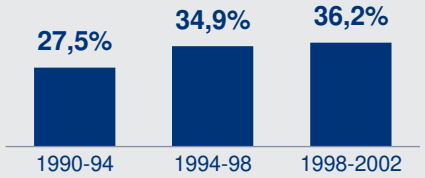
Impacts of Liberalization

Economic benefits	Impacts on the aviation sector
Greater competition	Less protection for FSC
Tariffs decrease	Greater international consolidation
Demand incentives	Greater Low-Cost penetration

Liberalization

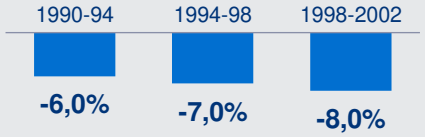
Example European market

ASK Evolution (% increase)



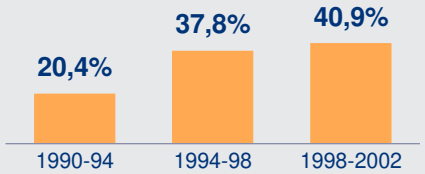
Increased competition
The entry of low-cost operators into the market has increased market capacity

Yield Evolution (% increase)



Changes in the business model
The entry of more efficient airlines has resulted in a reduction of fare yields

Passenger Traffic Evolution (% increase)



Demand incentives
Finally, there was an incentive to demand due to the fare reduction

Latin America has room to continue liberalizing the air transport sector; a greater degree of liberalization generates a greater degree of increased competition

Sources: IATA, Boeing, ALG Analysis

Other developed countries have achieved higher levels of liberalization, such as the United States, which implemented the Airline Deregulation Act in 1978

Air Transport Liberalization in the USA

4 Progressive air transport liberalization

01. History

Civil Aeronautics Board (CAB) **regulated all domestic interstate air transport routes** as a public utility, **setting fares, routes, and schedules**

The **rigid system faced strong pressure in the 1970s**. Rising fares drew passenger opposition and raised concerns in Congress about the future of air transport

In 1970 and 1971, the Council of Economic Advisers in the Nixon administration, along with the Antitrust Division of the United States Department of Justice and other agencies, proposed legislation to diminish price collusion and entry barriers in rail and trucking transportation. The Senate Judiciary Committee, which had jurisdiction over antitrust law, began hearings on airline deregulation in 1975

02. Legislative terms

Maintenance of **safety** as the highest priority in air transport

Placing **maximum reliance on competition** in providing air transportation services

Avoidance of unreasonable industry concentration which would tend to allow airlines to increase prices, reduce services, or exclude competition

Encouragement of entry into air transportation markets by **new air carriers**, the encouragement of entry into additional markets by existing air carriers, and the continued strengthening of small carriers

03. Effects

In 1994, **avg. fare per passenger mile was about -9%** compared to 1979

Costs fell more dramatically on higher-traffic, longer-distance routes than on shorter ones

Exposure to competition led to heavy losses to some airlines, that went bankrupt

Until the advent of LCCs, point-to-point air transport declined in favor of a more pronounced hub-and-spoke system

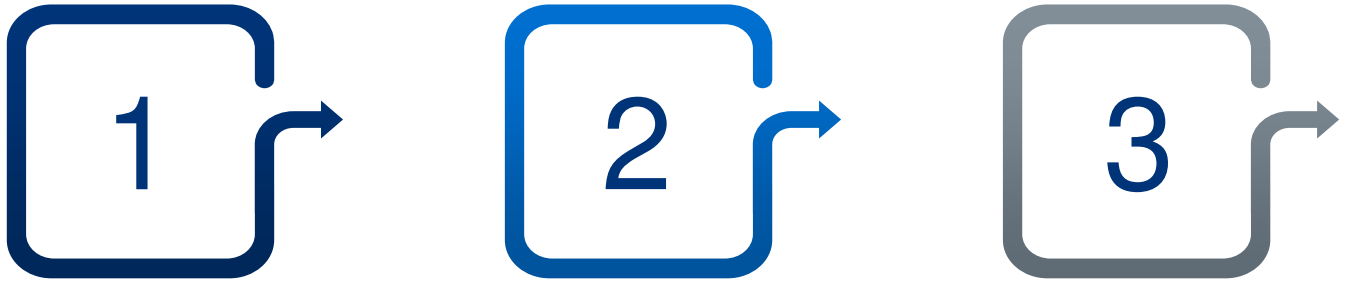
The Airline Deregulation Act of the USA (1978) removed federal control over areas such as fares, routes, and market entry of new airlines

Source: Virginia Government, Congress.gov, ALG Analysis

In Europe, the main liberalization process has been carried out between 1987 and 1997, facilitating the reduction of fares and the entry of new operators in the network

European Air Transport Liberalization

4 Progressive air transport liberalization



1987

Removal of route restrictions, **liberalization of fare setting**, and facilitation of **new airline market entry**

1990

Suppression of capacity limits and **implementation of full traffic freedom within the EU single aviation market**

1992-1997

Granting **of operating licenses to airlines**, **access for Community carriers to intra-EU routes**, and **regulation of air service fares and freight charges**

Main outcomes

- A **Boom of low-cost carriers**
- B Significant **fare reductions** on routes operated by 3 or more airlines
- C Increased **intra-European connectivity and tourism**
- D **Mergers among legacy carriers** and emergence of **new entrants**
- E **Network expansion**. Share of routes operated by 3 or more airlines rose from 2% to 6%
- F **Elimination of state monopolies**

The liberalization of air transport in the European Union was a gradual process aimed at removing cross-border restrictions and enabling free competition among European airlines

Source: European Commission, vLex, ALG Analysis

In Spain, the process had similar consequences; the number of passengers increased +162% between 1990 and 2010. Monopoly was eliminated, and LCC entered the market

Air Transport Liberalization in Spain

4 Progressive air transport liberalization

The liberalization of air transport in Spain was **implemented within the broader framework of the EU's Single Aviation Market**. As such, its timeline and phases align with those outlined previously

Despite the introduction of high-speed rail between major Spanish cities such as Madrid and Barcelona, **market liberalization has significantly contributed to the growth of air traffic**. Air transport remains competitive in both pricing and total door-to-door travel time

Liberalization process

End of Iberia's monopoly. The company loses market share to both foreign and domestic competitors

Entry of LCCs disrupts the market by lowering prices and increasing route flexibility for travelers

Airline mergers (IAG creation, Vueling+ Clickair merger, etc)

Increased competition and broader range of airline services

Resulting impact on traffic

+162% Mpax

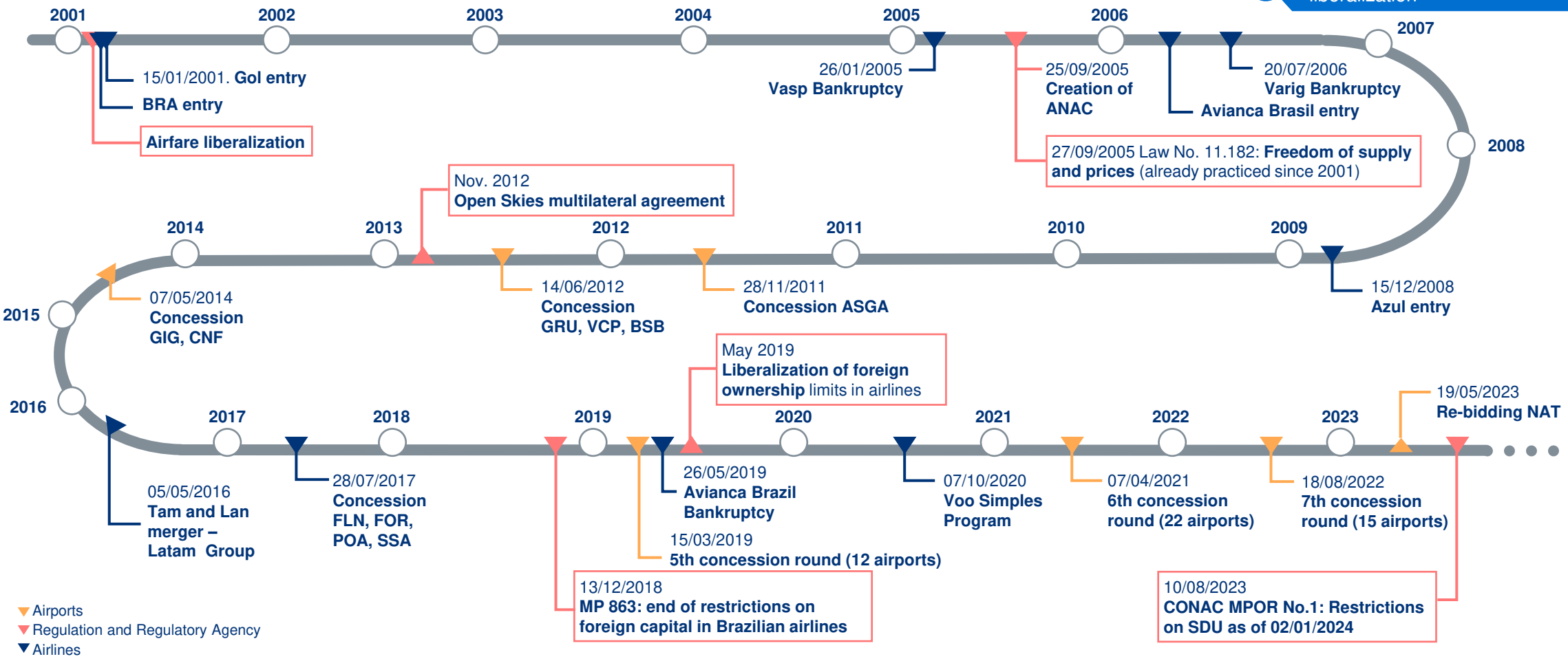
1990-2010

73.5 Mpax 1990 – 192.8 Mpax 2010

Source: Aena, ALG Analysis

In recent years, Brazil has undergone a continuous liberalization process, particularly regarding ticket pricing and airport modernization, the latter through concession programs

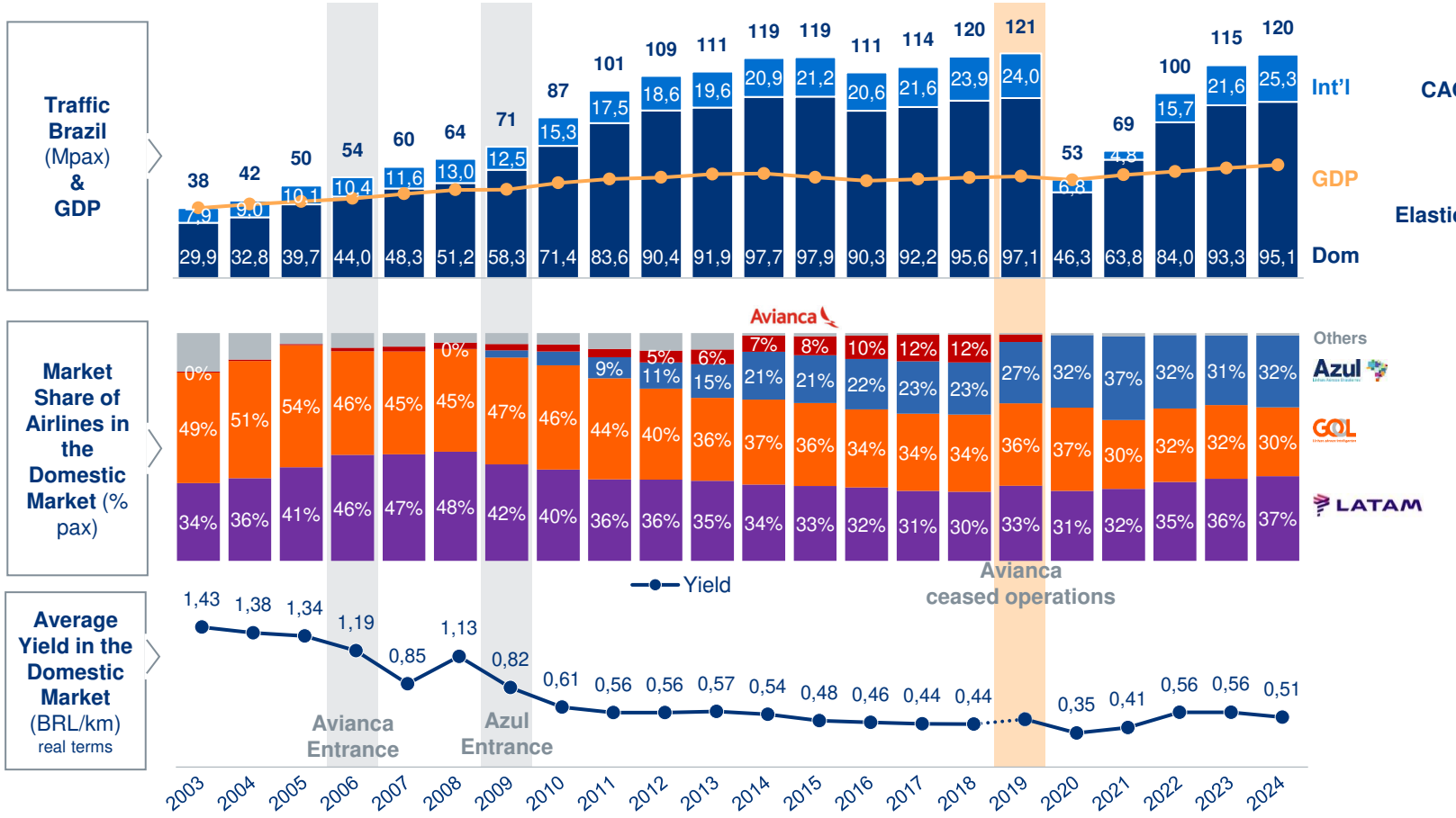
4 Progressive air transport liberalization



Source: Agencia Brasil, ALG Analysis

As a result, the increase of competition and entrance of new players reduced the domestic yields, which are currently stagnated due to the high costs of the industry and the dependency to the USD

Evolution of the Air Transportation Market in Brazil



4 Progressive air transport liberalization

CAGR

	'03-'19	'03-'08	'08-'19	'14-'19	'19-'24
Total	**7.5%**	**11.2%**	**5.9%**	**0.4%**	**-0.1%**
Dom	7.7%	11.4%	6.0%	-0.1%	-0.4%
Int'l	7.1%	10.4%	5.6%	2.5%	1.1%
GDP	**2.3%**	**4.8%**	**1.1%**	**-0.8%**	**2.2%**

Elasticity

Total	**3.3**	**2.3**	**5.3**	**-0.5**	**-0.1**
Dom	3.4	2.4	5.4	0.1	-0.2
Int'l	3.1	2.2	5.0	-3.0	-0.5

- Over the last decade, new entrants (increased competition) have put pressure on yields and contributed to the growth of traffic, providing some incentive
- Both for the domestic and international markets, the elasticities were higher in the period 2008-19 than in the entire period (2003-19), as a similar level of air transport industry growth was achieved with lower economic growth rates as a consequence of a more dynamic air transport industry
- **Before 2008, Brazil had a relatively static period for air transportation: yields were extremely high, and there were only 2 major airlines competing in the market (LATAM, GOL)**
- In the post-pandemic period, there was an economic recovery compared to the 2019 level, while air traffic has practically recovered, as evidenced by the resulting elasticity (-0.1 between '19-'24). This situation is expected to be reversed in the coming years

Source: ANAC, ALG Analisys

In the international market, Open Skies agreements removed restrictions on frequencies with USA, Argentina, stimulating competition and liberalization

Progressive Air Transport Liberalization

4 Progressive air transport liberalization

Gov.br

13 mar 2024

Open skies aviation policy between Brazil and Argentina

Joint press release by the Ministry of Foreign Affairs (MRE), the Ministry of Ports and Airports (MPor) and the National Civil Aviation Agency of Brazil (ANAC).

(…) The signing of the memorandum **will allow Brazilian and Argentine airlines to freely determine the number of passenger flights they are to offer between the two countries**. Until now, companies from each country were collectively limited to a maximum of 170 weekly flights, as regulated by each nation. The measure **will also provide more operational flexibility for airlines, which could lead to an increase in services offered and improve competition on routes** connecting Brazil and Argentina.

The Memorandum **also expands permission for cargo service operations, allowing airlines from both countries to transport international cargo without the requirement that the operation start or finish in the company's country of origin** (rights known in the industry as the "Seventh Freedom of the Air"). Recently, in addition to the agreement with Argentina, **Brazil negotiated similar rights for cargo operations** in the region **with Chile, Costa Rica, Cuba, Panama, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela.** (…)

U.S. Dept of Transportation

01/08/2019

United States, Brazil Reach Open-Skies Aviation Agreement

(…) Representatives of the United States and Brazil have agreed to implement an Open-Skies aviation regime, which will significantly liberalize U.S.-Brazil air services for airlines of both countries over a transition period.

"This agreement means the travelers, shippers, airlines and economies of both the United States and Brazil will benefit from competitive pricing and more convenient service," said U.S. Transportation Secretary Ray LaHood.

The agreement immediately removes restrictions on pricing and on the routes between each country that can be served by U.S. and Brazilian scheduled and charter airlines. The agreement also provides immediately for full code-share rights and additional charter flexibility. (…)

When full Open Skies take effect in October 2015, airlines from the United States and Brazil will be allowed to select routes, destinations and prices for passenger, cargo and charter services based on consumer demand and market conditions

- The **removal of the 170 weekly flight cap and the granting of 7th-freedom cargo rights** are set to **boost capacity on South America's second-busiest air corridor, lowering fares and enabling more complex logistics routes**. ULCCs like Flybondi and JetSMART are already eyeing expansion in this space
- Together, these developments reflect Brazil's move toward **broader international air liberalization bringing more competition for a demanding market**

Source: The Guardian, Euronews, ALG Analysis

Even though Brazil has advanced in liberalizing its air transport sector and allows foreign participation, few foreign airlines operate in the country due to structural barriers

Brazil's Limited Appeal to Foreign Carriers

4 Progressive air transport liberalization

In 2018 a Provisional Measure revoked the following article:

Art. 181. A concession or authorization shall only be granted to a legal entity established under Brazilian law, with its headquarters and management located in the country.

I – Headquarters in Brazil;

II – At least **4/5 (four-fifths)** of the voting capital must be owned by Brazilians, and this restriction shall prevail in the event of any capital increases;

III – Management must be entrusted exclusively to Brazilians.

In 2022 a new Law amended earlier reforms

Art. 216. Domestic air transport services are reserved for legal entities established under Brazilian law, **with headquarters and management located in the country.**

- The Brazilian aviation industry initially seams attractive to foreign players because of its **vast territory, necessity for national integration and access to remote regions**
- In 2018, a legislative development **opened the market to air carriers whose capital is 100% foreign, however they must have a headquarters in Brazil**
- The objective of this reform was **to bring LCCs to Brazil and achieve a reduction in tariffs across the entire market**
- Foreign airlines including LCC can be granted the AOC (Air Operator Certificate) by ANAC just as national ones do
- Furthermore, in 2022, **bureaucracy** regarding documentation **for the provision of international air transport services has decreased**, with foreign carriers being exempted from the operating authorization previously required
- Given the lack of response, in April of 2025, the Minister of Ports and Airports said that they are ``discussing the **possibility of even allowing international aviation to operate segments of cabotage within airports in Brazil**´´

Air Europa

Air Europa showed interest in operating domestic flights in Brazil. But the issue lies in being able to compete with the big three´: Azul, Gol and Latam

JetSMART

By 2028, it plans to begin operating domestic flights in the country. But Latin Americans are more used to the concept of LCC than Brazilians, in terms of auxiliary profits such as seat choice, extra luggage etc.

norwegian

As an LLC, received ANAC´s authorization to operate international flights. WithCeará offering to invest USD 500k per route in the first 3 years to promote and attract passengers. Despite interest in domestic flights in 2019 in talks with the ministry of tourism, this never moved forward.

Source: iclg – Aviation Law 2025, CNN Brasil, Aeroflap, Veja, ALG Analysis

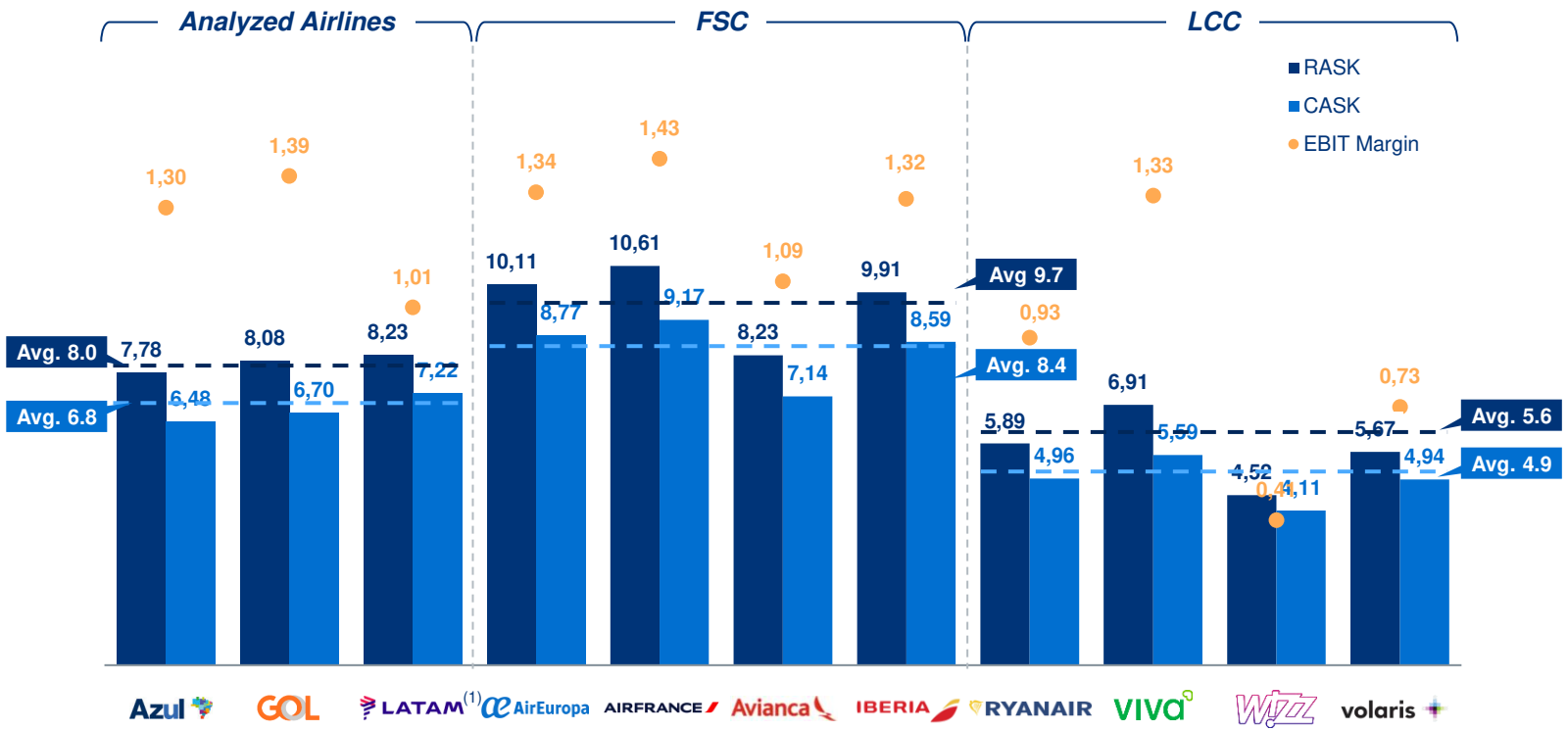
Content

- **Market Analysis**
  - **Brazilian market characteristics and bottlenecks**
    - Extrinsic drivers of air market
    - **Intrinsic drivers of air market – Business environment (structural costs and bottlenecks)**
- Strategies to stimulate Brazilian market
- Conclusions
- Annex: Economic Impact of Aviation

In terms of financial results, Brazil's 3 main airlines operated with positive EBIT margins, comparable to FSCs', signaling a return to profitability and a shift away from LCCs patterns

2024 Financial Results Analysis

Yield Rates, CASKs and EBIT Margin (USD cents, 2024)



- **Brazilian airlines have struggled to remain profitable in recent years**, with all of them resorting to filing for Chapter 11 bankruptcy protection in the USA
- However, **financial results** from 2024 **indicate that Azul, GOL and LATAM are currently generating positive operating margins**, indicating a return to profitability
- Moreover, **operating margins are comparable to those of other full-service carriers (FSCs), suggesting that both Azul and GOL – despite positioning themselves as low-cost carriers (LCCs) – are not currently performing in the line with the typical characteristics** of this model
- The high operating cost of Brazilian airlines, comparable to FSCs, drive up average airfares, representing a deviation from the low-cost carrier (LCC) model and reducing affordability to air travel in Brazil

Although described as LCCs, both Azul and GOL have operating margins and prices comparable to those of FSCs

(1) LATAM Group numbers. LATAM Brazil's domestic operations accounted for roughly 30% of the Group's ASK in 2024, while international flights operated by all affiliates represented about 52%.
Source: CAPA, ALG Analysis

Despite positive EBIT margins, high tax, regulatory burden and high interest rates have led Brazilian airlines to bankruptcies and Chapter 11 filings in the last years

Chapter 11 and Brazilian Airlines

2018 avianca

- Dec. **2018: filed for bankruptcy protection** in the 1st **Sao Paulo Commercial Court**. The objective was to renegotiate debts
- The request for judicial reorganization was driven by the resistance of aircraft lessors to reach agreements
- May **2019: ANAC suspended the airline's operations**
- July **2020**: the **court declared Avianca Brazil bankrupt** after the company failed to comply with its judicial recovery plan

2020 LATAM

- **May 2020**: Entered Chapter 11 following the severe impact of the pandemic
- **Nov. 2022**: Exited Chapter 11. The process enabled the company to emerge leaner, with a more competitive cost structure and adequate liquidity to face the future
- Following the exit, the group distributed shares and bonds to creditor shareholders

2024 GOL

- **Jan. 2024**: **entered Chapter 11** bankruptcy protection **as a result of debt burdens and decline in passenger numbers** during COVID-19
- **June 2025**:
  - GOL **exits Chapter 11 after raising $19 bn USD in financing with investors, with plans to expand fleet and add new routes** within Brazil and other countries
  - **GOL joins the ABRA Group—which also owns Avianca and holds 80% of GOL**—as of June 6, following the conclusion of its Chapter 11 process

2025 Azul

- **May 2025: Azul enters Chapter 11**
- The airline **hopes its overhaul will eliminate about $2bn of borrowings and reduce leasing liabilities**. Azul said **some existing lenders had committed to providing $1.6bn in so-called debtor-in-possession financing**, a type of loan typically given to companies in Chapter 11 bankruptcy to enable them to operate
- Expecting to get out the process on the beginning of 2026

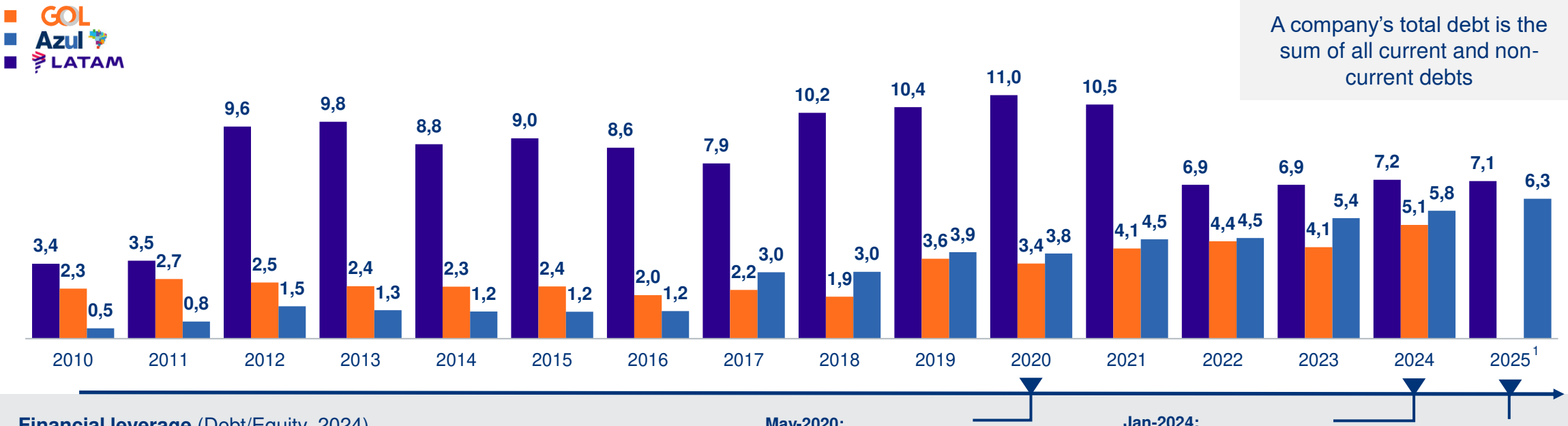
Source: Financier Worldwide,Latam Airlines, Reuters, Financial times, ALG Analysis

Due to rising debt and financial leverage levels, key players have pursued Chapter 11 protection over time aiming at restructuring and reducing their debt burden

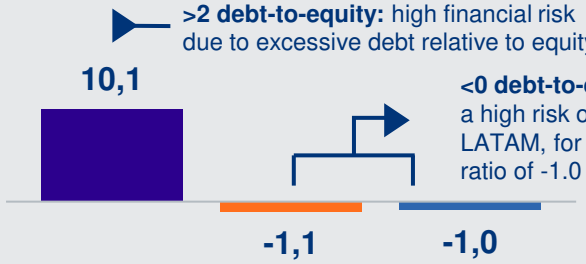
Evolution of Brazilian Airlines Debt (BUSD)

5 Development of low-cost business model

A company's total debt is the sum of all current and non-current debts



Financial leverage (Debt/Equity, 2024)



>2 debt-to-equity: high financial risk due to excessive debt relative to equity

<0 debt-to-equity: indicate potential insolvency and a high risk of bankruptcy or financial restructuring. LATAM, for example, had a negative debt-to-equity ratio of -1.0 in 2020, the year it filed for Chapter 11

May-2020:
Latam filed for Chapter 11
The severe impact of the pandemic led the airline to file for Chapter 11 to avoid bankruptcy

Jan-2024:
GOL filed for Chapter 11
Debt increased due to the sharp decline in passenger numbers during COVID-19, as well as existing debt burdens

May-2025:
Azul filed for Chapter 11
The company hopes that the process will eliminate borrowings and reduce leasing liabilities

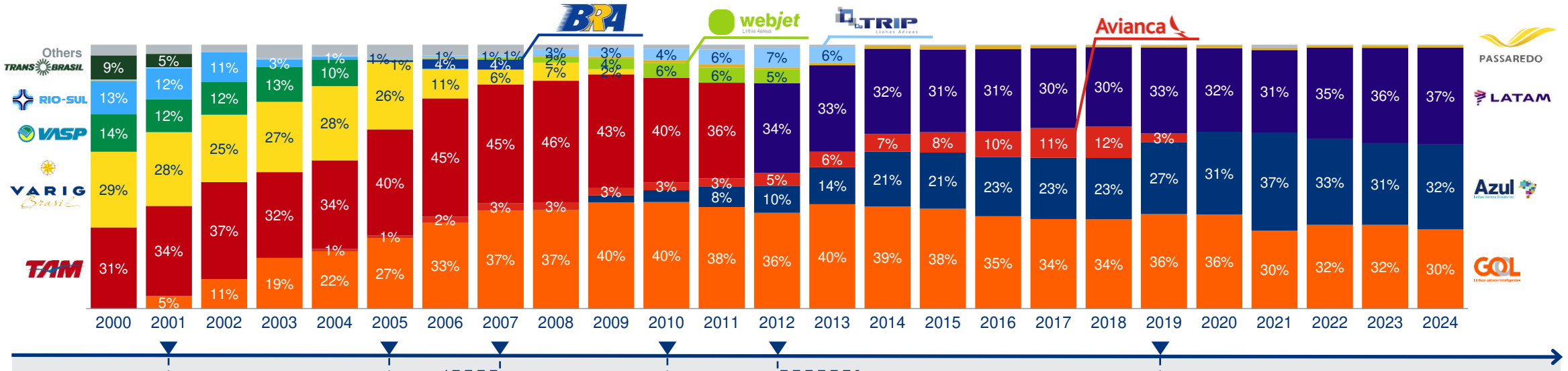
Source: Companies market cap, ALG Analysis
Note: 2025 values are referred to the published ones in March 2025

Facing such a challenging scenario, Brazil's aviation market has been through several Bankruptcies, Chapter 11 and M&A processes, resulting in a current concentrated market

Evolution of the Air Transportation Market in Brazil

5 Development of low-cost business model

Market share of Airlines in the Domestic Market (% seats)



2001: Bankruptcy of Transbrasil after a period of judicial reorganization, due to high costs, financial crisis and strong competition

2005: Bankruptcy of VASP Due to operational regulatory issues

2005: Request for judicial reorganization of VARIG

2007: Acquisition of part of Varig by GOL An important milestone in Brazil's aviation history, becoming the second biggest airline in Brazil

20027: End of operations of BRA After financial issues and an unsuccessful judicial reorganization

2010: Bankruptcy of Varig (Flex) Due to unsuccessful reorganization

2012: TAM-LAN Merger creating the new airline Latam The merger created the biggest airlines of Latin America, with a complete change of brand in 2016

2011-2012: Acquisition of Webjet by GOL and of Trip by Azul

2019: Bankruptcy of Avianca after an unsuccessful judicial reorganization, serious financial crisis and operations suspension by ANAC

Successive Chapter 11 filling due to structural financial problems associated with covid pandemic impact:

- **2020-2022: Latam**
- **2024-2025: Gol**
- **2025- ongoing: Azul**

Bankruptcy Chapter 11 Acquisition Merger

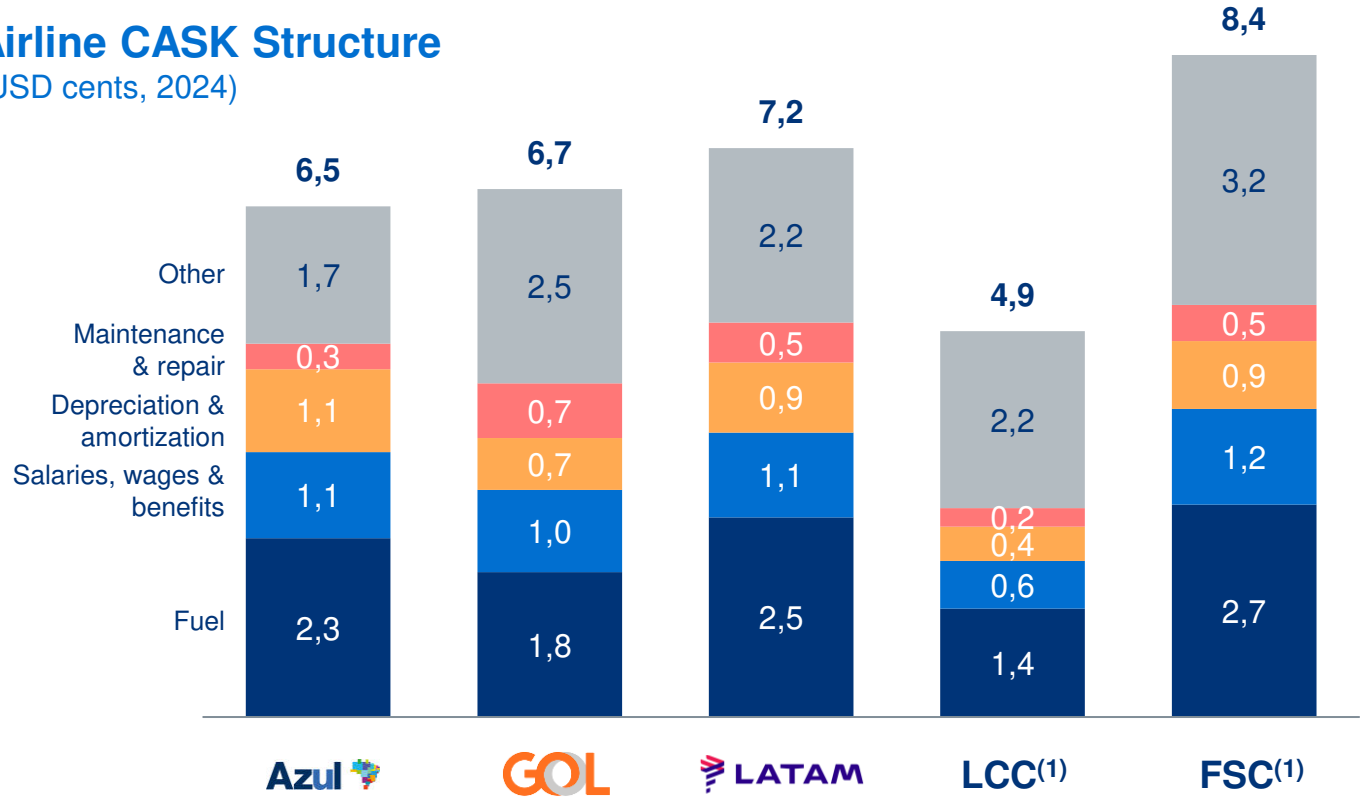
Source: ANAC, ALG Analisys

Airline costs in Brazil are closer to full-service airlines than low-cost, with high percentage of them denominated in USD (e.g. fuel, depreciation)

5 Development of low-cost business model

Airline CASK Structure

(USD cents, 2024)



*ICMS is a state tax on aviation fuel in Brazil and represents a significant portion of airline operating costs. States use tax reductions as a strategy to attract more flights and promote regional aviation, directly influencing air network connectivity and local development

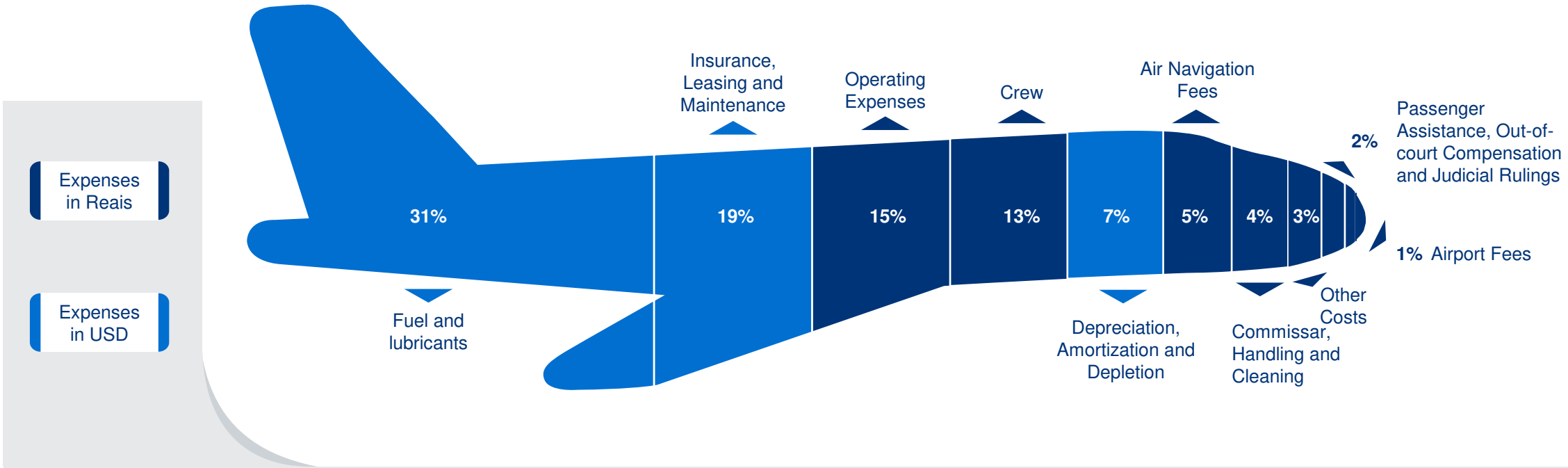
- The **cost structure of Azul and GOL airlines, although classified as low-cost carriers (LCCs), more closely resembles that of full-service carriers (FSCs)**. Notably, salaries and wages, as well as depreciation and amortization, represent significant cost components. **High fuel cost is driven by a tax burden** (ICMS*, that can reach up to 25% depending on the region), **monopolistic market** that limits competition and pricing flexibility **and the Brazilian real (BRL) depreciation**

(1) LLC and FSC costs were estimated by multiplying the avg. CASK by the industry avg. percentage of costs (excluding Air Europa and Air France due to lack of available data)
Source: CAPA, ALG Analysis

Around 57% of Brazilian airlines' costs (31% due to QAV) were tied to the USD while their revenues are mostly in BRL, resulting in considerable currency fluctuation exposure

Currency Mismatch: Revenues in BRL, Costs in USD

Distribution of Brazilian Airlines' Costs in 2024



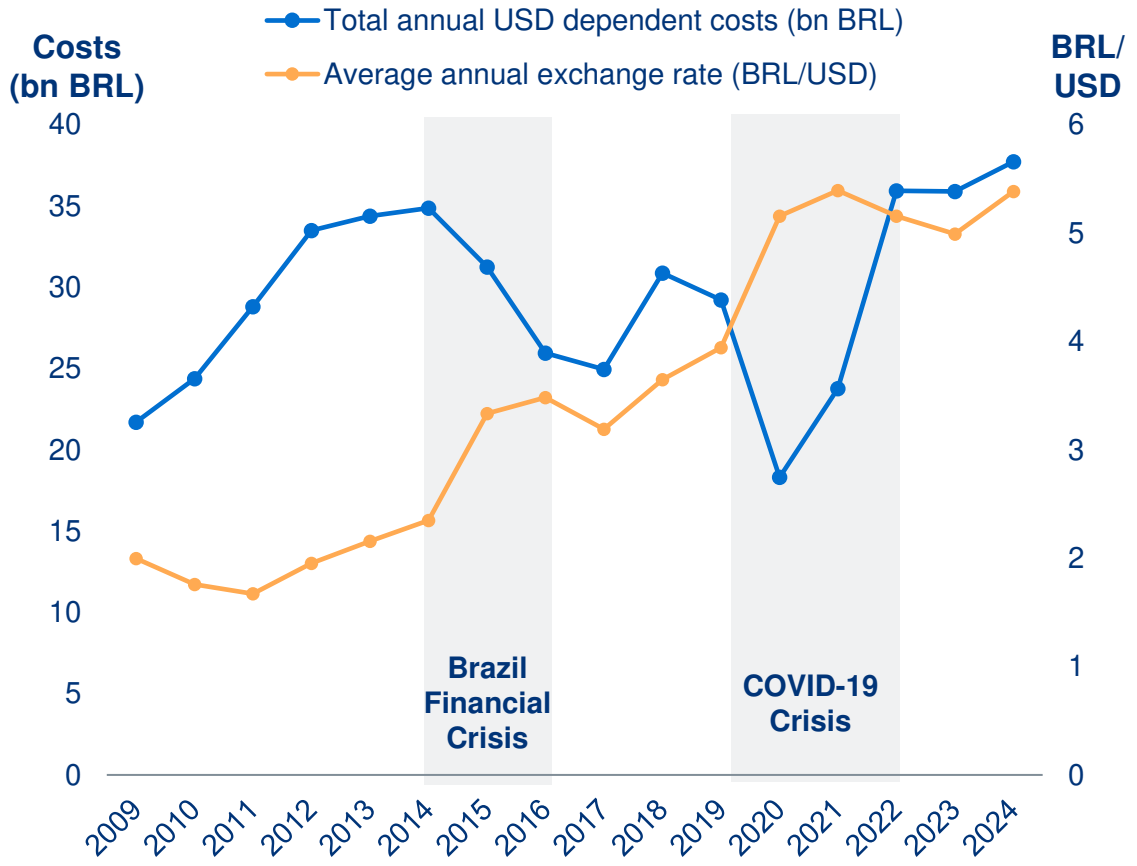
ABEAR classifies the operating costs of Brazilian airlines **by those measured in USD, representing 57% of the total expenses**, and those in Brazilian reais, 43% of expenses. Because of such distribution, costs are harder to control as those in USD are **dependent on fluctuations in the exchange rate.**

Source: IBS, ANAC, ALG Analysis

This risk is evidenced by dollar-denominated costs, whose increase shows a clear correlation with the depreciation of the BRL against the USD

Trend of Total USD Dependent Costs and the BRL/USD Exchange Rate

5 Development of low-cost business model



'09-'24 CAGR

USD Costs +4.3%

BRL/USD +7.9%

- A **strong positive correlation** is observed between USD dependent costs and exchange rate, as expected. Such costs were calculated by applying the share of categories: Fuel and Lubricants, Insurance, Leasing and Maintenance, and Depreciation, Amortization, and Depletion
- From 2009 to 2024, spending on these items **went from BRL 21.7 billion to BRL 37.7 billion, with a CAGR of +4.3%,** following the positive exchange rate trend
- This is because even as the **BRL depreciates, USD-dependent costs are constant** so the total annual USD dependent costs in terms of BRL increases
- Exceptions to this trend occurred during the 2014–2016 Brazilian **financial crisis** and **the pandemic**. Absolute and % share of **USD-denominated costs declined**
- During these downturns, crew salaries and operating expenses made up a larger share of total costs, as **airlines maintained staff** and **fixed assets** despite **reduced activity**
- Between 2021 and 2023, **reduced demand due to Covid-19 led to a significant drop in fuel prices**. As a result, the relative weight of fixed and semi-fixed costs –such as leasing and insurance- increased. This was further intensified by an oversupply of aircraft, many of which remained grounded

Source: Federal Reserve Bank St.Louis, ANP, ABEAR, ALG Analysis

The recent increase in the IOF, which impact most of the dollarized costs from 0.38% to 3.5% on outbound remittances may have a significant impact on the aviation sector, estimated to reach annual BRL 600 million

IOF Impact in Aviation Industry

IOF (Imposto sobre Operações Financeiras): a tax on financial operations in Brazil, subject to substantial changes in May 2025

Increase in the tax rate on outbound remittances from 0.38% to 3.5%, directly impacting the aviation industry, where 60% of operating costs are dollar linked:

- **Aircraft leasing**
- **Maintenance services**
- **Payments to foreign suppliers**

The **measure threatens national air connectivity and restricts access to aviation for populations in remote regions**

Key risks for the sector: **higher ticket prices, loss of connectivity, increased financial fragility**

Foreign airline competitors will not face the same cost pressures, as they conduct leasing and parts procurement directly from abroad, gaining a competitive advantage over Brazilian carriers

The ease with which tax rules can be changed contributes to **legal uncertainty**, discouraging foreign airlines from entering the Brazilian market**costs**

ABEAR sent a formal notice to the Ministry of Finance, warning of the direct impact of the IOF rate hike on aviation industry. The **sector estimates Brazil's 3 main airlines may face up to BRL 600 million in additional annual costs**

Moreover, the increase comes at a time of financial fragility for Brazil's leading airlines, further weakening their profitability

Source: ALG Analysis

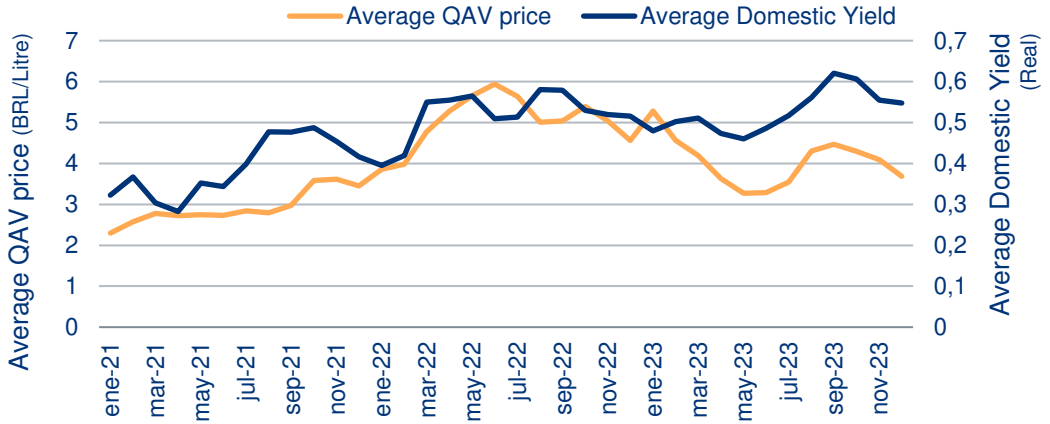
Regarding the cost of jet fuel in Brazil, the current pricing policy results in a lack of competitivity and a monopolistic situation impacting directly the main cost of an airlines

QAV price in Brazil

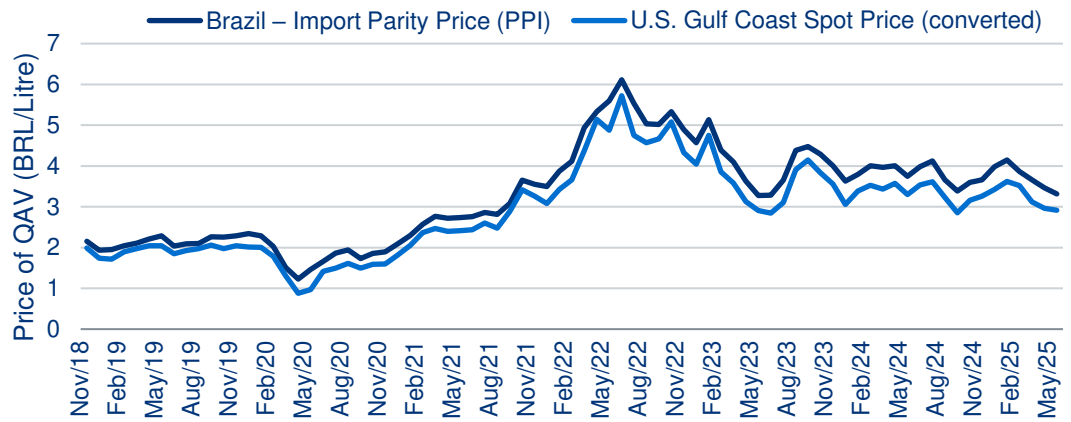
5 Development of low-cost business model

- **In 1997, Brazil imported over 96% of the refined oil** products it consumed (including QAV). To ensure price stability and avoid market distortions, the **government adopted a PPP** (Price Parity Policy).
- PPP pricing is **dependent on the USD/BRL exchange rate** and therefore domestic prices are pegged on import-equivalent costs.
- **Since 2019, Brazil imports less than 14% of its oil, but QAV prices remain ties to international market conditions.**
- In Brazil, QAV is a major cost, and airlines typically **pass fuel price changes directly into ticket prices**, creating a strong correlation with yield
- In 2023, while QAV prices dropped, yields stayed stable, suggesting airlines may have kept fares high to **boost profits**
- Per Brazil's agreement with ICAO, there is **no tax on QAV in international flights**
- On top of **ICMS, PIS/COFINS** (social contribution tax of ~5% of the amount paid at the refinery) is levied on fuel used in domestic air travel
- The trendline for QAV prices both in the USA and Brazil are greatly correlated with the price of Brent and WTI (West Texas Intermediate), **global benchmarks for fuels**
- Nonetheless, across the interval analyzed of ´18 - ´25, **Brazilian values were 13.6% higher than American ones**

Correlation between Cost of QAV and Yield in Brazil ´21-´23



QAV Prices Trends, Brazil & USA (jan/19 - may/25)



USA jet fuel prices (FOB) are refinery prices before shipping or taxes. Brazil's PPI includes cost to import fuel into the country. Monthly average exchange rates were used

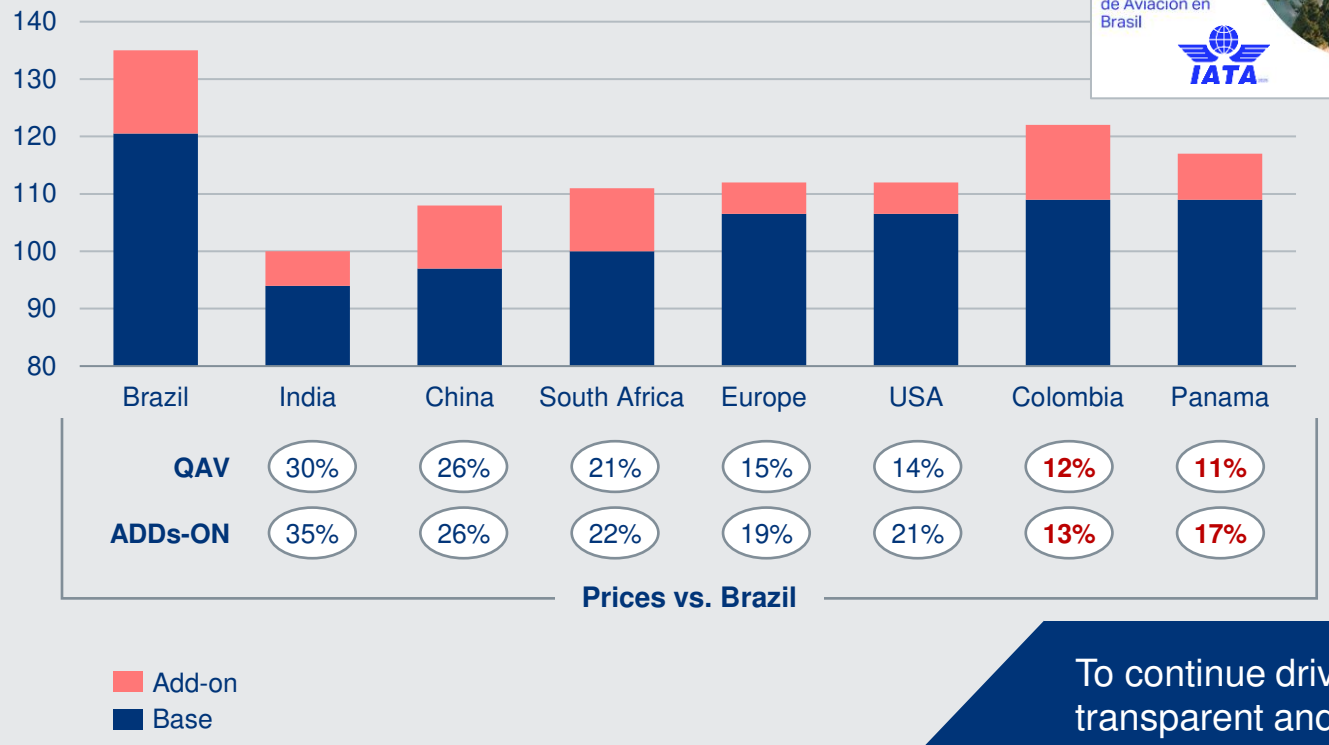
Source: IBS, ANP, iNFRA, World Bank, ALG Analysis

Main cost of airlines in Brazil is fuel costs, which has been consistently higher than in other regions

QAV price in Brazil

5 Development of low-cost business model

IATA analysis on QAV prices – Prices Nov 2022



The price of QAV (aviation kerosene) in Brazil is consistently higher than in other countries.

The main reasons for the additional costs include:

- Limited transparency regarding the logistics costs involved in the operation
- Monopolistic control over supply, refining, and transportation to airports

There is a general consensus that the lack of competition stems from regulatory gaps and a lack of clarity, which have allowed the monopolistic structure to persist.

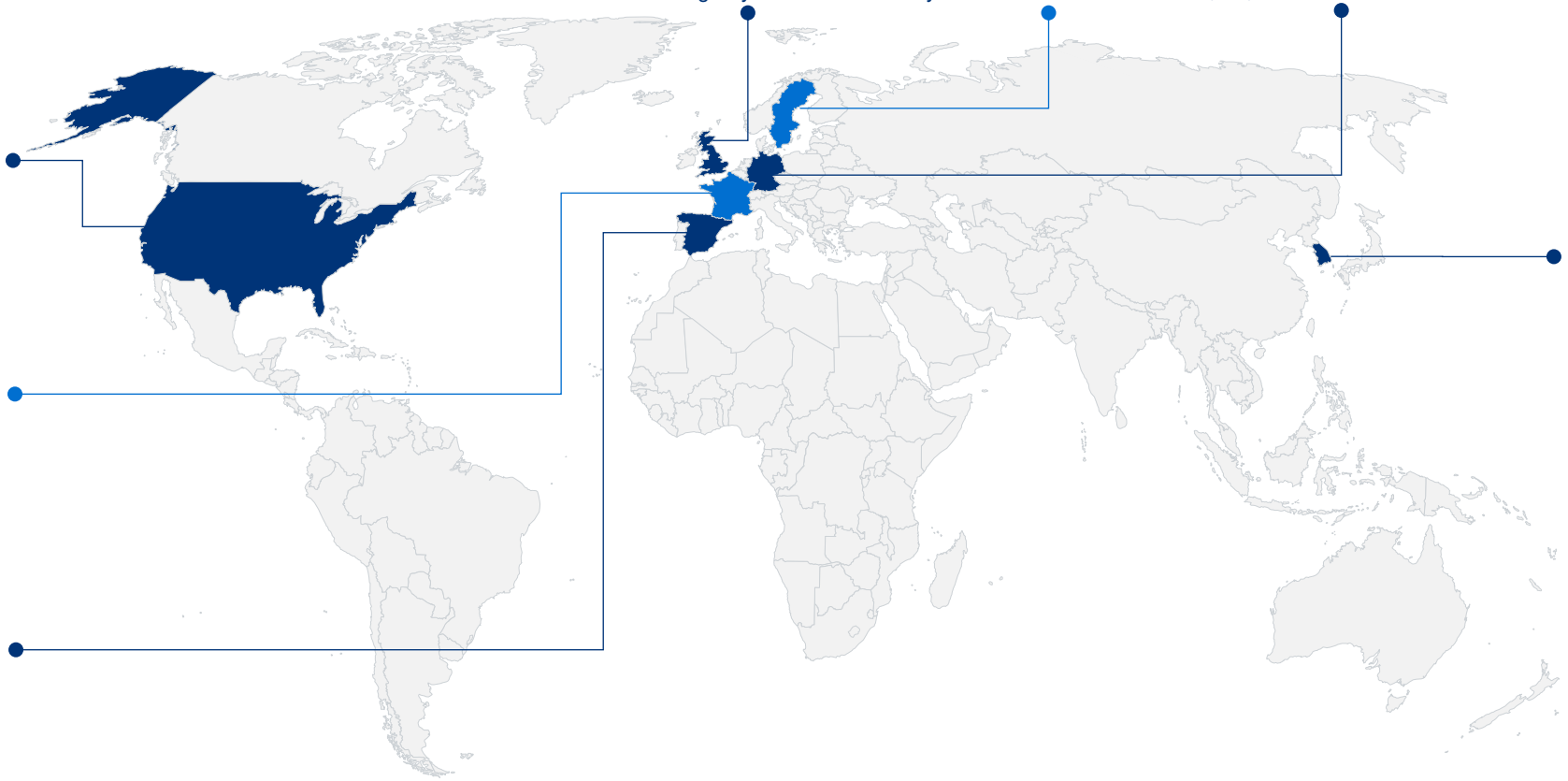
Recent measures, such as CNPE Resolution No. 15 and ANAC Resolution 717, are insufficient on their own and should be reinforced with robust public policies aimed at increasing industry competitiveness

To continue driving the industry forward, fuel prices must be transparent and cost-based. The best way to achieve this is through open competition and the unbundling of the supply chain

Source: IBS, ANP, iNFRA, World Bank, Mercado de Combustible de Aviación en Brasil – IATA – 4 march 2025; ALG Analysis

Also related to fuel costs, with growing concerns about GHG emissions from fossil fuels, countries around the world are promoting SAF initiatives, increasing its consumption through mandatory regulations

SAF Initiatives Around the World



United Kingdom

Goal to introduce targets starting in 2025, and achieving at least 10% SAF usage by 2030

Sweden

Implemented a volumetric SAF mandate of 1% with the goal of reaching 30% by 2030

Germany

Plans to introduce SAF mandate in 2026, focusing on the Power to Liquids (PtL) route

5 Development of low-cost business model

Mandate under analysis

Mandate implemented

USA

The goal is to increase SAF production by at least 3 billion L per year by 2030

France

SAF roadmap with consumption target of 2% by 2025, 5% by 2030, and 50% by 2050

Spain

Goal to supply 2% SAF by 2025. New biorefineries are being planned, with a special focus on waste

South Korea

Plans to begin a blending mandate

Source: Governo Federal Brasil, ALG Analysis

In Brazil, the regulatory framework for SAF complies with international ICAO requirements; in addition, national regulations have been developed to cover DOM flights

SAF in Brazil

International Regulation

ICAO:

- Sets global sustainability criteria for SAF
- Brazil follows the **CORSIA** scheme (Carbon Offsetting and Reduction Scheme for International Aviation). CORSIA **aims to offset CO2 emissions from international flights** by reducing emissions in other sectors, using eligible offset units

National Regulation

Law No. 528/2020 "Fuel for the Future):

- Legal framework promoting the decarbonization of Brazil's transportation sector
- Covers: SAF, biodiesel, ethanol, green diesel, carbon capture

ProBioQAV (National Sustainable Aviation Fuel Program)

- Initiative established under Law 528/2020
- Brasil targets a 10% SAF blending mandate by 2037

Incentives and Mechanisms

RenovaBio:

- Carbon credit program applicable to SAF
- Incentivizes biofuels through Decarbonization Certificates (CBIOs)

Tax incentives and subsidies (under regulation)

- Provided in the "Fuel for the Future" law to promote investment

Source: OACI, Argusmedia, ALG Analysis

ProBioQAV is the key Brazilian program, which intends to increase up to 10% the use of SAF in domestic flights by 2037, reducing GHG emissions

ProBioQAV – National Sustainable Aviation Fuel Program

5 Development of low-cost business model

- It is the National Sustainable Aviation Fuel Program established by Law No. 528/2020, aimed at promoting the production, regulation, and use of SAF in Brazilian air transport
- **Starting in 2027**, air operators will be required to reduce GHG (Greenhouse Gas) emissions in their domestic operations through the use of SAF

OBJECTIVES

- Develop a **competitive national SAF market**
- **Reduce greenhouse gas emissions in aviation**
- Promote the **energy transition and decarbonization of transport**
- Encourage **investment in technologies and refineries**

KEY GOALS

- Gradual **introduction of mandatory SAF use**
- **10% SAF blend in domestic flights by 2037, increasing progressively from 2027**, starting at 1%
- Alignment with ICAO/CORSIA sustainability criteria

INVOLVED INSTITUTIONS

Ministério de Minas e Energia

BRASIL UM PAÍS DE TODOS

ANAC

anp Agência Nacional do Petróleo

Brazil is moving toward a competitive SAF market with legal backing, international alignment, and ambitious decarbonization targets for 2037

Source: OACI, O Globo, ALG Analysis

Currently, multiple SAF production projects are underway, positioning the country's future supply to potentially meet the projected demand by 2037

Ongoing Projects

5 Development of low-cost business model

	Feedstock	Current situation	Planned capacity/ start date	Location
Itaipu Binacional, CIBiogás and H2Brasil project	Biogas + H2 → synthetic crude oil → SAF	Pilot plant	6kg of bio-syncrude per day June 2024	Foz do Iguaçu
Copersucar and Geo Partner En Paraná	Producing green liquid hydrocarbons from synthesis gas	Pilot plant	2025 expected date	Paraná
Brazil biofuels	Palm oil	N/A	500 million L of Green Diesel and SAF SAF produced since 2026	Amazonas
Acelen/Mubadala Capital	Macauba → fuel	Advanced engineering phase	800 tones annual capacity by 2030 End 2026	Bahia and Minas Gerais
Raízen	Ethanol → ATJ (Alcohol-to-jet)	Interest in using it to make SAF because its longer-term supply is relatively stable	Production starting 2027	Sao Paulo

The combined output of these projects could meet the projected demand of 1.1 billion liters of SAF by 2037

Source: Itaipu energy, safpath, ft, czapp, El Economista, grupo BBF, ALG Analysis

SAF production is costly and depends on clear regulation; with the right framework, Brazil could become fuel-independent and a key SAF exporter

Challenges and Opportunities of SAF in Brazil

5 Development of low-cost business model

Challenges

- **High production costs**: SAF is still more expensive than conventional jet fuel due to costly feedstock collection, processing, and the capital-intensive nature of advanced conversion technologies
- **Need for large-scale investment**: developing a competitive SAF industry requires substantial investments in infrastructure, new biorefineries, and technology
- **Regulatory uncertainty**: although progress has been made, detailed regulations and incentives are still being defined, which can delay investor confidence
- **International certification and market access**: to export SAF, producers must comply with strict international sustainability and certification standards, which can be complex and resource-intensive

Opportunities

- **Independence in production and international competitiveness**: Brazil has the potential to **produce SAF independently and even become a key exporter** to markets such as Europe and the USA, which already require low-carbon fuels
- **Leadership in energy transition**: an opportunity to position the country as a global leader in sustainable biofuels, leveraging its long-standing expertise in the sector
- **Diversification of the energy matrix**: **reduces dependence on imported fossil fuels and contributes to building a more resilient and sustainable energy mix** in the long term

Regulatory uncertainties still hinder investments in large-scale SAF production. Many countries are far from achieving their targets, which could delay the adoption of sustainable fuels

Source: ALG Analysis

Although clear opportunities, airline tickets prices may rise up to 18% in 2050 due to SAF's high production costs, making government support essential

SAF in Brazil

5 Development of low-cost business model

CNN Brazil

09 nov 2024

Airline tickets could get more expensive with sustainable jet fuel, companies say

Companies will be required to reduce greenhouse gas emissions through the use of sustainable aviation fuel, which is more expensive than traditional aviation kerosene

(…) **Brazilian airlines estimate that airfare prices may increase with the implementation of SAF** (Sustainable Aviation Fuel) in their operations from 2027. The fuel is more expensive than traditional aviation kerosene

(…) With the Fuel of the Future law, **air operators will be required to reduce greenhouse gas emissions on domestic flights through the use of sustainable aviation fuel from 2027. The goals start with a 1% reduction and gradually grow until they reach 10% in 2037**

"**Today, SAF costs two to three times the value of aviation kerosene**. Imagine something that already represents 40% of our costs, and on top of that you are putting an increase of two to three times. It's very impactful. There is still a lot of discussion with the government about how we can mitigate this impact," said GOL CCO director in an interview with CNN

FlightGlobal

Sept 2023

Airline tickets will be nearly 20% more expensive by 2050 due to SAF commitment

Airline ticket prices will need to be 18% higher in 2050 if the aviation industry is to afford the trillions of dollars it will cost to meet sustainable aviation fuel (SAF) targets and meet decarbonisation goals, according to a new report.

However, for the sector to achieve its SAF penetration target of 65% by 2050 it will require global production capacity of more than 400 million tonnes per annum, a huge increase on the sub-1 million tonnes available today.

That will only be enabled though the use of more expensive production solutions such as power-to-liquid fuel, the report argues, contributing to SAF remaining around twice the price of standard jet fuel, despite cost decreases associated with volumes of scale.

As a result, hitting the 65% target will cost "$3.5-5.5 trillion in excess of a kerosene-only future", the study suggests. Total spend on kerosene in that scenario would be $8-9 trillion to 2050, it says.

If these costs are passed through to customers, ticket prices will need to rise by 18% by 2050, against a jet fuel-only baseline, it adds.

Despite Brazil's significant opportunity –and ongoing efforts- to position itself as a global leader in SAF production, there remains uncertainty surrounding the potential impact on airline ticket prices, which continues to be a concern for airlines

Source: OACI, O Globo, FlightGlobal, ALG Analysis

Blending SAF with QAV is a technically viable, globally adopted solution for Brazil to begin SAF implementation without immediate infrastructure overhaul

Progressive SAF Adoption via Blending with QAV

5 Development of low-cost business model

- Blending is the controlled **combination of SAF with QAV** (Jet A1) to produce a certified drop-in fuel that meets all technical and safety standards of conventional jet fuel, **without requiring aircraft or infrastructure modifications**, making it a practical and scalable pathway for decarbonization
- It does offer a realistic point to progressively meet PrioBioQAV targets without major short-term investments
- It is a **transitional solution**, enabling SAF adoption at scale while paving the way for the future use of 100% pure SAF

SAF-QAV blended in Brazil

- Brazil has **limited current SAF supply chain**, making low-percentage blends (10-30%) a practical first step
- Blending enables a **phased adoption of SAF**, aligned with Brazil's regulatory roadmap
- **Leverages local feedstock**: Brazil has abundant biomass and biofuel expertise, offering a strong potential to scale SAF production domestically

Current regulation

- **ATSM D7566** is the main international standard governing SAF certification and blending limits for commercial aviation
- The regulation sets **maximum blend limits depending on the certified SAF pathway**, currently **allowing up to 50% SAF**
- Both **ICAO and IATA recognize SAF blending as a key near-term decarbonization lever**, encouraging global adoption

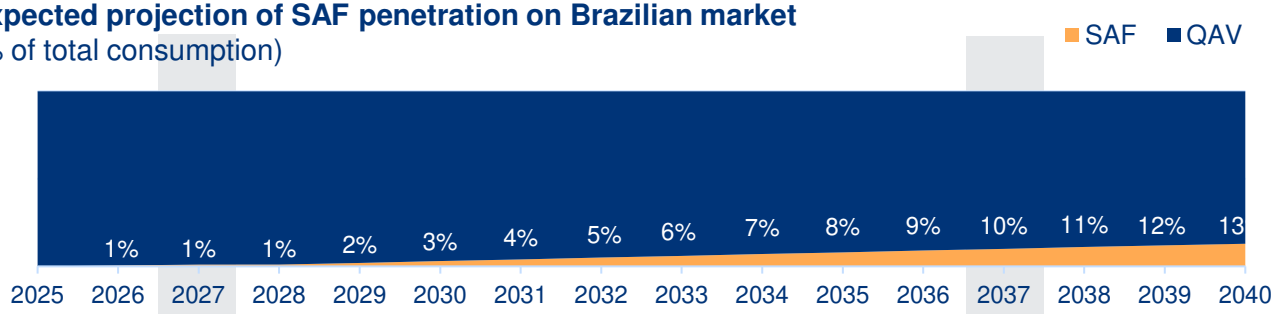
Source: ICAO, ALG Analysis

Considering Brazil's targets for SAF adoption and its current cost disadvantage compared to QAV, total fuel costs are expected to increase by approximately 7% to 20%

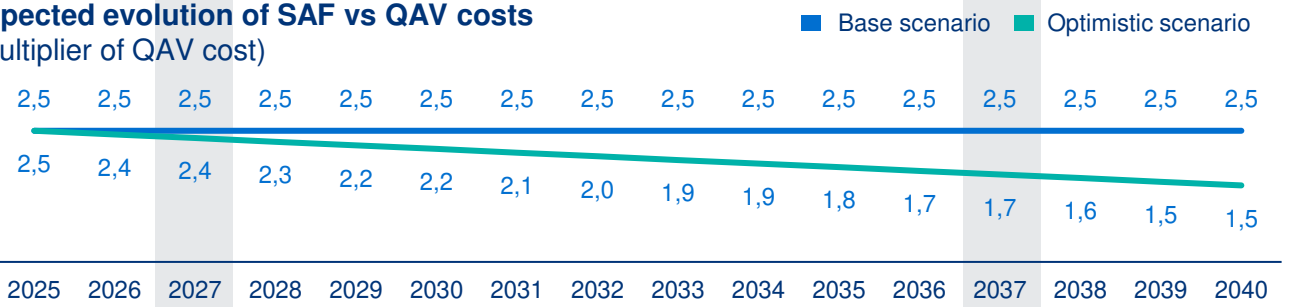
Projection of Impact on Aviation Fuel Due to Energetic Transition

5 Development of low-cost business model

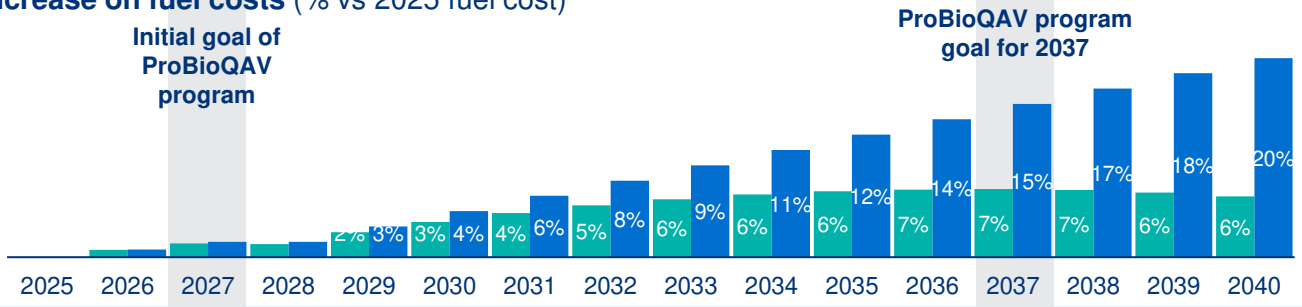
Expected projection of SAF penetration on Brazilian market
(% of total consumption)



Expected evolution of SAF vs QAV costs
(multiplier of QAV cost)



Increase on fuel costs (% vs 2025 fuel cost)

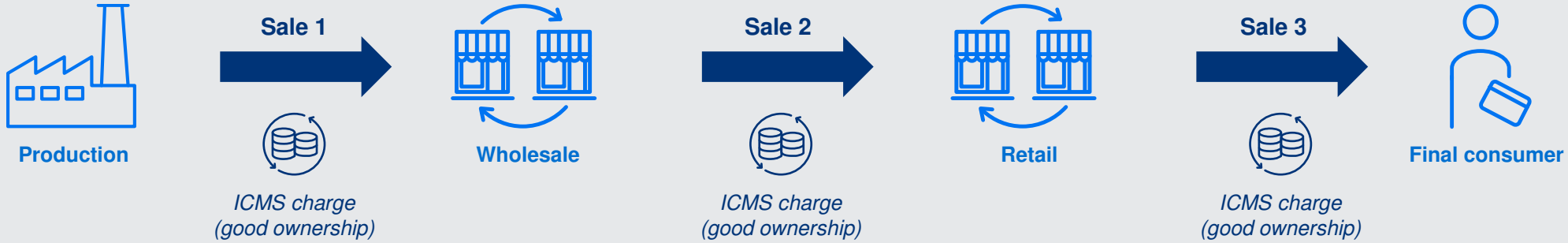


- Following the program ProBioQAV, **the airlines must reduce GHG emissions starting from 2027, when they need to achieve 1% of SAF of their total fuel consumption**. Such percentage must increase gradually, r**eaching 10% of the total consumption in domestic flights by 2037**
- However, according to recent technical research by the World Economic Forum, **the current production cost of SAF is two to three times higher than that of conventional jet fuel (QAV)**, with no significant short-term reductions expected
- Scaling up SAF production through targeted initiatives could significantly reduce costs. Studies from Clean Air Task Force indicate that **large-scale production could lower current SAF prices by 40% to 50%, resulting in a price that remains approximately 50% higher than QAV**
- Therefore, two main scenarios were considered:
  - **Base scenario**: The SAF production costs remains between 2 to 3 times the price of QAV in the next years
  - **Optimistic scenario**: The SAF production costs drop due to gains in efficiency and production scale
- Considering such penetration and costs, it is expected that **total costs on fuels might increase from 7% to 20% until 2040**

Source: ALG Analysis

Fuel costs are also highly influenced by the ICMS, a tax levied on purchase transactions, regulated by Brazilian states, and used as an incentive mechanism to attract companies

ICMS Tax Mechanism



- The ICMS (Imposto de Circulação de Mercadorias e Serviços) taxation is a state value added tax (VAT) operation that affects the final consumer of the products by increasing the final price considering the circulation process. ICMS is not applied to INT flights, so incentives are just applicable to DOM flights.
- **The tax is paid at any sale operation by the companies and collected monthly by the State, being one of the main sources of government revenue, with ~ 776 bn BRL in 2023**
- Tax rates range from approximately 7% to 25% and **depend on several factors, including the state of origin, the destination state, and the essential nature of the product, within a complex and decentralized tax system**
- Since ICMS tax rates are defined individually by each Brazilian state, **these governments have the autonomy to attract businesses and promote economic development by offering tax incentives and reduced rates**. This creates competition among states to attract companies from various sectors

In the aviation sector, the ICMS represents a key instrument of Brazilian states on the attraction of airlines and on the development of new routes through the provision of incentives

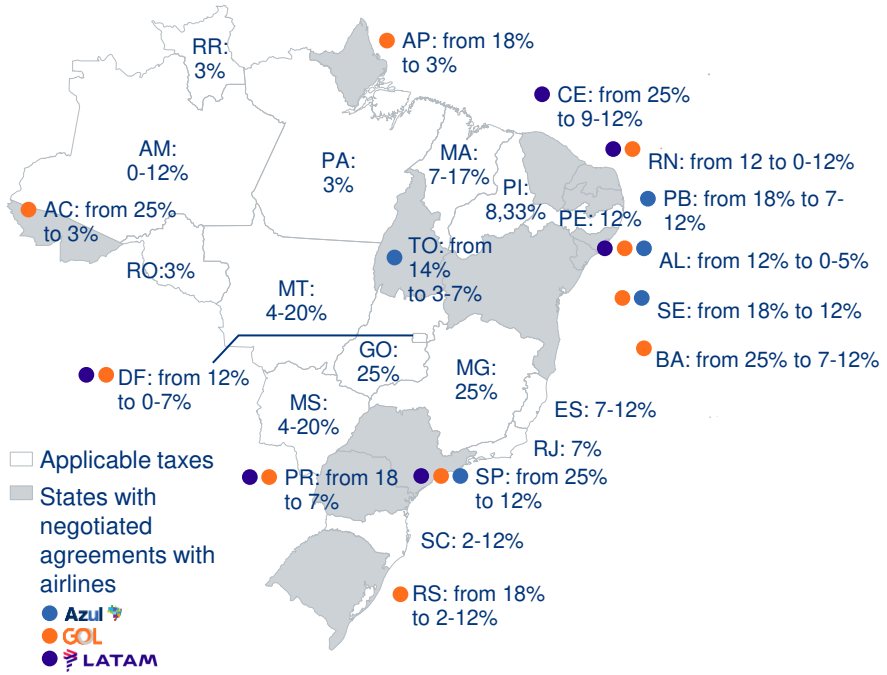
Source: PWC, Senado Federal, ALG Analysis

The current ICMS tax on aviation fuel, which varies by state, significantly increases operational costs - with fuel costs representing up to 36% of total operating expenses

ICMS in Brazilian Aviation

5 Development of low-cost business model

ICMS in Different Brazilian States (%, 2019)

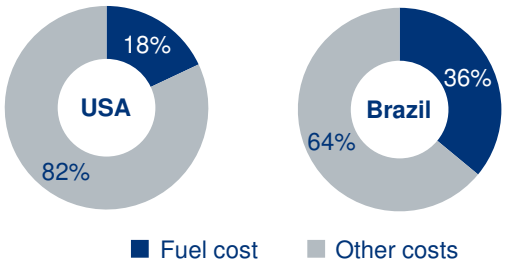


Only applied to **DOM flights**

Variable depending on the state

Negotiated among the parties involved

2023 Operating costs Brazil vs USA (%)



- The amount in taxes charged to airlines depends both on the state and on the negotiations conducted by each airline. In this regard, **GOL is the airline that benefits the most from tax reductions**, taking advantage of lower percentages
- Some **states offer special discounts based on the airlines' network**:
  - **Bahía**: From 18% to 12% if increase fuel consumption by 20% and adds new flights; 10% if maximum consume quota is achieved; 9% if 8 municipalities attended; 8% if 9 municipalities attended; 7% if 10 or more municipalities attended
  - **Tocantins**: 7% if carriers operates regular flights; 5% if flights involve another state; 3% if regular flights to 2 or more municipalities

The absence of standardized aviation fuel tax across Brazilian states creates inefficiencies for airlines and directly contributes to the widespread use of fuel tankering strategies

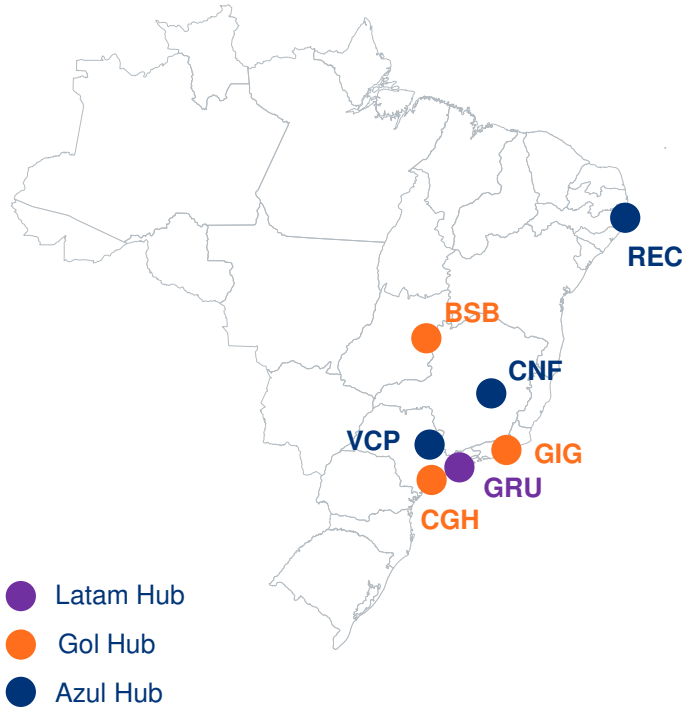
Source: Embry-Riddle Aeronautical University, Valor Económico, Governo de Bahia, ABEAR, ALG Analysis

States with lower ICMS rates and incentives tend to attract a higher number of air operations, positioning themselves as national hubs of the main Brazilian airlines

ICMS in Brazilian QAV

5 Development of low-cost business model

Main Brazilian Airlines Hubs (predominant airline)



Brazilian Airline Hubs

	Airline hub	Applicable ICMS
VCP	Azul	From 25% to 12%
CNF	Azul	From 18% to 2-7%
REC	Azul	From 18% to 5-8.6%
GRU	LATAM GOL	From 25% to 12%
CGH	LATAM GOL	From 25% to 12%
BSB	LATAM GOL	From 12% to 4-7%
GIG	GOL	From 22% to 7%

- To obtain these incentives, **airlines must comply with rules that encourage regional route operations and, sometimes, maintenance** in states with lower ICMS tax rates
- States with higher demand, such as São Paulo, offer incentives of less than 50%, while other states offer larger discounts to attract airlines

In this regard, tax policy on aviation fuel (QAV) can serve as a key instrument to enhance connectivity, by lowering operational costs and encouraging the development of new routes

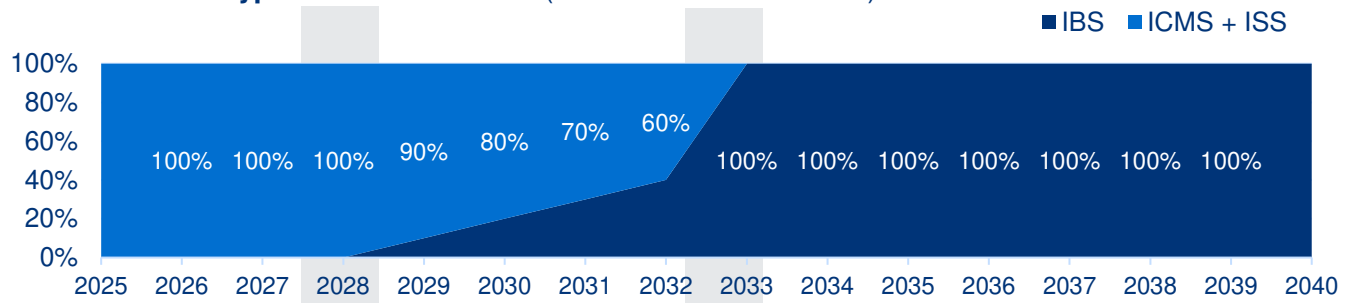
Source: GOV SP, SEF MG, GDF, GOV RJ, Sefaz-PE, ALG Analysis

In addition, the replacement of ICMS by IBS in the Brazilian tax reform could make several routes unviable, since eliminating incentives results in higher fuel costs

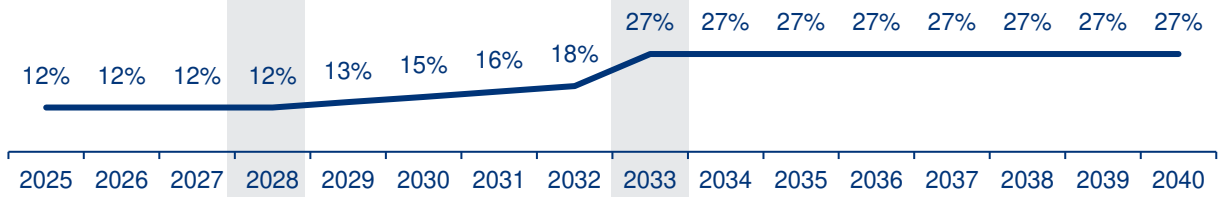
Projection of Impact Aviation Fuel Costs Increase in Subsidized Routes (ex: São Paulo state)

5 Development of low-cost business model

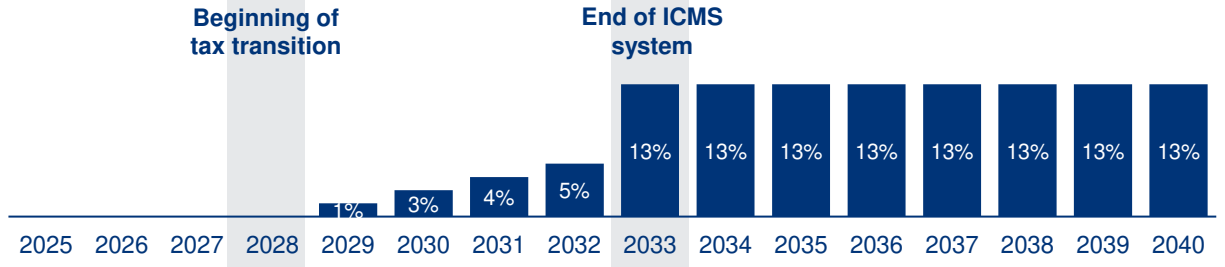
Transition of tax type due to tax reform (share of total collections)



Resulting tax rate evolution



Predicted increase on fuel costs (% vs 2025 fuel cost)



- **Brazil will be going through a tax reform in the following years** with the main objectives of modernizing, simplifying and improving de efficiency of the country's tax system, especially regarding consumption tax rates
- One of the key measures in this process involves eliminating the ICMS tax to restructure the current taxation system, which varies by state and leads to competition among them as they try to attract companies through ICMS incentives
- According to the tax reform plan, **the ICMS will be replaced by a new tax called IBS** (Imposto sobre Bens e Serviços), which is also a consumption tax
- Since many routes are currently subsidized through **ICMS-based incentives, these mechanisms are expected to be phased out, and tax rates may rise to 26.5%**, which is the standard rate under the new tax system
- Given the challenges of structuring a nationwide incentive program, such an increase would render many regional routes economically unviable. For instance**, in the state of São Paulo**, where ICMS incentives currently ensure a 12% tax rate on aviation fuel, **fuel costs could increase by approximately 13% in the long term**

Share of DOM traffic going through the state of SP (2024): **65%**

Source: ANAC, ALG Analysis

The impact in other states throughout the country could be even harsher, with fuel costs rising by 26 p.p. in RS and 23 p.p. in the North region

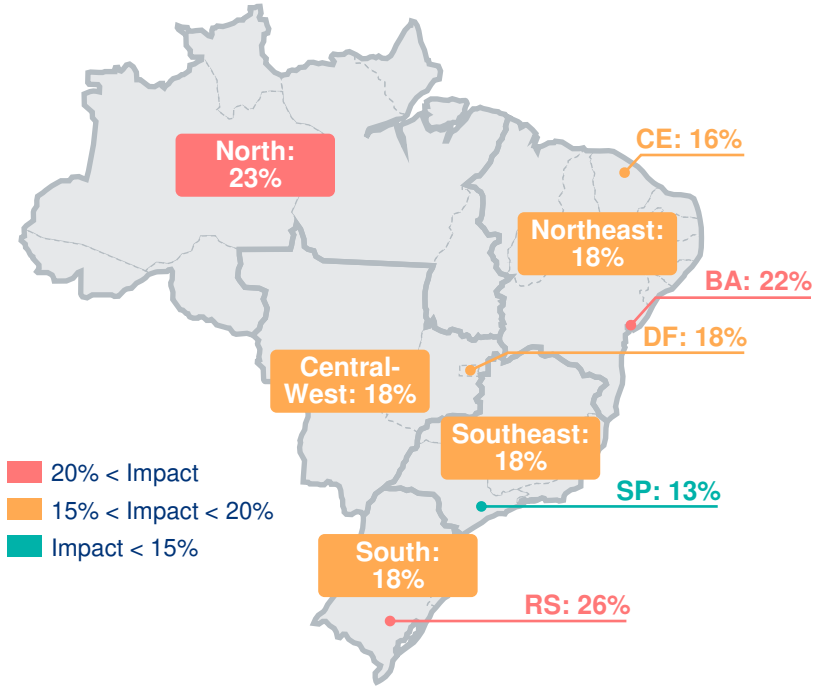
Tax reform in Brazilian Aviation

5 Development of low-cost business model

ICMS in Brazilian Regions(%, 2025)

Average ICMS on QAVz	
7%	Central-West, Northeast, DF, Southeast and South
3%	North
4,1%	BA
9%	CE
0,5%	RS
12%	SP

Predicted increase on fuel costs
(% vs 2025 fuel cost)



- As outlined in the example case of São Paulo, the ICMS system will be replaced by the IBS
- As such, **tax rates may rise to 26.5 p.p.** , which is the standard rate under the new tax system
- This translates to an increase on the fuel cost of 13 p.p. in the state of São Paulo, but this impact can double in other regions such as in the state of Rio Grande do Sul
- The impact on fuel cost will be most critical in the North region, reaching a value of 23% increas, as the tax rate will have a dramatic jump from the current 3% to the new 26.5%

Driven by the change in the ICMS to a 26.5% IBS rate, fuel costs could increase by more than 15 p.p. in most Brazilian states if there are no new incentives in the sector

Source: GOV SP, SEF MG, GDF, GOV RJ, Sefaz-PE, ALG Analysis

Another key cost for Brazilian airlines is related to the fleet, a costs that is worthen by the IRRF tax that leds to higher leasing costs and a reduction of Brazilian commercial fleets

5 Development of low-cost business model

Leasing and Importation of aircraft Tax Burden

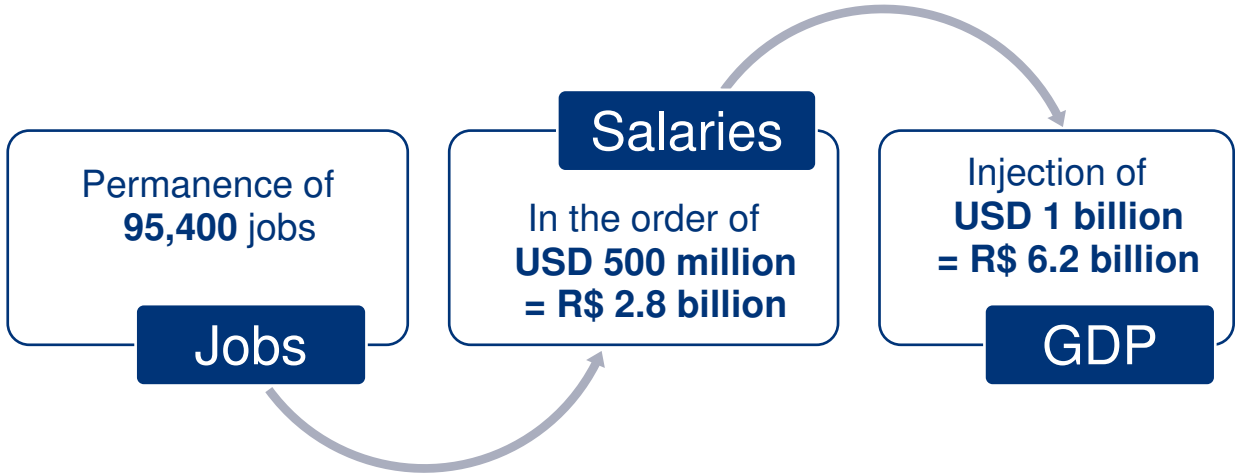
Main taxes associated to importation and leasing of aircraft in Brazil

- **Importation of aircraft for commercial operations are subject to**:
  - Import duty – **II** - (0% rate)
  - Tax on Manufactured Product – **IPI** – (0% rate)
  - Profit Participation Program and Social Security Financing Contribution – Import - **PIS/CONFINS** - (0% rate)
  - Tax on Distribution of Goods and Services – **ICMS** – (4% rate)
- **Finance and operating leases are subject to:**
  - **PIS/CONFINS** – Import of Financial Transactions – **IOF**
  - Withholding Income Tax – **IRRF**
  - Tax on Services – **ISS**

Impact of leasing taxes on airlines

- **As of 2022, fees charged by the IRRF on the rental of aircraft and engines was reduced from 15% to 0%, with a gradual increase of 1% per year**. Such reform directly benefits airlines, as seen by **impact on fleet size going from 507 to 529 aircraft** (a 4,3% increase), and indirectly benefits the entire tourism value chain, with a ripple effect on employment
- Brazil and Ireland have a double tax treaty under negotiation. If enacted, it could favor aircraft leasing between Irish lessors (with a 65% share of the global aircraft leasing market) and Brazilian airlines
- Ultimately, **such tax layers increase leasing costs**, restrict fleet flexibility and erode operating margins. Negatively affecting foreign entrants and already present domestic carriers

Estimated benefit to the Brazil's Economy due to reduction of IRRF on aircraft leasing (for ABEAR, 2022)



The IRRF tax led to higher leasing costs and a reduction of Brazilian commercial fleets. In 2022, it was eliminated, but from 2024 onwards it returned, increasing by 1% per year

Sources: iclg – Aviation Law 2025, Aviacionline, ANAC, The Irish Times, IBA, ALG Analysis

Another key risk for the market environment during the next years is the tax reform which is expected to further increase costs

Tax Reform – Perspectives

5 Development of low-cost business model

06 feb 2025 Valor Internacional

Valor INTERNATIONAL

Tax reform could slash air travel demand in Brazil by 30%, IATA says

Aviation industry sees increasingly hostile environment in Brazil

(…) Currently, **domestic airfares** are taxed at 9%, but the rate is set to rise under the proposed reform. The final figure is uncertain, but estimates suggest it **could reach around 27%.** International tickets, which are currently tax-exempt, would also be subject to the full tax rate under the new rules. (…)

An exception will be made for regional aviation, which will have a lower tax rate, but the specifics still require regulation.

! **IATA estimates that with a 26.5% tax rate, the average domestic airfare in Brazil would increase from $130 to $160. Meanwhile, the average international fare would rise from $740 to $935.**

Mr. Cerdá stressed that **aviation is vital for Brazil, given its vast territory**. "There's no way to get from São Paulo to Manaus without aviation," he said. **In Latin America, he added, the airline industry is still seen as a luxury rather than a form of public transportation.**

The **industry's systemic challenges in Brazil, including a litigation rate above the global average and higher fuel costs**, help explain the crises facing the country's airlines. Azul was the only major carrier that had not yet sought restructuring in the United States. Gol expects to complete its restructuring process in June, while Latam reorganized between 2020 and 2022.

Mr. Cerdá said he is optimistic about Azul's process, noting that Chapter 11 has proven effective in other airline restructurings.

He also argued that **Brazil does not necessarily need more airlines to boost competition and lower fares, contrary to the government's focus on attracting new low-cost carriers. "We see many markets with three airlines or fewer, such as Colombia, Spain, and other European countries.** You don't need ten airlines to have competition," he said.

While the government aims to attract new players, the sector is moving in the opposite direction. Shareholders of Azul and Gol are reportedly in talks about a potential merger after both groups conclude their restructuring efforts.

- The tax reform will be implemented in 2026 which simplifies and reduces the number of types of taxes, creating a new VAT without reducing the tax load
- Furthermore, the new VAT would eliminate ICMS and incentives given by Brazilian states to promote regional routes
- ABEAR (Brazilian Association of Airlines) commissioned a study by LCA Economic Consultancy which revealed that the exclusion of commercial aviation from the special tax regime could lead to a **270% increase in the sector's tax burden,** equivalent to an **additional expense of R$11.1 billion per year**
- **Latam estimates that the impacts would be:**

Average Tariff Increase

15% - 20%

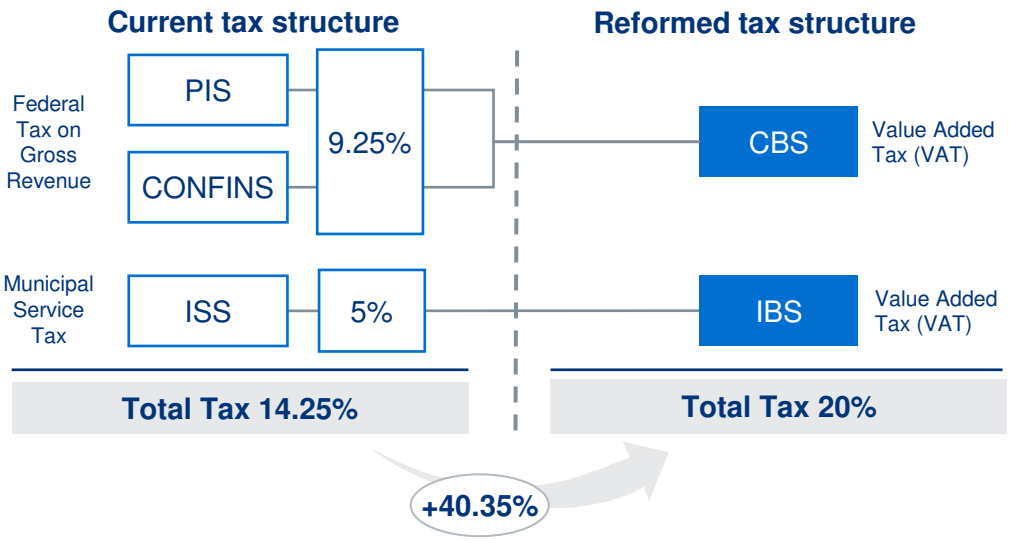
Decrease in passengers

6.2%	22%
Domestic	International

Source: Valor, ABEAR, Panrotas, ALG Analysis

A study conducted by ABR indicates the reform would raise taxes by 40% in airports, requiring a ~15% fee increase to pass the impact on to airlines and passengers

Current Vs. Reformed Tax Structure on Airports



Advantages of New Structure

- Avoids cascading taxation (non-cumulative VAT) and promotes tax fairness
- Clarifies and expands eligible costs for tax credits (e.g. SIMPLES small suppliers) and reduces reliance on special tax regimes
- Transition period will soften the impact of the increased tax burden

Limitations of New Structure

- Eradicates REIDI infrastructure tax incentive, potentially raising project costs
- Significantly increases the tax burden for existing concessions
- May require raising user tariffs to restore financial equilibrium

Estimated Impact of Tax Reform

5 Development of low-cost business model

IRR (Internal Rate Of Return) **drops** from 7.84% to 7.28%, creating a **contractual imbalance**
NPV (Net Present Value) turns negative: **–R$189.04 million**

To Recover Pre-Reform Projections (Post-Year 10 of Concession):

Goal	Factor	Required Change
Maintain IRR	Variable Concession Fee(1)	**-24.88%**
Maintain IRR	Tariff	**+14.53%**
Maintain Tariff Revenue	Tariff	**+10.34%**
Maintain EBITDA	Variable Concession Fee	**-23.34%**

While **positive for airports in year 1 of the concession—thanks to tax credits** enabling -1.1% in tariffs or +3.2% in concession fees—the reform would lead to long-term costs. Since **few new concessions are expected post-reform**, the primary scenario involves active concessions, which would need to adjust according to the figures presented in the table above

Overall Impact

Tax burden: increases by **+40.5%**

To restore IRR: –25% in **concession fees** or **+15%** in **tariffs** (e.g. boarding, parking fees)

- **Strains cash flow**; may affect contract performance
- **Risks covenant breaches**, debt acceleration, or financing limits
- **Lowers dividend potential**, reducing investor appeal
- Requires urgent **contract rebalance** to ensure financial viability

(1) Variable concession fees or ´Óutorga Variável´ is a percentagem of gross operational revenue paid to the government
Source: ABR, ALG Analysis

Also, the application of IPTU on airports raises legal uncertainty and costs, potentially deterring investment and requiring clarity on taxable areas

IPTU Disputes in Airport Concessions

5 Development of low-cost business model

IPTU at Brazilian Airports (2019)

Airport	ITPU Charges	Concessionaire pays
Natal (Inframérica)	✓	✗ Disputes on court
Brasilia (Inframérica)	✓	✗ Disputes on court
Guarulhos (GRU Airport)	✓	✗ Administrative challenges
Viracopos (Aeropoerto Brasil Viracopos)	✓	✗ Administrative challenges
Galeão - Rio de Janeiro (RioGaleão)	✗ Calculating taxable area	✗
Confins (BH Airport)	✗ Planning to charge	✗ Indicates it is not required
Fortaleza (Fraport)	✓	✓
Salvador (Vinci)	✗ Calculating taxable area	No response
Florianópolis (Floripa Airport)	✗ Calculating taxable area	No response
Porto Alegre (Fraport)	✗ Calculating taxable area	✓ Claims will pay if charged

- ITPU (Imposto Predial e Territorial Urbano) is a **municipal urban property tax levied on land and buildings in Brazil**. While federal assets used for public services are generally exempt, municipalities are now charging IPTU on commercially exploited areas of federally owned airports operated by private concessionaires
- **The landscape of IPTU charges across Brazil's concessioned airports reveals legal ambiguity, inconsistent enforcement, and financial risks**
- **In 2023, STF rulings permit IPTU on commercially exploited airport areas, but operational areas remain exempt**. This split has triggered major legal disputes:
  - **GRU** owes over R$ 400 million in IPTU, with the city splitting the airport into 65 properties and taxing only those with commercial activity
  - **In Natal**, the IPTU charge reportedly exceeded the total airport revenue, showing the risk of disproportionate claims
  - **Campinas** upheld IPTU for shops and services at Viracopos, despite the airport's operator being in judicial recovery
- **None of the original concession contracts mention IPTU**, and the PPI (Investment Partnership Program) only recently acknowledged it as a risk in newer bids

Without this demarcation, airports face unpredictable IPTU liabilities that were neither priced into concessions nor foreseen by investors — threatening legal certainty, financial feasibility, and future investment attractiveness

Source: Folha de S.Paulo, gov.br, Globo, Poder360, ALG Analysis

In addition, Brazilian air transport sector is characterized by a high number of lawsuits, which has grown in recent years and is responsible for 2% of airlines' costs

Overview of Litigation in Air Transport in Brazil

A legislation which favors the consumer

- Ongoing **conflict between regulations** regarding airline responsibilities
- **Prevalence of the Consumer Protection Code, favorable to consumers**, **allowing penalties for moral damages** and high number of lawsuits
- **Legislation is more consumer-rights oriented compared to the USA and Europe**

Brazil

1 lawsuit per every

~227 pax

VS

USA

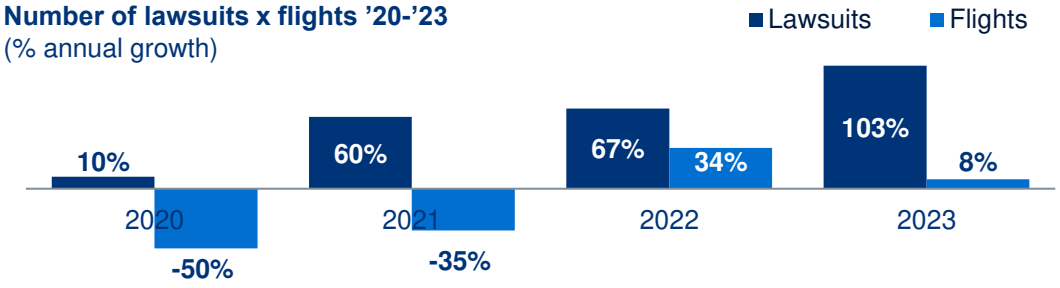
1 lawsuit per every

~1,254,560 pax

Growth of litigation in recent years

- **Despite operational efficiency,** with only ~3% cancellations and ~80% landings on-time in 2024**, there has been significant growth in legal claims**
- **The number of lawsuits has been driven up by predatory litigation practices**

Number of lawsuits x flights '20-'23
(% annual growth)



Higher cost for airlines

- **Litigation represents** a significant cost for airlines, reaching **~2% of total air service costs, equivalent to airport fee expenses**

BRL 6,700

Average compensation cost for **Moral Damages**

2%

of the total cost of airlines is associated with lawsuits

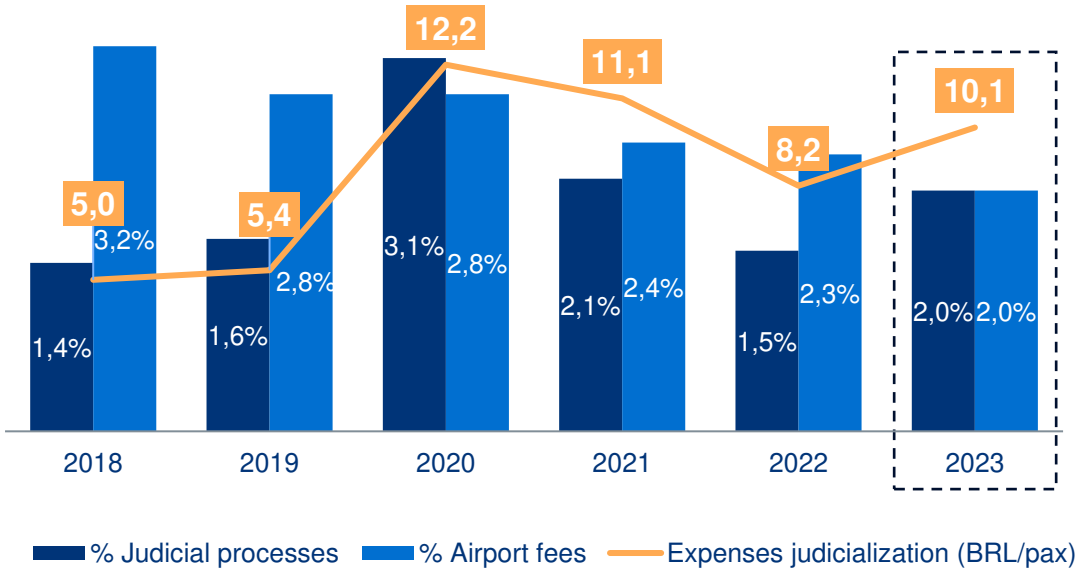
Source: IATA, IBAER (Brazilian Institute of Aeronautical Law), ABEAR, ANAC, ALG Analysis

Litigation expenses in the Brazilian air transport sector doubled between 2018 and 2023, costing approximately ~10 BRL per passenger, totaling more than 1 billion BRL per year

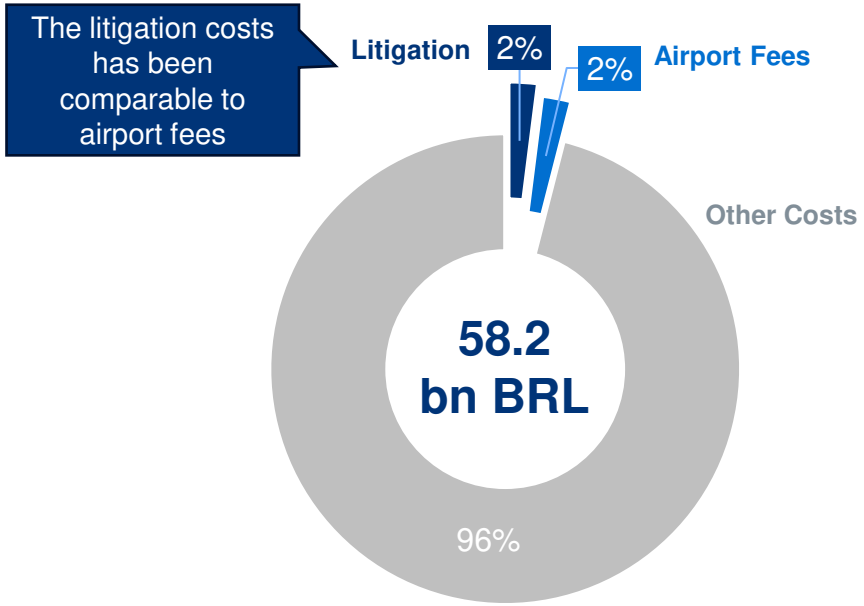
Impact of Litigation on Airline Costs

5 Development of low-cost business model

Evolution of litigation costs (%) vs. airport fees for airlines *(% of total expenses)* **and expenses judicialization** *(BRL/pax)*



Distribution by type of Airlines' total costs 2023 *(% total expenses)*



Annual cost of litigation

1.164 bn BRL

Expenses of litigation per passenger

~10.1 BRL/pax

Cost of 1 legal case in terms of air tickets

17 Air Tickets

Source: IBS, ANAC, ALG Analysis

Quality of Airline services in 2024 shows that Brazil had a similar performance than EU and USA, only with more cancelled flights, what contrasts with the higher number of lawsuits

Performance of Airlines per Region

5 Development of low-cost business model

	Brazil	Europe	USA
Cancelled flights	**3.2%** (29,652) !	**1.1%** (93,822)	**1.4%** (129,526)
Delayed flights (1)	**18.5%** (171,423)	**27.5%** (2,345,547)	**21.9%** (2,026,157)
Mishandled bags per 1,000pax(2)	**5.5**	**12.3**	**5.5**
Total Flights (departing)	926,606	8,529,261	9,251,859

Cancellations tend to frustrate passengers the most, making them more likely to result in lawsuits or high compensation costs for airlines

Compared to the average performance in Europe and the USA, flights in Brazil are delayed approximately 25% less and bags are mishandled around 60% less, reinforcing the mismatch between complaints and actual damages

(1) Flight considered delayed if it arrives >15min after scheduled time
(2) Values taken by region, South America, North America and Europe
Source: CBS, EUROCONTROL, U.S Department of Transportation, ANAC, SITA, ALG Analysis

The sector faces a disproportionate volume of litigation, much of it driven by predatory practices related to moral damage claims rather than service failures

Judicialization and Predatory Litigation in Brazil's Airline Sector

5 Development of low-cost business model

Evidence of Predatory Practices

- In Brazil, **10% of lawsuits are filed by solely 20 law firms**
- With the use **of aggressive digital marketing and influencers**, passengers are recruited sell their right to sue in exchange **for promises of easy money**
- This is a very large issue as moral **damages cannot be commercialized**, as they are non-transferable by law and often, there is no real service failure

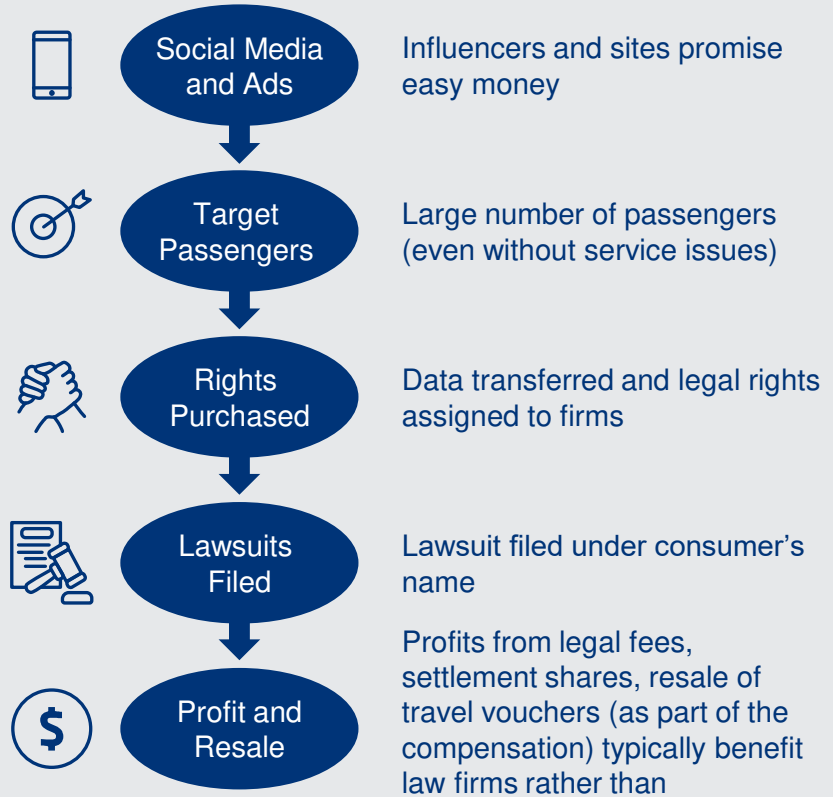
Costs to Airlines

- Predatory law firms and intermediaries **retain a significant share of compensation**, often without consumer awareness
- Entire operations structured for **quick settlements**, not justice
- This dynamic incentivizes volume over merit, **straining legal and corporate resources**

Broader Market Impacts

- On average, **litigation volume grew 60% annually from 2020-2023 while flights rose only 8%** in the same period
- **High legal costs act as a barrier to market entry,** discouraging foreign airlines and new domestic carriers from operating in Brazil
- To avoid predatory litigation, it is essential that the j**udiciary align its practices with international standards and agreements**

How the Predatory Litigation Scheme Works



Source: ABEAR, ALG Analysis

Brazil´s legal framework of compensation is much looser than equivalent foreign ones, with monetary uncertainty for airlines and leaving room for lawsuits and Moral Damages

Comparison of Compensation Frameworks in Different Regions

	Brazil	USA	Europe
Mishandled Luggage	• Domestic limit: **8,584BRL**, international limit: **9,776BRL,** but passenger may declare special baggage value	• International limit: 1,752 USD = **9,776BRL**	• **Montreal Convention:** limit of 1,180EUR = **7,590BRL (1)**
Flight delay >5hrs	• Consumer Defense Code (CDC) guarantees compensation for **moral damages** • **Accommodation, rebook or refund**	• No federal requirements, airlines are not required to compensate passengers whose flights are delayed or canceled but most will rebook you on their first flight to your destination • E.g.: American Airlines: **accommodation, rebook, refund the remaining ticket** value and any optional fees according to involuntary refunds policy • Domestic limit of liability: 4,700USD = **25,900BRL**	• Meals and drinks, **accommodation** with transport to airport, **reimbursement of: ticket, parts of journey** not made, parts made if flight serves no purpose anymore, return flight to departure point • Limit 4,897EUR = **31,499BRL**
Flight Canceled	• Consumer Defense Code (CDC) guarantees compensation for **moral damages** (usually Around **4,000-10,000BRL)** • **Accommodation, rebook or refund**		• **Reimbursement or re routing and**: **250EUR** for <1 500km • **400EUR** European flights of >1,500km • **600EUR** for other
Legal Framework	• Lawyers can work on a **success-fee** basis, charging only if the client wins • **No proof required for reimbursement**	• Montreal Convention limits airline liability in **extraordinary circumstances** (e.g. weather delays)	• Montreal Convention limits airline liability in **extraordinary circumstances** (e.g. weather delays)

(1) Special Drawing Right conversion by the IMF June 13th 2025

Source: Montreal Convention, European Union Law, U.S Department of Transportation, CNN Brazil, ANAC Resolution No. 400, ALG Analysis

The difference between current litigation costs and those as if Brazil followed an EU-style model shows the significant impact of moral damage claims in total costs

Brazil vs. Standardized EU Model

5 Development of low-cost business model

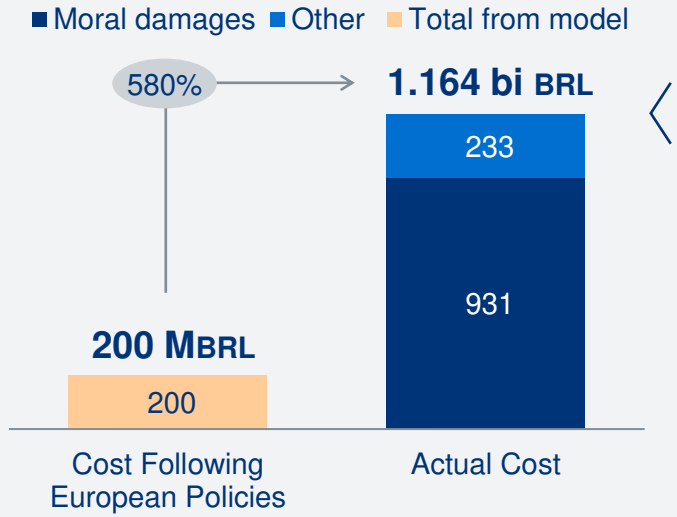
Average cost of cancellation of a commercial flight following European Policies (2023)

Cost of Cancellation	Total	BRL/pax
Total Cost	434,434	1,849
Passenger Care and Compensation	205,616	822

Estimation of compensation costs in Brazil through European Policies

Number of Lawsuits Annually (Brazil)	Average Compensation per Cancelled Flight	Average Compensation per Passenger	Total Annual Cost to Airlines in Compensation
243,000	205,616 BRL	822 BRL	200 MBRL

Burden from Passenger Claims for Airlines in Brazil (MBRL, 2023)



The 20% share of **"Other" burdens in actual cost closely matches the model estimate (200MBRL)**, indicating that **the excess cost is mostly due to moral damage claims**

Assumptions and Method

Number of Lawsuits: From ABEAR' study, the total projected number of lawsuits against airlines in 2023

Lawsuit per pax: The analysis assumes that each lawsuit corresponds to a different passenger, with no repeated claims from the same individual

European Compensation and Care: based on EU Regulation (EC) No 261/2004

Total costs: Includes losses from missed revenue, interlining, and passenger delay value, plus costs for crew, catering, and luggage — partially offset by operational savings (e.g. fuel, fees, maintenance).

Cost per pax: Commercial flight considered contains 250 seats, plane considered to be at full capacity

All values were converted corrected using IPCA to 2023 values to compare with real, published burden in 2023 (1.164 bn). Average annual exchange rates were used

Source: CNJ ANAC, EUROCONTROL, ALG Analysis

As long as CDC is considered applicable over Resolution 400 of ANAC and/or the international conventions, judicialization will negatively impact the cost and the attractivity for new entrants of the air transport sector in Brazil

Structural Challenges of Moral Damage Litigation in Brazilian Aviation

Legal Framework Enables Excessive Claims

Consumer Defense Code (CDC) and Moral Damages

- CDC guarantees the right to moral damage compensation
- Although **moral damages are legally non-transferable** (per the Superior Court of Justice, STJ), in practice, there is an informal market for buying and selling claims, distorting the system

- Even with clear, fixed compensation rules in place, the **Consumer Defense Code (CDC)** would still allow passengers to file lawsuits for moral damages. This legal structure continues to **incentivize litigation**, enabling excessive lawsuits — even for minor service disruptions

Litigation Culture is Entrenched

Indirect costs from litigation

- Passengers often file lawsuits **even after receiving direct compensation**
- This behavior generates **significant indirect costs** for airlines, including legal fees, case management overhead, and long dispute resolution timelines (unmeasured cost of time)

- In Europe, direct compensation is generally seen as fair and final, which naturally reduces litigation. In Brazil, however, litigation is often viewed as an **opportunity for financial gain**, rather than a means of seeking just compensation — making fixed payouts unlikely to deter legal action

Current CDC allows higher compensation costs due to moral damages and predatory practices. However, this practices are reflecting on an overall cost for the industry as a whole impacting all the consumers. CDC

Even with a fixed compensation model, the current Brazilian regulation, which favours the consumer through the CDC, would still allow the moral damage claims, the main responsible for high litigation costs in Brazil

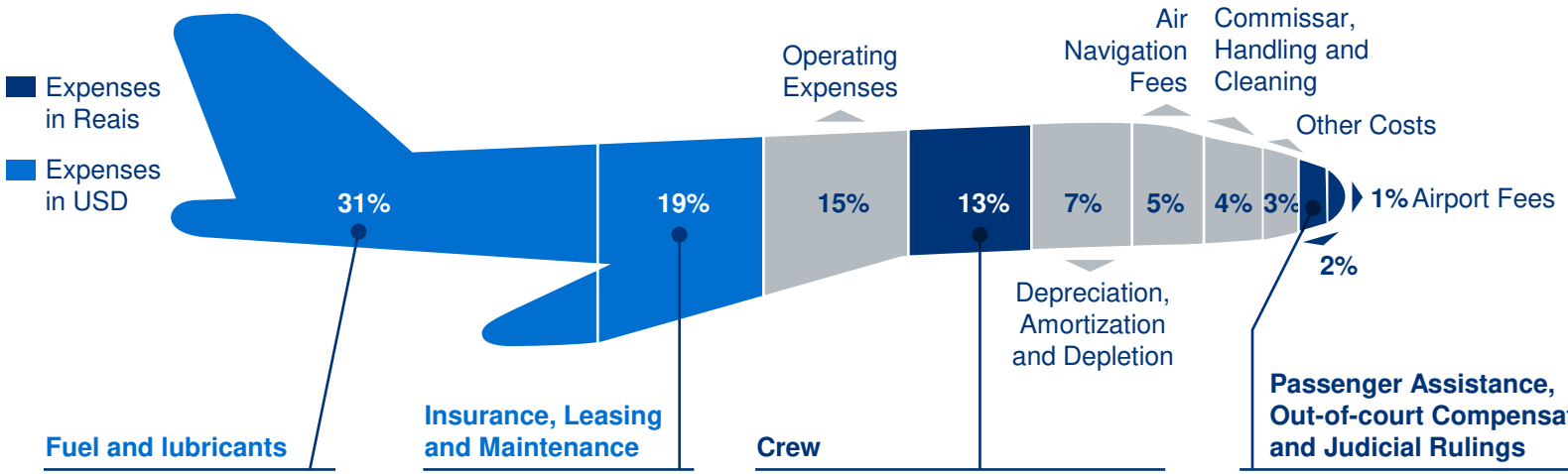
Source: ALG Analysis

Several elements in airlines' cost structure provide opportunities for policies stimulating a more efficient market environment

5 Development of low-cost business model

Existing inefficiencies

Distribution of Brazilian Airlines' Costs in 2024



Fuel and lubricants

To continue driving the industry forward, fuel prices must be transparent and cost-based. The best way to achieve this is through open competition and the unbundling of the supply chain

Insurance, Leasing and Maintenance

IRRF on leasing is not only increasing the costs for airlines, but also the risk to invest in new fleet

Crew

Flight hour limit: Brazil caps pilots at **900h/year, while de USA, Europe, and most of LatAm allow up to 1,000**; discussions on alignment in Brazil persist amid regulatory uncertainty. This result **in lower pilot productivity** compared to other regions

Passenger Assistance, Out-of-court Compensation and Judicial Rulings

Judicialization is one of the key unnecessary cost experienced in the market and it is also impacting highly the attractiveness of Brazil for a new airline

Upcoming challenges

SAF

SAF might result in a overcosts of almost 20%

Tax reform

It can lead to a higher overall tax burden (rising from approximately 9% to 27.5%), along with increased fuel-related taxation, which would raise operating costs for airlines and ultimately result in higher ticket prices

Source: IBS, ANAC, ALG Analysis

Content

- **Market Analysis**
  - **Brazilian market characteristics and bottlenecks**
    - Extrinsic drivers of air market
    - **Intrinsic drivers of air market – Development of low-cost model**
- Strategies to stimulate Brazilian market
- Conclusions
- Annex: Economic Impact of Aviation

As a result of the liberalization process in LatAm markets, LCCs have benefited, experienced growth and gained market share after the Covid-19 pandemic

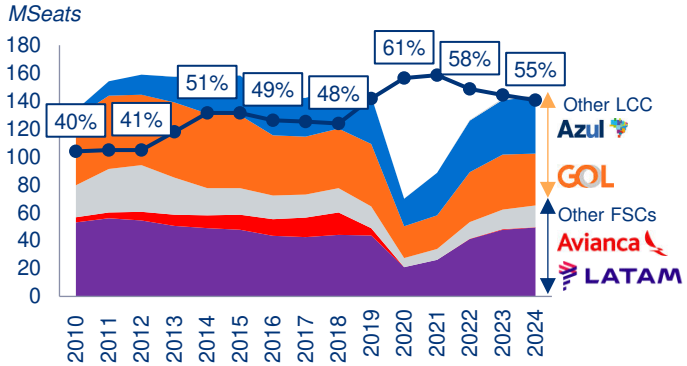
Scheduled total seats by LCC/FSC in LatAm

(MSeats; % LCC penetration; 2010-2024)

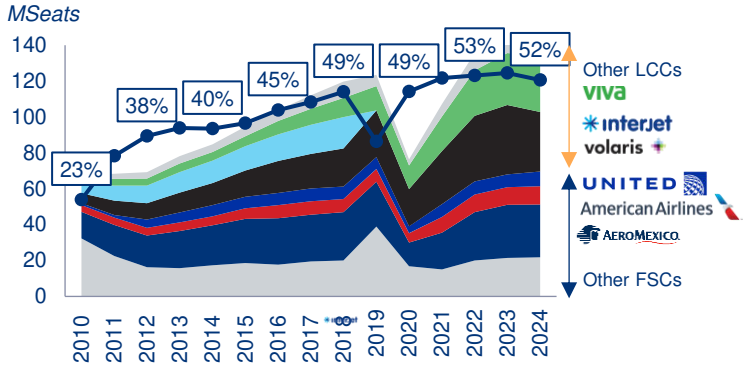
LCC FSC

5 Development of low-cost business model

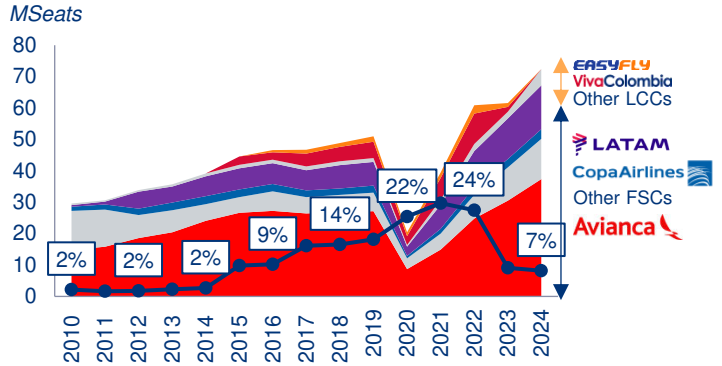
Brazil



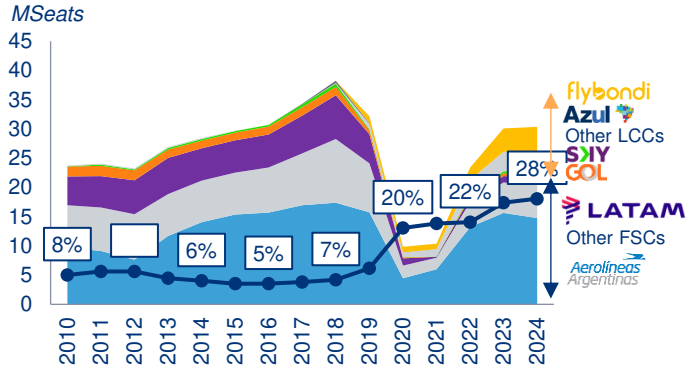
Mexico



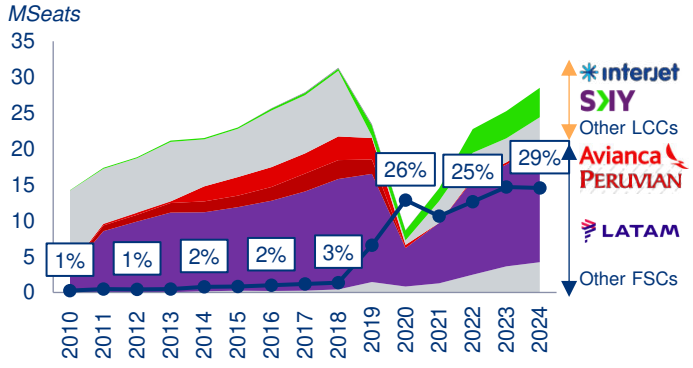
Colombia



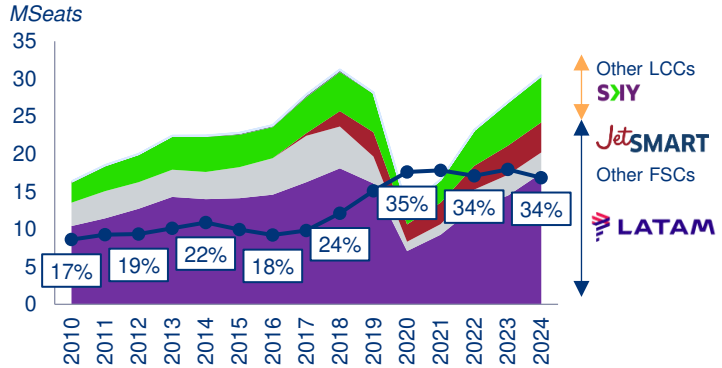
Argentina



Peru



Chile



Source: OAG, ALG Analysis

Note: JetSMART has been classified as a Low-Cost Carrier (LCC) across all countries analyzed, except for Chile, where it has not been categorized as such due to its origin as the founding market

Note: Main LatAm markets in terms of seats are displayed

In the domestic segment, Brazil has had the huge volume of seats offered, with strong presence of self-described LCC carriers, GOL and Azul, surpassing other LatAm countries

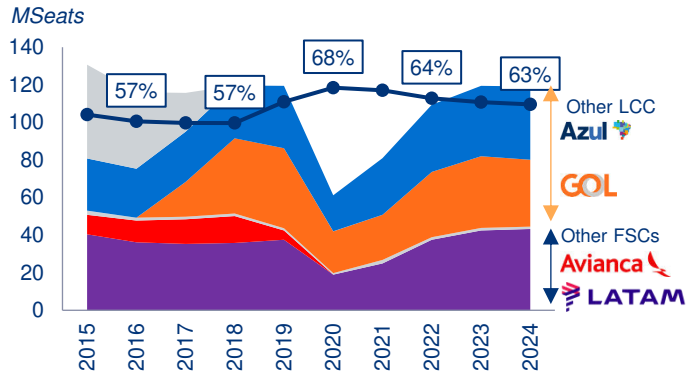
Scheduled domestic seats by LCC/FSC in LatAm

(MSeats; % LCC penetration; 2010-2024)

LCC FSC

5 Development of low-cost business model

Brazil



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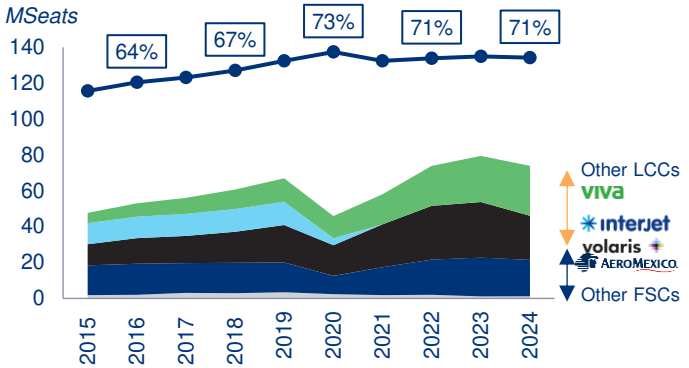

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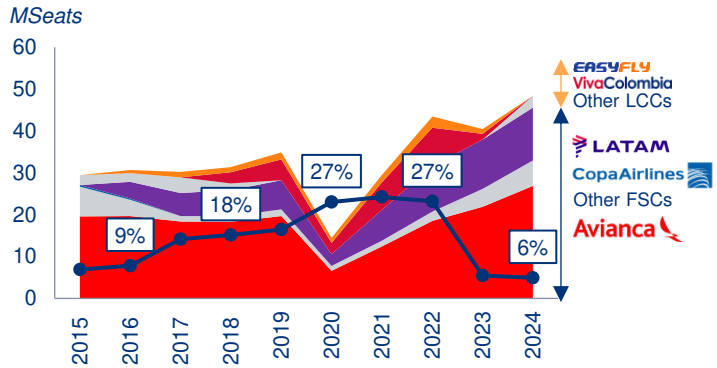

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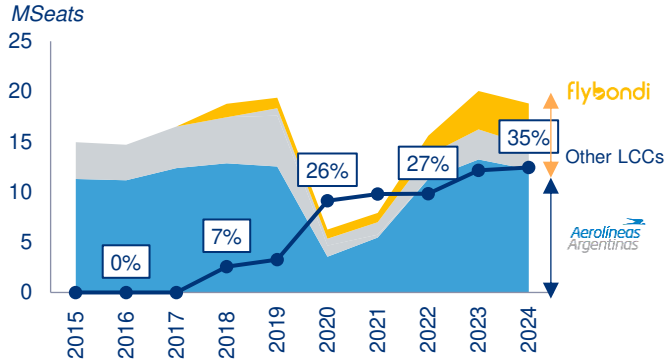

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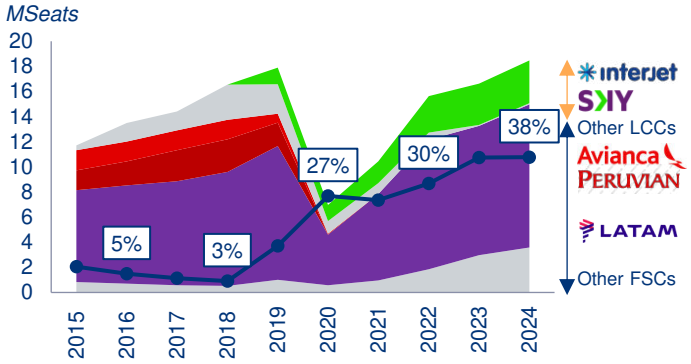

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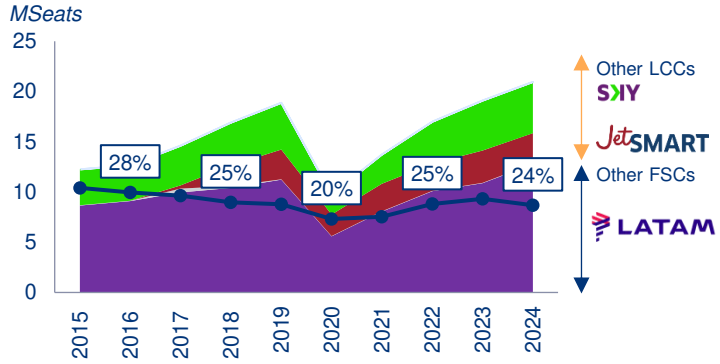


Source: OAG, ALG Analysis

Note: JetSMART has been classified as a Low-Cost Carrier (LCC) across all countries analyzed, except for Chile, where it has not been categorized as such due to its origin as the founding market

Note: Main LatAm markets in terms of seats are displayed

However, in the international segment, LCC presence in Brazil is limited due to the country's distance from major markets and the lower offer of flights by foreign LCCs

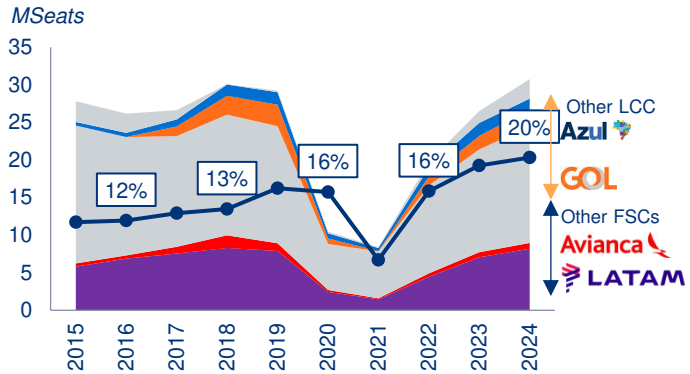
Scheduled international seats by LCC/FSC in LatAm

(MSeats; % LCC penetration; 2010-2024)

LCC FSC

5 Development of low-cost business model

Brazil



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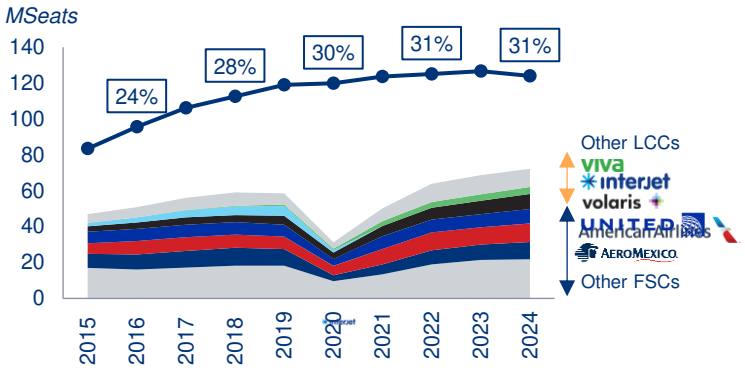

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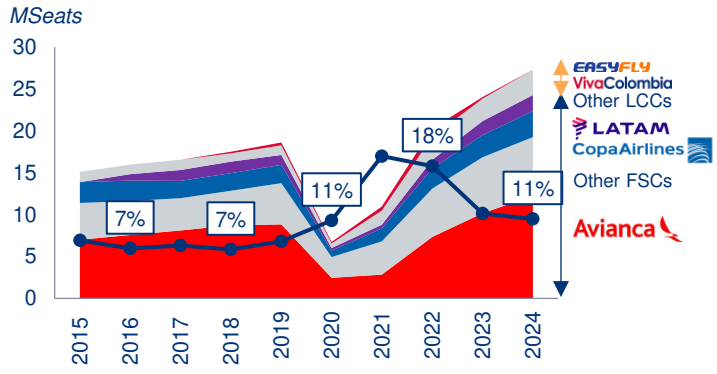

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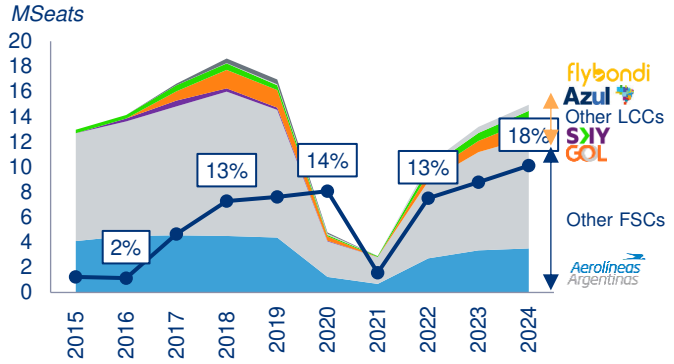

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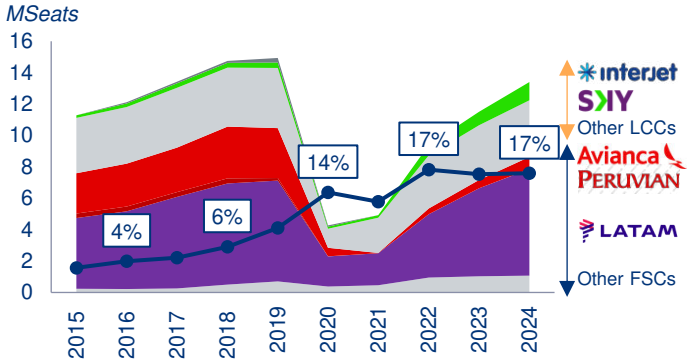

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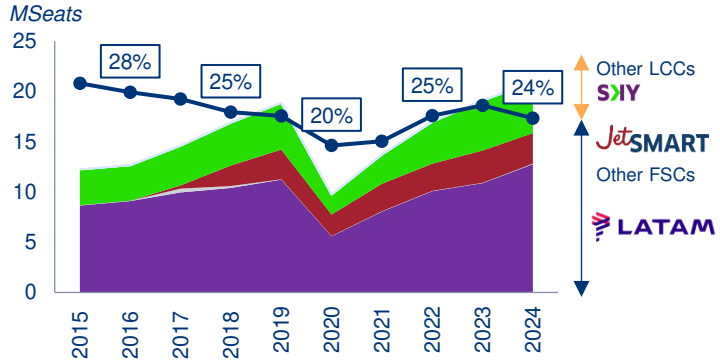


Source: OAG, ALG Analysis

Note: JetSMART has been classified as a Low-Cost Carrier (LCC) across all countries analyzed, except for Chile, where it has not been categorized as such due to its origin as the founding market

Note: Main LatAm markets in terms of seats are displayed

Such increase in LCCs operations and the liberalization process have reduced the general yields in LatAm countries in comparison to 2010 levels

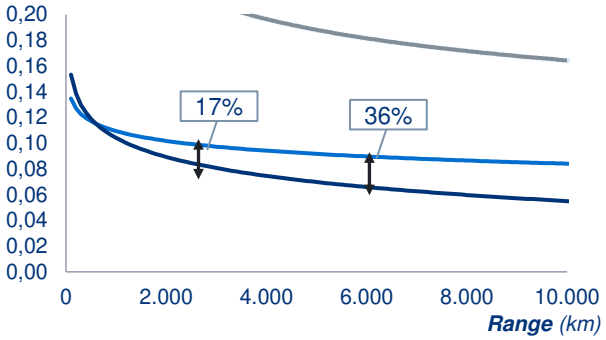
Yield Analysis in Main Latin American Markets

(USD real 2024 per km; 2010-2019-2024)

2010 — 2019 — 2024

5 Development of low-cost business model

Brazil



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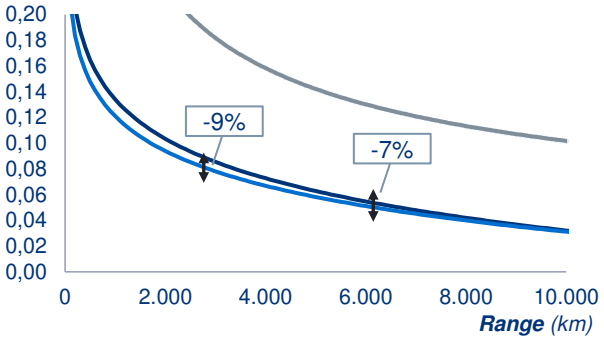

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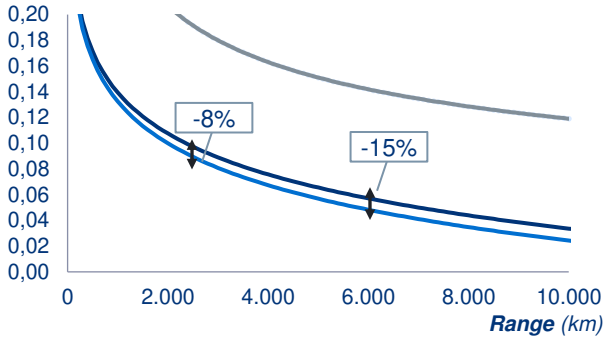

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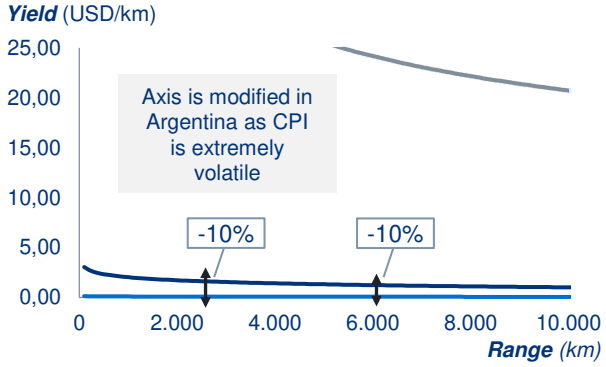

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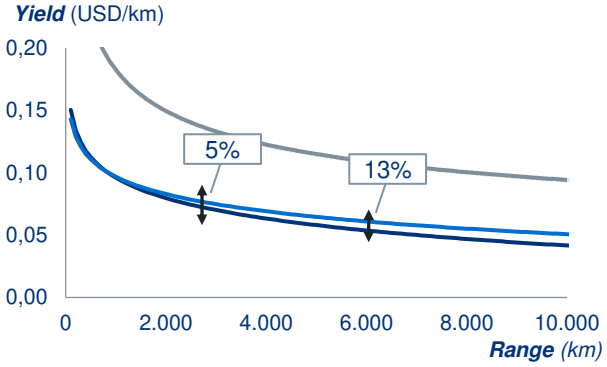

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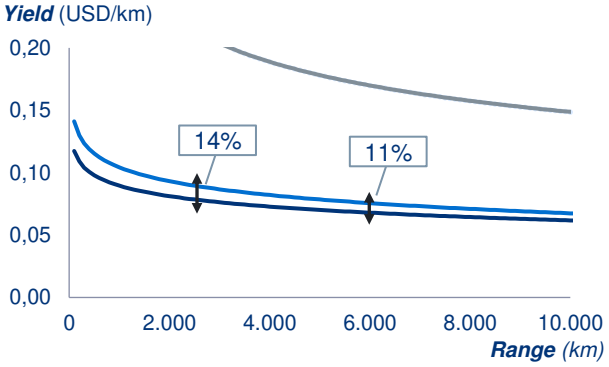


Source: OAG, ALG Analysis
Note: Data dispersion is not shown due to the sample size for each country
Note: Main LatAm markets in terms of seats are displayed

In the domestic market, the yield has decreased ~10% in Brazil between 2019 and 2024, while other LatAm countries have experienced ~20% of increase

Domestic Yield Analysis in Main Latin American Markets

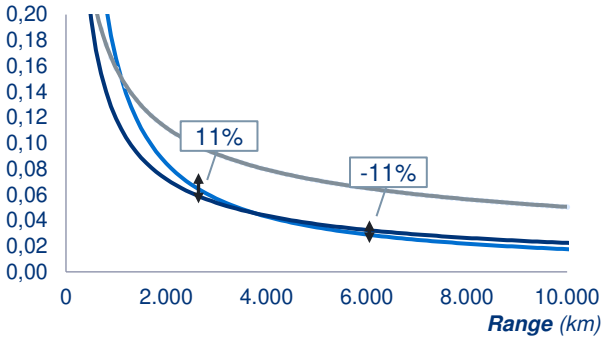
(USD real 2024 per km; 2011-2019-2024)

2011 — 2019 — 2024

5 Development of low-cost business model

Brazil

Note that yield growth has been higher on longer-distances routes



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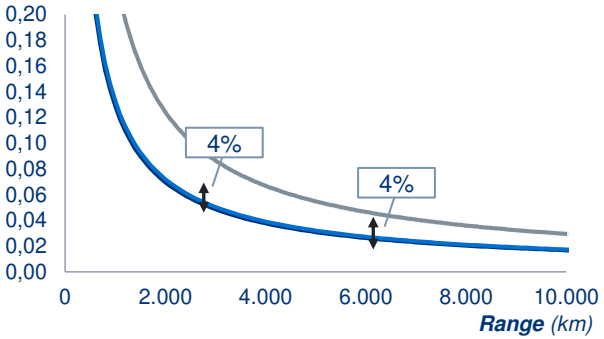

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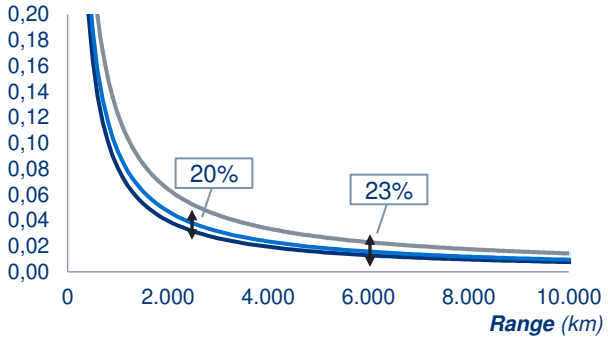

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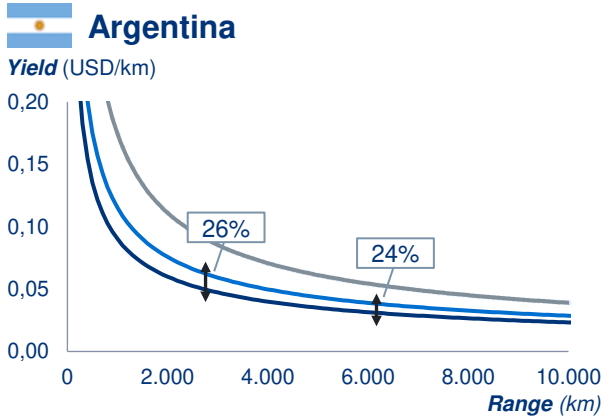

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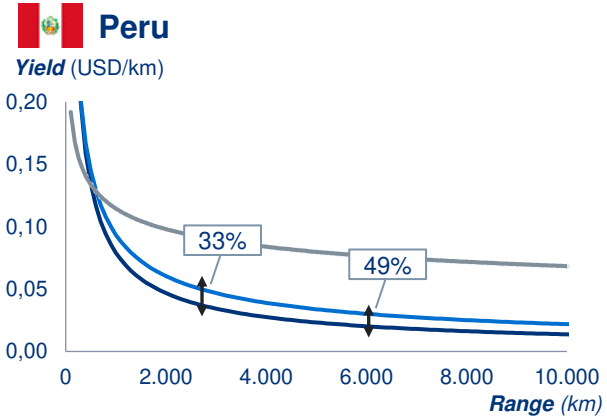

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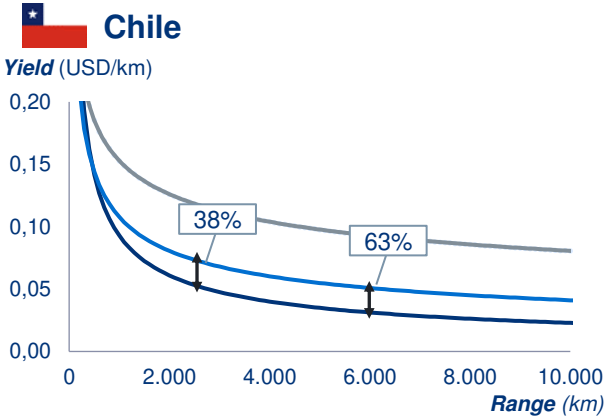


Source: OAG, ALG Analysis
Note: Data dispersion is not shown due to the sample size for each country
Note: Main LatAm markets in terms of seats are displayed

However, in the international segment, yields in Brazil have increased more than that in comparable countries, helping to explain the lower propensity to fly

International Yield Analysis in Main Latin American Markets

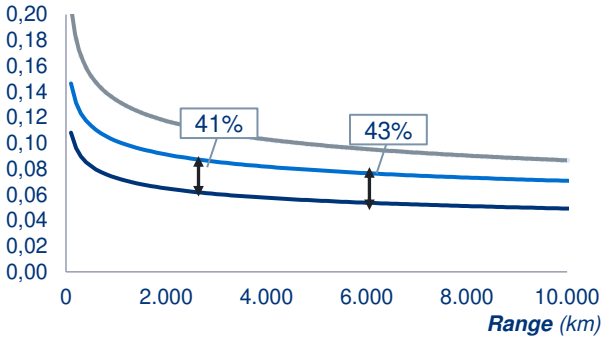
(USD real 2024 per km; 2011-2019-2024)

2011 — 2019 — 2024

5 Development of low-cost business model

Brazil

Note that yield growth has been higher on longer-distances routes



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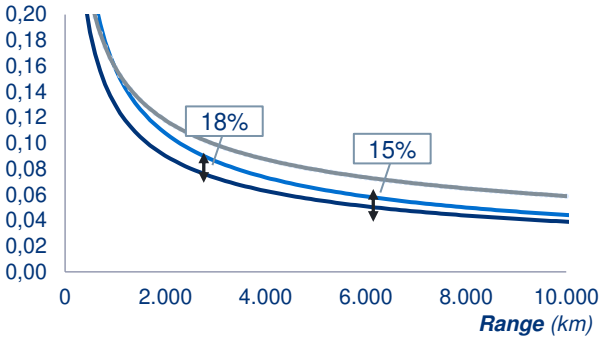

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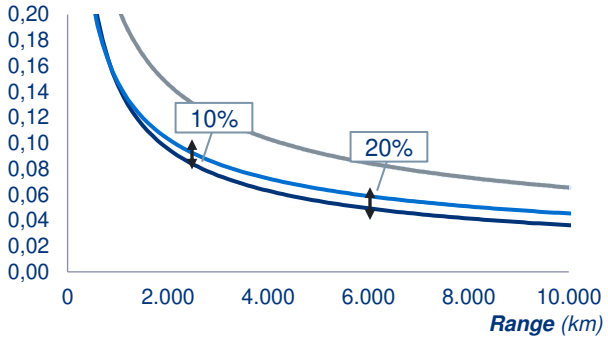

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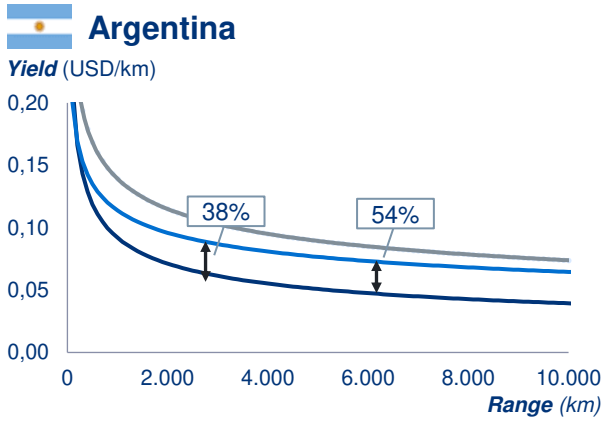

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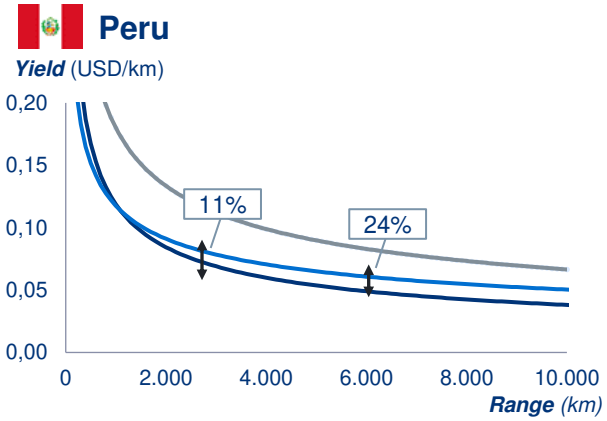

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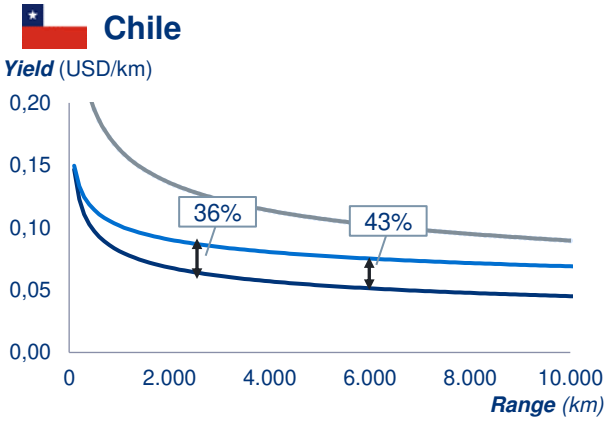


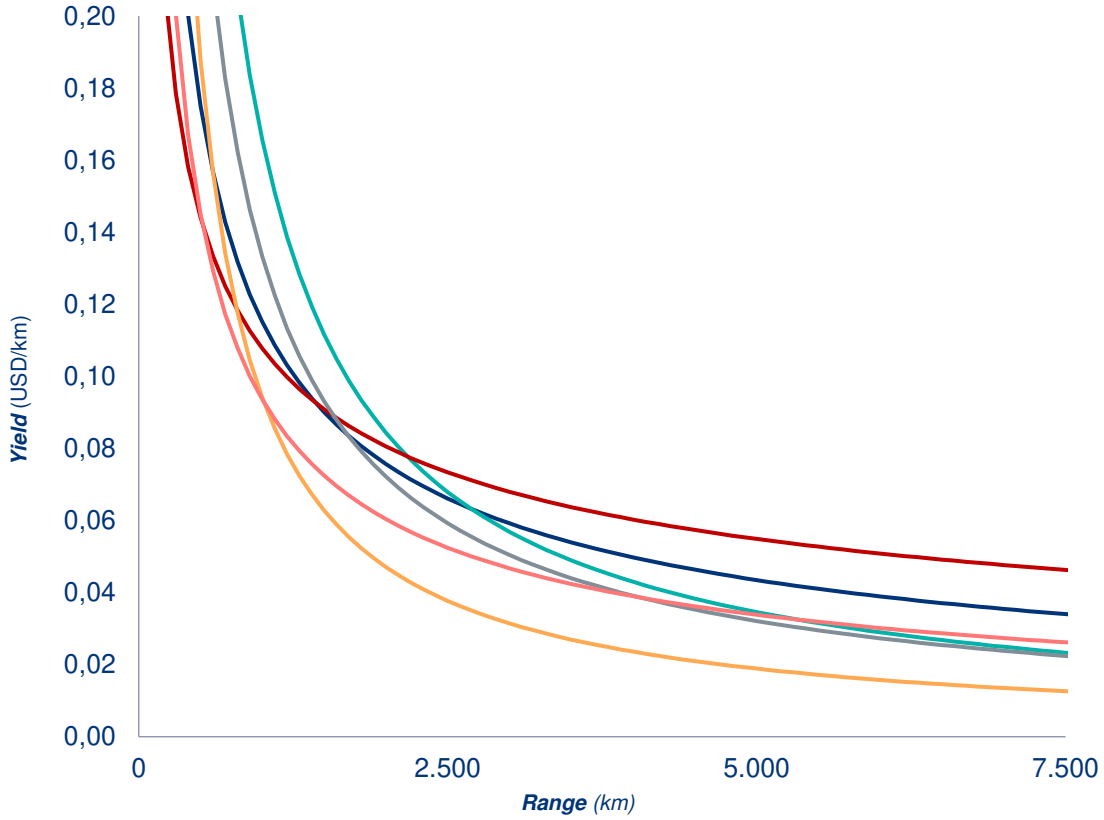
Source: OAG, ALG Analysis
Note: Data dispersion is not shown due to the sample size for each country
Note: Main LatAm markets in terms of seats are displayed

Both in DOM routes under 2,500 km and INT routes with distances larger than 3,000 km, Brazil currently represents the highest yield of such LatAm countries

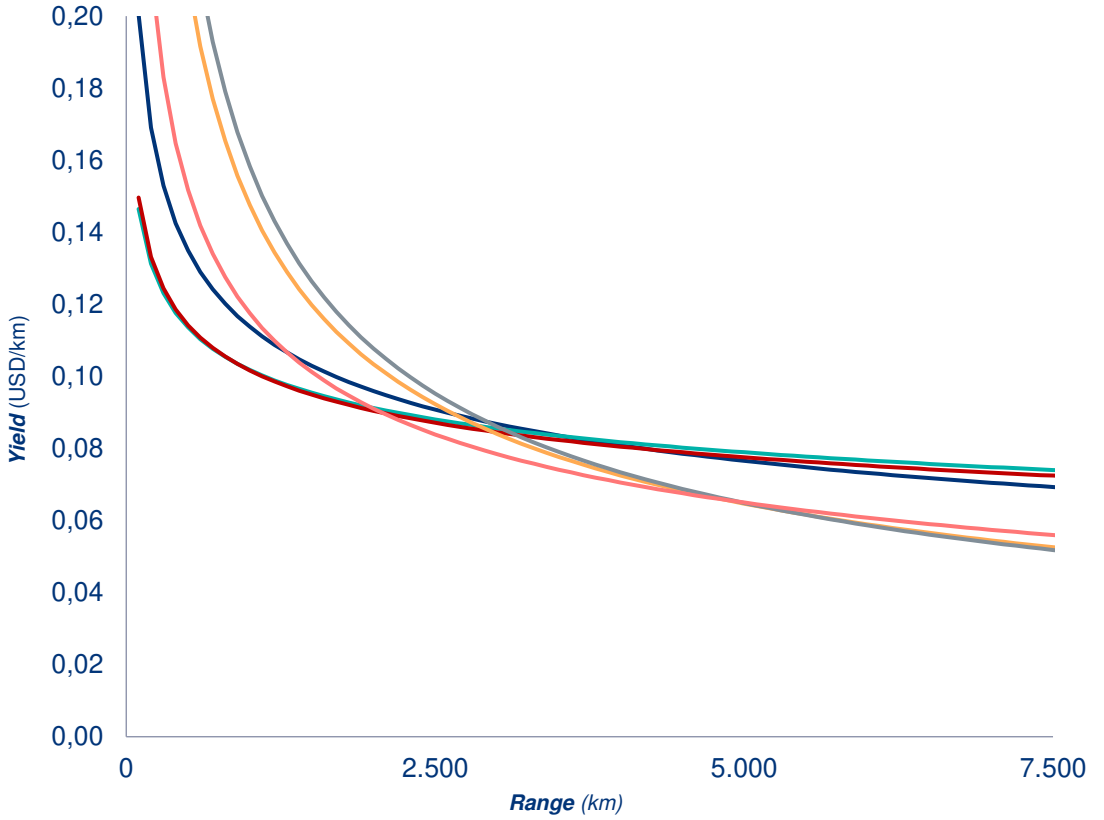
Yield Analysis in Main Latin American Markets (USD real 2024 per km; 2024)

5 Development of low-cost business model

DOM Yield Benchmarking



INT Yield Benchmarking



Source: OAG, ALG Analysis
Note: Data dispersion is not shown due to the sample size for each country
Note: Main LatAm markets in terms of seats are displayed

LCCs in Brazil face regulatory constraints that hinder the full deployment of their business model in comparison to other countries

Brazilian VS LCC Model

5 Development of low-cost business model

LCCs Main Characteristics

- Standardized fleet
- Lower ticket prices
- Point-to-point operations
- Optional add-on services
- High aircraft utilization
- Simplified loyalty programs
- Direct-to customer online sales

✓ Included in ticket price ✗ Not included in ticket price

Item/service	Ryanair	GOL
Carry-on luggage	✗	✓
Seats selection	✗	✗
Flight change	✗	✗
On-board F&B	✗	✓
Booking change	✗	✗
Special assistance services	✗	✓
Airport check-in fees	✗	✓

ANAC regulation establishes a 10 kg free carry-on luggage to all airlines

News European Parliament

Transport MEPs seek to reinforce passenger rights

24.06.2025

Hand luggage and more rights for vulnerable travelers

(...) Passengers should have a right to carry on board one personal item, such as a handbag, backpack or laptop (maximum dimensions of 40x30x15 cm), and one small hand luggage (maximum dimensions of 100 cm and 7 kg) **without an additional fee**

For example, airlines cannot charge for 10 kg carry-on baggage, as ANAC regulations establish that it must be free. Therefore, a truly low-cost model, which could attract price-sensitive customers, cannot truly be established

Source: ANAC, Ryanair, GOL, ALG Analysis

All Brazilian airlines offer a service level between that of LCCs and FSCs, which is reflected in higher fares compared to the traditional LCC low-cost model

Services Offered by Type of Airline in their Base Ticket

5 Development of low-cost business model

✓ Included in ticket price ✗ Not included in ticket price

Item/service	FSC	LCC	Azul	GOL	Latam
Carry-on bag (10-12 kg)	✓	✗ (1)	✓	✓	✓
First checked bag (23kg)	✓	✗	✗	✗	✗
Free seat selection	✓	✗	✗	✗	✗
Complimentary F&B (snack/water)	✓	✗	✓	✓	✓
Free in-flight entertainment (streaming/IFE)	✓	✗	✓	✓	✓
Check in fees	✓	✗	✓	✓	✓
Full refund without penalty	✓	✗	✗	✗	✗
Personal item (bag below seats)	✓	✗	✓	✓	✓

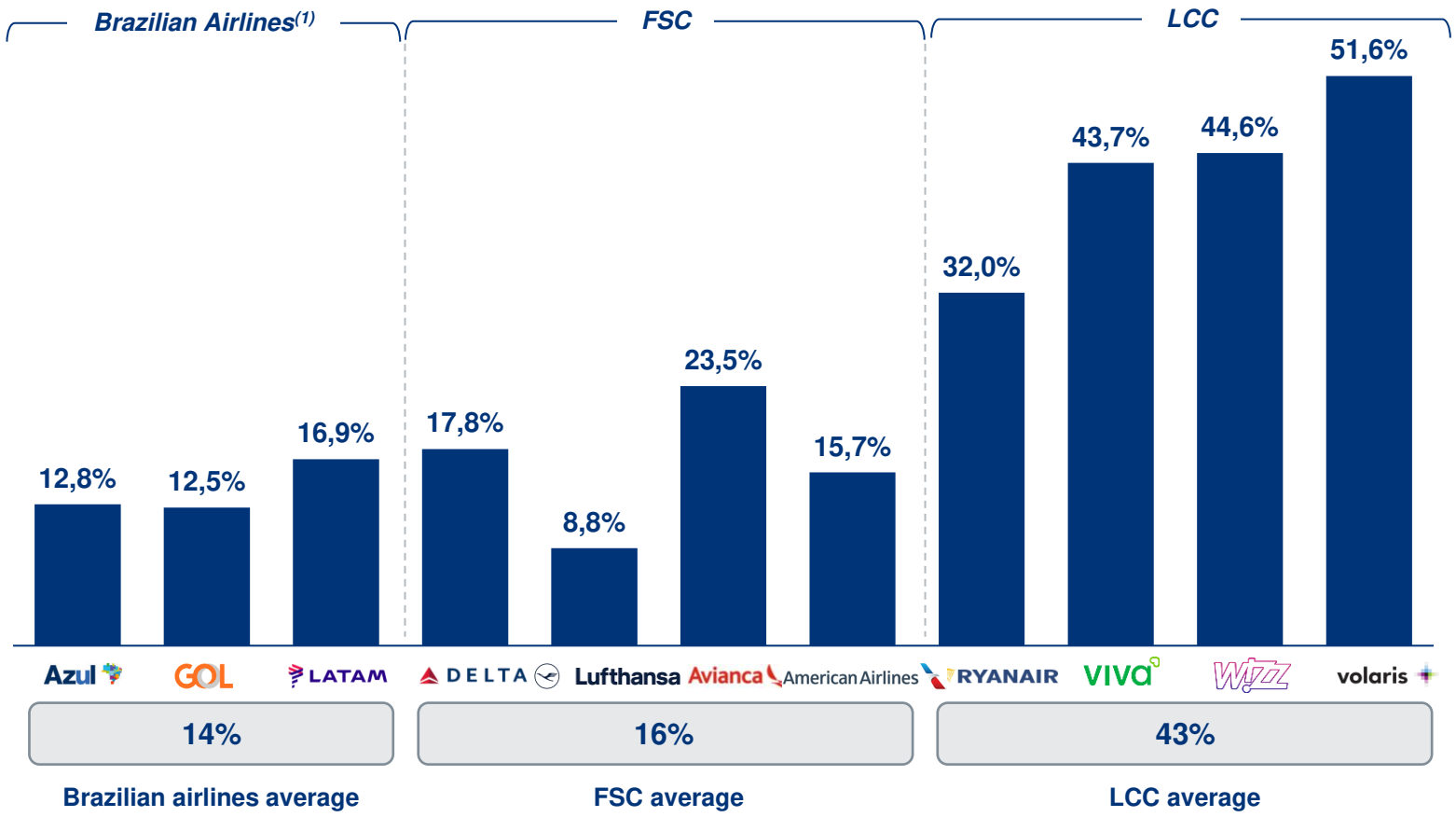
(1) Some LCCs accept carry-on baggages with no extra charge
Source: ALG Analysis

Since some fees are not permitted or socially/politically accepted in Brazil, implementing LCCs is challenging, as ancillary revenues are a major source of income for these carriers

Ancillary Revenues Across Different Airlines

5 Development of low-cost business model

Ancillary Revenue (% of Total Revenue, 2024)



- Ancillary revenue — from baggage fees, seat selection, and change/cancellation charges — is essential for low-cost carriers (LCCs), enabling lower base fares while maintaining profitability. In Brazil, however, regulatory restrictions (e.g. on charging for luggage) and cultural expectations for included snacks and services limit this revenue stream.
- As a share of total revenue, Brazilian airlines average 2 percentage points below full-service carriers (FSCs) and 29 points below LCCs globally. GOL, despite identifying as an LCC, earns 30.5 points less than the global LCC average — highlighting how local conditions challenge the low-cost model.
- To estimate these shares, the same revenue categories defined in the CarTrawler Yearbook of Ancillary Revenue were used. While effective for international airlines, it overestimated Brazilian figures. For greater accuracy, we relied on ANAC's 2021 study (2018 data), which considers all non-fare revenues as ancillary.

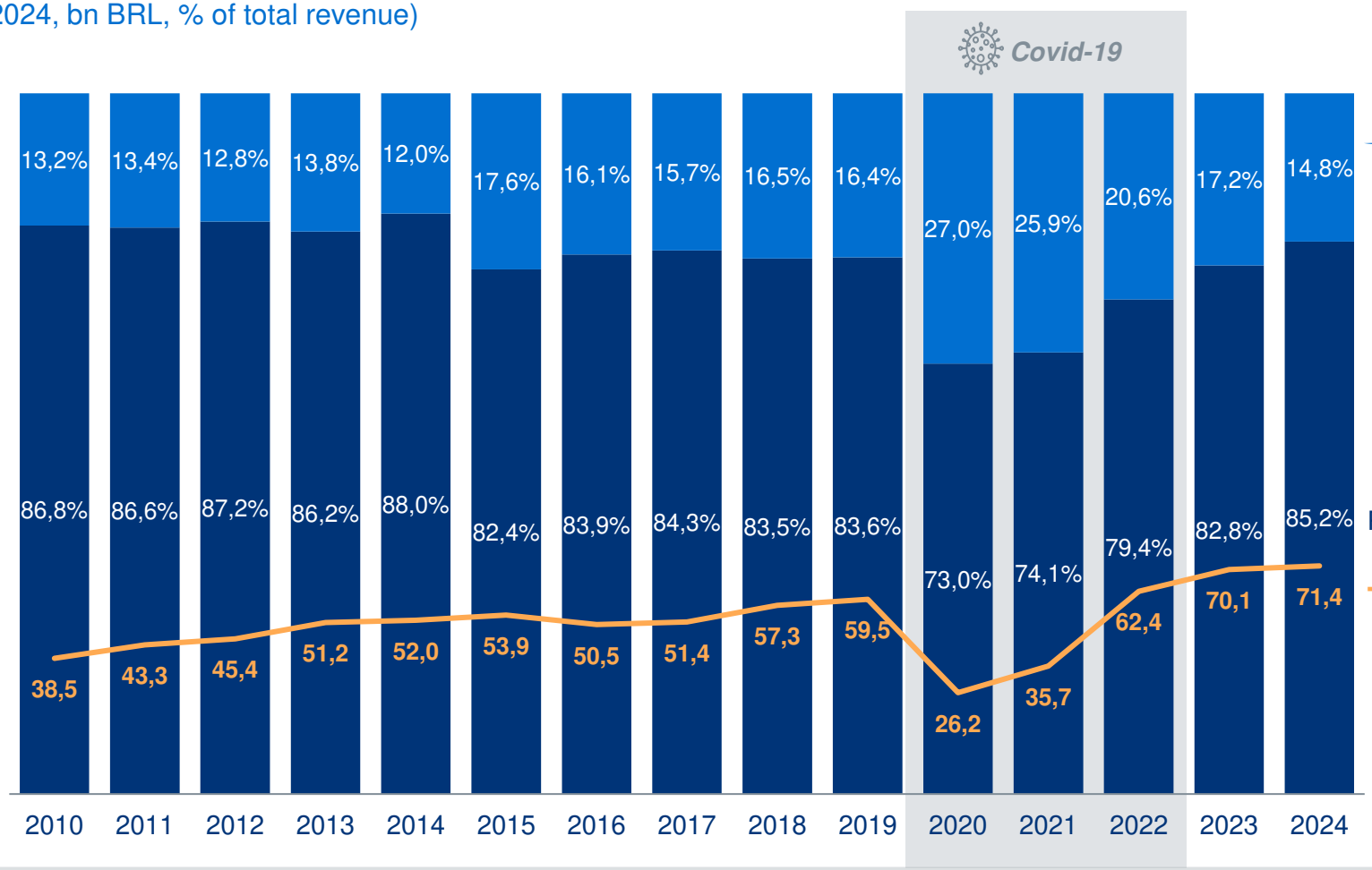
(1) ANAC values from 2018 considered for Brazilian Airlines
Source: All airlines financial results, US DOT, ANAC, IdeaWorks (CarTrawler Yearbook of Ancillary Revenue), ALG Analysis

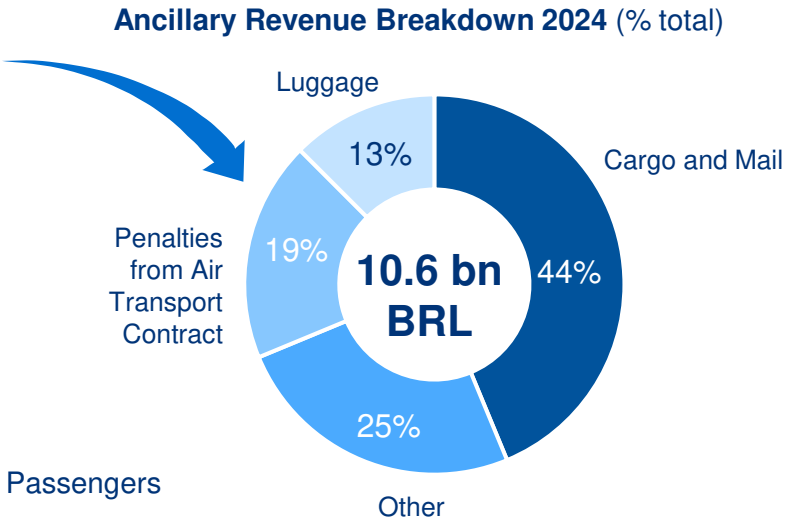
Historic revenue breakdowns show that ancillary revenues for Brazilian airlines have diversified but not substantially increased in overall percentage

Evolution of Brazilian Commercial Air Service Revenue, Total and Composition

(2024, bn BRL, % of total revenue)

5 Development of low-cost business model





Source: ABEAR, ALG Analysis

Another key challenge of low costs model is the regulatory instability that creates uncertainty for airline operations in Brazil, hindering investment, disrupting operations, and reducing market attractiveness

5 Development of low-cost business model

Regulatory Instability

Institutional Instability

- **Stable and predictable regulation** is essential to **attract new players** to the aviation market. However, in **Brazil, regulatory uncertainty** remains a major challenge
- **Challenging national finances** often result in **private operators bearing costs** that **should fall under public responsibility**, such as public security and emergency services
- This instability **impacts** not only the **strategic planning of airlines** but also **undermines consumer confidence and satisfaction.** The absence of resolution discourages competition and positions the country as an **international outlier, in breach of agreements like the Open Skies Treaties**
- Examples illustrate how legal uncertainty continues to **hinder the sector's growth and competitiveness**

High costs due to regulation

- **Flight hour limit**: Brazil caps pilots at **900h/year, while de USA, Europe, and most of LatAm allow up to 1,000**; discussions on alignment in Brazil persist amid regulatory uncertainty. This result **in lower pilot productivity** compared to other regions
- **Baggage fee legal limbo,** veto and delayed congressional review of key ancillary revenue
- **Ramp worker hazard pay (periculosidade),** in 2023, Brazil's labour court (TST) ruled that ramp workers are entitled to hazard pay, even with safety procedures in place. This regulation increased labor costs and introduced retrospective financial liabilities for airlines
- **Consumer Code Prevails Over International Conventions,** Supreme Court reversed its own stance on international flight claims, creating confusion over damage claim deadlines
- **IPTU tax on airport areas,** regulatory changes hinder long-term planning for investors and operators

Metrópoles

METRÓPOLES

Veto on free baggage allowance has gone two years without being voted on

(...) Congress once again removed the veto from the agenda due to a lack of consensus over whether to overturn or uphold the section of the law that would prohibit airlines from charging for checked baggage.

It was **at least the 13th time the veto had been included on** the Congressional session **agenda without being voted on**. In most cases, the session was canceled due to a lack of agreement. On three occasions, the veto was simply withdrawn from the agenda.

(...) The bill addressing the issue was **approved by Congress in May 2022. In June**, **then-President** Bolsonaro **vetoed** the section of the **proposal that guaranteed free checked baggage on flights departing from Brazil.**

If the veto is overturned, airlines will be prohibited from charging for one checked bag weighing up to 23 kg on domestic flights and up to 30 kg on international flights departing from Brazil.

Source: Metrópoles, UOL, Conjur, Jota UOL, ´´Carta de Brasilia´´, ANAC, ALG Analysis

Litigation and legal uncertainty pose a larger cost to the Brazilian domestic and international markets, as they discourage the entrance of new players, especially LCCs

Litigation and Uncertainty as Barriers to Entrance

5 Development of low-cost business model

Litigation frequency and cost

- High legal **costs** and **administrative** burden
- **Uncertain** cost due to moral damages and vague legislation
- Litigation **culture** treats compensation as an **opportunity rather than genuine redress**
- **Distortion** of airline **network planning** and service provision

Legal Uncertainty

- **Government interferes in free market flight allocation**
- Frequent **policy changes** on whether airlines can **charge for checked baggage** (crucial revenue stream for LCC)
- Complex and **unstable tax structure** with rates varying by state, route, aircraft type and aviation mode (regional, domestic, etc)
- **Inconsistent enforcement** and overlapping **regulations** by judiciary

Airlines that have mentioned this as a barrier

JetSMART flybondi norwegian

Source: Gazeta do Povo, UOL, ALG Analysis

Overall, the key barrier of entry for a new player and or the development of a strong LCC model in Brazil is the UNCERTANTITY: improving legal forecasting, ensuring stability, and advancing reforms focused on predictability and global alignment are essential to changing Brazil's current uncertainties

Tax Reform

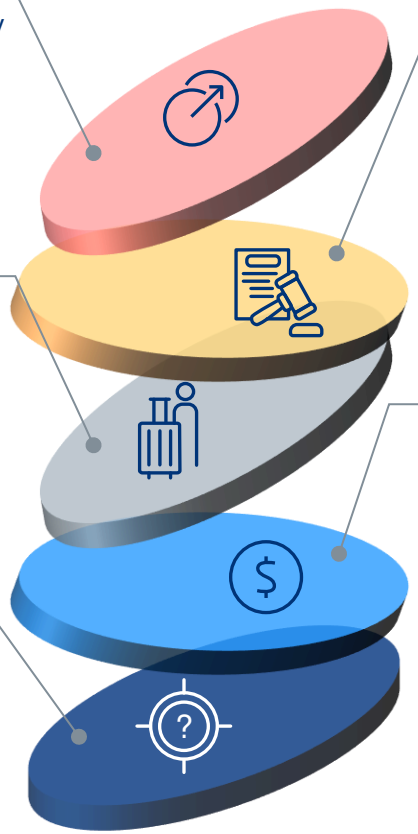
- **Potential rise in total tax burden** (IBS + CBS), with uncertainty over taxation of jet fuel and airfares
- **Unclear transition rules and special regimes** for regional/international transport **undermine financial planning and may result in higher fares** due to cost pass-through.

Judicialization of passengers

- **Brazil represents over 98% of global aviation lawsuits,** causing increase in legal costs and compensations (approximately 1 bn BRL annually)
- This fosters **opportunistic litigation, judicial uncertainty, and requires dedicated legal and HR resources,** negatively affecting airline reputation and raising regulatory risks

Unpredictable legal environment

- **Uncertainty in interpreting and enforcing tax, regulatory, civil, and labor laws** generates **unpredictable legal risks,** restricting domestic and foreign investment
- **This leads to low legal certainty for long-term planning,** barriers to international market entry, and reduced appeal of Brazil as an aviation and logistics hub



Labor disputes

- **Increased litigation over crew scheduling, fatigue, and variable pay** has resulted in labor liabilities affecting company finance
- **Unstable union relations and legal uncertainty** impede labor modernization, discourage direct hiring, and may boost outsourcing

Other taxes

- **Sudden increase in operational costs from IOF and IRRF** the leasing-based fleet model and **increase airline's costs**
- This d**iscourages aircraft renewal, reduces competitiveness** versus countries with leasing exemptions, and **complicates financing and contract renegotiations** due to diminished legal and tax incentives

- Brazil's aviation sector faces **legal and tax barriers creating a structurally unstable, unpredictable environment**
- The **tax reform, rather than simplifying, remains uncertain, deterring investment and increasing risks**
- **Excessive litigation by passengers and workers burdens the industry** and disrupts stakeholder balance
- **Low legal certainty discourages route expansion, fleet renewal, and international presence**
- Reversing this situation requires more **legal foresight**, **institutional stability** and **structural reforms focused on predictability, justice and alignment with international standards**

Source: ALG Analysis

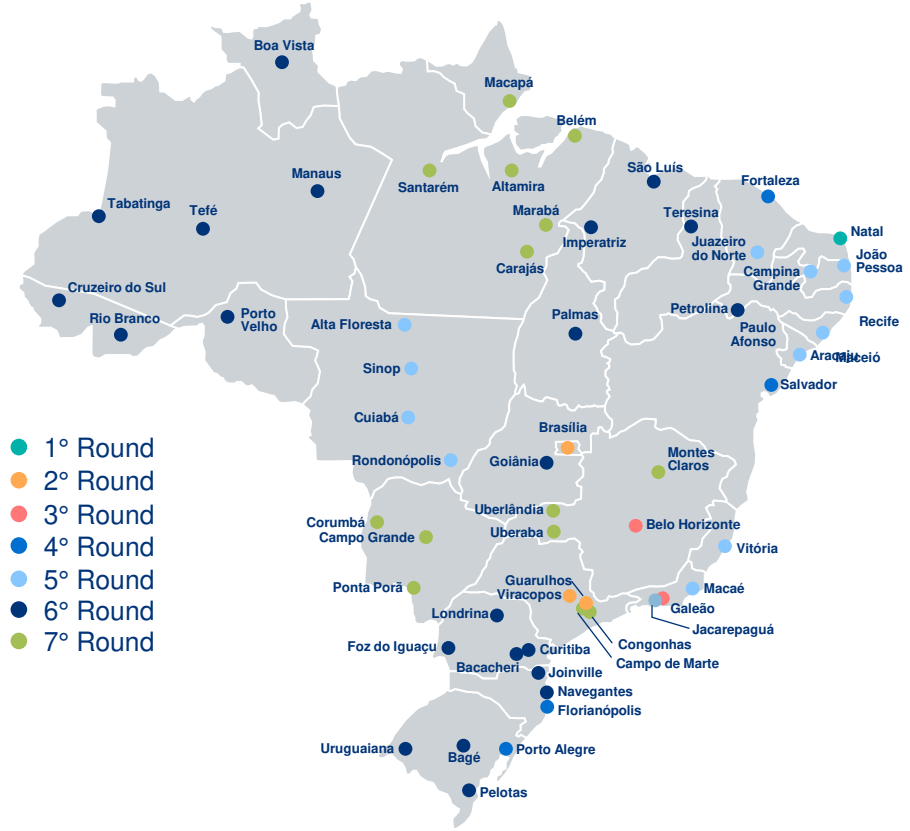
Content

- **Market Analysis**
  - **Brazilian market characteristics and bottlenecks**
    - Extrinsic drivers of air market
    - **Intrinsic drivers of air market – Airport infrastructure**
- Strategies to stimulate Brazilian market
- Conclusions
- Annex: Economic Impact of Aviation

The federal airports concession program in Brazil was carried out through 7 rounds which included almost 60 main infrastructures responsible for ~90% of air traffic

Brazilian Federal airports concession program

6 Strengthening of hub & spoke strategies in LatAm hubs



- The concession of the Brazilian airports was carried out through auctions organized by the Federal Government in collaboration with the ANAC (National Aviation Agency), **resulting in more than 60 airports currently under concession among more than 600 Brazilian airports**
- **So far, 7 rounds of concessions have been carried out**. The first round awarded the concession of Natal International Airport to the concessionaire Inframerica. Then, the concession structure framerowk has been developed, including groups of airports in order to include secondary airports in the program

98%
of air cargo moved in the country

~90%
of passengers traffic

59
concessioned airports

Concessionaries operating main airports

aena · Zurich Airport Brasil · GRU AIRPORT · BH Airport · INFRAMERICA · Socicam · Fraport · RIOgaleão · xp · VIRACOPOS · VINCI AIRPORTS · motiva

This program drove significant infrastructure improvements at major Brazilian airports; however, many smaller regional airports still lack adequate facilities

Source: ANAC, ALG Analysis

Although main airports in the country have benefit from a modernization process through the concession rounds, infrastructure in regional airports is still limited

Infrastructure Limitations in Regional Airports

6 Airport Infrastructure

Strategic relevance of regional connectivity

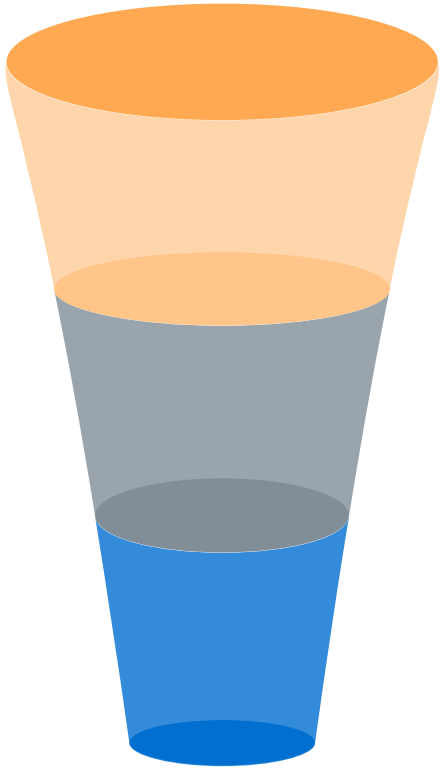
Regional airports are key to reducing travel times across Brazil's vast territory, improving access to underserved areas, and supporting economic inclusion beyond metropolitan centers

Consequences of underutilized regional infrastructure

The lack of viable alternatives outside majors hubs limits competition, increases fares in certain corridors, and restricts options for passengers in medium and small cities

Untapped potential for traffic growth

Strengthening the regional airport network could enable the development of point-to-point routes, support regional carriers, and unlock new demand pools – particularly in states with large distances and no rail or highway alternatives



+ 60 airports under concession

A growing number of regional airports are now operated by private concessionaires, aiming to modernize infrastructure and improve service quality

Only a portion with infrastructure for narrow-body jets

Runway extensions, terminal capacity and basic operational features remain insufficient in many airports to allow regular operations of jets like the A320 or B737

Few routes added outside main hubs

Without infrastructure readiness, these airports remain disconnected from the national network

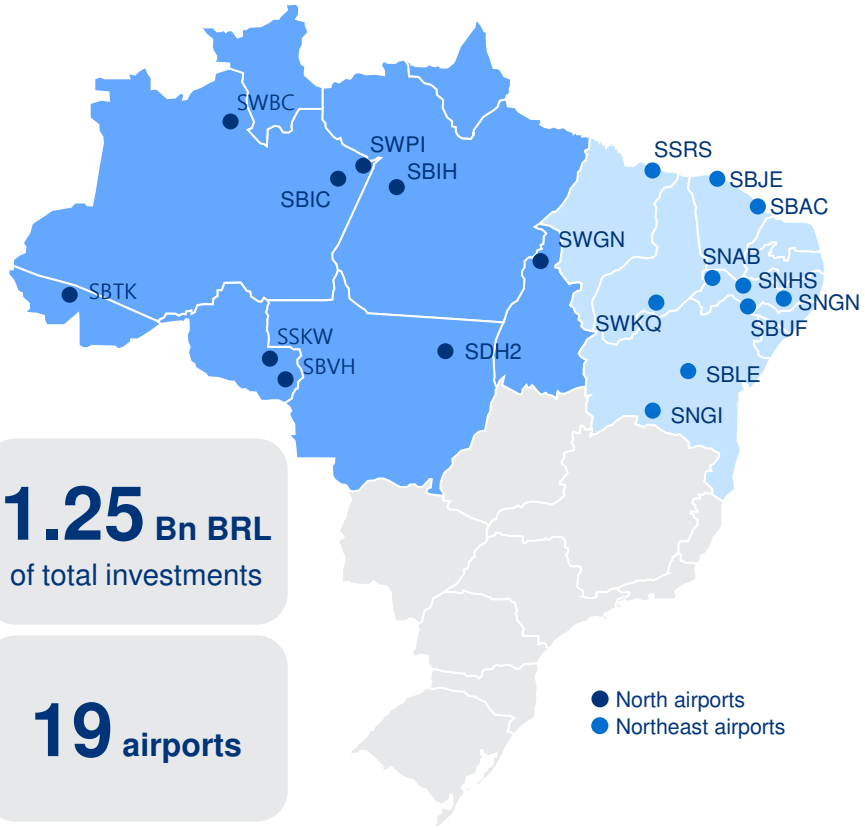
Source: ALG Analysis

The current AmpliAR program will enable investments in regional airport in the following years, focused on improving airport infrastructure of remote zones

AmpliAR concession program

6 Strengthening of hub & spoke strategies in LatAm hubs

Airports covered under the first phase of the program



1.25 Bn BRL
of total investments

19 airports

Summary

- After a significant improvement of the airports with commercial operations, the federal Brazilian government launched the **AMPLIAR program to modernize and improve the infrastructure of the regional airports, aimed at increase connectivity specially in remote zones**

Scale

- As whole, the program intends to attract more than 5 Bn BRL of investments to modernize around 100 airports in Brazil. **For the first phase of the program, 19 airports were included, in a total of 1.25 Bn BRL of investments**

Framework

- The contract targets **concessionaires** currently operating airports under existing concessions, who **will be compensated through amendments designed to rebalance their contracts**
- **The public notice of the first phase of the program was released in June/2025**, with expectations to receiving offers by September/2025
- Inclusion of 19 airports, **which can be granted in groups or individually** by a period of 30 years

Aimed regions

- Whole program: **Brazilian remote zones**
- First phase: Areas of **Legal Amazon and Northeast** with low connectivity

Objectives

- **Enhancing regional aviation**
- **Modernization and expansion of airport infrastructure**
- **Increase of connectivity and development of remote zones**

Source: ANAC, ALG Analysis

In terms of infrastructure, the lack of available slots at CGH and GRU – São Paulo's main airports – represents a structural barrier to the entry of new airlines

Slot Regulation and Limitations in Brazil

Slot coordination levels

- **Level 3 airports**: coordinated airports with compulsory slot allocation. Slots **managed by ANAC**. CGH, GRU, PLU, REC, SDU
- **Level 2 airports**: schedule-facilitated airports facing congestion during specific time periods. The **airport's administrative body is responsible for allocating infrastructure to planned operations**. BSB, CNF, FLN, FOR, GIG, POA, SSA, VCP
- **Level 1 airports**: non-coordinated airports. Airline can operate without previously approved slots

Slot management rules

- **Use-it-or-leave-it policy**: airlines must use at least 80% of their slots to maintain
- **Slot redistribution**: the loss of the right to operate a slot implies its relocation through an established process, where 50% of slots are redistributed to operating airlines and 50% are asigned to new entrants
- **Secondary slots market**: in 2022, the **sale or transfer of slots between airlines was authorized under regulated conditions** to prevent excessive market concentration

Limitations of Current Slot Situation in Brazil

Limited access to São Paulo airports: major hubs operate at full hourly capacity, leaving no room for new entrants. The issue could be resolved by increasing infrastructure capacity, which is unlike, or by establishing regulations that facilitate market entry

Structural barrier to competition: incumbent airlines hold the majority of slots, while opportunities to retain new slots are limited and sporadic

High slot concentration: although ANAC aims to redistribute released slots to new players, the available slots volume remains insufficient. There is a **lack of available infrastructure**

Regulatory framework: current slot allocation criteria makes it virtually impossible for new entrants to establish themselves at CGH

Source: ANAC, Ministerio de Portos e Aeroportos, ALG Analysis

ANAC faces backlash for holding slots, while current rules favor incumbents and require new entrants to meet a 1% RPK threshold

Slot Regulation and Limitations in Brazil

5 Development of low-cost business model

Congonhas Airport

To request slots at São Paulo/Congonhas Airport, an airline must meet at least one of the following:

I. Operate **paid passenger flights with** an average of **over 4 aircraft** in each of the **past 3 years**

II. Hold at least **1% of the domestic market share** (measured in RPK) in each of the **last 2 years**

III. Hold at least **2% of domestic RPK in the past year**

2024 Slot distribution at Congonhas[1]

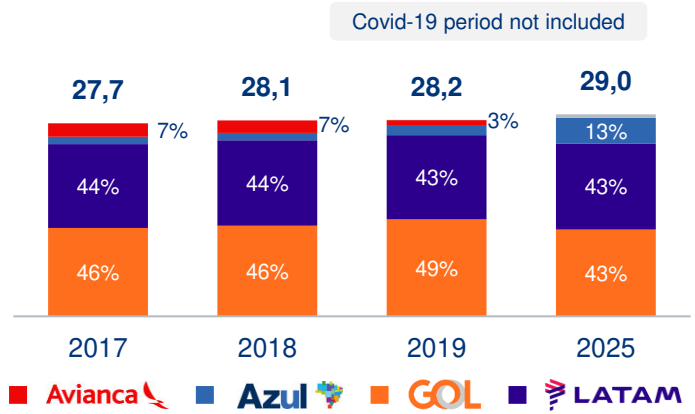
LATAM	GOL	Azul	VOEPASS
41.24%	40.89%	14.43%	3.44%

ANAC Regulations

- Policy aims to **prevent newly created airlines** from entering **solely to obtain slots** and then being **acquired by established carriers**. This is not a pure ANAC process but an industry one
- Designed to **avoid circumvention of competition rules**
- **CADE** (Administrative Council for Economic Defense) is **monitoring for competition concerns**

CGH Seat Supply Evolution

Mseats, % total



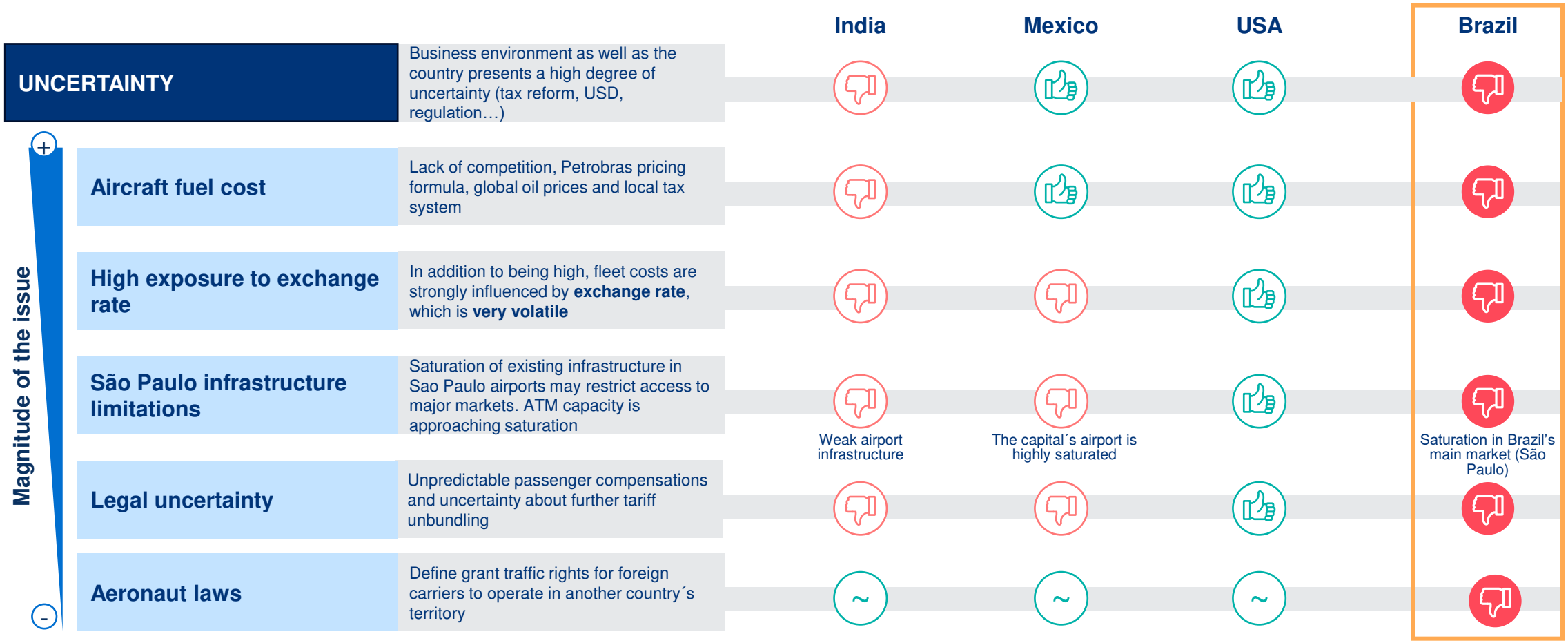
Avianca went bankrupt in 2018–2019, and its **slots at CGH were taken over by airlines that were already dominant** in the Brazilian market. This shows the difficulty that other competing airlines face in entering the airport

Restrictions on slot acquisition hinder LCCs' interest in operating in Brazil, as CGH would represent a highly profitable entry point

[1] Slots from Monday to Friday
Source: ANAC, Folha de S.Paulo, ALG Analysis

In short, despite the progress made in liberalization, there is still room for improvement, as Brazil retains certain barriers that hinder the entry of LCCs into the market

Barriers to Entrance of new Airlines in the Domestic Market



Source: ALG analysis

Content

- Market analysis
  - Extrinsic drivers of air transport market
  - Intrinsic drivers of air transport market
- **Strategies to stimulate Brazilian market**
  - **Recommended actions**
  - Impact
- Conclusions
- Annex: Economic Impact of Aviation

ALG

The “Carta de Brasília”, a unified declaration of sector priorities, highlights key demands to unlock growth in Brazil´s aviation and focuses on the need for increased competition

Priorities for the modernization of Brazilian aviation market according to “Carta de Brasilia”

Accessibility to air transport

- **Stable and predictable regulatory environment**: Once the current political and regulatory instability of the Brazilian air transport industry hinder the attractivity of new players, it is crucial to set clear rules and guarantee a stable and predictable regulatory environment in order to improve the accessibility to air transport
- **Composition of ANAC:** Considering the its function as a normative, regulatory and supervisory authority, with high complexity involved, ANAC positions need to be filled by individuals with recognized expertise and sector knowledge, nominated under legal basis
- **Industry bottlenecks:** In order to promote competition and develop the Brazilian air transport industry as seen in other international markets, it is crucial to address some structural issues such as exchange rate and interest rate pressures, the high cost of litigation, inadequate fuel pricing policies, and regulatory uncertainty

Tax regime

- **Aviation as a network industry**: To broaden access to air transport, it is essential that all the stakeholders of the system work together promoting efficiency and stimulating competition, enhancing taxation neutrality, in order to attract new players and expand air transport services
- **Taxation system comparable to worldwide standards:** Given that the Brazilian aviation sector faces one of the highest tax burdens in the world, it is essential to design a tax regime that supports the industry, ensuring stable tax rates while enhancing market attractiveness

Sustainability

- **Incentive to SAF use, supply chain infrastructure and production**: In order to advance the energy transition, the government could promote the use of SAF through tax incentives and investments in research, production, and infrastructure, making the country self-independent in the production with an integrated supply chain
- **Operational efficiency:** Moreover, to reduce the fuel consumption and the emissions, it is crucial to take measures to optimize routes, ATM management and modernize the current fleet
- **Compensation of carbon credits:** To further promote sustainability, it is essential to establish policies that foster transparent and accessible carbon markets aligned with international practices, enabling airlines to offset their emissions without imposing excessive costs or obligations on the sector

Source: Carta de Brasilia, ALG analysis

The main bottleneck and key agendas highlighted in the “Carta de Brasília” are in line with the market needs and the uncertainties identified

Bottlenecks of Brazilian Aviation

- Formulated during the National Civil Aviation Mobilization Meeting, **Carta de Brasília** is a unified declaration of sector priorities and **urgent demands for improving Brazil's aviation system**
- It outlines how, for aviation to be a true driver of national development and regional integration, it is essential to ensure **legal, regulatory, fiscal, and operational conditions that support growth and affordability.** Ultimately, Brazil must create conditions that **attract a new airline**
- However, this will only be possible if the other demands — tax reform, regulatory efficiency, infrastructure upgrades, legal clarity, and sustainability — are fully addressed. Without **solving these structural barriers**, continuous **investment**, healthy competition, and the expansion of operations is not possible

Source: Carta de Brasilia, ALG Analysis

In summary, the air market remains restricted due to high costs and structural constraints, limiting its full potential, what could be mitigated through targeted restructuring measures

Improving air traffic in Brazil: summary of issue, causes, effects and solutions

Causes

Operational Costs - Supply of Services

- **Exchange rate** pressure on leasing
- • **High fuel costs** due to high tax rates of ICMS
  • Inefficient fuel pricing policy
- **Excessive litigation** and barriers to competition

Regulation

- **Legal constraints** to the entrance of LCCs and legal insecurity

Airport Infrastructure

- **Slot restriction** at CGH and a slot allocation policy that hinder the entry of new airlines
- **Legal and judicial changes** affecting costs (IPTU, legislative bills…)

Socioeconomic

- **Economic instability** in Brazil
- **Low purchasing power** of population
- Cultural perception of air **travel as luxury**
- **Underdeveloped international tourism**

Effects

Social

- **Lack of access of lower social classes** to air transport (especially C and D)
- **Low propensity to fly** in comparison to LatAm countries
- **Difficulty of development of regional markets**

Economic

- **Preference for road transport**, even in long routes (Accidents + “Brazil Cost”)
- **Barriers to business development and torurism attraction**, especially international

Aviation Market

- **Less capacity to attract investors, airlines and LCCs** to the market, with high concentration
- **Difficulty to increase connectivity**, with traffic mainly concentrated at Hubs
- **High yields and tickets price**, hindering the acces to air transport

Solutions

Subsidies and government investments agenda

- **Policies to ensure regional connectivity**
- **Incentives for low-income population**
- **Tax reform and incentives**

Market environment improvements agenda

- **Fuel energetic transition**
- **Regulation focus on competitivity**
- **Fuel supply and costs**

Market environment improvements agenda

- **Tourism promotion**
- **Touristic infrastructure and qualification**

Source: ABR, ALG Analysis

Considering such guidelines and the multiple barriers to enter the market, there are eight main mechanisms aimed at improving Brazil's air connectivity and propensity to fly

Key Mechanisms to Increase Connectivity and Propensity to Fly

Government investment and incentives agenda

A Policies to ensure regional connectivity

- **In Brazil, there are routes which are not profitable for airlines, such as in remote zones and smaller airports, requiring subsidies for their operation.** It is necessary to increase connectivity both in main and regional airports
- **Subsidies through an essential air service program (EAS)** from government would enable new routes, improving connectivity

B Lines of credit for air travel

- Since air travel is limited to higher-income groups, **offering credit lines for flights and vacation packages would make flying more accessible**
- Moreover, the **creation of credit lines in BRL to finance airlines would reduce its exposure to exchange rate fluctuations**

C Tax Reform

- It is key that the tax reform recognizes aviation as an economic enabler and a strategic asset for the integration of the country, driving socio-economic benefits for smaller and remote locations
- Considering the future tax reform and the end of the current ICMS-based incentives, it is necessary to create municipal and/or state-level dedicated funds to finance strategic air routes, helping to foster connectivity and avoid a rupture of current hubs

Market environment agenda

D Cost optimization

- To reduce the pressure from high fuel costs and drive competition, it is essential to review the fuel production and distribution structures, while reviewing Petrobras' fuel pricing formula
- Considering the future tax reform and the end of the current ICMS-based incentives, it is necessary to create municipal and/or state-level dedicated funds to finance strategic air routes, helping to foster connectivity

E Regulation to increase competitiveness (new entrants and development of LCC)

To stimulate an increase of the aviation market and attract new airlines to operate in the country, it is crucial to promote the following structural regulation framework changes: slot regime, ancillary services regulation, judicial practices…

F SAF transition

Given the need to meet environmental targets and the potential cost impact of introducing SAF in Brazil, it is crucial to develop a structured plan for the energy transition and SAF scale-up, following these steps:

- Establishment of clear regulatory framework for SAF
- Creation of economic and tax incentives specifically for routes using SAF
- Development of national supply chain of SAF
- Integration into refining and distribution infrastructure of SAF

Tourism agenda

G Tourism promotion

- Tourism campaigns promote travel destinations through subsidies, marketing initiatives, and public-private partnerships
- **These efforts help increase tourist flows to specific locations, boosting either domestic or international traffic** depending on their focus, as seen in many campaigns worldwide

H Touristic infrastructure and qualification

- **Brazil's tourism sector currently faces structural challenges** related to hotel infrastructure, service quality, workforce training, and public security
- **Addressing these issues** through coordinated structural improvements, involving all stakeholders, **would enhance the country's attractiveness and stimulate tourism demand**, even international or domestic

Source: ALG Analysis

Subsidies are used to support operations that are not commercially viable, through three types of policies: route-based, passenger-based, or airline-based

Main Types of Subsidies to Air Traffic

A Subsidies through EAS

	Mechanism	Contractual Framework	Type of incentive	Price to passenger	International experiences
Policy based on routes	Specific routes	Competitive bidding	Payment of the difference between the market and the airline operating cost	Discount on market prices/ Fixed prices	USA (EAS), Europe (PSO) Australia (RASS) ….
	Routes in accordance with traffic distribution	Defined by law	Payment of some corresponding number of seats with a fixed price to the airline	Market prices	India (RDG)
Policy based on passengers	Discount to residents	Defined by law or competitive bidding	Payment of the difference between the market and the airline operating cost	Discount on market prices/ Fixed prices	Spain (touristic islands) Scotland (remote zones)

Subsidies are commonly directed toward domestic traffic, particularly to remote areas and regions with low demand — which aligns with the needs of Center-West, Northern and Northeastern Brazil, where air connectivity remains limited

Source: IDB, ALG Analysis

The incentive of air traffic is common in Europe and other countries, supported by policies that target routes and passenger groups

Europe: Public Service Obligations (PSO)

Program	Public Service Obligations (PSO)
Objective	Maintaining appropriate scheduled air services on routes which are vital for the economic development of low-income regions
Scale	~ 250 routes and >200 MUSD of annual incentive (2019)
Contractual framework	**A competitive bidding process is conducted for the operation of a route,** establishing frequencies and service levels**.** If no airline expresses interest**, the program covers the gap between operational costs and expected revenues**
Type	Policy based on routes

Main Routes Attended

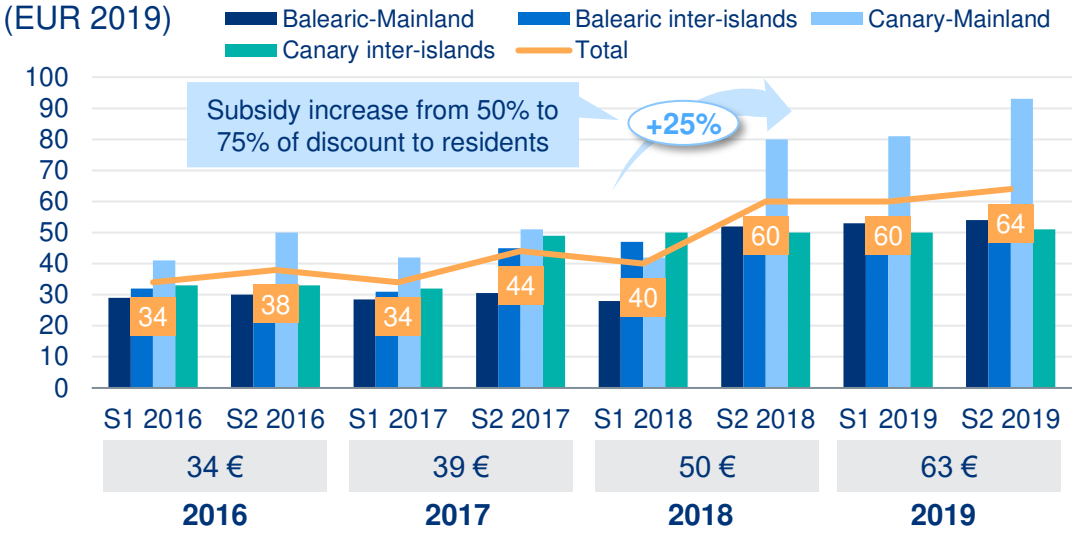
Spain: Subsidy for Residents of Touristic Islands

A Subsidies through EAS

Program	Subsidy of routes to islands territories in Spain
Objective	Improving the air connectivity among island territories and the rest of the country and compensating its residents for its peripheral location
Scale	>700 MEUR (2019)
Contractual framework	**The residents of islands regions have 75% discount** for routes between islands and between islands and mainland
Type	Policy based on passengers

Average Subsidy Costs per Trip

(EUR 2019)



Source: European Comission, CNMC, ALG Analysis

In Chile, air transport subsidies are granted through both route-based policies -targeting specific underserved connections- and passenger-based schemes

Chile: Subsidies to Air Traffic

A Subsidies through EAS

Law 20378

Project characteristics

Promoter:

Ministerio de Transportes y Telecomunicaciones

Location:

Chile

Date:

2009- present

Objective:

Provide air transport to isolated areas

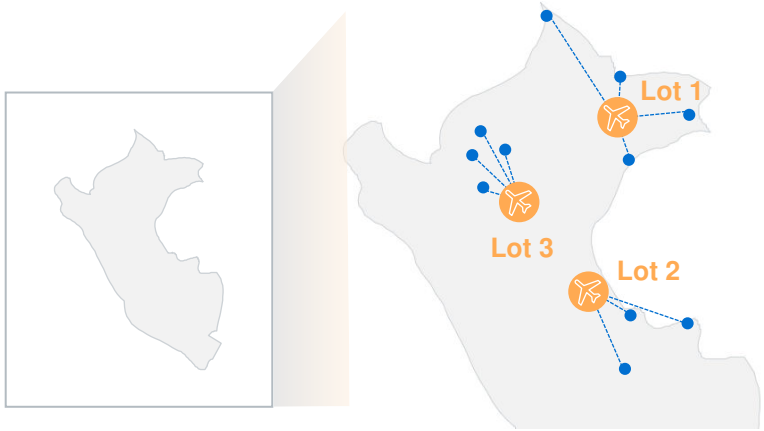
Project explanation	• There are 2 types of subsidies: **policies based on routes and policies based on passengers**. Policies based on route' objective is to **provide air services to remote areas**; policies based on passengers' objective is to **support the mobility of low-income populations from remote areas** • Currently, subsidies exist in a total of **17 routes**
Offered conditions	• In the case of supply-side subsidies, the identification of isolated locations is based on the travel time from each location to the nearest one offering essential services such as healthcare, education, and others. These types of subsidies are not exclusive to residents of the targeted areas, and the currently affected regions are Valparaíso, Biobío, Los Lagos, Ausén and Magallanes • The demand-side incentive is granted in cases where the share of household spending on transportation exceeds a specified level, known as the fare-based isolation threshold
Key outcomes	• The law has been established as an effective public policy to ensure affordable fares, promote territorial equity, and enhance infrastructure resources throughout the country

Source: Gobierno de Argentina, Centro Regional de Estudios Económicos de Bahía Blanca, ALG Analysis

In Peru, subsidies are provided for routes with limited access or where no private service offering exists

Peru: Subsidies to Air Traffic

A Subsidies through EAS



Project characteristics

Promoter:
DGAC Dirección General de Aeronáutica Civil PERU

Location:
Peru

Date:
2010- present

Objective:
Increase connection with Peruvian Amazon

Project explanation	• The initiative originates from the DGAC (Directorate General of Civil Aviation) • The program is driven by the need to ensure access to medical care, carry out business initiatives, pursue higher education, or complete official administrative procedures in remote areas or regions lacking private service offerings • Thus, the objective is to provide greater access to air connectivity for residents of the Peruvian Amazon • **Currently, a total of 11 locations are served**, divided into 3 packages based on the airport of origin: Iquitos, Tarapoto, or Pucallpa
Offered conditions	• As the incentive applies directly to the routes, passengers are not required to meet any specific conditions in order to access the discount • **Airfares are up to 70% lower than they would be without subsidies**
Key outcomes	• **Since the program's launch in 2010, more than 130,000 people have been transported** • During this period, the possibility of opening additional route packages has been analyzed in order to reach other areas with limited connectivity or difficult access

Source: Gobierno de Argentina, Centro Regional de Estudios Económicos de Bahía Blanca, ALG Analysis

In Brazil, Minas Gerais had an incentive program from 2016 to 2019, promoting tourism and transporting more than 35 kPax, but there was a decrease in connectivity after its end

Brazilian Example of Past Subsidies – Voe Minas Gerais

A Subsidies through EAS

Voe Minas Gerais

Project characteristics

Promoter:
CODEMGE
Companhia de Desenvolvimento de Minas Gerais

Location:
Minas Gerais (> 30 cities)

Date:
2016- 2019

Objective:
Increase tourism

Project explanation	• The project, officially named Projeto de Integração Regional de Minas Gerais – Modal Aéreo (PIRMA), was **established by the Government of Minas Gerais under the responsibility of the Secretariat of Economic Development of Minas Gerais as a state integration initiative** • **More than 30 cities were attended** during the project, including Araçuaí, Belo Horizonte, Diamantina, Governador Valadares, Ipatinga, Manhaçu, Patos de Minas, and Teófilo Otoni • The objective of the project was to **promote local businesses, develop tourism, integrate the various regions of the state, and facilitate the movement of the population between the interior and the capital** • The service was operated using **Cessna Caravan 208 aircraft**, with a capacity of **up to 9 passengers**
Offered conditions	• **Up to 10% discount** on purchases made at least 30 days in advance • **20% discount on the purchase of 5 or more tickets on a single aircraft** • Fixed discount of BRL 100 on the return ticket for passengers purchasing round-trips fares, regardless of ticket price or destination
Project cancellation	• Due to low passenger occupancy, a **number of routes were discontinued prior to the termination of the project** • The program required **18 MBRL in incentives** • During the 3 years the project remained active, a total of **9,761 flights were operated, transporting 37,467 passengers**
Connectivity	• Connectivity in Minas Gerais decreased after the end of the incentive, however, the program resulted in **7 destinations within the state** connected by the capital Belo Horizonte

Source: Voe Minas Gerais, Radar Aéreo, Dbpedia, ALG Analysis

Subsidies for air transport remains uncommon in Brazil, whereas metro systems have received support through PPPs, despite both being essential public services

Current Metro PPPs Examples in Brazil

A Subsidies through EAS

Line 4 – São Paulo Underground

Operator: ViaQuatro

Date: 2010

- **First metro line in Brazil operated under a public-private concession**, featuring fully automated driverless trains
- Financial model: the **Government of São Paulo financed 73% of the project**, while the private operator contributed 27%
- Performance: **high operational standards**, with a significantly lower number of incidents compared to lines operated by public entities

Metro de Salvador

Operator: CCR Metrô Bahia

Date: 2016

- Metro system spanning 33 km, operated by a fleet of 40 trains
- Financial model: **30-year concession contract, with a total investment of BRL 5,700 million, partially financed by BNDES** (National Development Bank of Brazil)

VLT Carioca – Rio de Janeiro

Operator: VLT RIO

Date: 2010

- Light rail system connecting key areas of Rio de Janeiro
- Financial model: **public-private concession covering the construction, operation, and maintenance of the system**

Nevertheless, air transport should be considered an essential mode of transportation as well, given the geographic scale and limited ground connectivity of the country

Source: Banco Mundial, ViaRio, ALG Analysis

In Brazil's particular scenario, aviation subsidies would be better managed by the state governments, as the federal government allocates limited resources on the sector

Subsidies Proposal in Brazil

A Subsidies through EAS

Federal Government

- In Brazil, **aviation is not considered a national strategic priority**, unlike sectors such as agribusiness or social programs
- As a result, the **federal government allocates limited direct resources to commercial aviation**, restricting subsidies to the air transport sector
- Consequently, the **country's budgetary priorities are not aligned with the needs of the aviation industry**

States Government

- **Federal states have taken on a more active and flexible role** in supporting and developing the aviation sector
- Key tools include:
  - **Fiscal and tax incentives**: ICMS reduction on aviation fuel, tax exemptions for new regional routes, passenger volume-based bonuses for airlines
  - **Regional route incentive programs**
  - **Infrastructure investment**: terminal modernization, runway upgrades, subsidies for security and control equipment

Strategic conclusion

- It is key that the tax reform recognizes aviation as an economic enabler and a strategic asset for the integration of the country, driving socio-economic benefits for smaller and remote locations
- **A close collaboration between the federal government acting as a coordinator and the states/municipalities taking an executive role following national policies is required to ensure**:
  - Greater territorial focus
  - Public-private partnerships
  - Administrative agility
  - Positive competition among states

Considering the future tax reform and the end of the current ICMS-based incentives, it is necessary to create municipal and/or state-level dedicated funds to finance strategic air routes, helping to foster connectivity

Source: ALG Analysis

Another effective tool to stimulate traffic is credit lines in BRL and or discounts targeting class C, which help expand access to air transportation when combined with a strategy of territorial integration and mobility

B Lines of credit for air travel

Provision of Credit Lines and/or discounts

Objective

- **Improve access to air travel for those unable to afford the full cost of a ticket**
- **Stimulate demand in markets with a low propensity to fly**

Options

- **Government-subsidized credit**: could be implemented through public banks such as Caixa Econômica Federal or BNDES
- **Private financing with guarantees or fiscal incentives**
  - **Banks** offer installment payment Options, with or without interest
  - **Partnerships with airlines** or travel platforms to offer special conditions
- **Direct payment plans** with the airlines
- Credits in **BRL minimize exchange rate risks**
- **Discounts structured to target class C**

Positive impacts

- **Democratization of access to air transport**, particularly in remote regions with poor ground transportation alternatives
- **Boost to regional tourism**
- **Stimulation of demand** in a context of market consolidation and airline mergers
- **Reduction of informality** and reliance on precarious ground transportation options

Associated risks

- **Need for regulatory oversight** to prevent abusive interest rates on credit lines
- **Risk of artificial price increases** if the measure is not accompanied by regulation or competition

To be effective, the measure must be targeted, regulated, and temporary due to high costs. It should boost initial access to air travel for low-income groups. Also, providing credit lines in BRL to airlines can help strengthen the market and improve their cash flow

Source: ALG Analysis

In Argentina, government's subsidies to air traffic had a direct impact on tourism, creating and economic impact of ARS 792 billion (~USD 630 million) since 2020

Argentina: Subsidies to Air Traffic

B Lines of credit for air travel

PreViaje Program

Project characteristics

Promoter:
Ministerio de Turismo y Deportes Argentina

Location:
Argentina

Date:
2020-2023

Objective:
Increase tourism

Project explanation	• A program promotes by the **Ministry of Tourism and Sports** aimed **at stimulating early travel purchases**, allowing travelers to use benefits across the entire tourism value chain nationwide • The first edition was launched in 2020, in response to the negative impact of the pandemic, with the objective of reactivating, strengthening, and boosting the tourism sector
Offered conditions	• A **50% reimbursement of travel expenses is provided in the form of credit**. For individuals affiliated with PAMI (National Institute of Social Services for Retirees and Pensioners), the reimbursement increases to 70% • The **maximum reimbursable amount per person is ARS 100,000**. Travelers must make advance purchases totaling at least ARS 10,000 • The **minimum amount per invoice is ARS 1,000** • The **credit is issued on a prepaid card provided by the Bank of the Nation of Argentina**
Key outcomes	• Since 2020, combining the results of all program editions, **7,5 million tourists benefited from the scheme, generating a real economic impact of ARS 792 billion**. After the program was cancelled, domestic traffic decreased • The services that accounted for the largest share of transactions were travel agency and other tourism-related support services (56%), accommodation services (29%), transportation services (13%), and the remaining 2% in other categories • **8 out of every 10 pesos invested have been recovered** through direct and indirect taxes, thanks to the formalization of consumption. Participating businesses are required to issue invoices

Source: Gobierno de Argentina, Centro Regional de Estudios Económicos de Bahía Blanca, ALG Analysis

It is key that the tax reform recognizes aviation as an economic enabler and a strategic asset for the integration of the country, driving socio-economic benefits for smaller and remote locations

C Tax reform and incentives

Tax reform

	Current	Proposed	Recommended
Domestic	***~9%***	***13,25% - 26,5%***	
Regional	***~9%***	***7,95%-15,9%***	*Improve or maintain tax burden to avoid negative impacts*
International	***~0%***	***13,25% - 26,5%***	

The tax reform introduced by Constitutional Amendment No. 132/2023 and regulated by Supplementary Law No. 214/2025 brings significant changes to consumption taxation in Brazil. Among the most affected sectors is commercial aviation, whose tax structure will be substantially altered with the implementation of the Goods and Services Tax (IBS) and the Contribution on Goods and Services (CBS)

The tax reform considers:

- **26,5% reference tax rate**
- **50% discount on round trip air tickets**
- **40% discount on regional flights (Amazônia Legal or regional and sub-regional capitals)**

Additionally, aviation kerosene (QAV), an essential input for the aviation sector, will be subject to both IBS and CBS. Certain aircraft and vessels will also be subject to the new Selective Tax. The potential taxation of aircraft leasing contracts under IBS and CBS, as well as the importation of parts and specialized services, are further factors that will increase the future tax burden on the sector.

Source: ALG Analysis

Given the uncertainty fuel cost and tax reform, it is also crucial to establish state-level funds to sustain the operation of strategic routes currently supported by ICMS subsidies

Proposed Changes to Finance Routes through Tax Incentives

C Tax reform and incentives

Objectives to stimulate traffic	X	Current scenario	Proposed scenario
I **Increase of connectivity**, with operation of commercial flights in regional airports		Brazil faces a scenario of high costs of fuel to airlines, with future uncertainty on the taxation system, due to the tax reform:	Given the current scenario, which diverges from the goal of expanding air connectivity in Brazil, **it is essential to maintain tax incentive policies for routes through the following measures to prevent further network concentration:**
II **Creation of new routes and increase of frequencies** in regions poorly attended by the current network		• **QAV pricing formula** linked to international oil price, tied to USD • **High taxes rates on QAV compared to international market** (13,6% higher than USA) • **Reduce of connectivity** and centralization of commercial operations in hubs • **Unfeasible routes financed through state-level ICMS tax incentives**, whose rate vary in function of each state • **Uncertainty about the new tax system**, with expectations that **ICMS-funded routes may be discontinued** and no federal plan currently in place to address this gap	• **Review of Petrobras pricing formula** in order to reduce general prices in relation to other countries • **Implementation of federal Essential Air Service (EAS)** programs to guarantee incentives to finance unfeasible routes to key regions and connectivity • **Creation of state-level dedicated funds to finance strategic air routes**, sourced from tax revenues, airport fees, and other mechanisms, could serve as an alternative to current ICMS-based incentives • **Creation of a specific regime for aviation in the IBS/CBS with a differentiated rate**, especially for regional and low-density flights • **Partnerships with state and municipal** governments as federal tax counterparts **for states that create local incentives for aviation**
III **Consistent reduction in ticket prices throughout Brazil's regions**, increasing the access to air transport			

Source: ALG Analysis

To address the various barriers of the Brazilian market, structural regulatory changes could facilitate the entry of new airlines and promote greater market liberalization

Required Improvements in Brazilian Regulation to Attract LCC's Operation

D E Cost optimization and regulation to improve competitiveness

Magnitude of the issue (+ / -)

	Current situation	Proposed action
Cost of aviation fuel (QAV)	**The aviation fuel (QAV) is extremely expensive, representing ~36% of airlines total costs**, especially driven by excessive taxation though ICMS	• **Review the fuel production and distribution structures** • **Review Petrobras' fuel pricing formula** • Establish a tax reform framework that recognizes **aviation as a strategic economic engine for the country**
Infrastructure availability in SP and slots regulation	**The unavailability of slots in CGH** and challenges to operate in other São Paulo hubs hinder the entry of new airlines in Brazil, once these are the most profitable markets of the country	• Establish policy framework for the **development of other hubs in the country** and conduct a **review of coordinated airports slots regime to facilitate access to new entrants**
Airline's ancillary revenues and add-on services	**Current regulatory constraints which does not allow airlines companies to charge ancillary services as a LCC business model**, with a scenario of legal uncertainty	• **Allow the charge of complementary services in line with low-cost operations**, enabling airlines to charge for ancillary services such as baggage, while removing the requirement to offer non-essential services like F&B
Litigation and Moral Damages	**Excessive litigation in Brazilian air transport market**, with high expenses for airlines due to a legal framework that allows large volume of lawsuits and cumulative Moral Damage claims	• **Aligning judicial practices with international standards to reduce predatory litigation** • Reviewing compensation obligations to reflect the **cost structure and service model of LCCs**, promoting **legal certainty and balance in passenger rights**

Source: ALG Analysis

Another key measure in the government agenda is the energetic transition from QAV to SAF, which must be strategically planned to prevent additional long-term fuel cost increases

Energetic Transition to SAF

F Fuel energetic transition

Establishment of clear regulatory framework

- **Certification of production pathways for SAF through ANP**
- **Set mandatory blending targets for SAF in aviation fuel**, similar to how ethanol and biodiesel are blended in road fuels
- **Implementation of a sustainability certification** to ensure Brazilian SAF meets international standards

Creation of economic and tax incentives

- Even with the potential end of ICMS-based subsidies, it is essential to **introduce new incentives for those operating with SAF**
- **Introduction of tax credits or SAF-specific decarbonization certificates**, similar to the RenovaBio program for ground transport
- **Provide public financing or climate funds to support SAF** production facilities and logistics infrastructure

Develop national supply chain

- **Promote feedstocks that are abundant and sustainable in Brazil**, such as used cooking oil, animal fat
- **Encourage partnerships between biofuel producers and airlines**, following models of USA and Europe
- **Support cost-efficient and scalable technologies**, such as HEFA and Alcohol-to-Jet (ATJ)

Integration into refining and distribution infrastructure

- **Adapt pipelines and fuel terminals to allow SAF distribution** and blending, especially in key hubs like GRU and GIG
- **Stablish priority SAF fueling zones**, starting with international flights or high-demand regions
- **Provide public financing or climate funds to support SAF** production facilities and logistics infrastructure

International cooperation and technology transfer

- **Agreements with SAF developing countries** (European Union, USA, Japan) **for technology transfer**
- **Access to global green funds** (GCF, CIFs, or CORSIA) **to subsidize SAF pilot projects in Brazil**

Main goals

- Integrate Sustainable Aviation Fuel (SAF) as a cleaner alternative for Brazilian aviation, capable of reducing CO_2 emissions by up to 80% compared to conventional QAV
- **Leverage Brazil's production potential to achieve self-sufficiency** and position the country as one of the global leaders in SAF production
- Develop an **integrated system that do not substantially increase airlines costs in the short term** and **enable feasible and competitive SAF pricing** in line with the economic realities of the Brazilian aviation sector **in the long term**

Source: ALG Analysis

In terms of tourism, promotion campaigns by airlines and governments show strong impact on inbound tourism and revenue, serving as examples for Brazil

Tourism Promotions Campaigns

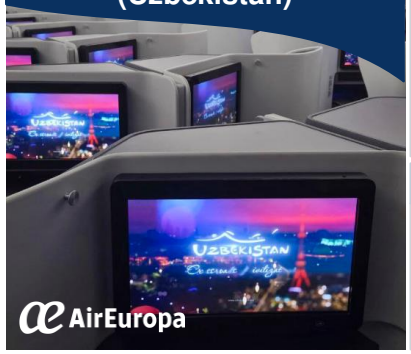
G Tourism promotion

Incredible India

Period	Sponsors	Impact on tourist arrivals
Launched 2002	Ministry of Tourism	2.38 mn (2002) 3.46 mn (2004) **+45% in 2 years**

Global branding campaign showcasing India´s cultural and natural diversity, TV and internet ads, website, guides, promotional events

Is it even a City (Uzbekistan)



Period	Sponsors	Impact on tourist arrivals
Launched 2024	Tourism committee, Air Europa	**4.2 mn** (Jan–Jul 2024) **3.64 mn** (Jan–Jul 2023) **+15% in 1 year**

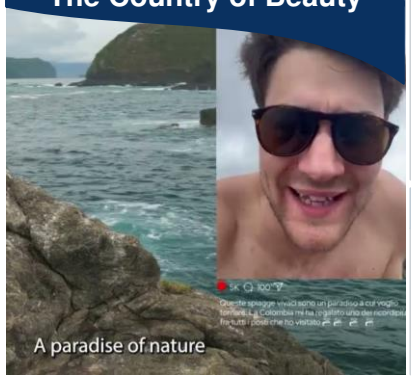
Multiple waves of large-scale ads on flights promoted Uzbekistan's cultural heritage to European audiences, positioning the country as a key Silk Road destination for Spanish-speaking long-haul travelers

Inspired by Iceland

Period	Sponsors	Impact on tourist arrivals
Launched 2010	Government, Icelandair, Iceland Express	From launch in May to December, **exceeded tourism forecast by 27%,** peaking at 43% in August. **Revenue £138.7mn**

Following volcano eruption disaster, viral marketing featuring comedic videos (e.g. "Hardest Karaoke Song") and national storytelling to reaffirm Iceland was "open for business"

Colombia, The Country of Beauty



Period	Sponsors	Impact on tourist arrivals
Launched 2024	Government, ProColombia (national agency)	Together with a 2nd campaign, it contributed to **>300k bookings** from 13 different nations, 64% increase in tourists. **Revenue USD 96mn**

Used AI to track 1,200 migratory species and sent personalized travel messages to global audiences. Showcased renovation of remote regional airstrips to promote lesser-known destinations through creative storytelling and national pride.

Source: tourism.gov, mrs.org, quantasnewsroom,, travelandtourworld, uzbekistan.travel, f-chain, ALG Analysis

To create a good promotion campaign in Brazil, a tourism promotion would start with defining the target audience and the purpose of the campaign to be carried out

Suggestion Tourism Campaigns (INT and DOM)

G Tourism promotion

	3-7 days		7-30 days		
	Domestic tourists		International tourists		
	"Explore as Capitais"	**"Brasil Natural"**	**"Brazil: Land of Nature"**	**"Brazil: Festivals & Great Events"**	**"Brazil: More than Nature"**
Target audience	Classes B and C, mid income	Classes A and B, high income	Ecotourism enthusiasts in Europe and the USA	Latam residents that do not have the events in their country	Asian tourists and people interested in history
Purpose of the trip	Discover important cities in other regions of Brazil	Explore Brazil's natural riches	Explore Brazil's natural riches	Explore global events (usually in Europe or the US) for less cost in Brazil	Learn about the history of Brazil's colonization, beyond its nature
Main destinations	Porto Alegre, Curitiba, Rio de Janeiro, Belo Horizonte, Recife, Goiânia, Manaus, Belém	Chapada dos Veadeiros, Jalapão, Pantanal, Lençóis Maranhenses, Jericoacoara	Amazônia, Bonito, Lençóis Maranhenses, Fernando de Noronha	Rio de Janeiro, Salvador, São Paulo, Brasília	Ouro Preto-Tiradentes, Olinda-Recife, São Luís-Alcântara, Pelotas-Bagé, Paraty

Source: ALG Analysis

To first stimulate international tourists, a stopover program could be used to attract tourists to stay for a few days in connecting flight cities such as São Paulo and Brasília

Suggestion for Stopover Program (INT and DOM)

G Tourism promotion

	São Paulo	Brasília
Target audience	International tourists in connection	Domestic business travelers on connection
Duration	3 nights	2 nights
Basic Bundle	• GRU Express Transportation ⇄ Paulista Avenue • 3-Day Metro/CPTM Card • 2-for-1 at selected restaurants and museums	• BSB Transportation ⇄ Esplanade • City pass for 5 museums + TV Tower viewpoint • Guided tour of the Esplanade of Ministries and Three Powers
Purpose of the trip	Discover the gastronomy, museums and events	Learn about Brazil's planned city and political structure
Potential Upgrade	More days in the city in a 4-star hotel, trip to the coast of São Paulo or to Rio de Janeiro (air shuttle)	Tour to Chapada dos Veadeiros

For this program to work, there must be cooperation between tourism entities and airlines, which can form partnerships with local tourism departments and airports

Source: ALG Analysis

Airports in Brazil are key players in the integration of public and private entities interested in promoting tourism, so their role is fundamental to the success of the programs

Airports as a Point of Contact between the Public and Private Sectors

G Tourism promotion

Public Sector

Government

Key functions:
- Electronic visa/visa collection
- ICMS-QAV exemption on strategic routes
- Integrated tourist police reinforcement
- PPPs for road/rail access and city passes
- Promotion of multilingual education for tourism
- Improvement public infrastructure

Expected Gains:
- Clear regulatory environment,
- Perception of safety
- Reduced airfare costs
- Improved communication with tourists

Airports

Key functions:
- Mediators between the public and private sectors
- Service hub
- Advertising spaces for events and tourist packages

Expected Gains:
- Increase in passengers
- More spending at airports
- Enablement of new routes

Private Sector

Companies

Key functions:
- Stopover packages (flight + hotel + tour)
- “2-for-1” promotions
- Quality services for tourists
- Improvement private infrastructure

Expected Gains:
- Increased revenue per passenger
- Loyalty
- Offering special experiences

The genuine interest of airports in increasing passenger flow as a way of increasing their revenue and their contacts with public and private entities makes them a key player in the dialogue and success of tourism campaigns in an integrated manner

Source: ALG Analysis

In addition to promotion, Brazil must make structural improvements and follow a funnel of steps to first attract and convert new tourists

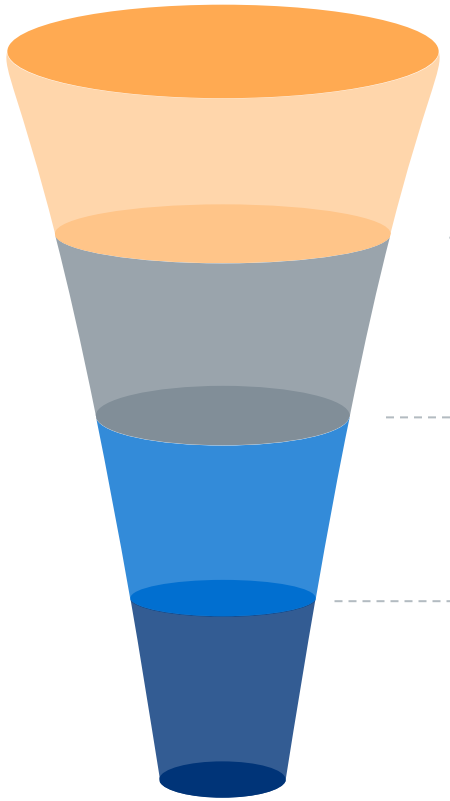
International Tourism Stimulation

H Touristic infrastructure and qualification

Safety Improvement
Improving safety in Brazilian cities to encourage tourism

Infrastructure and Connectivity
Improving infrastructure and connectivity at regional airports

Barrier Reduction
Improving Brazilian population's English level and reducing bureaucracy for traveling



Awareness
- Digital campaigns with global reach and presence at fairs to reach the general public and create an initial desire to visit Brazil

First Contact
- Th e first contact can be through a business trip or a stop over (agreements with Gol, Latam, and Azul in cities like São Paulo and Brasília)

First Trip
- Thematic campaigns (ecotourism, historic cities, events) with segmented target audiences focusing on attracting tourists for a longer period

Second Trip
- Ways to encourage tourists (and their family and friends) to return and discover other destinations through positive experiences

Source: ALG Analysis

Improving the environment to attract more tourists can be achieved with short-term measures such as more policing, less visa requirements, and better language proficiency

General Interventions to Improve Tourism

H Touristic infrastructure and qualification

Safety Improvement

- The perception of **insecurity harms tourist destinations**, discouraging visitors and affecting local economies
- Areas with high tourist activity are frequent **targets for theft**, as tourists often carry valuables and are more distracted
- As a **short-term measure**, it is vital to **reinforce tourist policing**, especially through **dedicated police units**, **smart surveillance cameras in hotel areas**, and **multilingual emergency channels**
- In the **long term**, the priority is **reforming Brazil's public security system** to **lower crime rates** and boost the **sense of safety** for all visitors

Infrastructure and Connectivity

- Airports are **key entry points for tourists** and vital to promoting national and international travel
- Brazil is progressing in its **regional airport concession program** to attract investment in **low-traffic areas** with tourism potential
- A main initiative is the **AmpliAR Program**, which transferred **19 airports to private operators**, encouraging **point-to-point routes** and better **regional connectivity**
- To strengthen the program's impact, more **tourist-region airports** should be included, and **local associations allowed to invest in airport infrastructure** via **private partnerships**

Barrier Reduction

- Foreign tourists in Brazil face challenges from **bureaucracy and language gaps**
- A major issue is the return of **visa requirements for travelers from the U.S., Canada, and Australia**, effective **April 2025**, which may reduce tourism
- Brazil's **low English proficiency**, ranked **81st globally** in the 2024 EF Index, worsens the issue
- **Short-term actions** include **e-visa expansion**, restoring visa exemptions for key countries, and **boosting accessibility** through **free English training for tourism staff**, **trilingual signage at major airports**, and **multilingual tourism websites**

Source: ALG Analysis

To fund such iniciatives, the current aviation fund used exclusively to infrastructure purposes, FNAC, could be reshaped to support airlines and develop air connectivity

Brazil's Aviation Fund and Pathways for Reform

What is FNAC?

National Civil Aviation Fund (FNAC), created in 2011, supports the development of Brazil's aviation system, focusing on public airport and aeronautical infrastructure. It is financed by airport concession fees

Current Use and Limitations

Original Goal	Current Use/ Deviation
Funded through **airport concession fees** and **investment returns**	Resources increasingly tied to **annual budget cycles**, fiscal contingencies, and **loan guarantees** rather than self-sustaining investment returns
Non-budgetary tool to drive **aviation infrastructure investment**	Functioning as a **budgetary instrument**, limiting long-term planning and flexibility; supports initiatives like **QAV fuel subsidies** in remote areas and **airline credit lines**
Support **public airport infrastructure** and **regional connectivity**	Limited funding for public infrastructure; focus has shifted toward **working capital**, **fuel**, and **fleet investments** for airlines
Promote **public-interest aviation services**	Increasingly support **airline recovery**, **credit up to 5 Bn BRL**, **Azul** expects up to **USD 300 million** in loans backed by FNAC through **BNDES** for incremental liquidity and lower exposure to currency exposure
30% revenue for tourism-related aviation development	Implementation is fragmented, and resources risk being diluted by overlapping goals with **airline recovery priorities**

Possible Reforms to Promote Aviation Growth

- **Boosting regional connectivity:** could finance Essential Air Service-style programs—based on the U.S. DOT's EAS model—by subsidizing airlines to operate low-traffic routes connecting remote or underserved cities
- **Funding Tourism Campaigns:** FNAC could help fund international campaigns, especially on social media, to guide perceptions of Brazil
- **Support aviation training:** FNAC could fund scholarships and basic training for pilots, mechanics, and controllers, especially in underserved regions
- **Promoting Accessibility and Mobility:** Provide subsidies for residents in remote regions, following the European Union's model for outermost territories, to make air travel more accessible and affordable
- **Supporting SAF infrastructure and production:** could co-finance SAF production in Brazil and invest in airport storage and distribution, supporting both national use and exports.

Source: Gov.br, Panrotas, UOL, Globo, ch-aviation, Reuteurs, ALG Analysis

Content

- Market analysis
  - Extrinsic drivers of air transport market
  - Intrinsic drivers of air transport market
- **Strategies to stimulate Brazilian market**
  - Recommended actions
  - **Impact**
- Conclusions
- Annex: Economic Impact of Aviation

As a first step, the reduction of tax and litigation costs of aviation market in Brazil could lead to a reduction of up to ~6.2% on base fare, making the air transport more affordable

Impact of cost reduction of aviation in Brazil

KEY COST

Reduction of fuel taxes

- Since **the current cost of QAV in Brazil is 13,6% higher than in USA**, due to high taxes, aligning prices to international levels could lead to lower airfares
- Considering that the fuel represents ~30,6% of airlines total costs, **such price adjustment could reduce tickets price by ~4,2%** (13,6% * 30,6%)

End of Moral Damages claims and excessive litigation

In Brazil, the total cost of airline litigation is primarily driven by moral damages claims, which account for approximately 80% of the total
Since the litigation represented ~2% of total costs in 2024, the end of Moral Damage Claims in aviation could allow the reduction of tickets prices by ~1,8%

Reduction of leasing taxes

- **Since the IRRF on aircraft leasing is set at approximately ~2% in 2025**, and expected to increase gradually in the coming years, exempting this tax could lead to a reduction in overall airline costs
- Given that leasing expenses account for between 5% and 10% of total airline costs, such an exemption could result in a ticket price reduction of up to 0,2%

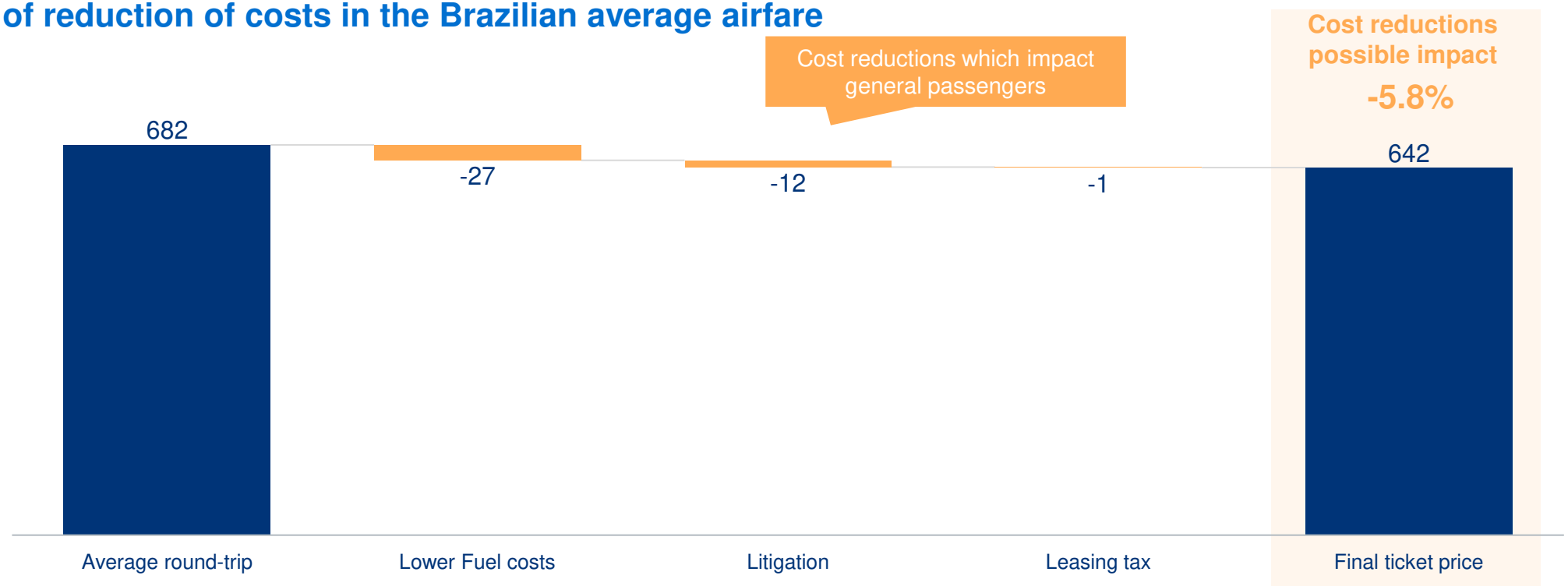
Reduction of base fare	-4.2%	-27 BRL/ticket		-1.8%	-12 BRL/ticket		-0.2%	-1,2 BRL/ticket

Considering the historical elasticity of traffic in relation to yield in Brazil of -0.5, such change could increase the traffic up to ~8% in the domestic traffic

Source: ALG analysis
Note: (1) The ticket price is composed by base fare + boarding fee and such effects are appliable only to base fares, once boarding fees are determined by the airports

Such measures would reduce the total average airfare (base fare + boarding fee) in Brazil by ~5.8%, with a total discount of 40 BRL/ticket and a impact of ~3 Mpax

Impact of reduction of costs in the Brazilian average airfare



Results	Lower Fuel Costs	Litigation	Leasing tax	Cumulative Result
Total pax increase	**1.97** Mpax	**0.84** Mpax	**0.09** Mpax	**2.90** Mpax
Total Jobs	**26.57** K jobs	**11.34** K jobs	**1.19** K jobs	**39.10** K jobs
Total Economic Impact	**3.75** bn BRL	**1.60** bn BRL	**0.17** bn BRL	**5.52** bn BRL

Source: ALG analysis

Going further, attraction of new airlines and or incentives to develop a real LCC model could lead up to ~10% reduction on average base fare, targeting a new customer Class C

Impact of improvement of aviation market environment in Brazil

KEY DEMAND ENABLER

ULCC business model – Regulation for attraction of new entrants

Allowing airlines to charge for carry-on baggage could significantly increase ancillary revenues for Brazilian carriers, enabling operations under a low-cost model aligned with the characteristics of the Brazilian aviation market:

- **Price per baggage:** 60 BRL (in line with the current ~120 BRL for checked bag)
- **% of usage**: ~50% of passengers
- **LCC participation:** ~62% (charged only by GOL and Azul, LCC airlines)
- **Additional ancillary revenue:** ~ 6 Bn BRL/year (reaching ~23% of ancillary revenues vs total revenues)

Considering that such extra ancillary revenues could be **integrally converted into reduction of passenger revenues, the ticket prices could potentially drop by up to ~10%**

Reduction of base fare	-10.0%	-63.5 BRL(1)/ticket

REQUIREMENTS TO ATTRACT NEW PLAYERS

Slots regulation review

In order to boost the interest of a new operator, it is required to review the Slots regulation to ensure enough participation in the main markers at peak hours to increase market attractivity

REQUIREMENTS TO ATTRACT NEW PLAYERS

Visibility on the mid-term

Maintain or reduce the tax burden on the aviation sector. It is essential that the tax reform does not increase the cost of air travel for the population

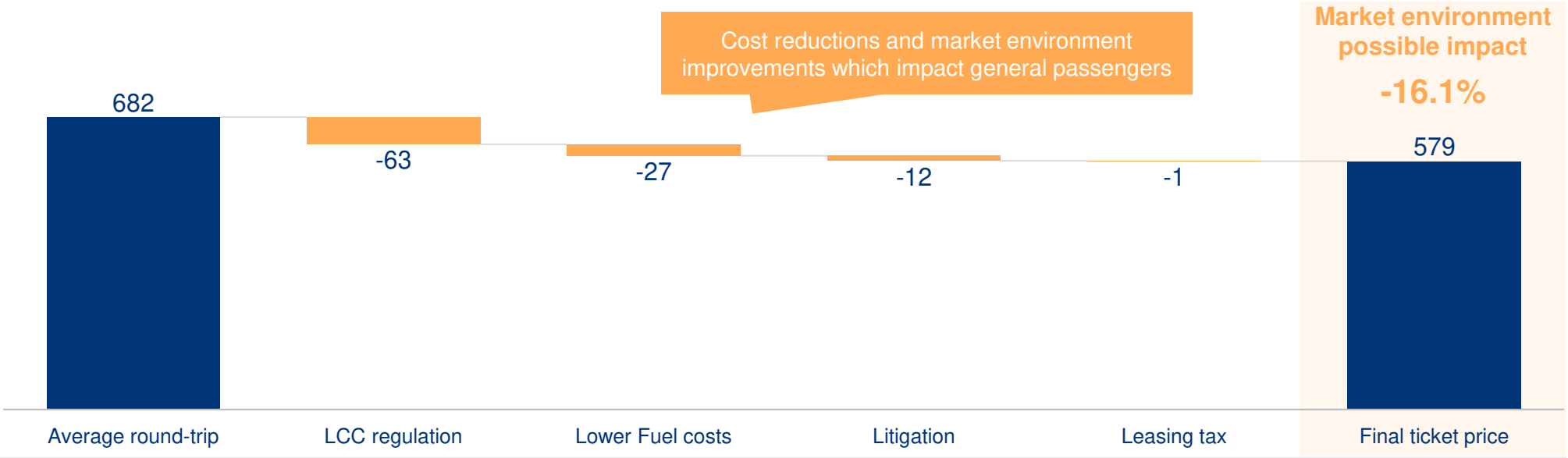
Promote the use of FNAC or other public subsidies to support the transition to Sustainable Aviation Fuels (SAF)

Considering the historical elasticity of traffic in relation to yield in Brazil of -0.5, such change could increase the traffic up to ~8% in the domestic traffic

Source: ALG analysis
Note: (1) The reduction of price consider an average round trip ticket, with two legs

Adding the improvements in market conditions, it is possible to achieve a reduction in airfares of up to 21.4% overall, reaching an average airfare of ~579 BRL/ticket

Impact of improvement of aviation market environment in the Brazilian average airfare



Results	LCC regulation	Lower Fuel costs	Litigation	Leasing tax	Cumulative Result
Total pax Impact	4.60 Mpax	1.97 Mpax	0.84 Mpax	0.09 Mpax	7.50 Mpax
Total Jobs Impact	62.10 K jobs	26.57 K jobs	11.34 K jobs	1.19 K jobs	101.20 K jobs
Total Economic Impact	8.77 bn BRL	3.75 bn BRL	1.60 bn BRL	0.17 bn BRL	14.29 bn BRL

Combined with the market environment improvements it would lead to a -16.1% decrease of price that will start to increase affordability of air transport, resulting in the increase of 7 to 8 Mpax at the domestic market

Source: ALG analysis

Subsides for EAS or discounts/incentive aimed at class C could increase the domestic traffic among 10-30 Mpax, with an investment of 1.3 - 3.8 Bn BRL, aligned with FNAC's average annual budget

Impact of incentive aimed at class C1 in the Brazilian market

Traffic (Mpax)	% DOM traffic	Population (M hab)	% Class C	Budget (Bn BRL)	Eco. Impact (Bn BRL)(1)	Jobs ('000) (1)
10.0	10.7%	5.0	5.0%	1.3	19.0	135.0
15.0	16.1%	7.5	7.5%	1.9	28.6	202.4
20.0	21.4%	10.0	10.0%	2.5	38.1	270.0
25.0	26,8%	12,5	12,5%	3.2	47,6	337.4
30.0	32.1%	15.0	15.0%	3.8	57.1	404.8
35.0	37.5%	17.5	17.5%	4.4	66.7	472.3
40.0	42.8%	20.0	20%	5.1	76.2	539.8

Subsidy budget aligned with average FNAC's annual budget '21-'24 **~4.7 bn BRL**

Estimation of incentive impact

Average plane round trip cost (ANAC 2024) **1,365 BRL**

- Considering that air transport in Brazil is mostly used by classes A and B, **class C1 would be a strategic target group**, as its average income level allows for an incentive aligned with FNAC's budget while enabling broader reach

Social class	Household income (BRL)	5 days work (BRL)	Mkt. Envir. Discount (BRL)	Required incentive (BRL)
A	26.812	6.094	~206	NA
B	12.683	2.883	~206	NA
C1	3.980	905	~206	253
C2	2.403	546	~206	612

Fixed incentive required to stimulate class C1 **~250 BRL**

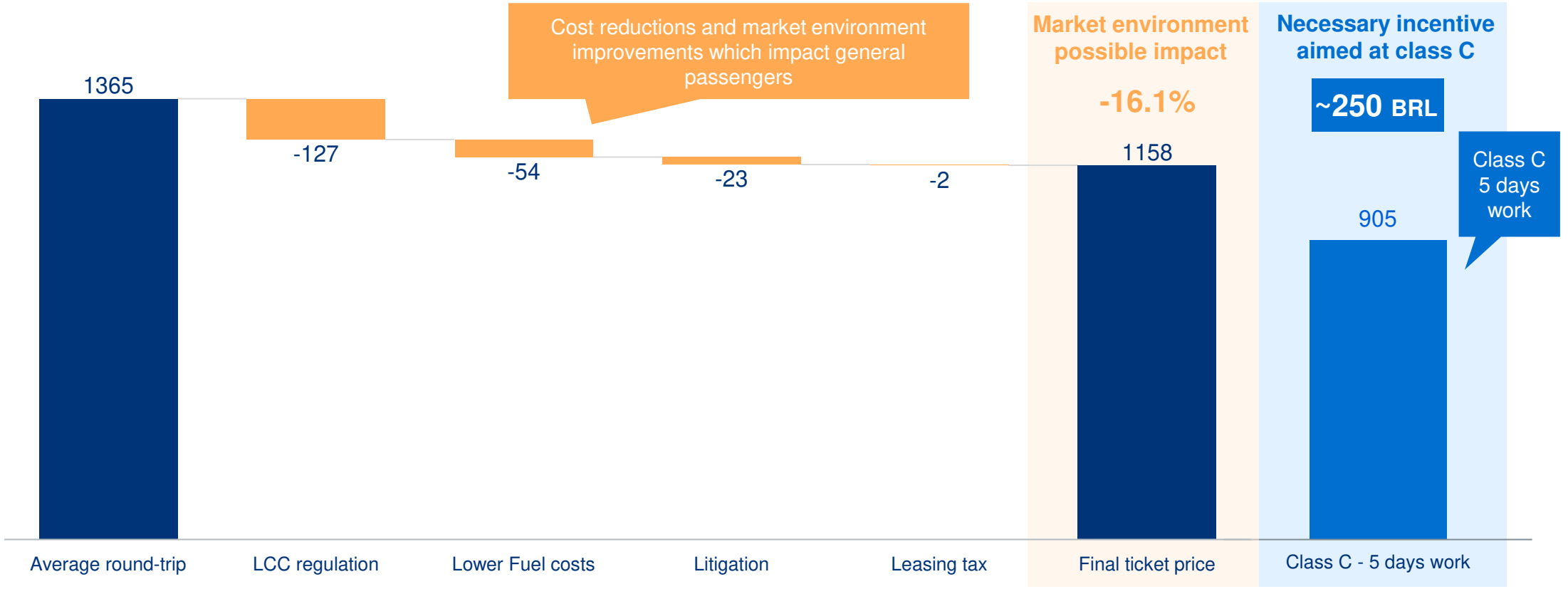
An incentive could preferably be offered as a temporary fixed amount, as seen in other case studies, to facilitate initial access to air transport for class C, with the goal of stimulating long-term growth in domestic traffic

Source: ANAC, Cenário Brasil, ALG analysis
Note: (1) For Every new passenger was considered 1,9k BRL of economic impact and for 1,000 passengers 13,5 Jobs

Therefore, considering cost reductions and improvement of market conditions, an incentive of ~250 BRL per passenger could expand air travel access to Class C population

Required incentive to enable access of class C to air transport after market environment improvements

(BRL 2024)



Source: ALG analysis

Moreover, an effective touristic campaign could additionally increase the current Brazilian air traffic up to 1% - 4% with an investment of 100 – 500 MBRL

Impact of campaigns targeted at the international tourism in Brazil

Budget (Bn BRL)	Tourits ('000)	% Total INT tourists	Traffic (Mpax)	% INT traffic	Eco. Impact (Bn BRL) (1)	Jobs ('000) (1)
0.1	0.10	1,5%	**0.2**	0,8%	**0.2**	**1.4**
0.2	201.3	3,0%	**0.4**	1,6%	**0.4**	**2.7**
0.3	301.9	4,5%	**0.6**	2,4%	**0,6**	**4.1**
0.4	402.5	5,9%	**0.8**	3,2%	**0.8**	**5.4**
0.5	503.1	7,4%	**1.0**	4,0%	**1.0**	**6.8**

Campaign's budget aligned current Embratur's budget for touristic promotion **~300 - 400 MBRL**

Estimation of tourism campaigns impact

- Considering the **undeveloped potential of Brazilian international tourism**, with a very low level of tourists per capita in comparison to other LatAm countries, **higher investments in effective touristic campaigns could increase international traffic in Brazil**
- Although it is challenging to isolate the exclusive impact of tourism campaigns on air traffic, since they are typically implemented alongside other policy measures, **an approximate effect can be inferred based on the outcomes of previous campaigns in Brazil and abroad**
- For instance, programs such as Embratur's PATI, which generated approximately 160,000 seats with an investment of ~64 MBRL, and Peru's Marca País initiative offer useful benchmarks. Based on these cases, a conservative estimate of pax generated per campaign investment was adopted:

Impact of touristic promotion campaign **2,015 Pax/MBRL**

The improvement of Brazilian touristic infrastructure and services, the main current bottlenecks in the sector, would increase even more the number of both international and domestic tourists and the air traffic

Source: Ministério do Turismo, ALG analysis
Note: (1) For Every new passenger was considered 1,9k BRL of economic impact and for 1,000 passengers 13,5 Jobs

In total, an improvement on market environment would stimulate ~8 Mpax at no direct costs, while associated investments in incentives and tourism could additionally impact ~31 Mpax

Results

	Government investments and incentives agenda	Market environment agenda		Tourism development agenda
	A	**D**	**E**	**G**
	Subsidies through EAS	**Costs optimization**	**Regulation for attraction of new entrants**	**Tourism campaigns**
Premises	**Complementary incentive** of ~250BRL **to enable the access of class C to air transport**, after market environment improvements, with 1.3 – 3.8 Bn BRL of investments	Reduction of taxes and the end of moral damages litigation	**Regulatory changes** allowing lower service costs while **reaching the same ancillary revenues share of LCCs** with 60-65% of LCC penetration	Impact based on benchmark of previous touristic campaigns of ~ 2 kpax/MBRL invested
Impact on traffic	**~10 to 30 Mpax**	**~3.0 Mpax**	**~4.0 to 5.0 Mpax**	**~0.2 to 1.0 Mpax**
Required investment	**~1.3 to 3.8 Bn BRL**	**NA**	**NA**	**~0.1 to 0.5 Bn BRL**

Note: For Every new passenger was considered 1,9k BRL of economic impact and for 1,000 passengers 13,5 Jobs, as soon as an elasticity of -0.5 of traffic in relation to the yield

Total Results

Total investment

~1 to 4 bn BRL

Total pax increase

~18-39 Mpax

Total Jobs

~290-520 K jobs

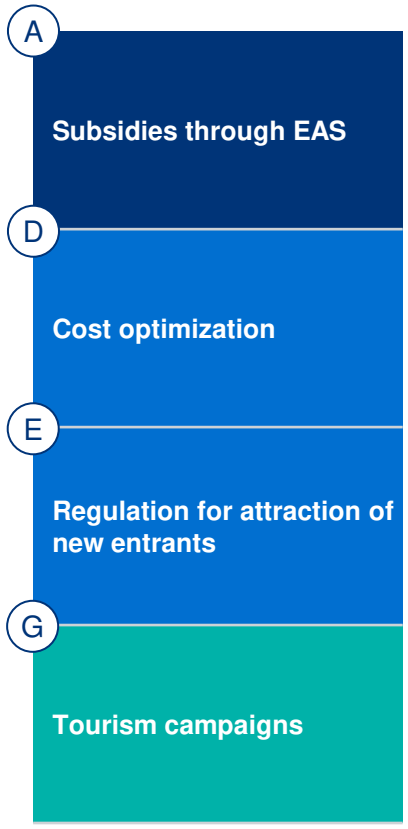
Total Economic Impact

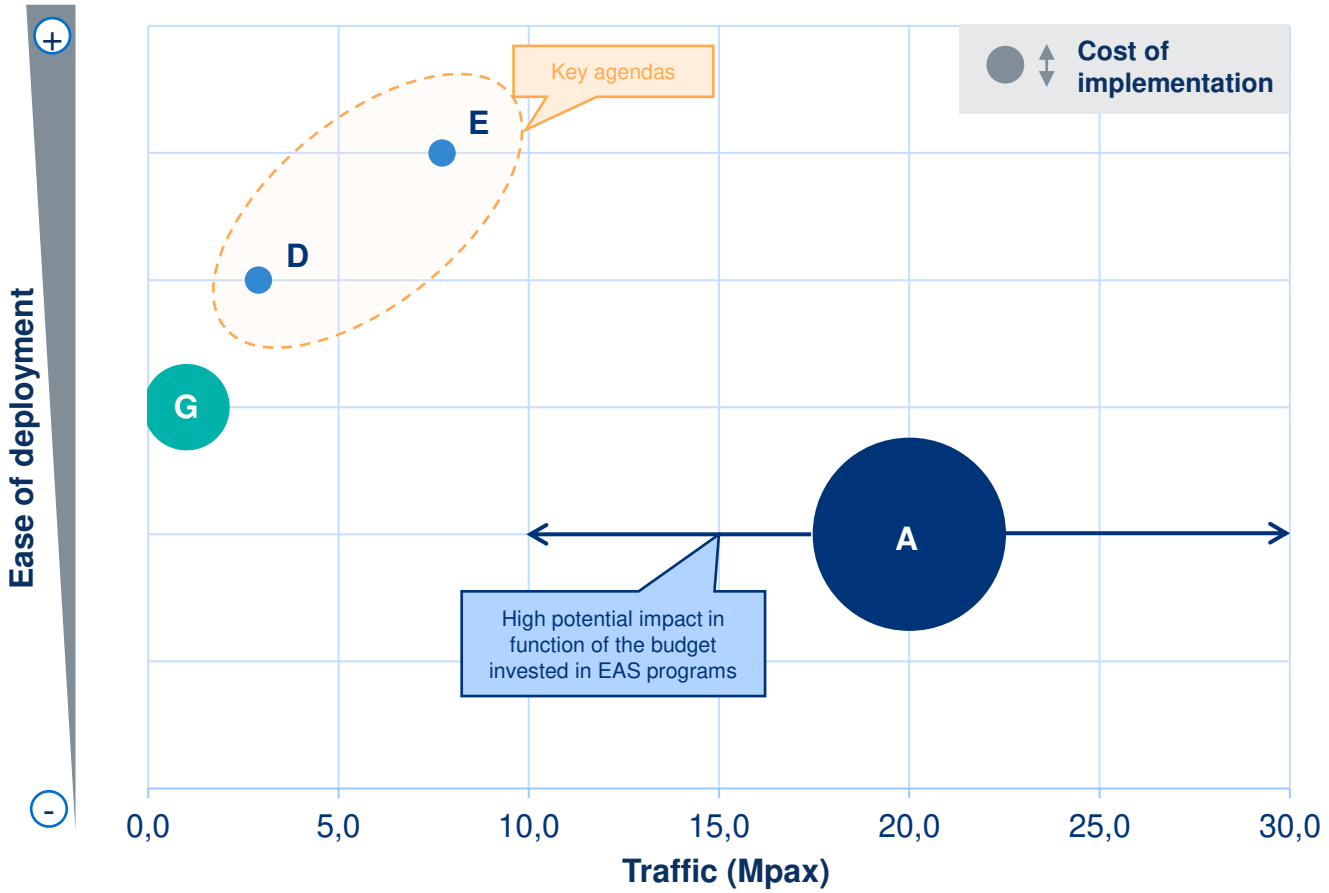
~35-73 bn BRL

Source: Aena, ALG Analysis

Comparing such mechanisms, regulatory reforms offer the most immediate gains to unlock the Brazilian air transport market, with EAS programs as a strong next step

Strategic Analysis of Mechanisms to Improve Market Liberalization





Main conclusions

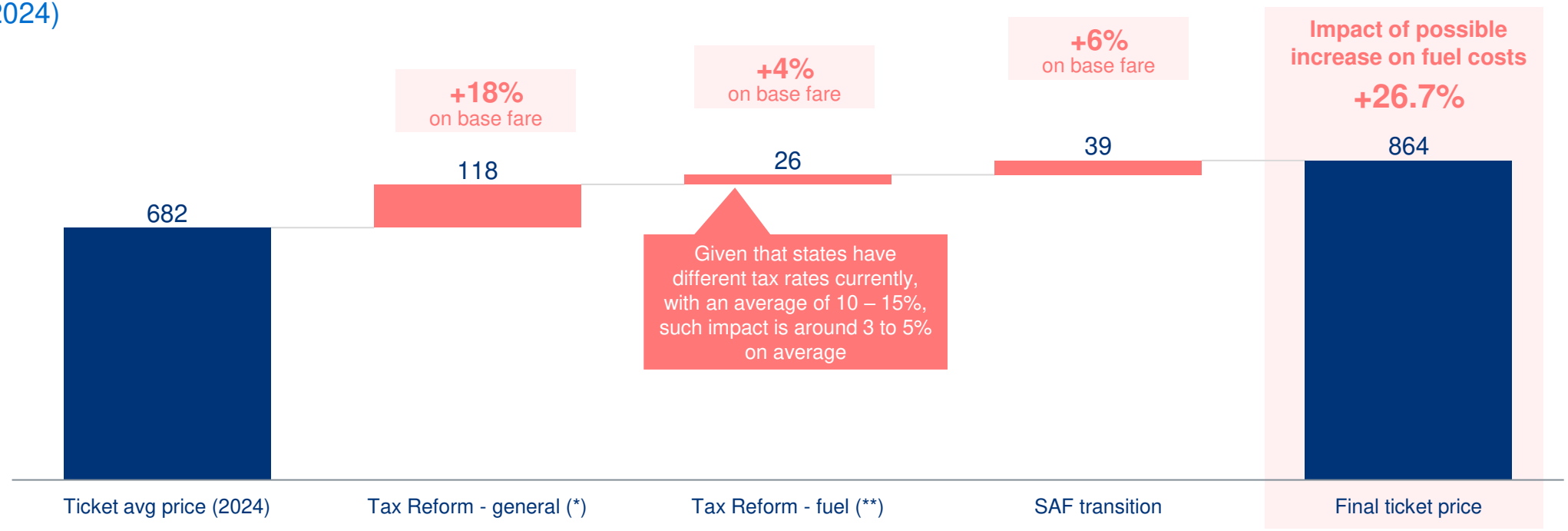
- **By comparing the possible mechanisms** to increase market liberalization in Brazil, **it is possible to categorize them by order of priority**:
- **Quick wins:** Mechanisms with higher impact on traffic and with no costs of implementation, once they rely on regulation changes:
  - Tax incentives
  - Regulation for attraction of new entrants
- **Structuring projects: The development of regional EAS incentive programs** has high potential impact following market environment improvements, with required investments aligned with FNAC's current budget
- **Complementary projects:** Tourism campaigns can be developed as a complementary structuring mechanism to stimulate international traffic

Source: Aena, ALG Analysis

Moreover, the upcoming tax reform and the SAF transition are expected to impact negatively the average airfare

Impact of fuel costs rise in the Brazilian average airfare – Domestic market

(BRL 2024)



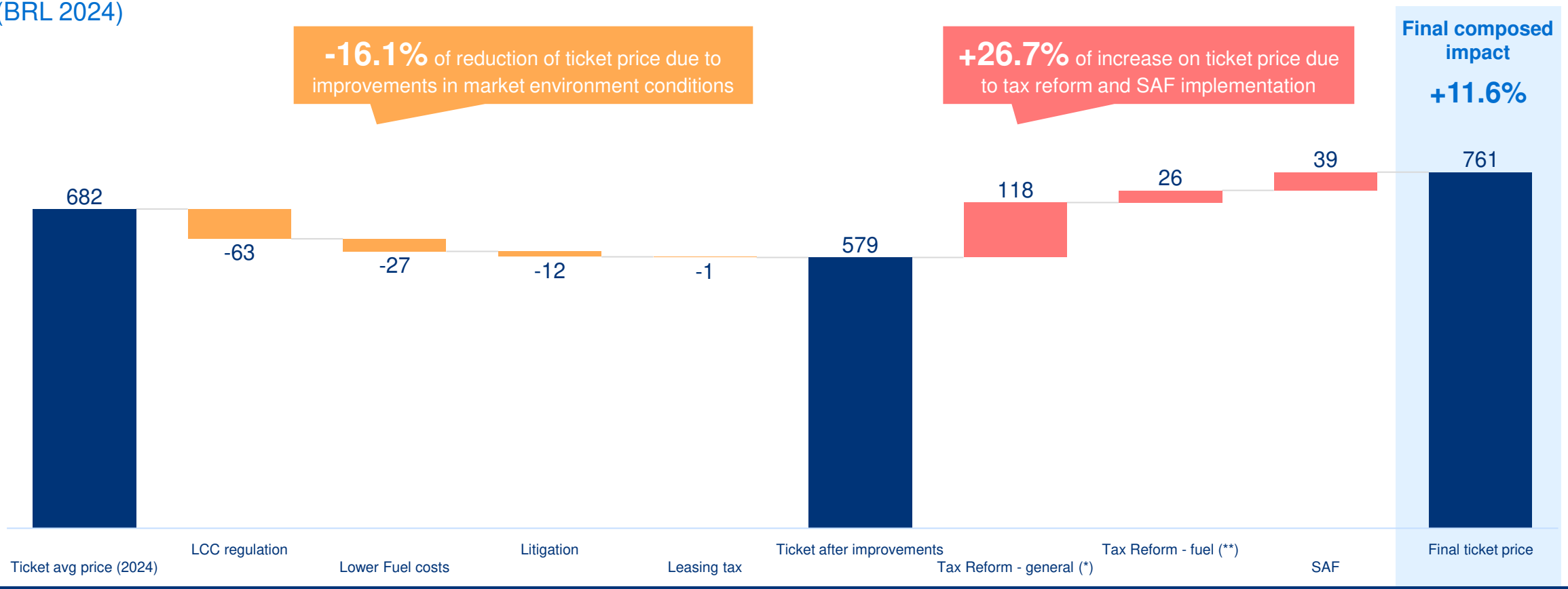
Results	Tax Reform - general	Tax Reform - fuel	SAF transition	Cumulative Result
Total pax Impact	-8.53 Mpax	-1.87 Mpax	-2.82 Mpax	-13.23 Mpax
Total Jobs Impact	-115.22 K jobs	-25.29 K jobs	-38.09 K jobs	-178.60 K jobs
Total Economic Impact	-16.26 bn BRL	-3.57 bn BRL	-5.38 bn BRL	-25.21 bn BRL

Source: ALG analysis
(*)Note: For analytical purposes, the impact calculation consider the proposed tax rate of 26,5%
(**)Note: For analytical purposes, the impact calculation consider the average ICMS rate of 12%

Although the proposed measures may significantly boost traffic, uncertainty of future fuel costs and tax regime could further drive-up airfares, offsetting their potential impact

Impact of total effects in the Brazilian average airfare – Domestic market

(BRL 2024)



To stimulate traffic and mitigate the risk of rising costs, it is crucial to properly structure the tax reform, preserve current tax incentives for air routes, and design an energy transition that ensures feasible and competitive SAF pricing

Source: ALG analysis
(*)Note: For analytical purposes, the impact calculation consider the proposed tax rate of 26,5%
(**)Note: For analytical purposes, the impact calculation consider the average ICMS rate of 12%

Therefore, the potential increase in airfares due to tax reform and fuel transition would offset the benefits of structural market changes, resulting in a net loss of 5.7 Mpax

Results – Domestic market

	Structural market environment improvements				Impact of Tax Reform and Fuel transition to airfares			Total Results
	LCC regulation	Lower Fuel costs	Litigation	Leasing tax	Tax reform - general	Tax reform - fuel	Transition to SAF	
Premises	**Changes** allowing lower costs and **reaching** 60-65% of LCC penetration, **decreasing ticket price by 10%**	Reduction of **ICMS** taxes and review of **PPP,** which **would decrease ticket price by 4,2%**	End of **moral damages** from litigation **which would decrease ticket price by 1,8%**	**Reduction** of **IRFF taxes** on leasing of aircrafts **which would decrease ticket price by 0,2%**	**Implementation of IVA with a 26.5% rate** transferred to passengers, replacing ICMS and PIS/CONFINS	**Re-structuring** and overall tax increase, **increasing ticket price of routes with ICMS incentives by 3% - 5%**	**Sustainable fuel transition** which adds cost and **increases ticket price by 6%**	
Impact on traffic	**+ 4.60 Mpax**	**+ 1.97 Mpax**	**+ 0.84 Mpax**	**+ 0.09 Mpax**	**- 8.53Mpax**	**- 1.87Mpax**	**- 2.82 Mpax**	
Total Economic Impact	**+ 8.77 Bn BRL**	**+ 3.75 Bn BRL**	**+ 1.60 Bn BRL**	**+ 0.17 Bn BRL**	**- 16.3 Bn BRL**	**- 3.57 Bn BRL**	**- 5.38 Bn BRL**	

Total pax Impact

-5.7 Mpax

Total Jobs Impact

-77.4 K jobs

Total Economic Impact

-10.9 bn BRL

Note: For Every new passenger was considered 1,9k BRL of economic impact and for 1,000 passengers 13,5 Jobs, as soon as an elasticity of -0.5 of traffic in relation to the yield

Source: ALG Analysis

Content

- Executive Summary
- Market Analysis
- Strategies to stimulate Brazilian market
- **Conclusions**
- Annex: Economic Impact of Aviation

Current efforts should focus on improving the market environment to attract new entrants or enhance competition among existing players, enabling the implementation of a true low-cost carrier (LCC) model in Brazil aimed at the class C population

1. **Brazil's air market faces several bottlenecks both extrinsic and intrinsic to aviation industry,** which hinder it from achieving its full potential, limiting traffic and increasing yields

2. **Among the challenges external to aviation**, **Brazil is marked by economic instability, low purchasing power, and a cultural perception of air travel as expensive**, factors that limit access to air transport to higher-income groups. In addition, the country has an underdeveloped international tourism sector, with lower levels compared to other Latin American nations

3. **Among the intrinsic challenges, Brazil faces high operational costs** driven by currency exposure, excessive taxation (particularly on fuel) and a high volume of litigation. **Regulatory hurdles** include legal uncertainty, restrictions on the operation of low-cost carriers (LCCs), and a slow liberalization process. Additionally, **airport infrastructure bottlenecks** persist, such as slot shortages at Congonhas (CGH) and recent legal changes affecting charges like property taxes (IPTU) and pending legislative bills

4. **To address these bottlenecks, two main agendas are proposed: (i) subsidies and government investments**, including route subsidies, lines of credit for air travel, restructuring of FNAC, and enhanced tourism promotion; **and (ii) improvements to the market environment**, such as tax incentives, regulatory reforms, development of new hubs, and the expansion of open skies agreements

5. **Considering both agendas the tickets prices could be reduced by ~35%, resulting in an increase of 21 – 42 Mpax in Brazilian market with 1 – 3 bn BRL of investments, what could result in 41 – 79 bn BRL of economic impact and 290 – 560 k jobs**

6. **However, the uncertainties surrounding the tax reform and SAF implementation might potentially increase air fares by 26,7%, resulting in a decrease of ~13 Mpax and a negative impact of -25 Bn BRL and – 178 kjobs, which highlight the importance of the structural changes**

Source: ALG Analysis

1 Key agenda

- Improve the market environment: costs reduction, slot regulation and ancillary revenues regulation
- The current inefficiencies do not require additional funds or investments but are costing to Brazil at least ~7.5 million passengers annually, which could generate approximately BRL 15 billion in economic impact and create ~100,000 jobs

2 Critical agenda

- **Tax reform aligned with the industry's strategic nature and its critical role for the economic development** — The primary goal should be to avoid any effective increase in the tax burden on the sector
- SAF transition — A balanced transition that matches the country's capabilities, combined with the short-term agenda for cost improvements, will ensure a smooth transition with minimal cost increases

Implementing this agenda will foster a healthier market environment for airlines, increase Brazil's attractiveness for new entrants, as well as the development of real low-cost carrier operations. However, it is essential to provide a clear and predictable path regarding the tax reform and the SAF transition to reduce uncertainty and further costs increase

3 Transformational agenda

- Provide subsidies to develop Essential Air Services to remote regions, complementing the current Ampliar program. Targeting the C-class population and less connected regions will not only improve national connectivity but also boost regional economies

Content

- Executive Summary
- Market Analysis
- Strategies to stimulate Brazilian market
- Conclusions
- **Annex: Economic Impact of Aviation**

The impact of Global Air Transport Industry is estimated by four different categories that in total supported 86.5 million jobs and had a $4.1 trillion economic impact in 2023

Global Economic Impact of Aviation by Category (2023, USD)

1 Direct Impact

11.6 Million jobs
$1.1 trillion

- Direct impacts refer to the **immediate economic effects generated by the core of air-transport operations**
- They encompass **airlines, airports, airport on-site companies, air navigation providers and civil aerospace industries**
- Examples: flight and maintenance crew, airline and staff, customs officers, police, air traffic controllers, engineers and others involved directly in the operation of a flight and/or airport
- These impacts result from the day-to-day functioning of the industry and represent its **most visible and measurable contribution to the economy**

2 Indirect Impact

20.4 Million jobs
$1.2 trillion

- Indirect impacts capture the **economic effects generated through the aviation industry's supply chain**
- Typical examples include **off-site industries, manufacturing and services**
- Examples: fuel suppliers, food and beverage, construction, transport providers, computer components, retail goods, accounting firms, lawyers, call centers, IT systems and every other industry that supports the main operation of a flight and/or airport
- These include jobs, income, and output **created by companies that provide goods and services to support air transport operations**

+

3 Induced Impact

17.2 Million jobs
$0.92 trillion

- Induced impacts represent the **economic effects resulting from the spending of individuals employed directly or indirectly in the aviation industry**
- **Wages received by pilots, mechanics, air-traffic controllers, ground handlers, and other aviation workers** are re-spent on housing, food, durable goods, healthcare, and leisure
- They **generate additional employment and economic activity** in sectors like retail, consumer goods, banking, telecommunications, and hospitality

+

4 Tourism Catalytic

37.3 Million jobs
$0.97 trillion

- Tourism Catalytic **covers the discretionary spending of air travelers themselves**, outside the airline ledger but triggered by the trip
- It starts with **ground access to the airport** (taxis, ride-hailing, parking, tolls), continues with **commercial spend airside** (food & beverage, duty-free, retail, paid lounges), and peaks at the destination in **accommodation, restaurants, entertainment, and shopping**
- These disbursements constitute **direct output for ground-transport, retail, and hospitality sectors**; when run through the same input–output multipliers they generate their own indirect and induced ripples across the broader economy

=

86.5 million jobs

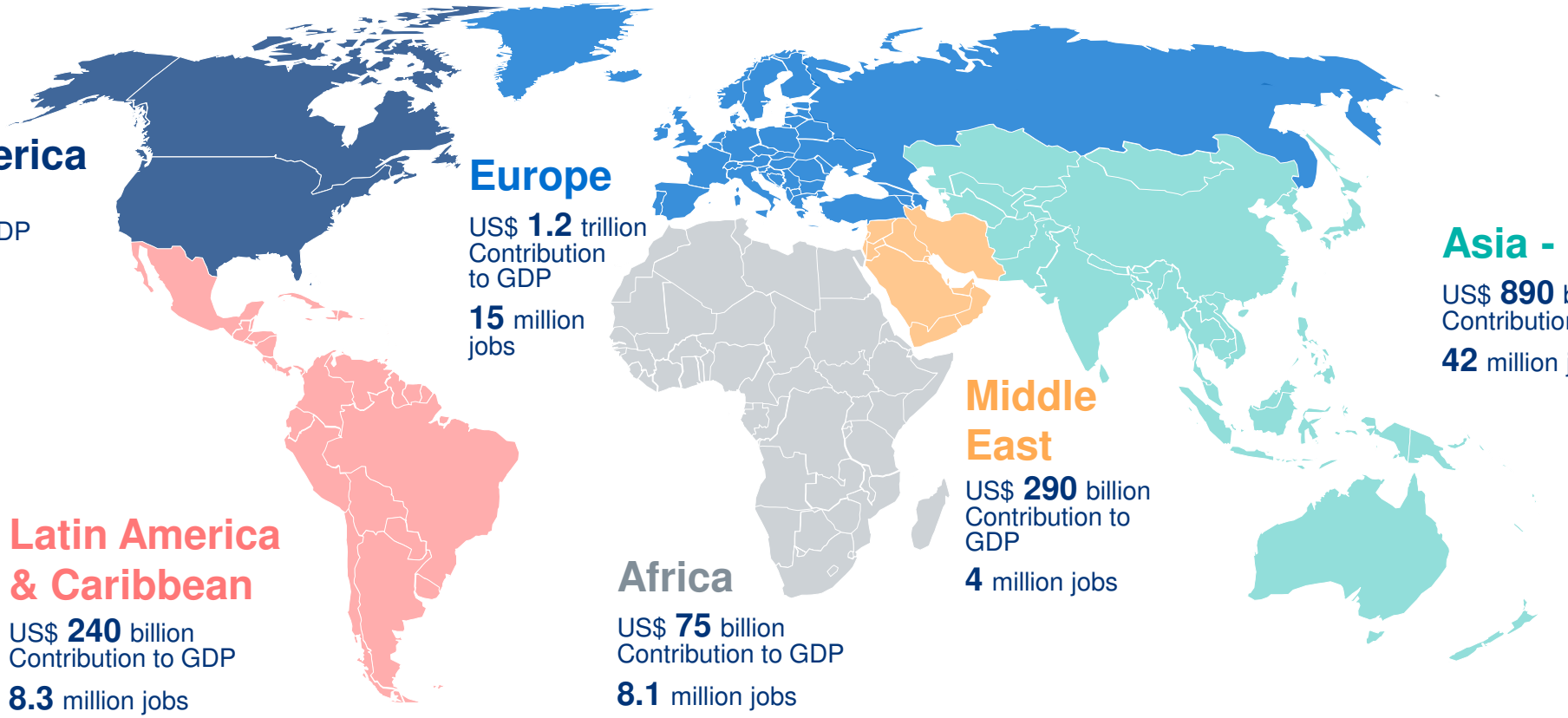
economic impact of $4.1 trillion

3.9% of GDP

Source: Aviation Benefits Beyond Borders, ALG Analysis

In 2023, Latin America & Caribbean reached a contribution of 240 Bn USD to GDP, creating 8,3 million jobs in the aviation sector

Economic Impact of Air Transport Per Region in 2023



North America

US$ **1.4** trillion
Contribution to GDP

8.4 million jobs

Europe

US$ **1.2** trillion
Contribution
to GDP

15 million
jobs

Asia - Pacific

US$ **890** billion
Contribution to GDP

42 million jobs

Middle East

US$ **290** billion
Contribution to
GDP

4 million jobs

Latin America & Caribbean

US$ **240** billion
Contribution to GDP

8.3 million jobs

Africa

US$ **75** billion
Contribution to GDP

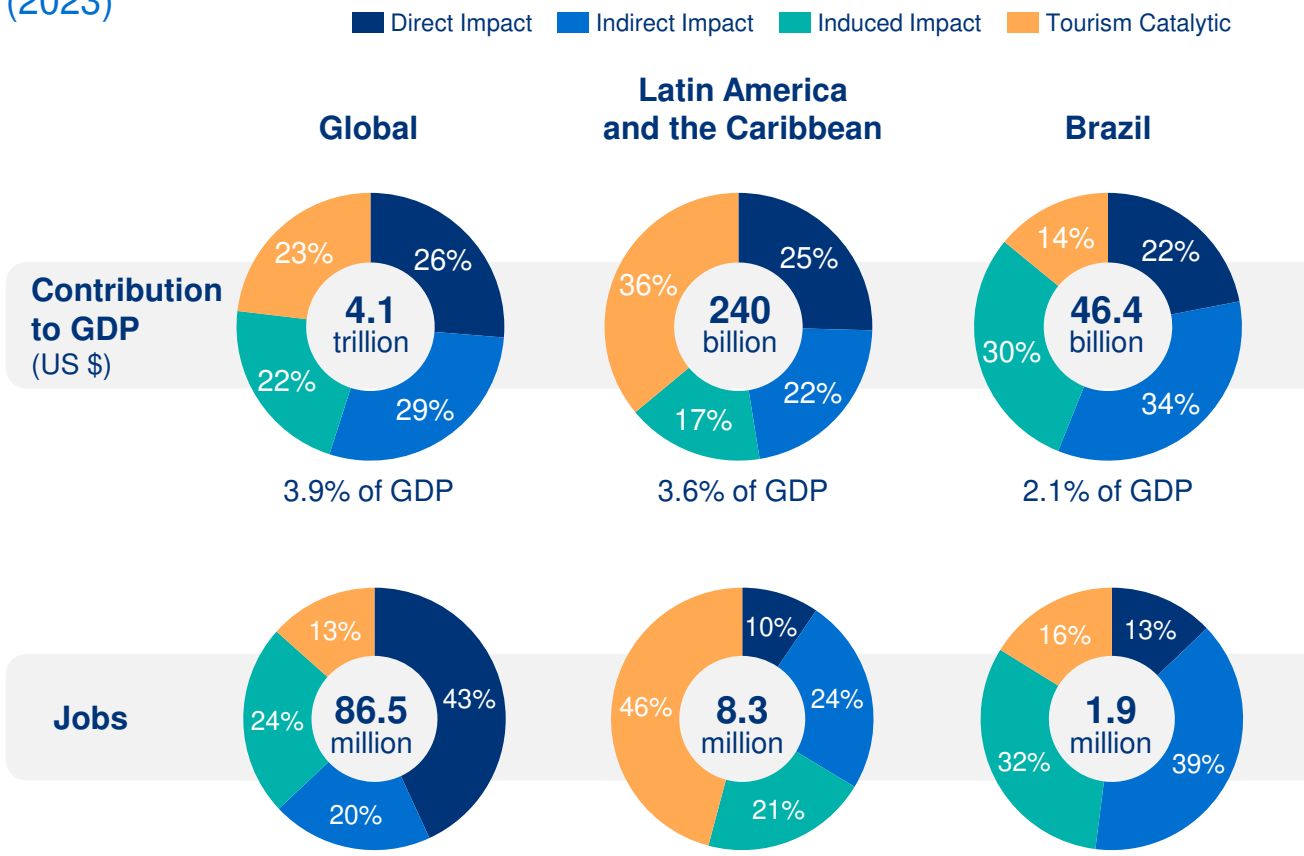
8.1 million jobs

Source: Oxford Economics, Aviation: Benefits Beyond Borders 2024, ALG Analysis

Aviation has broad economic impact, with a balanced contribution globally. In Brazil, it shows contrasting impacts on jobs and GDP in the tourism and aviation sectors

Total Economic Impact of Aviation Global vs LatAm vs Brazil

(2023)



- On average, Aviation Direct represents the largest share of the total economic impact across the world and in LAC. In Brazil however, the largest contributor is indirect.
- There is a balanced distribution across the 4 benefits which underscores the sector´s strong ripple effect through consumption and employment.
- The distribution of benefits – Induced, Tourism Catalytic, Indirect and Aviation Direct – remains mostly consistent at global, regional, and national levels, reinforcing the structural nature of the sector´s economic impact.
- The Tourism Catalytic impacts are significant across all regions, even when Direct Aviation contributions are modest, highlighting aviation´s ability to stimulate broader economic activity.
- In Brazil, Tourism Catalytic contributes more to jobs than Aviation Direct, while for GDP, Aviation Direct contributes more than Tourism Catalytic. This contrast reflects the service-intensive nature of tourism, which generates a high number of relatively lower-wage jobs, versus the capital-intensive nature of aviation, which demands skilled labor, infrastructure, and technology—leading to a higher GDP contribution.
- Given the trickle-down effect of aviation, a perturbation in equilibrium prices and quantities based on the available supply and national demand, can drastically impact both GDP and employment in Brazil.

Source: Oxford Economics, Aviation: Benefits Beyond Borders 2024, ALG Analysis

In Brazil, the Air Transport Industry contributed US$46.4 billion to the GDP (2.1% of total) and generated 1.9 million jobs in 2023

Total Economic Impact of Aviation in Brazil (2023, USD)

46.4 Contribution to GDP (bn US $)

2.1 % of GDP

1.9 Million Jobs

GDP Contribution and Employment within the Aviation Industry and Tourism

	Contribution to GDP	Jobs
Airlines	4.3 bn US$	61,100
Airports, ANSPs, civil manufacturing	6.0 bn US$	185,700
Tourism supported by aviation	6.6 bn US$	310,000

Assumptions and Sources

This analysis was executed by Oxford Economics with supporting data regarding the following in Brazil:

- **Airlines:** commercial airlines based in the country
- **Airports**: with scheduled commercial flights
- **Passengers 2023**: number of passengers departing airports (excluding connecting passengers)
- **Tourism % of GDP:** from the World Travel & Tourism Council, including contributions of the tourism sector that are direct, indirect and induced.

Estimates were conducted based on:

National statistics | Industry financial statements | Industry surveys and indicators

GDP estimates were converted to ´real´ 2023 US$ values, taking inflation changes into consideration

Source: Oxford Economics, IATA 2024, ALG Analysis

Aviation drives global trade, productivity, and innovation, while also supporting economic growth – especially in a country like Brazil with vast distances and many remote areas

Aviation and Economic Activities

Euronews

Airline sector generates US$ 10.3 billion and employs more than 245 thousand in Brazil

Aviation-supported tourism contributes US$6.6 billion to the country's GDP and employs 310,000 people

The air transport sector **contributes significantly to Brazil's economy** and there are two ways to measure this: **through the number of jobs and the contribution to the gross domestic product (GDP)**, which involves airlines, airport operators, local companies, air navigation service providers (ANSPs) and aircraft manufacturers. (…)

"**Our sector plays a crucial role in the Brazilian economy**, contributing significantly to economic growth and social development. **Air transport not only drives the Brazilian economy, but also transforms lives and communities, connecting people and cultures, and promoting sustainable development**. **The continued growth and development of the sector is essential for Brazil's social and economic progress**" IATA Country Director in Brazil, Dany Oliveira

Aeroin

54.4% growth in passengers and increase in international flights boost tourism in RN

Rio Grande do Norte **recorded a 54.4% growth in international tourism in the first four months of 2025**, compared to the same period in 2024. This rate is higher than that achieved by Brazil, which saw a 51% increase in international flow, according to data from Embratur. (…)

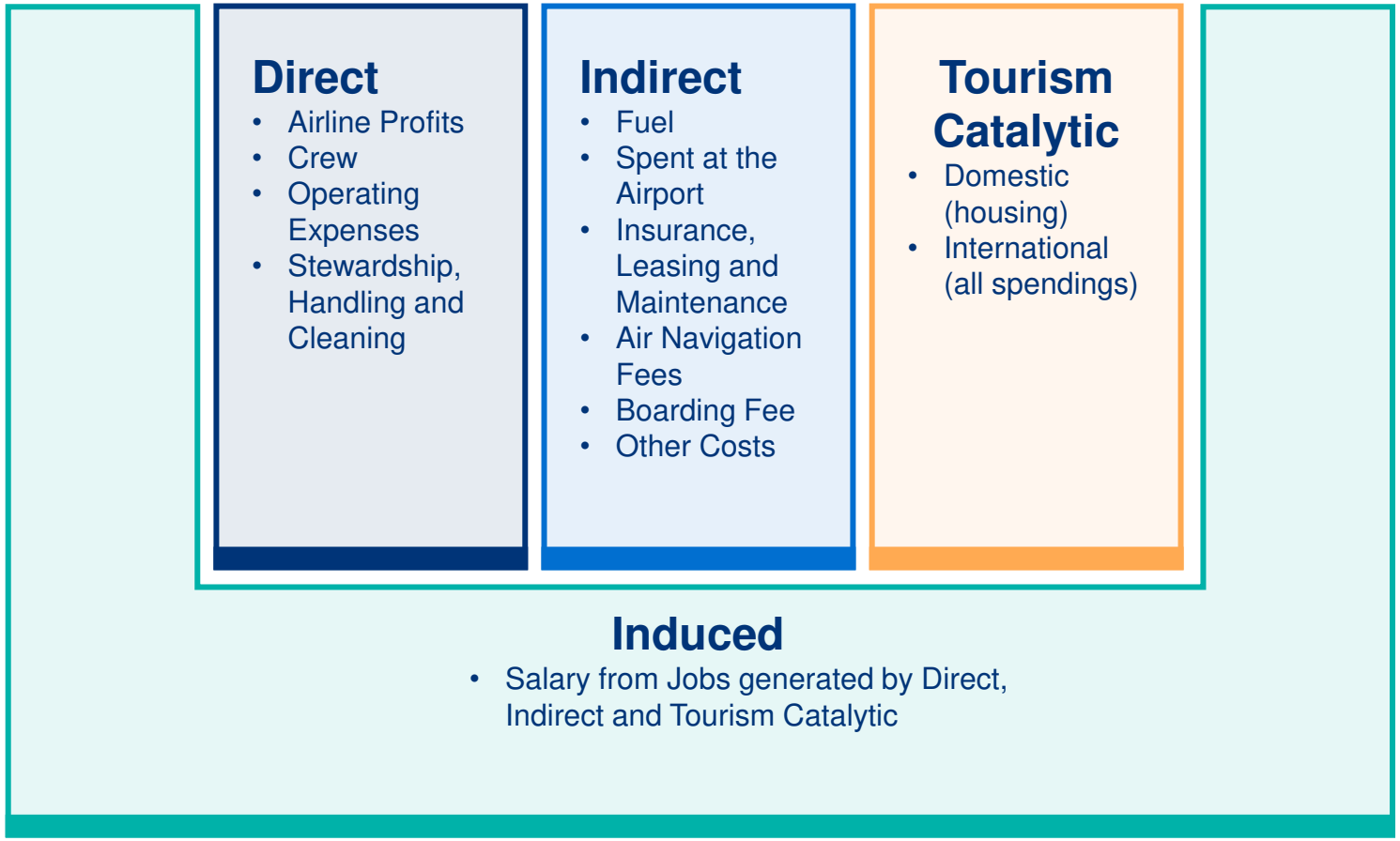
Argentina continues to lead as the main issuing country, with a growth of 128.4% in the first four months of 2025, totaling almost 21 thousand passengers. This compares to the period from January to August last year, **when an unprecedented connection was opened from Natal to Aeroparque, in Buenos Aires, increasing the number of flights to three weekly frequencies**. (…)

Expanding connectivity and strategic market analysis are the main tools for the results achieved by tourism in Rio Grande do Norte, according to Raoni Fernandes, CEO of Emprotur.

- According to IATA, **aviation stimulates global trade and investment, enhances labor and capital productivity, drives innovation, and enables knowledge exchange**. The movement of goods by air supports stronger economic outcomes through catalytic collaboration, specialization, and more efficient resource allocation across local and global economies.
- **Aviation plays a vital role in enabling dynamic and efficient supply chains** and in driving the growth of e-commerce. **In times of crisis, air cargo becomes essential for delivering humanitarian and emergency aid**. In 2023, Brazilian airports handled 1.4 million tonnes of air freight, supporting the country's overall import and export activity.
- By connecting people across cities quickly and safely, air transport benefits both consumers and the economy. It brings the world closer, enriching lives and enhancing cultural diversity. **In rural and remote areas, it is often a critical lifeline, ensuring access to healthcare, education, and employment opportunities**.

Source: The Guardian, Euronews, ALG Analysis

The ALG estimate calculated the economic impacts and jobs generated directly, indirectly and through catalytic tourism, before arriving at the induced impact and the number of jobs generated by it

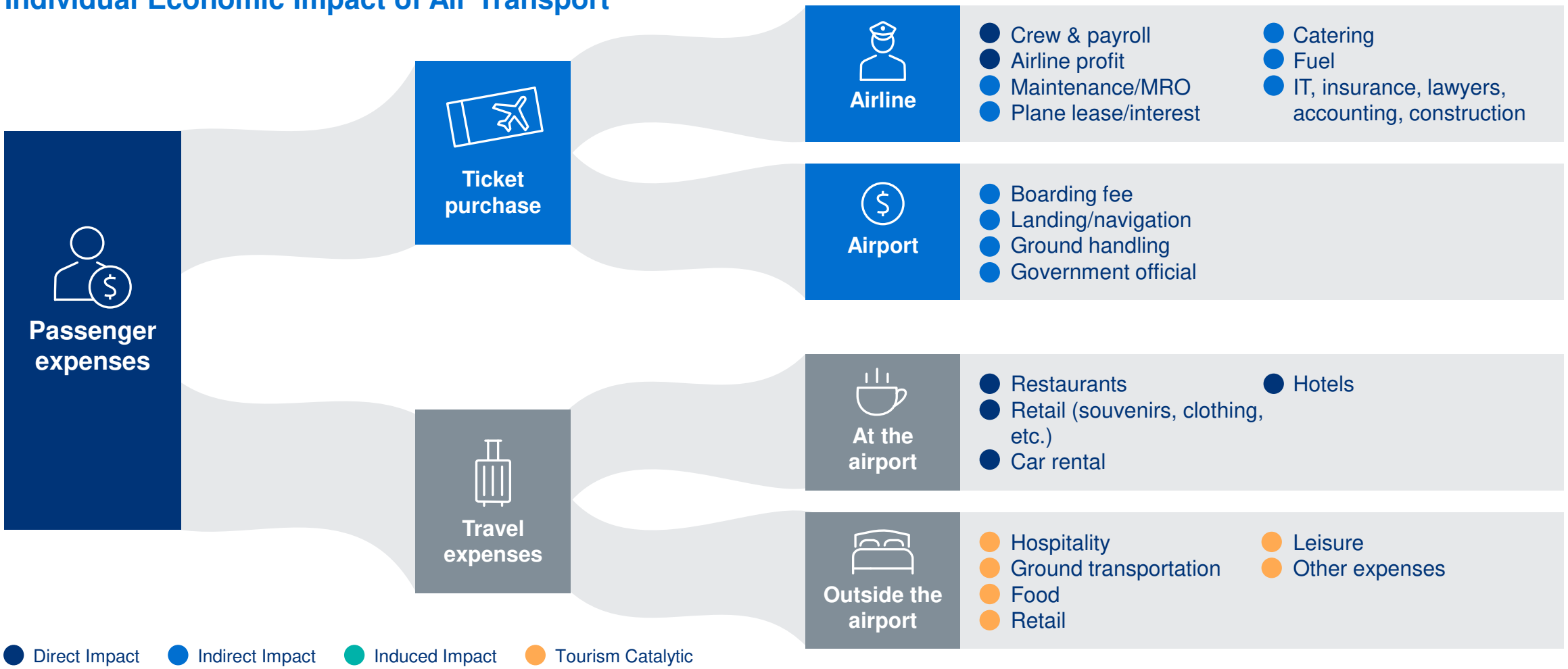


The induced impact was estimated using the **sum of the wages of the jobs generated by the other categories**, since it **represents the second wave** when aviation-related workers spend and generate new economic impacts and the creation of more jobs

Source: ALG Analysis

From a passenger's spending flow during a trip, it is possible to estimate the individual direct, indirect and tourism economic impact of the Air Transport Industry

Individual Economic Impact of Air Transport



Source: ALG Analysis

The number of jobs created by each category was also estimated; for direct jobs in aviation, airline and airport employee structures were created

Airline and Airport Employee Structures

Airlines

LATAM | GOL | Azul | Others

- Corporate Administration
- Flight and Cabin
- Maintenance, Repair and Overhaul (MRO)
- Ground and Network
- Commercial, Sales and Cargo
- Safety and Sustainability

Airports

GRU	Primary Metropolitan	Metropolitan Capital Regional
Primary Regional (A)	Secondary Regional (B)	Complementary Network

- Direct Airport Staff
- Subcontracted Staff
- MRO and Hangars
- ESATAs
- Commercial and Retail

From the structure created, quantities and respective salaries were estimated based on ALG's experience and information from official and market sources. In this way, it was possible to arrive at realistic approximations that can also be replicated in other countries

Source: ANAC, ALG Analysis

The results indicate that, in Brazil, aviation is responsible for the creation of 190.1k direct jobs, whose induced economic impact reaches 18.8 bn BRL

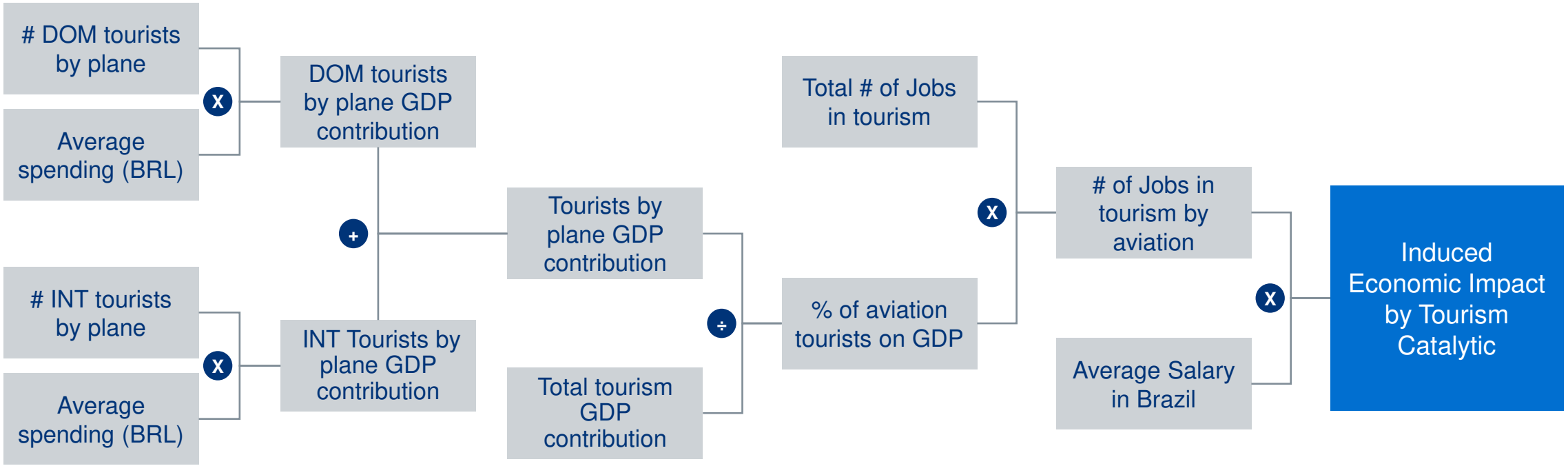
Direct Jobs and Induced Economic Impact

	Airlines	Airports	Total
Jobs created	55.5k jobs	134.6k jobs	**190.1k jobs**
Induced Economic Impact	6.6 bn BRL	12.1 bn BRL	**18.8 bn BRL**

Source: ALG Analysis

For indirect, induced and tourism jobs, another methodology was used based on sector data to approximate the impact of aviation

Methodology for Calculating Tourism Catalytic Jobs and Induced Impact



Proportions were applied to estimate workers and induced impacts for other categories; the premises are in the model developed by ALG

Source: ALG Analysis

It was found that there were 314.2k indirect, 245.2k in tourism and 775.1k induced jobs; the induced economic impact was 13.0 and 10.3 bn BRL in indirect and tourism, respectively

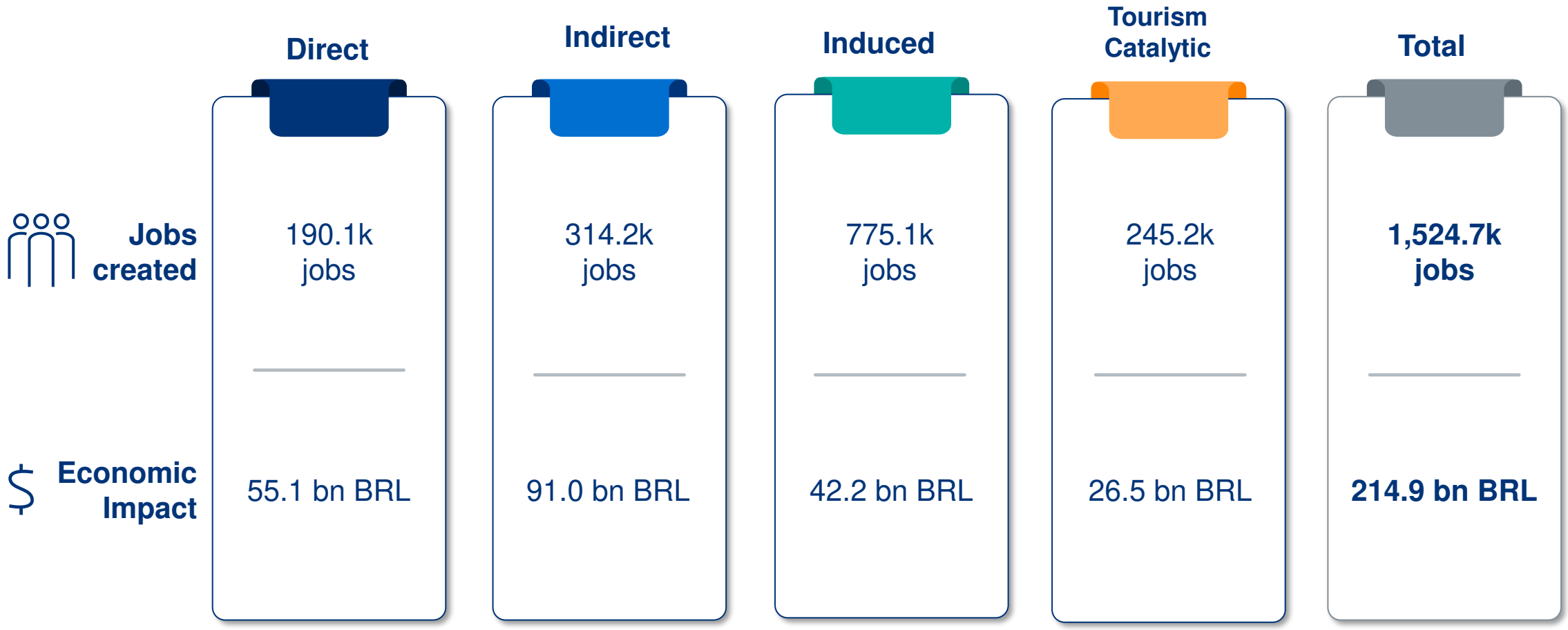
Direct Jobs and Induced Economic Impact

	Indirect	Tourism Catalytic	Induced
Jobs created	314.2k jobs	245.2k jobs	775.1k jobs
Induced Economic Impact	13.2 bn BRL	10.3 bn BRL	-

Source: ALG Analysis

The results found by the ALG model point to 1,524.7k jobs generated by aviation and an economic impact of 214.9 bn BRL annually

ALG Model Results

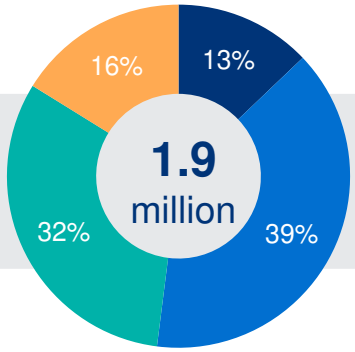


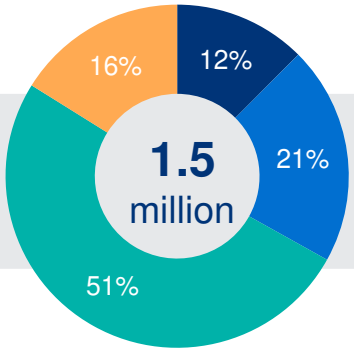
Source: ALG Analysis

Compared to ATAG figures, the ALG model estimated around 400,000 fewer total jobs, with a higher proportion classified as induced jobs

Comparison between ATAG and ALG

Jobs Created (#)



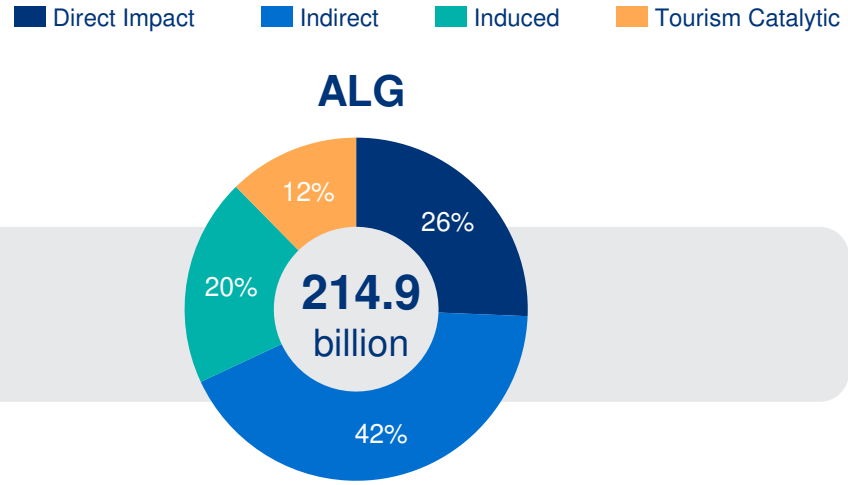


	ATAG	ALG
	4.0% of Jobs	**3.1% of Jobs**
Direct Jobs (#)	**247.0 k**	**190.1 k**
Indirect Jobs (#)	**750.0 k**	**314.2 k**
Induced Jobs (#)	**610.0 k**	**775.1 k**
Tourism Jobs (#)	**310.0 k**	**245.2 k**
Jobs per 1,000 passengers (#)	**21.9**	**13.5**

Source: Aviation Benefits Beyond Borders, ALG Analysis

In terms of economic impact, the two estimates are very similar, with ALG's model falling short by 5.9 bn BRL. In both models, the indirect impact is the largest contributor

Comparison between ATAG and ALG



Contribution to GDP (BRL)	ATAG	ALG
	2.1% of GDP	2.2% of GDP
Direct Impact (bn BRL)	49.4	55.1
Indirect Impact (bn BRL)	76.8	91.0
Induced Impact (bn BRL)	67.2	42.2
Tourism Catalytic (bn BRL)	31.7	26.5
Impact per passenger (BRL)	2,516.83	1,906.13

In addition to the different total passenger volumes considered, the difference in values per 1,000 passengers can also be explained by exchange rate differences that are not being considered in the comparison

Source: Aviation Benefits Beyond Borders, ALG Analysis

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