

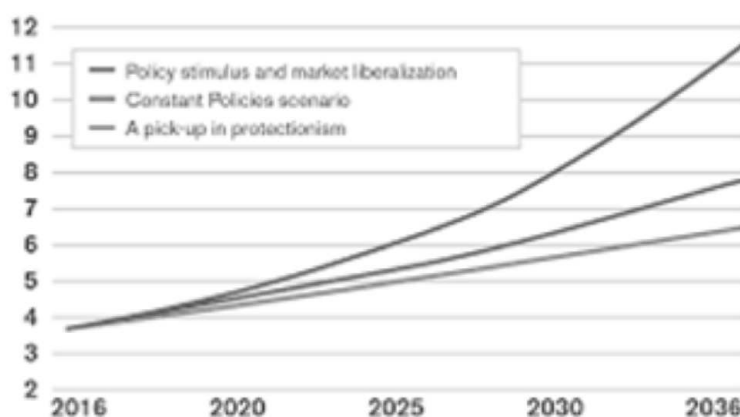
STATS WINDOW

AVIATION INDUSTRY

The airline sector is experiencing rapid growth worldwide, propelled by booming tourism industries, lower air fares and the push for greater connectivity in an increasingly globalised economy. Middle-class expansion has also spurred growth in air travel, as more people are able to afford flights for holidays or business-related travel. The

manufacturer also estimated that by 2036 an additional 41,000 plane deliveries will need to be fulfilled in order to meet service needs for both passengers and cargo. Significant investment will be needed in all areas of aviation to ensure it will be ready to meet long-term demands.

Global Passengers (billion, segment basis)

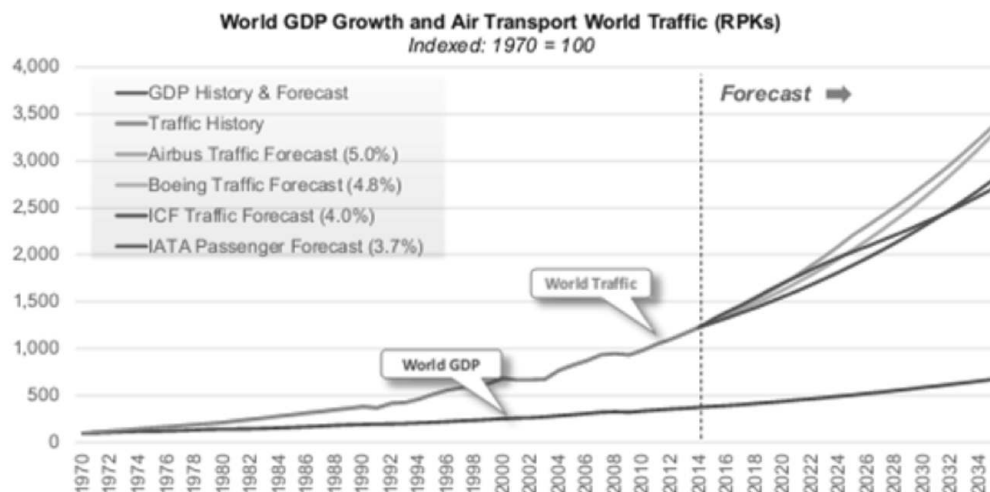


The global airlines' industry is projected to record a higher net profit of USD 38.4 billion in 2018, primarily bolstered by strong demand.

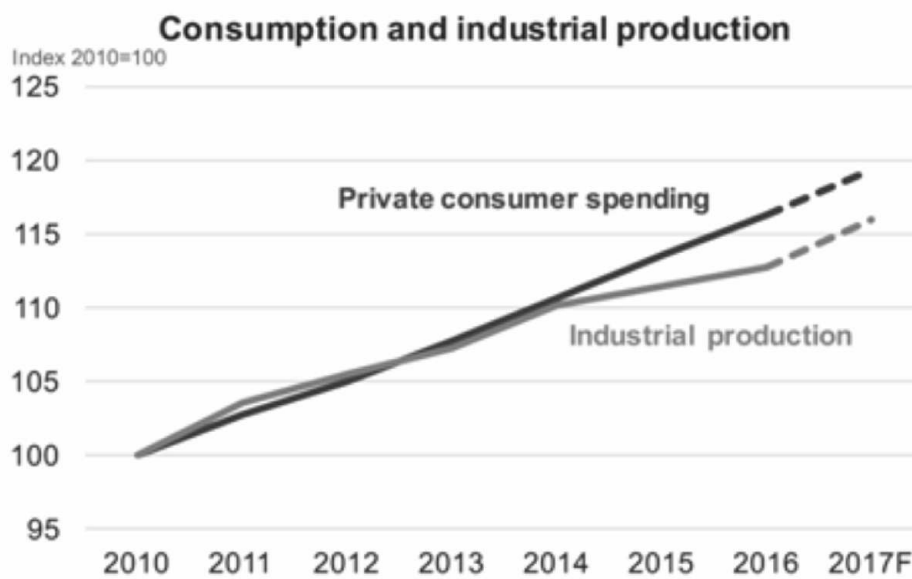


WORLD AIR TRAFFIC GROWTH HAS OUTPACED GDP GROWTH

World Traffic grew 1.9x GDP from 1970-2015, and is forecast to grow 1.7x through 2035

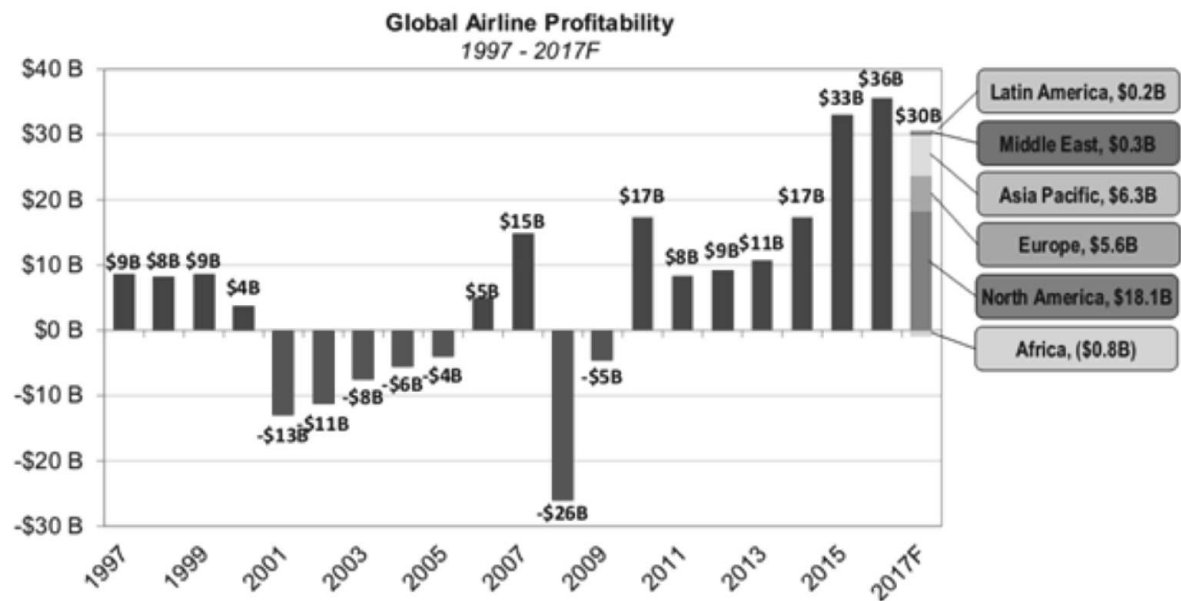


Sources: Airline Monitor, Oxford Economics, World Economic Outlook, Airbus/Boeing/Embraer Market Outlooks, OECD, ICF Analysis (2016 data). Note: RPK (Revenue Passenger Kilometer): number of paying passengers x kilometers flown

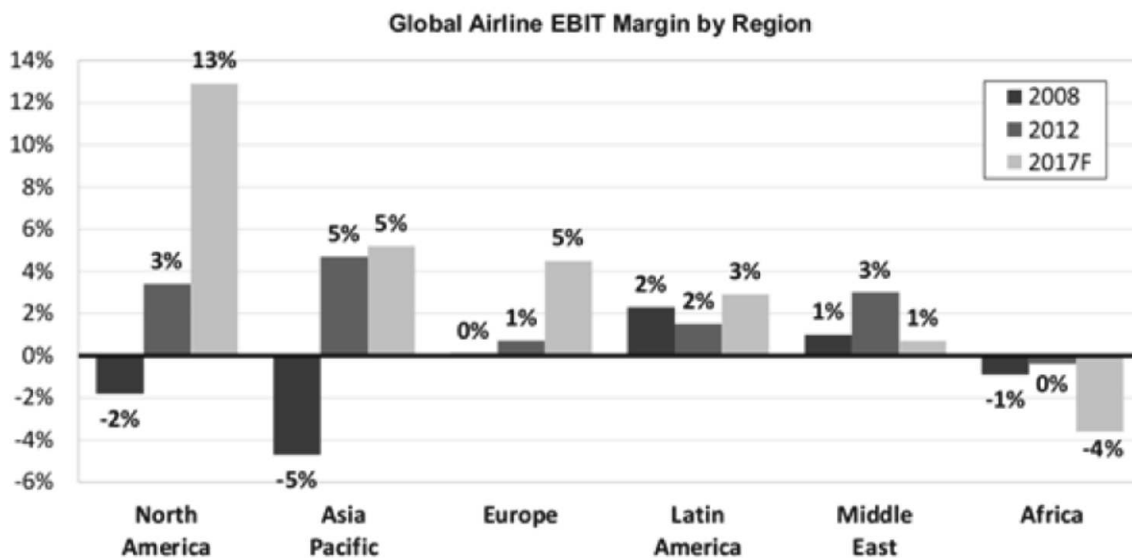


Source: IHS Markit Economics

Rising fuel and labor costs will contribute to a decrease in profitability in 2017

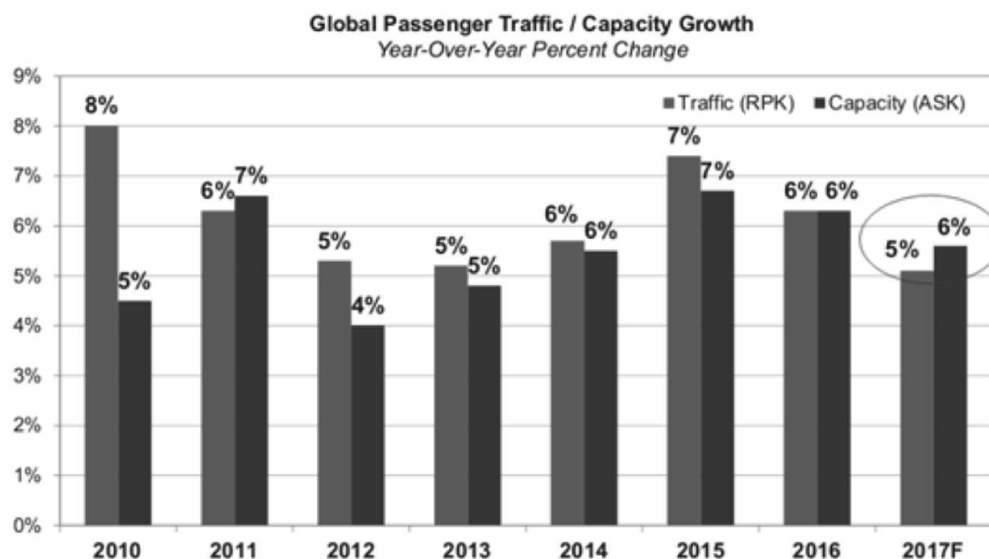


Sources: IATA, ICF Analysis



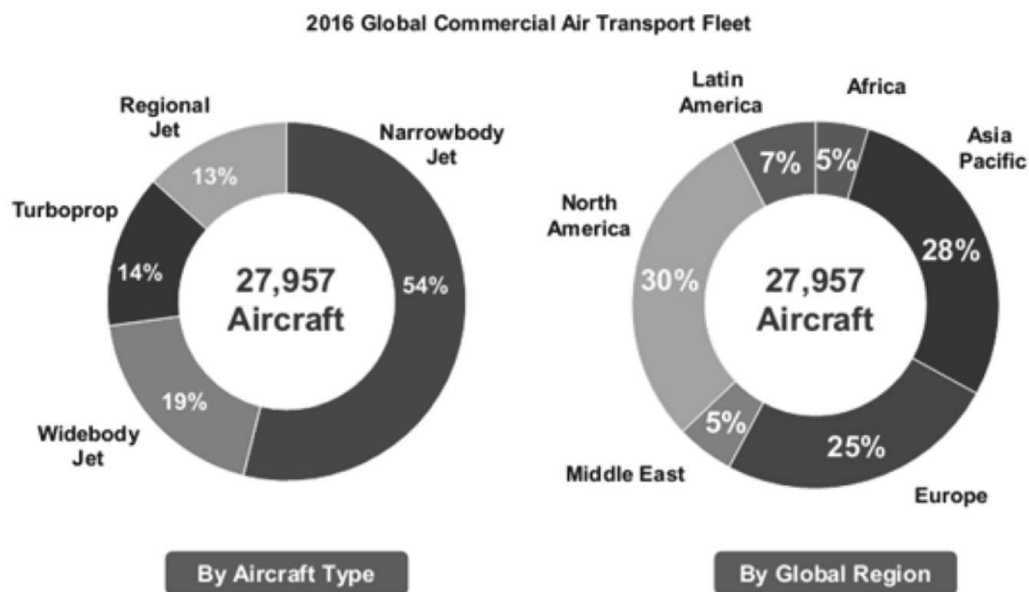
Sources: IATA, ICF Analysis

Global Passenger Traffic



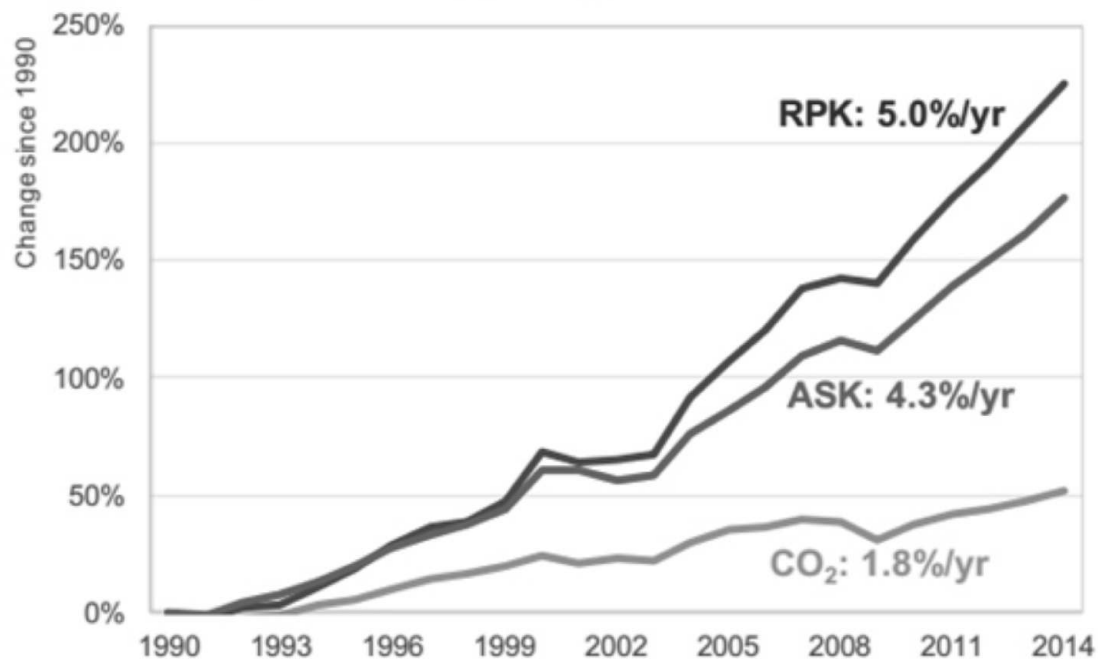
Sources: IATA Air Transport Market Analysis (2017) and Economic Performance of the Airline Industry (Dec 2016)

Commercial Air Transport Fleet

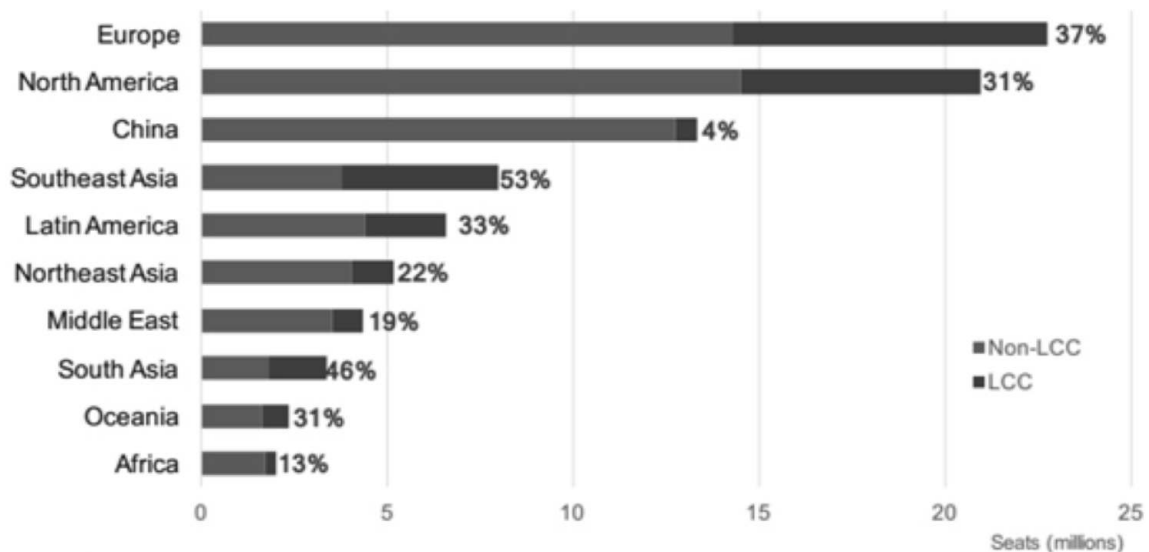


Source: CAPA 2016

CO₂ emissions growing much slower than traffic



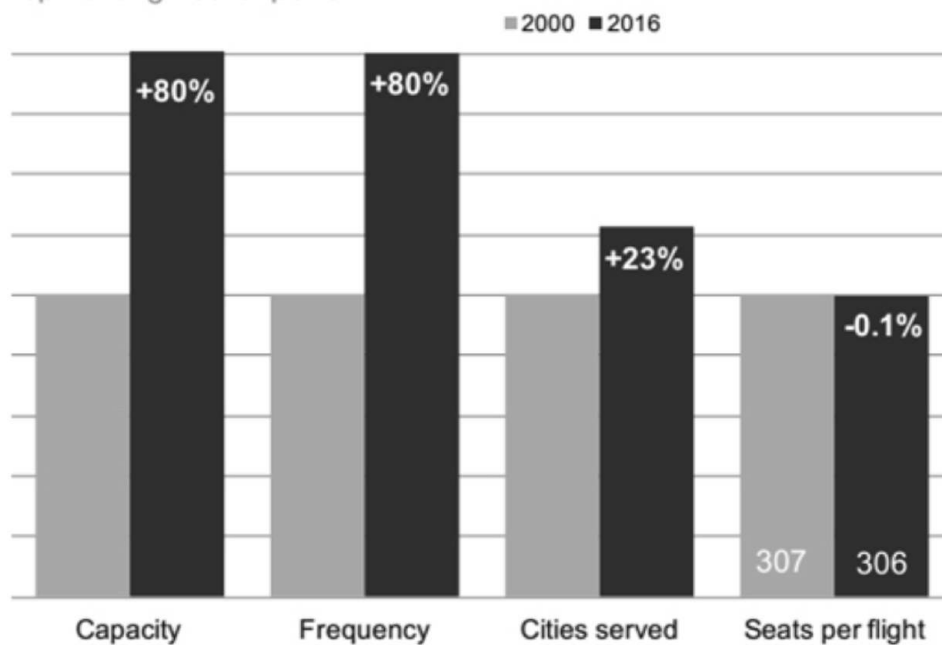
LCC share of total seats by region



Source: Innovata 2017 FEB

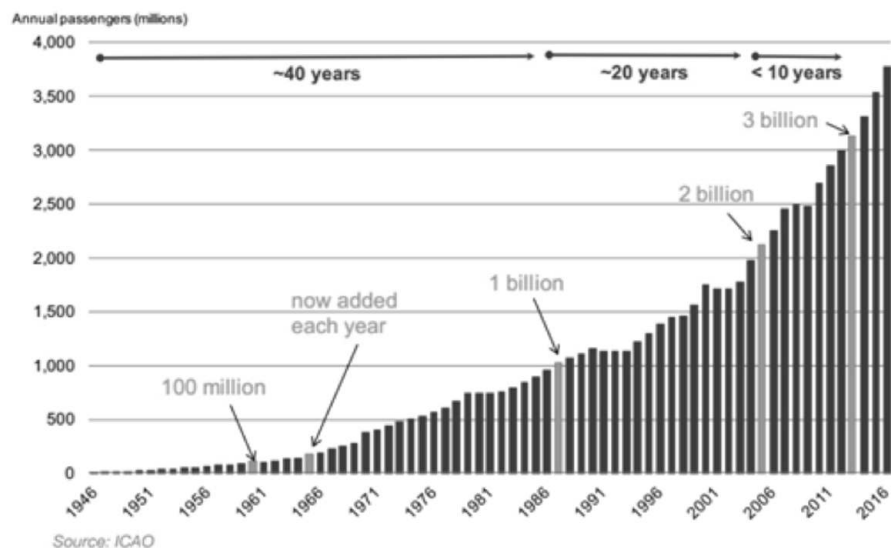
Fragmentation - not size - driving large hubs

Top 20 long-haul airports

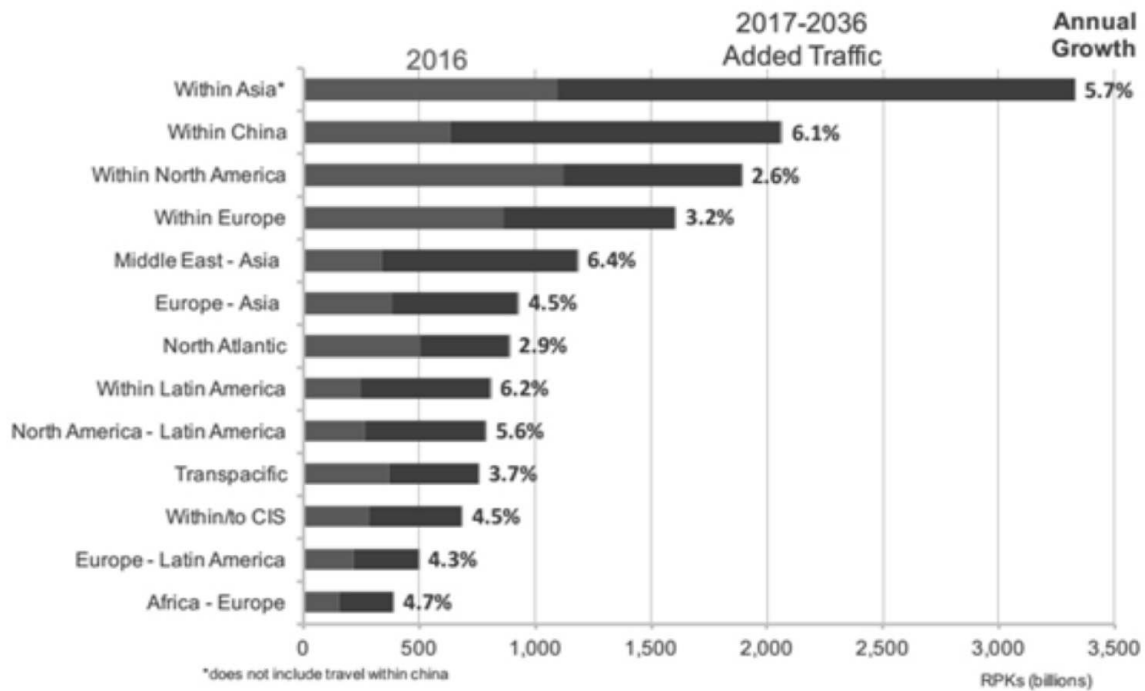


Traffic And Market Outlook

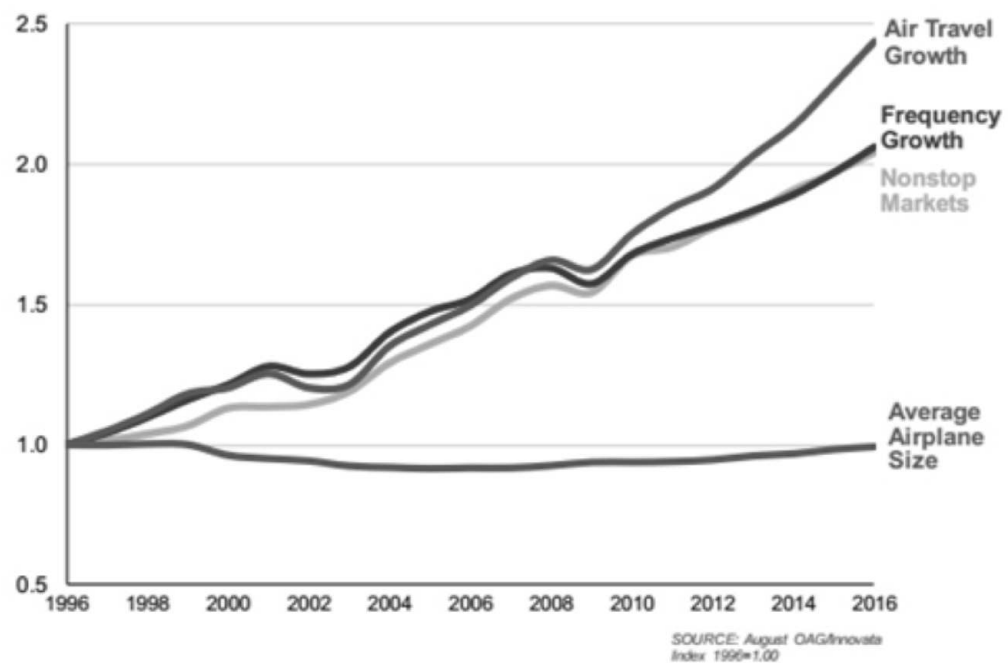
18 million passengers in 1946 – an infant industry...3.7 billion today – essential to modern life

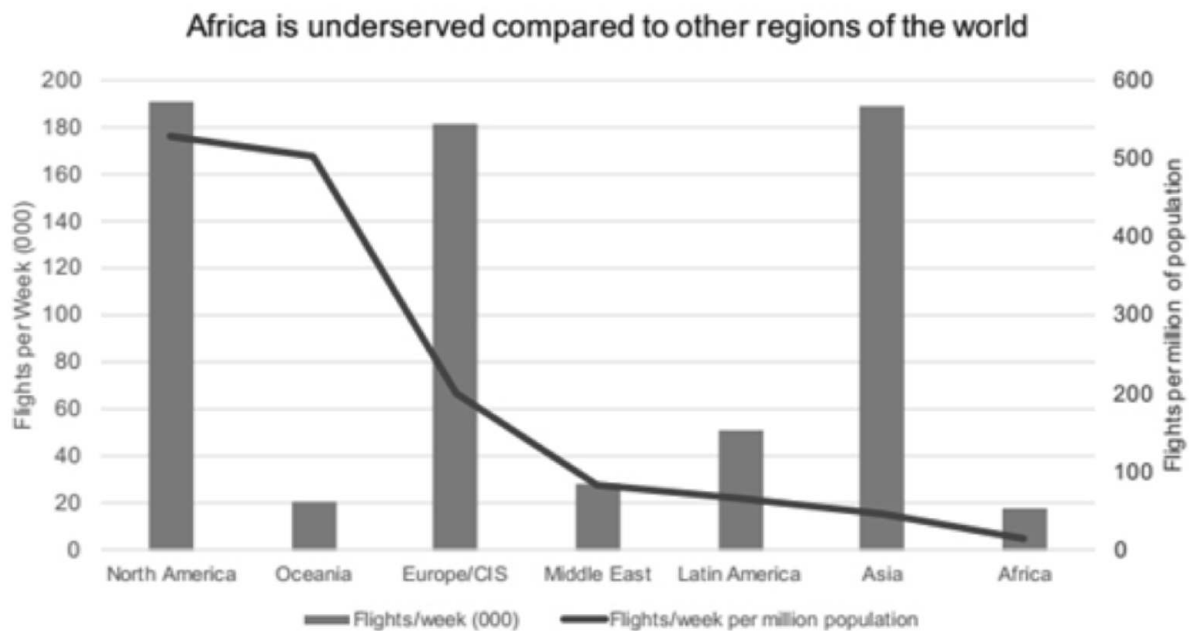


OUTLOOK FOR 4.7 PERCENT AVERAGE ANNUAL PASSENGER TRAFFIC GROWTH OVER THE NEXT 20 YEARS

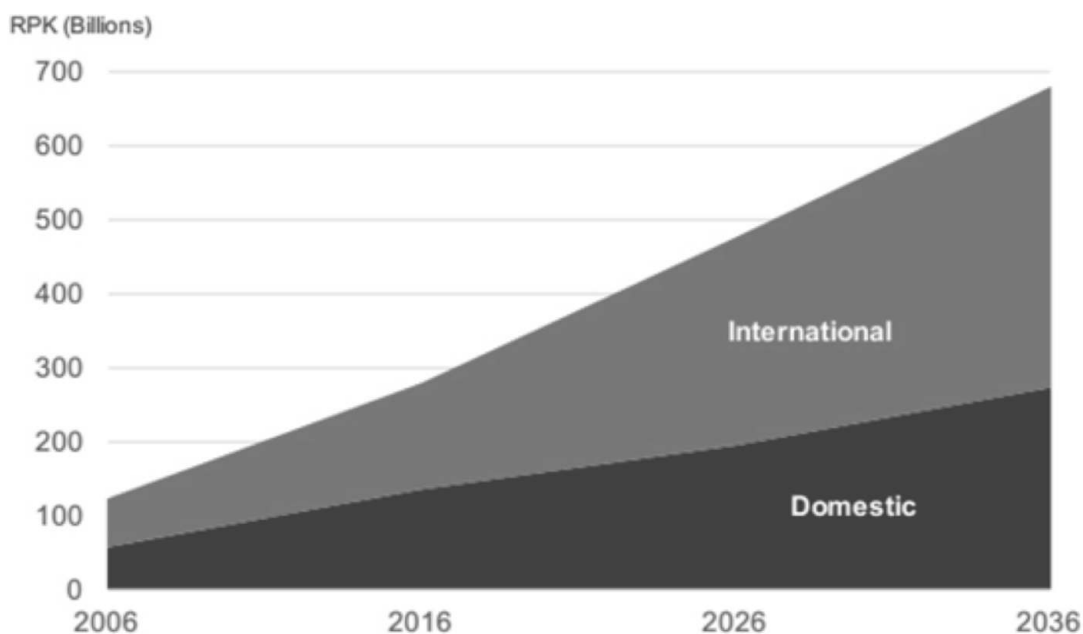


Air travel growth has been met by increased frequencies and nonstops

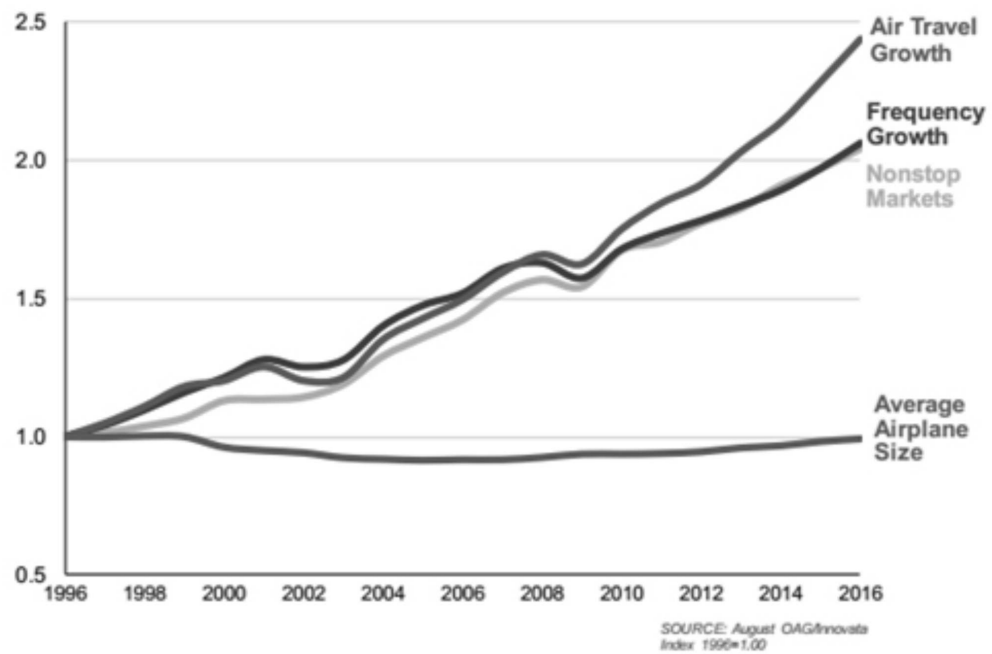




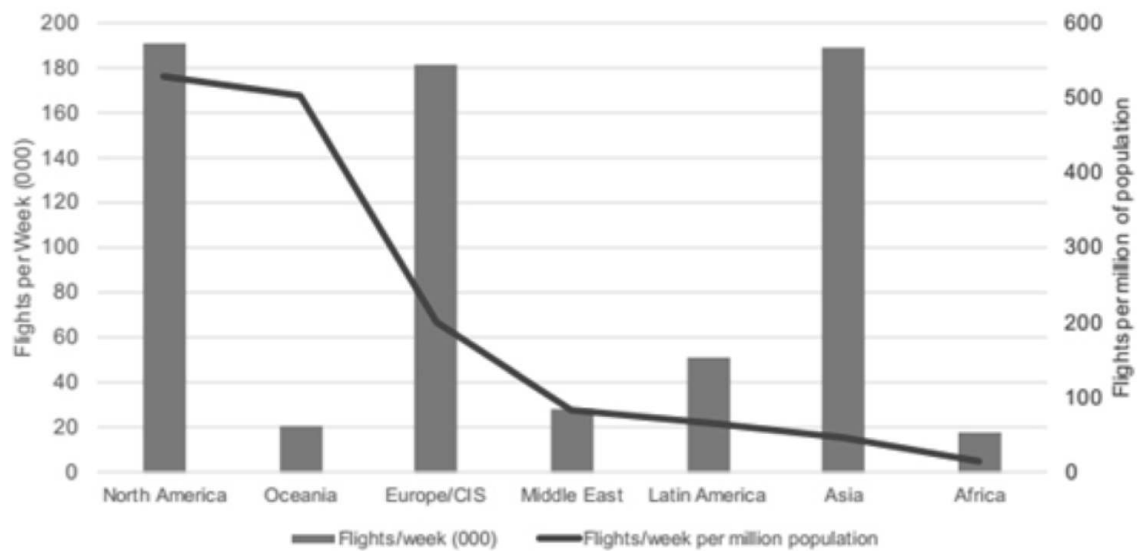
Expansion of traffic in both domestic and international markets

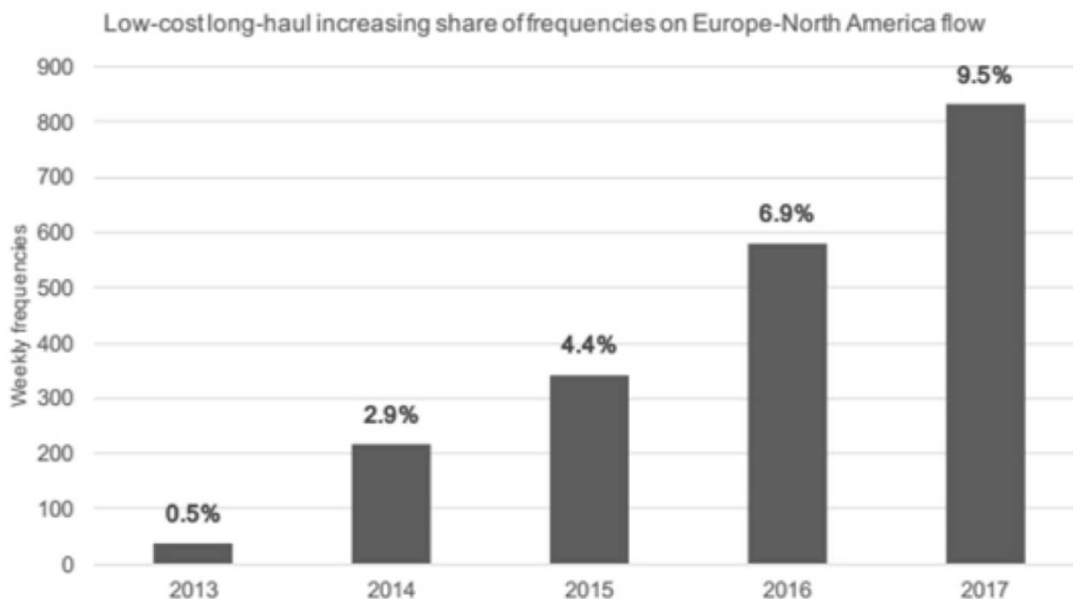


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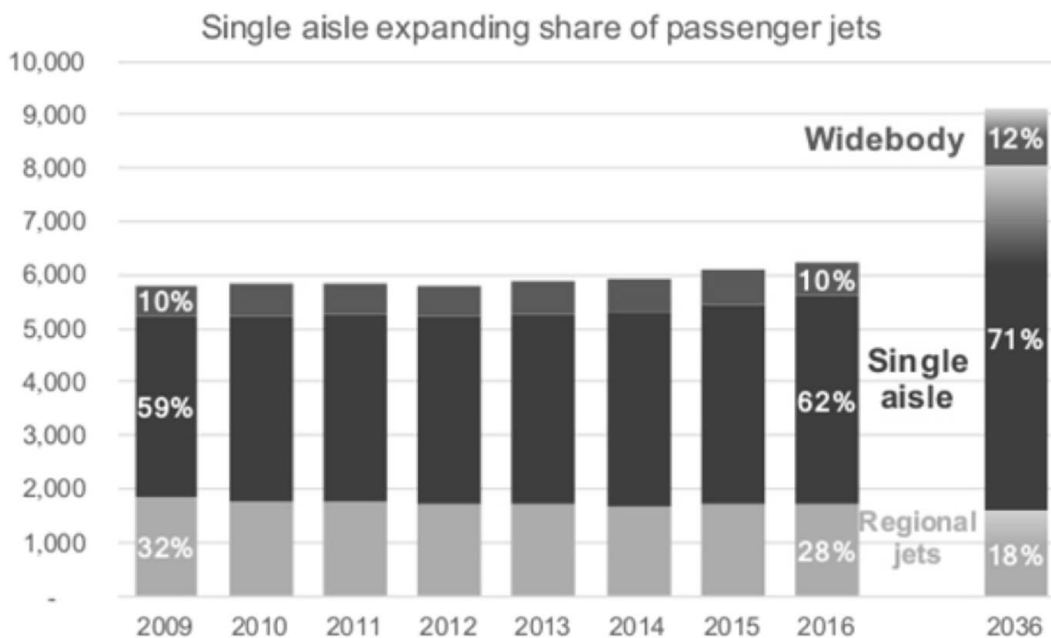


Africa is underserved compared to other regions of the world





Source: Diio/Innovata/OAG



Source: Ascend May 2017, CMO 2017

Worldwide airline Industry	2015	2016	2017
Spend on air transport*, \$billion	752	737	776
% change over year	-6.0%	-2.0%	5.3%
% global GDP	1.0%	0.9%	1.0%
Return fare, \$/pax. (2016\$)	417	371	353
Compared to 1996	-58%	-63%	-64%
Freight rate, \$/kg (2016\$)	1.85	1.58	1.51
Compared to 1996	-63%	-68%	-69%
Passenger departures, million	3,561	3,810	4,085
% change over year	7.0%	7.0%	7.2%
RPKs, billion	6671	7164	7694
% change over year	7.3%	7.4%	7.4%
Freight tonnes, million	52.2	54.3	58.2
% change over year	1.5%	3.9%	7.3%
World GDP growth, %	2.7%	2.4%	2.9%
World trade growth, %	2.7%	2.2%	3.9%

Note: RPK = Revenue Passenger Km, FTK = Freight Tonne Km, y-o-y = year on year change. GVA = Gross Valued Added (firm-level GDP). *Airline revenue + indirect taxes. Sources: IATA, ICAO, OE, Neth CPB, PaxIS, CargoIS.

Worldwide airline Industry	2015	2016	2017
Unique city pairs	17711	18691	19699
Compared to 1996	79%	89%	99%
Transport cost, US\$/RTK (2016\$)	90.5	81.1	77.2
Compared to 1996	-51%	-56%	-58%
Value of trade carried, \$billion	5,616	5,459	5,906
% change over year	-12.7%	-2.8%	8.2%
Value of tourism spend, \$billion	665	651	685
% change over year	-1.0%	-2.1%	5.2%
Supply chain jobs, million	65.0	67.7	69.6
% change over year	3.7%	4.1%	2.8%
Supply chain GVA, \$ trillion	2.8	3.0	3.3
% change over year	6.2%	5.9%	9.4%

Note: RTK = Revenue Tonne Kilometers, GVA = Gross Value Added. The total number of 'routes' or airport pairs is much higher because of multiple airports in some cities and connections are counted both ways. City-pairs: jets + turbo-props larger than 20 seats, at least 1 flight a week; from SRS Analyzer database.

Worldwide airline Industry	2015	2016	2017
Tax revenues, \$billion	113	117	124
% change over year	-1.0%	3.2%	6.6%
% GVA	46%	45%	45%
# of ticket taxes	230	234	236
% of countries requiring full visas	61	58	58

Note: GVA = Gross Value Added (firm-level GDP).

Source: IATA, Oxford Economics.

Worldwide airline Industry	2015	2016	2017
ROIC, % invested capital	9.9%	9.9%	8.8%
ROIC-WACC, % invested capital	3.0%	3.3%	1.5%
Investor value, \$ billion	16.0	17.2	7.9
EBIT margin, % revenue	8.5%	8.8%	7.5%
Net post-tax profits, \$billion	35.9	34.8	31.4
% revenues	5.0%	4.9%	4.2%
\$ per passenger	10.08	9.13	7.69
Free cash flow, % invested capital	2.4%	1.1%	0.6%
Adjusted net debt/EBITDAR	3.8	3.7	3.7

Note: ROIC = Return on Invested Capital, WACC = Weighted Average Cost of Capital, EBIT = Earnings Before Interest and Tax. Debt adjusted for operating leases. **Current year or forward-looking industry financial assessments should not be taken as reflecting the performance of individual airlines, which can differ significantly.** Source: IATA, McKinsey, ICAO.

Worldwide airline Industry	2015	2016	2017
Aircraft fleet	26,608	27,585	28,645
% change over year	3.1%	3.7%	3.8%
Available seats, million	3.7	3.9	4.2
% change over year	5.0%	6.2%	6.1%
Average aircraft size, seats	140	143	146
% change over year	1.9%	2.4%	2.1%
Scheduled flights, million	34.0	35.8	37.5
% change over year	3.0%	5.2%	4.7%
ASKs, % change over year	6.7%	7.5%	7.0%
Passenger load factor, % ASK	80.3%	80.3%	80.6%
Freight load factor, % AFTK	47.7%	46.9%	47.9%
Weight load factor, % ATK	66.9%	66.9%	67.8%
Breakeven load factor, % ATK	61.2%	61.0%	62.7%

Note: ASK = Available Seat Kilometers, AFTK = Available Freight Tonne Kilometers
ATK = Available Tonne Kilometers. Sources: Ascend, ICAO, IATA.

Worldwide airline Industry	2015	2016	2017
Fuel spend, \$billion	175	133	129
% change over year	-22.1%	-24.1%	-2.6%
% operating costs	26.5%	20.6%	18.8%
Fuel use, billion litres	307	323	339
% change over year	5.3%	5.3%	4.9%
Fuel efficiency, litre fuel/100atk	23.8	23.5	23.3
% change over year	-0.7%	-1.1%	-1.1%
CO ₂ , million tonnes	773	814	853
% change over year	5.3%	5.3%	4.9%
Fuel price, \$/barrel	66.7	52.1	64.0
% change over year	-41.9%	-21.9%	22.8%
% spread over oil price	23.7%	16.8%	18.5%
Upstream oil profits, \$billion	15	12	14

Note: ATK = Available Tonne Kilometers. Sources: Ascend, ICAO, IATA.

REGION WISE PERFORMANCE

The strongest financial performance is being delivered by airlines in North America. Net post-tax profits will be the highest at \$15.4 billion this year. That represents a net profit of \$16.32 per passenger, which is a marked improvement from just 4 years earlier. Net margins, forecast at 7.2%, are down from the previous 2 years, though not by much.

Worldwide airline Industry	2015	2016	2017
Africa			
Net post-tax profit, \$billion	-1.0	-0.1	-0.1
Per passenger, \$	-12.55	-1.45	-1.50
% revenue	-7.1%	-0.9%	-0.9%
RPK growth, %	0.0%	9.4%	7.5%
ASK growth, %	-0.2%	8.2%	7.9%
Load factor, % ATK	55.4%	56.2%	55.9%
Breakeven load factor, % ATK	57.7%	55.1%	52.9%
Asia-Pacific			
Net post-tax profit, \$billion	7.3	8.1	7.4
Per passenger, \$	6.03	6.03	4.96
% revenue	3.7%	4.0%	3.4%
RPK growth, %	10.1%	10.9%	10.4%
ASK growth, %	8.4%	9.9%	8.8%
Load factor, % ATK	68.6%	68.8%	70.0%
Breakeven load factor, % ATK	62.4%	61.3%	63.0%
Middle East			
Net post-tax profit, \$billion	2.1	1.1	0.4
Per passenger, \$	11.05	5.31	1.78
% revenue	3.4%	1.8%	0.6%
RPK growth, %	10.4%	11.3%	7.0%
ASK growth, %	12.9%	13.1%	6.9%
Load factor, % ATK	60.1%	59.1%	60.3%
Breakeven load factor, % ATK	57.9%	57.9%	57.5%
Latin America			
Net post-tax profit, \$billion	-1.6	0.6	0.8
Per passenger, \$	-6.03	2.15	2.87
% revenue	-5.1%	1.9%	2.6%
RPK growth, %	7.6%	4.5%	7.5%
ASK growth, %	6.9%	3.4%	6.7%
Load factor, % ATK	62.1%	62.3%	63.2%
Breakeven load factor, % ATK	61.2%	59.7%	60.9%

North America			
Net post-tax profit, \$billion	21.7	16.5	15.4
Per passenger, \$	24.57	18.15	16.32
% revenue	9.9%	7.9%	7.2%
RPK growth, %	5.3%	4.2%	4.0%
ASK growth, %	5.0%	4.6%	4.4%
Load factor, % ATK	64.3%	64.0%	63.9%
Breakeven load factor, % ATK	54.7%	55.5%	56.5%
Europe			
Net post-tax profit, \$billion	7.4	8.6	7.4
Per passenger, \$	7.91	8.67	6.94
% revenue	3.8%	4.6%	3.7%
RPK growth, %	6.0%	5.4%	7.0%
ASK growth, %	4.8%	5.7%	6.9%
Load factor, % ATK	67.4%	67.7%	68.3%
Breakeven load factor, % ATK	63.8%	63.6%	63.7%

Source IATA Economics

Market Size of Indian Airline Sector

India's passenger traffic grew at 16.52 % year on year to reach 308.75 million in 2018. It grew at a CAGR of 12.72 % during 2006-2018.

Domestic passenger traffic grew by 18.28 per cent to reach 243 million in 2018 and is expected to become 293.28 million in 2020E. International passenger grew by 10.43 per cent to reach 65.48 million in 2018 and traffic is expected to become 76 million in 2020E.

In 2018, domestic freight traffic stood at 1,213.06 million tonnes, while international freight traffic was at 2,143.97 million tonnes.

India's domestic and international aircraft movements grew 14.40 % and 9.40% to 1,886.63 thousand and 437.93

thousand during 2017-18, respectively.

During Apr-Nov 2018, passenger* traffic in India stood at 226.80 million. Out of which domestic passenger traffic stood at 181.72 million while international traffic stood at 45.08 million. Total freight traffic handled in India stood at 2.41 million tonnes during the same time.

During Apr-Nov 2018, domestic aircraft movement stood at 1.43 million while international aircraft movement stood at 0.30 million.

As of December 2018, India has 102 operational airports. As of May 2018, there are nearly 588 commercial aircraft in operation in India.