ECONOMIC PERFORMANCE OF THE AIRLINE INDUSTRY

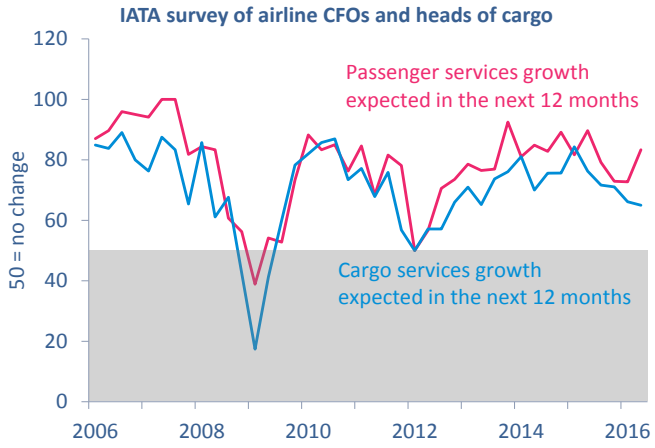
This semi-annual report takes a broad look at how the airline industry is adding value for its consumers, the wider economy and governments, as well as for its investors.

KEY POINTS

- Consumers benefit from lower fuel prices with lower fares, more routes, and will spend 1% of world GDP on air transport.
- Economic development is a big winner from the doubling of city pairs and halving of air transport costs over the past 20 years.
- Governments gain substantially from $118bn of tax next year and from almost 63 million 'supply chain' jobs.
- Load factors are forecast to slip a little as capacity accelerates, but breakeven should fall even further as fuel hedges unwind.
- Equity owners see a far better 2015 and 2016 with a 9%+ average airline ROIC, above the cost of capital for the first time.
- Credit metrics improve further with net debt, adjusted for operating leases, forecast to decline from 4x to 3.6x EBITDAR this year.
- Jobs in the industry should reach 2.61 million, productivity will be up 3.4% and GVA/employee over $100,000.
- Infrastructure use costs are rising further, plus inefficiencies in Europe alone add €2.9bn to airline costs next year.
- N American airlines perform best with a forecast 10.8% net post-tax profit margin in 2016. Africa is the weakest with a 3.5% loss.

CONSUMERS

Consumers will see a substantial increase in the value they derive from air transport this year, including a reduction in what they pay - though the 2015 total was distorted downwards by the sharp rise of the US$. New destinations are forecast to rise by 2%+ this year, with frequencies up too. We expect 1% of world GDP to be spent on air transport in 2016, totaling $740 billion. RPKs, which have been growing well above trend despite a sluggish world economy, are forecast to slow this year but remain above-trend at 6.2%. Falling travel costs have been adding several % points to RPK growth over the past year. The average return fare (before surcharges and tax) of $366 in 2016 is forecast to be 62% lower than 21 years earlier, after adjusting for inflation.



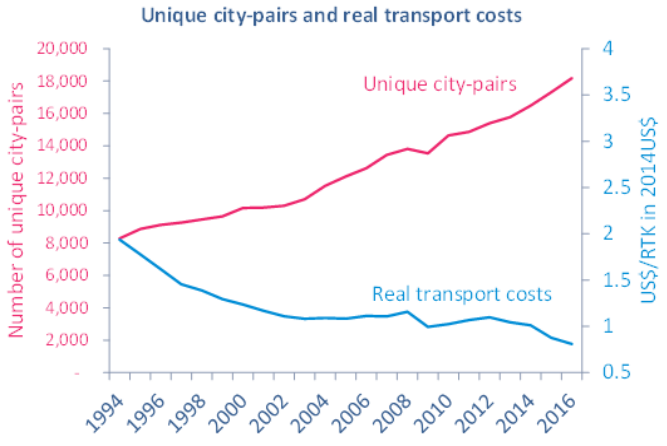
Worldwide airline Industry	2014	2015	2016
Spend on air transport*, $billion	785	750	740
% change over year	4.1%	-4.4%	-1.3%
% global GDP	1.0%	1.0%	1.0%
Return fare, $/pax. (2015$)	472	407	366
Compared to 1995	-50%	-57%	-62%
Freight rate, $/kg (2015$)	2.22	1.80	1.60
Compared to 1995	-52%	-61%	-65%
Passenger departures, million	3,328	3,568	3,783
% change over year	5.6%	7.2%	6.0%
RPKs, billion	6216	6679	7093
% change over year	5.7%	7.4%	6.2%
Freight tonnes, million	51.5	52.2	53.2
% change over year	4.0%	1.5%	1.9%
World GDP growth, %	2.6%	2.4%	2.3%
World trade growth, %	2.9%	1.6%	2.5%

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, EIU, Neth CPB, PaxIS, CargoIS.

Airline CFOs and heads of cargo reported in April that they had become more positive about future growth in air travel, but were less positive about cargo. There may be some more price stimulus to travel, but underlying economic activity is fragile, as recent weakness in business confidence in both advanced and emerging economies has shown – we have further lowered our economic growth forecast for 2016. This year will see slower growth, as weaker confidence induces consumers and business to save lower energy costs rather than to increase spending.

WIDER ECONOMY

Economic development worldwide is getting a significant boost from air transport. This wider economic benefit is being generated by increasing connections between cities - enabling the flow of goods, people, capital, technology and ideas - and falling air transport costs. The number of unique city-pair connections is expected to reach more than 18,000 in 2016, double the connectivity by air twenty years ago. The price of air transport for users continues to fall, after adjusting for inflation. Compared to twenty years ago real transport costs have more than halved.



Lower transport costs and improving connectivity have boosted trade flows; trade itself has resulted from globalizing supply chains and associated investment.

Worldwide airline Industry	2014	2015	2016
Unique city pairs	17370	17746	18243
Compared to 1995	181%	185%	190%
Transport cost, US$/RTK (2015$)	100.2	88.1	80.1
Compared to 1995	-44%	-50%	-55%
Value of trade carried, $billion	6,433	5,580	5,485
% change over year	1.1%	-13.3%	-1.7%
Value of tourism spend, $billion	672	665	657
% change over year	9.4%	-1.0%	-1.2%
Supply chain jobs, million	62.7		
% change over year	4.4%		
Supply chain GVA, $ billion	2.7		
% change over year	5.7%		

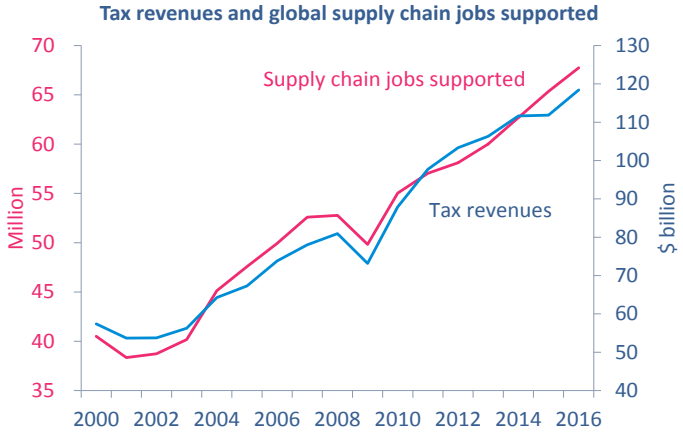
Note: RTK = Revenue Tonne Kilometers, GVA = Gross Value Added. The total number of 'routes' or airport pairs is much higher because of multiple airports in some cities and connections are counted both ways. City-pairs: jets + turbo-props larger than 20 seats, at least 1 flight a week; from SRS Analyzer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

Air transport is vital for manufactures trade, particularly trade in components which is a major part of cross border trade today. We forecast that the value of international trade shipped by air this year will be $5.5 trillion (down from 2014 only because of the stronger $). Tourists travelling by air in 2016 are forecast to spend $657 billion.

Another impact on the wider economy comes through the influence increased airline activity has on jobs in the sector, in its supply chain, and the jobs generated as spending ripples through the economy. These 'supply chain' jobs around the world are estimated to have been 62.7 million in 2014.

GOVERNMENT

Governments have also gained substantially from the good performance of the airline industry. Airlines and their customers are forecast to generate $118 billion in tax revenues this year. That's the equivalent of 45% of the industry's GVA (Gross Value Added, which is the firm-level equivalent to GDP), paid to governments in payroll, social security, corporate and product taxes (Note that charges for services are excluded). In addition the industry continues to create high value added jobs.



Worldwide airline Industry	2014	2015	2016
Tax revenues, $billion	112	112	118
% change over year	5.0%	0.3%	5.5%
% GVA	47.2%	46.3%	45.1%
# of ticket taxes	228	230	233
% of countries requiring full visas	62%	61%	

Note: GVA = Gross Value Added (firm-level GDP).
Source: IATA, Oxford Economics.

But in many countries the value that aviation generates is not well understood. The commercial activities of the industry remain highly constrained by bilateral and other regulations. Moreover, regulation is far from 'smart', leading to unnecessarily high costs. Visa requirements discourage inbound tourism and business travel. Encouragingly visa openness levels are improving. Unfortunately, the number of individual ticket taxes has risen to an alarming 233, while the level of many existing taxes continues to ratchet upwards.

Sources: IATA, ATAG, Oxford Economics, ICAO, SRS Analyser, UNWTO, WTO.

CAPITAL PROVIDERS

Debt providers to the airline industry are well rewarded for their capital, usually invested with the security of a very mobile aircraft asset to back it. On average during the business cycle the airline industry has been able to generate enough revenue to pay its suppliers' bills and service its debt. Credit metrics are improving with recent significant free cash flows, particularly in North America, and a forecast further decline in debt ratios.

Equity owners have not been rewarded adequately for risking their capital in most years, except at a handful of airlines. Investors should expect to earn at least the normal return generated by assets of a similar risk profile, the weighted average cost of capital (WACC). Such is the intensity of competition, and the challenges to doing business, that average airline returns are rarely as high as the industry's cost of capital. Equity investors have typically seen their capital shrink. But this year we expect the industry to generate a return on invested capital (ROIC) of 9.8%, which does, for only the second year, adequately reward equity owners. On invested capital of almost $600 billion, the industry is forecast to generate $16.2 billion of value for investors this year. But it should be clear that $39.4 billion net profit, while exceptional for the airline industry, is really only sufficient to pay investors a 'normal' return for risking their capital. Moreover, high returns have only started to be generated outside North America in the past year and are still not widespread across all regions.

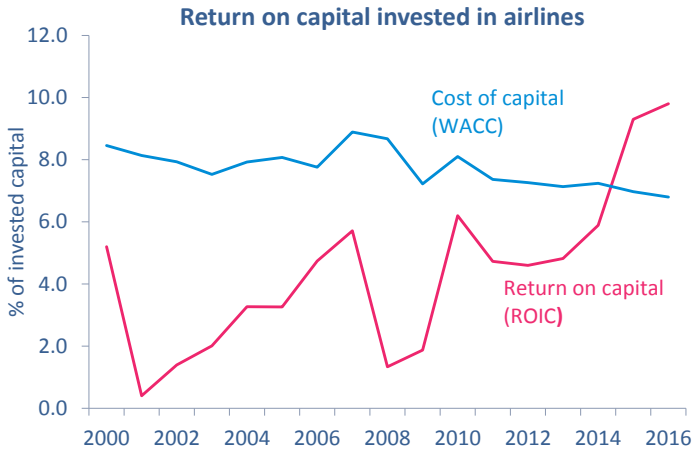
The trend improvement in returns is being driven by changes in industry structure and behavior. Breakeven load factors are usually on a painful upward trend as yields fall faster than cost reductions. They are falling this year because of lower fuel prices and increasing ancillary revenues. On top of that, consolidation and more returns-focused behavior have boosted load factors achieved.

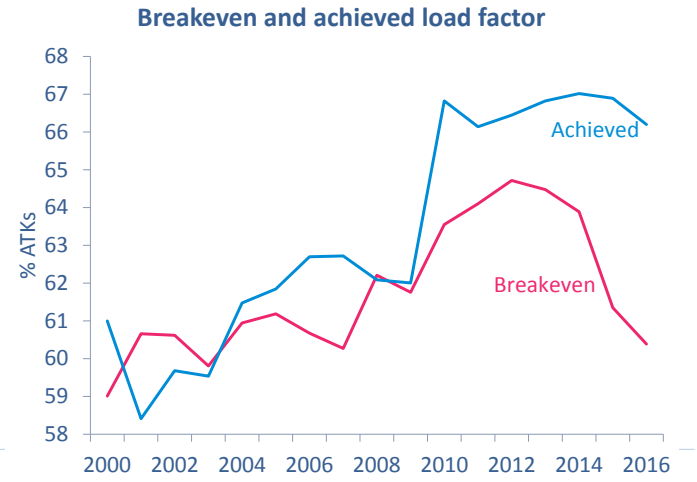
AIRCRAFT

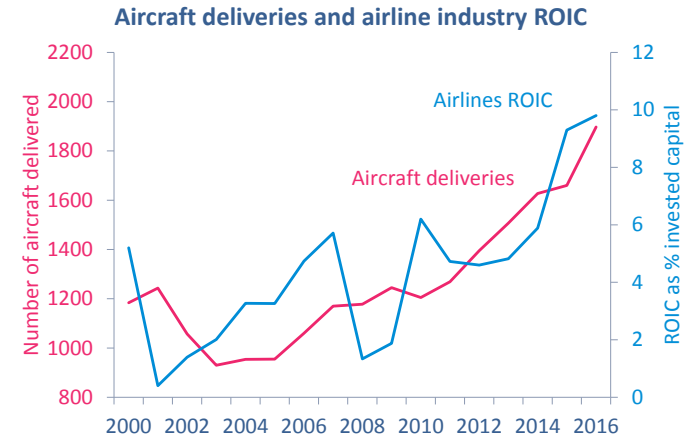
This year commercial airlines are expected to take delivery of almost 1,900 new aircraft, a substantial investment by the industry. The trend improvement in average returns (ROIC) has given the industry the confidence to invest on this scale. Sustained high fuel costs had also made it economic to retire older aircraft at a higher rate, but that effect will clearly continue to weaken this year. Around half of this year's deliveries will replace existing fleet, making a significant contribution to increasing fleet fuel efficiency, as described below.

Worldwide airline Industry	2014	2015	2016
ROIC, % invested capital	5.9%	9.3%	9.8%
ROIC-WACC, % invested capital	-1.4%	2.3%	3.0%
Investor value, $ billion	-7.8	12.8	16.2
EBIT margin, % revenue	4.7%	8.3%	8.8%
Net post-tax profits, $billion	13.7	35.3	39.4
% revenues	1.8%	4.9%	5.6%
$ per passenger	4.12	9.89	10.42
Free cash flow, % invested capital	-3.9%	1.6%	1.5%
Adjusted net debt/EBITDAR	4.6	4.0	3.6

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.







Sources for charts on this page: IATA, ICAO, McKinsey, Ascend.

The fleet is forecast to increase by over 1100 aircraft to end this year at almost 28,000 aircraft; lower fuel prices will lead to fewer older aircraft leaving the fleet. The average size of aircraft in the fleet is continuing to rise slowly. So by the end of 2016 there will be around 3.9 million available seats. These seats are also being used more intensively, which is critical for profitability in a capital intensive industry – and it also reduces environmental impact. Passenger load factors are expected to slip from 2015 levels but to hold at 80% on average this year. Aircraft are also being flown more intensively. The number of scheduled aircraft departures is forecast to exceed more than 36 million this year. That's an average of 70 aircraft departing each minute of 2015.

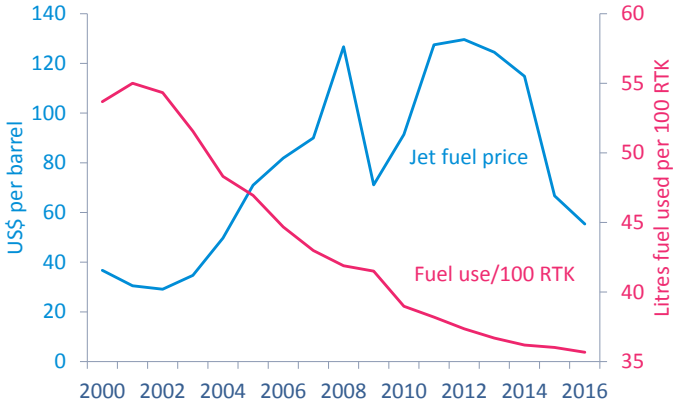
Worldwide airline Industry	2014	2015	2016
Aircraft fleet	25,860	26,788	27,930
% change over year	2.9%	3.6%	3.9%
Available seats, million	3.5	3.7	3.9
% change over year	5.0%	5.3%	5.8%
Average aircraft size, seats	137	139	141
% change over year	2.0%	1.6%	1.4%
Scheduled flights, million	33.0	34.8	36.8
% change over year	3.2%	5.5%	5.5%
ASKs, % change over year	5.5%	6.7%	6.8%
Passenger load factor, % ASK	79.9%	80.4%	80.0%
Freight load factor, % AFTK	45.8%	44.1%	42.9%
Weight load factor, % ATK	67.0%	66.9%	66.2%
Breakeven load factor, % ATK	63.9%	61.3%	60.4%

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

FUEL

This year we forecast the airlines fuel bill will fall to $127 billion, which will represent less than 20% of their total operating costs, for the first time since 2004. Jet fuel prices have fallen substantially and we base our forecast on an average price of $55.4/b this year, and $45/b for the Brent crude oil price. This year's oil price average is based on the low start to the year and a rising profile to just above $50/b by the end of the year. The slow rise in prices is being driven by evidence that high-cost oil supply is now being cut back, and the realization that inventories need to remain higher than before now that OPEC's buffer role has gone.

Fuel efficiency and the price of jet fuel



Fuel is such a large cost that it focuses intense effort in the industry to improve fuel efficiency, through replacing fleet with new aircraft, better operations and efforts to persuade governments to remove the airspace and airport inefficiencies that waste around 5% of fuel burn each year.

Worldwide airline Industry	2014	2015	2016
Fuel spend, $billion	226	181	127
% change over year	-1.8%	-19.9%	-29.6%
% operating costs	31.6%	27.5%	19.7%
Fuel use, billion litres	278	294	307
% change over year	4.2%	5.6%	4.7%
Fuel efficiency, litre fuel/100atk	24.3	24.1	23.7
% change over year	-1.1%	-0.7%	-1.5%
CO_2, million tonnes	739	781	817
% change over year	4.2%	5.6%	4.7%
Fuel price, $/barrel	114.8	66.7	55.4
% change over year	-7.8%	-41.9%	-17.0%
% spread over oil price	14.9%	23.7%	23.0%
Upstream oil profits, $billion	26	15	12

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

We forecast that fuel efficiency, in terms of capacity use i.e. per ATK, will improve by 1.5% in 2016 as deliveries of new aircraft accelerate and fuel prices start to trend upwards slowly. The annual average per RTK fuel efficiency improvement from 2009-14 currently stands at 2.4%, versus the 1.5% industry target.

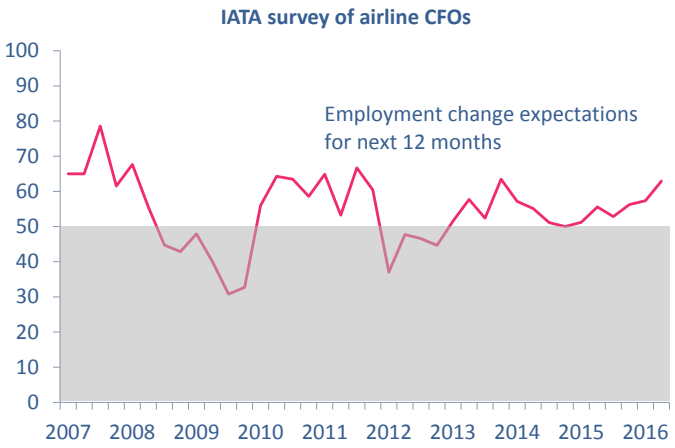
Continued fuel efficiency gains have partially decoupled CO_2 emissions from expanding air transport services. Without the expected fuel efficiency gain this year, fuel burn and CO_2 emissions would be 1.5% higher in 2016. That represents a saving of over 12 million tonnes of CO_2, as well as saving on fuel that would have cost the industry and its consumers an additional $1.8 billion.

Sources for charts on this page: IATA, ICAO, Platts.

LABOUR

Airlines are expecting to continue the strong pace of hiring over the coming year. Growth in employment was strong in 2015, and IATA's survey of airline CFOs in April showed a rising net balance of those saying they would increase hiring over the next 12 months.

We estimate that total employment by airlines will reach 2.61 million this year, a gain of almost 3% compared to 2015. Productivity is expected to be strong, as capacity accelerates in 2016, with the average employee generating almost 500,000 ATKs a year, which is a 3.4% improvement over last year. Wages and jobs will rise as employees share the benefits of improved performance. There are risks if labour costs become unsustainable when the next downturn arrives. But we expect a relatively small rise in unit labour costs in 2016.



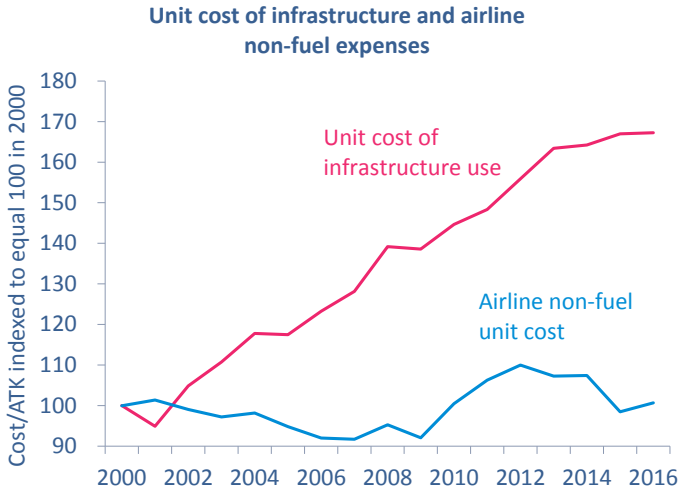
Worldwide airline Industry	2014	2015	2016
Labour costs, $ billion	143	144	153
% change over year	4.8%	0.6%	6.4%
Employment, million	2.47	2.54	2.61
% change over year	2.9%	2.8%	2.8%
Productivity, atk/employee	463,996	479,745	495,912
% change over year	2.4%	3.4%	3.4%
Unit labour cost, $/ATK	0.125	0.118	0.118
% change over year	-0.5%	-5.4%	0.1%
GVA/employee, $	95,646	95,143	100,186
% change over year	4.2%	-0.5%	5.3%

Note: ATK = Available Tonne Kilometers, GVA = Gross Value Added (firm-level GDP). Sources: IATA, ICAO, ATAG, Oxford Economics

The jobs being created are not just productive for their airline employers; they are also highly productive for the economies in which they are employed. We estimate that the direct GVA for national economies, generated by the average airline employee, will rise 5.3% this year to over $100,000 a year, which is well above the economy-wide average. Additional jobs in the airline sector will raise average levels of productivity in an economy.

INFRASTRUCTURE

Infrastructure partners play an important role in the service airlines provide to their customers, affecting the experience, the timeliness of the journey, and its cost.



Worldwide airline Industry	2014	2015	2016
European airspace inefficiency			
Airline costs, € million	2,720	2,759	2,845
Passenger time loss, € million	4,608	4,682	4,789

Sources: IATA 2015-16 forecast Eurocontrol PRC's European ANS Performance Review for the 2014 airline cost estimate. Value of time from Eurocontrol.

The direct cost paid for using infrastructure has increasingly been transferred to the passenger. Overall the cost of using airport and ANSP infrastructure has risen steeply over the past decade, partly because competitive pressures are very weak in this part of the supply chain. This contrasts with the relatively limited rise in other non-fuel airline costs. Moreover, inefficiencies causing delay and inefficient routings add to the direct cost. We forecast that the delays caused by inefficient airspace management in Europe alone will cost the industry over €2.8 billion next year, as well as generating unnecessary CO_2 emissions. The time passengers waste in these delays is a consumer cost worth an estimated €4.8 billion.

Sources for charts on this page: ACI (aeronautical revenues), ICAO (en-route charges), Eurocontrol, IATA.

REGIONS

The strongest financial performance is being delivered by airlines in North America. Net post-tax profits will be the highest at $22.9 billion this year. That represents a net profit of $25.34 per passenger, which is a marked improvement from just 3 years earlier. Net margins forecast at 10.8% exceed the peak of the late 1990s. This improvement has been driven by consolidation, helping to raise load factors (passenger + cargo) to 64%, and ancillaries, which together with lower fuel costs push breakeven load factors down to 54.2% this year.

Breakeven load factors are highest in Europe, caused by low yields due to the competitive open aviation area, and high regulatory costs. But the region has achieved the second highest load factors and is generating solid growth. Net profits are forecast to rise to $7.5 billion this year representing $7.83 per passenger and a margin of 4%.

Airlines in Asia-Pacific have very diverse performances. Average profit per passenger this year is forecast at $5.94 as lower fuel costs and more stable cargo markets, particularly important in this manufacturing region, help boost net margins to 3.9% and net profits to $7.8 billion.

Middle Eastern airlines have one of the lower breakeven load factors. Average yields are low but unit costs are even lower, partly driven by the strength of capacity growth; forecast at 12.2% this year. Post-tax profits are expected to grow to $1.6 billion this year, representing a profit of $7.83 per passenger and a net margin of 2.5%.

Latin American airlines have faced a harsh environment, with weak home markets and currencies, despite a degree of consolidation and some long-haul success. A net profit of just $0.1 billion is forecast this year, following losses of $1.5 billion in 2015.

Africa is the weakest region, as in the past 2 years. Losses have emerged again due to regional conflict and the impact of low commodity prices. Breakeven load factors are relatively low, as yields are a little higher than average and costs are lower. However, few airlines in the region are able to achieve adequate load factors, which average the lowest globally at 54.6% in 2016. Performance is improving, but only slowly.

2nd June 2016
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Worldwide airline Industry	2014	2015	2016
Africa			
Net post-tax profit, $billion	-0.8	-0.7	-0.5
Per passenger, $	-9.81	-8.60	-5.64
% revenue	-4.8%	-4.7%	-3.3%
RPK growth, %	0.3%	0.0%	4.5%
ASK growth, %	2.5%	-0.2%	5.3%
Load factor, % ATK	56.1%	55.5%	54.6%
Breakeven load factor, % ATK	57.3%	56.9%	55.3%
Asia-Pacific			
Net post-tax profit, $billion	1.8	7.2	7.8
Per passenger, $	1.63	5.95	5.94
% revenue	0.9%	3.6%	3.9%
RPK growth, %	6.9%	10.1%	8.5%
ASK growth, %	7.4%	8.4%	9.1%
Load factor, % ATK	66.9%	67.3%	66.7%
Breakeven load factor, % ATK	65.2%	61.5%	60.5%
Middle East			
Net post-tax profit, $billion	0.4	1.4	1.6
Per passenger, $	2.44	7.56	7.83
% revenue	0.7%	2.3%	2.5%
RPK growth, %	12.1%	10.4%	11.2%
ASK growth, %	10.9%	12.9%	12.2%
Load factor, % ATK	61.0%	60.1%	58.8%
Breakeven load factor, % ATK	60.3%	58.6%	57.2%
Latin America			
Net post-tax profit, $billion	0.0	-1.5	0.1
Per passenger, $	0.08	-5.47	0.38
% revenue	0.1%	-4.7%	0.4%
RPK growth, %	6.3%	7.6%	4.2%
ASK growth, %	4.1%	6.9%	3.7%
Load factor, % ATK	62.6%	62.1%	62.5%
Breakeven load factor, % ATK	61.3%	60.9%	60.9%
North America			
Net post-tax profit, $billion	11.2	21.5	22.9
Per passenger, $	13.30	24.48	25.34
% revenue	5.1%	9.8%	10.8%
RPK growth, %	2.7%	5.3%	4.0%
ASK growth, %	2.5%	5.0%	4.3%
Load factor, % ATK	65.1%	64.3%	64.0%
Breakeven load factor, % ATK	57.9%	54.8%	54.2%
Europe			
Net post-tax profit, $billion	1.0	7.4	7.5
Per passenger, $	1.15	8.03	7.83
% revenue	0.5%	3.8%	4.0%
RPK growth, %	5.7%	6.0%	4.9%
ASK growth, %	5.1%	4.8%	5.8%
Load factor, % ATK	67.2%	67.4%	66.6%
Breakeven load factor, % ATK	65.8%	63.8%	62.9%

Note: RPK = Revenue Passenger Kilometers, ASK = Available Seat Kilometers, ATK = Available Tonne Kilometers. **Current year or forward-looking industry financial assessments should not be taken as reflecting the performance of individual airlines, which can differ significantly**. Sources: ICAO, IATA.