I. STATEMENT FROM OUR EXPERT

AVIATION INDUSTRY PROFITABILITY CONTINUES TO IMPROVE

The aviation industry has continued on a very good growth path. Reasons for this include successful efficiency improvement and fleet renewal programmes; the realignment of business models and consolidation processes within the airline industry; and also significant declines in the price of oil since the start of 2015: while the price per barrel recently topped 50 dollars again, oil is currently still cheap in comparison to prices between 2012 and 2014. The lower price of aviation fuel has also contributed to a fall in average ticket prices, and this in turn has driven passenger numbers – according to IATA data, these climbed by 6.3% in 2016, which is higher than the average level. Airline profitability also reached record levels in the past year, with the average ROIC coming in at over 9%. A recent survey of airline CFOs suggests that the industry is optimistic about profitability remaining high in 2017, declining slightly to a little below 8% – still close to the record peak of the previous year.

Airlines' ROIC at 9% ↗

Oil price is a significant influential factor for profitability in the airline industry. Whereas fuel costs still accounted, on average, for around 27% of airlines' overall operating costs in 2015, this fell to around 19% in 2016, and a similar figure is expected in 2017. Last year, low oil prices somewhat cooled demand for new, fuel-efficient aircraft models such as the Airbus A320neo, Airbus A330neo and the Boeing 737 MAX, impacting on the level of new orders. However, this effect should only be temporary. Commodity prices are expected to rise, boosting interest in efficient aircraft in the medium term. In the longer term, we expect a continued substantial rise in market share for energy-efficient models.

New generation aircraft types: increased market share expected

Statistics indicate that geopolitical factors such as terror threats and political unrest can be detrimental to the air travel market. However, these negative effects are generally localised and temporary, with demand for air travel ultimately making a recovery. Moreover, airlines have made structural adjustments in recent years, including improvements to their cost structures, which will help the airline industry to overcome possible future challenges.

Long-term growth despite geopolitical factors

Jochen Hörger
Managing Director Aviation

II. FOCUS ON MARKET DATA

STABLE GROWTH

World GDP

+ 3.4%

The International Monetary Fund (IMF) is currently projecting that the global economy will grow by 3.4% in 2017. Growth last year was at 3.1%.

Trend: ↗

Sources of funding

Despite the significant recent increase in USD interest rates, capital markets remain highly liquid, ensuring good access to funding.

Trend: →

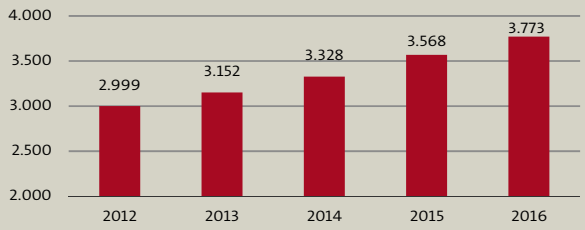
Kerosene price

52.6 USD/b

The average yearly price of kerosene was once again lower than in the previous year. However, the fuel price trend appears to have bottomed out in 2016. IATA expects fuel prices to continue to rise in 2017.

Trend: ↗

Price of kerosene in USD/bbl (2012-2016)



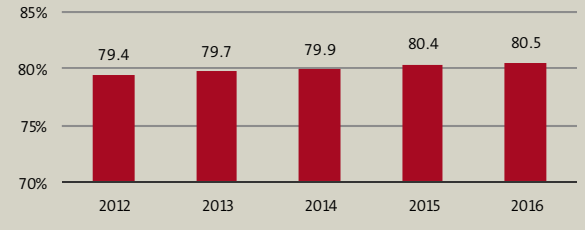
Seat load factor

80.5%

According to IATA data, airlines benefited from high capacity utilisation in their air travel business during 2016. The seat load factor (ratio of revenue seat kilometres to available seat kilometres) stood at 80.5%, roughly equal to the previous year's high level (80.4%). Capacity utilisation is expected to decrease slightly in 2017.

Trend: →

Seat load factor in % (2012-2016)



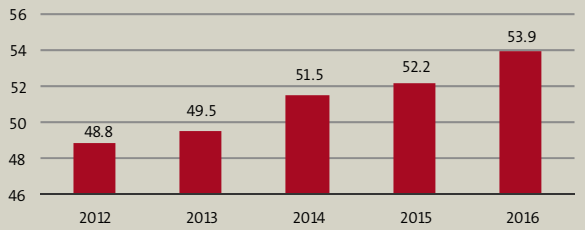
Freight volume

+ 3.8%

At 3.8%, the growth in freight volume (in tonne-kilometres) in 2016 exceeded mid-year forecasts by a considerable margin. In 2017, freight volume is expected to grow by around 3.5%.

Trend: →

Air freight in million tonnes (2012-2016)



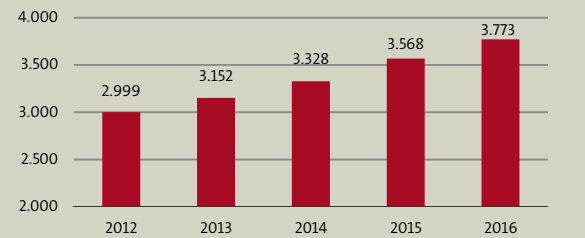
Passenger volume

+ 6.3%

With regard to passenger volume (revenue passenger kilometres) IATA reported global growth of 6.3% in 2016. In 2017 growth is expected to moderate to approximately 5.1%, in line with the average growth trend of the past 20 years.

Trend: ↘

Passenger numbers in million (2012-2016)



III. A CLOSER LOOK

THE INFLUENCE OF NEW DEVELOPMENTS ON OLD AIRCRAFT MODELS

Aircraft models such as the A320neo by Airbus or the Boeing 737 MAX are the newest generation of "narrowbodies". They are improved versions of existing aircraft types, with additional features such as more fuel-efficient engines. This development enables airlines to minimise fuel costs: the dominant cost driver in the industry. Depending on the route profile, Airbus specifies fuel savings of up to 20% with the "New Engine Option" (neo). There are currently around 5,000 orders on hand for aircraft in the A320neo family. However, earlier models such as the Airbus A320ceo (Current Engine Option) family are still in demand, not least because the relatively low current oil price has somewhat shifted the priority of achieving maximum fuel efficiency when choosing aircraft models.

New aircraft models offer fuel savings of up to 20%

An argument can be made for choosing either option: while the A320neo offers more efficient engines, lower operating costs and up to 10% more range, the A320ceo is several million dollars cheaper and has a lower empty weight (landing fees and air traffic control fees for example are generally based on weight). So whether the additional capital investment for the A320neo pays off in the long term depends largely on the development of oil prices. Another factor in the economic calculation is the aircraft's operating profile at the relevant airline – fuel savings will be less significant on short routes.

Both aircraft variants offer advantages

While it is not possible to accurately predict the future value trend of specific aircraft, experience indicates that the introduction of a new aircraft generation generally has only minimal impact on the value of aircraft from the predecessor generation. Historically, the impact has instead first been seen in prices for aircraft from even older generations. We therefore expect that interest in the A320ceo family – which, with over 7,000 aircraft currently in operation throughout the world, accounts for around 25% of the global fleet – will persist even after production is discontinued (as of 31 January 2017, there were still over 600 unfilled orders for the ceo variant). Given expected oil price increases in the medium and long term, airlines are nevertheless likely to also focus on the A320neo and 737 MAX newest generation aircraft models, given their advantages in terms of operating cost efficiency.

Interest in the A320ceo should continue

Ultimately, with good reasons to opt for both the current aircraft generation and the newest generation, airlines are likely to continue to buy both in the medium term.

Robust demand for both generations

IV. OUTLOOK

HIGH PROFITABILITY EXPECTED TO CONTINUE

2016 was another good year. According to IATA figures, passenger volume grew by 6.3% which, though less than the previous year's high figure (7.1%), is still significantly better than the average growth seen over recent years. And although slightly lower than the mid-year forecast, industry profits of USD 35.6 billion still hit record levels following 2015's profit of USD 35.3 billion.

Record industry profits

In 2017 IATA is expecting a slight slowdown in growth. Passenger volume is expected to grow by 5.1%, roughly in line with the average growth trend for the past 20 years. While the forecast profit for 2017 of USD 29.8 billion marks a decline compared with 2016, it would still represent the third highest annual result in the industry's history.

The profits achieved are not equally distributed among the different regions of the world, but are still mostly achieved by airlines in North America, Europe and Asia. IATA is expecting only low profits for Latin American and Middle Eastern airlines, while airlines in Africa will continue to post losses in 2017. The global aircraft fleet grew substantially in 2016: transport capacity (measured in seats) rose by 5.2%, largely due to the addition of new aircraft. A similar increase is expected in 2017.

Global aircraft fleet capacity increases by 5.2%

THE AVIATION SECTOR IN FIGURES

	Q4/15	Q1/16	Q2/16	Q3/16	Q4/16	Trend [1]
RPK growth (%) [2] [3]	6.5	7.0	6.0	5.9	6.3	→
FTK growth (in %) [2] [4]	2.2	-2.1	0.5	2.0	3.8	↗
Passenger load factor (in %)	80.3	78.7	79.2	80.6	80.5	→
Kerosene price in USD/bbl	53.2	41.7	53.6	54.4	60.2	↗

1) Trend compared with the previous quarters
2) Year-on-year change in the period from 1 January to the end of the quarter in question
3) RPK – revenue passenger-kilometres
4) FTK – freight tonne-kilometres

KGAL Aviation expertise

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- 3 aircraft portfolio funds for institutional investors
- Total investment volume of EUR 6.7 billion

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