What does the future hold?
The passenger outlook

Brian Pearce, Chief Economist, IATA
www.iata.org/economics
Air travel demand continues to expand above trend

Source: IATA Economics using data from IATA Statistics, Markit
International markets are strong

![International revenue passenger kilometres (% year-on-year)]

- **Industry**: Aug 2018: 5.6%, Jul 2018: 5.5%
- **Asia Pacific**: Aug 2018: 7.5%, Jul 2018: 7.2%
- **Africa**: Aug 2018: 6.8%, Jul 2018: 7.4%
- **Middle East**: Aug 2018: 5.4%, Jul 2018: 6.2%
- **Europe**: Aug 2018: 5.1%, Jul 2018: 5.1%
- **L. America**: Aug 2018: 3.5%, Jul 2018: 4.8%
- **N. America**: Aug 2018: 3.7%, Jul 2018: 4.1%

Source: IATA
Domestic markets more varied

<table>
<thead>
<tr>
<th>Country</th>
<th>Jul 2018</th>
<th>Aug 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic India</td>
<td>7.2%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Domestic China</td>
<td>10.8%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Domestic Russia</td>
<td>10.8%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Domestic USA</td>
<td>5.5%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Domestic Brazil</td>
<td>2.1%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Dom. Australia</td>
<td>2.1%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Domestic Japan</td>
<td>0.9%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Source: IATA
But expansion cycles don’t last forever

Worldwide RPKs and peak-to-peak cycle

- 9 years
- 11 years
- 8 years
- 10 years
- 10 years so far
- dotcom bubble/ 9-11
- Gulf war
- Oil crisis
- GFC

Source: IATA Economics using data from ICAO, IATA Statistics and our own forecast
Business confidence has declined since peak in early 2018
Tariff war latest in a decade of creeping protectionism

Source: IATA Economics using data from ICAO, IATA Statistics, SRS Analyzer and our own forecast

Share of exports + imports in global GDP

% of GDP


Source: IATA Economics using data from ICAO, IATA Statistics, SRS Analyzer and our own forecast
Central banks’ shift to monetary tightening brings its own risks

Central bank holdings of financial assets, US$ billion

US Federal Reserve Bank

European Central Bank

+$4.4 trillion or 65% of DJIA market cap

Source: IATA Economics using data from Datastream
High levels of debt risk cuts in spending

Outstanding debt held by non-financial private sector, % GDP

Source: IATA Economics using data from ICAO, IATA Statistics, IMF and our own forecasts
And economic spare capacity disappears at the late stages of the cycle.

Source: IATA Economics using data from Datastream
Fuel prices trending upwards

Jet Fuel and Crude Oil Price ($/barrel)

Source: IATA Economics using data from Platts
Cost pressures have emerged across most inputs in the past 2 years

Unit cost changes between 2016 Q1 and 2017 Q4

% contribution to increase in CASK

- Fuel: 51%
- Labour: 30%
- Infrastructure: 11%
- Other: 8%

Source: IATA Economics using data from The Airline Analyst
Airlines will try to recover higher costs

Source: IATA Economics using data from PaxIS

Indices (Jan 2011=100), seasonally adjusted

Global average passenger base fare yield
Premium-class base fare yield
Economy-class base fare yield

Global average passenger base fare yield (US$ terms)
Ancillaries are playing an increasing role

Source: IATA Economics using data from ICAO, IATA Statistics, IdeaWorks and our own forecasts
There will be a downturn in the next 2-3 years

Global GDP and RPK growth

Source: IATA Economics using data from ICAO, IATA Statistics, IMF and our own forecasts
But looking through the next cycle there is still large expansion ahead

Source: IATA/Tourism Economics
Trip frequency still low in many populous countries

Source: IATA/Tourism Economics Air Passenger Forecasts, September 2016
Living standards still have much room for catch-up

Growth in per capita incomes over the long run

% CAGR (2015-2035)

- India: 4.8%
- China: 4.7%
- Indonesia: 3.9%
- Turkey: 2.5%
- Russia: 1.5%
- Mexico: 1.4%
- Brazil: 1.3%
- United Kingdom: 1.2%
- United States: 0.9%
- Germany: 0.8%
- Canada: 0.8%
- France: 0.8%
- Japan: 0.7%
- Italy: 0.7%

Source: IATA/Tourism Economics Air Passenger Forecasts, September 2016
Multiplier effect on trip frequency in many emerging markets

*Source: IATA Economics using data from PaxIS+ and Oxford Economics*
Rise in middle-class households shows a similar picture

Source: Oxford Economics
Population, adjusted for age structure, is the another key driver

The UN's projected change in population (2015-2035, %)
UN projections adjusted for demographic factors

Source: IATA/Tourism Economics Air Passenger Forecasts, September 2016
Scope for much further progress in travel facilitation
Tourism visa openness index 2018

Source: UNWTO
Scope for price stimulation of air travel in some short-haul markets

Source: IATA Economics using data from PaxIS+
Asian air travel markets will rise up the top-10 rankings

The 10 largest air passenger markets over time (ranked by passenger numbers, to/from and within each country)

US 1
China 2
UK 3
Spain 4
Japan 5
Germany 6
India 7
Italy 8
France 9
Indonesia 10

Source: IATA/Tourism Economics
Aviation’s centre of gravity shifts further eastwards

Source: IATA/TE Passenger Forecasts
Even after recessions expect 2x rise in air travel during next 20 years

Source: IATA/Tourism Economics