

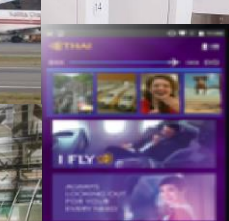
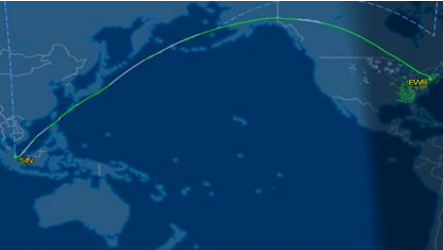


Asia Pacific Aviation

EMBRACING FUTURE CHALLENGES

Andrew Herdman
Director General
Association of Asia Pacific Airlines







Overview

- **Asia Pacific aviation**
- **Industry trends & outlook**
- **Evolving business strategies**
- **Global regulatory challenges**
- **Future growth**

Aviation: delivering global mobility

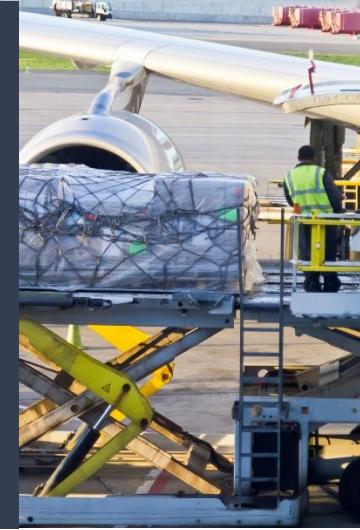


4.4 billion
passengers

12 million daily

35%
by value of
global trade

**Goods worth
US\$6 trillion**

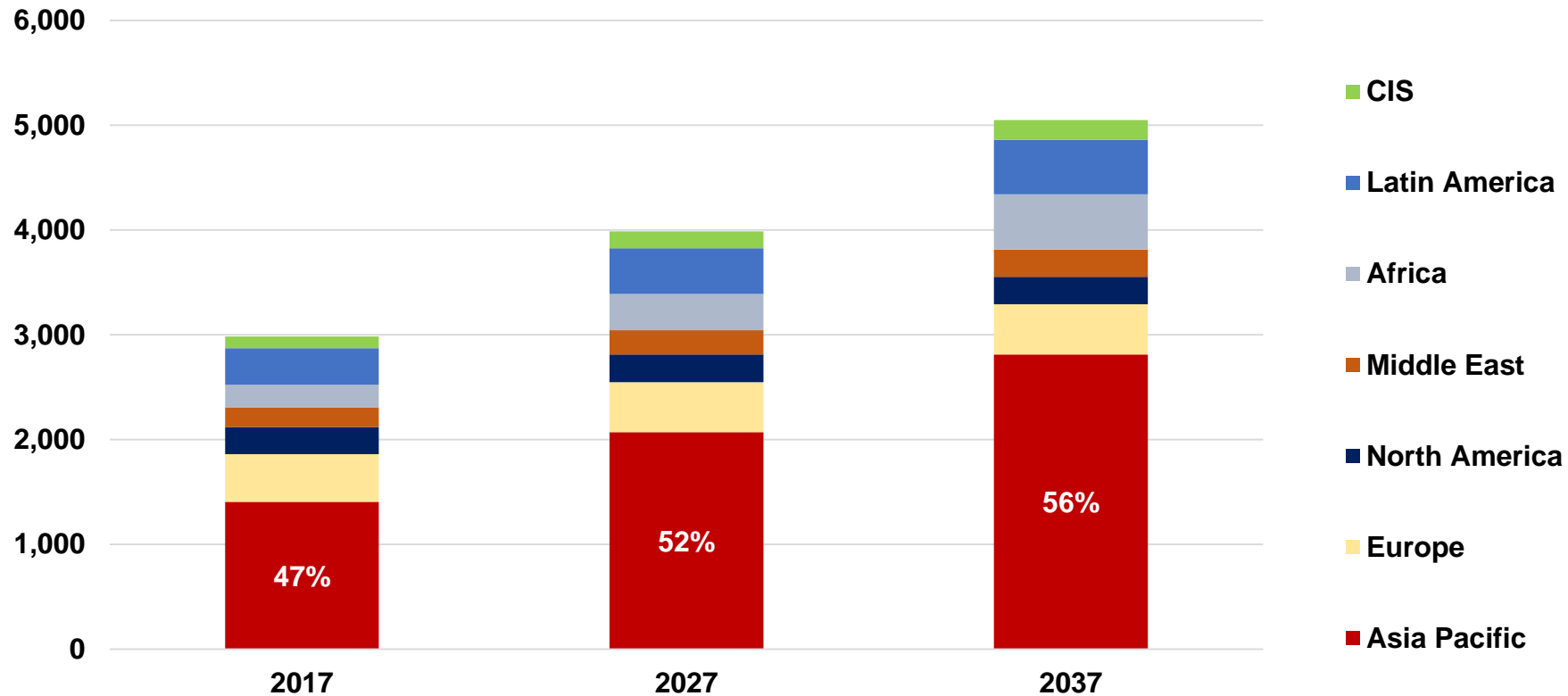


- **Safely connecting people and business**
- **Wider social and economic benefits**
- **Outstanding safety record**
- **Committed to sustainable growth**

Asia Pacific

- **Diverse geographic region**
- **Home to more than 4 billion people**
- **Dynamic economies generate 34% of global GDP**
- **Aviation widely recognised as a key contributor to economic and social development**
 - *Supports 30 million jobs and US\$684 billion in GDP*
- **Wide range of income levels, rapidly growing middle class**

Growth of Asian middle class consumers



Rising demand for goods & services including air travel

Source: Airbus GMF 2018 - 2037
Households with yearly income between \$20,000 and \$150,000 at PPP in constant 2017 prices

Asia Pacific Aviation



US\$186 billion revenue

US\$9 billion net profit

1,486 million passengers

1,055 million domestic

431 million international

22 million tonnes of cargo

7,997 aircraft

Asia Pacific carriers overall market share:

34% of global passenger traffic

36% of global cargo traffic

Source: Combined AAPA + non-AAPA airlines GMT+5 to GMT+12

2017 Data - Traffic: IATA World Air Transport Statistics, Financials: AAPA Estimates

World's ten busiest domestic routes

Rank	Route	PAX (million)
1	Jeju – Seoul	13.5
2	Melbourne – Sydney	7.8
3	Fukuoka – Tokyo	7.6
4	Sapporo – Tokyo	7.4
5	Beijing – Shanghai	6.4
6	Hanoi – Ho Chi Minh City	6.4
7	Delhi – Mumbai	5.6
8	Tokyo – Okinawa	4.8
9	Jeddah – Riyadh	4.8
10	Beijing - Chengdu	4.6

Source: IATA WATS 2018, 2017 data

almost all in Asia Pacific

World's ten busiest international / regional routes

Rank	Route	PAX (million)
1	Hong Kong - Taipei	5.4
2	Dublin – London	3.4
3	Jakarta – Singapore	3.3
4	Bangkok – Hong Kong	3.1
5	Kuala Lumpur – Singapore	2.8
6	Hong Kong – Seoul	2.7
7	London – New York	2.7
8	Osaka – Taipei	2.6
9	Bangkok – Singapore	2.5
10	Tokyo – Taipei	2.5

Source: IATA WATS 2018, 2017 data

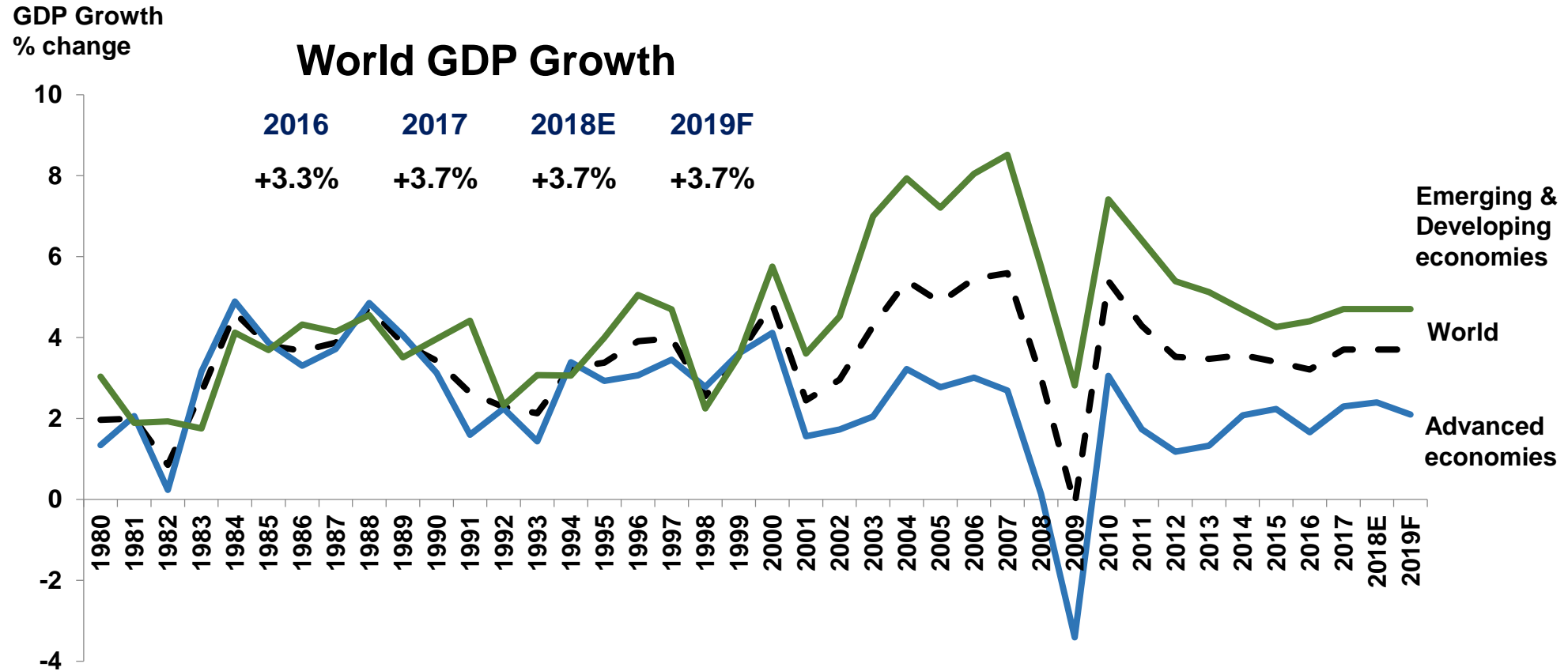
almost all in Asia Pacific



Industry Outlook

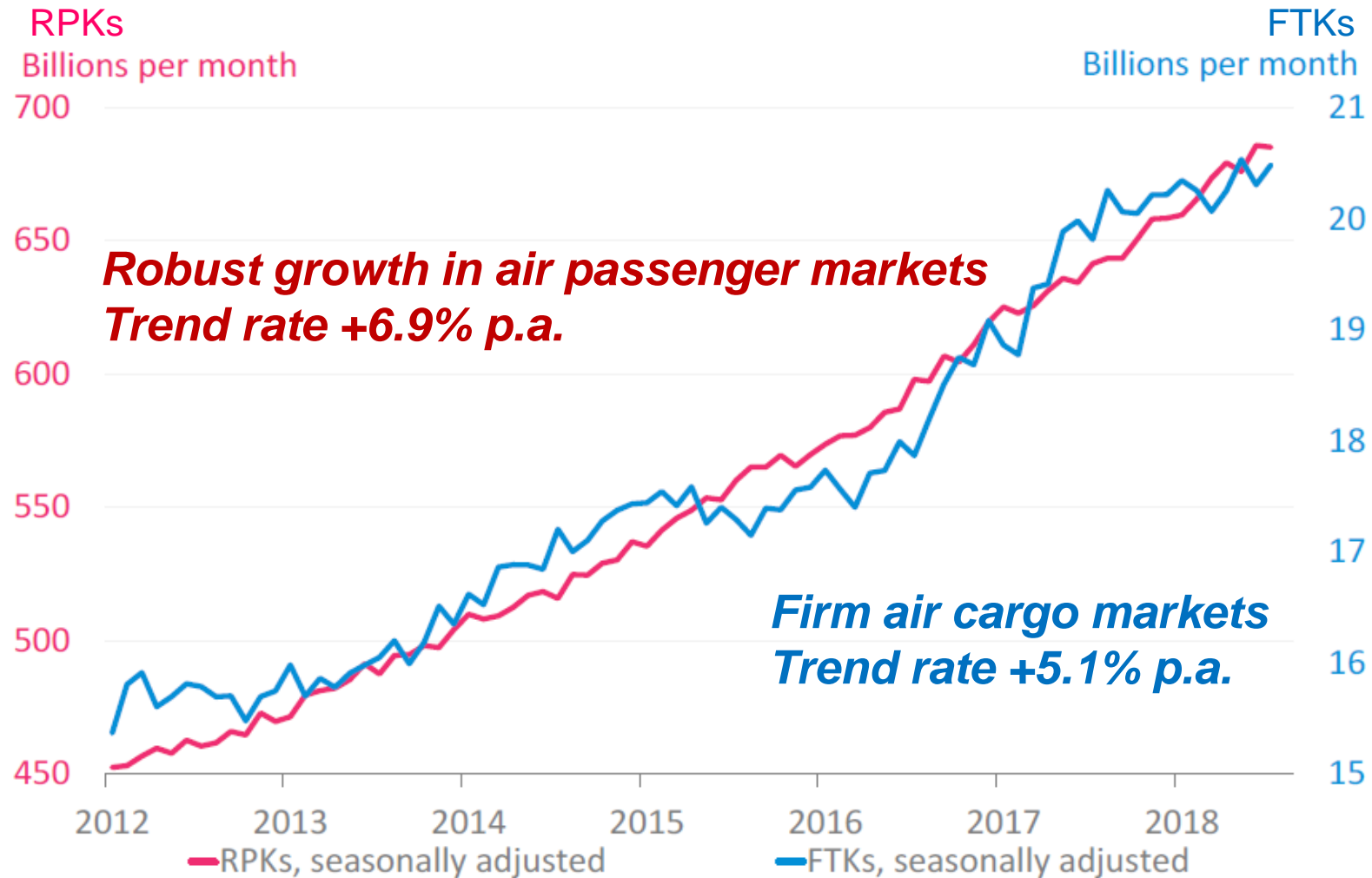


Global economic trends

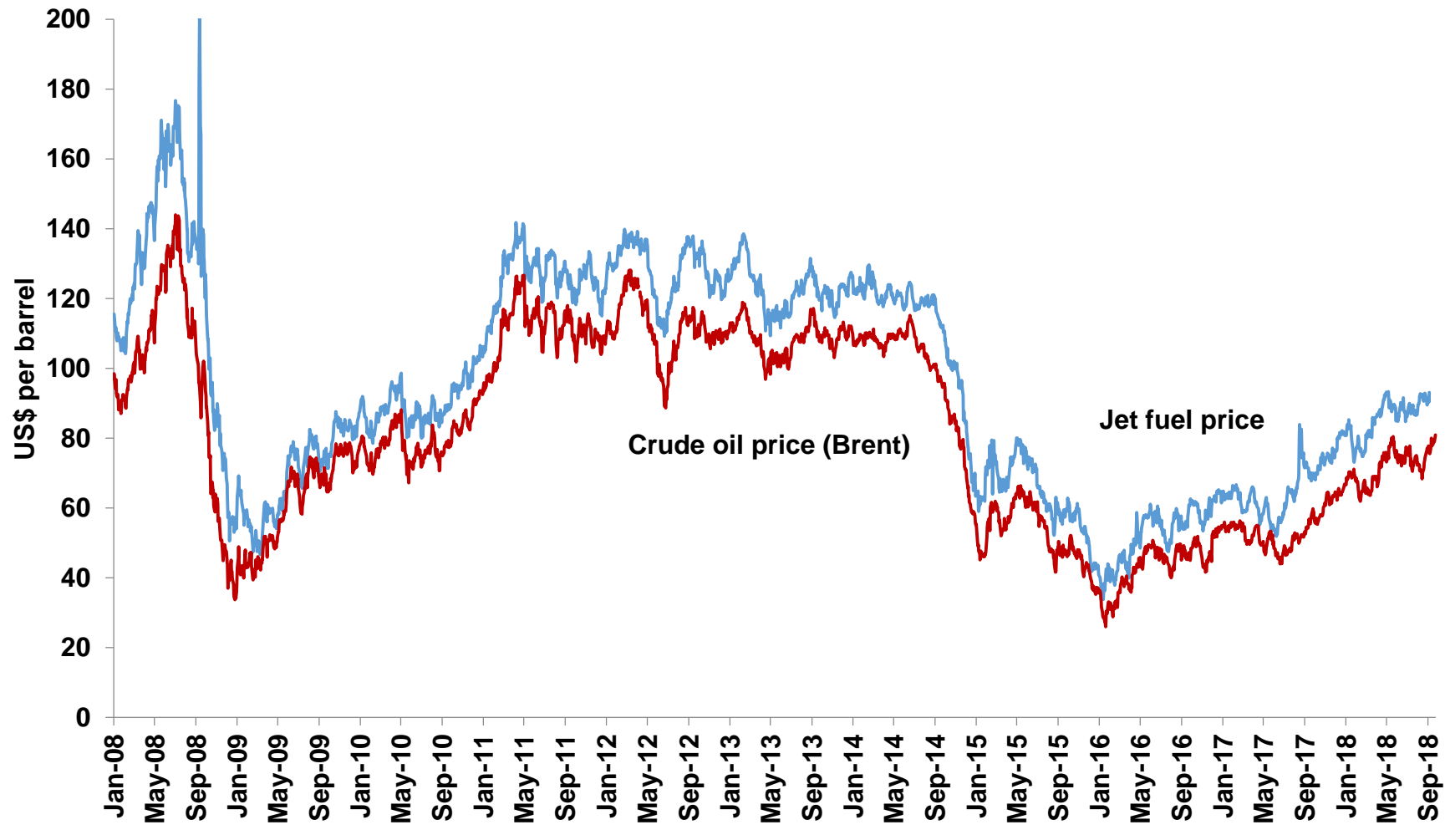


Policy uncertainty including trade frictions may undermine confidence

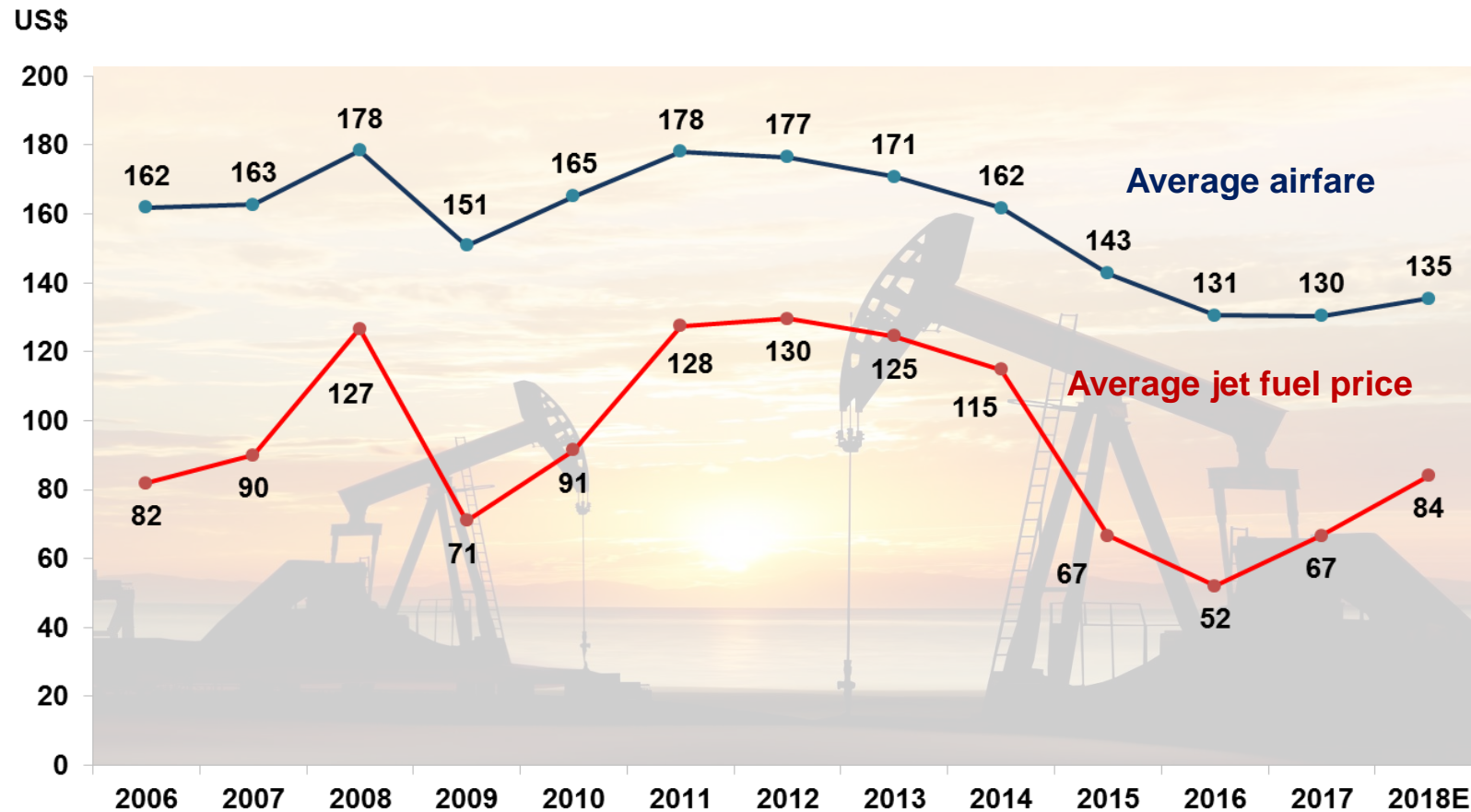
Global passenger and cargo traffic



Oil prices rising again

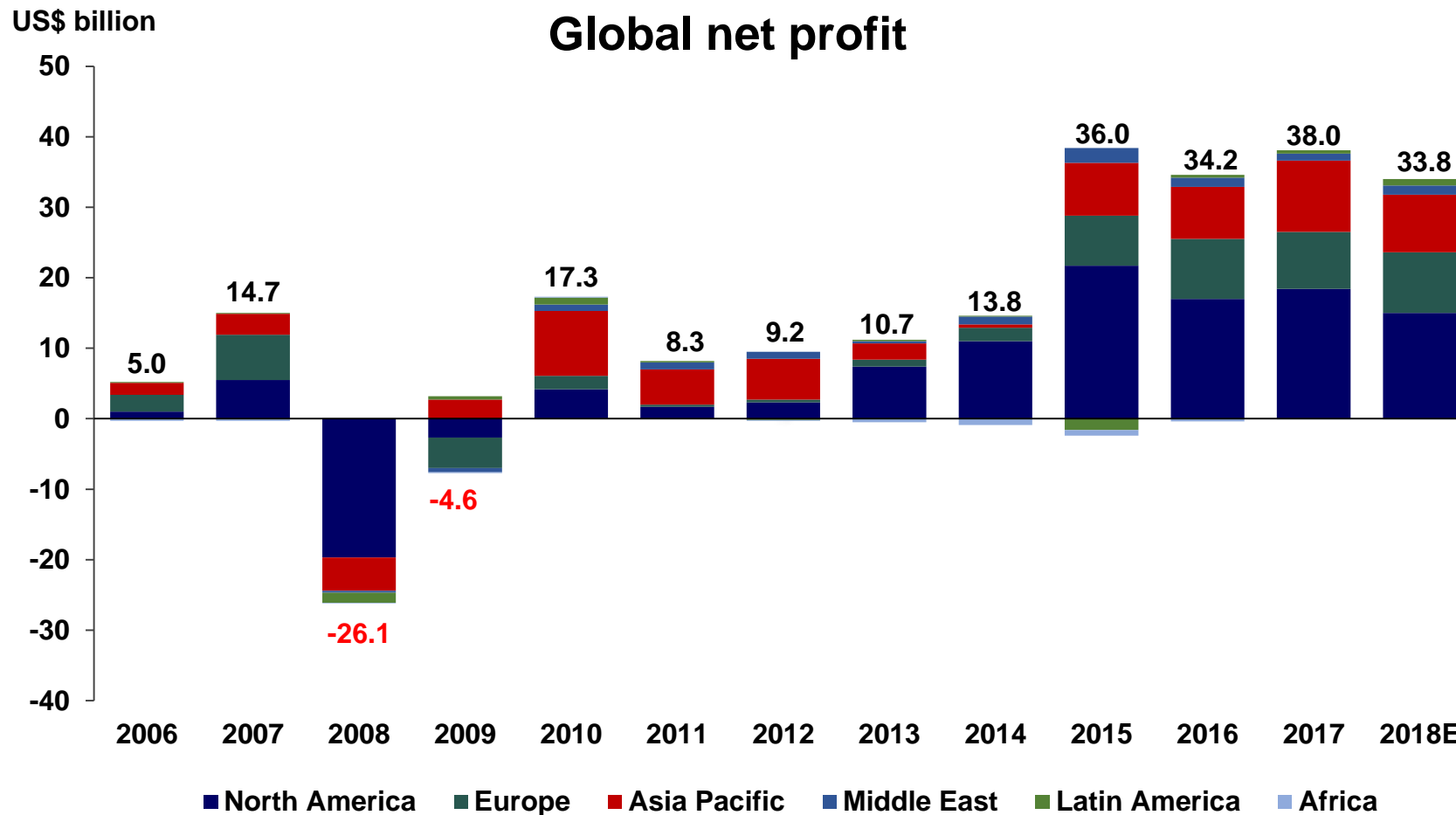


Airfares follow changes in oil prices



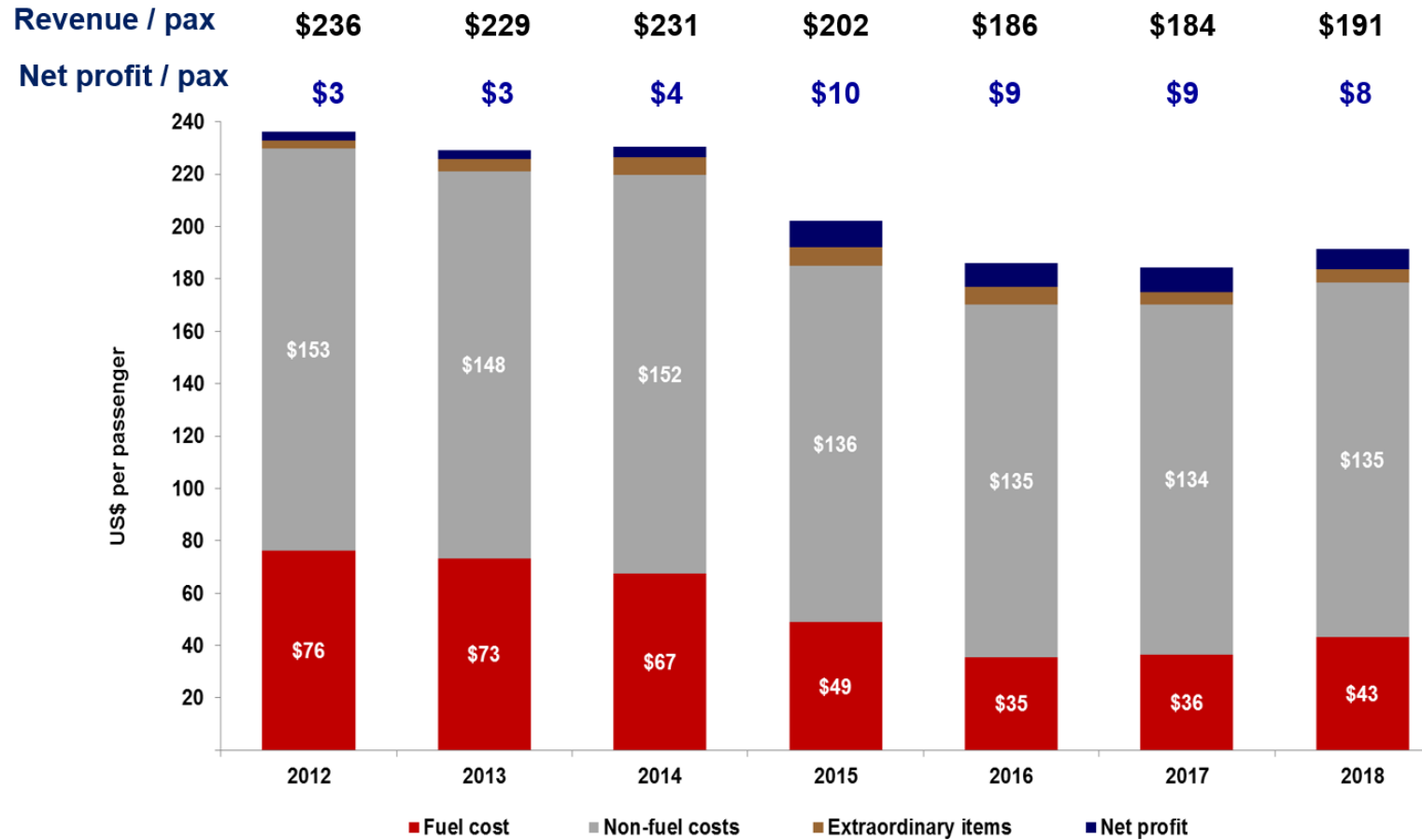
- *Airfares remain highly competitive*
- *Margins under pressure*

Global airline profitability trends



- *Strong passenger and air cargo markets*
- *Profit margin still just 4%*

Revenue & Profit per Passenger

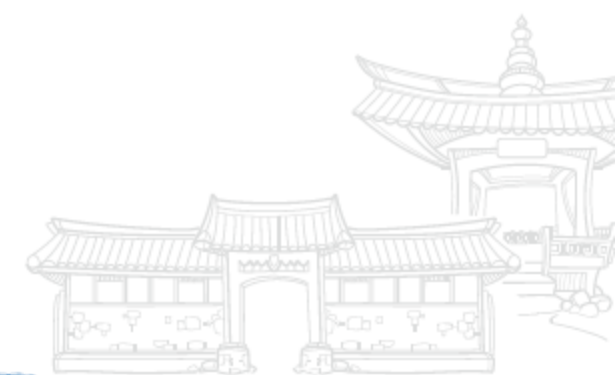


Profit per Passenger below US\$10 even in good years

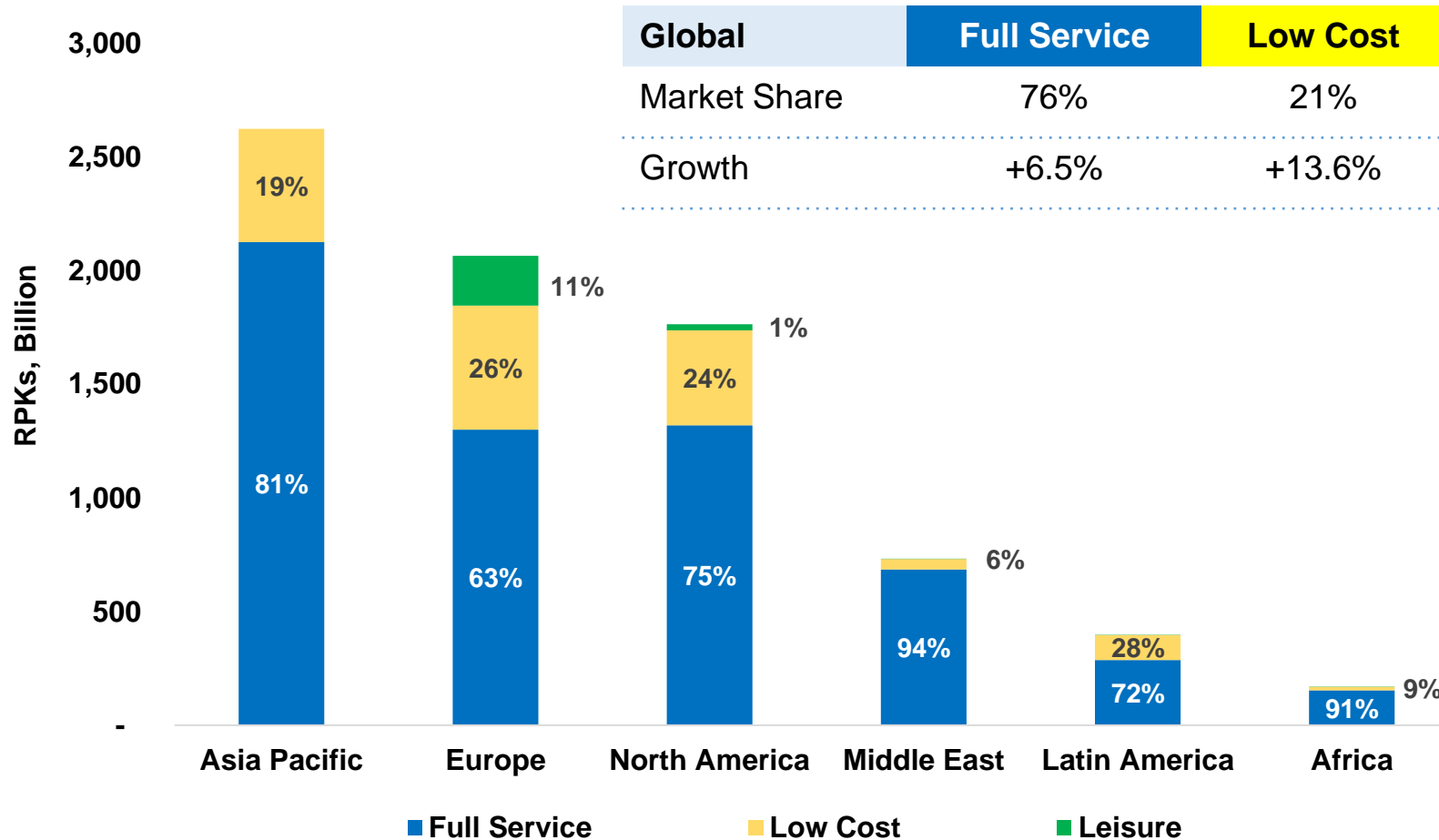
Source: IATA



Evolving Business Strategies



Airline business model share by region



Source: IATA WATS 2018, 2017 data

Digitising the passenger experience

- Evolving consumer expectations
- Smartphone for everything
- Streamlining customer processes
- Online research + booking + ancillaries + payment + digital token
- Self-service check-in + bag drop + boarding
- Biometric identity checks
- Flight updates & baggage tracking
- Automated service recovery

Challenge of harnessing new technologies to deliver a better passenger experience





Global Regulatory Challenges



Global regulatory influences



- *Wider impact of US and EU regulations*
- *Asia Pacific needs a unified voice*
- *Need for harmonised global standards*

Global regulatory challenges

Aviation is subject to intensive regulation

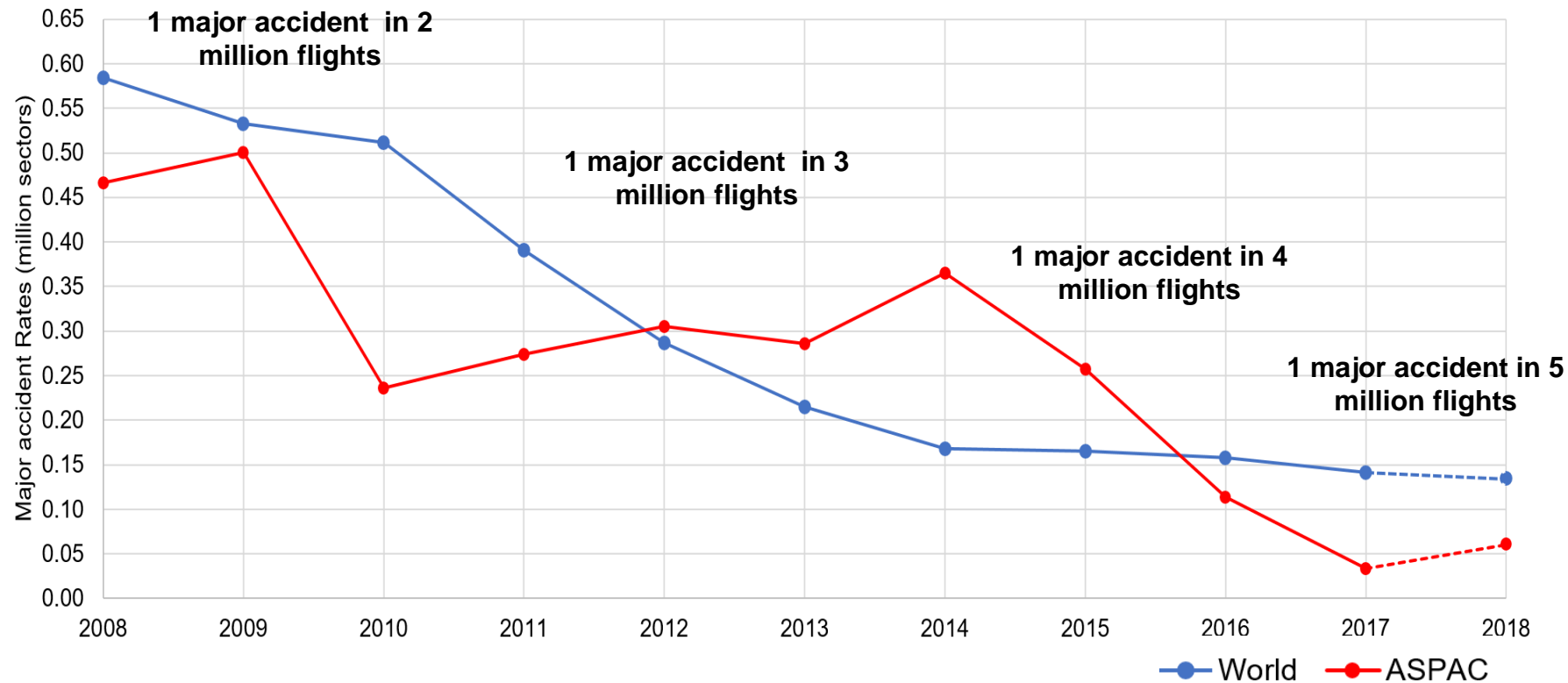
- **Safety**
- **Security**
- **Sustainability**
- **Passenger Facilitation**
- **Consumer Protection**
- **Taxes & Charges**
- **Infrastructure**



Aviation Safety Performance



Western-built Jet Aircraft Major Accident Rates by Operator Region 2008-2018
3-year moving averages



***Outstanding safety record built on focus,
commitment and cooperation***

Source: AAPA

*Data as of 10 October 2018

Aviation Security



- Aviation remains highly secure despite perceived risks
- Threats and challenges evolving: no room for complacency
- Good security about comprehensive threat assessment and balanced risk management, not the elimination of every conceivable risk
- Shared global concern requires close international coordination built on trusted relationships
- Mitigation measures need to be proportionate, focus on the probable threat, avoid unnecessary disruption
- Approach to security can learn from safety management

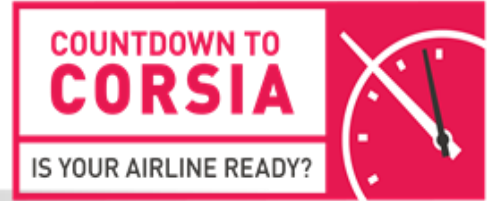
Cybersecurity



- Universal dependence on information technology
- Growing connectivity and digitisation bring increased challenges and vulnerabilities
- Cyber threats constantly evolving
- Criminals as well as State actors
- New regulatory initiatives
- Focus on ecosystem and resilience

Requires trust and cooperative efforts

Aviation & Sustainable development



- **Aviation pursuing ambitious strategy:**
 - Fuel efficiency + Operational enhancements + Infrastructure improvements + Sustainable alternative fuels + Carbon offsets
 - Carbon Neutral Growth from 2020
 - A 50% reduction in net aviation CO₂ emissions by 2050, relative to 2005 levels
- **Aviation is the first industry sector to commit to CO₂ reductions using a global market based measure**
- **ICAO CORSIA**
 - Emissions reporting for all operators - 2019
 - Carbon offsetting obligations - 2021 onwards
- **Risk of duplicative measures undermining support**

Aviation continues to deliver on its commitments



Passenger Facilitation



- Challenges of processing 12 million daily passengers
- Harness technologies to streamline airline, security & border control processes
- Lack of data exchange standards and concerns over privacy issues
- Proliferation of complex and inconsistent passenger rights regulations confuse travellers
- Mass disruption events require close cooperation of multiple stakeholders

Need for closer collaboration to improve passenger facilitation whilst enhancing border security

Taxes & Charges

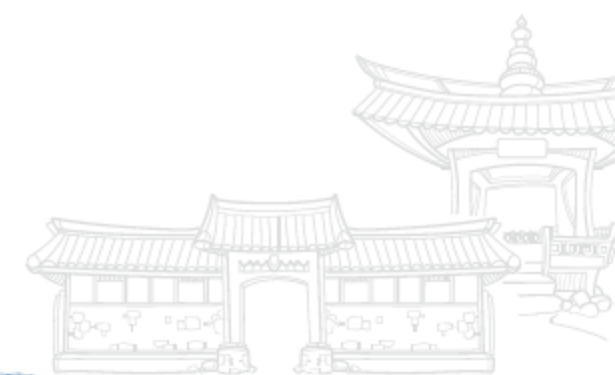


- Opportunistic taxes hurt economic development & impede job creation
- User charges must be transparent, cost-related, non-discriminatory & for current use
- Economic regulation of monopoly service providers required

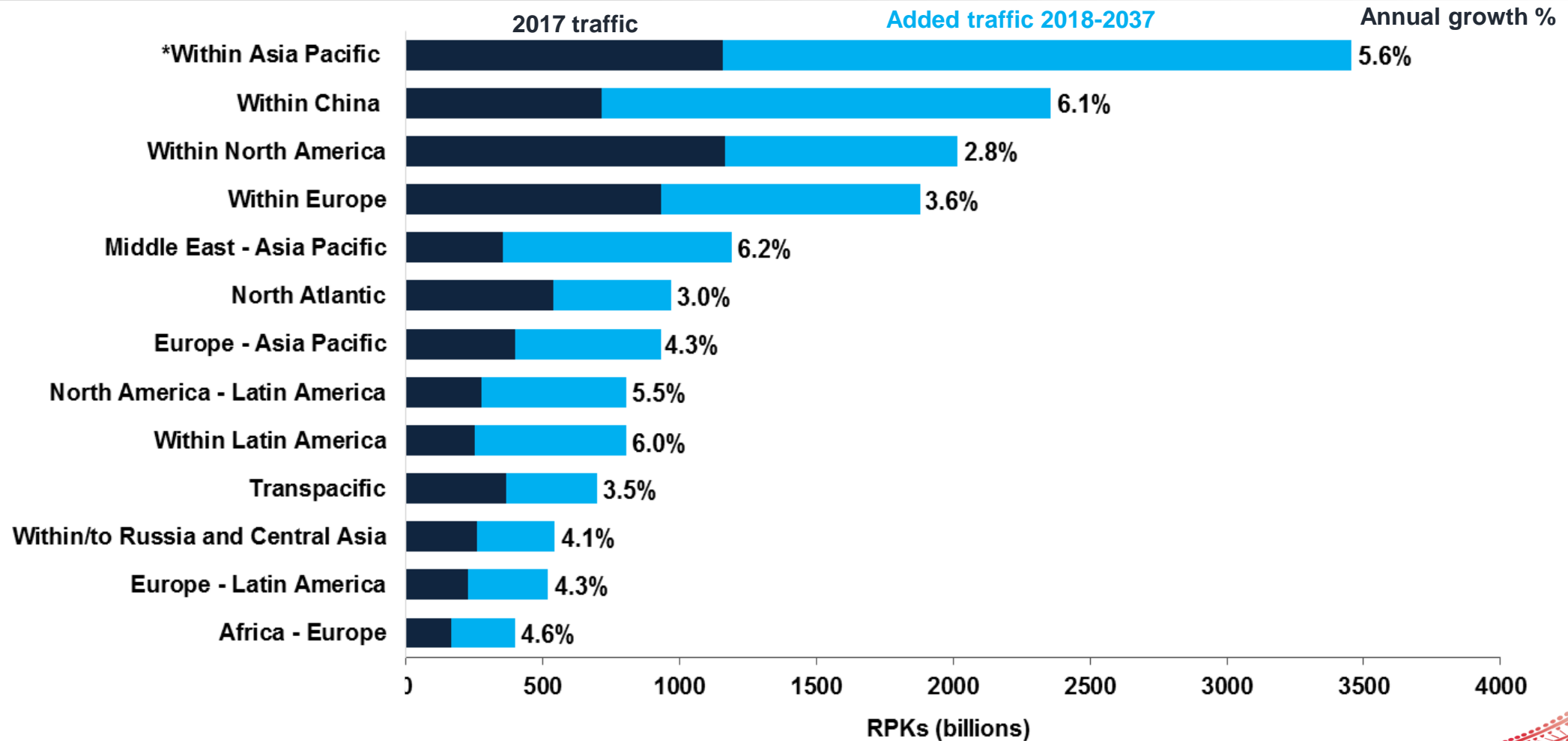
Aviation is a catalyst for economic growth, job creation & social development



Future Growth



Global Aviation - Future growth



Source: Boeing CMO 2018-2037

*Does not include travel within China

Global aviation - future aircraft orders

New airplane deliveries by region

2018 - 2037

Region

● Asia Pacific

● North America

● Europe

● Middle East

● Latin America

● Russia & Central Asia

● Africa

World Total

Airplanes

16,930

8,800

8,490

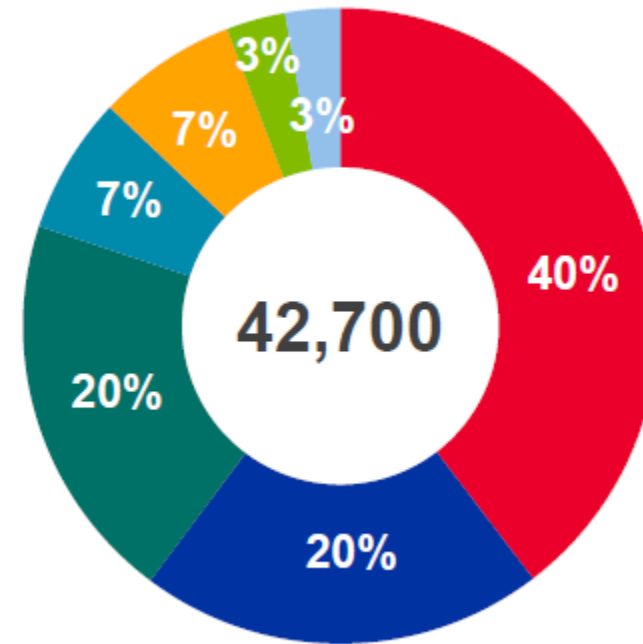
2,990

3,040

1,290

1,190

42,700



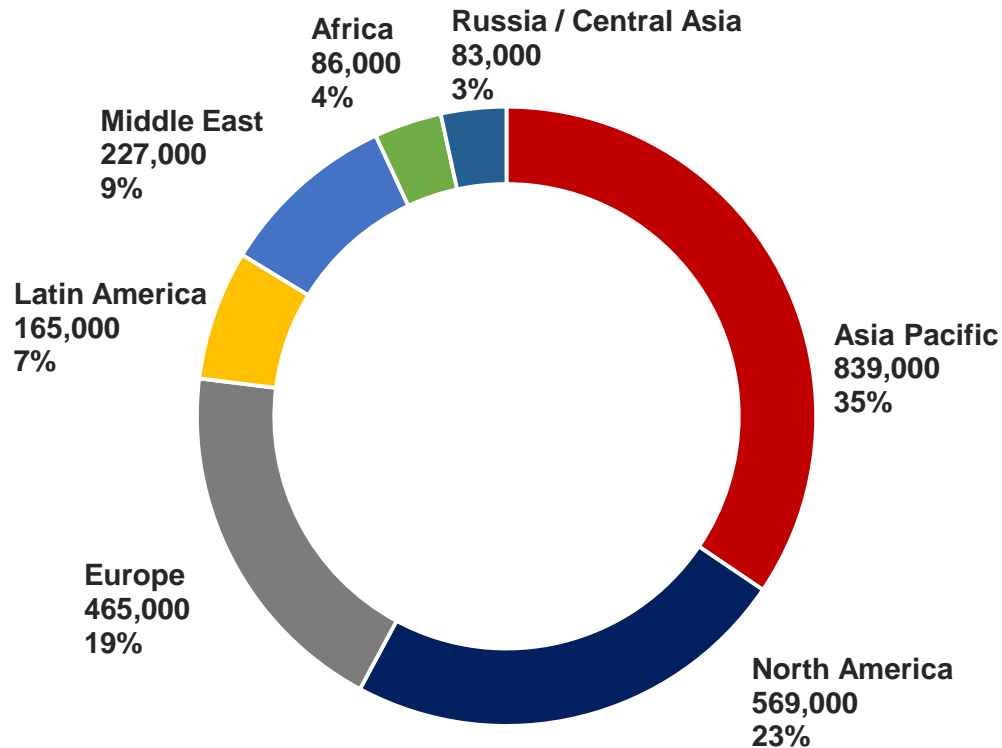
- *Asia Pacific to account for 40% of new aircraft deliveries*
- *Corresponding infrastructure & manpower requirements*



AAPA | JEJU
2018
62nd ASSEMBLY OF PRESIDENTS

Aviation – manpower development challenge

**Demand for Pilots, Technicians & Cabin Crew
2018 - 2037**



- **Need to attract, train and develop skilled manpower to meet future growth**
- **ICAO Next Generation of Aviation Professionals (NGAP) programme**
- **Government policy on education and training**
- **Private sector partnerships**
- **Commitment to workforce diversity and gender equality**

Infrastructure



- **Airport Capacity**
 - Long-term planning to meet projected growth
 - Capital investments required but need cost vigilance
 - Slot management only an interim measure
- **Various forms of public and private sector involvement**
- **Economic regulation & oversight**
 - Balancing interests of airlines, airports and travelling public

Governments have a responsibility to coordinate infrastructure planning and regulatory oversight

Closing thoughts



- Aviation a key driver of global economic and social development
- Infrastructure planning is now critical
- Airline strategies evolving in response to changing market dynamics and consumer preferences
- Regulatory oversight should focus on maintaining consistent global standards on safety, security and ensuring a competitive business landscape

Asia Pacific airlines at the forefront of global air transport development

