

# Supply and Demand in the Aviation industry



APATS 2019  
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Academics Department



# Overview

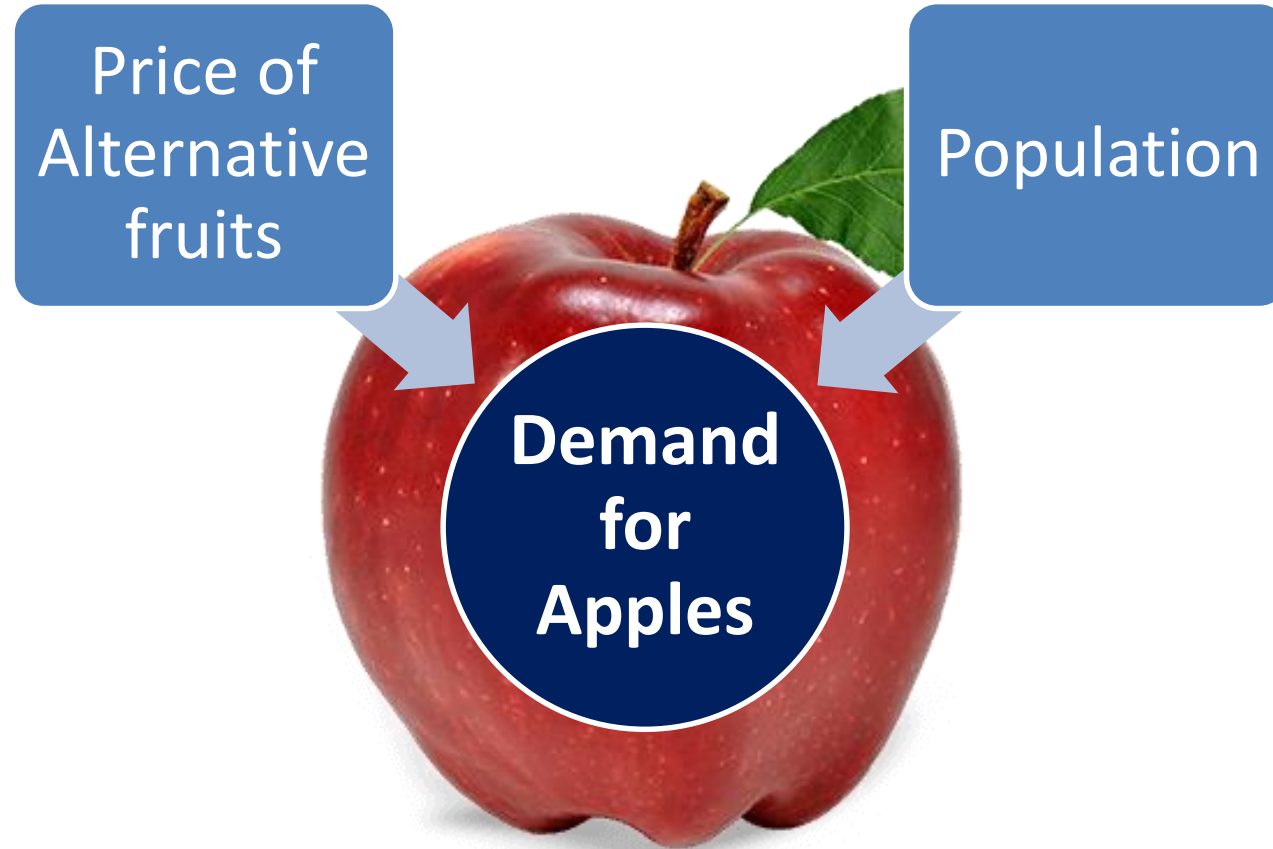
- Supply and Demand: Trends
- Supply and Demand: Drivers
- Implications
- Areas of concern
- Recommendations
- About us

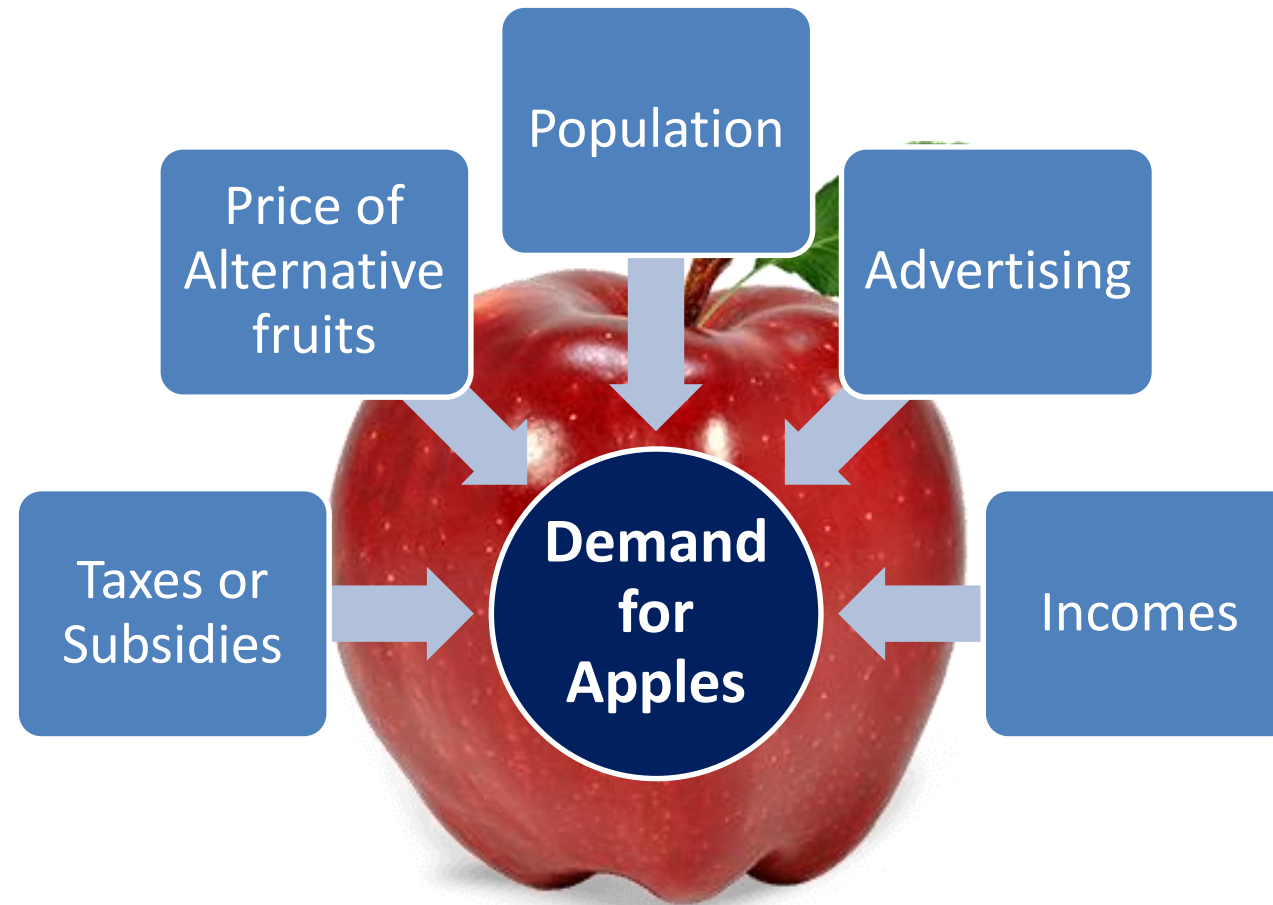


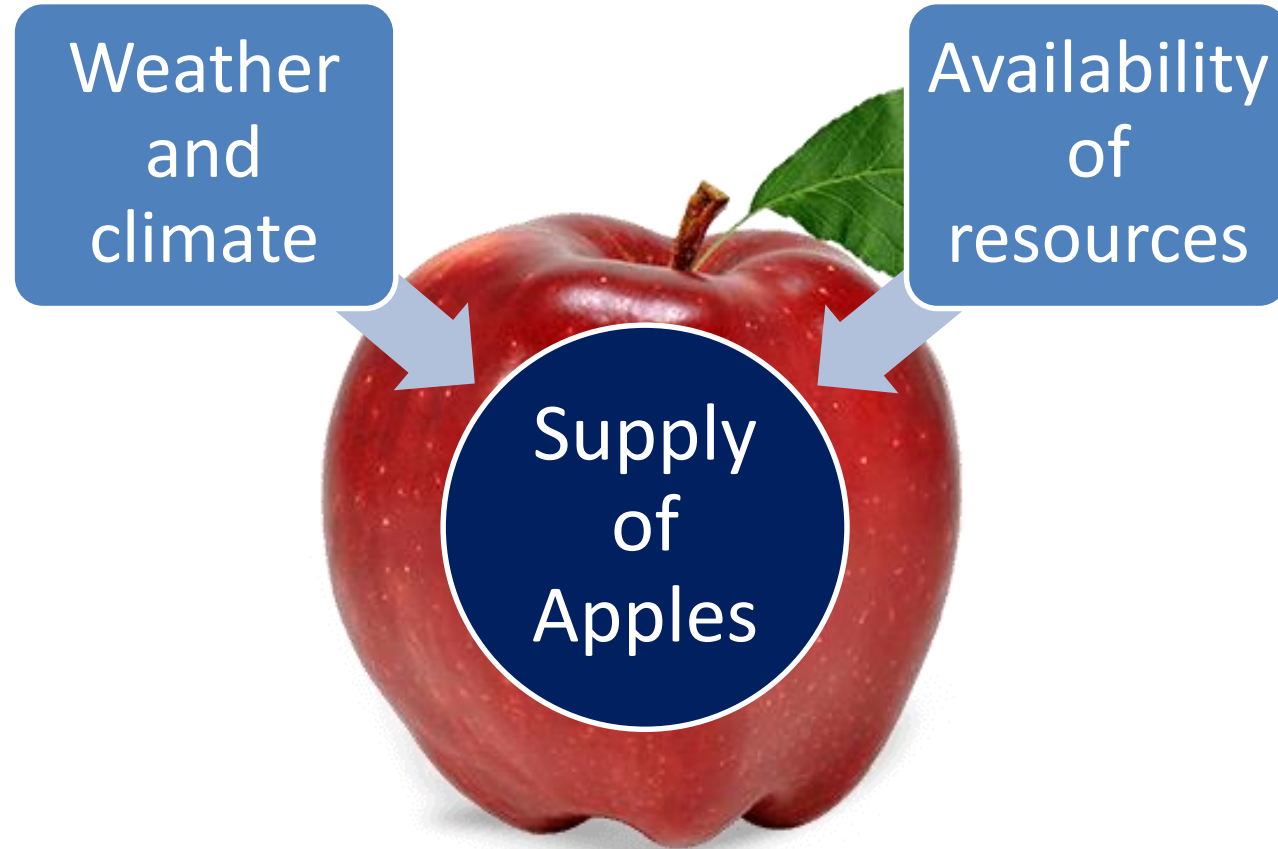


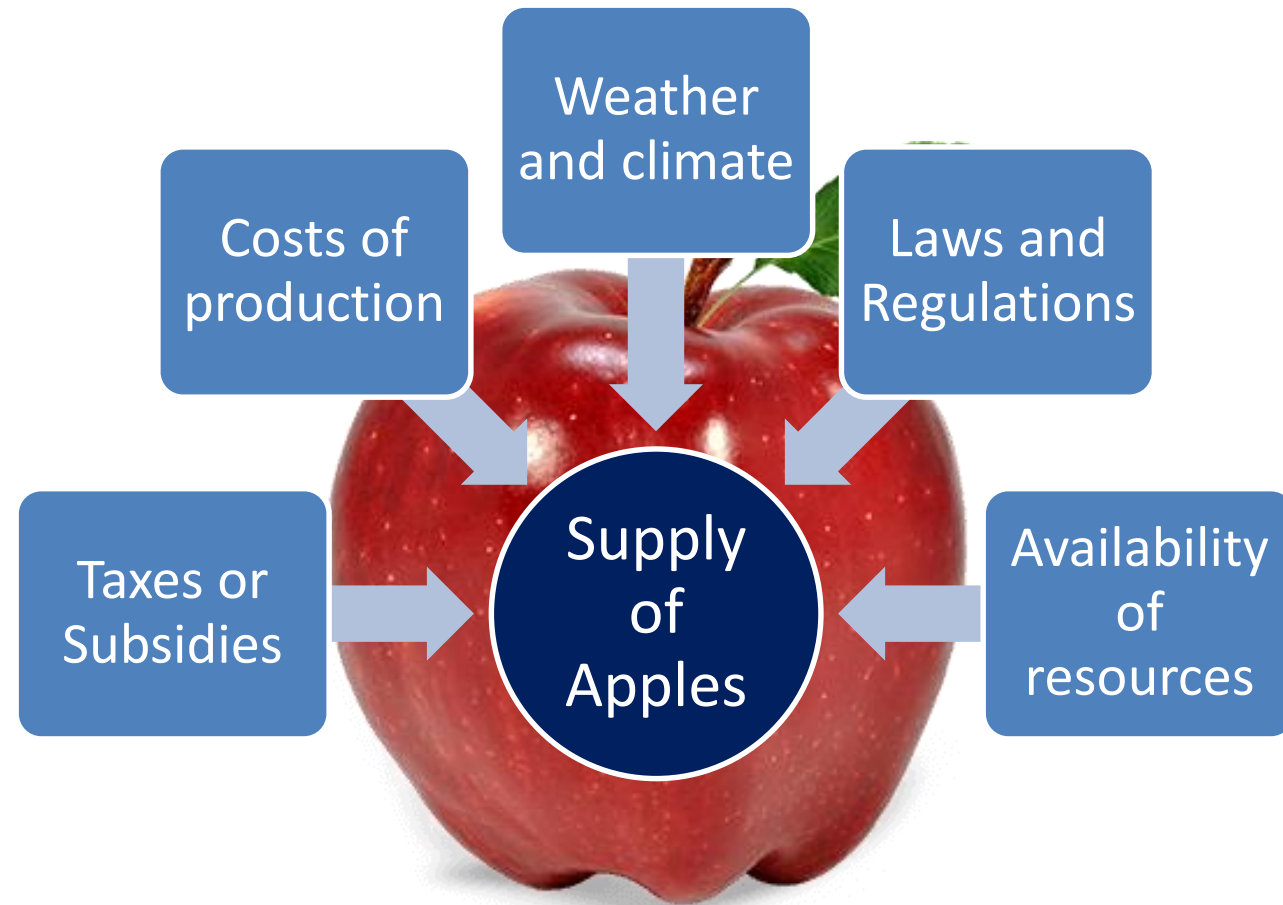
What determines the  
Demand & Supply of an...







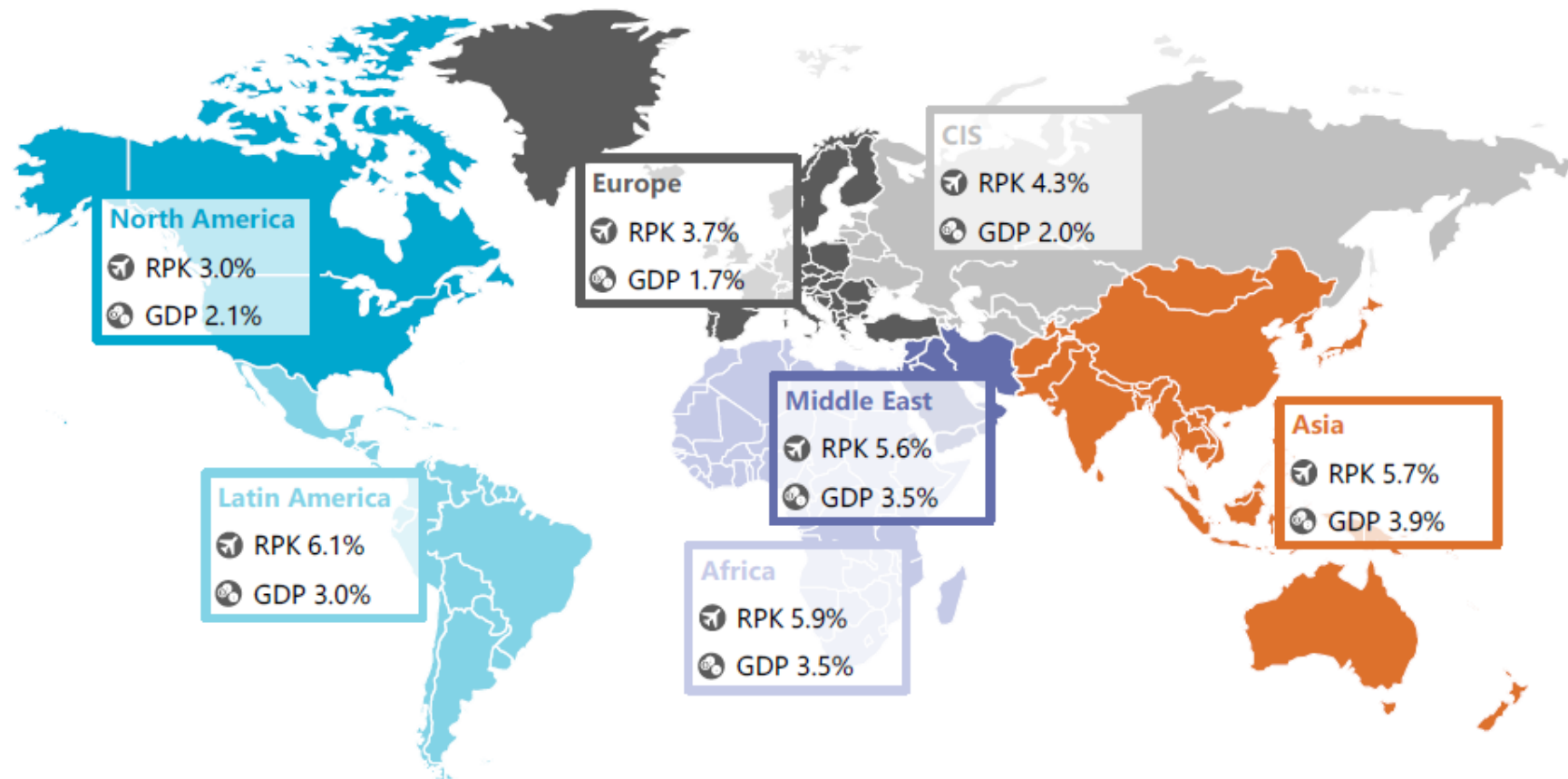






# Demand Trends in Aviation: Passenger growth

EXHIBIT 4: 20-YEAR GDP AND RPK PROJECTED ANNUAL GROWTH RATES



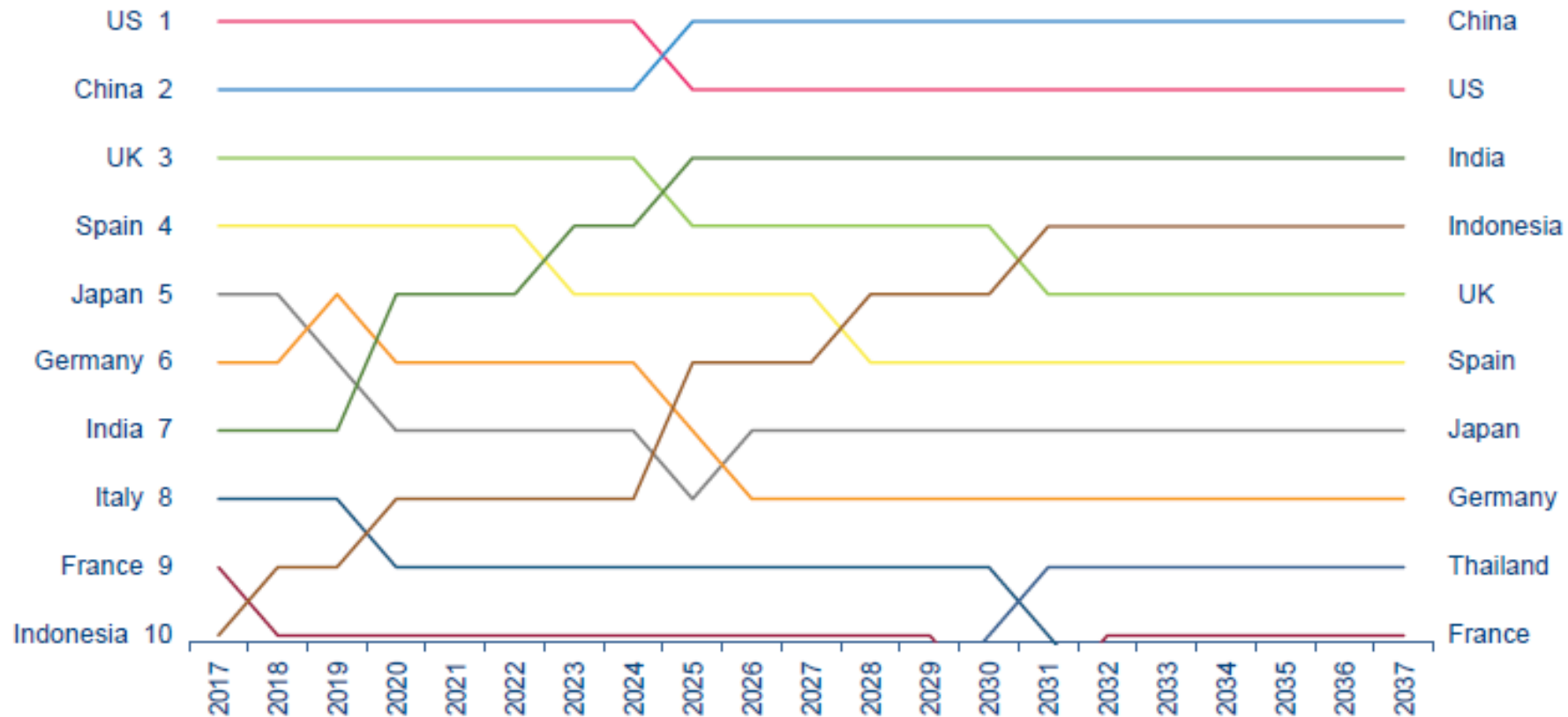
Source: Boeing





# Demand Trends in Aviation: Passenger growth

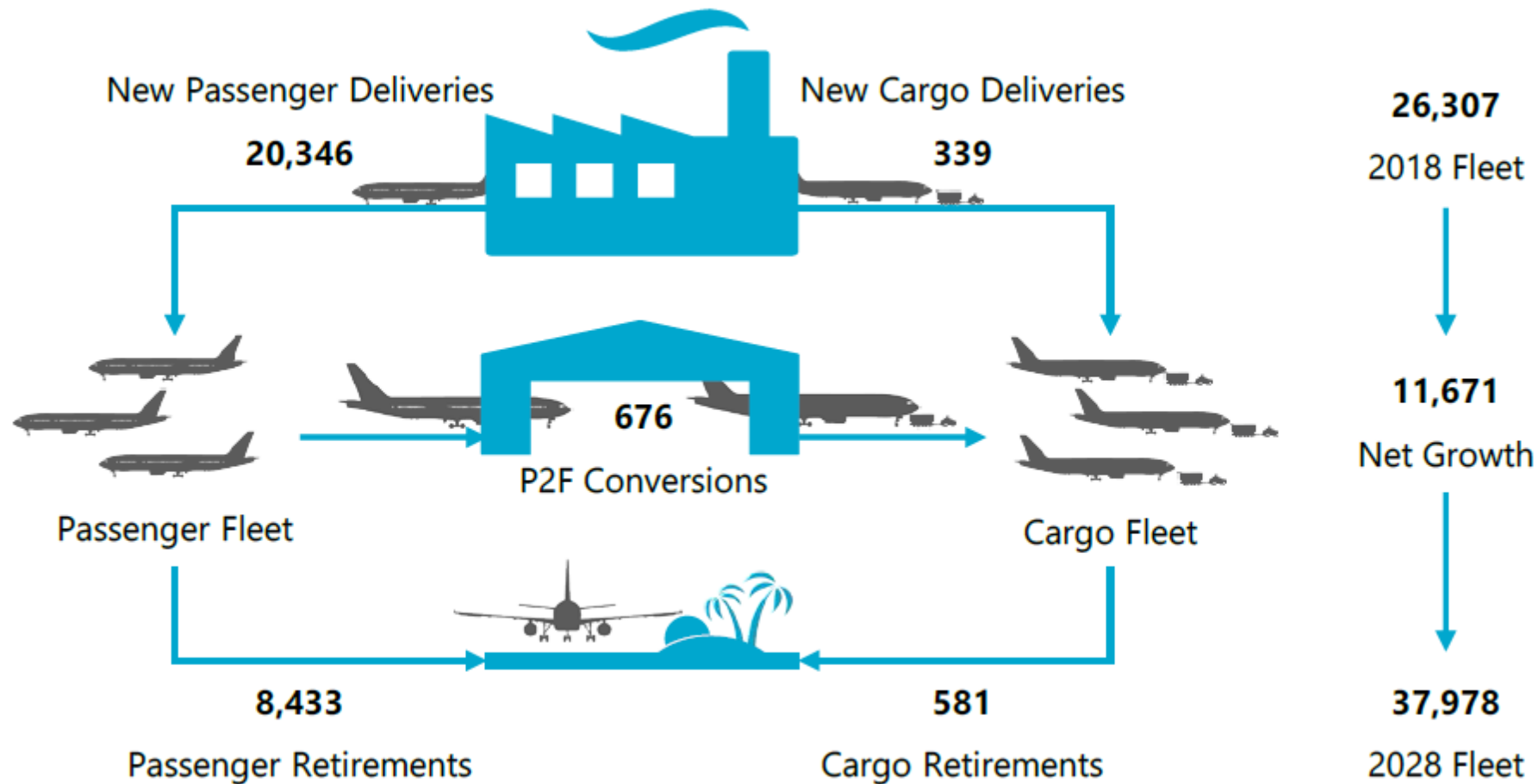
The 10 largest air passenger markets over time (ranked by passenger numbers, to, from and within each country)





# Supply Trends in Aviation by Region

EXHIBIT 12: 2018–2028 GLOBAL AIRCRAFT DEMAND



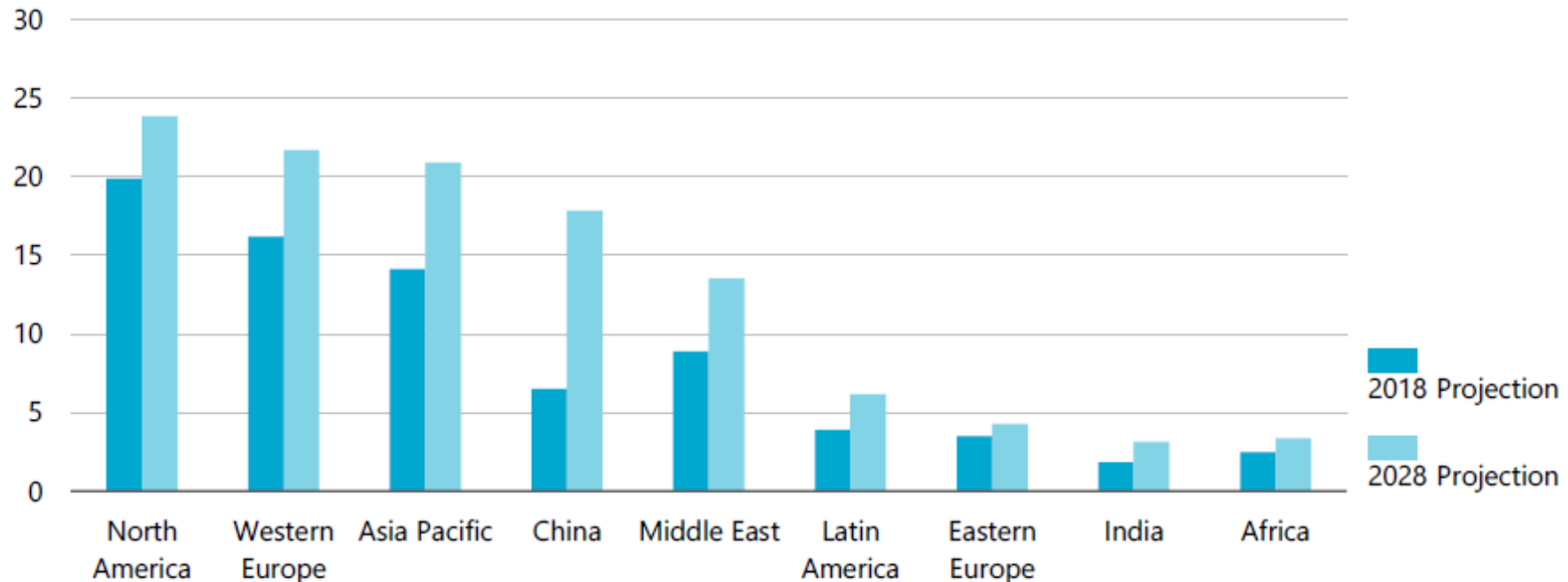


# Supply Trends in Aviation by Region

- Larger Fleet: By 2028, worldwide fleet will be 38000, up from 26000 in 2018.
- Newer Fleet: By 2028 55% of the fleet will have been designed and built since 2000.
- Growth in MRO by 4%: Driven by China and India.

## EXHIBIT 37: TOTAL MRO SPEND BY REGION

US DOLLARS (BILLIONS)



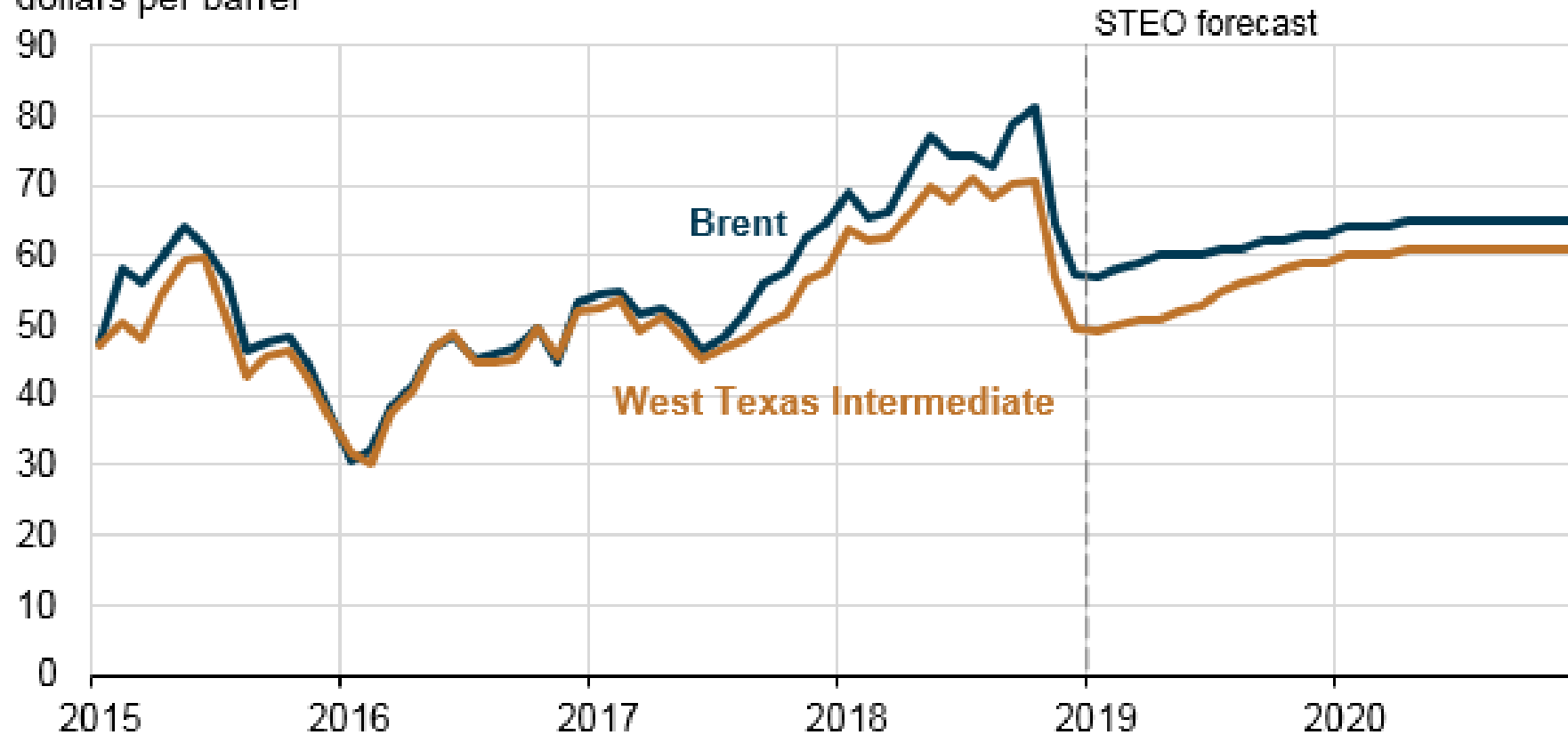
Source: Oliver Wyman Global Fleet & MRO Market Forecasts



# Supply Trends in Aviation: Oil Prices

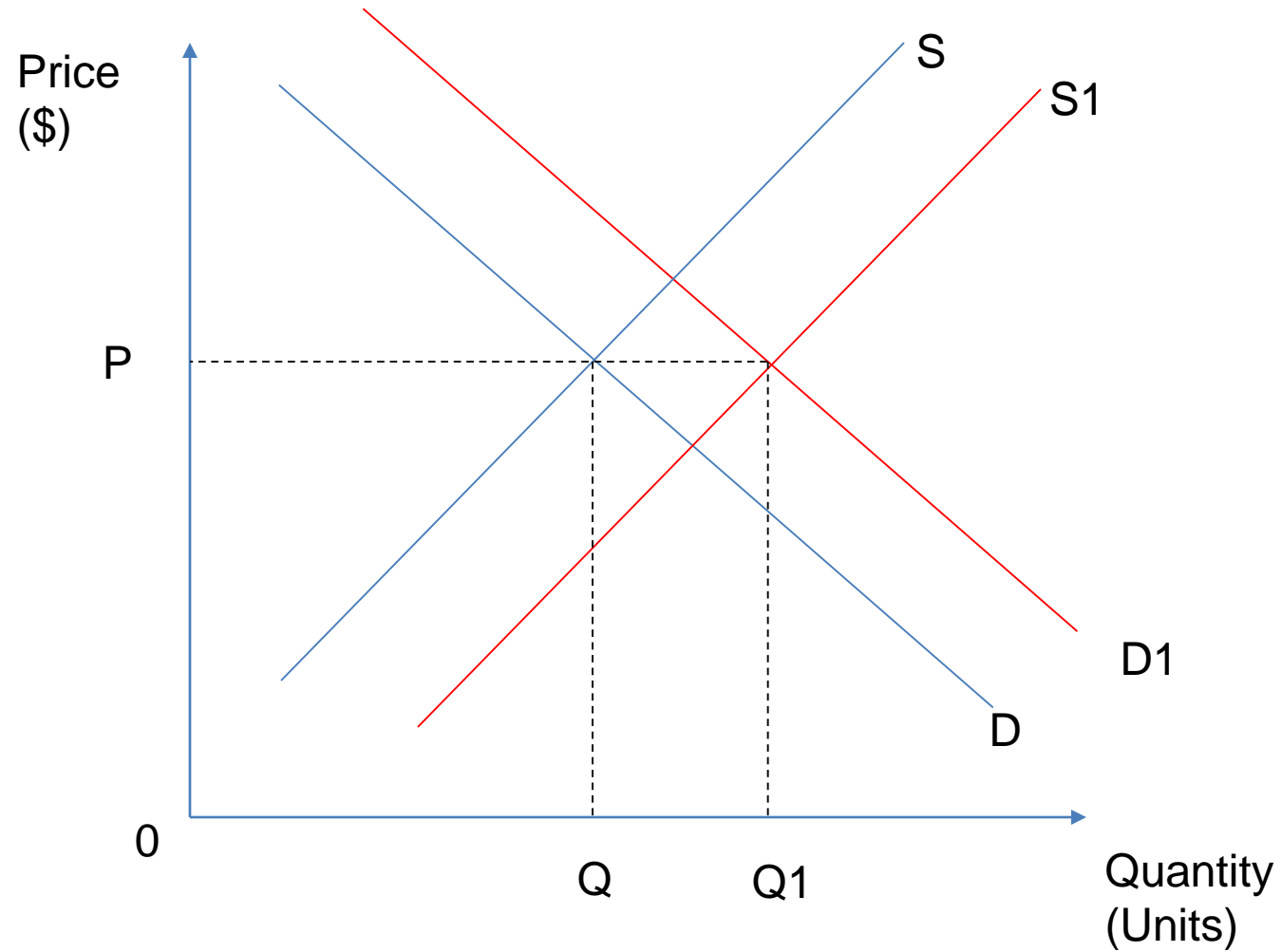
Monthly Brent and West Texas Intermediate crude prices (2015-2020)

dollars per barrel



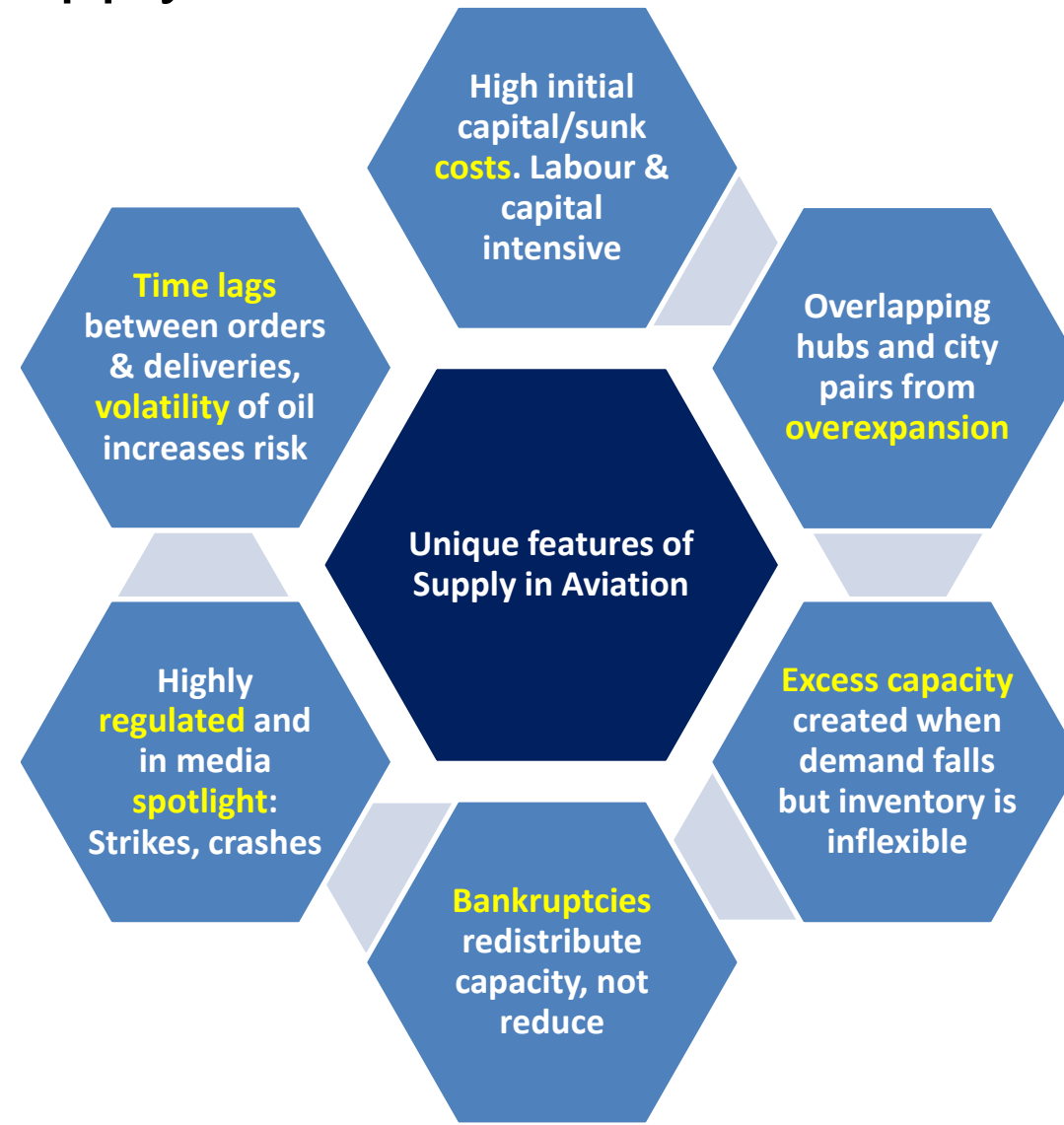


# Implications





# Insights: Aviation Supply





# Insights: Aviation Demand





# Inter-relation between passenger growth, GDP and Jobs

The supply and demand for aviation personnel is **derived** from the supply and demand for aviation in general

SCENARIO	CAGR	TOTAL PAX IN 2037 (ORIGIN- DESTINATION PASSENGERS)	JOBS SUPPORTED IN 2037	GDP SUPPORTED IN 2037 (2016 PRICES)
Reverse Globalization	2.4%	5.7 billion	90 million	\$4.6 trillion
Constant Policy	3.5%	7.0 billion	100 million	\$5.5 trillion
Maximum Liberalization	5.5%	10.3 billion	119 million	\$7.6 trillion

Source: IATA/Tourism Economics & Oxford Economics





# Areas of Concern

- **Lack of diversity in Aviation:** Under 5% of all pilots in both the US and UK are female. Indigo of India leads the way with 14% female pilots
- **Pilot shortages:** 790k new pilots required by 2037 (Boeing)
- **MRO shortages:** 10% shortfall in the number of mechanics required by 2028.
- **Safety concerns:** 16 crashes claiming 555 lives in 2018, after our best ever year, 2017
- **Cuts to training budgets:** Slim profit margins puts pressure on safety and training budgets
- **Disruption to the aviation industry:** Terrorist threats, trade wars, increased automation...
- The **world economic slowdown** may impact the incomes of middle classes and business and leisure travel



# Growth areas reported by our colleges



Human Factors



Aviation  
maintenance



Air Traffic  
management



Flight



Business  
Analytics





# Recommendations

