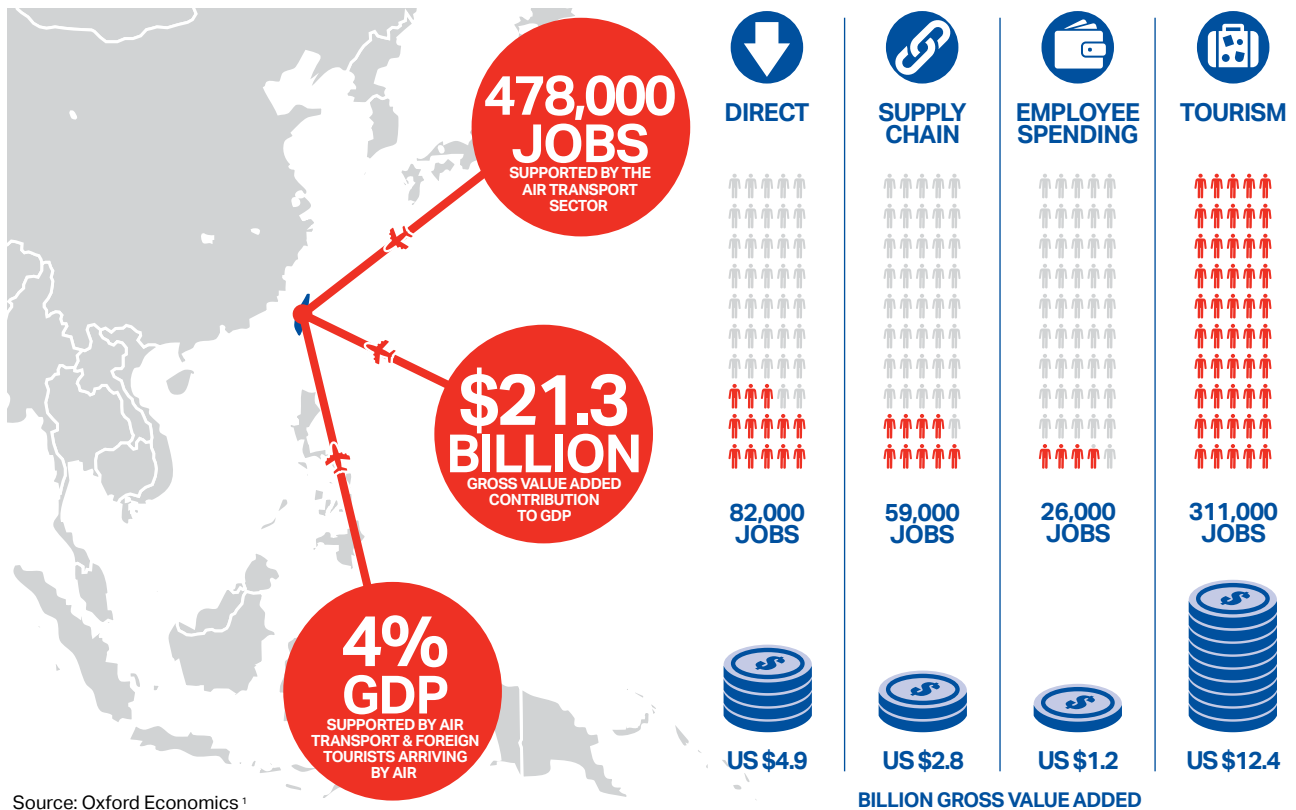




THE IMPORTANCE OF AIR TRANSPORT TO CHINESE TAIPEI

The air transport sector makes a major contribution to Chinese Taipei's economy

There are different ways of measuring air transport's impact on an economy. We look at three: the jobs and spending generated by airlines and their supply chain, the flows of trade, tourism and investment resulting from users of all airlines serving the economy, and the city pair connections that make these flows possible. All provide a different but illuminating perspective on the importance of air transport.



The air transport sector supports jobs...

Airlines, airport operators, airport on-site enterprises (restaurants and retail), aircraft manufacturers, and air navigation service providers employ 82,000 people in Chinese Taipei. In addition, by buying goods and services from local suppliers the sector supported another 59,000 jobs. On top of this, the sector is estimated to support a further 26,000 jobs through the wages it pays its employees, some or all of

which are subsequently spent on consumer goods and services. Foreign tourists arriving by air to Chinese Taipei, who spend their money in the local economy, are estimated to support an additional 311,000 jobs. In total 478,000 jobs are supported by air transport and tourists arriving by air.

...and spending

The air transport industry, including airlines and its supply chain, are estimated to support

US \$9 billion of GDP in Chinese Taipei. Spending by foreign tourists supports a further US \$12.4 billion of the GDP, totaling to US \$21.3 billion. In total, 4 percent of the GDP is supported by inputs to the air transport sector and foreign tourists arriving by air.

For forecasts of the industry's GDP and jobs contribution over the next 20 years see page 4

Air transport facilitates flows of goods, investment and people



Note: Data relate to all modes of transport / Source: UNWTO, UNCTAD and World Bank²

The most important benefits from air transport go to passengers and shippers and the spillover impacts on their businesses. The value to passengers, shippers

and the economy can be seen from the spending of foreign tourists and the value of exports (though note these figures include all modes of transport). A key

economic flow, stimulated by good air transport connections, is foreign direct investment, creating productive assets that will generate a long-term flow of GDP.

Top five international tourist arrivals (all modes of transport) by residence³

1. People's Republic of China
2. Japan
3. Hong Kong (SAR), China
4. Republic of Korea
5. United States

Top five busiest direct flights arrivals

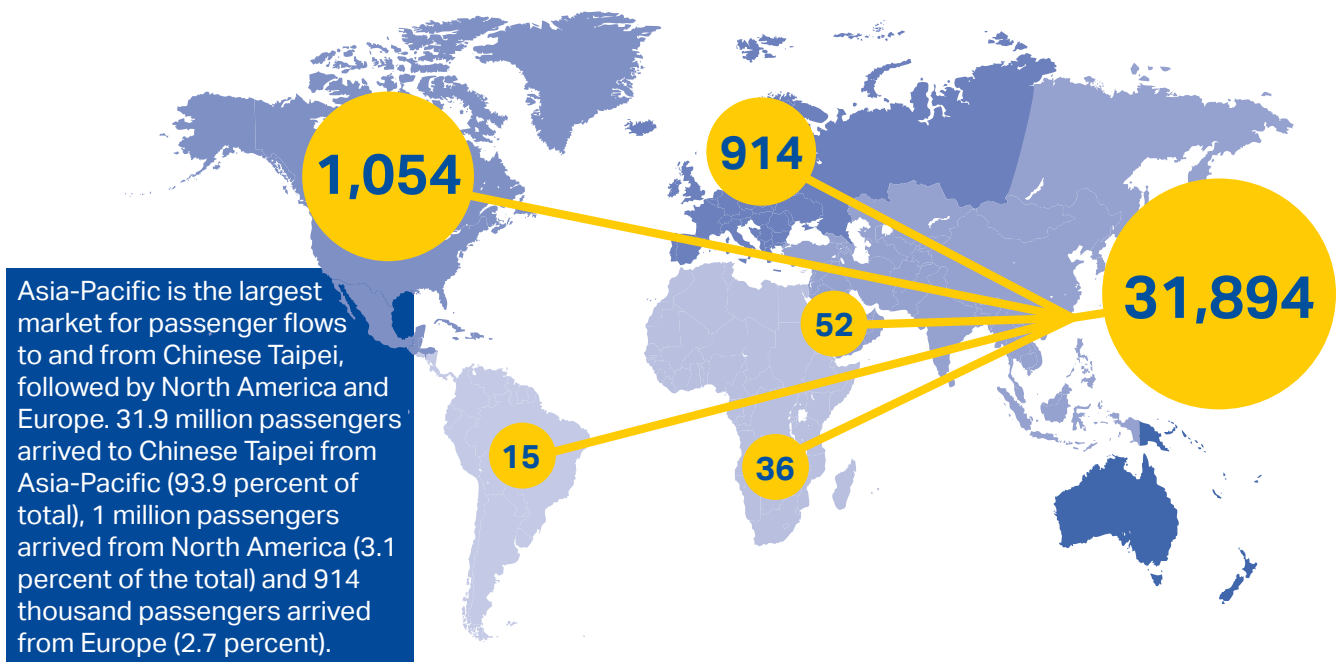
1. People's Republic of China
2. Japan
3. Hong Kong (SAR), China
4. Republic of Korea
5. Vietnam

Top five busiest air cargo routes

1. United States
2. People's Republic of China
3. Japan
4. Hong Kong (SAR), China
5. Singapore

Source: UNWTO and IATA²

Annual passenger flows by region (origin-destination, '000s)



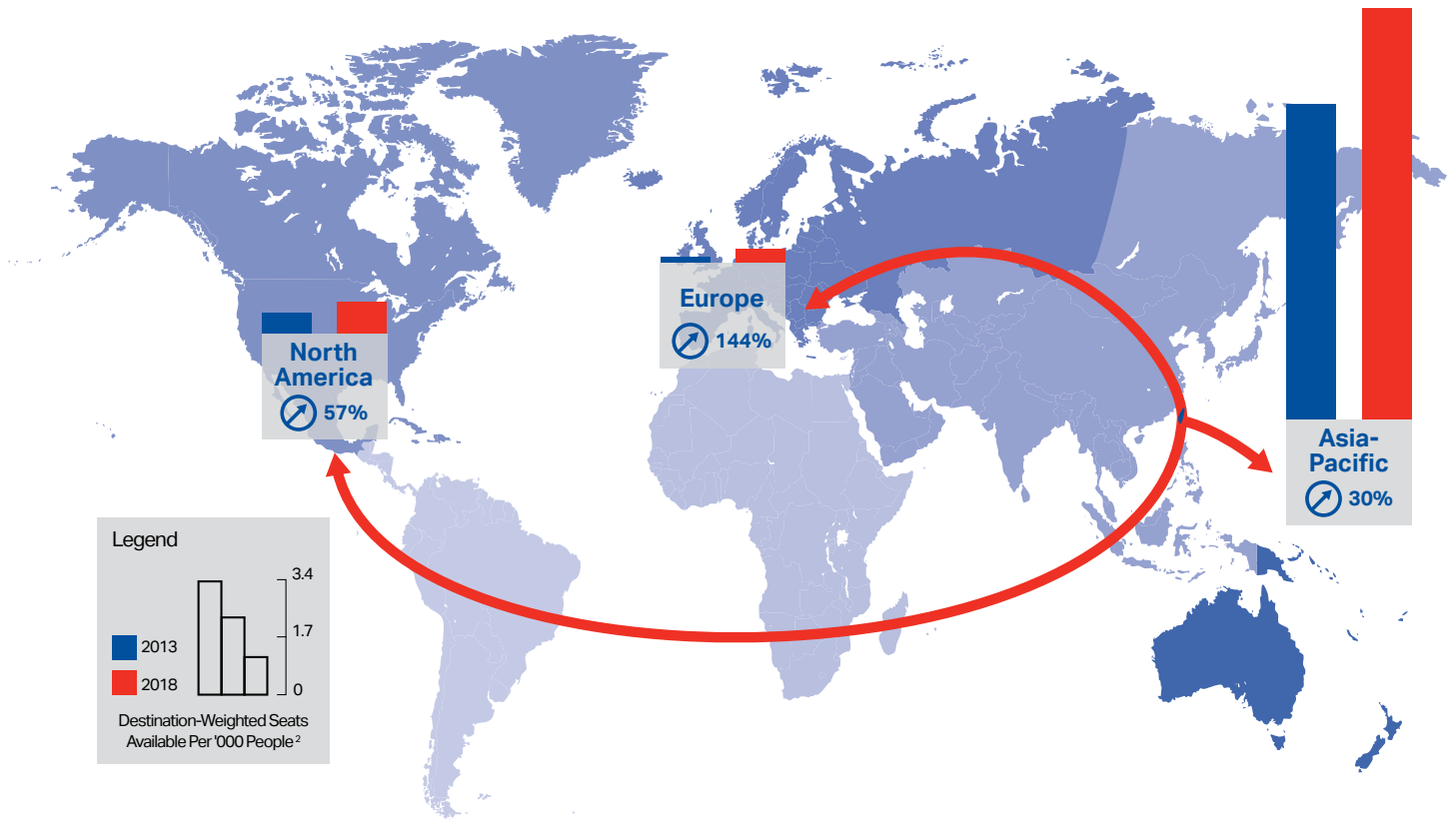
Source: IATA Direct Data Solutions

³ Arrivals of non-resident tourists at borders or in all types of accommodation establishments, by residence.

Air transport connects Chinese Taipei to cities around the world

Air transport generates benefits to consumers and the wider economy by providing speedy connections between cities. These virtual bridges in the air enable the economic flows of goods, investments, people and ideas that are the fundamental drivers of economic growth.

Map of Chinese Taipei's air connectivity, by its largest markets (segment basis)⁴



IATA's measure of how well an economy is connected to economically important cities around the world is shown above. The map shows Chinese

Taipei's connectivity at a regional level and how it has evolved. Chinese Taipei's connections to Europe have grown the fastest over the last five years.

Number of international city pairs direct service in the top ten countries by passenger numbers in the world

- 9 United States
- 97 People's Republic of China
- 41 Japan
- 1 United Kingdom
- 1 India
- 2 Indonesia
- 0 Spain
- 1 Germany
- 0 Brazil
- 1 France



Source: IATA, Aviation Benefits Beyond Borders 2018 report

⁴ The air connectivity scores reported are total destination weighted seats per 1000 people. IATA developed the Air Connectivity Indicator calculated based on the total route capacity (in terms of seats available) weighted by the destination airport's relative capacity (calculated as the ratio of seats available at that airport relative to the capacity at the airport with most available seats) divided by the population size of the economy with a 0.15% of connectivity threshold in 2013.

Ease of travel, cost competitiveness, and trade facilitation are vitally important

If air transport's unique contribution is the bridges it creates between cities, then the flows of goods, people, investment and ideas that stimulate economic development must flow unimpeded to maximise their contribution to consumers and the wider economy. Here we measure how freely goods and people flow across borders.

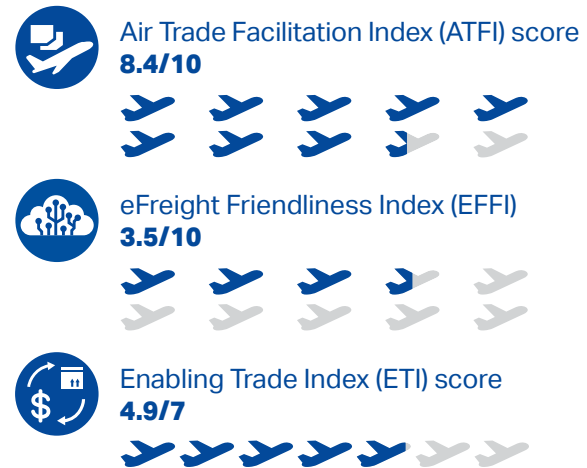
Passenger facilitation and cost competitiveness

Chinese Taipei's passenger facilitation (6.4/10) scores above the average of Asia-Pacific (4.7/10). On the World Economic Forum's Travel & Tourism Competitiveness Index, the Chinese Taipei ranks 37th for visa openness and 34th out of 136 economies for cost competitiveness. In all these scores and ranks, higher is better.



Measures of air cargo trade facilitation

Chinese Taipei's facilitation of air cargo through its customs' and borders' regulations ranks 39th out of 124 economies in terms of the Air Trade Facilitation Index (ATFI) and 18th out of 135 economies in terms of the eFreight Friendliness Index (EFFI) globally⁸. The Enabling Trade Index (ETI)⁹ ranks Chinese Taipei 35th out of 136 economies globally for the facilitation of the free flow of goods over borders and to its destination.



Forecast scenarios for passenger traffic, jobs and GDP footprint¹⁰

Air transport market in Chinese Taipei is forecast under the "current trends" scenario to grow by 85% in the next 20 years. This would result in an additional 29.2 million passenger journeys by 2037. If met, this increased demand would support approximately US \$39.4 billion of GDP and around 552,800 jobs.

	PASSENGERS	US \$ GDP	JOBS
2017	34.5 m	\$21.3 bn	478,163
2037	Current Trends	\$39.4 bn	552,811
	Upside	\$61.3 bn	868,600
	Downside	\$31.3 bn	436,570

¹ Source: Aviation Benefits Beyond Borders 2018 report (all currency is in United States dollars at 2016 prices).
² Data relates to 2017.
³ Passenger facilitation, one of the Air Transport Regulatory Competitiveness Indicators developed by IATA in 2018, looks at the ease of people moving around the globe and how the governments facilitate this process. It assesses the performance of economies on implementation of open skies agreements, advance passenger information and automatic border control systems and visa requirements.
⁴ Entry visa requirements for a tourism visit from worldwide source markets (10 = no visa required for visitors from all source markets, 0 = traditional visa required for visitors from every source market). Source: WEF, Travel & Tourism Competitiveness Report 2017.
⁵ Based on ticket taxes, airport charges and VAT (10=low cost, 0=high cost). Source: WEF, Travel & Tourism Competitiveness Report 2017.
⁶ The IATA Air Trade Facilitation index (ATFI) measures the extent to which an economy facilitates air cargo through its customs and borders processes and regulations. The IATA E-freight Friendliness Index (EFFI) assesses the actual penetration of electronic transactions and documents in air cargo shipments (Value of Air Cargo 2016 report).
⁷ The Enabling Trade Index (ETI), developed by the World Economic Forum, assesses the performance of 136 economies on domestic and foreign market access; border administration; transport and digital infrastructure; transport services; and operating environment. The ETI is featured in The Global Enabling Trade Report 2016.
⁸ Passengers are counted as departures, including connections. The passenger forecasts are based on the IATA 20-year passenger forecast (October 2018). Data on GDP and jobs 2017 are from Oxford Economics. GDP and jobs forecasts are from IATA Economics.
⁹ * All data relates to 2018 or most recent unless stated otherwise.