*/ HOW DOES TRAVEL & TOURISM COMPARE TO OTHER SECTORS? */

**GDP: SIZE**

- Travel & Tourism generated a total contribution of $29 billion to Singapore’s GDP in 2016.
- Travel & Tourism total GDP impact is larger than that of the mining, agriculture, automotive manufacturing, and retail sectors.
- In terms of its direct GDP, Travel & Tourism is more than twice the size of the chemicals manufacturing industry in Singapore.

**GDP: SHARE**

- Based on its direct, indirect, and induced GDP impact, Travel & Tourism generated 9.9% of Singapore’s GDP in 2016.
- This is larger than the size of the retail sector’s GDP impact at 5.1%.
**Employment: Size**

- Travel & Tourism sustained a total of 0.3 million direct, indirect, and induced jobs in Singapore in 2016.
- Travel & Tourism in Singapore directly employs more people than the mining, agriculture, automotive manufacturing, chemicals manufacturing, and banking sectors.
- Of note, Travel & Tourism directly supports more than five times as many jobs as the chemicals manufacturing sector.

**Employment: Share**

- Travel & Tourism generated, either directly or indirectly, 8.6% of Singapore’s employment in 2016.
- For every job directly in the Tourism sector, nearly one additional job is created on an indirect or induced basis, making its linkages stronger than in the construction sector.

**Growth: Trends**

- Travel & Tourism direct sector GDP expanded 112.3% between 1997 and 2016 while the total economy expanded 144.5%.
- The mining industry contracted 27.4% and the agriculture industry contracted 25.3% over this 19-year period.

**Growth: Forecast**

- Travel & Tourism GDP is expected to grow at an annual average of 3% over the next decade.
- In comparison, the total economy is expected to expand 2.7% per annum while the mining sector is forecast to contract 0.2% and the agriculture sector is forecast to grow 0.5% per annum, respectively, in real, inflation-adjusted terms.
**SINGAPORE SERVICE EXPORTS**
$ millions (2016 prices)

**EXPORTS: TRAVEL & TOURISM SHARE OF EXPORTS**
- Travel & Tourism is a significant source of export revenue for Singapore.
- In 2016, visitor exports totaled $17.8 billion. This was 12.7% of all service exports and 3.6% of all exports (including goods and services).

**EXPORTS: GROWTH OF TRAVEL & TOURISM EXPORTS**
- Between 1997 and 2016, Singapore’s Travel & Tourism exports expanded 188%.
- Total exports of goods and services outpaced Travel & Tourism Exports and grew 191% between 1997 and 2016.

### GDP, 2016 ($, 2016 PRICES)

<table>
<thead>
<tr>
<th>Sector</th>
<th>DIRECT</th>
<th>INDIRECT + INDUCED</th>
<th>TOTAL</th>
<th>% TOTAL ECONOMY</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
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<tr>
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<tr>
<td>RETAIL (WITHOUT WHOLESALE)</td>
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<td>5</td>
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<tr>
<td>FINANCIAL SERVICES</td>
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<td>23</td>
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<tr>
<td>BANKING</td>
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<td>12</td>
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<tr>
<td>CONSTRUCTION</td>
<td>16</td>
<td>15</td>
<td>31</td>
<td>11</td>
</tr>
<tr>
<td>TRAVEL &amp; TOURISM</td>
<td>12</td>
<td>16</td>
<td>29</td>
<td>10</td>
</tr>
</tbody>
</table>

### EMPLOYMENT, 2016 (Thousands)

<table>
<thead>
<tr>
<th>Sector</th>
<th>DIRECT</th>
<th>INDIRECT + INDUCED</th>
<th>TOTAL</th>
<th>% TOTAL ECONOMY</th>
</tr>
</thead>
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<tr>
<td>AGRICULTURE</td>
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<td>0</td>
<td>1</td>
<td>0</td>
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<tr>
<td>MINING</td>
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<tr>
<td>CHEMICALS MANUFACTURING</td>
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<td>AUTOMOTIVE MANUFACTURING</td>
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<tr>
<td>RETAIL (WITHOUT WHOLESALE)</td>
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<td>215</td>
<td>379</td>
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<tr>
<td>FINANCIAL SERVICES</td>
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<td>351</td>
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<td>15</td>
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<tr>
<td>BANKING</td>
<td>132</td>
<td>241</td>
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<tr>
<td>CONSTRUCTION</td>
<td>498</td>
<td>234</td>
<td>732</td>
<td>20</td>
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<tr>
<td>TRAVEL &amp; TOURISM</td>
<td>164</td>
<td>153</td>
<td>317</td>
<td>9</td>
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</table>
METHODOLOGY

The World Travel & Tourism Council (WTTC) has spearheaded global analysis of the economic importance of the sector for over 25 years.

This research has established the contribution of Travel & Tourism on an ongoing basis to over 180 countries in absolute size, share of the economy, and growth. Around the world, WTTC research is referenced as the authoritative source of the role of Travel & Tourism in generating GDP, employment, exports, and investment. This research compares the role that Travel & Tourism plays in the world economy with other economic sectors. The results of these comparisons provide new perspectives on the relative significance of Travel & Tourism, as well as some of its unique advantages in driving current and future global economic growth.

This updated WTTC research benchmarks Travel & Tourism against an assortment of other sectors for 27 countries and for each world region.

The following metrics are analysed by sector for each country and region:
- GDP (size and share of total)
- Employment contribution (size and share of total)
- Historic growth
- Expected growth
- Export contribution

And for most of the countries:
- Strength of linkages to the rest of the economy
- Job creation potential

The following sectors have been analysed in comparison to Travel & Tourism. They were selected as having a similar breadth and global presence as Travel & Tourism.

AGRICULTURE: agriculture, forestry, and fishing.
AUTOMOTIVE MANUFACTURING: motor vehicles and parts & accessories.
BANKING: all banking activities and related services.
CHEMICALS MANUFACTURING: drugs & medicines, manufacture of basic pharmaceutical products and pharmaceutical preparations, plastics, rubber, paint, polishes, ink, perfumes, cosmetics, soap, cleaning materials, fertilizer, pesticides, other chemicals.
CONSTRUCTION: those primarily engaged in the construction of buildings (both residential and non-residential), engineering projects or speciality trade contractors. Construction work done may include new work, additions, alterations, or maintenance and repairs.
FINANCIAL SERVICES: all financial relates activities including banking, investment services, and insurance.
MINING: the extraction of oil, natural gas, coal, metals, and related services.
RETAIL (WITHOUT WHOLESALE): all retail trade (i.e. retail trade, except of motor vehicles & retail codes to motor vehicles and motorcycles).

The analysis examines the economic value of industries on three levels:

DIRECT
This includes only those employees and the related value added for the relevant sector. In the case of Travel & Tourism, we only count the value added of the accommodation, recreation, transportation, and other related sectors.

INDIRECT
This measures the supply chain impact (also called inter-industry linkages) for each sector.

INDUCED
This measures the impacts of incomes earned directly and indirectly as they are spent in the local economy.

The sum of direct, indirect, and induced impacts equals the total economic impact of a sector.
COUNTRIES AND REGIONS COVERED

REGIONS
- Africa
- Americas
- Asia Pacific
- Europe
- Middle East
- World

COUNTRIES
- Argentina
- Australia
- Brazil
- Canada
- China
- France
- Germany
- India
- Indonesia
- Italy
- Jamaica
- Japan
- Kenya
- Malaysia
- Mexico
- Peru
- Russia
- Saudi Arabia
- Singapore
- South Africa
- South Korea
- Spain
- Thailand
- Turkey
- UAE
- UK
- USA

DATA SOURCES

All currency figures are stated in 2016 US dollars.

GDP & EMPLOYMENT
Main data sources for comparative sectors:
- United Nations International Labour Organization
- OECD
- CEIC Data Manager
- Eurostat (European Commission)
- UK Office for National Statistics (ONS)
- Oxford Economics Cities and Regions Forecasting Service
- UNESCO
- Groningen Growth and Development Centre
- UN World Input-Output Database (WIOD)
- Oxford Economics Global Industry Model
- Oxford Economics Global Economic Model
- Oxford Economics UK Regional Model
- Various country-specific National Statistics Office websites
- Travel & Tourism GDP and employment figures are drawn from Oxford Economics analysis for WTTC using the Tourism Satellite Account framework.

EXPORTS
Main data sources:
- World Trade Organization (WTO) for global goods and services exports
- IMFDOT for total goods exports by country
- IMFBOPA and ITC for total services exports by country
- National accounts and central bank balance of payments data (from national sources) complement our database where data from above sources is unavailable
- Oxford Economics estimates to fill gaps in historical data
- Data is generally available for 2000-2015 from above sources. Missing years and projected 2016 figures are estimated using available data on industry and trade.

LINKAGES (SELECTED COUNTRIES ONLY)
Main data sources:
- OECD, National Statistical Offices, Oxford Economics;
- Input-output tables for all countries were sourced from either the OECD or, when not available, National Statistical Offices. From the input-output tables, multiplier matrices were developed for each economy, detailing the flow of spending in an economy that occurs as a consequence of spending in a given sector;
- For each of the comparator sectors, a spending shock of $1 million was simulated, with the resulting spending impacts in every sector in the economy recorded;
- These spending outcomes were translated into gross value added (GVA) using the GVA/output ratios available in the input-output tables, and employment, using productivity level data developed from the GDP and employment figures derived elsewhere in the study;
- Travel & Tourism multipliers are drawn from Oxford Economics / WTTC ongoing Tourism Satellite Account analysis; and,
- Global and regional multipliers were calculated as the weighted average of all relevant nations, with weightings assigned according to sector GDP.
ABOUT AMERICAN EXPRESS
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ABOUT OXFORD ECONOMICS
Oxford Economics is one of the world’s leading providers of economic analysis, forecasts and consulting advice. Founded in 1981 as a joint venture with Oxford University’s business college, Oxford Economics enjoys a reputation for high quality, quantitative analysis and evidence-based advice. For this, it draws on 250 full-time staff including 150 highly-experienced professional economists; a dedicated data analysis team; global modelling tools, and a range of partner institutions across the globe. Oxford Economics has offices in Oxford, London, New York, Singapore, Belfast, Chicago, Dubai, Miami, Milan, Paris, Philadelphia, San Francisco, and Washington DC.

ABOUT WORLD TRAVEL & TOURISM COUNCIL
WTTC promotes sustainable growth for the sector, working with governments and international institutions to create jobs, to drive exports, and to generate prosperity. Council Members are the Chairs, Presidents, and Chief Executives of the world’s leading private sector Travel & Tourism businesses.

WTTC works to raise awareness of Travel & Tourism as one of the world’s largest industries, supporting 292 million jobs and generating 10.2% of global GDP in 2016.

To download reports or data, please visit www.wttc.org