

# **TECHNICAL NOTES**

*Singapore's International Trade in Services*

## **Data Sources**

Data presented in this report are compiled from various sources due to the diversity of trade in services. The bulk of the data is compiled from the International Trade in Services Survey (TIS) conducted annually by DOS. These are supplemented by data from other sources to compile the complete trade in services.

Data collected from sources other than the TIS survey contributed about 14.1 per cent of overall services exports and 17.1 per cent of overall services imports for reference year 2019, and include the following:

- Travel services (exports and imports)
- Government goods and services (exports and imports)
- Freight on imports in transport services (imports)
- Insurance on imports in insurance services (imports)
- Implicit service charges on foreign exchange trading in financial services (exports)
- Financial intermediation services indirectly measured in financial services (exports and imports)

There is no breakdown available for data by partner country from supplementary sources. Hence, statistics on trade in services by partner country are solely based on data compiled from the TIS survey.

The TIS data are used as inputs to compile the current account in Singapore's Balance of Payments (BOP).

## **Scope and Coverage of TIS Survey**

The survey covers establishments from manufacturing, construction, wholesale & retail, transport & logistics, financial, professional and business services which engage in international trade in services.

## **Survey Frame and Sample Selection for TIS Survey**

The survey frame of TIS survey covers establishments with international services trade. Establishments which engaged in international services trade were identified based on the previous year's TIS survey, other establishment surveys, administrative sources and media sources.

### Data Collection for TIS Survey

Respondents could submit their survey returns via internet and mail. Secured transmission of statistical information via the internet was enabled through a service known as E-Survey.

Six different survey forms were used to cater to the diverse nature of services across various industries. They were:

- **General** which covered establishments primarily engaged in real estate; renting of transport equipment; IT & related services; research & development; education; medical activities; recreational, cultural & sporting activities.
- **Manufacturing/Construction/Engineering** which covered firms in manufacturing; construction; production & distribution of electricity; architectural, engineering and land surveying.
- **Commerce** which covered wholesalers and retailers.
- **Financial & Insurance Services** which covered mainly financial and insurance companies.
- **Shipping Agencies/Branches of Foreign Shipping Lines and Airlines** which covered branches of foreign shipping lines, airlines and shipping agencies.
- **Transport-Others** which covered local shipping lines and airlines; post & courier and telecommunication services.

## **Concepts and Definitions**

Compilation of International Trade in Services statistics follows closely the principles and guidelines set out by the International Monetary Fund's Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6). These guidelines include the definition, valuation, classification and recording of trade in services between residents and non-residents.

### Residency

Conceptually, international trade in services is said to have taken place when one company provides a service to a company resident in another geographical territory. An entity is said to be a resident of a geographical territory when it engages in significant economic activities in the geographical territory for a period of time, usually more than one year.

### Valuation

Services transactions internationally are valued at market prices i.e. the value of transaction agreed upon between the supplier and the consumer at the time when the service is created, transformed, exchanged, transferred, or extinguished.

### Classification

Singapore's international trade in services is classified broadly into the following 12 categories:

- 1) Manufacturing Services on Physical Inputs Owned by Others
- 2) Maintenance & Repair Services
- 3) Transport
- 4) Travel
- 5) Insurance
- 6) Government Goods & Services
- 7) Construction
- 8) Financial Services
- 9) Telecommunications, Computer & Information Services
- 10) Charges for the Use of Intellectual Property
- 11) Personal, Cultural & Recreational Services
- 12) Other Business Services

### Manufacturing Services on Physical Inputs Owned by Others

Manufacturing services on physical inputs owned by others cover processing, assembly, labelling, packing, and so forth undertaken by entities that do not own the goods concerned. Excluded are the assembly of prefabricated construction (included under *Construction*) and labelling, and packing incidental to transport (included under *Transport*).

### Maintenance & Repair Services

Maintenance & Repair services cover repair work performed by residents (non-residents) on goods that are owned by non-residents (residents), and include maintenance and repairs performed on ships, aircraft and other transportation equipment. Services excluded are construction repairs (included under *Construction*) and maintenance of computers (*Telecommunications, Computer and Information*).

### Transport

Transport cover services that involve the carriage of passengers, the movement of goods, charter of carriers with crew, and related supporting and auxiliary services. This category also includes port services and commissions arising from services provided to foreign shipping lines/airlines as well as postal and courier services.

The components of Transport presented in this report are Freight, which includes the movement of goods and the carriage of mails, and Others (both for all modes of transport). An alternative breakdown by mode of transport, namely Sea Transport, Air Transport and Other Modes of Transport is also presented.

Transport payments include payments for carriage of goods such as freight on merchanting and freight on imports<sup>1</sup>. Proceeds collected by foreign airlines from the sale of air tickets in Singapore, payments for overseas port services and commissions to foreign agents by our shipping lines and airlines are also included.

Related items that are excluded from transport services are insurance on imports (included in *Insurance Services*) and charters of carriers without crew (*Other Business Services*).

---

<sup>1</sup> Freight on imports are estimated by applying freight factors to the value of imports (c.i.f). These factors are obtained from the survey of transportation costs for imports.

### Travel

Travel cover the range of goods and services consumed by travellers during visits to a particular economy for less than one year. Travellers going abroad for business activities or for purposes other than business such as holidays, social visits, and education and health-related purposes are included under travel<sup>2</sup>. Expenditures incurred by an individual (and their dependants) as an employee of his or her government stationed in another economy are included under *Government Goods and Services* and not in travel.

### Insurance

Insurance services include service charges for reinsurance, life insurance, general insurance and freight insurance<sup>3</sup>, which are mainly estimated based on gross premiums earned and premium supplements<sup>4</sup> net of claims incurred<sup>5</sup> (and changes in insurance technical reserves<sup>6</sup> for life insurance). Also included are auxiliary insurance services such as agents' commissions, insurance brokerage and other explicit charges related to insurance services.

### Government Goods & Services

Exports of government goods & services refer to the expenditure of foreign diplomatic and consular missions and foreign armed forces in Singapore, including personal expenditure incurred by diplomats and consular staff located in Singapore. Imports of government goods & services refer to the expenditure of Singapore's overseas diplomatic, trade, and tourist missions and the purchase of goods and services by the government from abroad.

### Construction

Construction services cover work performed on construction activities by employees or enterprises. The work is generally performed for a short period of time, usually less than a year. Construction services are valued on a gross basis i.e. it includes

---

<sup>2</sup> Expenditures of persons who travel abroad for study or medical treatment are included in travel even if their stay abroad exceeds a year, as their centre of predominant economic interest remains with their home territory and they are hence considered non-residents in the host economy.

<sup>3</sup> Payments for freight insurance on imports are estimated by applying insurance cost factors to the value of imports (c.i.f.). These factors are derived from the survey of transportation costs for imports.

<sup>4</sup> Premium supplements are investment income earned on the assets invested to meet insurance companies' provision liabilities which are attributable to insurance policyholders and are treated as being paid back to insurance companies.

<sup>5</sup> In line with the expectations approach, nonlife insurance claims are adjusted for volatility.

<sup>6</sup> Insurance technical reserves represent insurance companies' liabilities to policyholders and consist of prepayments of premiums and outstanding claims, among others.

the total costs incurred on materials and labour as well as the operating surplus that accrues to the companies performing the work.

### Financial Services

Financial services cover financial intermediary and auxiliary services which can be charged explicitly or implicitly. They can be broadly classified into bank services, investment & financial consultancy services, commissions on financial derivative transactions. Also included are implicit service charges in forex trading<sup>7</sup>, margins on acquisitions and disposals of debt securities on the secondary market as well as financial intermediation services indirectly measured (FISIM)<sup>8</sup>.

Banks derive most of their income from the intermediation of funds, i.e. interest income. In the BPM, interest income adjusted for FISIM is classified as investment income rather than services. Bank services in the BPM context refer to fee-based income of banks, as well as reimbursements for expenses from foreign banks to their local branches.

Similarly, services pertaining to investment activities refer to the fees earned from performing intermediary service, and not the dividends or capital gains/losses from investment. Thus, for the equity and derivative securities market, the services performed are reflected in the commissions received/paid for trading in the markets, while for fund management, the services performed are reflected in the management fees earned and recorded under investment services.

### Telecommunications, Computer & Information Services

Telecommunications services cover the transmission of sound, images and other information by telephone, cable, satellite, etc, as well as business network services,

---

<sup>7</sup> Foreign exchange dealers perform a service for their clients, and their service charge is implicit in the margin (spread between the bid and offer price) of the currencies they trade. The BPM recommends that the service charge be determined by the spread between the midpoint rate and the buying/selling rate. As the collection of data on the spread has its set of practical difficulties, DOS adopts a data model based on the foreign share of turnover and the gross earnings of foreign exchange dealers. It is based on the observation that any change in the spread between the midpoint rate and the buying/selling rate would be reflected in the earnings of foreign exchange dealers.

<sup>8</sup> Financial intermediaries charge for their services associated to loans and deposits (e.g. housing loans and credit lines) indirectly by offering lower rates of interest to their depositors and levying higher interest rates on their borrowers. The resulting interest margin acts as charges for such intermediation services and is known as financial intermediation services indirectly measured (FISIM). As recommended in the System of National Accounts (SNA), the “reference rate” approach is used whereby the reference rate represents the pure cost of borrowing funds without intermediation services. For the computation of exports and imports of FISIM, the external reference rate is derived using total interest paid to non-resident banks on inter-bank deposits and the total stock of such deposits placed by non-resident banks.

teleconferencing and related technical support services. Also included are cellular phone services, internet backbone services and on-line access services.

Computer services consist of hardware and software consultancy, implementation and maintenance services such as hardware/software development, disaster recovery services, computer/systems management services and system/programme design including web design and development. Data processing services such as data entry and tabulation are also included.

Information services generally cover news agency services such as the provision of news, photographic materials and feature articles to media agencies. Also included are subscriptions to newspapers and periodicals and other information services such as web search portals.

#### *Charges for the Use of Intellectual Property*

Charges for the use of intellectual property include fees and charges for the use of research & development outcomes, as well as franchises and trademarks licensing fees, reproduction and/or distribution rights of computer software and audio-visual products, etc.

Licenses for the use of outcomes of research & development covers fees and charges for the use of proprietary rights arising from research & development. On the other hand, franchising and trademarks licensing fees covers all payments and charges for the use of trademarks and franchising.

Licenses to reproduce and/or distribute computer software covers the charges for the authorised reproduction and/or distribution, through licensing agreements, of produced software originals. Similarly, licenses to reproduce and/or distribute audio-visual and related products covers fees and charges for the authorised reproduction and/or distribution, through licensing agreements, of produced audio-visual originals and prototypes as well as original works of authors, painters, sculptors, etc. Also included are rights relating to the reproduction and/or distribution of recordings of live performances and radio, television, cable and satellite broadcast.

Related items that are excluded are charges for the use of computer software (included in *Telecommunications, Computer & Information Services*) and audio-visual products (*Personal, Cultural & Recreational Services*). Also excluded are the sales and purchases of intellectual property ownership rights which are generally classified under the relevant services item depending on the nature of the intellectual property product.

### Personal, Cultural & Recreational Services

Personal, Cultural & Recreational services comprise audio-visual & related services, health services, education services and other personal, cultural & recreational services.

Audio-visual & related services include services related to the production of motion pictures, radio and television programs and musical recordings as well as the performing arts such as fees for entertainment and cultural performances.

Health services consist of human health services and laboratory and similar services, whether rendered on-site or remotely through telemedicine or tele-diagnosis. Similarly, education services include services relating to all levels of education whether delivered remotely, such as correspondence courses, or by teachers supplying services directly in host economies. However, education and health services provided to non-residents who are present in the territory of the service provider are excluded from personal, cultural and recreational services (included in *Travel*).

Sports and recreational services, for instance fees paid to foreign sports teams, and personal services such as membership dues of business associations are included in other personal, cultural & recreational services.

### Other Business Services

'Other business services' cover a range of services transactions and can be further categorised into the following components and sub-components:

- Research & development
- Professional & management consulting
  - Accounting
  - Advertising & market research
  - Business management services include administrative and consultancy services provided to businesses; as well as the reimbursement of operating expenses between related business entities.
  - Legal services
- Technical, trade-related and other business services
  - Architectural services
  - Engineering & technical services

- Operating leasing services cover leasing (rental) and charters, without crew, of ships, aircraft and transport equipment, as well as other types of equipment without operator such as computers and machinery.
- Trade-related services consist of commissions and associated income/expenditure arising from the trading of goods such as agency fees and distributor fees as well as discounts received/allowed.
- Other miscellaneous business services cover real estate services and other business services that cannot be classified to any of the business services listed above.

### **Other Related Publications on Trade in Services**

Trade in services statistics by broad category are also published in the Annual/Quarterly Economic Survey of Singapore and Review of Trade Performance.

Other related publications include:

- Occasional Paper on “Implementation of IMF Balance of Payments and International Investment Position Manual, 6th Edition in Singapore's Balance of Payments”, February 2012
- Article on “Trends in Singapore’s International Trade in Services”, March 2016
- Information Paper on “Singapore’s International Accounts: Methodological Updates and Recent Developments”, May 2016
- Article on “Adoption of the Extended Balance of Payments Services Classification”, March 2018
- Information Paper on “Methodological Improvements to the Current Account of Singapore’s Balance of Payments”, June 2019

For more related publications, see:

1. Publications & Papers on International Trade  
<https://www.singstat.gov.sg/publications/publications-and-papers/economy#trade>
2. Publications & Papers on International Accounts  
[https://www.singstat.gov.sg/publications/publications-and-papers/economy#international\\_accounts](https://www.singstat.gov.sg/publications/publications-and-papers/economy#international_accounts)