

Introduction

1. Background

- (1) The monthly report has been published since November 1965. The statistics for export and import goods were compiled jointly in terms of the Chinese Standard Industrial Classification and the Standard International Trade Classification (SITC).
- (2) Since CY 1989, the Harmonized Commodity Description and Coding System (HS) is applied for compilation of import and export statistics and the historical yearly data was revised to CY 1981, the monthly data was revised to CY 1989.
- (3) The majority of the tables in the report were re-organized in July 2009. The cross tables of major trading commodities and countries were added. The tables of minor trading countries and time series data for specific commodities are no longer provided in the monthly report. However, all the data above is available on the website of external trade statistics (<https://www.mof.gov.tw/Eng/Detail/Index?nodeid=259&pid=76301>).
- (4) The trade statistics has been adapted to general trade system since CY 2016. Under the general trade system, the time of recording should be the time when goods enter or leave the economic territory of the compiling country. The scope of recording included free circulation area, industrial free zones, premises for inward processing, commercial free zones and customs warehouses. In accordance with the applying of general trade system, the principal commodity classification was revised and historical data was revised to CY 2001.

2. Source of data:

All trade statistics are compiled on the basis of the data on the Import, Re-Import, Export, and Re-Export Declarations filed with the various Customs Offices.

3. Coverage of statistics:

The statistics cover only goods exported to and imported from foreign countries; sales of fish overseas and bunker oil for foreign vessels or aircraft at local ports are also included in exports. However, prior to CY 2015, sales of bunker oil for domestic vessels or aircraft are also included in exports.

4. Compilation Approach:

Total Exports = Exports + Re-exports Total Imports = Imports + Re-imports

Re-Export data refers to the data of goods to be returned or resold abroad after having been imported. In addition, Re-Import data includes domestic goods to be returned from aboard and domestic goods to be processed aboard simply.

5. **Timing:** The statistical time base for exported and imported goods is the date of completion of scrutiny.

6. Valuation:

- (1) Values of imports are on a C.I.F. basis.

(2) Values of exports are on a F.O.B. basis.

7. Exchange rate: The value in U.S. dollars is converted from N.T. Dollars by using the average exchange rate of 'purchase in' and 'sales out' adopted unitary, the exchange rate provided by the Customs Administration, Ministry of Finance.

8. Commodity classification:

Merchandise is classified according to the following rules:

- (1) The Customs Import Tariff and Classification of Import and Export Commodities of the Republic of China
- (2) The Standard International Trade Classification (SITC)
- (3) The Characteristic Classification of Exports and Imports Commodity

9. Countries: Exported and re-exported goods are classified by the country of destination which was declared by the exporter. Imported and re-imported goods are classified according to the country of origin. (Re-imported goods are classified according to the country of the seller before 2013.)

10. Annotation:

- (1) The import and export trade statistics are published on a monthly basis. To ensure correctness, preliminary data is released the following month and revised a month after.
- (2) The following symbols are used:
— : none p : preliminary figures r : revised figures
- (3) Figures may not add up to the total because of rounding.

Appendix 1. Explanation for Index of Import and Export

1. Purpose:

The import/export index measures the changes in unit value and quantum of trade commodities, and serves as an input for analysis of concerned institutions.

2. Population:

According to the import / export commodities in the Taiwan Area.

3. Base Period:

The reference year is CY 2016.

4. Index Classification:

In order to measure the trade values, prices, and volumes, the value index, unit value index, and quantum index are compiled. The value index is the change of the total value of imports and exports in the calculation period and the reference year. The quantum index is the value index divided by the unit value index. The unit value index is based on the chain-linking method. In addition to the compilation of a general index and indices for 17 groups, 9 chapters with large trade values are arranged by the chapter index, and the 16th group is divided into 4 subgroup indices: (1) parts of electronic product, (2) machinery, (3) electrical machinery products, (4) information, communication, and audio-video products.

5. Source of data:

The main data is based on customs documents. Commodity prices greater than 2 times or less than 0.5 times of the previous month's average price will be removed. While the commodities in chapters 84, 85, 87, and 90 are of a smaller size, higher speed, higher efficiency or lower price, the unit price does not easily explain fluctuations in the real price. Therefore, the indices of the above chapters are computed according to import/export price indices from DGBAS. The export sampling rate (selected commodities /total commodities) of CY 2016 is 94.3%; import sampling rate is 92.5%.

6. Formulas for compilation:

A. Value index:
$$I_v = \frac{\sum p_i q_i}{\sum p_0 q_0} \times 100$$

where $\sum p_i q_i$ refers to the total value of import / export commodity groups in the current period, and $\sum p_0 q_0$ refers to those in the base period.

B. Unit value index:
$$I_p = \frac{\sum p_i \times q_{i-1}}{\sum p_{i-1} \times q_{i-1}} \times \dots \times \frac{\sum p_1 \times q_0}{\sum p_0 \times q_0} \times 100$$

where p_i refers to the unit value in the current period, p_{i-1} refers to the unit value before the current period, q_{i-1} refers to the quantity before the current period, p_0 refers to unit value in the reference year, and q_0 refers to the quantity in the reference year.

C. Quantum index:
$$I_Q = \frac{I_v}{I_p} \times 100$$

D. Net terms of trade:
$$T_N = \frac{I_{PE}}{I_{PI}} \times 100$$

where I_{PE} means the unit value index of export, I_{PI} means the unit value index of import.

E. Income terms of trade:
$$T_I = T_N \times I_{QE}/100$$

where I_{QE} means the quantum index of export.

7. Index time series:

The general index annual data start from CY 1952, and monthly data start from CY 1974. Group index annual and monthly data start from CY 1989.

Appendix 2. A General Description of the Standard and Characteristic Classification of Export and Import Commodities

1. By Input Factor Intensity

Many factors of production are used directly or indirectly as the input during the producing process of commodities. In general, the ratio of each factor of production to the total input factors used represents the various factor intensity of commodity.

According to the existing Standard and Characteristic Classification of Export and Import Commodities, the input factor intensity is classified into four categories:

- (1) Degree of Labor Intensity: It means the direct and/or indirect labor input per million NT\$ value added in domestic factor cost. (Unit: person/NT\$1,000,000)
- (2) Degree of Capital Intensity: It means the fixed assets in operation per labor used (Including direct and/or indirect assets and labor inputs).(Unit: NT\$1,000/person)
- (3) Degree of Technique Intensity: It means the ratio of employee with university or higher education to total employee. (Unit: %)
- (4) Degree of Energy Intensity: It means the direct and/or indirect energy input per million NT\$ value added in domestic factor cost.(Unit: kiloliter of oil equivalent/NT\$1,000,000)

2. Classification of Technology and Industry by OECD

There are no unified definition in various countries of relevant Hi-tech industries and products. Our current characteristic classification of export and import commodities are based on the data of industry and service census of 2011 to calculate the ratio of R&D expenditure to the gross product and make reference to the cut-off points of OECD in 2016 as well as taking into account of our industrial type to divide into four types: High-Technology, Medium-High-Technology, Medium-Low-Technology and Low-Technology.