

# 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) are applied for compilation of import and export statistics and the historical yearly data were revised to CY 1981, the monthly data were 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. For the tables of minor trading countries and time series data for specific commodities were no longer provided in the monthly report. However, all the data above are available on the website of external trade statistics (<http://www.mof.gov.tw/Eng/Pages/Detail.aspx?nodeid=259&pid=64520> ).
- (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 custom warehouses. In accordance with the applying of general trade system, the principal commodity classification was revised and historical data were 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 oversea 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. (Before 2013, exports and imports in U.S. dollars exchange rate to NT dollars by using the average value of the given period 'purchase in' and 'sales out' separately.)

**8. Commodity classification:**

Merchandises are 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 following symbols are used:

— : none                      p : preliminary figures                      r : revised figures

(2) 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 is measure the changes in unit value and quantum of trade commodities and as an input for analysis of concerned institution.

### 2. Population:

According to the import / export commodities in Taiwan Area.

### 3. Base Period:

The reference year is CY 2011.

### 4. Index Classification:

Based on the chain-linking method, includes a general index and indices for 17 groups, and further, the larger trade value of 9 chapters arranged by the chapter index, the 16<sup>th</sup> group are divided into 4 subgroups index : (1)parts of electronic product, (2)machinery, (3)electrical machinery products, (4)information, communication and audio-video products.

### 5. Source of data :

The indices of chapter 84,85,87,89 are computed according to the data from DGBAS, and others are according to Customs Administration. The commodity price which greater than 2 times or less than 0.5 times of last month average price will be removed. Export sampling rate (selected commodities / total commodities) is 94.3%, import sampling rate is 92.6% .

### 6. Formulas for compilation:

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

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

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

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

$$\text{C. Quantum index: } I_Q = \frac{I_V}{I_P} \times 100$$

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

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

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

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

### 7. Index time series:

Annual index and monthly index are retrospectped to CY 2011.

## **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 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 thousand NT\$ value added in domestic factor income. (Unit: person/NT\$ 1,000)
- (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 Human Capital Intensity: It means the ratio of employee with college or higher education to other kinds of employee. (Unit: person/person)
- (4) Degree of Energy Intensity: It means the direct and/or indirect energy input per thousand NT\$ value added in domestic factor income.(Unit: NT\$/ NT\$)

### **2. Classification of Technology and Industry by OECD**

There are no unified definition in various countries of relevant Hi-tech industries and products, the standard and characteristic classification of imports and exports commodities classify by way of OECD temporarily. We will consult domestic relevant indicators and make appropriate adjustment in the future.

OECD according to different intension divides into Hi-tech, Medium-high-technology, Medium-low-technology and Low-technology.

High-tech products includes (1)Aerospace (2)Computers, office machinery (3)Electronics-communications (4)Pharmaceuticals.

Medium-high-technology includes (1)Scientific instruments (2)Motor vehicles (3)Electrical machinery (4)Chemicals (5)Other transport equipment (6)Non-electrical machinery.

Medium-low-technology includes (1)Rubber and plastic products (2)Shipbuilding (3)Other manufacturing (4)Non-ferrous metals (5)Non-metallic mineral products (6)Fabricated metal products (7)Petroleum refining (8)Ferrous metals.

Low-technology includes (1)Paper printing (2)Textile and clothing (3)Food, beverages, and tobacco (4)Wood and furniture.

### **3. Top Ten Industries by the World Bank**

In accordance with the stages of the manufacturing process (materials, intermediate products, and finished goods), the Top Ten Industry Products are divided by the World Bank as follows: (1) Agriculture, Forestry, Livestock and Hunting Products (2) Processed

Food (3) Beverage and Tobacco Preparation (4) Energy and Minerals (5) Construction Materials (6) Intermediate Products (7) Consumer Non-Durable Goods (8) Consumer Durable Goods (9) Machinery (10) Transportation Equipment.

Among these goods, the processed forestry products and minerals which are not used directly for consumption are regarded as intermediate products. According to the level of processing, they are further divided into A and B groups:

- (1) Intermediate Products A are the products that can be used for consumer goods or producer goods after processing.
- (2) Intermediate Products B are the products that can be used for consumer goods or producer goods without processing.