# Export and Import Price Indices of Industrial Products

## Introduction

In the last few years, the importance of short-term indicators has grown considerably due to the development of the single market and the implementation of the European Monetary Union.

One of the main fields of study relates to the analysis of prices. This interest in the development of prices has increased even more in the last few years with market globalisation and the importance of competitiveness on an international scale.

In order to monitor the development of the prices of industrial products manufactured and sold on the domestic market, we have the Industrial Price Indices (IPRI).

In terms of indicators that measure the development of the prices of export and import flows in Spain, the Ministry of Economy and Tax compiles the Foreign Trade Unitary Value Indices (UVI) on a monthly basis using foreign trade data from the Department of Customs and Special Taxes, which belongs to the State Tax Agency.

These new indicators, based on the prices of specific products that are comparable in time, complete the IPRI and the analysis of the prices of foreign trade flows, both in terms of exported industrial goods (Export Price Indices of Industrial Products) and imported industrial goods (Import Price Indices of Industrial Products).

### Short-term statistics regulation

Council regulation (EC) No. 1165/98 on short-term statistics and their subsequent modification of July 2005, sets out a common production framework of community statistics for all European Community countries and for a set of short-term industry, construction and services indicators in order to analyse the development of the economic cycle.

There are also subsequent regulations that develop this regulation and Commission regulations relating to its application in terms of the definition of variables and the large industrial sectors.

For each variable, these regulations determine questions relating to the collection of data, the periodicity of variables, the level of detail, changes in weightings and base year, availability deadlines for each statistic, etc.

The Export and Import Indices are included within the industry indicators contained in this regulation.

Moreover, the import price index is one of the nineteen Principal European Economic Indicators (PEEIs) set out by the European Council in order to monitor economic and monetary policy.

These indicators appear in the National Statistics Plan 2005-2008 within the 4210 programme "Other Short-term Industrial Indicators".

# Methodology

### **Objective and main uses**

The aim of export price indices is to measure on a monthly basis the prices of industrial products sold directly on the foreign market.

The import price indices measure the monthly development of the prices of industrial products from the rest of the world.

These indicators have various uses, including the following:

- Direct use as an indicator for the short-term analysis of economic activity linked to foreign trade. In addition, they are a useful tool for researchers and companies when analysing specific products or markets.

- Indirect use as a deflator: to convert current price value data into constant price data in foreign trade and national accounts statistics.

### Scopes. Statistical unit

The index covers all industrial sectors, excluding construction. It researches the extractive, manufacturing and production industries and the distribution of gas and electricity that correspond to sections B, C and D of the National Classification of Economic Activities 2009 (CNAE-2009).

From a territorial point of view, all statistical units located within Spanish territory come under study.

The survey's reference period is monthly and the export and import price data should refer to the price in force on the 15th of each month.

In terms of the observation units to which the data refer, for the export price index these are the establishments that sell industrial products on the foreign market and for the import price index the observation units are the establishments that import industrial products.

### Prices to be measured and transactions to be observed

The prices measured by the indices have the following features:

1 - All technical and sales criteria that are a determining factor in the price (quality, type of buyer or client, country or group of countries of origin or of transaction destination, measurement unit, transaction currency...) should remain fixed throughout time.

2 - They are the prices existing at the national border, excluding VAT, other indirect taxes or customs duties, even though all sales or discounts are included.

The export prices are the exports FOB (free on board), excluding transport or insurance costs relating to the part of the journey outside Spain.

The import prices are CIF prices (cost, insurance, freight), excluding transport or insurance costs relating to the part of the journey within Spain.

3 - They are effective prices in force on the 15th of each month. If there have been no transactions on this day, prices from the closest day to the 15th will be taken.

4 - The indices will reflect the development of prices expressed in Euros. When the transaction is undertaken in another currency, this will be converted into Euros before calculating the indices.

5 - The prices are those that relate to a specific product; not average prices nor unitary values.

6 - As a general rule, actual sales that are the source of effective prices are taken into account. As far as possible, list prices will be avoided.

7 - In terms of transactions based on prices between companies belonging to the same group, their prices are taken into account when they are market prices or influenced by the market, or where authentic actual prices are available.

### Choice of basket of products, sample of establishments and subvarieties

Each branch of activity will be represented by an indicator at the maximum breakdown level, in other words, the CNAE-2009 type (four digits), whose objective is to measure monthly development. These indicators will be compiled using a basket of representative products. The products in the basket are defined based on the Combined Nomenclature (CN).

The sample of informant units is made up of the most important units according to their export or import value, until a reasonable coverage has been achieved for each branch. In order to measure the short-term development of the export or import prices of a product, it is essential that this price refers to exactly the same product model in the different monthly data collection processes, and that the same sales conditions are maintained upon which the transaction is made. To do this, each product needs to be described according to all of its price's determining characteristics, so that the prices in different periods refer to the same product. "Sub-variety of a product" is defined as a set of physical and sales characteristics that describe a product in such a way that the price relating to a sub-variety can always be reflected in an unmistakable way.

### **Base Year**

2005 will be taken as the base year and the year to which the weightings refer.

#### Weightings

The weightings of branches and the products in the basket are calculated using data from Spain's Foreign Trade Statistic.

The data in this statistic are based on the Customs Clearance Declaration (CCD or single administrative document) for trade with third countries and the statistical declaration from Instrastat for exchanges within community countries.

#### Nomenclatures

The indices use official current classifications.

The Combined Nomenclature is used to specify products. This classification is used to code products involved in foreign trade between European Union countries and which includes the classification used by Spain for foreign trade with countries outside the EU. At the same time, they correspond to the products in the National Classification of Products by Activities, which includes the classification used for the European industrial production survey (PRODCOM).

In order to specify the branches of activity, the National Classification of Economic Activities is used.

Royal Decree 475/2007, of 13 April 2007, passed National Classification of Economic Activities 2009 (CNAE-2009), to be applied as of January 2009.

In addition, pursuant to Regulation (EC) No. 1893/2006 of the European Parliament and Council of 20 December 2006, establishing the European classification of economic activities (NACE Rev.2), the statistics governed by Regulation (EC) No. 1165/98 regarding short-term statistics will be compiled in accordance with NACE Rev.2 as of 1 January 2009.

Thus, beginning on this date, January 2009, the industrial branches studied by these indicators are those established by CNAE-2009.

The indices are available from January 2005 following the new classification. The series from the old National Classification of Economic Activities (CNAE-93) will no longer be published as of January 2009.

In addition, Commission Regulation (EC) No. 586/2001 sets out the definition of Large Industrial Sectors (LIS) for which the short-term statistics should calculate results.

These large sectors are:

Durable consumer goods Non-durable consumer goods Capital goods Intermediate Goods Energy

Moreover, the Consumer Goods series is calculated as the weighted sum of durable and non-durable consumer goods.

The LIS essentially consider the economic destination of industrial goods and products.

#### **Basic surveys**

At the start of the survey, a specific questionnaire was used that was designed to record the different sub-varieties of products whose export and import prices were to be researched. The chosen sub-varieties of a product must be representative of all the sub-varieties exported or imported by an establishment for this product.

Later on, the survey used a personalised questionnaire for each informant unit, which linked the products and sub-varieties and requested on a monthly basis the import and export price of each reference period.

The methods used to collect the primary information are ordinary post, interviewers and a new collection system using the Internet (arce).