

September 2018

INDUSTRIAL AND CONSTRUCTION PRODUCER PRICES

- In September 2018 the total producer price index rose by 0.4% compared with the previous month. Domestic and non-domestic producer price indexes increased by 0.4% and 0.1%, respectively.
- The percentage change of the average of the last three months with respect to the previous three months was 2.1% (2.8% for the domestic market and 0.3% for the non-domestic market).
- The total producer price index increased by 4.7% compared with September 2017 (5.6% on domestic market and 2.0% on foreign market).
- The construction producer price index was down 0.1% in September 2018 with respect to the previous month, and rose by 1.6% on the same month of the previous year.
- The average of the last three months with respect to the previous three months of the construction producer increased by 0.8%.

Industrial Producer Prices

CHART 1. INDUSTRIAL PRODUCER PRICES INDEX, TOTAL, DOMESTIC AND NON-DOMESTIC MARKET

January 2013 – September 2018 (index, 2015=100)

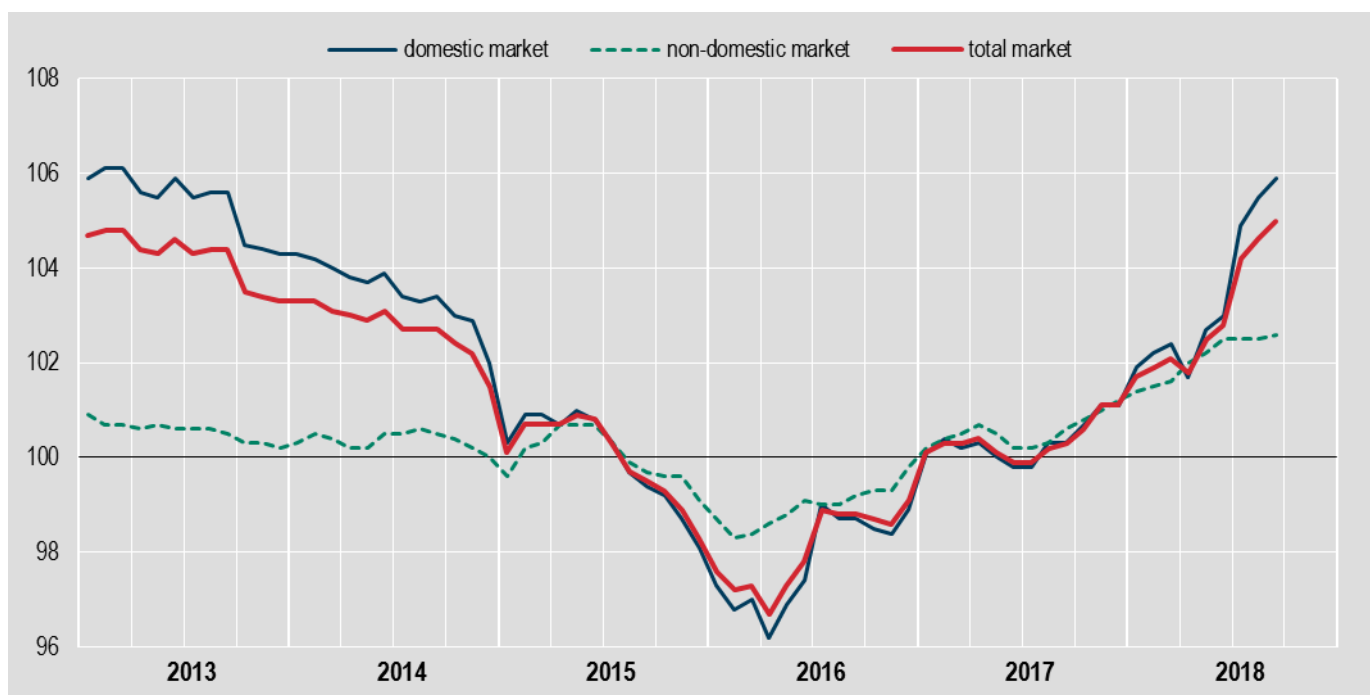


CHART 2. INDUSTRIAL PRODUCER PRICES INDEX, MONTH ON PREVIOUS MONTH PERCENT CHANGES

January 2013 – September 2018 (index, 2015=100)

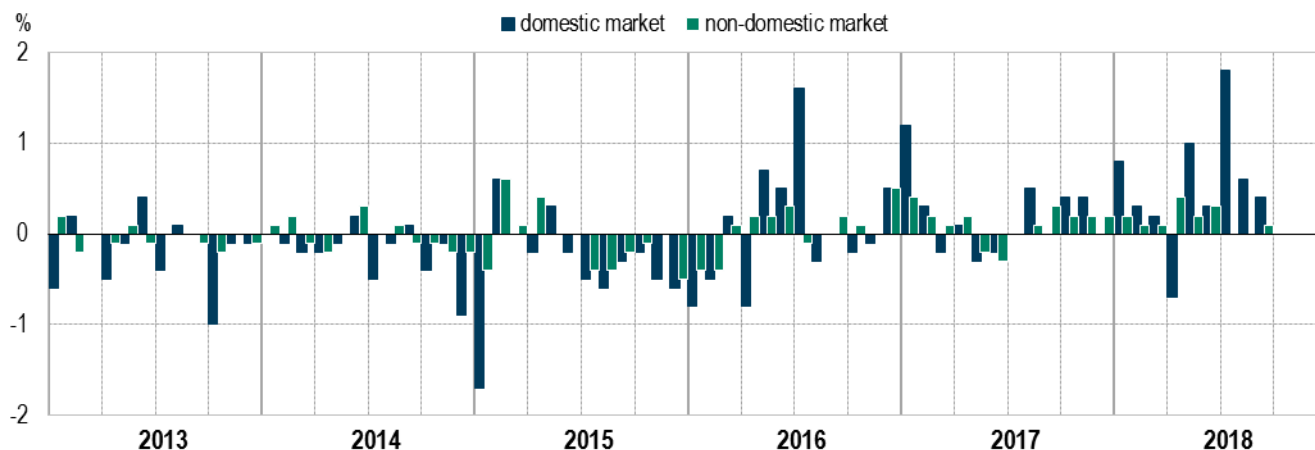


CHART 3. INDUSTRIAL PRODUCER PRICES INDEX, MONTH ON SAME MONTH A YEAR AGO PERCENT CHANGES

January 2013 – September 2018 (index, 2015=100)

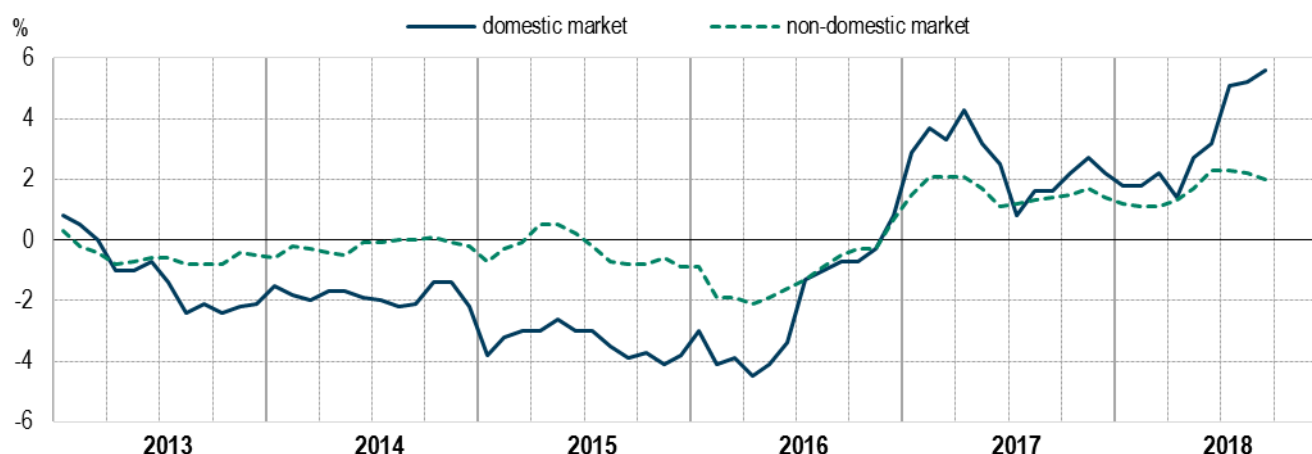


TABLE 1. INDUSTRIAL PRODUCER PRICES INDEX

September 2018 (a), months on previous months and months on same months a year ago percent changes (index, 2015=100)

| | Index | Months on previous months | | Months on same months a year ago | |
|----------------------|-------|---------------------------|--------------------------|----------------------------------|--------------------------|
| | | Sep18 Aug18 | Jul-Sep 18 Apr-Jun 18 | Sep 18 Sep 17 | Jan-Sep 18 Jan-Sep 17 |
| Total market | 105.0 | + 0.4 | + 2.1 | + 4.7 | + 2.8 |
| Domestic market | 105.9 | + 0.4 | + 2.8 | + 5.6 | + 3.3 |
| Non-domestic market | 102.6 | + 0.1 | + 0.3 | + 2.0 | + 1.7 |
| <i>Euro area</i> | 102.8 | 0.0 | + 0.3 | + 1.7 | + 1.7 |
| <i>Non-euro area</i> | 102.4 | 0.0 | + 0.4 | + 2.2 | + 1.7 |

(a) Data are provisional and subject to revisions.

TABLE 2. INDUSTRIAL PRODUCER PRICES INDEX BY MAIN INDUSTRIAL GROUPINGS (MIG)

September 2018 (a), month on previous month and month on same month a year ago percent changes (index, 2015=100)

| MAIN INDUSTRIAL GROUPINGS (MIG) | Domestic market | | Non-domestic market Euro area | | Non-domestic market Non-euro area | |
|---------------------------------|-------------------------|--------------------------------|-------------------------------|--------------------------------|-----------------------------------|--------------------------------|
| | Month on previous month | Month on same month a year ago | Month on previous month | Month on same month a year ago | Month on previous month | Month on same month a year ago |
| | Sep 18 Aug 18 | Sep 18 Sep 17 | Sep 18 Aug 18 | Sep 18 Sep 17 | Sep 18 Aug 18 | Sep 18 Sep 17 |
| Consumer goods | + 0.2 | + 0.3 | - 0.2 | - 0.1 | - 0.2 | + 0.4 |
| Durable consumer goods | 0.0 | + 0.6 | + 0.1 | + 0.9 | - 0.1 | 0.0 |
| Non-durable consumer goods | + 0.2 | + 0.3 | - 0.2 | - 0.3 | - 0.2 | + 0.6 |
| Capital goods | + 0.1 | + 0.7 | 0.0 | + 0.7 | + 0.1 | + 0.4 |
| Intermediate goods | - 0.1 | + 2.1 | + 0.1 | + 2.7 | - 0.1 | + 3.3 |
| Energy | + 1.2 | + 14.5 | + 3.0 | + 33.5 | + 1.0 | + 27.8 |
| Total except MIG energy | + 0.1 | + 1.2 | - 0.1 | + 1.2 | 0.0 | + 1.4 |
| Total | + 0.4 | + 5.6 | 0.0 | + 1.7 | 0.0 | + 2.2 |

(a) Data are provisional and subject to revisions.

Construction Producer Prices

CHART 1. CONSTRUCTION PRODUCER PRICE INDEX

January 2013 – September 2018 (index, 2015=100)

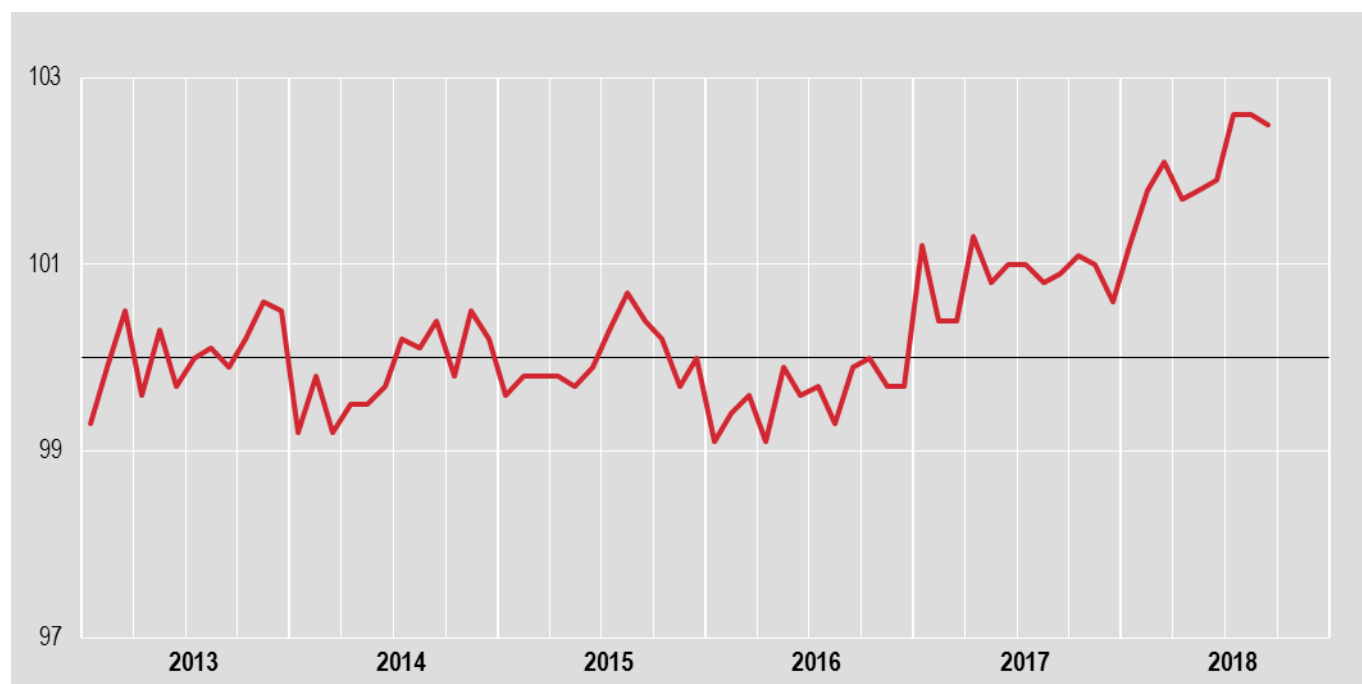


CHART 2. CONSTRUCTION PRODUCER PRICE INDEX

January 2013 – September 2018, month on previous month and month on same month a year ago percent changes (index, 2015=100)

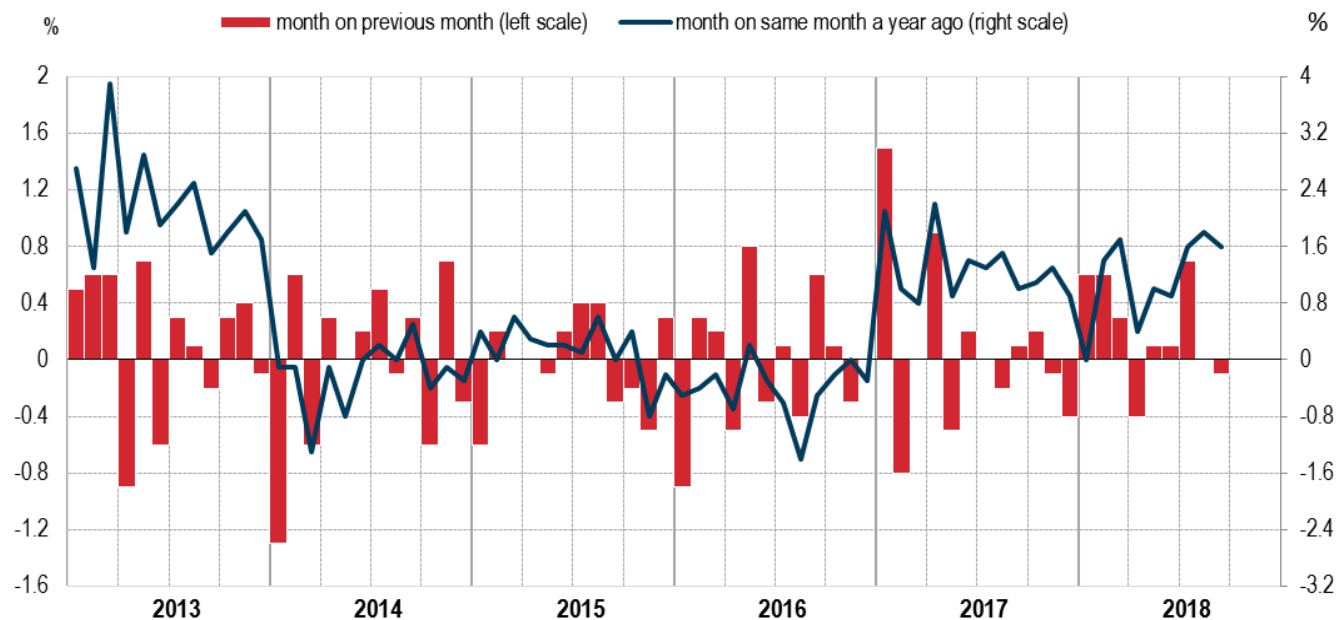


TABLE 1. CONSTRUCTION PRODUCER PRICE INDEX

September 2018 (a), months on previous months and month on same month a year ago percent changes (index, 2015=100)

| Index | Months on previous months | | Month on same month a year ago |
|-----------------------|---------------------------|------------------|------------------------------------|
| | September 18 | Sep 18 Aug 18 | Jul-Sep 18 Apr-Jun 18 Sep 17 |
| Residential buildings | 102.5 | -0.1 | +0.8 |

(a) Data are provisional and subject to revisions

Industrial producer prices

Introduction

Industrial producer prices statistics derive from the *monthly survey of industrial producer prices*. This survey is included in the National Statistical Programme (code IST-02650).

Industrial producer prices indices measure the monthly prices dynamics of goods sold by enterprises – resident in Italy – to other enterprises or public administrations.

Indices *base period* is the month of December of the preceding year. Indices are disseminated through the Laspeyres chain-linking formula.

The monthly survey is based on non-random sample whose units (products, prices and enterprises) are annually updated. Approximately, 1,700 products are surveyed from a list of about 6,300 industrial enterprises providing about 21,500 monthly price quotations.

Legal framework

Legislative Decree n° 322 of 6 September 1989, and successive amendments and additions, “Regulation on the National Statistical System and on the reorganisation of the National Statistical Institute” - art. 6a, paragraph 1 (assumptions of processing), paragraph 2 (processing of personal data), paragraph 4 (communication of personal data to members of the National Statistical System), paragraphs 5, 6 and 7 (storage of data), paragraph 8 (exercise of rights of subject), art. 7 (obligation to provide statistical data), art. 8 (professional confidentiality of workers in the statistics offices), art. 9 (provisions for the protection of statistical confidentiality), art. 11 (administrative sanctions in case of failure to respond), art. 13 (National Statistical Programme);

Legislative Decree n° 196 of 30 June 2003, “Code regarding the protection of personal data” - art. 2 (purpose), 4 (definitions), 7-10 (rights of the subject), 13 (information), 28-30 (subjects performing processing), 104-110 (processing for statistical or scientific purposes); “Code of ethics and good conduct for processing of personal data for statistical and scientific research purposes performed in the context of the National Statistical System” (Annex A.3 of the Code regarding the protection of personal data - Legislative Decree n° 196 of 30 June 2002).

National Statistical Programme for three-year period 2017-2019, Decree of the President of the Republic, 31 January 2018 - “Approval of National Statistical Programme for the three-year period 2017-2019”. (Official Gazette of the Italian Republic, general series - 20 March 2018, n°. 66, Ordinary Supplement n°. 12). Council Regulation (EC) n° 1165/98, of 19 May 1998 (L 162, 5.6.1998), and successive amendments and additions, concerning short-term statistics.

Commission Regulation (EC) n° 1158/2001 of 26 March 2001 on implementing Council Regulation (EC) No. 1165/98 concerning short-term statistics as regards the definition of Main Industrial Groupings (MIGs).

Regulation n° 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) n° 1165/98 concerning short-term statistics. The Regulation establishes a reference framework for the collection, compilation, transmission and evaluation of Community business statistics for the purpose of the analysis of the economic cycle.

Commission Regulation (EC) n° 1503/2006 of 28 September 2006, implementing and amending Council Regulation (EC) n° 1165/98 concerning short-term statistics as regards definitions of variables, list of variables and frequency of data compilation.

Commission Regulation (EC) n° 656/2007 of 14 June 2007 amending Regulation (EC) n° 586/2001 on implementing Council Regulation (EC) n° 1165/98 concerning short-term statistics as regards the definition of main industrial groupings (MIGs).

Commission Regulation (EC) No. 1178/2008 amending Council Regulation (EC) No. 1165/98 concerning short-term statistics and Commission Regulations (EC) n° 1503/2006 and (EC) n° 657/2007 as regards adaptations following the revision of statistical classifications NACE and CPA.

Classifications

The Classification of the Economic Activities 2007 (Ateco 2007) is the national version of the NACE Rev. 2 classification (Statistical classification of economic activities adopted in the European Union, EU). It lists the economic activities grouping by Sections, Divisions, Groups, Classes, Categories and sub-categories. The current version of the Ateco 2007 came into force on 1 January 2008.

The Classification of Products Associated to the Activity (CPA 2008) is adopted at EU and groups products to NACE economic activities. *The Combined Nomenclature (CN)* is the classification adopted in the EU for the international trade in goods statistics.

The ProdCom nomenclature is a list of products belonging to the mining and manufacturing industries, harmonised at EU level. This list is annually updated. The titles of the Prodcom list are derived from the CN; each product category is characterised by an eight-digit numeric code. The first six of the eight digit are identical to the CPA ones. Therefore the Prodcom list is also consistent with the CPA code and even more so with the NACE. The link Prodcom/CPA leads to the link with NACE and allows the identification of the product/industrial enterprise; the link Prodcom/CN allows the comparison between the industrial products and international trade goods.

The Main Industrial Groupings (MIGs) defined by the European Commission Regulation n° 586/2001 group products in the following aggregates: consumer durables, consumer non-durables, capital goods, intermediate goods and energy.

Observation field, analysis and survey unit

The observation field of the survey concerns:

- a) products included in Sections from B to E36 of the CPA classification (derived from NACE Rev. 2). Products of the sectors relating to marine, aerospace and railway construction and arms are excluded.
- b) Enterprises with main economic activity in the sectors of mining and manufacturing including supply of electricity, gas, steam and air conditioning - collection, treatment and supply of water (sections B, C, D, E36 of the Ateco 2007 classification derived from NACE Rev. 2).

The product defined by the Prodcom code is the analysis unit. Enterprises provide price quotations corresponding to a list of their own products consistent with the Prodcom definition. The analysis unit can be a raw material, a semifinished product or a finished one. It is manufactured and destined for sale both on domestic and non-domestic market. The product consists in the elementary unit to which survey prices are referred to. Custom products are excluded from the survey as well as the goods manufactured in a local unit and sold another unit of the same enterprise of industrial group.

The survey unit is the industrial enterprises whose factories are located in Italy.

Sampling design

Both for the domestic market and the Euro and non-Euro area, the monthly survey of producer prices is based on a sample annually updated. Once a year, the products basket and the list of enterprises are updated. Consequently price series are updated too. The basket of product is a non-random selection of representative goods manufactured in Italy by industrial enterprises and sold on the domestic market or directly exported. Enterprises are linked to product by using the information available in the Business register. Concerning the domestic market, products are singled out using the annual industrial statistics (Prodcom). Referring to the non-domestic market, products are selected by the international trade of goods statistics. Respectively for the domestic and non-domestic market, variables used to select products are those of the value of production sold and annual value of exports.

Each enterprise involved in the sample survey is requested to provide the monthly price of the most representative sold.

The annual sample updating allows a better representativeness of the information provided to users. Both for products and enterprises in fact, no longer economically relevant units are ruled out from the survey and substituted by new ones. On the other hand, the annual updating of respondents allows also to make a rotation plan for reducing the statistical burden on enterprises without damaging the need and the collection of statistical information.

Table A summarises the composition enterprises/products/prices of the index base period December 2017.

Table A. INDUSTRIAL PRODUCER PRICES. Sample size of products, enterprises and prices December 2017 calculation base

| UNIT | Total market | Domestic market | Non domestic market | Non domestic market euro area | Non domestic market non-euro area |
|-------------|--------------|-----------------|---------------------|----------------------------------|--------------------------------------|
| | Base 2017 | Base 2017 | Base 2017 | Base 2017 | Base 2017 |
| Products | 1,744 | 1,242 | 1,047 | 883 | 858 |
| Enterprises | 6,331 | 3,972 | 2,510 | 1,945 | 1,996 |
| Prices | 21,488 | 11,900 | 9,588 | 4,674 | 4,914 |

Data collection and quality control

Data are collected by a web questionnaire available in the Istat Statistics Portal. The electronic questionnaire allows respondents to send data pre-checked improving timeliness too. The respondents in fact are directly notified about errors in filling in the questionnaire due to incompatible responses or breaks in continuity or inconsistencies and omissions.

Data must be transmitted by respondents within a time window whose lower and upper times are respectively the first and the twelfth day after the end of the reference month. This time interval allows to be compliance with the Short-Terms Statistical Regulation deadline. Reminders and follow up operations are planned for reducing non-responses. In particular these activities are undertaken both before and after releasing provisional data firstly and successively before publishing final data.

The questionnaire is pre-filled: each enterprises fills in its own questionnaire by detailing prices consistently with the definition of product contained in the same questionnaire. Prices concern the most representative items the respondent produces and sell on the domestic and the non-domestic market. These items are the ones the enterprise regularly and monthly sells. Prices are actually producer prices because they refer to sale between two enterprises. Both the producer (seller) and the purchaser are enterprises. The price must be surveyed in Euros, net of the VAT, and must be a real transaction price (list prices and transfer prices are therefore excluded).

Data collected are checked and corrected. Missing data are estimated. Data are released as anonymous and aggregate index numbers.

Index compilation

The industrial producer prices are compiled according to the methodology of the annual chain-linking on a monthly basis. Since March 2018, backward to January, the producer price indices on industry are released in the reference base 2015=100 and the base period is the month of December 2017. The system of producer price indices on industry is made up of three surveyed variables - referring to the domestic market, the Euro area market, non-Euro area market - and by two summary variables – foreign market (Euro and non-Euro areas), and total market (domestic and foreign markets).

The surveyed variables are calculated as base period indices and successively released as reference base indices. The compilation process is made up of three steps. The first steps deals with the definition of price relatives (quotients of current prices – numerator – and base prices, denominator, December 2017). In the second step, prices relatives associated with each product are aggregated by simple geometric average to provide product indices. In the third step, the product indices are aggregated by weighted arithmetic averages (chain-linked Laspeyres type formula) to provide the whole set of sub-aggregate indices and the overall one.

Index purpose

Main index purposes are:

- the short-term measure of the inflationary dynamics in the first stage of commercialisation of the industrial products;
- the study and identification of inflationary factors;
- the comparative analyses between different countries;
- the deflation of the industrial monetary indicators of national accounts;
- the indexing of long term contracts that explicitly set out usage of this index.

The producer price index also contributes to the calculation of the producer price indices for the total of countries of the EMU and the EU, through the summaries with the analogous indicators produced by the other member countries.

Weights

For the three variables surveyed (domestic market, Euro area foreign market and non-Euro area foreign market), the weighting systems are determined using different sources.

At the upper level the aggregation mechanism (from the fourth digit of the Ateco 2007 classification up to the total of industry), weights are derived from the value of total turnover in industry – the information comes from the *Frame-SBS*¹ register and from the survey “Economic results of businesses” - and from the value of total exports - distinct by Euro and non-Euro areas - derived from the foreign trade surveys. Data refer the year 2015, the most recently available.

At the lower level, the variables used to set up weights are: the annual value of industrial production sold in 2015 available at eight-digit level of Prodcom; the annual value of exports measured in 2015 by the foreign trade statistics survey available at eight-digit level of Combined Nomenclature by area of exportation (Euro and non-Euro). The values referring to the foreign trade statistics, initially expressed according to the codes of the Combined Nomenclature, are recoded in terms of ProdCom.

Timeliness and revisions

Producer price indices of industry are monthly revised. Provisional data are released about 30 days after the end of the reference period. A second release concerns final data, after about 60 days from the end of the reference period. No other revisions are carried out.

The release calendar is annually defined and published on the Institute website <https://www.istat.it/en/information-and-services/journalists/release-calendar>.

Issue

Producer price indices as well as all the other data released by Istat are protected by statistical confidentiality (art. 9 of Legislative Decree n°. 322/898) and subject to the legislation relating to the protection and processing of personal data (Legislative Decree n°. 196 of 30 June 2002).

Data are published simultaneously to all the interested parties through the monthly press release - Flash Statistics “[Industrial and construction producer price](#)” - published on the Istat website.

The series of the updated indices are published, simultaneously to the press release, on the Institute data warehouse (I.stat) within the Prices theme- [Industrial producer prices](#) and on [Rivaluta](#).

¹ Frame-SBS is a statistical register of annual economic variables of all active enterprises included in the ASIA-Enterprises business register

In compliance with the European Regulation on the Short-Term Statistics, data are also transmitted to Eurostat <http://ec.europa.eu/eurostat/data/database> (Theme *Industry, trade and services*, subject *Short-term business statistics (sts)/Industry (sts_ind)*).

Further information in the following documents: (only Italian version available)

Fixed base chain-linking changeover: [Nota Informativa 3 marzo 2011](#)

The new base 2010=100: [Nota Informativa 7 marzo 2013](#)

December 2016 calculation base: [Nota Informativa 31 marzo 2017](#)

The new base 2015=100: [Nota Informativa 29 marzo 2017](#)

Construction producer prices

Overview

Producer price index on constructions is a statistical processing of Istat data. Its inclusion in the National Statistical Programme is forthcoming. The data sources are producer prices indices (on industry and services), labour cost survey and production in construction indices.

Indices base period is the month of December of the preceding year. Indices are disseminated through the Laspeyres chain-linking formula. The reference base is 2015=100.

Currently the Short-terms statistics Regulation asks EU member countries to provide indices on construction costs. Nevertheless, in the forthcoming FRIBS Regulation producer price indices will substitute cost indices for constructions. This new scenario is firstly aimed to make the whole set of constructions indices more homogeneous among member states; further, the enlargement of producer price on construction sector – NACE Division F – will allow to get producer price indices for industry, constructions and services providing more appropriate indicators for deflating national accounts.

The observation field of producer prices on constructions is the NACE Class 41.20 “Construction of residential and non-residential buildings” and, in particular, constructions of new “residential buildings”.

Producer price index on construction measures the monthly prices dynamics of new residential building sold by the construction contractor to the client. The former is the enterprise that took the initiative for the construction work. The latter is the enterprise for whom the new residential building is constructed.

The item composition of producer prices on construction includes construction costs (materials, labour, plant and equipment, transport and energy), contractor’s profit margins (mark-up) and overheads. These items all concern the construction contractor. The producer price is the output price paid by the client. VAT, land, architect’s fees and the client’s profit margins are excluded because the client is not the final owner of the new building.

Technically, producer prices on constructions derive their structure from a construction project detailing all items that contribute to define the new residential building construction costs and the contractor’s mark-up and overheads. This frame is the weightings system of produce prices on constructions. Cost components are derived from the construction project. National account data (USE tables at purchasers’ prices) are used to harmonise costs, profit margins and overheads within the same weights frame.

Monthly, each producer price component is measured in terms of producer price indices on industry and services and labour statistics indices. Producer prices indices on industry provide monthly price indicators corresponding to the item costs of materials and energy; producer prices on services provide monthly indicators corresponding to overheads items and transport costs; finally labour indices provide monthly indicators corresponding to labour costs paid by the construction contractor for unskilled worker, qualified worker and specialised worker.

The index is compiled and released at national level. At present time, data are available since 2010 and they are released as provisional up to December 2018. Therefore, no monthly revisions are carried out.