

July 2019 – Q2 2019

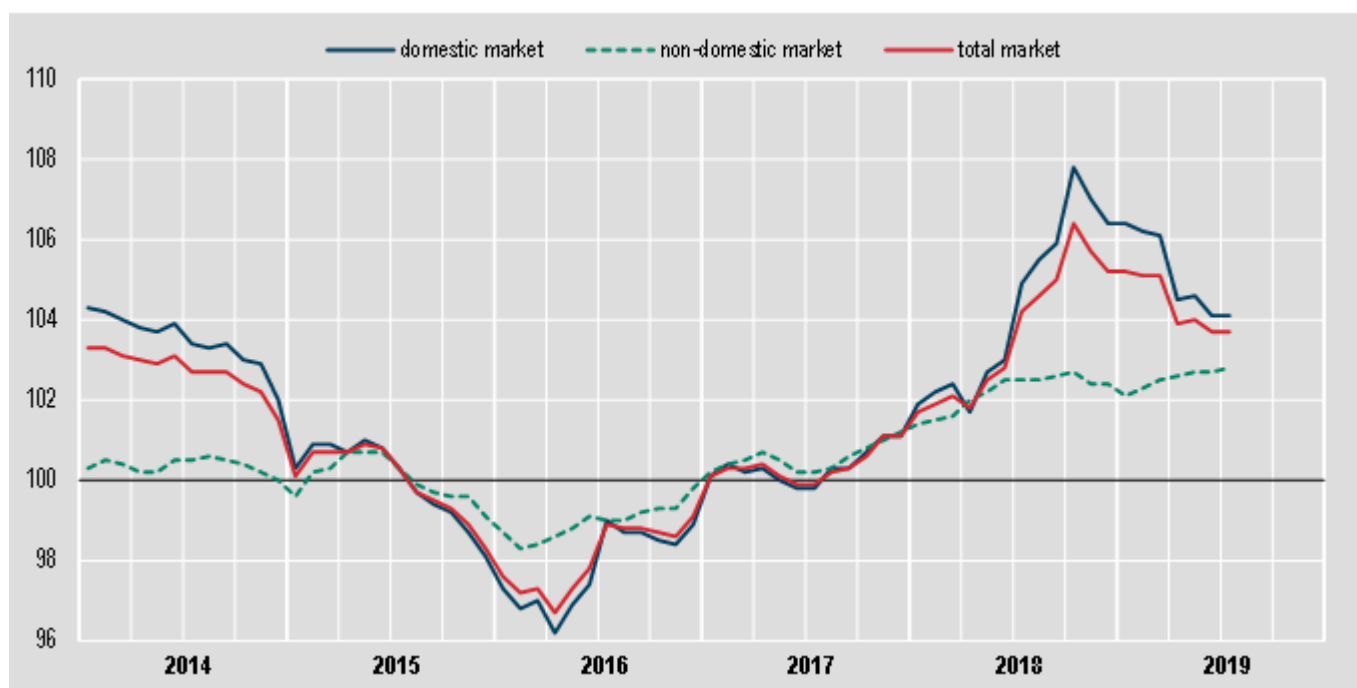
## INDUSTRIAL, CONSTRUCTION AND SERVICES PRODUCER PRICES

- In July 2019 the industrial producer price index unchanged compared with the previous month. Domestic producer price index unchanged, while producer price index on non-domestic market increased by 0.1%.
- The percentage change of the average of the last three months with respect to the previous three months decreased by 0.9% (-1.2% for the domestic market and +0.2% for the non-domestic market).
- The industrial producer price index decreased by 0.5% compared with July 2018 (-0.8% on domestic market and +0.3% on foreign market).
- The construction producer prices index increased by 0.8% in July 2019 with respect to the previous month, and decreased by 0.3% 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 prices index increased by 0.5%.
- In quarter 2 the total services producer price index increased by 0.2% compared with the previous quarter and by 1.4% respect to quarter 2 of the previous year. Sea and coastal water transport provided the largest upward contribution to the annual rate (+13.9%) while telecommunications the largest downward one (-5.2%).

### Industrial Producer Prices

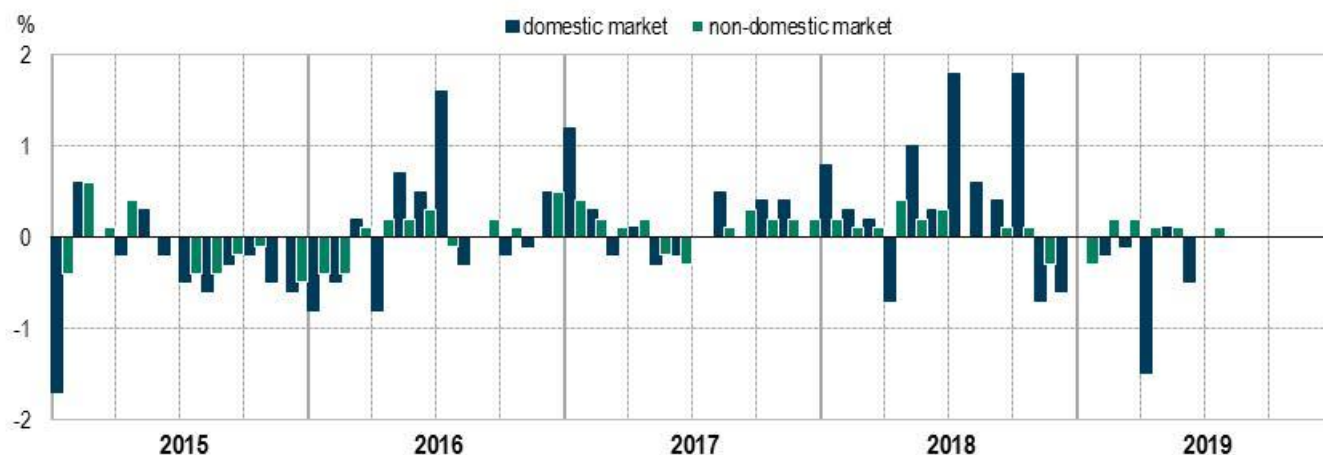
**CHART 1. INDUSTRIAL PRODUCER PRICES INDEX, TOTAL, DOMESTIC AND NON-DOMESTIC MARKET**

January 2014 – July 2019 (index, 2015=100)



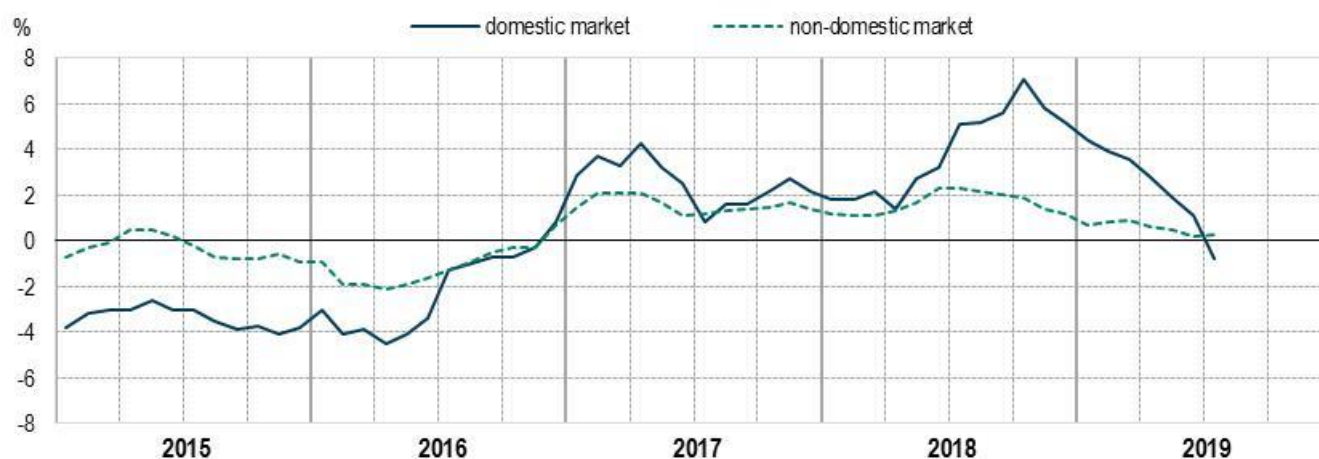
**CHART 2. INDUSTRIAL PRODUCER PRICES INDEX, MONTH ON PREVIOUS MONTH PERCENT CHANGES**

January 2015 – July 2019 (index, 2015=100)



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

January 2015 – July 2019 (index, 2015=100)



**TABLE 1. INDUSTRIAL PRODUCER PRICES INDEX**

July 2019 (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	
		Jul 19 Jun 19	May-Jul 19 Feb-Apr 19	Jul 19 Jul 18	Jan-Jul 19 Jan-Jul 18
Total market	103.7	0.0	-0.9	-0.5	+2.0
Domestic market	104.1	0.0	-1.2	-0.8	+2.3
Non-domestic market	102.8	+0.1	+0.2	+0.3	+0.5
Euro area	102.9	-0.1	+0.1	+0.2	+0.5
Non-euro area	102.7	+0.2	+0.3	+0.3	+0.6

(a) Data are provisional and subject to revisions.

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

July 2019 (a), month on previous month and month on same month a year ago percent changes (index, 2015=100)

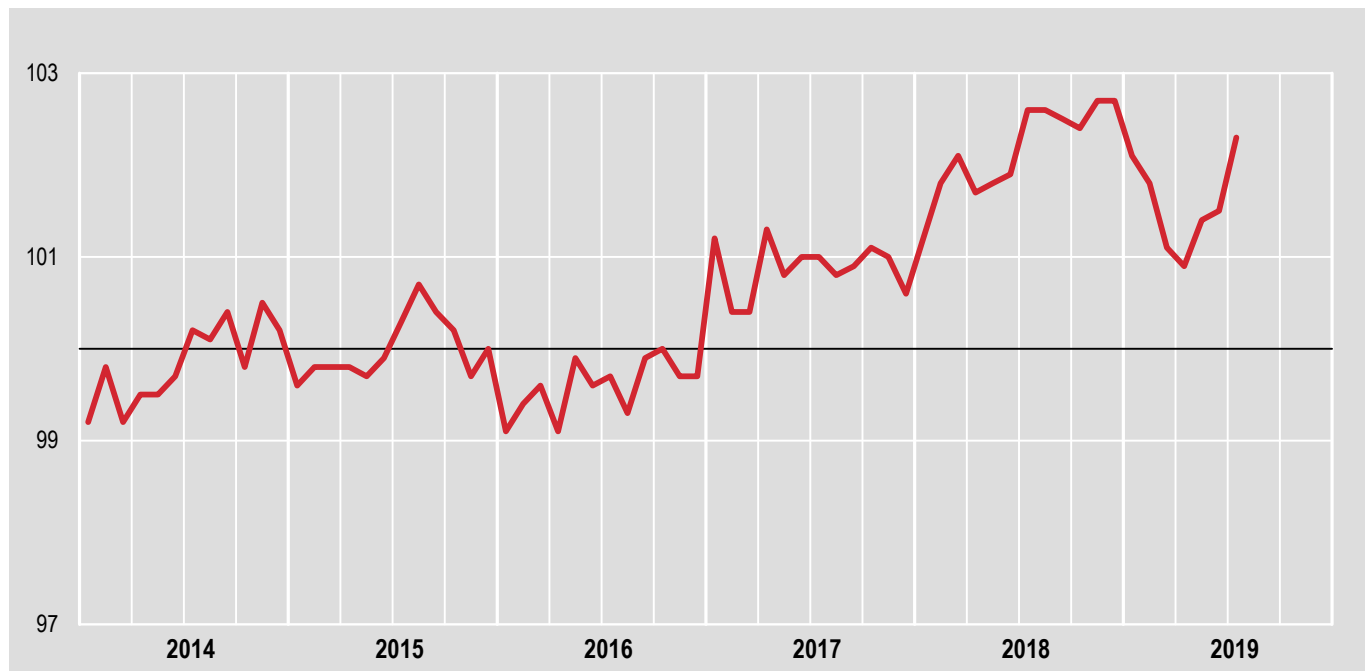
MAIN INDUSTRIAL GROUPINGS (MIG)	Domestic market		Non-domestic market Euro area		Non-domestic market Non-euro area	
	Month on previous month	Month on same month a year ago	Month on previous month	Month on same month a year ago	Month on previous month	Month on same month a year ago
	Jul 19 Jun 19	Jul 19 Jul 18	Jul 19 Jun 19	Jul 19 Jul 18	Jul 19 Jun 19	Jul 19 Jul 18
Consumer goods	0.0	+0.6	+0.1	0.0	+0.2	+1.3
Durable consumer goods	0.0	+1.3	0.0	+0.7	+0.7	+1.8
Non-durable consumer goods	+0.1	+0.6	0.0	-0.2	+0.1	+1.1
Capital goods	-0.1	+1.3	-0.2	+1.1	+0.1	+0.7
Intermediate goods	-0.1	-0.4	-0.2	-0.2	-0.1	+0.1
Energy	+0.3	-3.4	+2.6	-2.5	+2.0	-8.1
Total except MIG energy	0.0	+0.5	-0.1	+0.3	+0.1	+0.7
<b>Total</b>	<b>0.0</b>	<b>-0.8</b>	<b>-0.1</b>	<b>+0.2</b>	<b>+0.2</b>	<b>+0.3</b>

(a) Data are provisional and subject to revisions.

## Construction Producer Prices

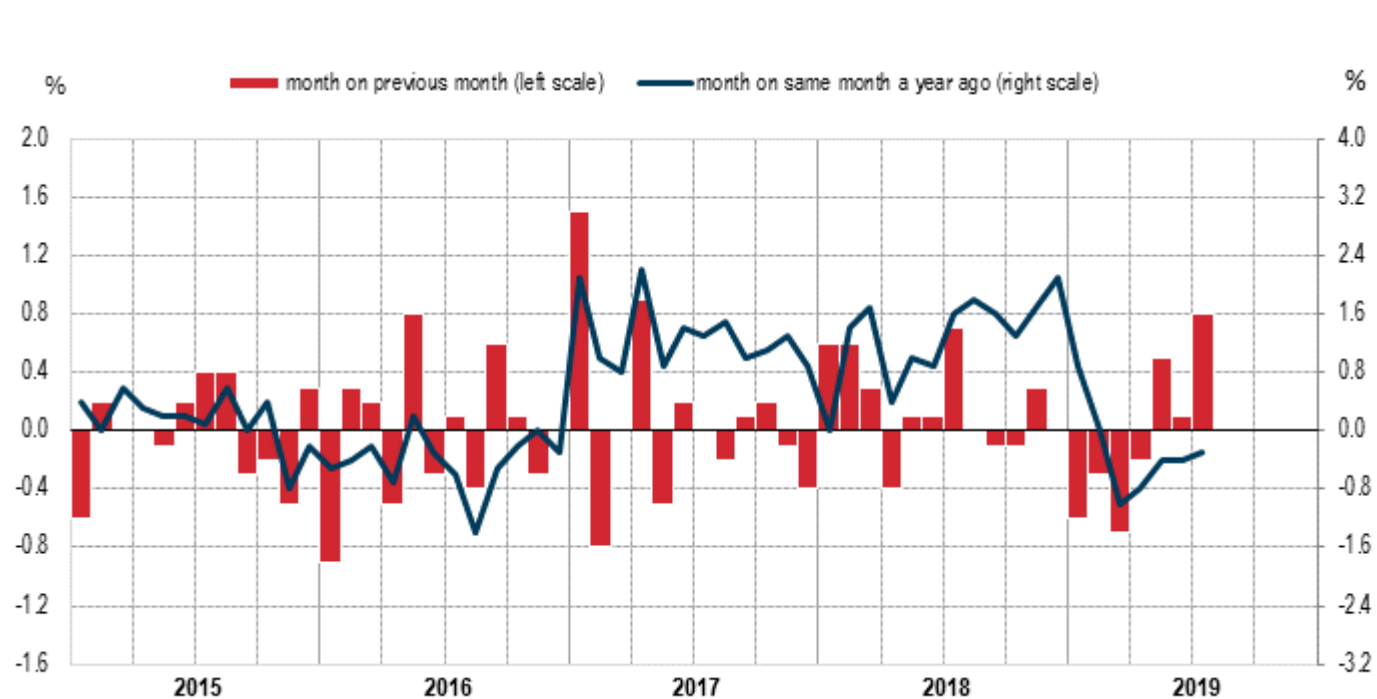
**CHART 4. CONSTRUCTION PRODUCER PRICE INDEX**

January 2014 – July 2019 (index, 2015=100)



**CHART 5. CONSTRUCTION PRODUCER PRICE INDEX**

January 2015 – July 2019, month on previous month and month on same month a year ago percent changes (index, 2015=100)



**TABLE 3. CONSTRUCTION PRODUCER PRICE INDEX**

July 2019 (a), months on previous months and month on same month a year ago percent changes (index, 2015=100)

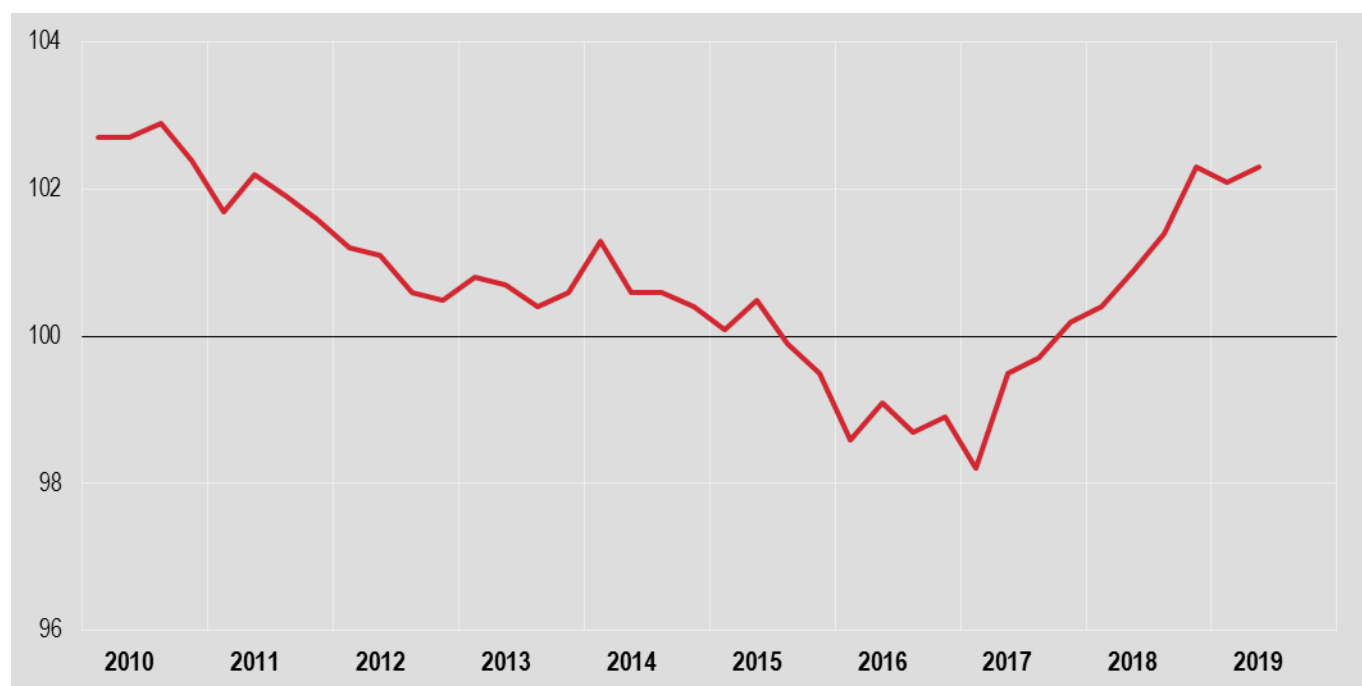
	Index		Months on previous months	Month on same month a year ago
	July 19	<u>Jul 19</u> Jun 19	<u>May-Jul 19</u> Feb-Apr 19	<u>Jul 19</u> Jul 18
Residential buildings	102.3	+0.8	+0.5	-0.3

(a) Data are provisional and subject to revisions

## Services producer prices

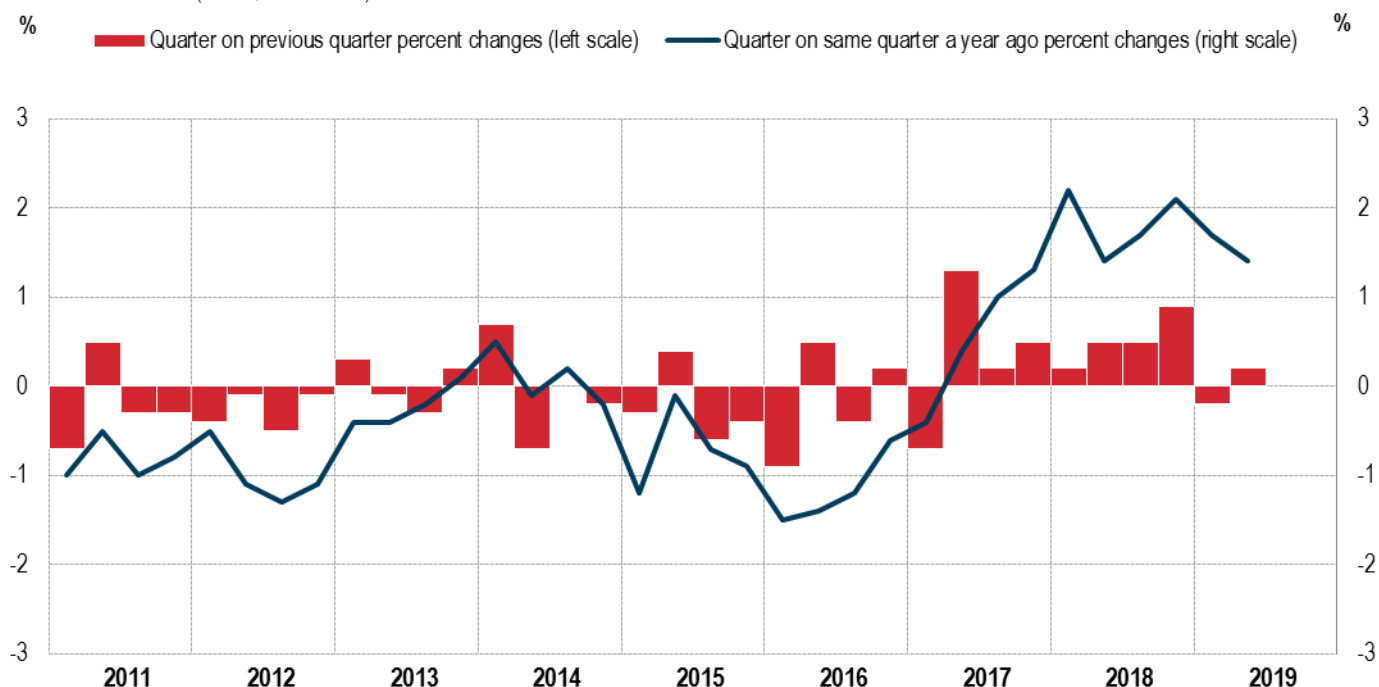
**CHART 6. SERVICES PRODUCER PRICES. TOTAL INDEX**

Q1 2010 – Q2 2019 (index, 2015=100)



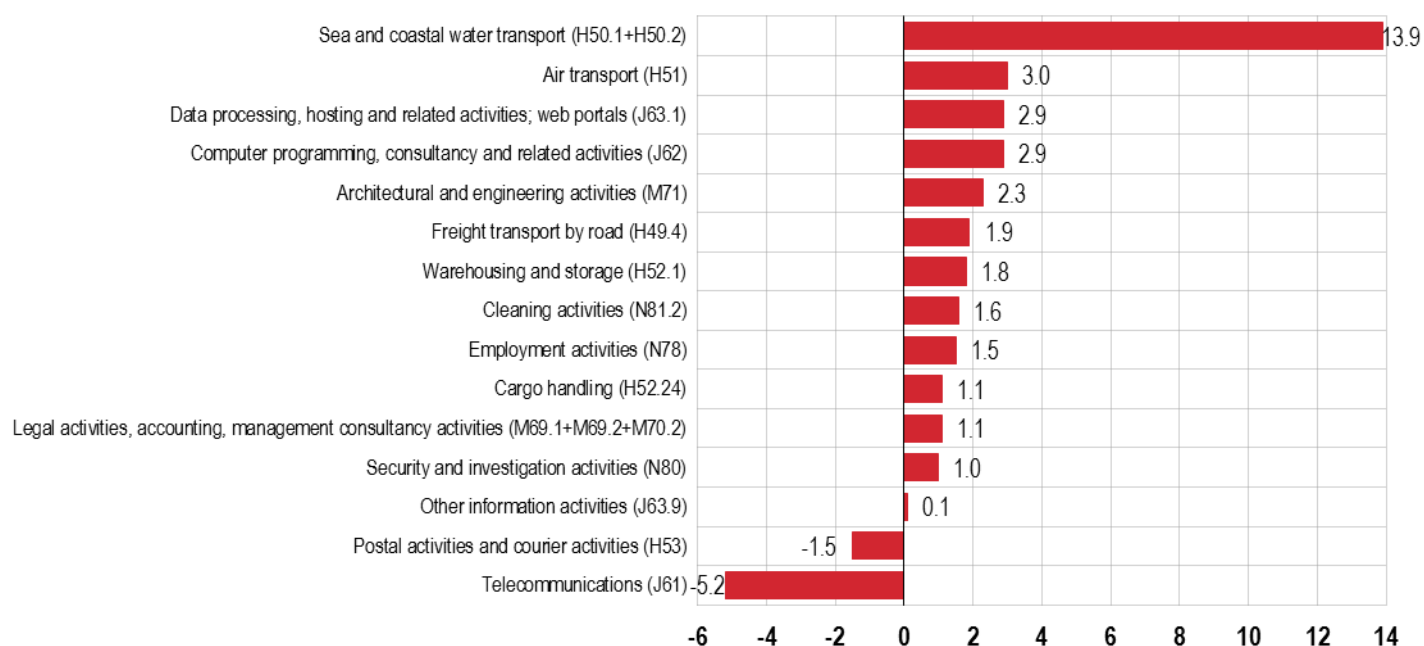
**CHART 7. SERVICES PRODUCER PRICES. QUARTER ON PREVIOUS QUARTER AND ON SAME QUARTER A YEAR AGO PERCENT CHANGES**

Q1 2011 – Q2 2019 (index, 2015=100)



**CHART 8. SERVICES PRODUCER PRICES. YEAR-ON-YEAR GROWTH RATE BY ECONOMIC ACTIVITY**

Q2 2019. Quarter on same quarter a year ago percent changes (index, 2015=100)



**TABLE 4. SERVICES PRODUCER PRICES. TOTAL INDEX**

Q2 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

	Index	Quarter on previous quarter percent changes	Quarter on same quarter a year ago percent changes
	II quarter 2019	<u>II 2019</u> <u>I 2019</u>	<u>II 2019</u> <u>II 2018</u>
<b>Total index</b>	<b>102.3</b>	<b>+0.2</b>	<b>+1.4</b>

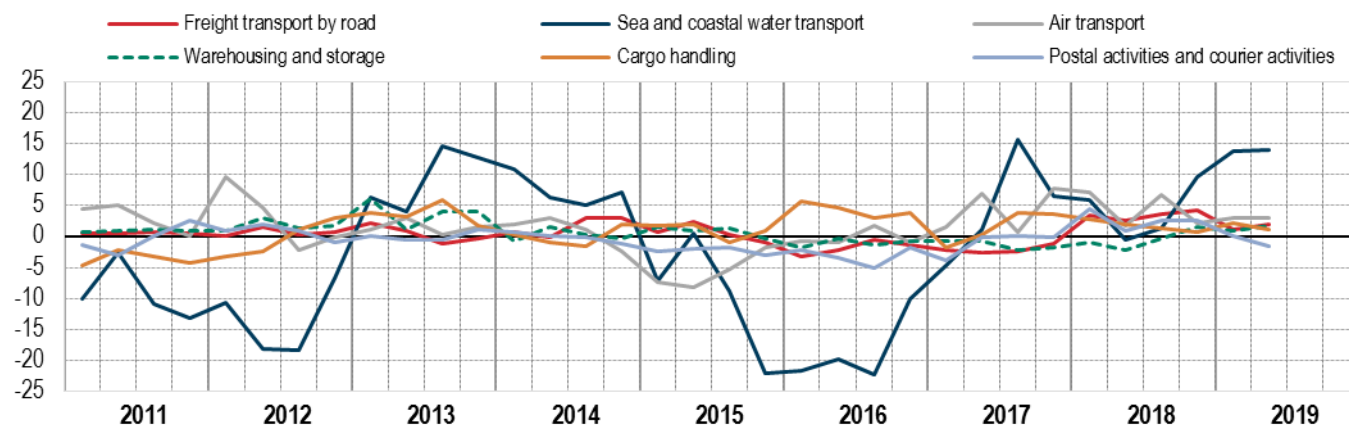
**TABLE 5. TRANSPORTATION AND RELATED SUPPORT SERVICES PRODUCER PRICES**

Q2 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES		II quarter 2019	Quarter on previous quarter percent changes <u>II 2019</u> <u>I 2019</u>	Quarter on same quarter a year ago percent changes <u>II 2019</u> <u>II 2018</u>
H49.4	Freight transport by road	100.5	+1.7	+1.9
H50.1 + H50.2	Sea and coastal water transport	96.5	-1.1	+13.9
H51	Air transport	110.0	-0.6	+3.0
- H51.1	Air passenger transport	104.9	+2.5	+4.6
- H51.2	Freight air transport	111.7	-5.4	-1.4
H52.1	Warehousing and storage	98.0	+0.2	+1.8
H52.24	Cargo handling	109.1	-0.1	+1.1
H53	Postal activities and courier activities	96.8	-2.5	-1.5

**CHART 9. TRANSPORTATION AND RELATED SUPPORT SERVICES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES**

Q1 2011 – Q2 2019 (index, 2015=100)



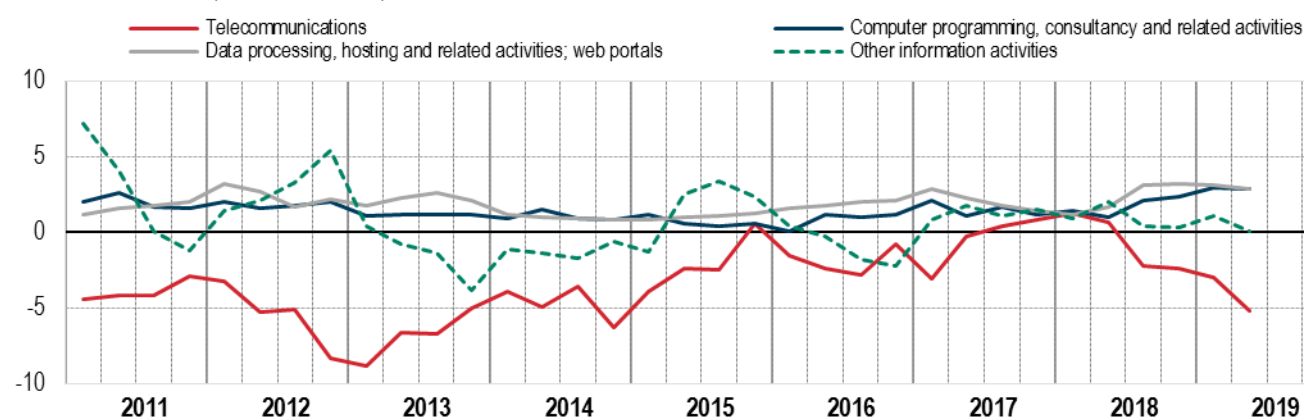
**TABLE 6. INFORMATION AND COMMUNICATIONS SERVICES PRODUCER PRICES**

Q2 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES		II quarter 2019	Quarter on previous quarter percent changes	Quarter on same quarter a year ago percent changes
			II 2019 I 2019	II 2019 II 2018
J61	Telecommunications	92.7	-1.0	-5.2
- J61.1	Wired telecommunications	99.8	+1.1	-1.4
- J61.2	Wireless telecommunications	77.4	-6.0	-14.1
J62	Computer programming, consultancy and related activities	107.0	+0.4	+2.9
J63.1	Data processing, hosting and related activities; web portals	109.2	+0.6	+2.9
J63.9	Other information activities	105.0	+4.0	+0.1

**CHART 10. INFORMATION AND COMMUNICATIONS SERVICES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES**

Q1 2011 – Q2 2019 (index, 2015=100)



**TABLE 7. PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES PRODUCER PRICES**

Q2 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES		II quarter 2019	Quarter on previous quarter percent changes	Quarter on same quarter a year ago percent changes
			II 2019 I 2019	II 2019 II 2018
M69.1+M69.2+M70.2	Legal activities, accounting, management consultancy activities	102.3	+0.3	+1.1
M71	Architectural and engineering activities	108.9	-0.5	+2.3



**CHART 11. PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES**

Q1 2011 – Q2 2019 (index, 2015=100)



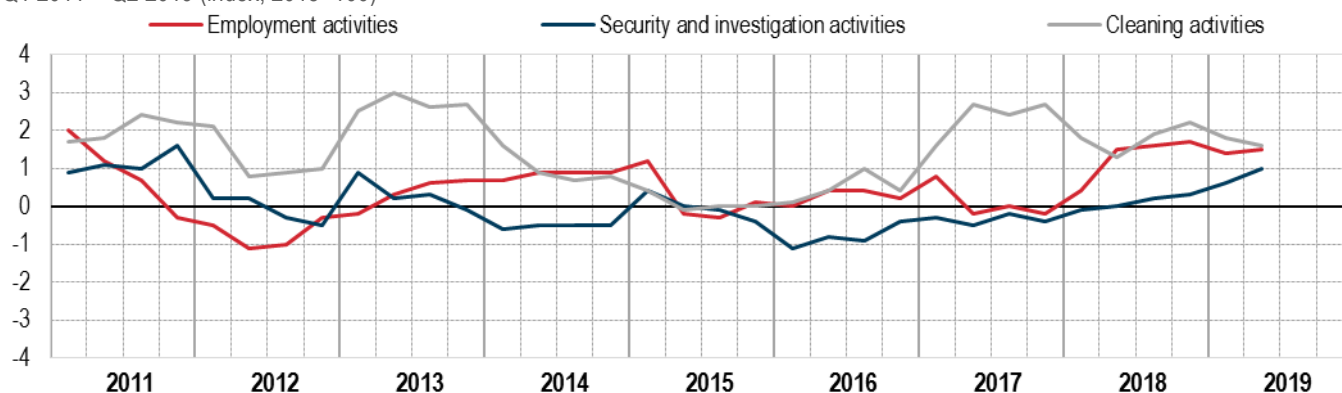
**TABLE 8. SUPPORT SERVICES TO ENTERPRISES PRODUCER PRICES**

Q2 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES		II quarter 2019	Quarter on previous quarter percent changes	Quarter on same quarter a year ago percent changes
			II 2019 I 2019	II 2019 II 2018
N78	Employment activities	103.0	+0.3	+1.5
N80	Security and investigation activities	99.8	+0.3	+1.0
N81.2	Cleaning activities	105.9	+0.4	+1.6

**CHART 12. SUPPORT SERVICES TO ENTERPRISES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES**

Q1 2011 – Q2 2019 (index, 2015=100)



## 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 6.000 industrial enterprises providing about 20.500 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.

[Council Regulation \(EC\) No. 1165/98 of 19 May 1998](#) (OJL 162. 5.6.1998) and its amendments and additions. concerning short-term statistics.

[Commission Regulation \(EC\) n° 586/2001 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 Version 2.1) 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° 656/2007 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 2018.

**Table A. INDUSTRIAL PRODUCER PRICES.** Sample size of products, enterprises and prices December 2018 calculation base

UNIT	Total market	Domestic market	Non domestic market	Non domestic market euro area	Non domestic market non-euro area
	Base	Base	Base	Base	Base
	2018	2018	2018	2018	2018
Products	1.727	1.231	1.130	871	843
Enterprises	6.039	3.820	3.085	1.870	1.883
Prices	20.469	11.338	9.131	4.485	4.646

## 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 indices are compiled according to the methodology of the annual chain-linking on a monthly basis. Since March 2019, 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 2018. 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 2018). 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*<sup>1</sup> 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 2016. the most recently available.

At the lower level. the variables used to set up weights are: the annual value of industrial production sold in 2016 available at eight-digit level of Prodcom; the annual value of exports measured in 2016 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](#).

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)

December 2018 calculation base: Nota Informativa 29 marzo 2019

The new base 2015=100: [Nota Informativa 29 marzo 2018](#)

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

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

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

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



## 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 unspecialised 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 April 2019. Therefore, no monthly revisions are carried out.

## Services producer prices

### Introduction

Services producer prices measure the quarterly changes of prices of services sold by enterprises, having their residence in Italy, to other enterprises and/or Government. They are *business to business* (BtoB) prices.

Producer price indices for services (SPPIs) are a system of quarterly indices calculated and released according to the requirements set out by Regulation (EC) n. 1158/05 - relating to the short-term statistics - and Regulation (EC) n. 1503/06 amending the previous one.

In addition to the content envisaged by the above Regulations, a total SPPI is calculated too. It is aimed to analyse the whole dynamic of services producer prices. Technically, the total index is a weighted arithmetic mean of all the SPPIs individually compiled. Table B shows the list of the economic activities and the corresponding services producer price indices compiled.

SPPIs are produced according to the methodology of the annual chain-linking on a quarterly base. Therefore, the quarterly index of the current year is calculated using the fourth quarter of the previous year as index base. Since the first quarter of 2018, producer price indices for services are released in the reference period 2015=100.

**Table B.** Producer prices indices for services

<b>NACE Code</b>	<b>Economic activity</b>	<b>Notes</b>
H49.4	Freight transport by road and removal services	
H50.1 + H50.2	Sea and coastal water transport	Contains <sup>2</sup> : H50.1 - Sea and coastal passenger water transport H50.2 - Sea and coastal freight water transport
H51	Air transport	Contains: H51.1 - Passenger air transport H51.2 - Freight air transport
H52.1	Warehousing and storage	
H52.24	Cargo handling	
H53	Postal and courier activities	Contains: H53.1 - Postal activities under universal service obligation H53.2 - Other postal and courier activities
J61	Telecommunications	Contains: J61.1 - Wired telecommunications J61.2 - Wireless telecommunications
J62	Computer programming, consultancy and related activities	
J63.1	Data processing, hosting and related activities; web portals	
J63.9	Other information activities	
M69.1+M69.2+M70.2	Management consultancy activities	
M71	Architectural and engineering activities; technical testing and analysis	
M73	Advertising and market research	
N78	Employment activities	
N80	Security and investigation activities	
N81.2	Cleaning activities	

### Legal framework

Legislative Decree No. 322 of 6 September 1989 and its amendments and additions. "Regulation on the National Statistical System and on the reorganisation of the National Statistical Institute".

Legislative Decree No. 196 of 30 June 2003 and its amendments and additions. "Code regarding the protection of personal data".

<sup>2</sup> The two separate indices are required by Regulation (EC) no. 1158/05 and are sent to Eurostat quarterly, under the constraint of confidentiality. Eurostat uses them to calculate the corresponding EU indices.

Code of ethics and good conduct for the processing of personal data for statistical and scientific research purposes carried out in the context of the National Statistics System (Annex A.3 of the Code regarding the protection of personal data - Legislative Decree No. 196 of 30 June 2002).

Decree of the President of the Republic of 30 August 2016. approving the 2014-2016 National Statistical Programme - 2016 'Update of the lists of the surveys with obligation to reply for private and public subjects' (Official Gazette of the Italian Republic 15 October 2016 - General Series - No. 242).

Communication relating to the Decree of the President of the Republic of 30 August 2016. concerning the approval of the 2014-2016 National Statistical Programme - 2016 Update (O.S. No. 54 of the Official Gazette of the Italian Republic 12 December 2016 - General Series - No. 289).

Law Decree No. 244 of 30 December 2016. amended by Law No. 19 of 27 February 2017 (O.S. No. 14 of the Official Gazette of the Italian Republic 28 February 2017 - General Series - No. 49).

Council Regulation (EC) No. 1165/98 of 19 May 1998 (OJL 162. 5.6.1998) and its amendments and additions. concerning short-term statistics.

Regulation (EC) No. 1158/2005 of the European Parliament and of the Council of 6 July 2005. amending Council Regulation (EC) No. 1165/98 concerning short-term statistics (OJ L 191. 22.7.2005). The Regulation establishes a reference framework for the collection. compilation. transmission and evaluation of Community business statistics for the purpose of the analysis the economic cycle.

Commission Regulation (EC) No. 1502/2006 of 28 September 2006. implementing Council Regulation (EC) No. 1165/98 concerning short-term statistics as regards derogations to be granted to Member States.

Commission Regulation (EC) No. 1503/2006 of 28 September 2006. implementing and amending Council Regulation (EC) No. 1165/98. concerning short-term statistics as regards definitions of variables. list of variables and frequency of data compilation.

Regulation (EC) No. 1893/2006 of the European Parliament and of the Council. establishing the statistical classification of economic activities NACE Revision 2. amending Council Regulation (EC) No. 3037/90 as well as certain EC Regulations on specific statistical domains.

Commission Regulation (EC) No. 472/2008 of 29 May 2008. implementing Council Regulation (EC) No. 1165/98. concerning short-term statistics as regards the first base year to be applied for time series in NACE Revision 2 and. for time series prior to 2009 to be transmitted according to the NACE Revision 2. defining the level of detail. the form. the first reference period and the reference period.

## Purpose of the indices

Producer prices indices for services:

- ✓ measure the short term producer price inflation;
- ✓ are important for analysing the process of fixing costs and prices in the whole economy;
- ✓ are essential for cleaning the service turnover indicators from price evolution component;
- ✓ are used for deflation of some national monetary aggregates;
- ✓ are used for comparative analysis among different countries.

## Methodology: common and specific features

A general methodological framework is common to all SPPIs. Nevertheless. each service industry is characterized by its own methodology tailored on the typical services aspects.

### 1. Common features

- ▶ The definition of the service producer price is provided by the EC Regulations: it is the basic price that excludes VAT and similar deductible taxes directly linked to turnover as well as all duties and taxes on the goods and services invoiced by the unit. whereas subsidies on products received by the producer. if there are any. should be added.



- ▶ The survey unit is the enterprise resident in Italy. It provides its services to other enterprises and/or to Government, both within and outside the national territory<sup>3</sup>. The survey units are identified by the Business register where enterprises are classified according to their main economic activity<sup>4</sup>.
- ▶ Data collection occurs quarterly through electronic questionnaires filled in by each respondent and available on the Istat website.
- ▶ Data checks are carried out by an ad hoc software. Follow up contacts are undertaken too, both to prevent missing responses and to validate data.
- ▶ Producer prices indices for services are chain-linked Laspeyres-type indices. Their base period is the fourth quarter of the previous year. All indices are calculated and released at national level. Sector indices are produced by aggregating sub-sector indices which are grouped by weighted arithmetic means. Weights, the lists of respondents and the basket of services are annually updated.

## 2. Specific features

### **H49.4 – Freight transport by road producer prices**

- ▶ observation field: the basket refers to three classes of services
  - (i) full truckloads; (ii) less than truckloads/*groupages*<sup>5</sup>; (iii) general cargo services and courier services<sup>6</sup>. Each of the three classes of services is split into national and international destinations. Respondents are asked to identify the main representative services of their activities within these classes.
- ▶ price: each enterprise gives the value of the quarterly turnover as well as the corresponding volume for each representative service. These data are used to calculate the average unit value<sup>7</sup> of every service;
- ▶ sample of enterprises: a stratified sample with PPS (Probability Proportional to Size) selection of units from each stratum is used.

### **H50 - Sea and coastal water transport producer prices**

- ▶ observation field: two baskets of services
  - (i) the basket for shipping companies (ship owners) includes both scheduled transport services (liner shipping) and non-scheduled transport services (tramp shipping). In liner shipping, prices and weights (turnover) are collected both for goods and passengers<sup>8</sup>; differently, in tramp shipping data only concern weights (turnover);
  - (ii) the basket for ship brokers (intermediaries) concerns time charter services and spot market services. Respondents are asked to provide only prices;
- ▶ price: average unit values<sup>9</sup> are collected for liner shipping; actual transaction prices and model pricing<sup>10</sup> are collected for tramp shipping;

<sup>3</sup>A unit has its centre of economic interest in one specific country if it is engaged, or intend to be, in activities and transactions on a large scale, in the country considered, for at least one year.

<sup>4</sup>For example, the following are excluded: (i) for the maritime transport sector, the shippers that provide non-relevant services, such as transport on cruise ships, off-shore, tugboats; (ii) for air transport, the air carriers providing charter services, low cost airlines, air taxis, helicopters, companies without routes that interest the Italian territory; (iii) for warehousing, the units that perform the service for themselves and those who exclusively perform outsourcing (warehousing for others); (iv) for cargo handling, the companies that exclusively perform portage and those specialised in administrative-documentary activity; (v) for freight transport by road: moving services, transport of logs within forests as part of tree-cutting activity, the distribution of water via lorries, waste collection and transport, terminal management for transportation of goods, packing services for transport, postal and courier activities (limited to goods up to 20kg).

<sup>5</sup>*Groupage* means a transport of goods in which packages of different senders are mixed in a single shipment, addressed to different receivers located in the same geographic area, usually region or country.

<sup>6</sup>Relative to shipments of more than 20 Kg. Shipments of less than 20kg are collected by the 'Courier producer prices survey' aimed at the production of the corresponding price index.

<sup>7</sup>Ratio between quarterly turnover and the volume of goods transported.

<sup>8</sup>The transport of passengers, within the meaning of business to business transport, is defined as transport of the drivers who accompany, during the voyage on a ship, their own trucks.

<sup>9</sup>Ratio between the value of the freights effectively collected and the relative transported volume.

<sup>10</sup>Model pricing: price estimate of a standardised service whose specifications remain constant over time.

- ▶ sample of enterprises: units are selected by a *cut-off* method.

#### **H51 - Air transport producer prices:**

- ▶ observation field: two baskets of services
  - (i) transport of goods: the basket contains three types of goods by six classes of weight and three destinations (national. international. intercontinental);
  - (ii) transport of passengers: the basket consists of three destination areas (national. international. intercontinental);
- ▶ price: freight transports prices are measured as average unit values of the most important flight routes. passenger transports prices are measured as average prices according to the most important contracts drawn up with other enterprises and/or Government;
- ▶ sample of enterprises: units are selected by a *cut-off* method.

#### **H52.1 - Warehousing and storage services producer prices:**

- ▶ observation field: services for various product sectors (automotive; clothing. footwear and accessories; publishing; electronics/communications; pharmaceutical; mass market goods; industrial products). identified by the enterprises according to their main contracts in terms of turnover. Warehousing of goods. handling of goods as well as value added services are collected;
- ▶ price: the average unit value<sup>11</sup> of each service is collected;
- ▶ sample of enterprises: units are selected by a *cut-off* method.

#### **H52.24 – Cargo handling services producer prices**

- ▶ observation field: three baskets of services corresponding to three distinct sub-sectors
  - (i) air cargo handling: includes both the handling warehousing services and the ramp-handling services;
  - (ii) sea cargo handling: includes four types of cargos in import/export/transshipment;
  - (iii) railway cargo handling: includes two types of cargos by type of carrier;
- ▶ price: average unit values<sup>12</sup> are collected;
- ▶ sample of enterprises: air and sea cargo handling are based on a two stage sampling; railway cargo handling is based on a judgmental sampling.

#### **H53.1 - Postal activities under service obligation producer prices**

- ▶ observation field: the most representative business postal services under universal service obligation;
- ▶ price: the average unit value<sup>13</sup> is collected for each service and enterprise;
- ▶ sample of enterprises: units are selected by a *cut-off* method.

#### **H53.2 - Courier activities producer prices:**

- ▶ observation field: shipments weighting less than 20kg<sup>14</sup> by weight class and delivery area;
- ▶ price: average unit price of each class of shipment and each enterprise;
- ▶ sample of enterprises: units are selected by a *cut-off* method

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<sup>11</sup>Ratio between quarterly turnover earned and the total volume of service offered.

<sup>12</sup>Ratio between the quarterly turnover earned and the total volume of the service offered

<sup>13</sup>Ratio between turnover earned for the provision of each service and the corresponding sales volumes.

<sup>14</sup> Shipments weighing more than 20kg are monitored by the 'Freight transport by road producer prices survey' for the purpose of production of the corresponding price index.

### **J61 - Telecommunications services producer prices:**

- ▶ observation field: two baskets of services, respectively for wired and wireless telecommunications. Services are organized in homogeneous classes that cover the whole telecommunication BtoB market;
- ▶ price: quarterly turnover and volumes of each service class and each enterprise are collected for the purpose of calculating the corresponding average unit value;
- ▶ sample of enterprises: units are selected by a *cut-off* method

### **N78 – Employment activities producer prices:**

- ▶ observation field: activities of temporary and permanent work supply by activity sector (automotive, food, trade, public administration, industrial production, etc.) and type of employee (senior executive, employee, worker);
- ▶ price: average prices per hour worked for each class and enterprise;
- ▶ sample of enterprises: units are selected by a *cut-off* method

### **N80 – Security and investigation activities producer price:**

- ▶ observation field: services related to the different types of security and investigation activities (permanent armed surveillance; robbery and shoplifting supervision; surveillance and street patrolling of sites; tele-monitoring and remote control; transport and stockpile of valuables; safety deposit and counting of money; other services concerning not armed security) grouped by three types of users (public administration agencies; banks and big enterprises; medium and small enterprises);
- ▶ price: average unit values;<sup>15</sup>;
- ▶ sample of enterprises: units are selected by a stratified sampling with PPS (*Probability Proportional to Size*) selection of units from each stratum.

### **M71 - Architectural and engineering activities producer prices:**

- ▶ observation field: the representative projects of each company's market. They refer to design/execution; legal advice; advisory services; collaborations with other professional firms; topographic surveys and other activities<sup>16</sup>;
- ▶ price: model pricing<sup>17</sup>;
- ▶ sample of enterprises: a stratified sample with PPS (*Probability Proportional to Size*) selection of units from each stratum is used.

### **M73 - Advertising and marketing research producer prices:**

- ▶ observation field: services of intermediation and sales of advertising spaces on the media (television, radio, press<sup>18</sup>);
- ▶ price: average unit values compiled by collecting turnover and quarterly volume of services;
- ▶ sample of enterprises: a stratified sample with PPS (*Probability Proportional to Size*) selection of units from each stratum is used.

<sup>15</sup>Ratio between quarterly turnover earned and the total volume of service provided

<sup>16</sup>Computer engineering and telecommunications services are excluded.

<sup>17</sup>Model pricing: price estimate of a standardised service whose specifications remain constant over time.

<sup>18</sup>On-line advertising is excluded.

***J62 – Computer programming. consultancy and related activities***

***J63.1 – Data processing. hosting and related activities; web portals***

***J63.9 – Other information activities***

***M69.1+M69.2+M70.2 – Management consultancy activities***

***N81.2 – Cleaning activities***

These SPPIs do not come from direct surveys on services producer prices but are calculated using other data sources:

- ▶ observation field: totality of the services identified by the payments. done by enterprises. of social security contributions that guarantee security protections to employees;
- ▶ price: quarterly hourly labour cost coming from Istat statistical process Oros;
- ▶ sample of enterprises: units are selected by linking both administrative data from the Italian Revenue Agency Register (Sector Studies - SdS ) and from the National Social Security Agency INPS (Social Security Working Positions).

## **Timeliness**

The indices are released at national level about 90 days from the end of the reference quarter and are sent to Eurostat nearly 80 days after it.

## **Output**

Services producer prices indices are released quarterly at national level. The indices reference period is 2015=100. Time series indices are available since 2010 (first quarter). except for Telecommunication and Postal services available since 2006 (first quarter). SPPIs are released through the joint quarterly flash press release “Producer price indices on industry. constructions and services” available on the Istat website.