

January 2020 – Q4 2019

INDUSTRIAL, CONSTRUCTION AND SERVICES PRODUCER PRICES

- In January 2020, compared with the previous month, industrial producer prices decreased by 0.2%. On domestic market, producer prices decreased by 0.3%, while on non-domestic market they increased by 0.2%.
- The percentage change of the average of the last three months with respect to the previous three months decreased by 0.3% (-0.4% for the domestic market and +0.1% for the non-domestic market).
- In January 2020, compared with January 2019, industrial producer prices decreased by 2.3% (-3.4% on domestic market and +0.9% on foreign market).
- Construction producer prices of Residential buildings and non-residential buildings increased by 0.3% in January 2020, compared to the previous month, and by 0.1% on the same month of the previous year. Construction producer prices of Roads and railways rose by 0.5% both compared to the previous month and to the same month of the previous year.
- The percentage change of the average of the last three months, compared to the previous three months, rose by 0.5% for Residential buildings and non-residential buildings and by 0.3% for Roads and railways.
- In the fourth quarter 2019, services producer prices increased by 0.7%, compared with the previous quarter, and increased by 0.1%, compared to the same quarter of the previous year. Sea and coastal water transport provided the largest upward contribution to the annual rate (+4.1%) while telecommunications the largest downward one (-7.3%).

Industrial Producer Prices

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

January 2015 – January 2020 (index, 2015=100)

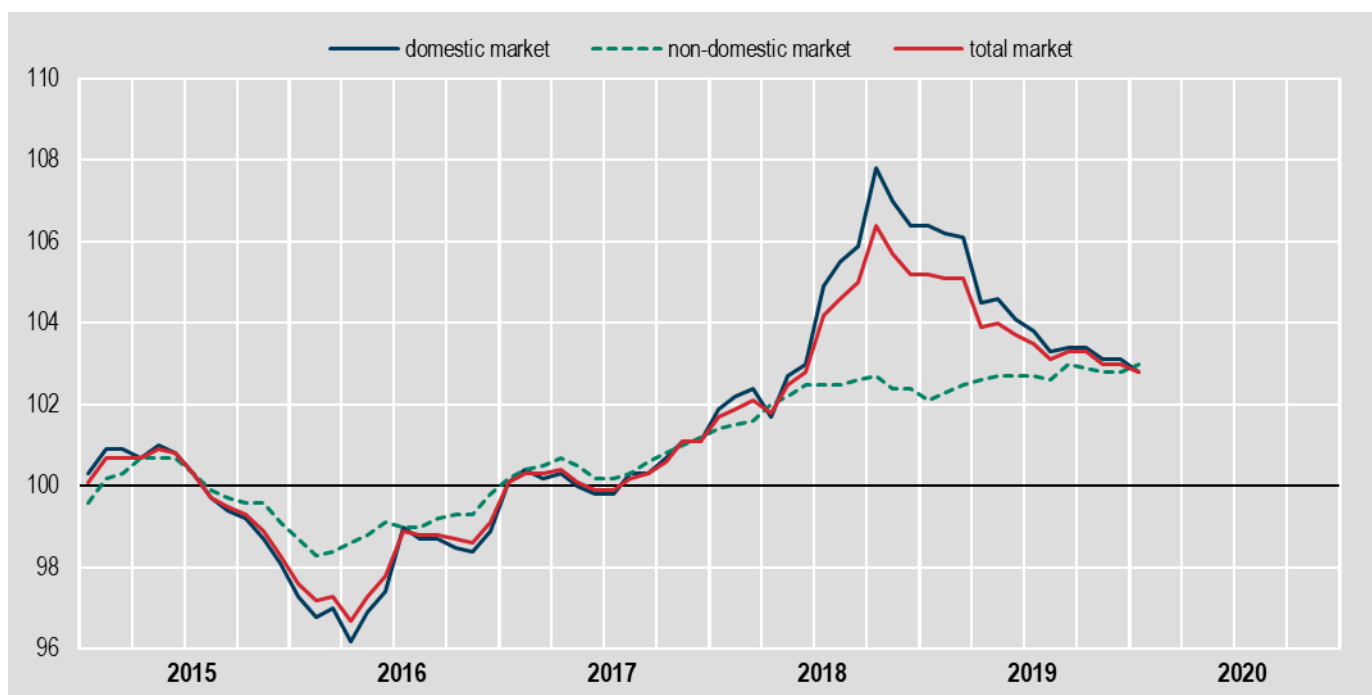


CHART 2. INDUSTRIAL PRODUCER PRICES INDEX, MONTH ON PREVIOUS MONTH PERCENT CHANGES
January 2016– January 2020 (index, 2015=100)

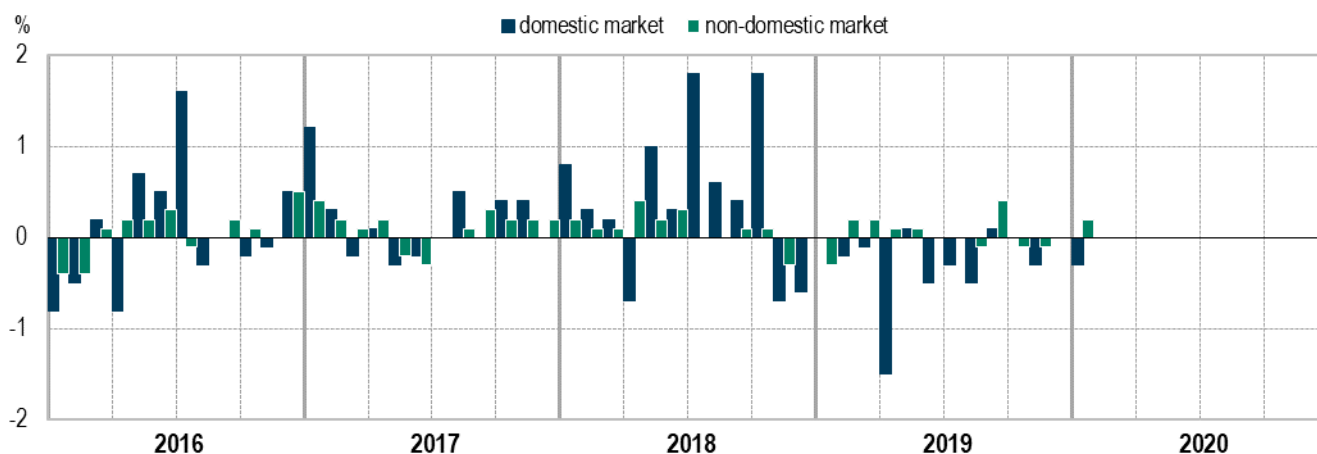


CHART 3. INDUSTRIAL PRODUCER PRICES INDEX, MONTH ON SAME MONTH A YEAR AGO PERCENT CHANGES
January 2015 – January 2020 (index, 2015=100)

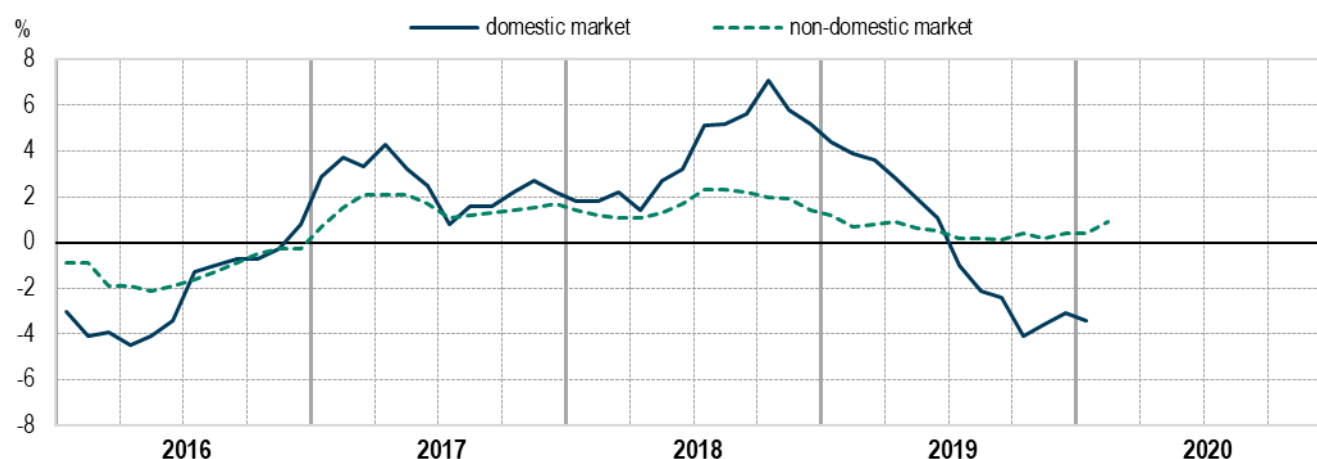


TABLE 1. INDUSTRIAL PRODUCER PRICES INDEX
January 2020 (a), months on previous months and months on same months a year ago percent changes (index, 2015=100)

	Index	Months on previous months		Months on same months a year ago
		Jan 20 Dec 19	Nov 19-Jan 20 Aug-Oct 19	Jan 20 Jan 19
Total market	102.8	-0.2	-0.3	-2.3
Domestic market	102.8	-0.3	-0.4	-3.4
Non-domestic market	103.0	+0.2	+0.1	+0.9
<i>Euro area</i>	102.7	-0.1	-0.2	+0.1
<i>Non-euro area</i>	103.2	+0.4	+0.1	+1.4

(a) Data are provisional and subject to revisions.

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

January 2020 (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
	Jan 20 Dec 19	Jan 20 Jan 19	Jan 20 Dec 19	Jan 20 Jan 19	Jan 20 Dec 19	Jan 20 Jan 19
Consumer goods	+0.4	+1.7	+0.1	+0.5	+0.6	+1.9
Durable consumer goods	+0.3	+1.7	+0.4	+0.6	+0.6	+1.6
Non-durable consumer goods	+0.4	+1.7	0.0	+0.5	+0.6	+2.0
Capital goods	+0.3	+0.8	+0.2	+1.1	+0.8	+1.8
Intermediate goods	+0.3	-0.8	-0.2	-1.3	+0.2	-0.1
Energy	-1.8	-10.9	-2.5	+7.4	-0.7	+7.4
Total except MIG energy	+0.4	+0.5	0.0	-0.1	+0.5	+1.3
Total	-0.3	-3.4	-0.1	+0.1	+0.4	+1.4

(a) Data are provisional and subject to revisions.

Construction Producer Prices

CHART 4. CONSTRUCTION PRODUCER PRICE INDEX, BUILDINGS

January 2015 – January 2020, (index, 2015=100)

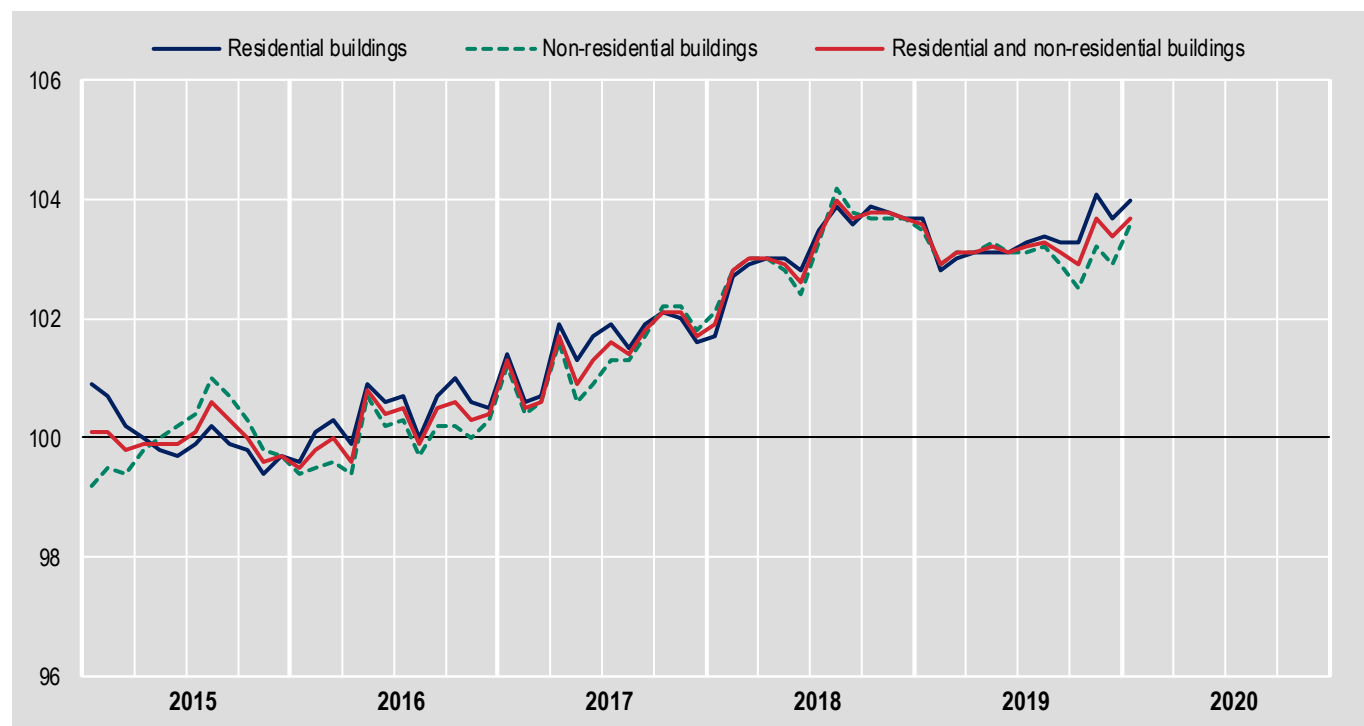


CHART 5. CONSTRUCTION PRODUCER PRICE INDEX, BUILDINGS

January 2016 – January 2020, month on previous month percent changes (index, 2015=100),

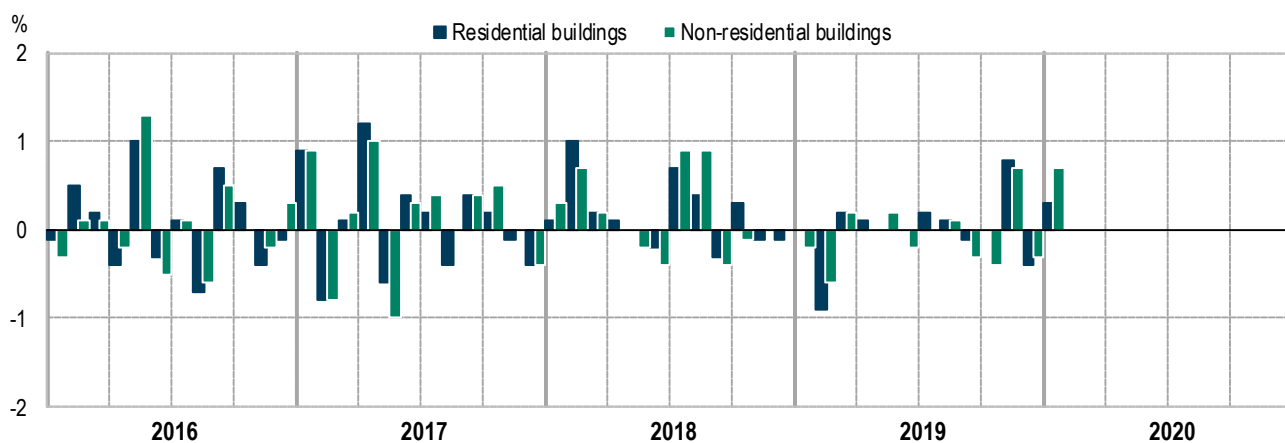


CHART 6. CONSTRUCTION PRODUCER PRICE INDEX, BUILDINGS

January 2016 – January 2020, month on same month a year ago percent changes (index, 2015=100)

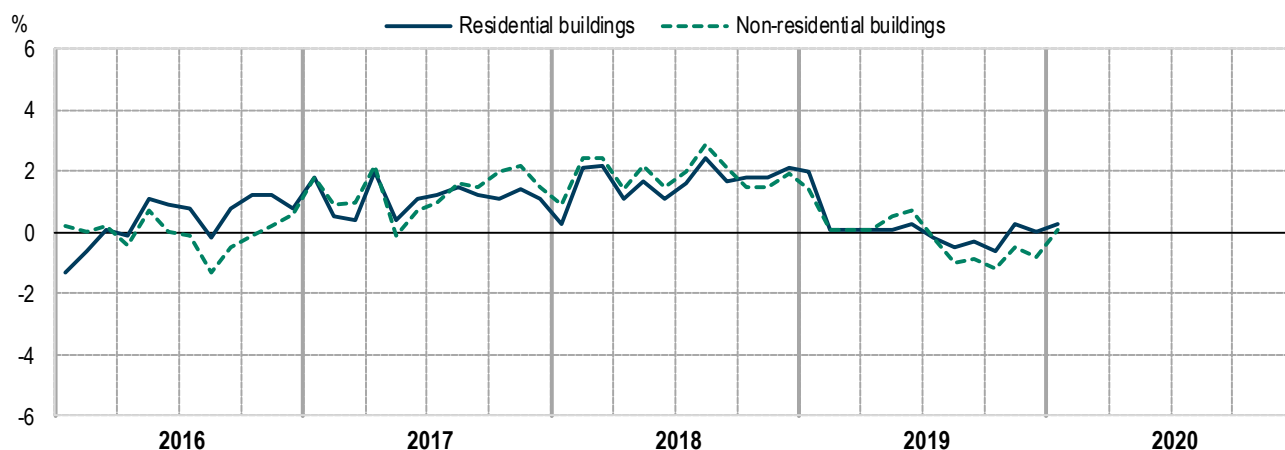


TABLE 3. CONSTRUCTION PRODUCER PRICE INDEX

January 2020 (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
		Jan 20 Dec 19	Nov 19-Jan 20 Aug-Oct 19	Jan 20 Jan 19
F.41.2 Residential buildings and non-residential buildings	103.7	+0.3	+0.5	+0.1
<i>Residential buildings</i>	104.0	+0.3	+0.6	+0.3
<i>Non-residential buildings</i>	103.6	+0.7	+0.3	+0.1
F.42.1 Roads and railways	100.5	+0.5	+0.3	+0.5
<i>F.42.11 Roads and motorways</i>	101.3	+0.9	+0.7	+2.3
<i>F.42.13 Bridges and tunnels</i>	100.4	+0.4	+0.3	+0.3

(a) Data are provisional and subject to revisions

CHART 7. CONSTRUCTION PRODUCER PRICE INDEX, ROADS AND RAILWAYS, ROADS AND MOTORWAYS, BRIDGES AND TUNNELS

January 2015 – January 2020, (index, 2015=100)

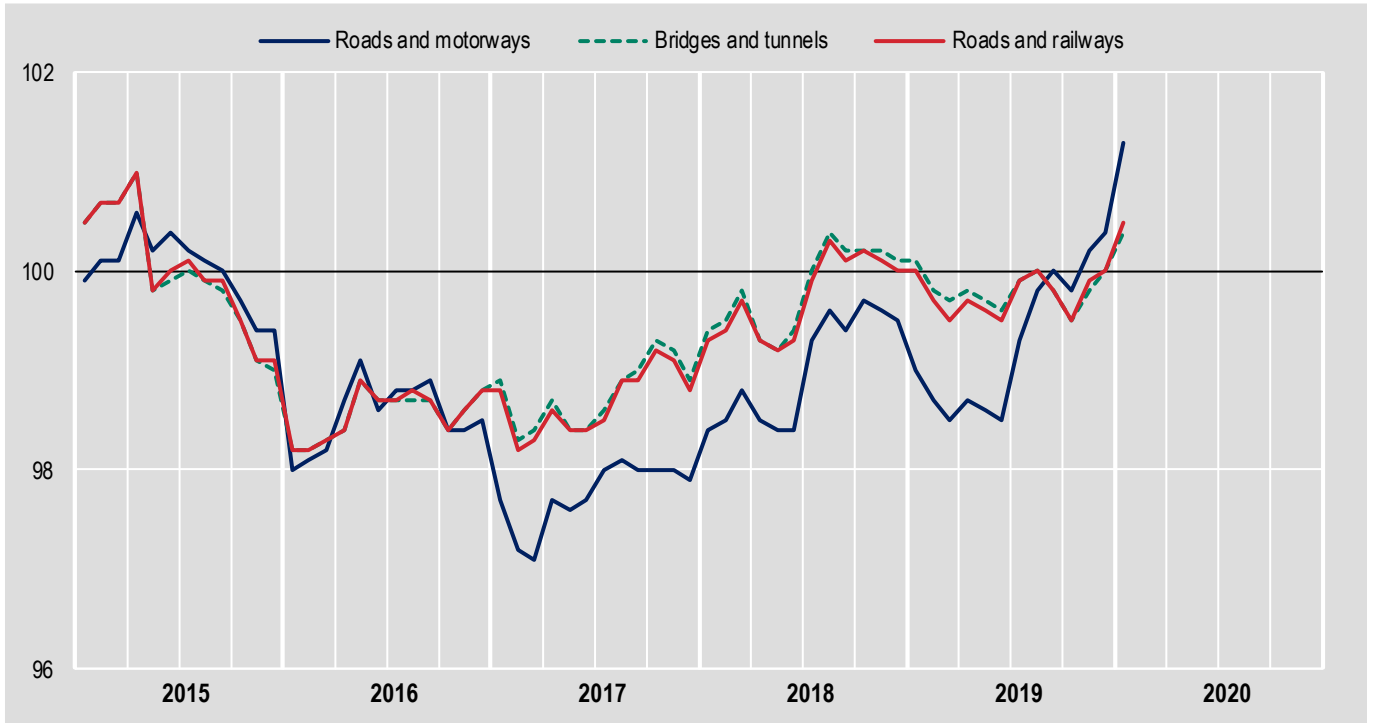


CHART 8. CONSTRUCTION PRODUCER PRICE INDEX, ROADS AND RAILWAYS

January 2016 – January 2020, month on previous month and month on same month a year ago percent changes (index, 2015=100)

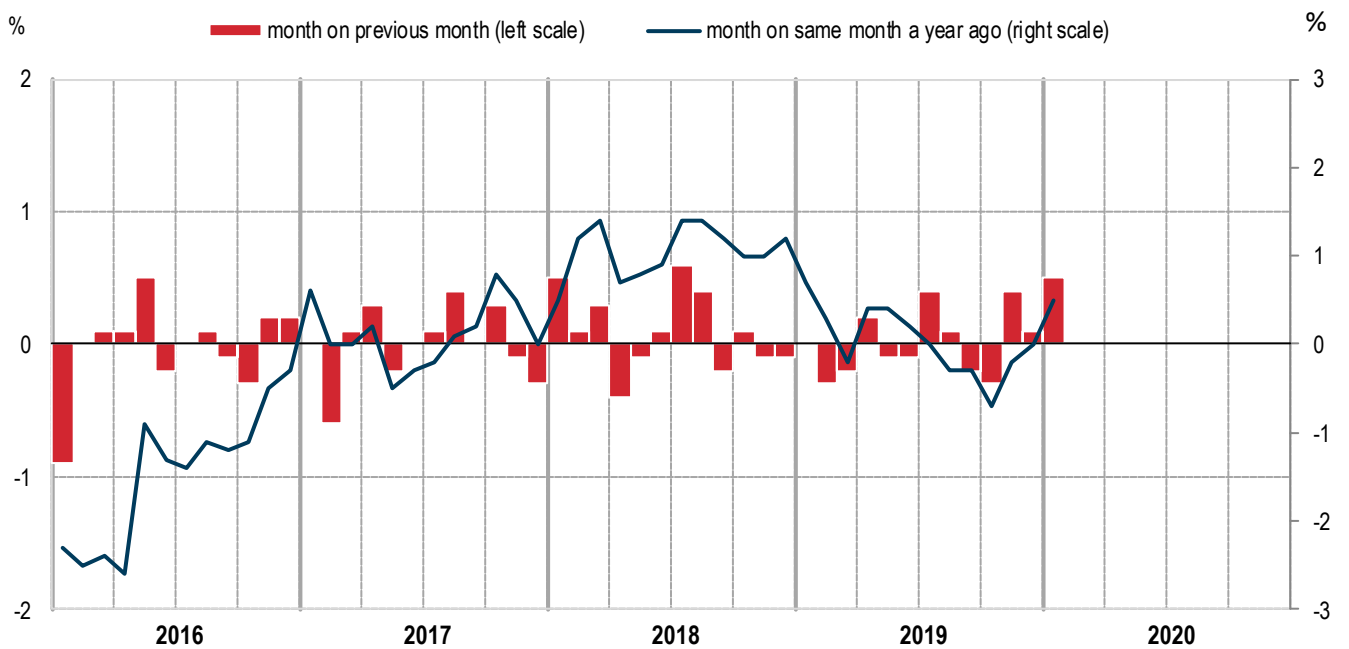


CHART 9. CONSTRUCTION PRODUCER PRICE INDEX, ROADS AND MOTORWAYS, BRIDGES AND TUNNELS
January 2016 – January 2020, month on previous month percent changes (index, 2015=100)

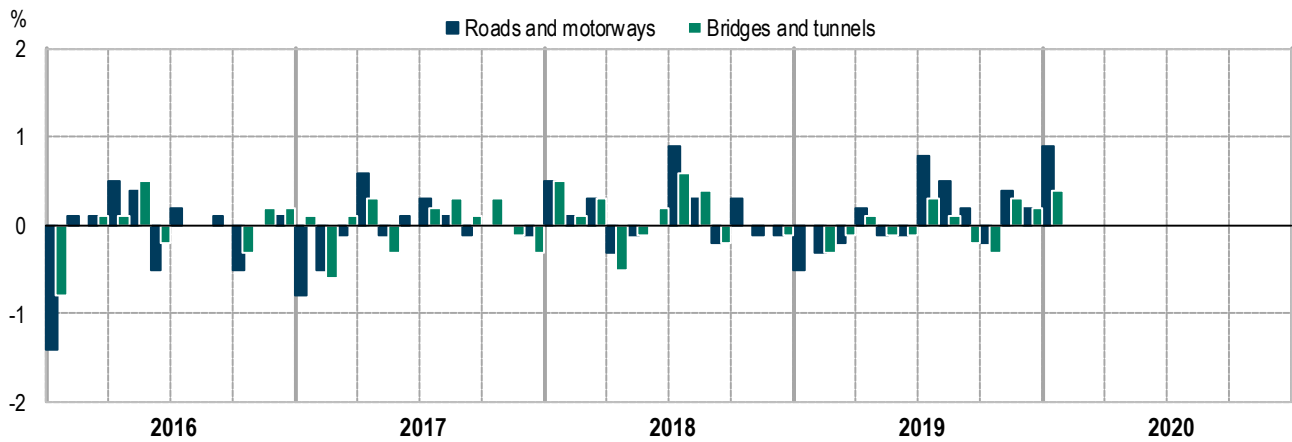
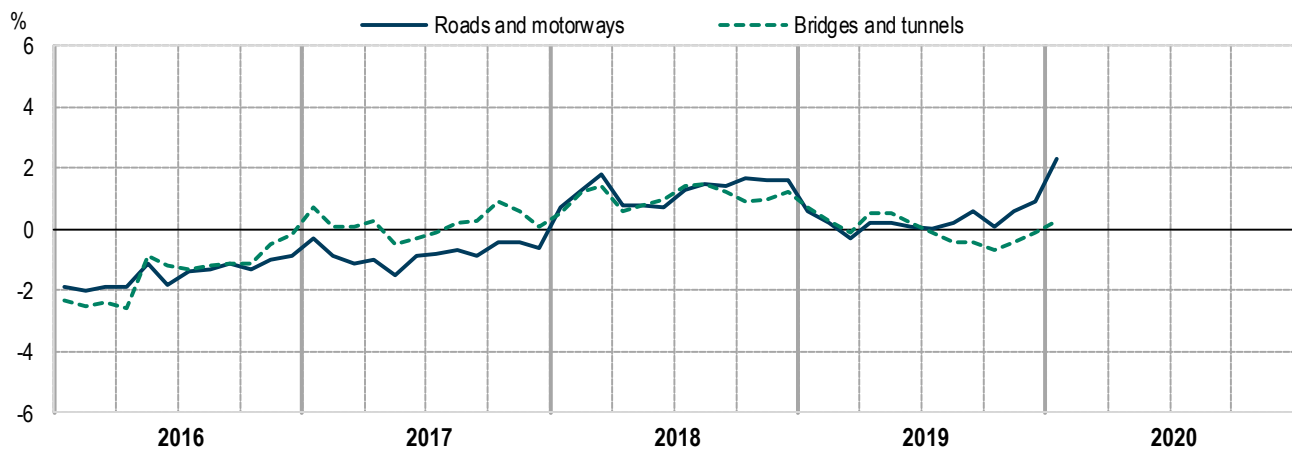


CHART 10. CONSTRUCTION PRODUCER PRICE INDEX, ROADS AND MOTORWAYS, BRIDGES AND TUNNELS
January 2016 – January 2020, month on same month a year ago percent changes (index, 2015=100)



Services producer prices

CHART 11. SERVICES PRODUCER PRICES. TOTAL INDEX
Q1 2010 – Q4 2019 (index, 2015=100)

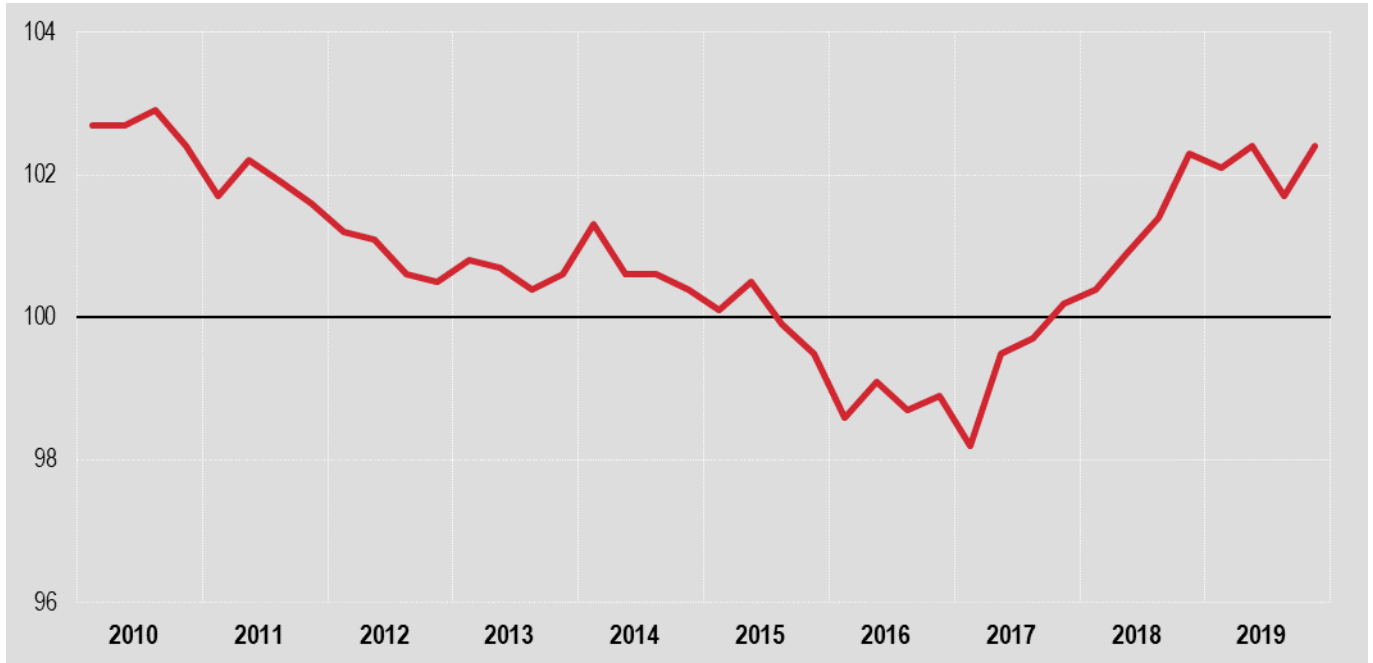


CHART 12. SERVICES PRODUCER PRICES. QUARTER ON PREVIOUS QUARTER AND ON SAME QUARTER A YEAR AGO PERCENT CHANGES
Q1 2011 – Q4 2019 (index, 2015=100)

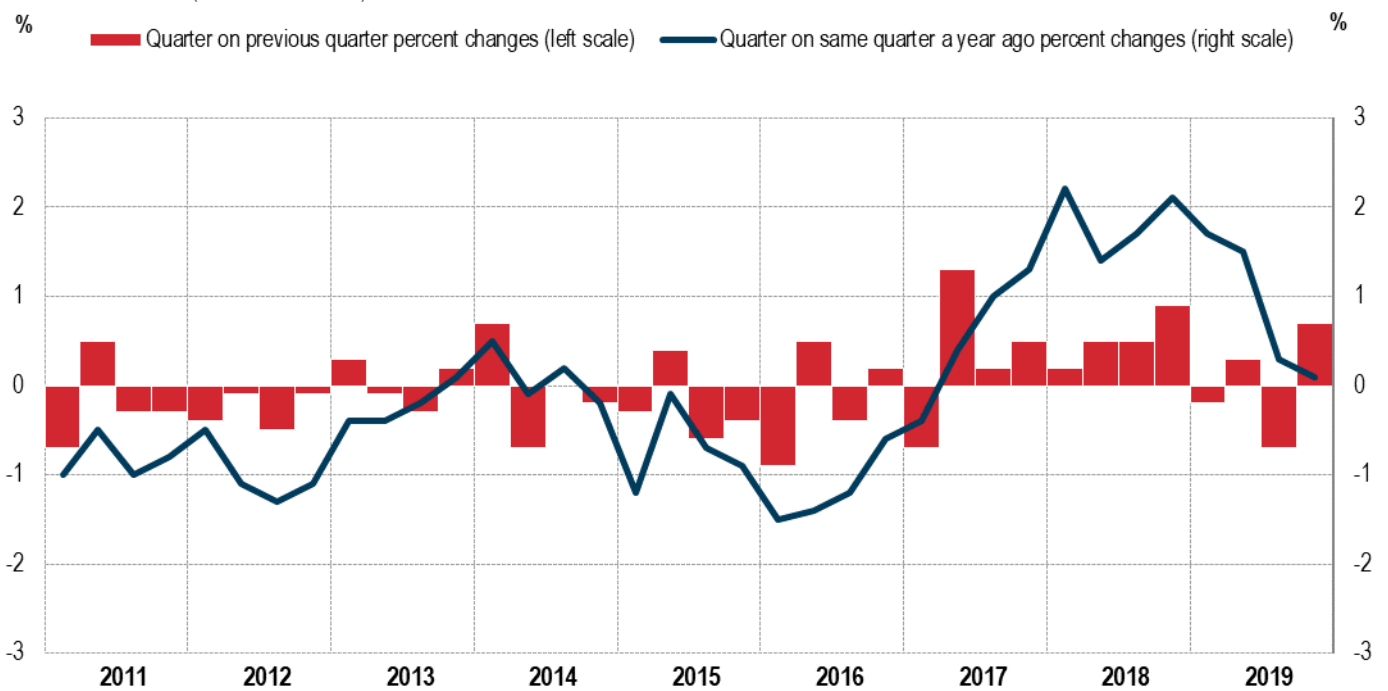


CHART 13. SERVICES PRODUCER PRICES. YEAR-ON-YEAR GROWTH RATE BY ECONOMIC ACTIVITY

Q4 2019. Quarter on same quarter a year ago percent changes (index, 2015=100)

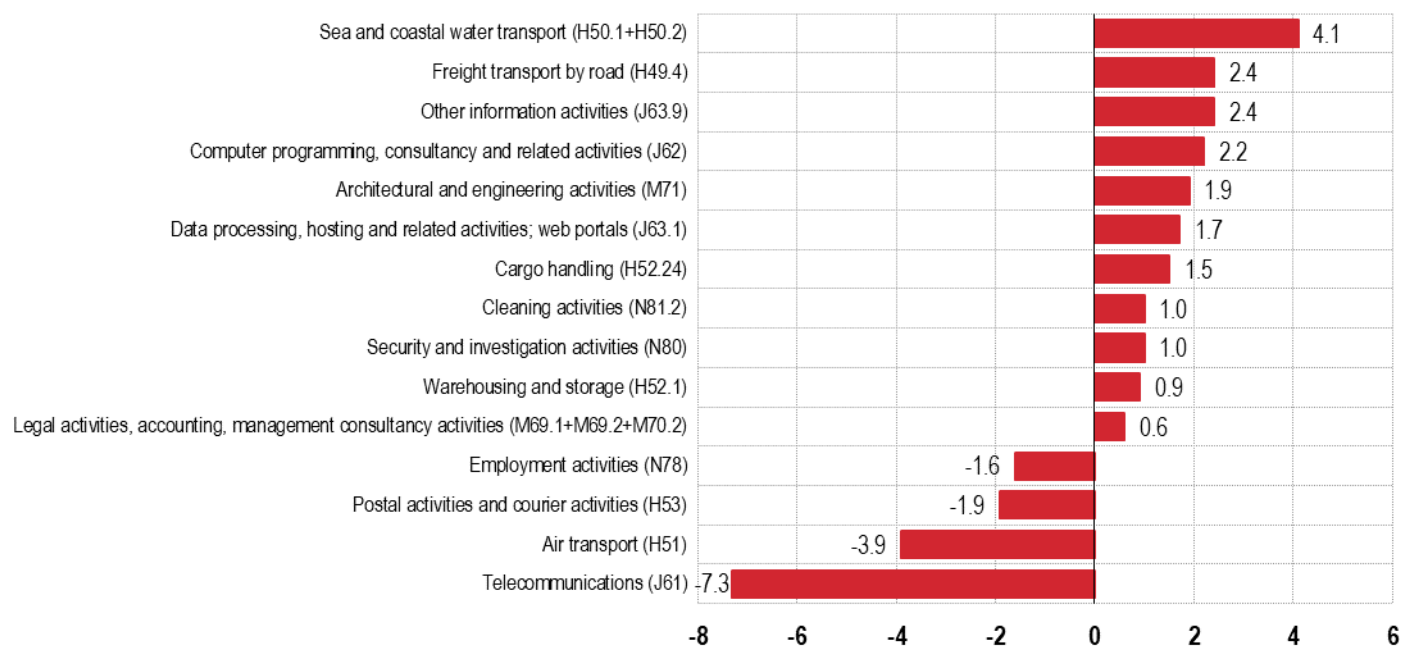


TABLE 4. SERVICES PRODUCER PRICES. TOTAL INDEX

Q4 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

Index	Quarter on previous quarter	Quarter on same quarter a year ago	Year on year
IV quarter 2019	IV 2019	IV 2019	2019
	III 2019	IV 2018	2018
Total index	102.4	+0.7	+0.9

TABLE 5. TRANSPORTATION AND RELATED SUPPORT SERVICES PRODUCER PRICES

Q4 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES	IV quarter 2019	Quarter on previous quarter	Quarter on same quarter a year ago	Year on year	
		IV 2019	IV 2019	2019	
		III 2019	IV 2018	2018	
H49.4	Freight transport by road	103.2	+1.9	+2.4	+1.6
H50.1 + H50.2	Sea and coastal water transport	98.0	+5.8	+4.1	+9.1
H51	Air transport	106.4	+1.0	-3.9	-0.3
- H51.1	Air passenger transport	101.9	+2.7	+1.4	+2.3
- H51.2	Freight air transport	107.5	-1.6	-11.4	-4.9
H52.1	Warehousing and storage	98.7	+0.4	+0.9	+1.2
H52.24	Cargo handling	110.0	+0.5	+1.5	+1.8
H53	Postal activities and courier activities	96.8	+0.4	-1.9	-1.1

CHART 14. TRANSPORTATION AND RELATED SUPPORT SERVICES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES

Q1 2011 – Q4 2019 (index, 2015=100)

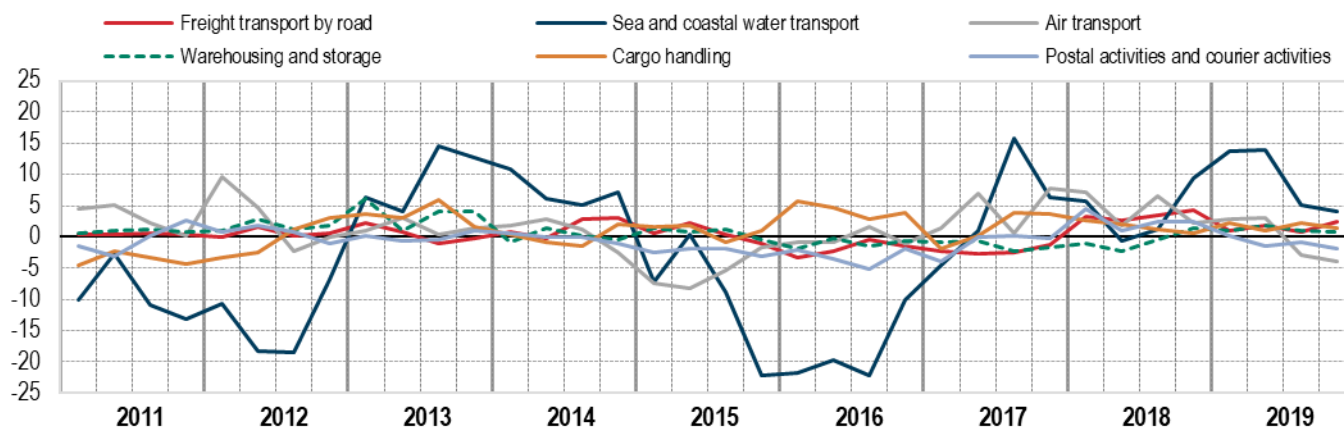


TABLE 6. INFORMATION AND COMMUNICATIONS SERVICES PRODUCER PRICES

Q4 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES	IV quarter 2019	Quarter on previous quarter	Quarter on same quarter a year ago	Year on year
		IV 2019	IV 2019	2019
		III 2019	IV 2018	2018
J61 Telecommunications	90.0	-0.2	-7.3	-5.5
- 61.1 Wired telecommunications	96.7	-0.3	-5.2	-3.0
- 61.2 Wireless telecommunications	75.5	0.0	-12.4	-11.3
J62 Computer programming, consultancy and related activities	107.2	+0.4	+2.2	+2.7
J63.1 Data processing, hosting and related activities; web portals	108.9	+0.5	+1.7	+2.3
J63.9 Other information activities	102.5	+0.1	+2.4	+1.6

CHART 15. INFORMATION AND COMMUNICATIONS SERVICES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES

Q1 2011 – Q4 2019 (index, 2015=100)

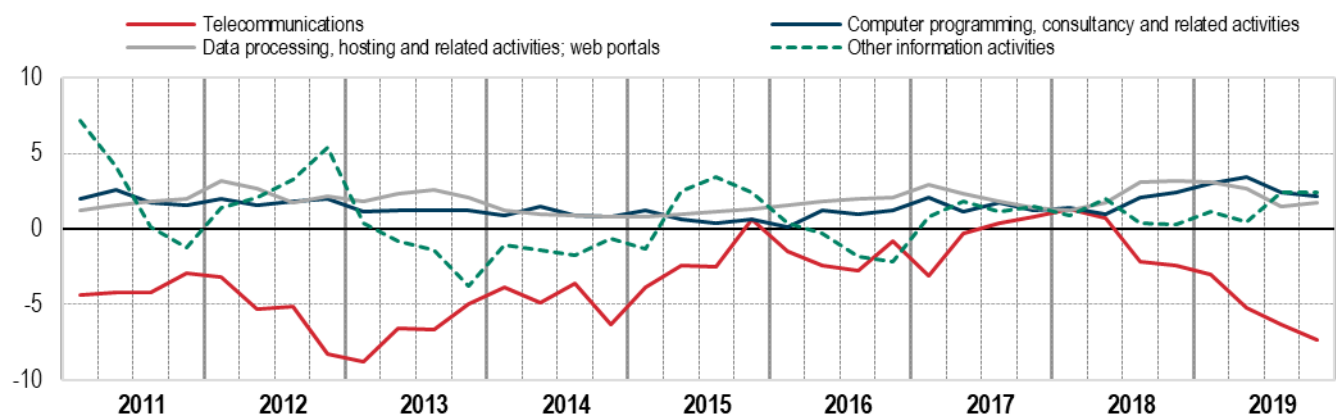


TABLE 7. PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES PRODUCER PRICES

Q3 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES	IV quarter 2019	Quarter on previous quarter	Quarter on same quarter a year ago	Year on year
		IV 2019	IV 2019	2019
		III 2019	IV 2018	2018
M69.1+M69.2+M70.2 Legal activities, accounting, management consultancy activities	102.2	+0.3	+0.6	+0.9
M71 Architectural and engineering activities	110.4	+0.2	+1.9	+2.5

CHART 16. PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES

Q1 2011 – Q4 2019 (index, 2015=100)



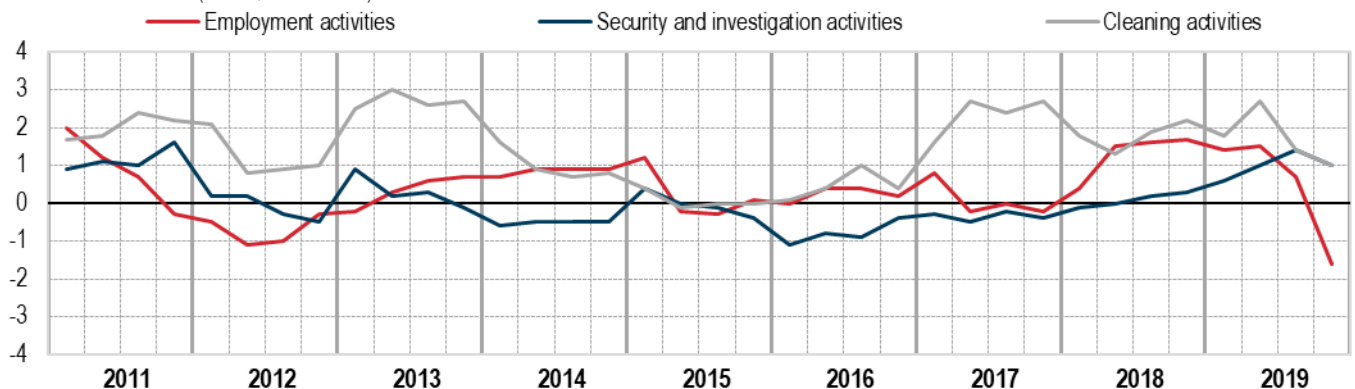
TABLE 8. SUPPORT SERVICES TO ENTERPRISES PRODUCER PRICES

Q4 2019. Index and Quarter on previous quarter and on same quarter a year ago percent changes (index, 2015=100)

ECONOMIC ACTIVITIES	IV quarter 2019	Quarter on previous quarter	Quarter on same quarter a year ago	Year on year
		IV 2019	IV 2019	2019
		III 2019	IV 2018	2018
N78 Employment activities	100.5	-1.8	-1.6	+0.5
N80 Security and investigation activities	100.0	-0.4	+1.0	+1.0
N81.2 Cleaning activities	106.8	+0.3	+1.0	+1.8

CHART 17. SUPPORT SERVICES TO ENTERPRISES PRODUCER PRICES. QUARTER ON SAME QUARTER A YEAR AGO PERCENT CHANGES

Q1 2011 – Q4 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 5.500 industrial enterprises proving about 19.000 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 2019.

Table A. INDUSTRIAL PRODUCER PRICES. Sample size of products, enterprises and prices December 2019 calculation base

UNIT	Total market	Domestic market	Non domestic market	Non domestic market euro area	Non domestic market non-euro area
	Base 2019	Base 2019	Base 2019	Base 2019	Base 2019
	Products	1.680	1.199	1.085	837
Enterprises	5.570	3.554	2.820	1.736	1.712
Prices	18.875	10.498	8.377	4.183	4.194

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 2020, 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 2019. 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 2019). 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 2017, the most recently available.

At the lower level, product weights for the three markets (domestic, non-domestic Euro area and non-domestic Non-euro area) are setting up using the annual value data of industrial production sold in 2017, available from Prodcom Survey and the annual value data of exports measured in 2017 by the foreign trade statistics surveys.

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](#)

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

Construction producer prices

Introduction

Istat compiles and disseminates Construction Producer prices as a system of secondary statistics. Within NACE Division F 41 and F 42, indices concern Groups 41.2 (Construction of residential and non-residential buildings) and 42.1 (Construction of roads and railways). The former Group is detailed through two sub-aggregates: Construction of residential building and Construction of non-residential buildings. The latter Group has a breakdown in two Classes: 42.11 (Construction of roads and motorways) and 42.13 (Construction of bridges and tunnels).

Construction producer price indices are a measure of the monthly prices dynamics of i) new residential and non-residential building; and ii) roads. Price indices refer to buildings/road constructions sold by the contractor to the client. The contractor is the enterprise that took the initiative for the construction work; the client is the enterprise for whom the new building/road has been constructed.

Legal framework

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.

Observation field, object and index purposes

Producer price index in construction focuses the attention on the evolution of prices in the construction activity as this one is defined in the Division F 41 and F 42 of NACE Rev.2. For this reason these output price indices consider the point of view of the contractor.

While a construction cost index measures the relationships between costs at a constant technology and input mix, a producer price measures movements in prices charged to client of construction work. Producer price index, in fact, includes changes in contractor's margins.

It is the object of a producer price index in construction to show the evolution of prices received by the contractor (construction enterprise) to sell the construction work to the client i.e. the enterprise who gave the building/road commitment. Therefore, 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/road.

Main index of producer price in construction purposes are:

- providing short-term measure of the inflationary dynamics in new building/road construction;
- comparative analyses among different countries in construction output price indices;
- deflating production in construction;
- construction contracts updating.

Index compilation

Technically, producer price index in constructions is made up of three components: direct costs (construction costs), overheads and contractors' mark-up. This frame is the weightings system of producer prices in constructions. Direct costs and overheads are lists of items to whom a set of appropriate price indices are referred to.

Direct costs dynamic is provided by a set of industrial producer price indices. Overheads dynamic derives from a set of producer price indices in services. A price measure of contractor's profit margin is defined as a deflator. This one is the ratio between a value index (supply and use gross operating margin) and a quantity index (production in construction index).

Monthly, average arithmetic means of items' prices and items' weights provide a set of sub-aggregates and aggregates producer price indices in building/road construction.

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

As producer price indices in construction are built up by processing a set of indices derived by monthly and quarterly price indicators, no statistical burden on respondents occurs (and, therefore, no data collection operations are carried out).

These indices are compiled and released at national level, since 2010.

Weights

Construction producer price index weightings are derived from a set of coherent data sources. National accounts, structural business statistics, building permits and, at detailed level, direct cost items are listed according to construction projects for residential building, non-residential building and roads. These technical projects are provided by the Universities of Cassino and Rome Civil engineering department and from the national agency for roads.

National accounts provide gross value of production as it derives from the Supply and use table, branches F41 and F42. This value is detailing into 260 items: 177 refer to intermediate consumptions of goods, 79 intermediate consumptions of services. Further, labour cost, consumption of fixed capital and net operating margin, each one concerning just an item. The (national accounts) gross value of production is processed in order to get a producer price frame according to the scheme provided in the manual *Methodology of short-term business statistics, interpretation and guidelines* (Eurostat, 2002). Direct costs sub aggregate weight (value) is given by the sum of all 177 items above mentioned plus values of labour costs and other taxes and subsidies on production. On its turn, overheads weight is defined by summing the 79 item values of services intermediate consumptions. At last, mark-up weight is given by the sum of consumption of fixed capital value and net operating margin value.

The Supply and use table of F41 value is processed through the SBS one (total production value of all enterprises whose main economic activity concerns NACE F41.2) to get the Group F41.2 weight. Analogously, by processing Supply and use table of F42 value by the SBS one (this time, the production value of all enterprises whose main economic activity concerns NACE F41.2) the Group F42.1 weight is defined. The next step is aimed to detail sub-aggregates weights in each of the above NACE Groups. To distinguish between Construction of residential building and Construction of non-residential building, the variable used is the total square meters surface as it derives from the monthly Building permits survey. Finally, in the NACE Group F42.1 the distinction between Classes F42.11 and F42.13 is obtained by using the weightings structure as it is contained in the road construction project. This last allows to identify weights distinguishing between outdoor sections of road, F42.11, and the one of bridges and tunnels, F42.13.

Timeliness and revisions

Producer price indices in construction 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 in construction 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)*).

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

NACE Code	Economic activity	Notes
H49.4	Freight transport by road and removal services	
H50.1 + H50.2	Sea and coastal water transport	Contains ² : 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".

² 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 territory³. The survey units are identified by the Business register where enterprises are classified according to their main economic activity⁴.
- ▶ 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*⁵; (iii) general cargo services and courier services⁶. 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 value⁷ 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 passengers⁸; 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 values⁹ are collected for liner shipping; actual transaction prices and model pricing¹⁰ are collected for tramp shipping;
- ▶ sample of enterprises: units are selected by a *cut-off* method.

³A 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.

⁴For 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).

⁵*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.

⁶Relative 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.

⁷Ratio between quarterly turnover and the volume of goods transported.

⁸The 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.

⁹Ratio between the value of the freights effectively collected and the relative transported volume.

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

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 value¹¹ 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 values¹² 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 value¹³ 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 20kg¹⁴ 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

¹¹Ratio between quarterly turnover earned and the total volume of service offered.

¹²Ratio between the quarterly turnover earned and the total volume of the service offered

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

¹⁴ 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;¹⁵;
- ▶ 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 activities¹⁶;
- ▶ price: model pricing¹⁷;
- ▶ 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, press¹⁸);
- ▶ 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.

¹⁵Ratio between quarterly turnover earned and the total volume of service provided

¹⁶Computer engineering and telecommunications services are excluded.

¹⁷*Model pricing*: price estimate of a standardised service whose specifications remain constant over time.

¹⁸On-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.

For technical and methodological information

Industrial producer prices

Emiliano Sibio

tel. +39 06 4673.6028
sibio@istat.it

Emanuela Valci

tel. +39 06 4673.6206
valci@istat.it

Construction producer prices

Francesca Coppola

tel. +39 06 4673.6162
frcoppola@istat.it

Elisabetta Aquilini

tel. +39 06 4673.6306
aquilini@istat.it

Services producer prices

Maria Moscufo

tel. +39 06 4673.6214
moscufo@istat.it

Francesca Sansone

tel. +39 06 4673.6133
franson@istat.it
