



Industrial producer prices

National Reference Metadata in Euro SDMX Metadata Structure (ESMS)

Compiling agency: Institut National de la Statistique et des Etudes Economigues (French NSI).

Time Dimension: 2016-A0

Data Provider: FR1

Data Flow: STSIND_ESMS31_A

Eurostat metadata Reference metadata

For any question on data and metadata, please contact: EUROPEAN STATISTICAL DATA SUPPORT

1. Contact

1.1. Contact organisation	Institut National de la Statistique et des Etudes Economiques (French NS	
	Direction des Statistiques d'Entreprises	
1.2. Contact organisation unit	(Directorate of Business Statistics	

2. Metadata update

2.1. Metadata last certified	14/03/2017
2.2. Metadata last posted	28/02/2017
2.3. Metadata last update	28/02/2017

3. Statistical presentation

3.1. Data description

Name of indicator/source: Producer Price Indices in industry. - Survey "Observation des prix de l'industrie et des services" (OPISE).

3.2. Classification system : NACE Rev. 2. (2008) \ CPF Rev 2 (2008).

3.3. Coverage - sector

Activities covered

The theoretical coverage (including imputations and weights) in terms of activity corresponds to CPA 2008 sections B to E for industry (hence, a larger scope than requested by European STS regulation). The following divisions or groups are not surveyed in industry, but are imputed, so that our "total industry" is representative of the full scope of industry for National Accounts.

B06.2	Natural gas, liquefied or in gaseous state	
B07	Metal ores	
B08.91	Chemical and fertiliser minerals	
B08.92	Peat	
B09	Mining support services	
C14.2	Articles of fur	
C18.2	Reproduction services of recorded media	
C19.1	Coke oven products	
C20.6	Man-made fibres	
C23.44	Other technical ceramic products	
C23.49	Other ceramic products	
C24.41	Precious metals	
C24.46	Processed nuclear fuel	
C25.4	Weapons and ammunition	
C26.52	Watches and clocks	
C26.8	Magnetic and optical media	
C28.91	Machinery for metallurgy	
C30.3	Air and spacecraft and related machinery	
C30.4	Military fighting vehicles	
C30.99	Other transport equipment n.e.c.	
C32.11	Coins	
C33.19	Repair services of other equipment	
D35.21	Manufactured gas	
E38.31	Dismantling services of wrecks	

Besides, for B05 Coal and lignite, there is no production in France, so no means to assess a PPI.

Coverage of theoretical scope in terms of activities

OPISE survey covers 99.8% of PPI on the French market according to the European scope and 94% of total industry (sections B to E) in terms of production of covered activities; 96.2% of PPI on foreign markets and 99.0% of PPI on all markets according to the European scope (respectively 89% and 93% on total industry).

<u>Size classes covered</u> Cut-off technique for selection of firms sampled. Firms below 3 million € in a NAF4 commodity-group are generally excluded from the survey.

3.4. Statistical concepts and definitions

List and definition of variables : Producer prices exclude VAT and taxes on the products, but include discounts. They are consistent with turnover of firms by products. Intra-group transactions prices are included in the scope. The PPI are calculated with the same technique (and rely generally on same sample) for domestic and non-domestic markets. Field surveyors regularly visit firms in order to define elementary products that will be followed by OPISE survey. The selected products are representative of a product family. In practice, they are generally the products with the biggest turnover within each family.

Planned changes in information collected : None.

Accounting conventions : The reported price usually corresponds to the average price of the product sold over one calendar month.

3.5. Statistical unit

Reporting unit : Firms. Sometimes several departments of a single firm (due to its organization) or a head office of a group for its affiliates.

Observation unit(s) : Representative products (CPA 4-digit) sold by firms.

3.6. Statistical population

The statistical population is defined by Structural Business Statistics: 220.805 legal units for total industry (sections B to E), representing a 1000 billion euro turnover.

3.7. Reference area

The survey covers French economic territory, including Corsica and overseas departments (Guadeloupe, French Guyana, Martinique, Mayotte and Réunion). On the contrary, ultraperipheric departments (New Caledonia, French Polynesia, Saint Pierre and Miquelon, Wallis and Futuna) are excluded.

3.8. Coverage - Time

Date of first use as a source : The OPISE survey was first used at the beginning of the 90's for some CPA 4-digit level headings. The whole industry index was first published in 2000.

3.9. Base period

It is necessary to distinguish two different levels of aggregation: aggregation of representative transactions to four-digit CPF rev.2 levels and aggregation of CPF rev.2 levels to a higher CPF rev.2 level. These two levels of aggregation are called respectively <u>basic aggregations</u> and <u>higher aggregations</u>.

For basic aggregations, weights correspond to turnover of the year preceding the field officer's visit.

For higher aggregations, indices are chain-linked. Weights used for compiling year Y indices stem from year Y-2 national accounts when Y>=2012, and from Y-1 national accounts when 2006<=Y<=2011. Before 2006, weights correspond to 2005 national accounts. Nevertheless, import price indices are labeled "base 2010". Their reference is 100 in 2010 (annual average).

4. Unit of measure

Indices (reference 100 in 2010) expressed in euro.

5. Reference Period

Figures relate to December 2016. The reference period of our indices are the calendar months.

6. Institutional Mandate

6.1. Institutional Mandate - legal acts and other agreements

Legal basis : A yearly visa from the Minister of economics is given, according to the 1951 law about statistics (2016 visa: 2016M048EC). It also covers import prices of industrial products, service producer price indices and construction price indices in maintenance and improvement of dwellings (~ division 43)

Obligation on units to provide data : The survey is compulsory. Fines can be given for non-respondents but effectiveness is limited in practice.

Planned changes in legal basis, obligation to respond and frame used : None.

6.2. Institutional Mandate - data sharing

The "Centre d'études économiques du bois" ("CEEB", ie Economic studies center on wood) and "Fédération française de l'acier" ("FFA", ie French union of steel) are in charge of collecting prices in their activities (classes 16.10 and 24.10 respectively).

Few price indices are directly transmitted to United Nations Statistics Division (Monthly Bulletin of Statistics questionnaire).

7. Confidentiality

7.1. Confidentiality - policy The producer price index is regulated by the 1951 law about statistics. Every surveyed firm is provided with information about statistical confidentiality.

7.2. Confidentiality - data treatment

Confidential data are not published. That happens in two cases: either there are less than three units to produce the index or one single unit represents more than 85% of the turnover in the commodity-group.

8. Release policy

8.1. Release calendar Producer price index are published around m+30 (last working day of the month).

8.2. Release calendar access

A monthly calendar is produced for the four following months. It can be found on the INSEE website: <u>https://www.insee.fr/en/information/2107811?debut=0</u>.

8.3. Release policy - user access

Simultaneous release to all interested parties : Yes.

Identification of internal government access to data before release : None.

Transmission to Eurostat and further use of the statistics : The transmission to Eurostat is made using the GESMES format, the day before the national release.

9. Frequency of dissemination

Monthly.

10. Accessibility and clarity

Тор

10.1. Dissemination format - News release A 2 page "Informations Rapides" can be found online on the INSEE website, both in French: <u>https://www.insee.fr/fr/statistiques?debut=0&theme=30&conjoncture=44</u> and in English: <u>https://www.insee.fr/en/statistiques?debut=0&theme=30&conjoncture=44</u>

They cover domestic PPI, non-domestic PPI and import prices.

10.2. Dissemination format - Publications National paper publications : No longer available on paper.

National electronic dissemination : See above our comments on press release = 2 pages "Informations Rapides", which can be found online on the INSEE website, both in French: <u>https://www.insee.fr/fr/statistiques?debut=0&theme=30&conjoncture=44</u> and in English: <u>https://www.insee.fr/en/statistiques?debut=0&theme=30&conjoncture=44</u>

10.3. Dissemination format - online database Series can be accessed on https://www.insee.fr/en/statistiques/series/102776019.

10.4. Dissemination format - microdata access

Researchers can require microdata, but they need to come on site, with a special procedure. No readymade files are already available.

10.5. Dissemination format - other Data are also available on <u>https://www.insee.fr/en/information/2512785</u>.

Data are sent to Eurostat the day before the national release.

10.6. Documentation on methodology Some methodology can be accessed on: <u>https://www.insee.fr/en/metadonnees/source/s1133</u>.

10.7. Quality management - documentation

A "quality file" for year 2014 is available in French on Insee website https://www.insee.fr/fr/metadonnees/source/s1296#documentation.

11. Quality management

11.1. Quality assurance

The European statistics code of practice is implemented as far as possible. In particular, selective editing is implemented consistently with EDIMBUS manual.

11.2. Quality management - assessment

The main quality problems are linked to one-off products, misunderstandings between firms and Insee about some elementary price series and some unwillingness from several firms.

The DQAF of French PPI can be found on the IMF framework:

http://dsbb.imf.org/pages/sdds/DQAFBase.aspx?ctycode=FRA&catcode=PPI00

12. Relevance

12.1. Relevance - User Needs These indices allow:

- Economists to evaluate and analyze economic trends;

- National accountants to deflate production that comes from structural business statistics and as such to carry out the breakdown between development of the activity in volume (quantity, quality, structure effect) and development of prices (« price-volume sharing »). They can then track the evolution of Gross Domestic Product and NA aggregates in volume;

- Businesses and local collectivities to escalate contracts;

- International organisations such as Eurostat to compare economic statistics of several Member States.

12.2. Relevance - User Satisfaction

Several claims are expressed every month about some PPI series by firms that use them for contract escalation. Our revision policy allows us to satisfy them generally the following month.

12.3. Completeness

Coverage rate of PPI for French market is 99.8% of the European scope.

Coverage rate of PPI for foreign markets is 96.2% of the European scope.

Coverage rate of PPI for all markets is 99.0% of the European scope.

Non domestic market is splitted between euro zone and non euro zone.

13. Accuracy

13.1. Accuracy - overall

The main sources of error are the following ones:

- Non probability-sampling error (a "cut-off" technique is used);
- Aggregation of indices based on too few representative products;
- Misunderstandings concerning price questionnaires;

- Non-response;

- Errors in data processing;
- Handling of quality changes in products;
- Handling of new products entering and old one exiting from the market;
- Measurement difficulties in unique/one-off products;
- Uncertainty of imputation models.

The revision of "total industry" production price indices is rarely higher than 0.2% a month in absolute terms. No bias on revisions has been observed.

13.2. Sampling error

There is no sampling error strictly speaking as France uses a cut-off technique to select firms.

In every NAF4 commodity-group, main firms are surveyed. It could be a source of bias. Nevertheless, if main firms are price-maker, and other are price-taker, the bias should be low.

13.3. Non-sampling error

Possible multiple listings are identified when field surveyors visit firms. Federation of employers are requested by Insee about under-coverage and over-coverage, so that both are limited when an activity is "refreshed". When time goes by, under-coverage is able to grow: new firms are created and they are not surveyed, new products are sold, and they are seldom surveyed (firms are able to "change products", but they don't do it so frequently).

The list of representative products are discussed face-to-face between firms and field surveyors: this helps improving the response rate and the quality of the survey. Then, firms fill prices every month, by filling an Internet (or paper) form. If necessary, field surveyors are likely to take contact long after the visit.

The main reasons for non-response are: representative products unperfectly defined, no sale during the period under review, difficulties to estimate prices because of an unsuitable information system, change of contact inside firms, momentary "oblivion". Non-responses are estimated through close groups of products, so as to limit their impact on aggregates.

The response rate is approximately 85%. Some actions to speed up or increase the rate of response have been implemented. For internet respondents, if they do not complete the questionnaire, they can receive up to two reminder e-mails. The first is around the 10 of the month following the reference month. If they still do not answer, the second is sent to them around the 20. For paper respondents, only one reminder letter is sent around the 15. Eventually a follow-up call can be made to get the required information. Web-based data collection offers a quicker response time and is favoured (now approximately 85% of responses are provided by Internet).

Data editing helps to focus on price changes that have greatest impact on aggregates. Consequently, other errors may be not seen.

No specific models are used.

14. Timeliness and punctuality

14.1. Timeliness

Indices are released near the 30th of the month following the reference month. They are provisional for three months. All markets, fine details and aggregates are available on same time.

14.2. Punctuality

French release dates are always respected, with one exception in January 2009 due to a strike of Insee's civil servants. The provision of price series to Eurostat is generally punctual, but some technical problems induced an exceptional delay at the end of October 2013 (data were finally sent on the beginning of November 2013, indeed).

15. Coherence and comparability

15.1. Comparability - geographical

Overseas departments are included in French economic territory, whereas ultraperipheric departements are excluded.

15.2. Comparability - over time

PPI in base and reference 2010 have been aggregated and chain-linked since January 2005. Before, they have been backcasted with the help of PPI in base and reference 2005, with a fixed base technique, relying on weights of year 2005.

15.3. Coherence - cross domain

Dissemination of information that support statistical cross-checks and provide assurance of reasonableness: For D35.3, the same data are gathered both for PPI and for CPI.

Confrontation with other data sets: National Accounts confront PPI (total, domestic, non domestic), CPI and import prices and find some inconsistencies. But they can be due to value amounts too, and most often

these inconsistencies are not reported externally to National Accounts team.

PPI are used to compile quarterly and yearly national accounts, and monthly industrial production in volume.

For yearly national accounts, "implicit PPI" (that is to say the ratio production in value / production in volume) may be different than yearly PPI when uses and supply balance requires to do so.

15.4. Coherence - internal

No discrepancies between aggregates and sub-aggregates have not observed.

16. Cost and Burden

The cost of PPI and import prices for Insee is about 8 Full Time Equivalent of a category A statistician, 22 Full Time Equivalent of category B or C civil servants, plus 7 field surveyors (assimilated to category A) + 42.000 euros of mail expenditures. The median for burden is estimated at 30 minutes per month for a respondent.

17. Data revision

17.1. Data revision - policy

The policy of revision is strictly identical both for national release and for data transmitted to Eurostat.

Data are transmitted to Eurostat the day before the national release (under "embargo").

<u>Scheduled revisions</u> Indices are released near the 30th of the month following the reference month (M+30). Firms are still able to change their price for the reference month for three months, so that indices may be updated at M+30, M+60 and M+90 respectively. They also may be revised when CPF4 weights are changed (usually in May, so that indices from January to March may be revised with the May release).

<u>Non-scheduled revisions</u>; Afterwards, indices are only revised if a big mistake is discovered. Then, a specific note is published on website: <u>https://www.insee.fr/en/information/2886952</u>, commenting the reason why and the impact.

17.2. Data revision - practice

The revisions of domestic PPI at market prices for contract escalation are announced on website at the time of change, for each cell concerned (a 'r' near the index shows that it has been modified since the previous release). It happens once or twice a year in average.

Our press release notices the revision brought to the aggregates' price changes for the 3 previous months. In average absolute terms, the stated revisions are of this order:

Revision of the monthly change (in points)

period kind of price index	m-3/m-4	m-2/m-3	m-1/m-2		
French producer prices in industry sold on:					
- the French market	0,03	0,08	0,08		
- the foreign markets	0,04	0,10	0,08		
- all markets	0,01	0,05	0,07		

18. Statistical processing

18.1. Source data

Type of source : OPISE statistical survey, monthly in industry.

Frame on which the source is based : The (annual) structural business survey of firms (SBS) is used. In France, EAP survey combines SBS and Prodcom purposes. The customs data are also used in order to improve the selection of firms and products sold on foreign markets.

Sample or census : A two-stage sample is made: the first one concerns firms, the second one deals with the selection of representative products among the output of firms (with a visit of the firm by field surveyors).

Criteria for stratification : The largest firms are selected until at least 40% and most often 60% of the commodity-group total turnover is covered (cut-off technique). Units that do not fall within these criteria

<u>Top</u>

might be selected to obtain a better coverage of a particular product family, especially when previously selected units appears to be misclassified. The choice of the products is made by field surveyors when visiting selected units. In accordance with the contact person inside the firm, a selection of representative products is made.

Threshold values and percentages : Production units with a turnover less than EUR 3 millions are generally excluded from the survey. There is no threshold as far as turnover is concerned: each firm is weighted according to its weight in the commodity group. Approximately 8,000 firms selected in the survey. Approximately 65,000 representative products recorded in the database.

Frequency of updating the sample : Approximatively every 5 years, for each class of CPA (4-digit level).

18.2. Frequency of data collection

Monthly, sometimes quarterly (especially when the product is not repeatedly sold every month, or in case of tariffs with annual updates, or if firms are required with a heavy burden such as a model pricing).

18.3. Data collection

Questionnaires used in the survey : A unique form is used for the whole sample (including import prices and SPPI). It is pre-filled with the information previously received from the field surveyors and the prices communicated by the firms themselves. Available both on paper and on INSEE's website (https://entreprises.insee.fr/crpi/accueilPVIS.jsp)

Planned changes in national questionnaires : None.

Data collection media : Both postal and electronic data collection are available. Respondents are given access to the website <u>https://entreprises.insee.fr/crpi/accueilPVIS.jsp</u>.

Planned changes in data collection methodology : None.

18.4. Data validation

Selective editing is used in line with EDIMBUS manual, and a "Canadian questionnaire" is implemented on line in order to collect reasons for price change:

Price development > 10% Influential contribution	Yes	Νο	
	Contributes to expertise score calculation If validated, the firm price is kept. Otherwise, the price is imputed (the firm price is not kept).		
Yes	The price manager:	Contributes to expertise score	
(to expertise by the price manager)	 validates the price developments for answers 1 to 3 (some of 6) of Canadian questionnaire without introduction of a quality coefficient, 	calculation Is not imputed	
	 does not need to validate for answers 4, 5 or 6 when justified: the software introduces itself a quality coefficient in order to impute price indices with cautious hypotheses 		
No	Does not contribute to expertise score calculation	Does not contribute to expertise score calculation	
(not to expertise)	Is imputed if not validated and if no answer to the Canadian questionnaire	Is not imputed	

18.5. Data compilation

Estimates for quality change linked with new products :

Many techniques are used, depending on the context:

- Monthly overlap whenever possible;
- Imputation of the average price change in the series (by default);
- Prices kept constant (for tariffs preferably);
- Imputation of the average price change for the same respondent;
- Selection of another product from the same respondent;
- Selection of a similar product from another respondent;
- Imputation of the price change of the main raw material.

When a product disappears, the firm is contacted in order to supply data for a new one.

Estimates for grossing-up to population levels : None.

Type of index : Chain-linked Laspeyres indices in reference 100 in 2010 (annual average), from CPA 4 digits upward.

Method of weighting and chaining : The weights are proportional to the production (sold) on the relevant market. This information is obtained from national accounts at aggregated levels and from the structural business statistical survey (SBS) at CPA 4-digits. Below CPA 4-digit level, the aggregation is made according to the information gathered by the field surveyors during visits.

Planned changes in production methods : Since 2014, the information provided by Prodcom and customs data are taken into account in the annual update of weights.

18.6. Adjustment WDA, SA and other calculations

Gross data only. No correction of working days is carried out, nor are the data seasonally adjusted.

19. Comment

Explanations can be accessed on https://www.insee.fr/en/metadonnees/source/s1133#documentation

IMF DQAF on PPI in English can be accessed on <u>http://dsbb.imf.org/pages/sdds/DQAFBase.aspx?</u> <u>ctycode=FRA&catcode=PPI00</u>.