Industrial import prices

National Reference Metadata in Euro SDMX Metadata Structure (ESMS)

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

Time Dimension: 2016-A0

Data Provider: FR1

Data Flow: STSIND_ESMS34_A

Eurostat metadata
Reference metadata

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

Contact
1.1. Contact organisation
Institut National de la Statistique et des Etudes Economiques (French NSI).

1.2. Contact organisation unit
Direction des statistiques d'entreprises

(Directorate of Business Statistics)

2. Metadata update
2.1. Metadata last certified
13/03/2017

2.2. Metadata last posted
13/03/2017

2.3. Metadata last update
13/03/2017

3. Statistical presentation
3.1. Data description

Name of indicator/source | Import prices of industrial products, collected from OPISE ("Observation des prix de l'industrie et des services") survey

3.3. Coverage - sector

Activities covered

For import price indices of industrial products, the STS regulation requirements are made up of sections B to D of the CPA revision 2 of 2008, with the exclusion of the following products:

- B07.21 Uranium and thorium ores
- B09 Mining support services
- C18 Printing and recording services
- C24.46 Processed nuclear fuel
- C25.4 Weapons and ammunition
C30.1 Ships and boats  
C30.3 Air and spacecraft and related machinery  
C30.4 Military fighting vehicles  
C33 Repair and installation services of machinery and equipment  

Not all products are covered by the survey, but then they are imputed, and the calculation of the "total industry" import prices takes all the "target" scope into account.

Conversely, import prices for C30.1 are released, even if this is not requested by the STS regulation.

| Importance of classes covered | OPISE survey covers in 2016 about 98.7% of imports according to the European scope and 93% of total industry (sections B to D) according to our national target for National Accounts. |

3.4. Statistical concepts and definitions

**List and definition of variables**

*Import price indices of industrial products* track the development of transaction prices (converted into euro, therefore including the exchange effects) of goods and services from foreign industrial (and trade) activities sold on the French market. The measurement covers as much as possible cost, insurance and freight (CIF) prices, which is to say that it is assessed at the French border exclusive of import taxes, in line with European regulation No 1165/98 (nonetheless, the price is extracted from enterprises databases, therefore it is more an « invoice price » than a « CIF price »). All imports are taken into account, whether they are internal to groups or not. Field surveyors regularly visit firms in order to define the elementary products and the kinds of “markets” to be included in the basket. The selected transactions are representative of the price evolution of a transaction family. In practice, they are the products with the biggest turnover within each family. The aim of Insee is to obtain a price close to the real price of transaction.

| Planned changes in information collected | None. |
| Accounting conventions | The reported price often corresponds to the average price of the product bought over one calendar month. |

3.5. Statistical unit

**Reporting unit**

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

**Observation unit(s)**

Family of transactions = fine items of products x typology of "markets" (countries, kinds of providers).

3.6. Statistical population

The statistical population is defined by the customs statistics. There were 130,000 French firms importing industrial products in 2015.

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, ultraperipheral 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 first import index was published in June 2007. The import prices were then backcasted by imports Unit Value Indices.

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 basic aggregations and higher aggregations.
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

| Reference year of this report | 2016 (December, as the periodicity of the import prices is monthly). |

6. Institutional Mandate

6.1. Institutional Mandate - legal acts and other agreements

| Legal basis | A yearly visa from the Minister of economy is given, according to the 1951 law about statistics (2016 visa: 2016M048EC). This visa also covers producer prices indices in industry, services 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 statistical service of French customs provides Insee with a detailed file by firm, kind of product and partner country.

These industrial import prices, combined with agricultural import prices, provide import prices by SITC sections, which OECD downloads on Insee website: https://www.insee.fr/fr/statistiques/series/102776019.

7. Confidentiality

7.1. Confidentiality - policy

Dissemination of terms and conditions under which official statistics are produced, including confidentiality of individual responses: The producer price index is regulated by the 1951 law about statistics. Every surveyed firm is provided with information on 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 purchases in the commodity-group.

8. Release policy

8.1. Release calendar
Advance dissemination of release calendar: Import price indices are published around m+30 (last working day of the following month).

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

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

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

10.3. Dissemination format - online database

10.4. Dissemination format - microdata access
Researchers can ask for microdata, but they need to come on site, with a special procedure. No ready-made files are already available.

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

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

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

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/s1297#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 us on
some elementary price series and some unwillingness from several firms.

The DQAF of French PPI (very similar to import prices for source and technique) can be found on the IMF framework:

12. Relevance
12.1. Relevance - User Needs
Import price indices allow the European Central Bank (ECB) to analyze flows inside and outside the euro area.

National Accounts use them as deflators.
Moreover, businesses can use some of them in order to escalate their contracts.
Businesses or macroeconomists can use these indices to track movements of import prices and materials’ costs in their field, and evaluate their competitiveness compared to their competitors.
International organisations such as Eurostat can compare them among all (or most) member states.

12.2. Relevance - User Satisfaction
Few claims are expressed every month about some import price series by firms that use them for contract escalation. Our revision policy allows us to satisfy them generally the following month.

12.3. Completeness
OPISE survey covers in 2016 about 98.7% of imports according to the European scope.
As far as we know, all Eurostat requirements are fulfilled.

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" import 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 CPF4 commodity-group, main purchasers are surveyed. It could be a source of bias.

13.3. Non-sampling error
Possible multiple listings are identified when field surveyors visit firms. Customs database is used for sampling, which can avoid both undercoverage and multiple listings and limit overcoverage when an activity is "refreshed". When time goes by, undercoverage is able to grow: new importing firms are not surveyed, new products are bought, 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 purchase 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 10th of the month following the reference month. If they still do not answer, the second is sent to them around the 20th. For paper respondents, only one reminder letter is sent around the 15th. 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 have 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 departments are excluded.

15.2. Comparability - over time
Import price indices in base and reference 2010 have been aggregated and chain-linked since January 2005. Before, they have been backcasted with the help of Unit Value Indices in base and reference 2005, with a fixed base technique, relying on weights of year 2005.

15.3. Coherence - cross domain
Industrial import prices are used to compile quarterly and yearly national accounts.

For yearly national accounts, "implicit import prices" (that is to say the ratio imports in value / imports in volume) may be different than yearly import prices 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").

Scheduled revisions
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).

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

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

Revision of the monthly change (in points)

<table>
<thead>
<tr>
<th>Import prices of industrial products</th>
<th>m-3/m-4</th>
<th>m-2/m-3</th>
<th>m-1/m-2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0,03</td>
<td>0,08</td>
<td>0,06</td>
</tr>
</tbody>
</table>

18. Statistical processing
18.1. Source data

<table>
<thead>
<tr>
<th>Type of source</th>
<th>OPISE statistical survey, monthly for import price indices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame on which the source is based</td>
<td>Customs statistics.</td>
</tr>
<tr>
<td>Sample or census</td>
<td>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 the field surveyors).</td>
</tr>
<tr>
<td>Criteria for stratification</td>
<td>The largest firms are selected until at least 30% and most often 50% of the commodity-group total imports is covered. Units that do not fall within these criteria 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 they visit the selected unit. In accordance with the contact person inside the firm, a selection of representative products is made.</td>
</tr>
<tr>
<td>Threshold values and percentages</td>
<td>Firms with amounts less than EUR 3 million are generally excluded from the scope.</td>
</tr>
<tr>
<td>Frequency of updating the sample</td>
<td>Every 5 years, for each class of CPA (4-digit level).</td>
</tr>
</tbody>
</table>

18.2. Frequency of data collection

| Periodicity of data collection | Monthly, sometimes quarterly (especially when the product is not repeatedly purchased every month). |

18.3. Data collection
Questionnaires used in the survey: A unique form is used for the whole sample (including PPI 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 https://entreprises.insee.fr/crpi/accueilPVIS.jsp.

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:

<table>
<thead>
<tr>
<th>Price development &gt;10%</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influential contribution</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(to expertise by the price manager)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Contributes to expertise score calculation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If validated, the firm price is kept. Otherwise, the price is imputed (the firm price is not kept). The price manager: - validates the price developments for answers 1 to 3 (some of 6) of Canadian questionnaire without introduction of a quality coefficient, -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</td>
<td>Contributes to expertise score calculation</td>
</tr>
<tr>
<td></td>
<td>Is not imputed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does not contribute to expertise score calculation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is imputed if not validated and if no answer to the Canadian questionnaire</td>
<td>Does not contribute to expertise score calculation</td>
</tr>
<tr>
<td></td>
<td>Is not imputed</td>
<td></td>
</tr>
</tbody>
</table>

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 2010, from CPA 4 digits upward.
Method of weighting and chaining: The weights are proportional to the imports on the relevant zone (euro or non-euro area). This information is obtained from national accounts at aggregated levels and from the customs statistics at CPA 4-digits. Below CPA 4-digit level, the aggregation is made according to the
information gathered by 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 http://dsbb.imf.org/pages/sdds/DQAFBase.aspx?ctycode=FRA&catcode=PPI00.