

Industrial production index

Fields covered by the index

Industrial production indices (IPI) are calculated for industry and the construction sector. They cover the sections B, C, D and E (of NAF rev. 2) for industry and the sector F for construction.

Dissemination

In the *Informations Rapides*, the indices are disseminated at levels A 10, A 17 and A 38 of the aggregate classification (NA) associated with NAF rev. 2; they are also disseminated according to the Main Industrial Groupings (MIG) defined by Eurostat.

In addition to the aggregate levels, more detailed levels – the divisions, groups and classes in NAF rev. 2 – are also disseminated on the INSEE website:

<http://www.indices.insee.fr/>

<http://www.bdm.insee.fr/>

Industrial production indices are also disseminated by Eurostat in the European classifications.

Sources

The industrial production indices are calculated by INSEE by means of branch surveys conducted by INSEE, the SSP, the SOES and professional bodies. The products monitored are to be found at all levels of the manufacturing process: they therefore provide the best representation of activity in industry as a whole.

Rebasing to 2010

Industrial production indices are Laspeyres indices (with constant weightings over time) of production volumes. They are rebased every five years; the indices published for the years 2013 to 2018 will be 2010 based, that's to say that the weightings of the different levels correspond to values calculated for the year 2010. They are also published with a reference 100 in 2010, which means that the indices have a mean of 100 in 2010.

The constant weightings of the branches are their 2010 raw values added to the basic prices. By definition, the values added to basic prices exclude taxes on the products but include subsidies on the products; they do not include transport provisions. The constant weightings were calculated using data of the annual national accounts and those of the annual production survey. Within each branch, the index is based on a representative sample of activities weighted by their turnover figures (in the annual branch surveys).

A major renovation of the IPI was conducted for the 2010 rebasing. To bring the French IPI to the best international standards, including the UN Recommendations (2008), the number of series observed in deflated turnover was increased and the number of series observed in quantities was reduced. This change affects 59 series of the 2010 based IPI, and allows to better take into account the growth generated by the evolution of the quality of products. In addition, declining activities whose weight had become too low have been grouped or removed, while expanding activities have been broken down into more detail. Among the 520 series of the 2010 based IPI, 33 result from the combination of several series of 2005 based IPI and 11 are fragments of series of the 2005 based IPI that have been exploded. In addition, in order to improve the coverage of the IPI, the field of 17 series was expanded with new products and 21 entirely new series were created. Finally, the 520 series capture the monthly evolution of construction and of the production in industry for 91 groups and, since the release of October 2015, 203 classes of the NACE rev 2. For modified or new series, there are no direct observations since 1990, but only a monthly continuous observation from a more recent date. The evolution of these series from 1990 to the first observed value were assumed equal to the evolution of the original series, or in cases of completely new series, to the evolution of the branch of industry they belong to.

Corrections for seasonal variations and for working days

The series are corrected for seasonal variations and calendar effects (SWDA). An estimate of these effects (with a view to neutralising them) is performed with the X12-Arima programme in JDemetra+ (supplied by the European Commission). It is carried out at the NAF rev. 2 classes level. For the upper levels, SWDA series are obtained thanks to aggregation of classes level series (indirect SWDA correction).

The annual mean of SWDA indices may differ slightly from that of the raw indices because it takes into account the variations from one year to the next of the annual composition in working days: presence of leap years, position in the week of the various bank holidays, etc.

Periodic rectifications and updates

The responses from enterprises questioned in branch surveys are not always fully available when the index is first published. An estimate is therefore required. The integration of these delayed responses into the index results in the revision of the raw data over the following months.

In most branches, annual or sometimes quarterly surveys provide exhaustive results on the civil year or quarter preceding the last period covered. The monthly and annual data are then made consistent in order to include the most complete information since the start of the covered period. These rectifications are regularly taken into account when the indices are published. The raw indices then become definitive.

The SWDA models are updated once a year, but the coefficients are updated monthly. This latter update takes into account the data of the month under review and the most recent available revisions of the data relating to the previous months. When the indices are published, all the SWDA indices published on the INSEE website are updated from 1990.

Detailed documentation

- The industrial production index: description and methodology
<http://www.insee.fr/en/methodes/default.asp?page=sources/sou-ind-prod-indus-ipi.htm>
- “L’indice de la production industrielle ; sources et méthodes de la base 1995”, *Insee Méthodes* n°104, March 2003 (in French).