# **Turnover in industry and construction**

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Turnover indices for industry and construction are monthly value indices. Turnover indices for exports are also published. They show changes in turnover achieved with foreign countries.

## Scope

The turnover indices for industry and construction cover sections B, C, D, E, and F of the French classification of activities, NAF rev. 2 2008. The "Overall industry" published scope covers sections B, C, D and E.

These indices are calculated using the monthly VAT returns filled in by businesses whose head office is in France. So, their geographical coverage is France including overseas departments (excepted French Guyana and Mayotte, where businesses are not liable for VAT).

#### Dissemination

In *Informations Rapides*, the indices are published at levels A 10, A 17 and A 38 of the aggregate classification (NA) associated with NAF rev. 2.

The more detailed levels, the divisions and groups of NAF rev. 2, are available on the INSEE website in raw data and in seasonally adjusted (SA) and calendar effect adjusted (working day adjusted WDA) data; the sub-class level is published only in raw data:

- http://www.indices.insee.fr/
- http://www.bdm.insee.fr

Turnover indices are also disseminated by Eurostat according to European classifications.

# Sources

Turnover indices are calculated using a tax source, form CA3, which businesses fill in for the payment of value added tax (VAT). The forms provides turnover excluding VAT of the declaring business, all activities combined, classified according to its principal activity.

Turnover indices for export are based on the total amount of turnover declared by businesses on export outside the European Union and deliveries supplied within the Community.

#### Base 2010

The raw data indices are calculated at the most detailed level of the French classification of activities: sub-classes of NAF rev. 2. At the most disaggregated level, the index of the month M is calculated by linking the index of the month M-12 to the variation of the turnover between M-12 and M. All the businesses that have declared on the month M are contributing to the calculation of this variation.

Indices for the broader sectors are calculated as Laspeyres indices (with constant weightings over time) from the most detailed indices. They are rebased every 5 years; indices currently published use base 2010, i.e. the weightings of the different levels correspond to values calculated for the year 2010. They are also published with a reference of 100 in 2010, i.e. the indices have a mean of 100 in 2010.



The constant weightings of the elementary indices relate to production sold in the branches in 2010 at basic prices. By definition, production at basic prices excludes tax on the products, but includes subsidies on products; transport services are not included. Weightings are calculated using data from national accounts and the annual sector survey 2010.

#### Corrections for seasonal variations and working days

The series are corrected for seasonal adjustments (SA) and calendar effects (working day adjustments WDA). An estimate of these effects is produced with the X12-Arima software in Demetra+ (supplied by Eurostat) at the group levels of NAF rev. 2. SA-WDA indices for higher levels are obtained by aggregating the SA-WDA indices of the sub-classes that make up the level.

The annual mean of the SA-WDA indices can slightly differ from that of the raw indices because it takes into account variations from one year to the next in the annual composition in working days: presence of leap years, position in the week of various public holidays, and so on.

#### Periodic corrections and updates

Businesses declarations are not always fully available when the index is first published. Late responses are incorporated into the index afterwards, and thus the raw data are revised.

The calculation of the SA-WDA coefficients is updated monthly for the whole of the dissemination period (from January 1999). In addition, all of the SA-WDA models are revised annually. This updating may also modify all the values in the SA-WDA series.

#### Processing business declarations

The tax authority provides INSEE with VAT returns every month. Until the publication of the December 2015 indices in February 2016, turnover indices were built based on a sample of roughly 150 000 businesses in metropolitan France which declare the VAT monthly. This sample was renewed every year.

Since the publication of January 2016 indices in March 2016, turnover indices are calculated over all monthly VAT returns. This new methodology produces turnover indices of better quality. It takes better account of business' demography and so, reflects more accurately the economic reality. On the one hand, it gets rid of annual samples using all the monthly VAT returns, while information techonology enables now to process largest volumes of data. Until then, turnover indices calculated for any given year (Y) did not take into account either business births or deaths, scope entries or exits, or changes of sector occurred during the year Y, because the corresponding sample was drawn on 31 December of the year (Y-1). On the other hand, this new methodology is built on the statistical register SIRUS (instead of the administrative register SIRENE) to take into account the most recent demographic events which have impacted the businesses more quickly and more automatedly.

# Processing restructuring

Structural modifications (or restructuring) likely to affect the sectoral outline of the VAT declarations are processed specifically: companies that have undergone a structural modification during the current year are reconstituted to the way they were before restructuring for the period following this modification, and companies that have undergone restructuring in the previous year are reconstituted to the way they were after the restructuring for the period preceding this modification.

### The different VAT assessment systems

Type of activity and amount of turnover are the two main criteria which determine a business's VAT assessment system. However, if they prefer, businesses have the possibility of opting for a higher assessment system[1].

Businesses are covered by:

- either the basic exemption system;
- · or the simplified real assessment system;
- · or the normal real assessment system.

Businesses subject to the normal real tax system have to declare their turnover on form CA3 every month except if the annual VAT payable is less than €4,000. In that case, the business is allowed to declare quarterly.

## Detailed documentation

- Turnover indices: description and methodology http://www.insee.fr/en/methodes/default.asp?page=sources/ope-ica.htm
- Taking better account of businesses demography in monthly turnover indices by a complete exploitation of monthly VAT returns, INSEE, March 2016 <a href="http://www.insee.fr/en/methodes/sources/pdf/ICA">http://www.insee.fr/en/methodes/sources/pdf/ICA</a> demographie-entreprises en.pdf
- Rénovation de la méthodologie de calcul des indices de chiffres d'affaires Présentation et analyse des impacts, Insee, mars 2016, 8 p http://www.insee.fr/fr/methodes/sources/pdf/ICA Analyse impacts nouvelle methodologie 2016.pdf