

Sales volume in retail trade and services to households

Sales volume indices for retail trade and household services indices are monthly indices in volume: they track variations in the volume of sales. Turnover indices in value are also available on the insee.fr website.

Scope

Sales volume indices for retail trade and household services covers the divisions Trade and repair of motor vehicles and motorcycles (45) and Retail trade except of motor vehicles and motorcycles (47) and the sections Accommodation and food service activities (I), Arts, entertainment and recreation (R) and Other service activities (S) of the French classification of activities, NAF rev. 2 2008.

The indices are calculated using 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 disseminated for divisions 45 and 47 and for sections I, R and S of NAF rev. 2. Moreover, indices are calculated for specific aggregations:

- Services to households combining sections (R) and (S);
- Not specialised trade, that means food supermarkets, combining sub-classes 47.11D to 47.11F;
- Trade in specialised stores, combining retail sale of food (47.2), automotive fuel (47.3), information and communication equipment (47.4), other household equipment (47.5), cultural and recreation goods (47.6) and retail sale of other goods in specialised stores (47.7);
- Trade not in stores combining retail sale via stalls and markets (47.8) and retail trade not in stores, stalls or markets (47.9); this last item includes distance or online selling and sales from door to door;
- Clothing, footwear and leather goods combining retail sale of clothing (47.71) and of footwear and leather goods (47.72) in specialised stores.

The more detailed levels of NAF rev. 2, i.e. divisions, groups, classes and sub-classes, are disseminated on the INSEE website:

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

The 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 form provides turnover excluding VAT of the declaring business, all activities combined, classified according to its principal activity.

Volume indices are obtained by deflating the value indices by a price index which is representative of the products sold and obtained by aggregating the household consumer price indices of the products concerned.

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 VAT for 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 taxes 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.

Index of sales volume in retail trade within 30 days

Indices of turnover and sales volume are published two months after the end of the month being studied. For the whole retail trade, an early estimate of sales volume is also published within 30 days.

This estimate is based on econometric equations for which the main explanatory variables are currently:

- results of the monthly survey of retail trade by the Bank of France household equipments and food products;
- results of the monthly INSEE survey on the activity of large-scale food retailing, for supermarkets and hypermarkets sales;
- results of the monthly INSEE survey on the activity of large-scale food retailing, for fuel sales in supermarkets and hypermarkets;
- household consumer price index for fuels.

Corrections for seasonal variations and working day

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 JDemetra+ (supplied by Eurostat) at the sub-classes level 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

Business returns 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 SA-WDA coefficients calculation is updated monthly for the whole of the dissemination period (from January 1999 onwards). 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 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 enables to produce turnover indices of better quality. It takes better into account business demography and so, reflects more accurately the economic reality. On one hand, it gets rid of annual samples using all the monthly VAT returns, while the information technology enables now to process huge volumes of data. Until then, turnover indices calculated for any given year (Y) did not take into account either businesses births and 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 automatically.

Processing restructuring

Structural modifications (or restructuring) likely to affect the sectoral outline of the VAT declarations are processed specifically: businesses 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 businesses 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 company's VAT assessment system. However, if they prefer, businesses have the possibility of opting for a higher assessment system.

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 company 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 business demography in monthly turnover indices by a complete exploitation of monthly VAT returns*, INSEE, March 2016
http://www.insee.fr/en/methodes/sources/pdf/ICA_demographie-entreprises.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