## What changed for turnover indexes since March 31st

## On March 31st 2016, INSEE published turnover indexes according to a new methodology

At the end of each month, INSEE publishes turnover indexes of the month M-2. Since the end of March 2016, turnover indexes are created through a renewed process to improve quality.

Turnover indexes are built from administrative data: VAT form completed by companies to pay VAT. This form includes turnover sales of declaring company, all activities combined, categorized under their main activity.

Turnover indexes are Laspeyres indexes, with fixed weights over time. They are rescaled every five year; published indexes are currently based year 2010, that means that the weightings of the various levels correspond to values calculated over the year 2010. These indexes are also published with a reference of 100 in 2010, that means that their mean is 100 in 2010.

The constant weightings of every elementary index are the 2010 branch turnover at the basic prices. By definition, turnover by branch at basic prices corresponds to the sum of the productions valued by the purchase prices of the buyers plus subsidies on products less taxes on products; it doesn't include transport services. Weightings are calculated from data of national accounts in base 2010 and from the 2010 annual sectoral survey.

## Indexes calculation is improved

INSEE has has been using VAT data since 1976. The tax authority provides INSEE with VAT returns every month. So far, turnover indexes were built based on a sample of roughly 150 000 companies in metropolitan France which declare the VAT monthly.

This sample was renewed at the end of the year. It included one exhaustive stratum composed of the largest companies of each sector and was picked in proportion to the turnover on the rest of the scope.

As of March 31st 2016, turnover indexes are calculated over all monthly VAT returns, completed by 1,5 million legal units whose head office is in France. So, these indexes cover "whole France" including overseas departments, excepted French Guyana and Mayotte, which are not liable to VAT.

This new methodology enables to produce turnover indexes of better quality. It takes better into account companies' demography and so, reflects more specifically the economic reality. On the one hand, it frees itself from annual samples using all the monthly VAT returns. Until then, turnover indexes calculated for any given year (Y) did not take into account nor companies starts-ups or bankruptcies, movements in the scope, neither changes of sector occurred during the year Y, because the corresponding sample was drawn on December 31st of the year (Y-1).

On the other hand, this new methodology is built on statistical register SIRUS to take into account more quickly and more automatically demographic events.

The new calculation process enables to introduce various demographic aspects (starts-ups, bankruptcies, changes of sector, listing on the scope), that were before very incompletely taken into account in turnover indexes. Thus, it becomes possible to measure the impact of every demographic component and to better understand turnover changes in a given economic sector.

Turnover indexes series have been recalculated with this new methodology since January 1999.



## **Detailed documentation**

- Turnover indexes: description and methodology http://www.insee.fr/en/methodes/default.asp?page=sources/sou-ica.htm
- A better taking into account of companies demography in monthly turnover indexes by a complete exploitation of monthly VAT returns INSEE, March 2016,, 4 p. 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.
   <a href="http://www.insee.fr/fr/methodes/sources/pdf/ICA\_Analyse\_impacts\_nouvelle\_methodologie\_20">http://www.insee.fr/fr/methodes/sources/pdf/ICA\_Analyse\_impacts\_nouvelle\_methodologie\_20</a>
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