

Revised Turnover Index and New Orders Index in Industry (2005=100.0)

General review

The Industrial Turnover Index and New Orders Index are new short-term indices that are compiled **monthly** on the framework of requirements of the Council Regulation (EC) No 1165/98 concerning short-term statistics, as well as the amendment Regulation (EC) No 1158/05 of the European Parliament and Council, amending the Council Regulation No1165/98. The indices were first compiled in 2006, with base year 2000=100.0 and has been recently revised and rebased with base year 2005=100.0.

Purposes of the industrial short-term indicators

The need for the aforesaid indices arose primarily from the signing of the Treaty of Economic and Monetary Union (EMU), which acknowledged the necessity of having reliable statistics rapidly available for the purpose of analysing the economic performance of each Member State within the framework of implementation of EU economic policy.

More specifically, the objectives of compiling each of the short-term industrial indicators are the following:

- The Turnover Index is an indicator of an enterprise's business cycle showing the monthly evolution of the market of goods and services in industry. The aim of this index is to measure the activity of the industrial sector in terms of value. Turnover comprises the totals invoiced (without VAT) by the enterprise during the reference period, and corresponds to the market sales of goods or services supplied to third parties. The aims and characteristics of the turnover index also apply to the sub-indicators for domestic and non-domestic turnover separately.
- The purpose of the Industrial New Orders Index is to assess the future evolution of demand for goods and services in industry as an indication of future production. An order is defined as the value of the contract linking the producer and a third party in respect of the provision by producer goods and services. This index is also suitable to indicate whether the demand originates from the domestic or the non-domestic market.

Revision of Turnover Index and New Orders Index in Industry

The recent revision of Turnover Index and New Orders Index in Industry, with base year 2005=100.0, was based on the results of the annual survey of the production and sales of industrial products (PRODCOM) for the year 2005, the annual Industrial survey for 2005, the annual Mining-Quarrying survey for 2005, the annual External Trade survey for 2005, all carried out by the NSSG. The revision took place on the framework of the requirements of the Council Regulation (EC) No 1165/98 concerning short-term statistics, according to which short-term indices are revised every five (5) years, particularly on calendar years ending with a 0 or a 5.

Statistical classification

At the recent revision of the indices, the new Eurostat classification NACE Rev.2 has been applied at the level of categories of economic activities (Council Regulation

1893/2006), along with the new Eurostat classification CPA 2008 at product level (Council Regulation 451/2008).

The revised Industrial Turnover Index (2005=100.0) covers all activities listed in Sections B and C (Mining-Quarrying and Manufacturing) as defined in the NACE Rev. 2 classification.

The revised Industrial New Orders Index (2005=100.0) covers only Divisions 13, 14, 17, 20, 21, 24, 25, 26, 27, 28, 29 and 30 of Section C (Manufacturing) as defined in the NACE Rev. 2 classification.

Indices currently being compiled

The short-term industrial indicators currently being compiled, allowing for the separation of transactions according to the product's destination (on the framework of requirements of the aforesaid amendment Regulation (EC) No 1158/05 of the European Parliament and Council), are the following:

Turnover Indices in Industry

- Turnover Index in Industry (Total Market)
- Turnover Index in Industry for the Domestic Market
- Turnover Index in Industry for the Non-Domestic Market
- Turnover Index in Industry for the Eurozone Countries
- Turnover Index in Industry for the Non-Eurozone Countries

New Orders Indices in Industry

- New Orders Index in Industry (Total Market)
- New Orders Index in Industry for the Domestic Market
- New Orders Index in Industry for the Non-Domestic Market
- New Orders Index in Industry for the Eurozone Countries
- New Orders Index in Industry for the Non-Eurozone Countries

Size of samples of enterprises/establishments

The sampling unit used in compiling the indices is the enterprise and the sample of enterprises surveyed comprise 1,200 enterprises for the Turnover Index and 550 enterprises for the New Orders Index. It should be noted that, in the manufacturing sector, only establishments employing ten or more persons were considered for inclusion in the sample for these indices.

Computation of the Indices

The method and the procedure of the calculation of the indices is described here. The Turnover Index and New Orders Index in Industry is calculated initially at the four-digit level of economic activity and subsequently, with the implementation of appropriate weighting coefficients, the index is calculated at higher levels (three-level, two-level and one-level of economic activity) or at the level of Main Industrial Groupings (MIGs).

More specifically, in order to compile the index at the four-digit level k, the value of turnover or new orders of all the surveyed enterprises, for the month t, need to be computed and be compared to the average monthly value of turnover of the base year (2005=100.0), as follows:

$$I_{k,t} = \frac{y_{k,t}}{y_{k,0}}$$

where:

- $y_{k,t}$: the monthly turnover or new orders value of all the surveyed enterprises at the four-digit level k during the month t,
- $y_{k,0}$: the average monthly turnover or new orders value of all the surveyed enterprises at the four-digit level during the base year (2005).

The index I, at three-level, two-level and one-level of economic activity or at the level of MIGs, is compiled as follows:

$$I_t = \sum_k w_k I_{k,t}$$

where:

$$w_k = \frac{Y_{k,0}}{\sum_k Y_{k,0}} \quad (\text{weighting coefficient of the four-digit level k})$$

- $Y_{k,0}$: (a) the annual turnover value of all the enterprises of the four-digit level, in the base year, according to the results of the annual Industrial survey and the annual Mining-Quarrying survey for 2005, for the compilation of the Turnover Index and (b) the annual new orders value of all the enterprises of the four-digit level, in the base year, according to data from the surveyed enterprises for 2005, for the compilation of the New Orders Index.

- $\sum_k Y_{k,0}$: the annual turnover value or new orders value of all the four-digit levels k which compose the level for which the index is being compiled (three-digit, two-digit, one-digit level).

The sub-indicators for domestic and non-domestic market (with the distinction to Eurozone and non-Eurozone countries) are compiled correspondingly, with the values to be distinguished according to the product's destination to domestic and non-domestic market. Moreover, the weighting coefficients are separated to two categories depending on the product's destination, according to the results of the annual External Trade survey for 2005.

Weighting coefficients

The weights at the various levels (products, economic activities, main industrial groupings), and taking into consideration the need to distinct between the domestic market and the two zones of the non-domestic market, are based on the total turnover values of the products that are disposed to the domestic market and the two zones of the non-domestic market, during the base year 2005=100.0, according to the results of the following NSSG surveys:

- the annual Industrial survey for the year 2005,
- the annual survey of the production and sales of industrial products (PRODCOM) for the year 2005,
- the annual Mining-Quarrying survey for the year 2005, and
- the annual External Trade survey for the year 2005, as regards the data for exports of industrial products to Eurozone and Non-Eurozone countries.

In addition, when calculating the weights, a distinction was made between Eurozone and Non-Eurozone countries, from product level to the level of general indices.

Backcasting of time series

In order to deal with the problem of lack of continuity between the revised (2005=100.0) and the previous (2000=100.0) time series of the Turnover Index and New Orders Index in Industry, back calculation and readjustment of the previous time series has been performed, according to the Council Regulation 472/2008 about backcasting.

The available full time series of the revised Turnover Index and New Orders Index in Industry (2005=100.0) consists of the converted indices for the period 2000-2004 and of the re-calculated indices using the new weighting scheme from the year 2005 and onwards.

Publishing and releasing data of the Turnover Index and New Orders Index in Industry

The Industrial Turnover Index and New Orders Index are released monthly in a Press Release of standardized form, 50 days after the end of the reference month. The dates of the press releases are decided upon at the end of the previous year and are listed in the NSSG annual calendar of press releases.

The data from the revised indices (2005=100.0) were first released with January 2009 as their first reference month and their time series are published in a Press Release, as well as on the NSSG website www.statistics.gr, since January 2000.

Weighting coefficients of New Orders Indices in Industry
(2005=100.0)

NACE Rev.2 code	Divisions of economic activity	Weighting coefficients %				
		Total Market	Domestic Market	Non- Domestic Market	Non- Domestic Market Eurozone	Non- Domestic Market Non- Eurozone
C	MANUFACTURING	100.00	100.00	100.00	100.00	100.00
13	Textiles	6.11	5.58	7.06	9.56	4.42
14	Wearing apparel	7.04	5.57	9.70	14.11	5.03
17	Paper and paper products	5.17	7.19	1.50	1.25	1.77
20	Chemicals and chemical products	12.91	14.34	10.30	6.68	14.14
21	Basic pharmaceutical products and pharmaceutical preparations	6.08	8.05	2.50	2.11	2.92
24	Basic metals	31.83	25.38	43.56	40.95	46.32
25	Fabricated metal products	11.43	14.16	6.44	4.76	8.22
26	Computers, electronic and optical products	2.25	1.59	3.44	4.77	2.04
27	Electrical equipment	8.54	7.87	9.76	10.64	8.83
28	Machinery and equipment n.e.c.	3.62	3.55	3.76	2.82	4.76
29	Motor vehicles, trailers and semi-trailers	1.56	2.26	0.30	0.30	0.29
30	Other transport equipment	3.47	4.46	1.67	2.06	1.25
	MAIN INDUSTRIAL GROUPINGS	100.00	100.00	100.00	100.00	100.00
1	Energy					
2	Intermediate goods	61.03	56.13	70.34	62.78	78.43
3	Capital goods	16.86	20.34	10.05	10.92	9.11
4	Durable consumer goods	3.67	3.58	3.84	6.21	1.31
5	Non-durable consumer goods	18.45	19.95	15.77	20.09	11.15