Industry, commerce and services

Compiling agency: Eurostat, the statistical office of the European Union

Eurostat metadata

Reference metadata

For any question on data and metadata, please contact: EUROPEAN STATISTICAL DATA SUPPORT

1. Contact

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1.1. Contact organisation	Eurostat, the statistical office of the European Union
1.2. Contact organisation unit	Unit G3: Short-term statistics
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2. Metadata update

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2.1. Metadata last certified	10 March 2010
2.2. Metadata last posted	14 May 2009
2.3. Metadata last update	10 March 2010

3. Statistical presentation

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3.1. Data description

New activity classification (NACE Rev 2) and base year being implemented in STS

A new version of the European standard classification of productive economic activities (NACE) is being implemented in STS starting with data for January 2009. In March 2009, monthly indicators (e.g. retail trade deflated turnover index or industrial production index) will be disseminated in the NACE Rev 2 classification.

Quarterly data will change over with the first quarter of 2009, so in June 2009. In future, STS indicators will be published by Eurostat exclusively in NACE Rev 2. Simultaneously with the introduction of NACE Rev 2 a new base year (2005) for the indices will be adopted to better reflect the present economic structure. ***The information in this metadata file reflects the data in NACE Rev.2, base year 2005.***

Industry, Commerce and Services statistics are part of Short-term statistics (STS), they give information on a wide range of economic activities according to **NACE Rev.2** classification (Statistical Classification of Economic Activities in the European Community). The industrial import price indices offer information according to the CPA classification (Statistical Classification of Products by Activity in the European Economic Community).

All data under this heading are **index** data. **Percentage changes** are also available for each indicator.

The index data are presented in the following forms:

- Unadjusted
- Working-day adjusted (Production, Turnover in wholesale and retail trade and other services, Hours worked)
- Seasonally-adjusted

Data are accessible as **monthly** and **quarterly** data. This heading covers the indicators listed below in five different sectors.

INDUSTRY

- Production Index
- Turnover Index
- New Orders Received Index
- Producer Prices (Domestic Output Prices index)
- Import Prices Index: Total, Euro area market, Non euro area market (euro area countries only)
- Labour Input Indicators: Number of Persons Employed, Hours Worked, Gross Wages and Salaries

CONSTRUCTION

- Production Index: Total of the construction sector, Building construction, Civil Engineering
- New orders (Total of the construction sector, Building construction, Civil Engineering): since 2006 this indicator is transmitted by the Member States on a voluntary basis
- Labour input indicators: Number of Persons Employed, Hours Worked, Gross Wages and Salaries
- Construction costs Index
- Building permits indicators: Number of dwellings

RETAIL TRADE

- Volume of sales (deflated turnover)
- Turnover (in value)
- Labour input indicators: Number of Persons Employed

OTHER STATITICS

- Number of new car registrations==>This indicator is not a STS legal requirement for the Member States. The national data are collected by the European Automobile Manufacturers Association (ACEA - Association de Constructeurs Européens d'Automobiles). Eurostat only compiles the European time series based on the information provided by ACEA.

3.2. Classification system

NACE Rev.2 classification (Statistical Classification of Economic Activities in the European Community) is used for all the STS indicators, except Industrial Import Prices*;* for this indicator, the information is available according to CPA classification (Statistical Classification of Products by Activity in the European Economic

Community).The split of the construction indicators into *Building* and *Civil engineering* is made based on CC classification (Classification of Types of Construction).

3.3. Sector coverage

INDUSTRY

The indicators in this sector cover economic activities listed in sections B to E of NACE (B-Mining and quarrying, C-Manufacturing, D-Electricity, gas, steam and air conditioning supply, E-Water supply; sewerage, waste management and remediation activities) ; the import prices indicator covers products listed in Sections B, C and D of the CPA.

CONSTRUCTION

The indicators in this sector cover economic activities listed in section F of NACE (Construction). The breakdown into Building and Civil engineering required for certain indicators is based on CC classification.

RETAIL TRADE AND OTHER STATISTICS

The indicators in this sector cover economic activities listed in section G of NACE (Wholesale and retail trade; repair of motor vehicles and motorcycles).

3.4. Statistical concepts and definitions

Detailed definitions of each indicator are described in the Commission Regulation 1503/2006.

PRODUCTION

The objective of the production index is to measure changes in the volume of output at close and regular intervals, normally monthly. It provides a measure of the volume trend in value added over a given reference period. The production index is a theoretical measure that must be approximated by practical measures.

Value added at basic prices can be calculated from turnover (excluding VAT and other similar deductible taxes directly linked to turnover), plus capitalised production, plus other operating income plus or minus the changes in stocks, minus the purchases of goods and services, minus taxes on products which are linked to turnover but not deductible plus any subsidies on products received. The division of production in construction between building construction and civil engineering is based on the classification of types of construction (CC).

TURNOVER

It is the objective of the turnover index to show the development of the market for goods and services.
Turnover comprises the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties. Turnover also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice.

Turnover excludes VAT and other similar deductible taxes directly linked to turnover as well as all duties and taxes on the goods or services invoiced by the unit.
The indices of domestic and non-domestic turnover require turnover to be split according to the first destination of the product based on the change of ownership. The destination is determined by the residency of the third party that purchased the goods and services. Non-domestic turnover is further sub-divided into turnover despatched to euro-zone countries and all other non-domestic turnover.

VOLUME OF SALES

The volume of sales represents the value of turnover in constant prices and as such is a quantity index. It is normally calculated as turnover at current prices, deflated by the deflator of sales.

NEW ORDERS RECEIVED

It is the objective of the new orders received index to show the development of demand for products and services as an indication of future production. It is also suitable to indicate whether the demand originates from the domestic or non-domestic market.
An order is defined as the value of the contract linking a producer and a third party in respect of the provision by the producer of goods and services. The order is accepted if, in the producer's judgement, there is sufficient evidence for a valid agreement. New orders refer to goods and services to be provided by the observation unit,

including those originating from sub-contractors.

Orders of previous periods that have been cancelled during the reference period are not to be deducted from the new orders received nor is the index for previous periods revised due to cancellations.
The indices of domestic and non-domestic new orders received require the new orders received to be split according to the origin of the order based on the change of ownership. The origin is determined by the residency of the third party that has made the order. Non-domestic new orders are further sub-divided into orders received from euro-zone countries and all other non-domestic new orders.

PRODUCER PRICES (OUTPUT PRICES)

The producer prices are also known as output prices. However, although the STS-Regulations use the term of "output prices", in practice the most used term is "producer prices". The definition in this paragraph reflects the terminology used in the Commission Regulation 1503/2006.

The objective of the output price index is to measure the monthly development of transaction prices of economic activities.

The domestic output price index for an economic activity measures the average price development of all goods and related services resulting from that activity and sold on the domestic market. The non-domestic price index shows the average price development (expressed in the national currency) of all goods and related services resulting from that activity and sold outside of the domestic market. When combined, these two indices show the average price development of all goods and related services resulting from an activity.
It is essential that all price-determining characteristics of the products are taken into account, including quantity of units sold, transport provided, rebates, service conditions, guarantee conditions and destination.

The indices of domestic and non-domestic prices require separate output price indices to be compiled according to the destination of the product. The destination is determined by the residency of the third party that has ordered or purchased the product. Output prices for the non-domestic market are further sub-divided into output prices for products despatched to euro-zone countries and all other output prices.

IMPORT PRICES

It is the objective of the import price indices to measure the monthly transaction price development of imported goods purchased from non-domestic areas by domestic residents. All the related services are excluded from the scope. It is essential that all price-determining characteristics of the products are taken into account, including quantity of units sold, transport provided, rebates, service conditions, guarantee conditions origin and destination.
The non-domestic market is defined as third parties, which are not resident in the same national territory as the observation unit.

The indices of the import prices require a separate calculation according to the country of consignment of the product. The country of consignment is determined in a consistent way with customs procedures. Import prices are sub-divided into imports from euro-zone countries and imports from other countries.

NUMBER OF PERSONS EMPLOYED

It is the objective of the index of number of persons employed to show the development of employment.
The number of persons employed is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance teams).

HOURS WORKED

It is the objective of the hours worked index to show the development in the volume of work done. The total number of hours worked represents the aggregate number of hours actually worked for the output of the observation unit during the reference period.

WAGES AND SALARIES

It is the objective of the wages and salaries index to approximate the development of the wage and salaries bill.Wages and salaries are defined as the total remuneration, in cash or in kind, payable to all persons counted on the payroll (including home workers), in return for work done during the accounting period, regardless of whether it is paid on the basis of working time, output or piecework and whether it is paid regularly.

CONSTRUCTION COSTS

The objective of the construction cost index is to show the development of costs incurred by the contractor to carry out the construction process. The component costs index (material costs and labour costs) shows the price developments of production factors used in the construction industry. Output price indices for construction can be used as an approximation for the construction cost variables.

BUILDING PERMITS: NUMBER OF DWELLINGS, SQUARE METRES OF USEFUL FLOOR AREA

The objective of the number of dwelling building permit index to show the future development of construction activity in terms of unit numbers, while the objective of the useful floor area building permit index to show the future development of construction activity in terms of volume.

A building permit is an authorisation to start work on a building project. As such, a permit is the final stage of planning and building authorisations from public authorities, prior to the start of work.

3.5. Statistical unit

The STS-Regulations require the use of the following observation units:

- **KAU** (Kind of activity unit) for the indicators in **industry** and **construction;**
- **Enterprise** for the indicators in **wholesale and retail trade** and **other services.**

In practice, however, several Member States collect the information from the enterprises rather than from the KAU.

3.6. Statistical population

The statistical population comprises the observation units (KAUs or enterprises) operating in the NACE/CPA classes mentioned below.

INDUSTRY

- Production: sections B, C, D of NACE (*D353 excluded*)
- Turnover: sections B and C of NACE
- New orders: manufacturing industries working on orders(*C13, C14, C17, C20, C21, C24 to C30*)Producer prices (Output prices): sections B to E of NACE (*B0721, C2446, C254, C301, C303, C304, E37, E38 and E39 not included*)
- Import prices: Sections B, C, D of CPA (*B0721, B09, C18, C2446, C254, C301, C303, C304, C33 not included*)
- Labour input indicators (Number of Persons Employed, Hours Worked, Gross Wages and Salaries): Sections B to E of NACE (*E37, E38 and E39 not included*)

CONSTRUCTION

- Production: section F of NACE
- New orders: section F of NACE
  Labour input indicators (Number of Persons Employed, Hours Worked, Gross Wages and Salaries): section F
- Construction costs: CC11 excluding CC 113 (New residential buildings excluding residencies for communities)
- Building permits indicators:Number of dwellings: CC11 excluding CC113 (New residential buildings excluding residencies for communities)

RETAIL TRADE AND OTHER STATISTICS

- Volume of sales (deflated turnover): section G of NACE (*G45, G46, G47*)
- Turnover (in value): section G of NACE (*G45, G46, G47*)
- Labour input indicators (Number of Persons Employed): section G (*G45, G46,G47 excluding G47.3*)
- Number of new car registrations: section G (*G 45.1*)

Detailed information on the level of detail of the data to be delivered by each country and therefore, on the target statistical population for each country, is available from the *STS requirements*, available here. The STS-Regulation allows simplified reporting for small countries (below certain thresholds).

3.7. Reference area

Euro area and European Union, EU Member States, Croatia, Turkey, Norway, Switzerland, United States and Japan.

3.8. Time coverage

Time coverage varies from series to series. Typically, time series cover the period back to 1998, the year the STS-Regulation was adopted. Some countries have data for earlier years. Historical series for a limited number of indices are available back to the 1980's. The final European aggregate is a compilation of a number of countries that decreases the further back one wants to go.

3.9. Base period

Year 2005 = 100
Year 2006 = 100 for other statistics only

4. Unit of measure

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Indices, percentage changes (%); Thousands of tons, Gigawatt hour and Terajoules (Gross calorific value = GCV) for energy indicators; Euro per ton and Euro per liter for energy prices.

5. Reference period

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INDUSTRY

- Production: Month
- Turnover: Month
- New orders: Month
- Producer prices (Output prices): Month
- Import prices: Month
- Labour input indicators: at least quarter (monthly data may be provided by some countries)

CONSTRUCTION

- Production: Month for those Member States whose value added in Section F of NACE in a given base year represents at least 2% of the European Community total, Quarter for the others
- New orders: Quarter, this indicator is not a legal requirement
- Labour input indicators: at least quarter
- Construction costs (Construction input prices): at least quarter
- Building permits indicators: at least quarter

RETAIL TRADE AND OTHER STATISTICS

- Volume of sales (deflated turnover): Month
- Turnover (in value): Month
- Labour input indicators (Number of Persons Employed): Quarter
- Number of new car registrations: Month, this indicator is not a legal requirement

6. Institutional mandate

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6.1. Legal acts and other agreements

The legal basis for the STS indicators is the Council Regulation No 1165/98 of 19 May 1998 concerning short-term statistics , amended by the Regulation No 1158/2005 of 6 July 2005 concerning short-term statistics and by the Regulation (EC) No 1893/2006 of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2, herein referred as STS-R. Consolidated STS-R can be found here.

The definitions of short-term statistics variables are laid down in Commission Regulation No1503/2006 of 28 September 2006 implementing and amending Council Regulation N° 1165/98 of 19 May 1998 concerning short-term statistics as regards the **definition of variables**.

The Commission Regulation 657/2007 on European Sample Schemes, amended by the Commission Regulation 1178/2008, reduces the scope of data delivery for some countries and variables (import prices, output prices and new orders).

The classification by the **main industrial groupings (MIG-s)** is defined by the Commission Regulation No 656/2007.

6.2. Data sharing

Eurostat makes available all the non-confidential data on its dissemination website. Selected data in special formats are transmitted daily to the ECB (European Central Bank) and monthly to the OECD (Organisation for Economic Cooperation and Development).

7. Confidentiality

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7.1. Confidentiality - policy

Regulation (EC) No 223/2009 on European statistics (recital 24 and Article 20(4)) of 11 March 2009 (OJ L 87, p. 164), stipulates the need to establish common principles and guidelines ensuring the confidentiality of data used for the production of European statistics and the access to those confidential data with due account for technical developments and the requirements of users in a democratic society.

7.2. Confidentiality - data treatment

In some cases, Member States transmit data to Eurostat with the request not to publish these data. Eurostat has the right to publish those data that are delivered according to a legal act and are not considered to be of truly confidential nature (Article 13(1) of Council Regulation No 322/97 of 17 February 1997).

The Member States are obliged to ensure a sufficient degree of representativeness of data (**STS-Regulation**, Article 10 (1)). Several cases have to be distinguished:

Confidentiality - if data are of truly confidential nature according to the above mentioned regulation, they have to be flagged confidential, and they will not be published by Eurostat.

Embargo - to enable Eurostat to produce press releases, sometimes data are sent in advance to Eurostat. Those data, if considered under embargo will not be published by Eurostat until the embargo expires. This case is currently handled by using confidentiality flags.

Data should not be published by Eurostat on request of a Member State - there is the (relatively rare) case that data are of good quality, but for some reasons, countries would not want these data to be published. In such a case the NSI should contact Eurostat and express their request that Eurostat should not publish these data. An informal agreement is needed between Eurostat and a NSI.

Quality issues

(a) bad quality - If national data of questionable quality are submitted to Eurostat to satisfy the requirements of the STS Regulation and these data are flagged as confidential, Eurostat will refuse receiving the bad quality data.

(b) data good enough for European aggregates, but not reliable on a national level - If data are not reliable at a national level, but are considered to be a reliable input for a European aggregate, the national data can be flagged confidential and will not be published by Eurostat. In this case an informal agreement is needed between Eurostat and a NSI if there is no other agreement (such as laid down by Commission Regulation 657/2007 on European Sample Schemes).

8. Release policy

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8.1. Release calendar

The countries announce their release dates one year in advance. Based on the information provided by the countries, Eurostat makes public its own release calendar containing the publication dates of the European aggregates in October for the following calendar year. A few days before the publication, these dates must be officially confirmed.

8.2. Release calendar access

Eurostat's release calendar is available at:

http://epp.eurostat.ec.europa.eu/portal/pls/portal/ddis.release_calendar.xml

8.3. User access

In line with the Community legal framework and the European Statistics Code of Practice Eurostat disseminates European statistics on Eurostat's website (see item 10 - 'Dissemination format') respecting professional independence and in an objective, professional and transparent manner in which all users are treated equitably. The detailed arrangements are governed by the Eurostat protocol on impartial access to Eurostat data for users.

In line with this protocol and on a strictly regulated basis, data on key indicators are sent for information to the European Central Bank (ECB) under embargo the evening before official release of data.

9. Frequency of dissemination

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Monthly and quarterly

Most of the national data are monthly disseminated; if only quarterly data are available, Eurostat calculates monthly estimates of the national data (method: interpolation of the quarterly data). These estimates are integrated in the monthly European aggregates but they are not published at national levels.

10. Dissemination format

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10.1. News release

News releases on-line. News releases are issued at 11 a.m CET on Eurostat's website. These publications release each month selections of the most important EU aggregates, together with selected data from the Member States. The following news releases are published every month:

- *Industrial output prices*
- *Retail trade volume*
- *Industrial Production*
- *Industrial new orders*
- *Construction output*

10.2. Publications

Statistics in Focus - irregularly

Eurostatistics - monthly

10.3. On-line database

STS data are disseminated in full detail in the Short-Term Business Statistics dedicated section.

10.4. Micro-data access

Not relevant; no micro-data available at Eurostat.

10.5. Other

Internet address: http://ec.europa.eu/eurostat

11. Accessibility of documentation

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11.1. Documentation on methodology

The *Methodology of Short-term Business Statistics, Interpretation and guidelines*, 2006, contains a comprehensive set of recommendations on the compilation of the STS statistics.

Detailed methodological information on the national methodologies is available from the *STS sources*.

All the important methodological documents are available on the Short-Term Business Statistics dedicated section.

11.2. Quality documentation

In 2004 Eurostat proposed to consider a detailed, focused analysis for one PEEI every year, with the chosen PEEI changing each year (*PEEI in focus*). The available reports can be downloaded here.

The *reports from the Commission to the Council and the European Parliament concerning Short-Term Statistics* give also information on quality aspects of the STS.

Whenever available, updated quality documentation is published on the Short-Term Business Statistics dedicated section. General quality evaluations of the PEEIs are published on a monthly basis in the context of Euro-IND database and released in two publications *State of Affairs* and *Monitoring Report* available in the Euro-Indicators special topic.

12. Quality management

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12.1. Quality assurance

Quality checks and validation of data are done through the whole process: first by the providers of data i.e. countries, then by Eurostat in the calculation of European aggregates. The quality is regularly monitored on the basis of the following inputs:

- The latest update of the *STS sources*
- The *PEEIs in focus*
- Usual quality checks in the process of validation of data

Concrete outputs are the following:

- The *Reports from the Commission to the Council and the European Parliament concerning Short-Term Statistics*
- Information to users by using Eurostat Website
- Improved quality data

12.2. Quality assessment

See the reports from the Commission to the Council and the European Parliament concerning Short-Term Statistics, *PEEI in focus*

13. Relevance

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13.1. User needs

STS provide statistical information necessary to improve the competitiveness and performance of the business community in the EU. The STS are used by different users (European Commission and ECB, national governments and central banks, economic analysts in private companies and financial institutions) and serve different purposes.

- **Internal market** - In order to carry out the tasks entrusted to it under the Treaties, especially with regard to the internal market, the Commission must have exhaustive, up to date, reliable and comparable information on the activity, competitiveness and performance of enterprises in the Community.
- **Tools for decision-making** - New economic, competition, social, environmental and enterprise policies and guidelines call for initiatives and decisions based on valid statistics. Business statistics are needed to provide harmonised, reliable and fast statistical information, to assist and inform policy decisions by both the Commission and individual enterprises.
- **GDP** - Business statistics have an essential role to play since these statistics are used in compiling the various components in national accounts, which are in turn needed in the calculation of GDP.
- **European monetary policy** must be able to base itself on reliable European statistics which are comparable at all levels. The Maastricht Treaty already provided the **European Central Bank** the right and obligation to obtain the tools necessary to fulfil its mission: "In order to ensure the missions of the ESCB*, the ECB, assisted by the national central banks, shall collect the necessary statistical data, either from the competent national authorities, or directly from the economic agents".

* **ESCB - E**uropean **S**ystem of **C**entral **B**anks

13.2. User satisfaction

Not available.

13.3. Completeness

Twice a year (every April and October), Eurostat assesses the degree of compliance with the STS Regulation 1165/98. These assessments are however, not published.

14. Accuracy and reliability

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14.1. Overall accuracy

The accuracy is tackled at national and Community levels, by eliminating as much as possible non-sampling errors, by calculating sampling errors and studying and analysing revisions. The available information at country level is summarized in the reports *PEEI in focus*.

14.2. Sampling error

The available information at country level is summarized in the reports *PEEI in focus*.

14.3. Non-sampling error

The available information at country level is summarized in the reports *PEEI in focus*.

15. Timeliness and punctuality

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15.1. Timeliness

The European aggregates for the latest periods are released as soon as sufficient national data (minimum 60%) are available. The European aggregates are published one or two days after the national deadlines.

The countries must transmit their data to Eurostat by the following deadlines after the end of the reference period:

INDUSTRY

- Production: 1 month and 10 calendar days
- Turnover: 2 months
- New orders: 1 month and 20 calendar days
- Producer prices(Output prices): 1 month and 5 calendar days
- Import prices: 1 month and 15 calendar days
- Labour input indicators: 2 months for Number of Persons Employed, 3 months for Hours Worked, Gross Wages and Salaries

CONSTRUCTION

- Production: 1 month and 15 calendar days
- New orders: 3 months, not a legal requirement

- Labour input indicators: 2 months for Number of Persons Employed, 3 months for Hours Worked, Gross Wages and Salaries
- Construction costs (Construction input prices): 3 months
- Building permits indicators: 3 months

RETAIL TRADE AND OTHER STATISTICS

- Volume of sales, turnover: 1 month for *Food, Non-food* and *Total retail trade* (2 months for the other activities)
- Labour input indicators (Number of Persons Employed): 2 months

For small Member States, whose share in the respective Community total falls below 3%, the deadlines are 15 days longer.

15.2. Punctuality

All the news releases have been published according to the announced release calendars. The other indicators, not included in the press releases, have been also published in time.

16. Comparability

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16.1. Comparability - geographical

The STS Regulations and the STS methodological guidelines are applied by the countries transmitting STS data. This ensures a good comparability between national data and good-quality European aggregates. However, the data are not 100% comparable from a country to another. In order to best use their available data, the countries may apply different collection methods (surveys, use of administrative sources) and different calculation procedures for the data.

Detailed methodological information about Member States practices is available from the *STS sources*.

16.2. Comparability - over time

Not available.

17. Coherence

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17.1. Coherence - cross domain

Not available.

17.2. Coherence - internal

Not available.

18. Cost and burden

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Information can be found in the 2008 report from the Commission to the Council and the European Parliament concerning Short-Term Statistics

19. Data revision

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19.1. Data revision - policy

Data are revised when additional information from national statistical authorities becomes available. Major revisions and changes in methodology are announced in the monthly *News Releases* and/or in the publication *Quarterly Panorama of European Business*.

19.2. Data revision - practice

Apart from revisions generated by seasonal adjustment, the revisions of EU indices come directly from revisions in national series. The fact that there are 27 countries with different revision policies means that it is common for EU indices to be revised.

A distinction can be made between revisions due to errors and those due to the incorporation of new information. The general idea is that it is preferable to integrate new information on a regular basis. In this area, as in many others, Eurostat cannot impose a solution but must seek one which is acceptable to all and which makes it possible to improve the credibility of the EU indices.

Some information on data revision can be found in the 2008 report from the Commission to the Council and the European Parliament concerning Short-Term Statistics.

20. Statistical processing

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20.1. Source data

The production of indices within Member States is normally based on the compilation of data from numerous sources. Detailed methodological information about Member States practices is available from the *STS sources*.

Statistical surveys

All national statistical authorities have statistical questionnaires used for compiling STS. However, their content and style vary greatly, partly because of cultural differences and partly because of the greater or lesser importance attached to respondent burden and cost. These influences as well as others determine what information the national statistical authorities think that they can observe. In most of the national statistical authorities, the surveys are rarely restricted to one standard questionnaire or form but tend to be a combination of forms, differentiated by major characteristics, namely:

- the activity, size, legal form and the type of variables asked on the form (output, prices, employment, other specialised variables);
- occasionally, an extra characteristic, the geographical location of the unit, may influence the contents of a survey.

Administrative sources / registers / declarations

For the purposes of business statistics a limited definition of administrative sources can be used. According to the purpose they serve, administrative registers can be subdivided into basic registers and specialised registers. Examples of indicators which use more frequently administrative sources are turnover (VAT declarations) or number of persons employed.

Estimations

The STS-Regulations explicitly permit the use of statistical estimation procedures. For example, these may be used for item or unit non-response, grossing of sample results to the level of the frame population or to adjust results from surveys or administrative sources where the frame population does not match sufficiently the target population or the variables collected are not sufficiently close to those required. Hence, this need for estimation may arise because of non-response or because the statistical authority has chosen not to collect directly the information required.

Non-official sources

There is a great variety of non-official data, much of it available from consultancies or research institutes. Trade associations and chambers of commerce also produce non-official data about the business community. With only a few exceptions, private research institutions do not carry out regular surveys and tend to produce results from ad hoc surveys for clients.

20.2. Frequency of data collection

INDUSTRY

- Production: **Month**
- Turnover: **Month**
- New orders: **Month**
- Output prices (Producer prices): **Month**
- Import prices: **Month**

- Labour input indicators: **at least quarter** (monthly data may be provided by some countries)

CONSTRUCTION

- Production: **Month** for those Member States whose value added in Section F of NACE in a given base year represents at least 2% of the European Community total, **Quarter** for the others
- New orders: **Quarter**, not a legal requirement
- Labour input indicators: at least **quarter**
- Construction costs (Construction input prices): at least **quarter**
- Building permits indicators: at least **quarter**

RETAIL TRADE AND OTHER STATISTICS

- Volume of sales (deflated turnover): **Month**
- Turnover (in value): **Month**
- Labour input indicators (Number of Persons Employed): **Quarter**

Number of new car registrations: **Month,** not a legal requirement

20.3. Data collection

Detailed methodological information about Member States practice is available from the *STS sources*

20.4. Data validation

Data received from the countries and the European indices are validated using logical validation rules.

At national level, editing involves studying data from respondents with the aim of identifying (and eventually correcting) errors. Not all errors can be identified and the aim is to detect the errors that have a significant influence on the results. Rules to assist in identifying errors may flag possible errors that require further investigation to determine where there really is an error as opposed to an unusual result or they may identify definite errors. Editing involves checks for completeness, that values are within given ranges and that values for related variables are coherent. Data editing may take place during or after data entry.

Responses can be compared to the response of previous months. Inconsistency or large deviations (outside of a pre-established range) indicate that a closer look is desirable. This may result in editing. In the context of timeliness, the editing process may be designed to give top priority to those outliers that are most in need of editing for the sake of reliable aggregates. By solving the worst cases, large improvements can be achieved.

Eurostat also carries out validation checks on the national aggregated indices it receives.

20.5. Data compilation

National level

The starting point for the processing stage is the information as collected from respondents. The aim is to bring these data to the level of the intended statistical output. For various reasons, the act of processing comprises more than just aggregating questionnaire items.

Processing steps can be summarised as follows.

- After data entry, errors and inconsistencies are detected and corrected during editing.
- Subsequently, item non-responses as well as gaps between questionnaire concepts and output concepts are dealt with by imputation.
- The resulting set of clean and complete micro data serves as the basis for weighting and reweighting. During this stage, also frame errors may be accounted for.
- The aggregated data may then be confronted with related data from other sources and possibly integrated.
- Finally, where appropriate, statistical compilations and analysis are carried out, resulting in a non-public data set. Prior to dissemination, the one remaining stage is to identify and treat confidentiality.

European level

The European indices are calculated from national indices, taking into account the relative share of each Member State in the appropriate geographical aggregate, for the gross and working day adjusted forms. This is done at each level of the activity classification level. Only after calculation at all levels of classifications are the EU indices analysed to produce seasonally adjusted and trend series.

However, the data received from each country may need a certain amount of pre-treatment before the EU indices can be calculated. Three necessary stages can be identified as well as one extra stage that is not directly needed for the calculation of EU indices.

Firstly, any data supplied in absolute figures need to be compiled as indices. Secondly, base years need to be harmonised. Thirdly missing activity aggregates need to be calculated. Finally, any of the required forms (for example seasonally adjusted) that are missing are produced, although these are not used for compiling geographical aggregates.

The procedures for compiling the geographical aggregation starts with the gross and working day adjusted series. The European aggregates start - with any number of countries - from the reference period for which 60% of the total weight is reached; as new series pile up, the total weight increases, to reach eventually 100% of the target aggregate. Thresholds also apply to the ending portion of the series; missing countries are approximated by ARIMA (autoregressive integrated moving average) forecasts. More information on ARIMA models can be found at http://www.bde.es/servicio/software/econome.htm).

The weighting system used by Eurostat plays a double role, to carry out geographical aggregation and, when national statistical authorities choose not to provide higher levels of activity classifications, to make activity aggregation as well. The current weighting system uses 2005 data. The weights are sometimes confidential, especially at a detailed level. This can be because the weights are in general based on SBS data which itself may be confidential. The tables containing non-confidential weights can be found here.

20.6. Adjustment

According to the STS-R, the countries are required to transmit working-day adjusted figures for the following indicators:

- industrial production
- production in construction
- hours worked in industry and construction
- retail trade turnover
- retail trade volume of sales (retail trade deflated turnover)
- turnover in other services

Eurostat performs the seasonal adjustment for all the European aggregates. Member States are not obliged but they are encouraged to transmit seasonally adjusted and trend-cycle indices. If they do not, Eurostat calculates the seasonally adjusted and trend cycle indices using TRAMO/SEATS method and software. Eurostat applies the **direct method of seasonal adjustment**. This means that all time series, including the European aggregates are seasonally adjusted independently.

21. Comment

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21.1. Notes

None

21.2. Related Metadata

21.3 Annex