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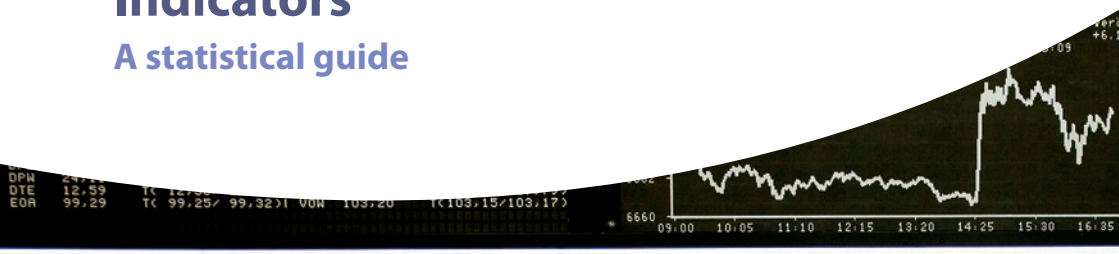
Principal European Economic Indicators

A statistical guide



2009 edition

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Eurostat is the Statistical Office of the European Communities. Its mission is to provide the European Union with high-quality statistical information. For that purpose, it gathers and analyses figures from the national statistical offices across Europe and provides comparable and harmonised data for the European Union to use in the definition, implementation and analysis of Community policies. Its statistical products and services are also of great value to Europe's business community, professional organisations, academics, librarians, NGOs, the media and citizens.

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Eurostat has set up with the members of the 'European statistical system' (ESS) a network of user support centres which exist in nearly all Member States as well as in some EFTA countries. Their mission is to provide help and guidance to Internet users of European statistical data. Contact details for this support network can be found on Eurostat Internet site.

Foreword

This is the second in a series of booklets explaining how the most important European statistics are collected and compiled and what they are used for. The first in the series, on price statistics, was published in 2008. This second booklet deals with the principal European economic indicators, or PEEIs, a set of the most important monthly and quarterly indicators on economic development. It explains what they cover, why they are relevant, how they relate to and depend on each other and how they are used, with practical examples. The book should prove useful to economic analysts, policy-makers, students and anyone interested in economic issues. Numerous links help the reader to find additional information on Eurostat and its websites.

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Data extracted in February 2009.

Contents

Introduction

The economic and monetary union and the setting up of the European Central Bank (ECB) significantly reinforced the need for a broad range of monthly and quarterly statistics to measure economic and monetary developments in the euro area and to support a common monetary policy. Designing an effective monetary policy and judging the business cycle depends on timely, reliable and comprehensive economic statistics giving an overview of the economic situation.

More generally, effective economic and political decision-making depends on a regular supply of reliable and objective information. Statistics are one main source of that information, providing essential figures to support the drafting and implementation of policies. The data is used by the European institutions and the ECB, by national governments and central banks, by financial markets and companies. Statistics are also a powerful tool for communicating with the general public.

Satisfying these information needs involves constant interaction between policymakers and statisticians: the policymakers identify their data needs, and the statisticians attempt to adapt the system to meet those needs. New policies drive improvements in statistical production, both in terms of improving existing indicators and creating new ones.

Eurostat has responded to these needs by developing the Euro-indicators, of which the Principal European Economic Indicators are the core. These indicators have been developed by experts and agreed by policymakers. They are continuously monitored, improved and reviewed to keep pace with changing policy requirements.

Historical background

In the run-up to monetary union, Eurostat and the European Statistical System made major efforts to improve monthly and quarterly statistics. In particular, national accounts, consumer price statistics, business statistics and external trade statistics were all substantially expanded.

In 1998, when fixed exchange rates were set for each currency participating in the euro, the economic and finance ministers in the 'Ecofin' Council, the European Central Bank, and private and public analysts all increasingly needed to monitor economic developments in the euro area. Eurostat responded to this by creating specific pages on its website, the so-called Euro-indicator tables, offering easy access to a large set of economic indicators for the euro area and the European Union.

In 2002, the European Commission produced a list of 19 principal European economic indicators (PEEIs) (see Communication COM/2002/661) in the following areas:

- National accounts, including government accounts,
- External trade,
- Balance of payments,
- Prices,

- Labour market,
- Business statistics,
- Monetary and financial statistics.

Following the Communication, an in-depth analysis began to review and improve the coverage and quality of the PEEIs, and many improvements were made. More details on the improvements are given below.

In 2007, the list of PEEIs was substantially revised to increase its usefulness for economic analysis purposes. The PEEI list now comprises 26 indicators, of which 22 are currently available. Table 1 lists the 26 PEEIs together with frequency with which they are published and the release date of the first European aggregates, counted from the end of the reference period (t).

To promote the PEEIs, a specific PEEI page was added on the Eurostat website. This page brings together in a single place a set of the most relevant and timely short-term economic indicators for the euro area and the European Union. More information on the Euroindicator/PEEI web pages can be found in Annex 1.

Table 1: Principal European Economic Indicators

PEEI	Frequency	Release date
Gross domestic product (GDP)	quarterly	t+45 days
Private final consumption	quarterly	t+65 days
Investments	quarterly	t+65 days
External trade balance	monthly	t+48 days
Balance of payments — current account	monthly (euro area) quarterly (EU-27)	t+8 weeks t+2,5 months
Inflation (Harmonised Indices of Consumer Prices — HICP)	monthly	t+15 days
Unemployment rate (total, 15-24 years and above 24 years)	monthly	t+30 days
Employment	quarterly	t+70 days
Labour cost index	quarterly	t+75 days
Industrial producer prices	monthly	t+1 month and 2-3 days
Industrial import prices (for euro area)	monthly	1 month and 11-12 days
Industrial production	monthly	t+1 month and 12 days
Industrial new orders	monthly	t+1 month and 22 days
Production in construction	monthly	t+1 month and 17 days
Retail trade turnover	monthly	t+1 month and 3 days
Government deficit/surplus	annually	t+3 month and 3 weeks
General government gross debt	annually	t+3 month and 3 weeks
Economic sentiment indicator	monthly	2nd last working day of the reference month
Three-month interest rate	monthly	t+12 days
Long term government bond yields	monthly	t+10 days
Euro exchange rates	monthly	t+2 days
Sector accounts	quarterly	first results available
Turnover index for other services	quarterly	not available
Service producer prices	quarterly	first results available
Job vacancy rate	quarterly	not available

Improvements

Since 2002, PEEIs have been regularly monitored and improved. Working groups in all statistical fields bring together experts from Eurostat and the national statistical offices in order to discuss and implement improvements. The Euroindicators Working Group (which brings together producers from the Member States and principal users of the PEEIs) plays a particularly important role in the technical improvements. The main tool for monitoring and improving PEEIs is the annual EFC Status Report on Information Requirements in EMU, drafted jointly by Eurostat and European Central Bank and submitted to the 'Ecofin' Council. In recent years several relevant improvements have been raised in this document and endorsed by the Council:

- increasing timeliness to reduce the gap with the US, partly by using statistical and econometric techniques,
- improving the coverage of PEEIs — filling in the missing indicators and ensuring geographical and historical coverage,
- harmonising some aspects of PEEI production and dissemination in key areas such as seasonal adjustment, revisions, estimates, etc.

Timeliness

At the beginning of 2000 European statistics tended to lag seriously behind those of the USA. To fill this gap policymakers recognised that production needed to be accelerated, but in the short term this was feasible only for a few indicators. A reasonable alternative for some other indicators was the use of statistical techniques to produce quick estimates. Two solutions were suggested:

- the construction of flash estimates using forecasting techniques to estimate the recent past or the present,
- use of the European Sampling Scheme, which allows earlier estimation of a European aggregate by using information from small European samples that would not necessarily produce reliable estimates for individual Member States.

Various initiatives resulted in:

- the production of a flash estimate of the euro area price index HICP at t+0 in 2003 (t being the end of the reference period and 0 meaning zero days, i.e. no time-lag),
- the production of flash estimates of GDP for the euro area and the European Union at t+45 in 2003, and
- an early estimate of retail trade turnover for the euro area, the European Union and most Member States at t+23.

Further improvements in timeliness were achieved especially in business statistics (e.g. for the industrial production index and industrial producer prices). The feasibility of reliable flash estimates for gross domestic product and the industrial production index at t+30 and for the labour cost index at t+45 is being examined with some Member States.

Coverage

Considerable progress has been made in the coverage of the indicators listed in Table 1.

More recently, figures for quarterly sector accounts, i.e. EU and euro area government, household and company accounts as well as industrial import prices have been released for the first time, which is an important step towards full coverage. Quarterly statistics on turnover and output prices for services also improved significantly, and Council regulations on job vacancy statistics have recently been approved. In short, a full coverage can be expected within the next two years.

Progress has been made towards full country coverage and the situation is satisfactory for almost all PEEIs.

In terms of coverage over time, there is an obvious lack of long time series (e.g. 15-20 years) in some areas. In order to fill this gap Eurostat has started exploratory work on recalculating PEEIs for earlier years for the euro area and the EU, using statistical models.

Harmonising production

From the outset, some institutions signalled the need for harmonisation of some features of the processing and presentation of PEEIs. The apparent discrepancies, mainly in revisions, seasonal adjustments and estimation practices, affect the comparability of PEEIs across countries. Furthermore, since European indicators are mainly obtained through aggregation or estimation, the lack of harmonisation of national practices affects the overall quality of the figures for the euro area and the European Union.

Recently, major steps have been taken to harmonise PEEI production:

- publication of the ESS Guidelines on Seasonal Adjustment,
- revision of the Quarterly National Accounts Guidelines for Seasonal Adjustment,
- a first attempt to define a general scheme for PEEI revision policy,
- a proposal of a common scheme for the revision of national accounts data.

Note that while the ESS has now endorsed the first two initiatives, the others still need further discussion before they can be endorsed. Harmonising seasonal adjustment strategies, in particular, will be a very important step forward because seasonally adjusted data are often used as headline figures.

Importance for economic analysis and policy making

PEEIs are the primary source of information for assessing monetary policy and for monitoring and following up the cyclical situation for the euro area, the European Union and the Member States. The PEEIs presented in Table 1 give a very complete description of the economic situation and they include all of the variables commonly used by analysts and policy makers. In particular, national accounts indicators, consumer prices and unemployment statistics provide the main framework for all kinds of macroeconomic analysis. Monthly business indicators such as the industrial production index, production in construction and retail trade deflated turnover give short-term sectoral views of the production and sale of goods and services. External trade, balance of payments and exchange rate figures describe the economic interactions of the euro area, the European Union and Member States with the rest of the world. Statistics on labour cost, industrial producer prices and industrial import prices complete the picture of the processes that cause inflation. The three-month interest rate and long-term government bond yields are the main instrumental variables for monetary policy and the economic sentiment indicator is included because it represents a very useful synthetic indicator with some forward-looking properties.

PEEIs can also be used to construct highly aggregated macroeconomic models, whereas for large-scale econometric models the underlying, more detailed, information is required.

Each PEEI usually represents a larger family of indicators broken down according to the various disaggregation schemes (nomenclatures) in order to give detailed accurate pictures at different levels of disaggregation. Nevertheless, for large-scale macroeconomic models, several non-PEEI indicators may be also be relevant — the energy market and energy prices, the raw materials market and prices, information on capital stocks, monetary aggregates, population and migration.

The main uses of Principal European Economic Indicators for economic analysis include:

- the construction of coincident and leading indicators,
- the estimation of a monthly indicator of economic activity,
- the estimation of trend and cyclical components for the main economic variables,
- the study of convergence and synchronisation among economies and sectors,
- the detection and dating of turning points, and
- the creation of small-scale econometric models for business cycle analysis and forecasting purposes.

Eurostat, the European Central Bank (ECB) and the European Commission's Directorate-General for Economic and Financial Affairs have launched several projects on the above-mentioned topics in recent years. Relevant papers are available on the Eurostat, ECB and Economic and Financial Affairs DG websites, and in international reviews and journals.

Future trends

Principal European Economic Indicators form the core of European monthly and quarterly macroeconomic statistics. They are monitored with particular care by Eurostat and a medium-term development strategy has been defined. PEEIs do not represent a static set of data but are intended to adapt:

- to include newly available data,
- to respond to user requirements,
- to better represent changing economic scenarios.

On the last two points, Eurostat, the ECB, the Economic and Financial Affairs DG and EU Member States are currently rethinking PEEI coverage, especially to include new indicators on the housing market. The ECB and the Ecofin Council have strongly supported the inclusion of such indicators, in the light of the recent events affecting the housing market. Further considerations are increasing globalisation and its effect on the short-term behaviour of the economy.

Improved timeliness has been one of the major priorities and achievements in recent years. Most of the timeliness targets set out in 2002 have now been achieved and more attention will be paid to other aspects of quality, especially the accuracy and reliability of PEEIs.

It is important to underline that the consensus around PEEIs is the key to their success. PEEIs will be further promoted and should be widely used. Feedback and remarks from PEEI users will drive further development and improvement.

1

National Accounts

Gross domestic product

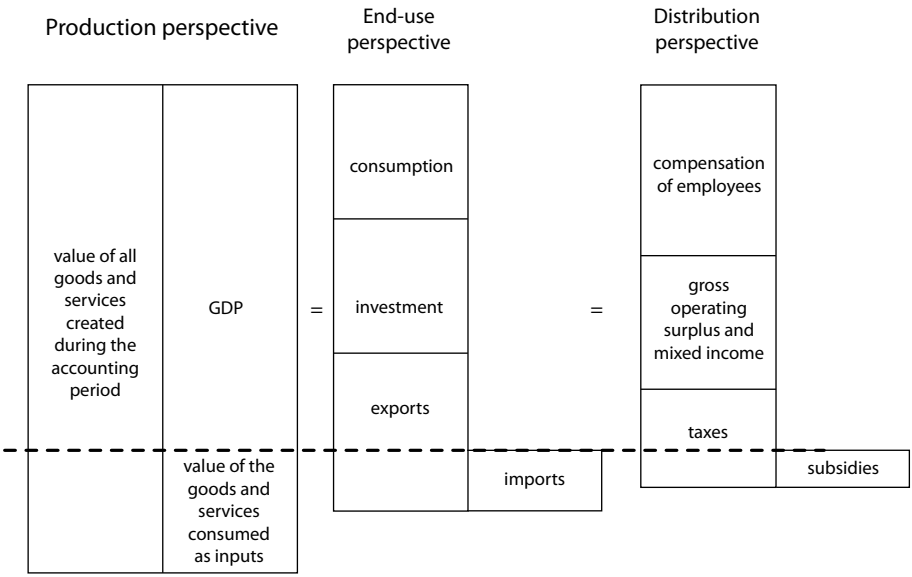
Gross domestic product (GDP) is a summary measure for economic production. It is generally considered to be an overall indicator of the development of the economy.

GDP measures the final result of the production activity of resident producer units (ESA95, 8.89.). It is the value of all goods and services created during the accounting period, less the value of the goods and services consumed as inputs in production processes. This difference between value of output and value of input is also called gross value added.

Despite being a concept based on production, GDP can also be presented in two other ways:

End-use: the value added by an economy can be used for consumption, for investment or it can be exported. GDP is hence the sum of all final uses by domestic units (final consumption expenditure and gross capital formation), plus exports and minus imports of goods and services.

Distribution: the value added by an economy is distributed among economic actors according to their participation in the production process. GDP is hence the sum of employee remuneration, gross operating surplus (the income which production units obtain from their own use of their production facilities) and mixed income (the remuneration of work carried out by the self-employed which cannot be distinguished from their profits as entrepreneurs), and taxes less subsidies on production and imports.



All three approaches lead to the same total value of GDP.

The term 'gross' in GDP means that the consumption of fixed capital (i.e. depreciation of capital stock such as machinery and buildings) is not accounted for. The term 'domestic' in GDP means that it includes all production that takes place in the country's territory, regardless of the producer's nationality.

Economic importance

GDP is one of the best-known and most-used economic statistical figures. Its importance lies in the fact that it combines several desirable properties:

- It merges all economic production into one measure that is easily understood and assessed.
- It is based on a consistent framework of detailed accounts in which all activities are naturally translated into monetary values. This means that merging the information into a single figure does not involve arbitrarily combining incommensurable quantities. This also means that several levels of consistent additional detail beyond the summary measure of GDP are available to assess economic performance.
- It is based on a well-established, consistent international methodology, which makes it a credible statistic with few pitfalls in international comparison.

GDP — often in conjunction with other statistics — is regularly used in a wide variety of analyses. For example, it serves as the primary indicator of the stage of the business cycle. As a widely accepted measure, it is often the basis for calculating derived indicators (such as the output gap) and is used in setting interest rates, deciding on tax rates, setting demands in wage negotiations or fixing the government budget.

GDP is also used beyond the confines of pure economic and monetary policy. One example is its use as a benchmark in indicators such as energy intensity, which is calculated as the ratio of gross inland energy consumption to GDP.

Note, however, that national accounts work with a 'production boundary' to determine which activities are to be recorded in the accounts and which are not. Own-account production of certain services — a haircut for example — inside households do not show up in GDP, while the same services would be included in GDP were they are produced by a provider outside the household — a hairdresser rather than a family member. In addition, attributing monetary values to outputs will not necessarily coincide with the amount of 'utility' actually derived from consuming them.

Hence, GDP is an important but not an exhaustive measure of a society's well-being.

Data availability

Eurostat publishes annual and quarterly GDP series for nominal values, volumes and deflators as far back as national data are available. While, for some Member States, consistent data may be available even before 1970, for others data may start only in 1995 or even 2000. This does not necessarily

mean that GDP figures were not compiled before then, just that changes in methodology have not been retraced beyond these dates. Series for the euro area and the EU currently start in 1995.

Each quarter, Eurostat produces four releases of figures for the EU and the euro area (EA). A flash estimate for quarterly GDP growth for the euro area and the EU becomes available 45 days after the end of the reference quarter (t+45). After 65 days (t+65), the first quarterly GDP is released, including GDP components on the output and expenditure side, at current and constant prices. At t+75 days, the first quarterly employment figures are released. At t+105 days, the second (revised) quarterly GDP is released. Additional variables estimated are: GDP income-side components (including A6 industry breakdowns), population & national employment, breakdowns of exports & imports, gross fixed capital formation and domestic employment. The EU and EA aggregates of the quarterly sector accounts are available 120 days after the end of the reference quarter.

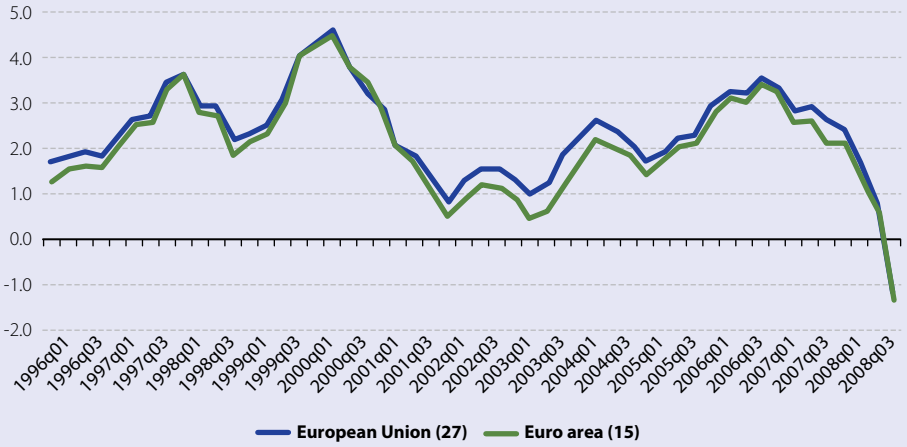
GDP data are presented at current prices, at the previous year's prices and as chain-linked volumes with reference year 2000. In addition, growth rates, index numbers and per capita figures are provided. Current price data for Member States is presented in ECU/euro (using variable exchange rates), in national currency (using fixed conversion rates for EA Member States) and in purchasing power standards (centred on the euro for the EU-27).

All data are available on the Eurostat website: http://ec.europa.eu/eurostat => Theme: Economy and finance => Data => National accounts.

Example

The following graph shows GDP growth over the period 1996-2008. It illustrates the movement of the business cycle, notably the sharp downturn between 2000 and 2002 and from the third quarter of 2007 onwards. Another typical feature is that growth rates in the EU-27 are usually higher than those in the euro area, which is testimony to the more dynamic growth in the new EU Member States, as they are catching up with the income levels of the EU-15 countries. At the same time, the small size of this growth difference shows the comparatively small absolute size of most EU economies outside the euro area.

Graph 1: Quarterly GDP, chain-linked volume, seasonally adjusted
% change to the same quarter of the previous year



Source: Eurostat, National Accounts (namq_gdp_k)

Private final consumption

'Private final consumption' is a summary measure of the value of goods and services acquired by residents and used directly to satisfy their individual or collective needs. It is an important measure of welfare: higher consumption is expected to lead to a higher degree of satisfaction of needs, which in turn translates into increased welfare in society as a whole.

'Final consumption' refers to spending to directly satisfy individual or collective needs, whether that spending is incurred at home or abroad (ESA95, 3.75-3.99).

'Private consumption' refers to spending by households and non-profit institutions serving households (NPISH: e.g. trade unions, professional societies, political parties, churches, charities, and sports clubs), but not by the general government.

Economic importance

Roughly speaking, the total value added by economic activities (i.e. GDP) can be used for consumption, for investment or for (net) exports. Each of these three basic uses has its own characteristics:

- *Consumption* meets the needs of individuals or collectives and thus directly increases societal welfare.
- *Investment* adds to the capital stock and thus stores up potential for future consumption.
- *(Net) exports* put added value at the disposal of economic units outside the country, which can use them for their own consumption or investment. In return, the domestic economy builds up international claims which may, for example, be exchanged for imports of goods and services later.

Ultimately, consumption is the final goal of all productive activity. Both investment and (net) exports mean foregoing immediate consumption for the sake of increasing future production and consumption possibilities. Private final consumption is a measure of how far an economy provides people with the means of satisfying their needs, ranging from basic needs (housing, food) to more sophisticated ones (travel, recreation). Note that consumption covers both goods and services. Further insight can be provided by breaking down consumption expenditure by purpose. The broad categories of this breakdown are:

1. Food and non-alcoholic beverages
2. Alcoholic beverages, tobacco and narcotics
3. Clothing and footwear
4. Housing, water, electricity, gas and other fuels
5. Furnishings, household equipment and routine household maintenance
6. Health

7. Transport
8. Communication
9. Recreation and culture
10. Education
11. Restaurants and hotels
12. Miscellaneous goods and services

The full breakdown is called the COICOP classification (Classification of Individual Consumption by Purpose, 1999 version) and is available on the Ramon server of the Eurostat website.

Changes in consumption are also considered to give some indication of the economic expectations of citizens, as households tend to consume more if they expect their economic situation to improve in the future and less if they expect it to deteriorate.

This statistic is all the more relevant when it can be assessed with related figures, such as those on investment and exports, income or saving rates, as part of the national accounts.

Data availability

Eurostat publishes annual and quarterly national accounts series for nominal values, volumes and deflators as far back as national data are available. While, for some Member States, consistent data may be available even back beyond 1970, for others data may start only in 1995 or even 2000.

Data for quarterly private consumption for the euro area, the EU and many of the Member States becomes available about 65 days after the end of the reference quarter. More detailed breakdowns of national accounts are published around 105 days after the end of the reference quarter.

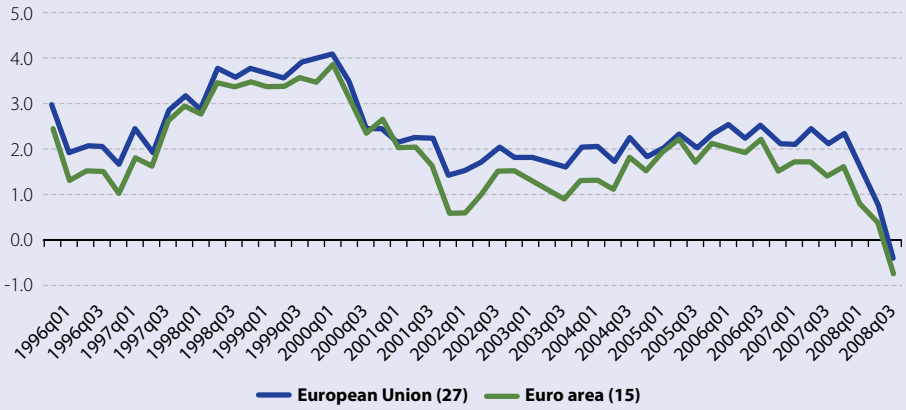
Consumption data are presented at current prices, at the previous year's prices and as chain-linked volumes with the reference year 2000. In addition, growth rates and index numbers are provided. Current price data for Member States is presented in ECU/euro (using variable exchange rates) and in national currency (using fixed conversion rates for EA Member States).

All data are available on the Eurostat website => Theme: Economy and finance => Data => National accounts.

Example

The following graph shows private final consumption growth over the period 1996-2008. It illustrates the movement of the business cycle, notably the sharp downturns between 2000 and 2002 and from the third quarter 2007 onwards. Growth rates in the EU-27 are usually higher than those in the euro area, which is testimony to the more dynamic growth in the new EU Member States, where consumption is growing faster as these economies become richer and the households can afford more and better goods and services.

Graph 2: Quarterly private final consumption, chain-linked volume, seasonally adjusted
% change to the same quarter of the previous year



Source: Eurostat, National Accounts (namq_gdp_k)

Investment

Investment is a summary measure of the value of additions to the capital stock of an economy. A larger capital stock in turn implies an increase in future production potential. Investment is an important measure since it is expected to create returns and increase economic growth in the future.

The term 'investment' is used here to cover gross fixed capital formation (GFCF) in the national accounts. GFCF consists of resident producers' acquisitions, less disposals, of fixed assets during a given period, plus certain additions to the value of non-produced assets. Fixed assets are produced tangible or intangible assets that are themselves used in production processes for more than one year. (ESA95, 3.102)

Practical examples of gross fixed capital formation might be:

- buying machinery for a new production plant,
- building apartment blocks,
- building cargo ships,
- constructing a dyke to protect arable land,
- buying software licences or patents,
- planting fruit trees on a farm,
- buying a company car for business use.

On the other hand, the following do not constitute GFCF:

- buying a private car,
- buying small tools for production plants,
- buying machinery for resale,
- building up stocks of raw materials or finished products.

The term 'gross' in GFCF means that consumption of fixed capital (i.e. depreciation of capital stock) is not accounted for. Hence, investment does not necessarily mean a net increase in capital stock.

Economic importance

Investment is one of the central economic statistics that allows economists to assess the current position in the business cycle. As investment is expected not only to lead to future returns, but to lead to future returns larger than the original investment, it also has a certain power to predict future economic development.

Further insight can be provided by breaking down investment by the type of asset acquired, the broad categories being:

- cultivated assets,
- transport equipment,
- other machinery and equipment,
- dwellings,
- other construction,
- intangible fixed assets.

This statistic is all the more relevant when it can be assessed with related figures such as consumption and exports as part of the national accounts. Furthermore, investment is the main input into calculations of capital stock and capital services, capital productivity and capital intensity.

Data availability

Eurostat publishes annual and quarterly national accounts series for nominal values, volumes and deflators as far back as national data are available. While, for some Member States, consistent data may be available even back beyond 1970, for others data may start only in 1995 or even 2000.

Quarterly investment data for the euro area and the EU and many of the Member States becomes available about 65 days after the end of the reference quarter. More detailed breakdowns of national accounts for the EA/EU are published around 105 days after the end of the reference quarter.

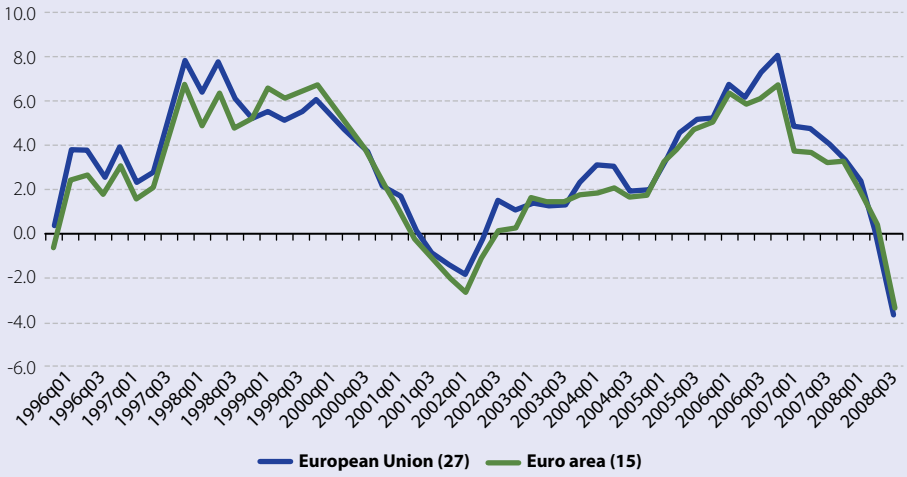
Investment data are presented at current prices, at the previous year's prices and as chain-linked volumes with the reference year 2000. In addition, growth rates and index numbers are provided. Current price data for Member States is presented in ECU/euro (using variable exchange rates) and in national currency (using fixed conversion rates for EA Member States).

All data are available on the Eurostat home page: http://ec.europa.eu/eurostat => Theme: Economy and finance => Data => National accounts.

Example

The following graph shows investment growth over the period 1996-2008. It illustrates the movement of the business cycle, notably the sharp downturn between 2000 and 2002 and from the third quarter of 2007 onwards. Growth rates in the EU-27 are usually higher than those in the euro area, which is testimony to the more dynamic growth in the new EU Member States. At the same time, the EU-27 series is a bit more volatile. Investment may react faster and more strongly to changes in economic expectations than other components of GDP, as can be seen from a comparison with the same graph for private consumption.

Graph 3: Quarterly gross fixed capital formation, chain-linked volume, seasonally adjusted
% change to the same quarter of the previous year



Source: Eurostat, National Accounts (namq_gdp_k)

How national accounts PEEIs are compiled

The compilation of national accounts, including GDP, private final consumption and investment, is governed by international standards. For the EU, this is the European System of National and Regional Accounts (ESA95), which EU Member States are legally obliged to apply. ESA95 itself is consistent with the worldwide SNA (System of National Accounts) standard.

National accounts are compiled from a large set of source statistics, including most other standard economic statistics such as production indices and consumer price indices. Other important source statistics are business and household budget surveys, administrative (e.g. tax) records and non-economic statistics such as the labour force survey or population censuses. Which statistics are used depends on the specific circumstances in a given national statistical system.

Accounts are set up in nominal terms (i.e. current prices) and in volume terms to disentangle price effects. Dividing GDP at current prices by GDP volume results in a measure of aggregate price movements called the 'implicit GDP deflator'. While the nominal accounts are often used for structural analysis, national accounts volumes are better suited for assessing change over time, and in particular the business cycle, because they remove inflation (i.e. price movements) from 'real' economic change. Calculating volumes entails valuing economic activity at the previous year's prices, i.e. assuming that prices had not changed. The resulting changes from one period to another are then chained together to give consistent volume time series.

Nominal national accounts aggregates, such as GDP, consumption and investment at current prices, are naturally expressed in currency units, namely ECU/euros for the euro area (EA) and EU aggregates. Volumes, on the other hand, are normally presented as growth rates — in the case of quarterly accounts, compared both with the previous quarter and with the same quarter of the previous year — and index series. Another important way of presenting GDP in particular is as a 'per inhabitant' figure, for which national data are often given in a form corrected for differences in purchasing power between different countries (and currencies).

EA and EU national accounts aggregates are, in principle, obtained as aggregates of national GDP data. The underlying compilation process for the EA and EU aggregates is somewhat more complex, because they require a fully consistent set of accounts, and national data have some methodological differences and are typically not fully available when the aggregates are calculated.

Quarterly GDP series are either unadjusted or seasonally adjusted, depending on the intended use. Seasonal adjustment usually includes a correction for differences in the number of working days. GDP can either be adjusted as a time series in its own right or be derived from adjusted component series. EA/EU seasonally adjusted GDP series are derived from adjusted national GDP series.

2

External Transactions

External trade balance

European external trade statistics cover the movement of goods across the frontiers of EU Member States. Basically, all physically incoming and outgoing movable goods, including electricity for example, are recorded and documented.

Economic importance

The trade balance is the difference between the value of the goods that a country (or an economic area like the EU or the euro area) exports and the value of the goods that it imports. If exports exceed imports, it has a trade surplus and the trade balance is said to be positive. If imports exceed exports, the country (area) has a trade deficit and its trade balance is said to be negative. However, the words 'positive' and 'negative' have only a numerical meaning and do not necessarily tell you whether the economy of a country (area) is performing well or not. A trade deficit may for instance reflect an increase in domestic demand for goods destined for consumption and/or production. The total trade balance, i.e. of all goods exported and imported, is one of the major components of the balance of payments. A big surplus/deficit for a single product or product category can show a competitive advantage/disadvantage in the world market for goods.

Data compilation

The Member States collect, compile and transmit external trade statistics to Eurostat in line with specific EU regulations. Statistics on trade between Member States are based on Regulation (EC) No 638/2004 of the European Parliament and of the Council, and Commission Regulation (EC) No 1982/2004, while statistics on trade with non-EU countries are based on Council Regulation No 1172/95 and Commission Regulation (EC) No 1917/2000. These are designed to ensure that the statistics are harmonised and comparable. However, Member States may apply different concepts when publishing figures for national purposes.

External trade statistics are compiled under two different statistical systems: Extrastat for cross-border trade in goods between EU Member States and non-EU countries (extra-EU trade) and Intrastat for trade in goods between the EU Member States (intra-EU trade). This separation mainly reflects different data collection instruments but is also logical in terms of policy impact: whereas extra-EU trade statistics are needed for the Community's common trade and customs policy, intra-EU trade statistics measure the integration of the Member States in a common market.

Extra-EU trade statistics are compiled from statistical data in the single administrative document (SAD) provided by the customs authorities, while intra-EU trade statistics are compiled using the Intrastat declarations provided by traders. To limit the burden on businesses of providing trade information, while at the same time maintaining the quality of the data, there is a system of thresholds for both intra-EU and extra-EU trade below which no information, or reduced information, is collected.

In addition to the data collected from the SAD and Intrastat declarations, Member States compile and provide Eurostat with adjustments for the impact of the trade data not collected due to the threshold system and of late replies. So trade coverage should be close to 100%.

Member States send detailed monthly Extrastat and Intrastat statistics within 42 days and 70 days, respectively, from the end of the reference month. In addition, a file of aggregated data for intra-EU and extra-EU trade has to be sent within 40 days of the end of the reference month. Since EU and euro area trade balance statistics are released about 48 days after the reference month, these aggregate data are particularly important for calculating the euro area trade balance. In fact, euro area trade is a combination of extra-EU trade (euro area members' trade with extra-EU countries) and intra-EU trade (euro area members' trade with the other EU countries).

The value used for trade data is the value calculated at national frontiers. It is the FOB (free on board) value for exports and dispatches (intra-EU exports) or CIF (cost, insurance and freight) for imports and arrivals (intra-EU imports).

The indicator chosen is the seasonal and working day adjusted trade balance. It is calculated as the difference between the adjusted series of monthly exports and imports. Monthly trade data are in fact affected, as are most economic series, by recurring seasonal movements (e.g. trade in agricultural products) and by differences in the number of working days (e.g. the effect of Easter holidays).

Data availability

Detailed statistics on trade in goods by each Member State are collected and disseminated on a monthly basis. The trade value and the quantity are the basic indicators available for all products (more than ten thousand) in the Combined Nomenclature (a detailed EU product classification based on the international Harmonised System). Aggregated data series for the EU and the euro area are available for the SITC (Standard International Trade Classification) and BEC (Broad Economic Categories) product groups. Series for the EU-27 and euro area (15) trade balance are available from January 1999. All classifications are available on the Eurostat classification server Ramon (http://ec.europa.eu/eurostat/ramon/).

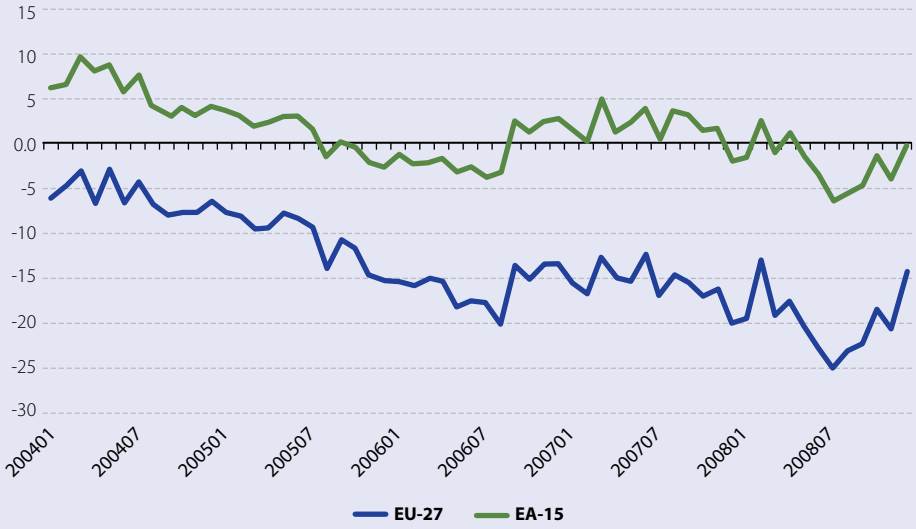
Initial results on the EU and euro area trade balances are published around 48 days after the reference month.

Detailed and aggregated data are available on the Eurostat home page: http://ec.europa.eu/eurostat => Theme: External trade.

Examples

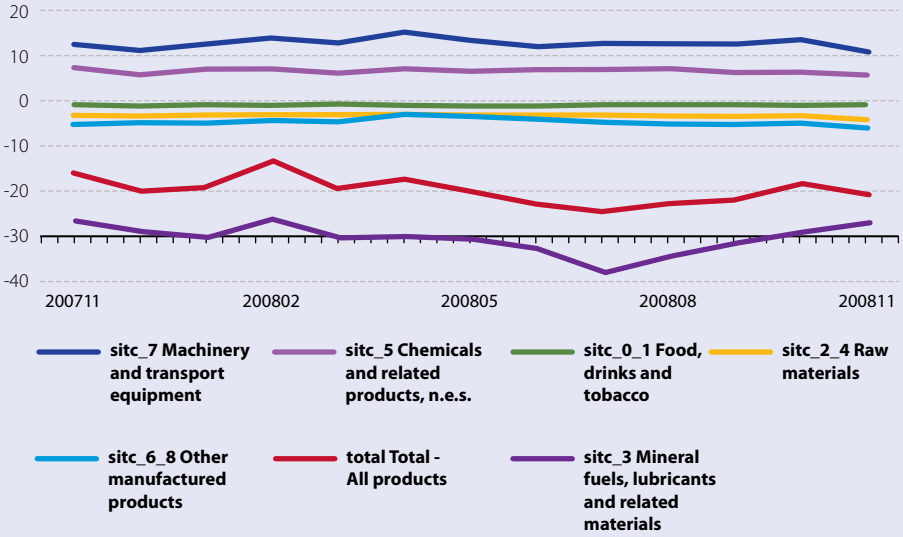
The EU and euro area trade balances have followed a similar pattern in recent years, both showing an overall declining trend. In particular, the EU-27 total balance has been persistently negative in recent years; some products, in particular machinery and transport equipment, have shown big surpluses that have been offset by large deficits in other sectors. During the most recent period shown the total balance has been largely influenced by the increasing deficit in energy products, following the remarkable rise in oil prices.

Graph 4: EU-27 and EA-15 External trade balance
Seasonally and working day adjusted, billion EUR



Source: Eurostat (ext_st_eu27sitc, ext_st_ea15sitc)

Graph 5: EU-27 External trade balance by main product groups
Seasonally and working day adjusted, billion EUR



Source: Eurostat (ext_st_eu27sitc)

Balance of payments — current account

The balance of payments systematically summarises all economic transactions (such as purchases of goods and services, interest or dividend payments, investment, etc.) between the residents and non-residents of a country or of a geographical region during a given period. It is based on a double-entry system: each transaction is recorded twice, once as a credit and once as a debit. For instance, if a service is sold to a non-resident, and paid for in cash in foreign currency, this service export is recorded as a credit, and the corresponding payment, which shows the increase in foreign currency held by residents, as a debit. So the net balance of all entries is zero.

Transactions can be recorded in the current account, in the capital account or in the financial account. The current account shows flows of goods, services, income and current transfers between residents and non-residents; the capital account pertains to capital transfers and the acquisition or disposal of non-produced non-financial assets; the financial account pertains to financial assets and liabilities.

Economic importance

The ratio of a country's current account balance to its GDP is often considered a measure of how open its economy is, as it roughly measures exposure to the rest of the world.

More significantly, there are important links between international transactions, as recorded in the balance of payments, and the domestic economy. Firstly, it can be shown by accountancy identities that the current account balance is equal to the gap between gross savings and gross capital formation, and thus mirrors the savings and investment behaviour of the economy.

In addition, the sum of the balance of the current and of the capital account represents net lending and borrowing by the economy with the rest of the world. This is conceptually equal to the balance of the financial account, which measures how net lending or borrowing is financed. For instance, a deficit in the sum of the current and capital account implies that the economy needs to borrow funds from abroad to finance the deficit, and how it borrows is further shown in detail in the financial account.

Data compilation

Eurostat and the European Central Bank (ECB) share responsibility for compiling the balance of payments. Eurostat focuses on quarterly and annual aggregates for the EU, while the ECB is in charge of compiling and disseminating the euro area monthly and quarterly balance of payments statistics.

The major components of the current account are:

- *Goods* — This includes general merchandise, goods for processing (that is, goods imported/exported to be processed and subsequently re-exported/re-imported), repairs to goods, goods procured in ports by carriers and non-monetary gold.

- *Services* — This includes transportation services, travel, and other services. Transport services include the carriage of passengers, the movement of goods, rentals of carriers with crew, and related support and auxiliary services. Travel mainly includes goods and services acquired by travellers. Other services include communication services, construction services, insurance services, financial services, computer and information services, royalties and licence fees, other business services (which comprise merchanting and other trade-related services, operational leasing services and miscellaneous business, professional and technical services), personal, cultural and recreational services and government services not included elsewhere.
- *Income* — This covers two types of transactions: employee remuneration paid to non-resident workers or received from non-resident employers, and investment income accrued on external financial assets and liabilities.
- *Current transfers* — This includes general government current transfers, e.g. transfers related to international cooperation between governments, payments of current taxes on income and wealth, etc., and other current transfers, e.g. workers' remittances, insurance premiums — less service charges — and claims on non-life insurance companies.

Quarterly and annual data are revised with updated information sent by the Member States according to a timetable. New data received for a single country are published on Eurostat's website only when the data set is updated for all countries.

Quarterly data are considered to be provisional when first released. They are revised when more detailed information (by components and geographical breakdown) is sent by Member States three months after the reference quarter. Quarterly data are also revised when information for the next quarters is provided by Member States. Finally, quarterly data are also subject to revision when the annual data are published, in order to ensure consistency between quarterly and annual figures.

Data availability

The data are available as monthly (only for the aggregate euro area), quarterly and annual data sets. Monthly data are available starting from 1999. Quarterly and annual data are available starting from 1980.

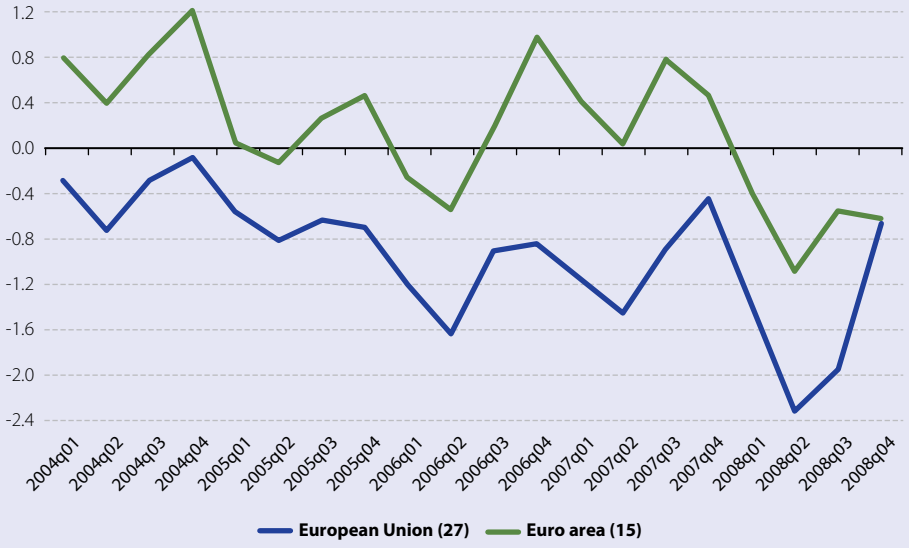
Monthly data for the euro area are released within eight weeks after the relevant month. A first estimate of the quarterly data for the EU aggregate and for the net flows of the current account and services is published two and a half months after the reference period. The complete balance of payments is published four months after the reference period.

The aggregated and detailed data are available on Eurostat's website at http://ec.europa.eu/eurostat => Theme: Economy and finance => Data => Balance of payments — International transactions => Balance of payments statistics and International investment positions.

Example

The EU-27 is currently running a minor deficit in the balance of payments. The comparison with the data for the 15 euro area countries (EA-15) indicates that it is mainly the Member States outside the monetary union, such as the UK, that are contributing to this deficit since the EA-15 balance of payments fluctuates around zero.

Graph 6: Balance of payments — Current account
% of GDP



Source: Eurostat (bop_q_euro, bop_q_eu), ECB

3

Prices

Inflation (Harmonised indices of consumer prices - HICP)

Consumer price indices (CPIs) measure changes over time in the prices of consumer goods and services acquired, used or paid for by households. CPIs aim to cover all the goods and services consumed by a country's population within its territory. The price changes are measured against a representative set of consumer goods and services — the so-called 'consumer basket'. Consumer goods and services include, for example, food, beverages, personal hygiene products, newspapers and periodicals, expenditure on housing, water, electricity, gas and other fuels, health, transport, communications, education, restaurants and hotels. Many of these goods and services are bought frequently, or are consumed on a daily basis.

The HICPs are a set of EU consumer price indices calculated according to a harmonised approach and a single set of definitions. They are designed primarily for assessing price stability in the euro area and convergence in European Union countries, and for making international comparisons of inflation, i.e. changes over time in the purchase prices of goods and services. This does not mean that they should not or cannot be used by a wider range of users for other purposes.

In most EU Member States, HICPs and national CPIs coexist. Both measure inflation and they are for the most part based on the same data sources, but they have different aims and therefore sometimes use different concepts or methods.

Although in general the differences between HICPs and national CPIs have been diminishing as national statistical offices have adopted HICP standards for their CPIs, they may sometimes be significant in practice. The main differences are as follows:

- Coverage of households: the HICP covers households' expenditure within the country, whether those households actually live in the country or they are merely visiting; it also covers institutional households (such as soldiers in barracks, patients in hospitals, etc.). National CPIs usually record expenditure by resident households whether it is incurred in the country or abroad, and may exclude institutional households.
- Coverage and measurement of taxes and fees, and services — such as health, social protection, education and insurance services: the harmonised treatment of this expenditure is a major advantage of the HICP. HICPs measure the actual prices faced by consumers including taxes and duties, and net of reimbursements, for example in the case of medicines. National CPIs may adopt different approaches, or exclude parts of such expenditure.
- The treatment of owner-occupied housing (OOH): price changes for OOH are currently excluded from the HICP. In national CPIs they may or may not be included, and where they are included the methods used differ substantially.

Economic importance

For the euro area, the HICP is mainly used for monetary policy purposes. The ECB defines price stability as a year-on-year increase in the HICP for the euro area of below, but close to, 2%

over the medium term. The change in consumer prices, as measured by the HICP, is one of the convergence criteria used to assess whether a Member State is ready to join the euro area. These uses require a harmonised conceptual framework and comparable results. In addition, HICPs are being used increasingly for economic analyses in general and for indexation purposes.

Outside the euro area, CPIs play a role in some countries in monetary policy and for economic analysis in general, but CPIs also have a wide range of other uses, such as indexation of commercial contracts, wages, social protection benefits, and financial instruments. The range of uses made of CPIs varies between countries. As a result, methods of calculating the CPI vary, and national CPIs are not usually regarded as comparable for cross-country analyses. For the EU, only the HICPs provide comparable measures of consumer price inflation.

Data compilation

The HICP is made up of the EU consumer price indices (CPIs), calculated according to a harmonised approach and a single set of definitions as devised by Eurostat in conjunction with the national statistical institutes of the EU Member States.

The key HICPs are:

- the Monetary Union Index of Consumer Prices (MUICP) — an aggregate index covering the countries in the euro area,
- the European Index of Consumer Prices (EICP) — an aggregate index for all EU countries,
- the national HICPs for each of the EU Member States.

The MUICP and EICP are calculated according to rules laid down in Council Regulation (EC) No 2494/95 of 23 October 1995.

In the Member States prices are typically collected by a combination of visits to local retailers and service providers and central research (via mail, telephone, email and the internet). The distribution of purchases of goods and services for which prices are collected, and the precise description of some of them, varies from country to country — there is no uniform 'European basket'. Data are collected on expenditure that is representative in each country. The weights used for computing HICPs in a country may relate to a period up to seven years prior to the current year. However, to minimise any incomparability this might cause, adjustments must be made each year for any especially large changes in expenditure patterns. HICPs are required to cover all newly significant goods and services. Special rules cover situations where prices are introduced for goods or services that were previously free, or where markets are opened to new suppliers — which may in practice deliver price benefits for consumers.

To produce comparable results, each country's HICPs must be compiled using specified formulae (the ratio of either arithmetic or geometric means, but not the arithmetic mean of price relatives). The MUICP is compiled as a weighted average of the countries comprising the euro area. The country weights are derived from national accounts data for 'household final monetary

consumption expenditure'. For the EU and EEA HICP aggregates, the euro area is treated as a single entity to which data for the other countries is then added (the weights again use national accounts data, converted into purchasing power standards).

The HICPs are in principle open to revision, in particular when new or improved information becomes available.

Data availability

Eurostat publishes HICPs monthly, about 15 days after the end of the reporting month, and publishes a Flash Estimate for the euro area on the last working day of the reference period.

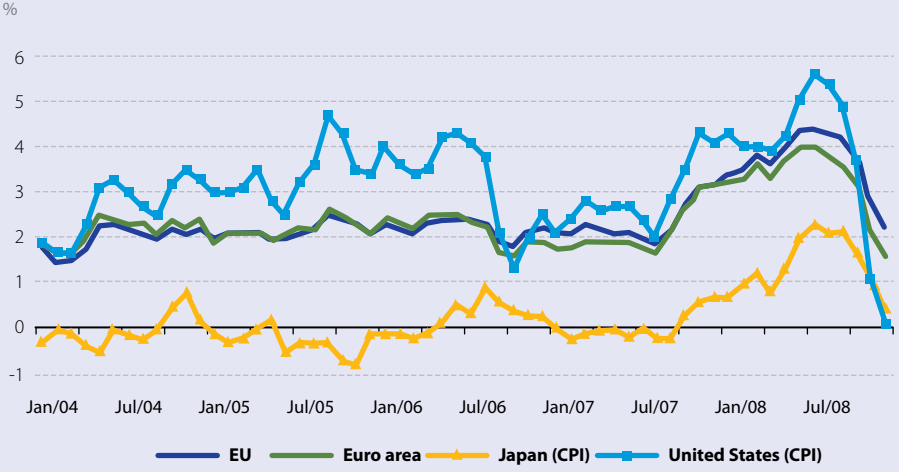
The HICP series begin in 1996 and have a common reference year: 2005=100. Early data for countries that have recently joined the EU are estimates based on national CPIs. For more information, please see the country-specific pages under 'HICP Summary Methodology' on the Eurostat home page (http://ec.europa.eu/eurostat => Special topics: HICP => Methodology => National HICP practices).

The HICP data released each month cover the price indices themselves, annual average price indices and rates of change, monthly and annual rates of change, and 12-month moving rates of change. None of these are seasonally adjusted.

In addition to the all-items HICP, Eurostat publishes the full range of around 100 COICOP/HICP indices for different goods and services and a series of over 30 special aggregates. The complete list of the COICOP/HICP classification (basket) and special aggregates are accessible through the classifications server Ramon on Eurostat's website (http://ec.europa.eu/eurostat/ramon/).

Example

Graph 7: Annual inflation rates



Source: Eurostat (prc_hicp_aind), ECB

EU inflation is measured by the EICP ('European Index of Consumer Prices' as defined in Council Regulation (EC) No 2494/95 of 23 October 1995) which is the official EU aggregate. New Member States are integrated into the EICP using a chain index formula.
Euro area inflation is measured by the MUICP ('Monetary Union Index of Consumer Prices' as defined in Council Regulation (EC) No 2494/95 of 23 October 1995) which is the official euro area aggregate. New Member States are integrated into the MUICP using a chain index formula.

For the United States and Japan national consumer price indices are shown.

4

Labour Market

Unemployment rate

Eurostat produces harmonised monthly unemployment rates for individual EU Member States, the euro area and the EU. These unemployment rates are defined in accordance with International Labour Organization (ILO) standards. The measurement is based on a harmonised source, the European Union Labour Force Survey (LFS).

Based on the ILO concept, Eurostat defines unemployed persons as persons aged 15 to 74 who:

- are without work;
- are available to start work within the next two weeks; and
- have actively sought employment at some time during the previous four weeks.

The unemployment rate is the number of people unemployed as a percentage of the labour force. The labour force is the total number of people employed plus unemployed.

Economic importance

The unemployment rate is an important indicator with both a social and an economic dimension. From an economic perspective, unemployment indicates unused available labour (in persons). Rising unemployment may result in loss of income for individuals and increased pressure on government spending on social benefit schemes.

The ILO unemployment rate is the most widely used labour market indicator because of its international comparability and relatively timely availability. Besides the unemployment rate, indicators such as employment and job vacancies also give useful insight into labour market developments.

Published monthly, the time series on unemployment are used by the European Communities, public institutions and media as an economic climate indicator. Banks use the data for business cycle analysis. Finally, the general public is generally interested in changes in unemployment.

The unemployment rate is considered a 'lagging' indicator. When there is a downturn in the economy, it usually takes several months before the unemployment rate starts to rise. Once the economy starts picking up again, employers are usually cautious and it takes several months again for the unemployment rate to start falling.

Data compilation

The data are calculated monthly. However, there is no legal basis for producing and disseminating *monthly* unemployment data. There are EU Regulations that govern the LFS and the production of quarterly labour force statistics. While these quarterly LFS figures are used as internationally comparable benchmarks, the monthly pattern is derived by using additional monthly figures from unemployment registers. Few countries actually supply monthly unemployment figures directly from the LFS. All monthly figures are delivered by the Member States on the basis of a 'gentlemen's agreement'.

The results of the calculations yield harmonised monthly unemployment data. Quarterly and annual averages (structural indicators) are calculated from these harmonised time series.

Eurostat aims to harmonise the calculation process as much as possible. For all countries, the monthly series are compared with the quarterly LFS figures. However, the calculation of monthly figures and of provisional figures (until LFS data are available) depends on the availability and specific characteristics of sources in individual Member States.

Every month new figures from the public employment offices' administrative registers or from the LFS are added into the process and new estimates are calculated. This might cause a slight revision in past figures as the seasonal adjustment procedure is re-run. Whenever the new quarterly LFS data become available, a potentially larger revision takes place from the months of that particular quarter onwards.

Data availability

Harmonised unemployment figures are compiled for all EU Member States. Aggregates are available for the EU-15, EU-25 and EU-27 and euro area aggregates are available for the EA-12, EA-13, EA-15 and EA-16.

New data are released every month, about 30 days after the end of the reference month.

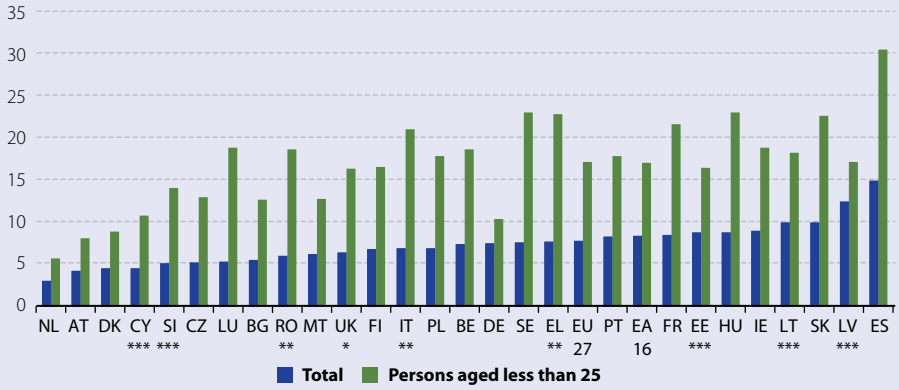
The data is available as totals, disaggregated by sex and two age groups (15-24, 25-74).

The data is available unadjusted, seasonally adjusted and as trend estimates.

All data are available on the Eurostat home page at http://ec.europa.eu/eurostat => Theme: Population and social conditions => Data => Labour market.

Examples

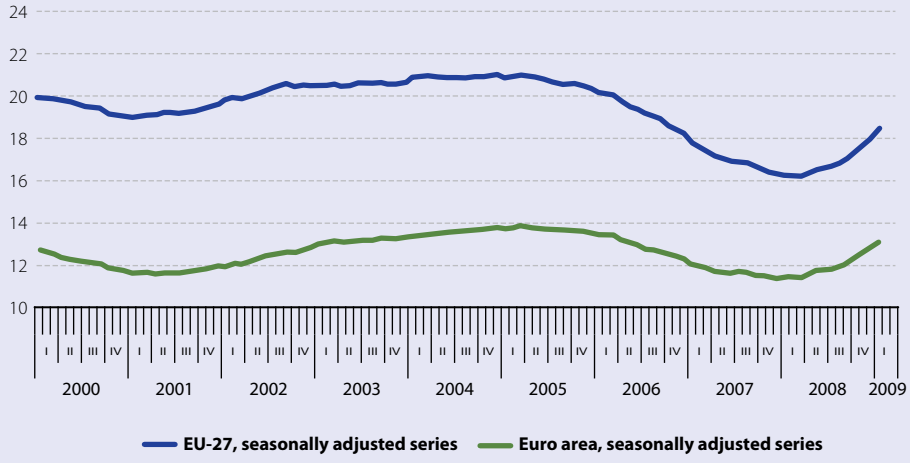
Graph 8: Unemployment rate, EU-27, January 2009
%, seasonally adjusted



Source: Eurostat (une_rt_m)

* November 2008 ** Q3 2008 *** Youth unemployment quarterly

Graph 9: Unemployment in the EU-27 and the euro area
Million, seasonally adjusted



Source: Eurostat (une_rt_m)

Employment

Employment statistics measure the number of people engaged in productive activity that falls within the national accounts): either employees (working by agreement for another resident unit and receiving remuneration) or self-employed people (owners of unincorporated enterprises).

Employment is defined in the European System of National and Regional Accounts (ESA95, 11.11) to ensure that labour input measures applied in assessing productivity are conceptually consistent with the output measures derived as part of the national accounts. Hence employment covers people working in resident production units (since only resident producer units' output is included in GDP), even if these people themselves are not resident in the economy.

Employment can be counted in persons, so every person engaged in productive activity counts as employed, regardless of the scope of their activity and regardless of their weekly working time. Every person however is only counted once. Alternatively, employment can be measured in hours worked. This gives a better indication of the volume of work input, but is more difficult to compile and harmonise.

People who are temporarily not at work are also considered employees provided they have a formal job attachment. They may temporarily not be at work because of illness or injury, holiday or vacation, strike, maternity leave or parental leave.

'Self-employed persons' also includes unpaid family workers (e.g. on farms or small retail trades) and workers engaged in production undertaken entirely for their own final consumption or own capital formation.

Economic importance

Employment, along with GDP and inflation is a direct indication of the overall level of economic activity, and highly correlates with the economic cycle, albeit with a certain time lag.

Human labour is the most important production factor. Higher employment means better use of the productive potential of a society. Other things being equal it leads to higher aggregate revenue for the employed (wages and salaries or operating profit), and this revenue can in turn be consumed or saved.

Employment also has an important social aspect. It is the main source of income for the majority of population. Increased employment usually means increased total income, which not only can lead to additional economic growth, but can also reduce the risk of poverty, decrease dependency on transfers and generate additional tax revenues.

The employment category is based on a well-established and internationally harmonised methodology. Compiled as part of the national accounts, it is conceptually consistent with monetary aggregates such as employee compensation and value added. This allows important derived measures such as productivity and unit labour cost to be calculated.

Its usefulness in economic analysis is further enhanced by the availability of breakdowns by occupational status (employee, self-employed) and by economic activity for national accounts employment. Further detail, in particular by age, gender and qualification, is not available from national accounts, but from labour market statistics such as the labour force survey.

There are some limitations: employment expressed in persons employed is insensitive to changes in the balance between full-time and part-time employment. Neither does employment give any indication of the distribution of income derived from employment or other sources.

Data compilation

National accounts, including employment, are compiled in line with international standards: for the EU, the European System of National and Regional Accounts (ESA95), which Member States are legally obliged to apply. ESA95 itself is consistent with the worldwide SNA (System of National Accounts) standard. Employment is covered in chapter 11 of the ESA. 'Employment covers all persons — both employees and self-employed — engaged in some productive activity that falls within the production boundary of the system' (ESA95, 11.11). National accounts are compiled from a large set of source statistics, including many different sources for employment statistics such as the labour force survey, population surveys, the records of the labour administration and social insurance bodies, tax statistics and business surveys.

EA and EU employment are, in principle, obtained as sums of the national employment data.

Quarterly employment series are used either unadjusted or seasonally adjusted, depending on the intended use. Seasonal adjustment of employment series usually does not include a correction for differences in the number of working days. EA/EU seasonally adjusted employment series are derived from adjusted national employment series.

Data availability

Eurostat publishes annual and quarterly employment series expressed in persons and in hours worked. EA/EU employment expressed in hours worked is currently only available on an annual basis. Series for the euro area and the EU currently start in 1995, but the length of country series may differ substantially.

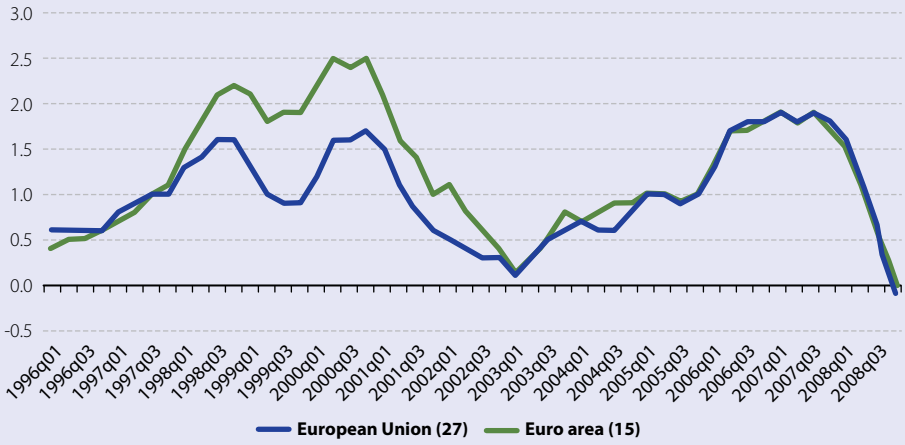
Data on quarterly employment growth for some Member States become available 45 days after the end of the reference quarter. Data on the euro area, the EU, and additional Member States are published about 75 days after the end of the reference quarter, while additional breakdowns may be published around 105 days after the end of the quarter.

All data are available from the Eurostat home page on http://ec.europa.eu/eurostat => Theme: Economy and finance => Data => National accounts.

Example

The graph below shows employment growth over the period 1996-2008. It illustrates the movement of the business cycle, notably the sharp downturn between 2001 and 2003 and from the third quarter of 2007 onwards. Another interesting feature is that growth rates in the EU-27 were significantly lower than those in the euro area between 1998 and 2003, and that despite stronger economic growth in the new EU Member States. This indicates that economic growth was at least partly driven by productivity increases and not by an increase in employment alone.

Graph 10: Quarterly employment, seasonally adjusted
% change compared to the same quarter of the previous year



Source: Eurostat, National Accounts (namq_aux_pem)

Labour cost index

The labour cost index (LCI) shows the short-term development of the total cost on an hourly basis of employing labour. In other words, the LCI measures the cost pressure arising from the production factor 'labour'.

Economic importance

The labour cost index is an essential part of the range of statistics relevant to understanding inflation and cost dynamics in the economy.

Information on labour costs is required for economic and monetary policies, wage bargaining and economic analyses. Labour costs are an important potential source of inflation since they account for a large proportion of the total costs borne by private businesses, which may pass higher labour costs, in particular if not reflected in higher productivity, on to consumers via higher end prices, thus fuelling inflation. A timely labour cost index is therefore of utmost importance for the European Central Bank in order for it to be able to monitor inflation in the euro area.

Data compilation

The LCI consists of the Laspeyres index of labour costs per hour worked, chain-linked annually and based upon a fixed structure of economic activity at NACE section level. The current reference year for the index is 2000. In addition to the index numbers, annual and quarterly labour cost growth rates are also calculated.

EU Member States produce the necessary estimates from surveys, other appropriate sources such as administrative data and statistical estimation procedures. Different estimation methods are used, as for example estimations of separate growth rates for labour costs and hours worked, or the application of growth rates of some labour cost components to all labour cost components.

Since the production of quarterly LCI figures in most Member States relies heavily on annual and even four-yearly benchmark surveys and estimation methods, revisions are frequent and can go back several years.

EU aggregates are obtained as weighted aggregates of the national data. The weights reflect the share of labour costs that each Member State has in the total EU aggregate. While the LCI itself is compiled in national currency and thus not influenced by exchange rate movements, the share of the Member State for the EU aggregates is measured in euro and can therefore vary according to the value of the national currency against the euro. In practice, these variations are however very small and have no influence on the comparability of the LCI series over time.

Data availability

Eurostat has labour cost index data available for all Member States, the euro area and the EU on a quarterly basis from 1996 on.

Data are broken down by cost items (total cost, wages and salaries, other labour costs) and by economic activity (NACE sections, see NACE classification on the Eurostat Ramon server).[1]

Index numbers and growth rates are made available for the total cost index and for the subdivisions wages and salaries and non-wage labour cost by economic activity.

All series are available in working-day-adjusted form; this means that differences in hourly labour cost which arise due to a varying number of working days are corrected for. Also, all series are available on a seasonally adjusted basis.[2] Seasonal adjustment corrects for variations in the labour cost index over the year, which can arise from recurring events such as new school and university graduates entering the labour market in the autumn.

Quarter-on-quarter growth rates are based on seasonally adjusted data; year-on-year growth rates are based on working-day adjusted data.

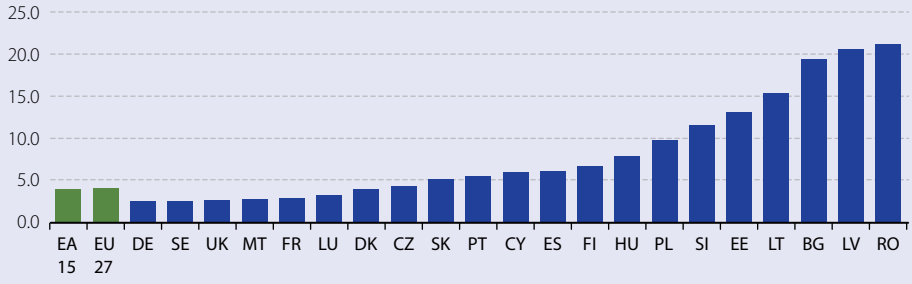
New data are released every quarter, about 75 days after the end of the reference quarter.

Index levels and quarterly changes are available on the Eurostat home page at http://ec.europa.eu/eurostat => Theme: Population and social conditions => Data => Labour market.

1 http://ec.europa.eu/eurostat/ramon.
2 Seasonally adjusted series are also working day adjusted.

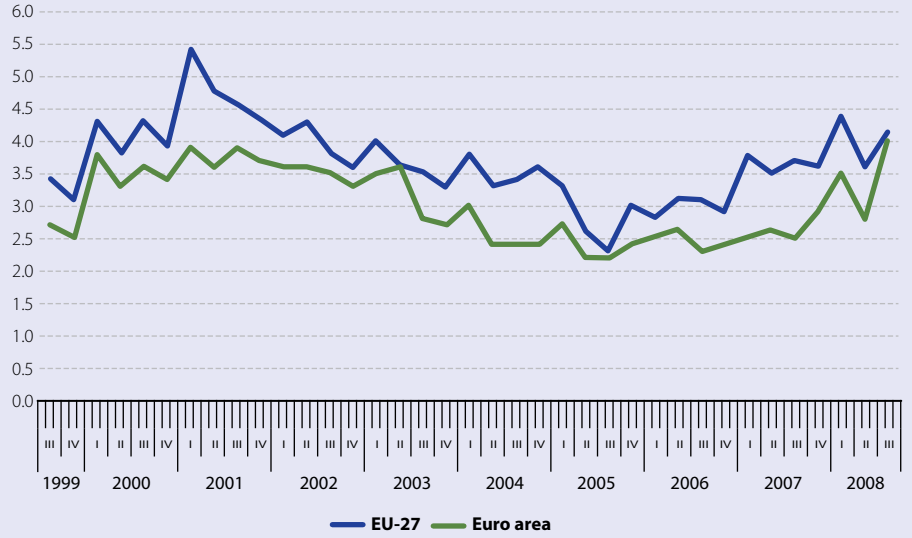
Examples

Graph 11: Total nominal hourly labour cost, third quarter 2008
% change compared with same quarter of previous year, working day adjusted



Source: Eurostat (lc_lci_q)

Graph 12: Total nominal hourly labour cost
% change compared with same quarter of previous year, working day adjusted



Source: Eurostat (lc_lci_q)

5

Business Indicators

Industrial producer prices

The industrial producer prices (also known as output prices) follow the selling prices of the goods on the domestic markets and non-domestic markets. In practice, the series they follow most closely is the producer price index for domestic markets.

The industrial producer price index (PPI) for domestic markets measures the average price development of all goods resulting from an economic activity and sold on the domestic market. It is a measure of price changes from the perspective of the seller. This contrasts with other measures, such as the consumer price index (CPI), that measures price change from the perspective of the purchaser. The difference is trade and transport margins and taxes such as VAT that occur after the goods leave the factory.

Economic importance

The PPIs are used for three major purposes:

- as an economic indicator — PPIs are early signals of inflationary pressures in the economy, and may indicate future price changes for businesses and consumers;
- as a deflator — PPIs are used to adjust other economic time series for price changes;
- as a basis for contract price adjustment — PPIs can be used in price escalation clauses in long-term contracts in order to protect both buyers and sellers from unanticipated changes in prices.

Data compilation

The following rules apply to defining prices:

- The appropriate price is the basic price excluding VAT and similar deductible taxes directly linked to turnover as well as all duties and taxes on the goods and services invoiced by the unit, but including any subsidies on products received by the producer.
- If transport costs are included, this should be part of the product specification.
- In order to show the true development of price movements, actual transaction prices should be used, not list prices.
- The producer price index should take into account quality changes in products.
- The price collected in a given period should refer to orders booked during that period (i.e. the price at the time of the order, not when the goods leave the factory gates).

The index should, in principle, reflect the average price during the reference period. In practice, the information actually collected may refer to a particular day in the middle of the reference period that is deemed representative of the reference period. For products with a significant impact on the national economy whose prices are known to be volatile at times, it is important that the index does indeed reflect average prices.

The domestic market is defined as that of all other enterprises resident in the same economic territory as the enterprise that produces the products/services concerned.

The domestic PPIs track price changes for the output sold by domestic goods producers operating in the following sectors: *mining and quarrying, manufacturing,* and *electricity, gas and water supply*. Data are available for aggregate and detailed levels, in accordance with the NACE classification of economic activities (accessible on the Eurostat classification server Ramon).

National data are collected by the relevant countries, generally by postal questionnaires or telephone surveys, and increasingly by electronic means.

The monthly changes in prices of goods sold by domestic producers are monitored by means of statistical surveys of the producers. Regular collection of price data normally flows from a two-stage sample of observation units (domestic producers) and a sample of their products/services.

Alternatively, if an appropriate framework is available, a single sample is made of pairs of observation units and products. The PPI for an economic activity is the weighted average of the producer price indices of the observation units in that activity.

The EU Member States send index data to Eurostat. Eurostat calculates the European aggregates as weighted averages of the data from the Member States.

The national and European producer prices published by Eurostat are expressed with reference to a base year. In 2009 this indicator will move to NACE rev 2, base year 2005. More details about these changes and other additional methodological details are offered in the 'Explanatory notes' at the end of this chapter.

Data availability

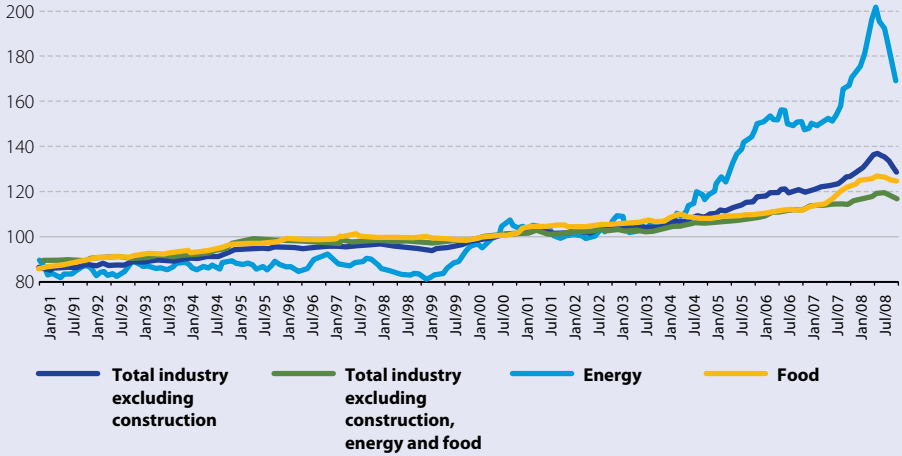
The industrial producer price index is published monthly for the euro area, the European Union and for each country separately, if data are available.

Countries send data to Eurostat no later than one month and five days after the end of the reference month. In fact, most of the countries send their data before the legal deadline, which allows Eurostat to compile and publish the European aggregates one month and two or three days after the end of the reference period. Price indices are not seasonally adjusted and are presented as indices and growth rates.

All data, the latest publications and background information are available on the short-term business section of the Eurostat website => Theme: Industry, Trade and Services => Short-term business statistics.

Example

Graph 13: Industrial Producer Price Index for Domestic Markets in the European Union
2000=100



Source: Eurostat (sts_inpp_m)

The graph above shows the influence of food prices and in particular extremely volatile energy prices on the prices of total industry (excluding construction). The prices for energy increased swiftly from the middle of 2004 until the middle of 2008, when they started declining after reaching their highest historical value in July 2008.

Industrial import prices

The industrial import price index measures the development of monthly transaction prices of imported goods purchased from abroad by domestic residents. The import price index is designed to measure pure import price changes; it should take into account changes in product quality, the appearance of new products and the disappearance of others, and changes in the geographical distribution of the flows. This contrasts with the unit value index (UVI), which is used in foreign trade statistics. Import unit values are calculated as the value of the imports of a product divided by the quantity imported. The UVI reflects not only higher or lower prices but changes in the quality and volume of the products imported.

Economic importance

International trade is an important part of the world economy and particularly important for the economy of EU Member States. Precise figures on trends in trade are essential for monitoring the economy. International trade statistics published by Eurostat are in current prices, i.e. in prices relevant to the reference period concerned. However, the development of trade flows over time is determined by variations in price and volume. It is necessary for a number of analytical purposes to distinguish the two.

In 2000, the Economic and Monetary Union Action Plan highlighted the need for more specific statistical information to reflect short-term economic developments in the euro area. In line with this plan, Council Regulation (EC) No 1165/98 concerning short-term business statistics was amended in 2005, partly in order to add a new variable to be delivered by euro area Member States: the import price index.

The availability of indicators on changes in import prices makes it possible to:

- distinguish real import growth from price changes in foreign trade statistics and the national accounts;
- analyse the competitiveness of countries or products in international markets;
- analyse how changes in exchange rates are passed on in import prices;
- analyse the impact of imported inflation and hence forecast prices in the domestic market.

The import price index can be considered one of the most important indicators for measuring the origins of inflation and formulating monetary and fiscal policies for the euro area.

Data compilation

The following rules apply to defining import prices:

- the appropriate price is the CIF (cost, insurance, freight) price at the border excluding all duties and taxes on the goods and services to be borne by the importer;

- intra-company transfers should be taken into account as long as these transfers are based on prices which are market based or market influenced, or if market prices are insignificant;
- in order to show the true development of price movements, actual transaction prices, not list prices, should be used, so discounts should be deducted from the price;
- in order to show pure price movements the price index should take into account and adjust for quality changes in products;
- other price-determining characteristics of the products should also be treated consistently;
- imports are recorded when the ownership of the goods is transferred (i.e. when the parties record transaction in their books or account);
- transfer of ownership of boats and aircraft or similar products from a person established in a non-member country to a person established in the Member State in question is counted as import.

All characteristics that determine the price of the products are taken into account, including the quantity of units sold, transport provided, rebates, service conditions, and terms of guarantee.

The following limitations apply:

- imports by households, government units and non-profit institutions are excluded;
- the underlying trade regimes and statistical procedure are the special trade system, and both normal imports and imports for inward processing are included (imports for repair are not covered);
- product coverage is limited to the *mining and quarrying*, *manufacturing,* and *electricity, gas and water supply* sectors in the Classification of Products by Activity (CPA, available on the Eurostat classification server Ramon). Related services are excluded.

The import price index is required from those Member States that have adopted the euro as their currency. These countries must further distinguish in their import price indices between euro-area and non-euro-area imports. The data must be sent to Eurostat as index data.

The import price index is subject to Commission Regulation (EC) No 1178/2008 amending Commission Regulation No (EC) 657/2007 regarding the establishment of the European sample schemes and limiting the scope of this variable. Austria, Cyprus, Belgium, Finland, Ireland, Luxembourg, Malta, Portugal and Slovenia participate in the European sample scheme; they have to deliver import price indices for at least some selected four-digit CPA products and for imports coming from the non-euro area countries only. The other euro area countries opted to deliver complete data at two-digit CPA level, for all three variables: total import prices, imports from the euro area and imports from outside the euro area.

The basic sampling method varies from one national statistical authority to another. It generally involves a three-stage sampling procedure: selecting a sample of groups of imported products;

selecting a sample of enterprises or similar units in each group of products selected in the first stage; and selecting specific commodities to be priced.

Eurostat calculates euro area aggregates as weighted averages of the data from the Member States. The euro area aggregates can be calculated as soon as the national data cover at least 60% of the total. The most recent periods for any missing countries are forecast.

The weights for aggregating the indices are based on imports and are derived from foreign trade statistics. Weights are revised every five years. The current weighting system uses data for the reference year 2005.

Eurostat publishes import price indices which are calculated with reference to a base year. Currently, the base year is 2005.

In 2009 the import price index will convert to the new CPA 2008 classification.

Short-term statistics will implement CPA 2008 in 2009. Starting with the first reference month of 2009, Eurostat will publish all the import price data according to CPA 2008.

Data availability

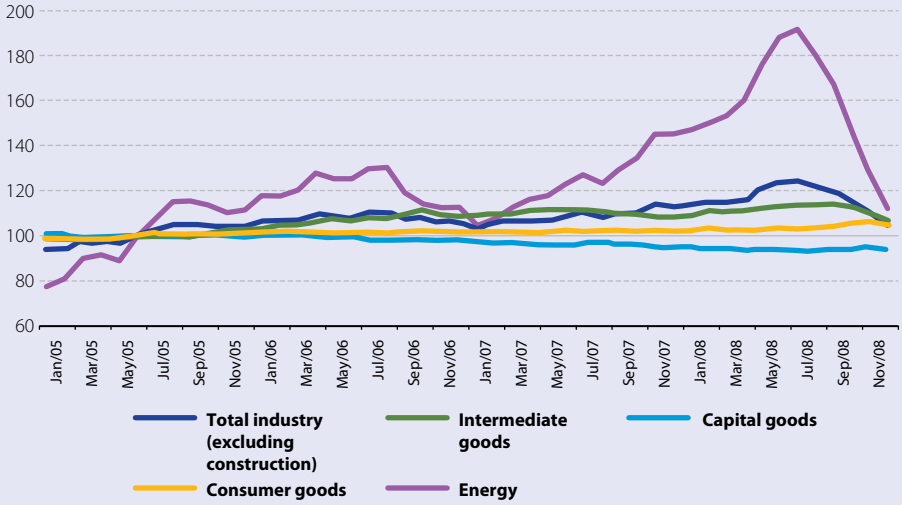
Data are published for the euro area and for each euro area country, if they are available. Those Member States that have not adopted the euro as their currency do not need to send import price data.

The reference period is the calendar month. Data should be sent to Eurostat no later than 1 month and 15 days after the end of the reference period. As a number of major countries send their data before the official deadline, it is possible to publish euro area aggregates for the latest periods one month and 11 or 12 days after the end of the reference period. Data are presented as indices and growth rates.

All data, the latest publications and background information are available on the short-term business section of the Eurostat website => Theme: Industry, Trade and Services => Short-term business statistics.

Example

Graph 14: Industrial Import Prices, euro area
Gross data, 2005=100



Source: Eurostat (sts_inpi_m)

The graph above gives a picture of import price developments for five of the most important euro area aggregates. The import price index for energy is clearly changing fastest, driving import prices for industry as a whole.

The energy sector contrasts with that of capital goods, which is the most stable aggregate of the four that make up total industry.

Service producer prices

Service producer price indices (SPPI) show price changes in the service markets.

Economic importance

Services are an important part of European economies and contribute substantially to economic output. The large and increasing share of services in the economy led to a great need for more short-term statistics on services. One consequence was that Regulation No 1158/2005 of the European Parliament and the Council amended the original STS Regulation (Council Regulation (EC) No 1165/98) and introduced a requirement for producer price indices for a wide selection of service activities. The activities covered were those identified as being probably the most related to the business cycle and for which users, notably policy makers, the European Central Bank and national accountants, felt the greatest need. The services covered by the SPPI represent about 30% of the economy — transport and communications activities, computer services and other services to business (for example, legal and accounting services).

These services were selected as being mainly delivered to customers that are enterprises or people representing enterprises, often referred to as *B2B* (business to business). For some of these activities, where sales to households are also significant, a *Business to All* price index is also of interest. Other services, like wholesale and retail trade, education, health and other community, social and personal service activities are not yet covered by the SPPIs.

Data compilation

The definitions of all short-term statistics variables are laid down in Commission Regulation (EC) No 1503/2006 of 28 September 2006.[3]

For service producer prices the appropriate price measure is the actual transaction price. Prices should take into account any discounts, rebates, surcharges, etc., that may apply. Taxes on products (especially VAT) are excluded, while any subsidies on products received by the producer are added.

The price is recorded at the date of delivery of the service. If the service delivery spans several periods, appropriate adjustments are made.

SPPIs are quarterly indices with 2006 as the base year.

More technical information on SPPIs is available from the *Methodological guide for developing producer price indices for services* (Eurostat product code KS-BG-06-003).

Starting from the data for the first quarter of 2009, the SPPIs will be provided in NACE Rev 2 classification. The coverage of the indices does not change much as a result of the changeover to the new classification. More details about these changes and other additional methodological details are offered in the 'Explanatory notes' at the end of this chapter.

3 Official Journal No L 291, 12 October 2006.

Data availability

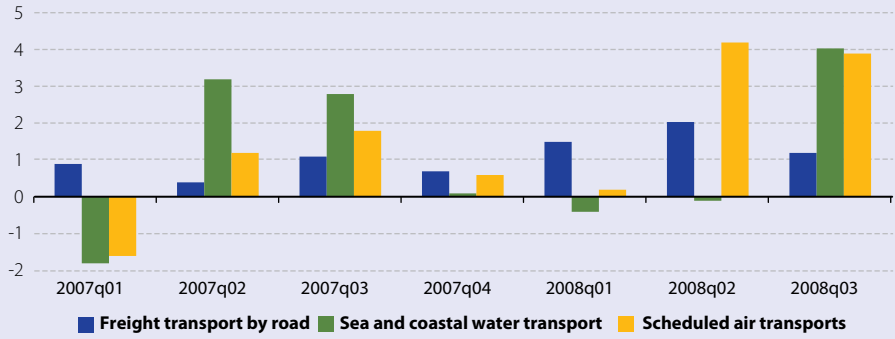
The 2005 Regulation set the first quarter of 2006 as the first reference period. In addition, the Regulation gave some countries until August 2008 or even August 2009 and 2010 to introduce the SPPIs for some or all service activities.[4] By autumn 2008 SPPIs for the EU were available for the six activities shown in the graphs below for a sufficient number of countries to enable European totals to be calculated, while availability for other activities will progressively improve to almost complete coverage in the course of 2009. The available data are normally published three months after the end of the reference quarter.

All data and background information are available on the short-term business section of the Eurostat website => Theme: Industry, Trade and Services => Short-term business statistics. Since the SPPI is still in development, it is not yet included in the PEEI list on the Euro-Indicators/PEEI webpage.

4 Storage and warehousing, business service activities, or all service activities for smaller Member States.

Examples

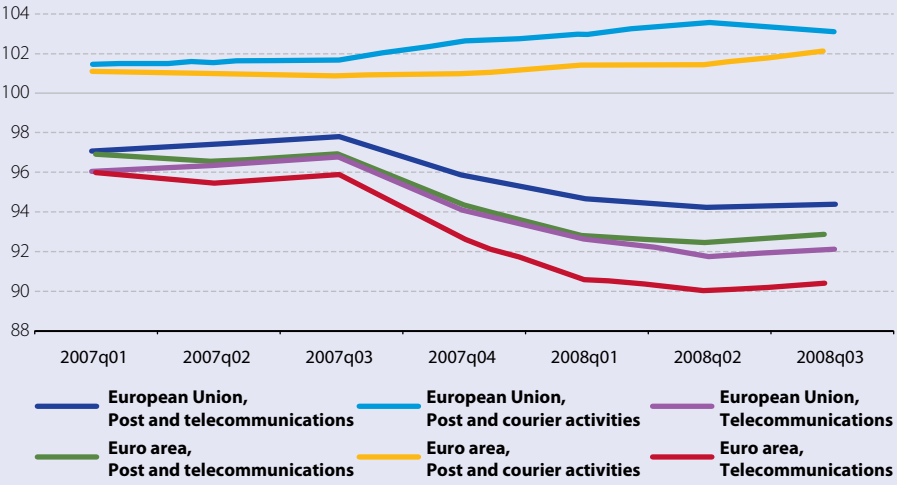
Graph 15: Prices for transport activities in the EU
% change to the previous quarter



Source: Eurostat (sts_sepp_q)

Of the three activities shown, *sea and coastal water transport* and *scheduled air transport* have had the biggest increases in service prices since the beginning of 2007.

Graph 16: Post and telecommunication prices in the EU and in the euro area
2006=100



Source: Eurostat (sts_sepp_q)

In *post and telecommunications*, the telecommunications index has pulled the overall index downwards, while prices for *post and courier activities* have been relatively stable in recent years.

Industrial production

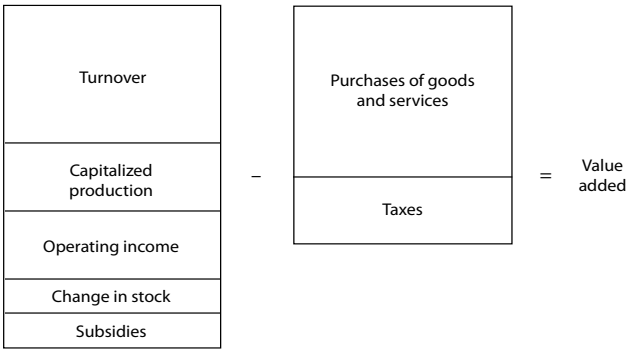
Industrial production is an indicator of the business cycle for industrial output and activity. The index measures changes in the volume of output of different industrial activities and industry as a whole at monthly intervals. It reflects price-adjusted changes in industrial output.

Economic importance

Industrial production is one of the most important measures of economic activity. Changes in the industrial production index mark the economic cycles of industry. This index is the reference indicator for short-term observation of economic development and it is used in particular to identify turning points in economic development at an early stage. The major advantages of industrial production compared with other indicators are its combination of fast availability (relative to GDP for example) and at the same time its detailed activity breakdown. Industrial production is used to assess changes in GDP as a whole.

Data compilation

The aim of the industrial production index is to measure changes in the price-adjusted output of a branch and of total industry month by month. In theory, this indicator reflects volume developments in value added. Value added 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 changes in stocks, minus the purchases of goods and services, minus taxes on products linked to turnover but not deductible, plus any subsidies on products received.



Income and expenditure classified as financial or extraordinary in company accounts is excluded from value added. Hence, subsidies on products are included in value added, whereas all taxes on products are excluded.

Industrial production covers the following economic sectors: *mining and quarrying*, *manufacturing* and *electricity, gas and water supply*. Data at detailed levels are available, broken down by the standard classification of the activities (NACE, available on the Eurostat classification server Ramon).

In most countries, the value added data needed to compile an index are not available on a monthly basis. Therefore, data are in general collected for other variables considered suitable proxies for value added. So a variety of methods are used, which can be broken down as follows:

Methods that use **output variables** as basic information

- measuring as a value the output (turnover, production value or value added) of the observation unit as a whole, and then using a deflator at some stage of compilation to produce a volume index;
- measuring as a value the output (sold or total production, or production intended for sale) for products, and then using a deflator at some stage of compilation to produce a volume index;
- measuring the physical quantity (tonnes, litres, pieces etc.) of output by product.

Methods that use **input variables** as basic information

- measuring the work input (hours worked is a good approximation of the production process); when using work input as basic data it is particularly important to take account of changes in productivity;
- measuring the physical quantity (or deflated value) of inputs (raw materials or energy).

The EU Member States send Eurostat time series in working-day-adjusted form. Eurostat calculates working-day-adjusted European indices, as weighted averages of the data received from the Member States. In addition, Eurostat makes a seasonal adjustment of European and national time series (where countries do not supply seasonally adjusted data).

The national and European indices published by Eurostat are expressed with reference to a base year. In 2009 this indicator will move over to NACE rev 2 and base year 2005.

More details about these changes and other additional methodological details are offered in the 'Explanatory notes' at the end of this chapter.

Data availability

Data are published for the euro area, the European Union and for each country separately, if available.

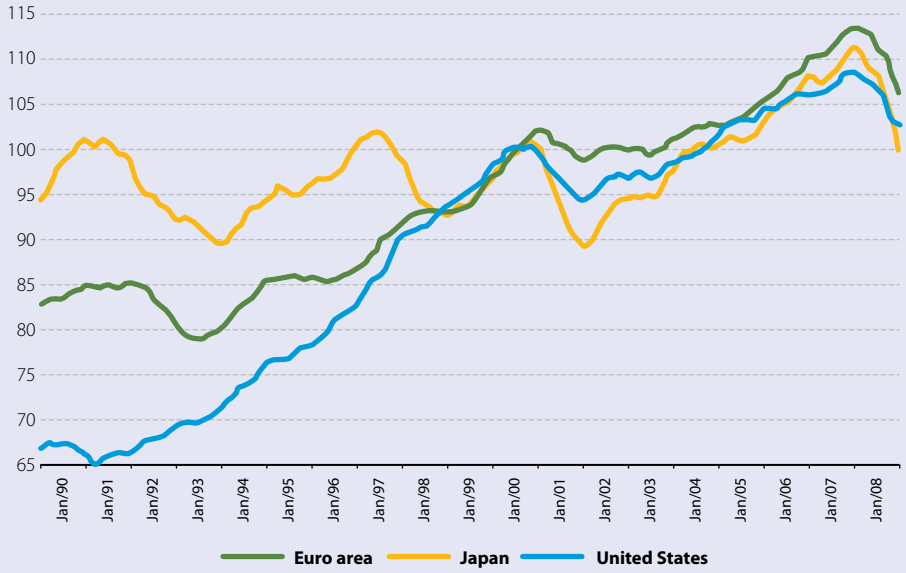
The industrial production index is published monthly. EU countries send data to Eurostat no later than one month and 10 days after the end of the reference month. The European aggregates are normally published one month and 12 days after the end of the reference period.

Data are presented in working-day-adjusted and working-day and seasonally adjusted form, as indices and growth rates. Trend data are also available.

All data, the latest publications and background information are available on the short-term business section of the Eurostat website => Theme: Industry, Trade and Services => Short-term business statistics.

Example

Graph 17: Industrial Production Index
2000=100, trend-cycle data



Source: Eurostat (sts_inpr_m)

This graph shows changes in the industrial production index for the euro area, the United States and Japan. The euro area shows the most dynamic developments from 2001 onwards. All three economies record a sharp drop in 2008, as they slip into economic recession.

Industrial new orders

The new orders index shows changes in demand for domestic products and imports. It measures the trend in orders received by industrial producers from domestic and non-domestic customers. It shows orders broken down by the industry that received them, not by the industry that placed them.

Economic importance

The new orders index provides information on the future development of production and turnover of branches that habitually work to order. This information is particularly useful at times when the economic cycle is changing. The new orders index is therefore considered a leading indicator. Series based on orders may be included in composite leading indicators for the economic cycle.

The new orders index also indicates the future development of the industries placing the orders. For example, if there is a large inflow of orders for the manufacture of machinery for metallurgy, production of such machines will increase and, as these machines are sold to manufacturers working in metallurgy, production in the metallurgy sector will also increase in the future.

Data compilation

The orders recorded for a particular reference month represent the value of contracts agreed that month that connect a manufacturer with a third party for the supply of manufactured products (and services directly linked to these products). The order is accepted if, in the producer's judgment, there is sufficient evidence for a valid agreement.

'New orders received' covers goods and services to be provided by producers and their subcontractors.

The following items should be deducted from the value of orders:

- VAT and other similar deductible taxes directly linked to turnover,
- all duties and taxes on goods or services that will be invoiced by the unit,
- price reductions, rebates and discounts given at the time of the order and the value of any packaging that is expected to be returned after delivery.

Orders from previous periods that have been cancelled during the reference period are not deducted from new orders received, nor is the index for previous periods revised to reflect cancellations.

The value of new orders also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice.

New orders data are only requested for those industrial activities where it is assumed that the enterprises work to order.

The main aggregate for new orders is *manufacturing industries working on orders.* It reflects the trend in the amount of orders received in the industries working to order. Another useful analytical aggregate is *manufacturing industries working on orders excluding heavy transport equipment*, as explained below.

Countries collect the data, normally by means of statistical surveys of industries that work to order. The Member States are asked to send Eurostat new orders series in unadjusted form. Eurostat calculates unadjusted European aggregates as weighted averages of the data received from the Member States. In addition, Eurostat makes a seasonal adjustment of the European aggregates and of the national time series (where countries do not supply seasonally adjusted data).

The national and European new orders indices published by Eurostat are expressed with reference to a base year. In 2009 this indicator will move to NACE rev 2, base year 2005. More details about these changes and other additional methodological details are offered in the 'Explanatory notes' at the end of this chapter.

Data availability

Data are published for the euro area, the European Union and for each country separately, if they are available.

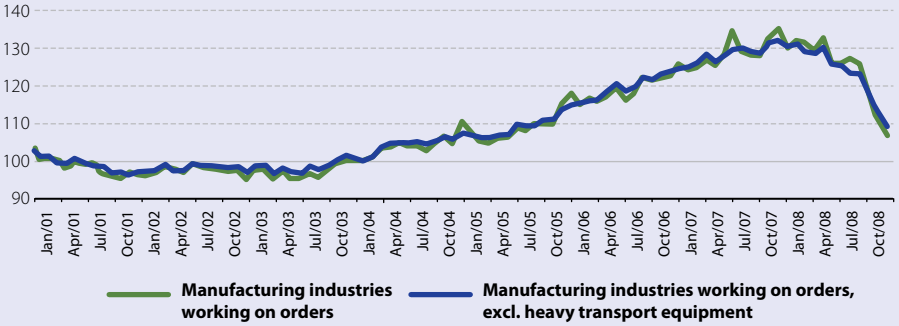
The new orders index is published monthly. EU countries send data to Eurostat no later than one month and 20 days after the end of the reference month. The European aggregates are normally published one month and 22 days after the end of the reference period.

Data are presented in unadjusted and in seasonally adjusted form, as indices and growth rates. Trend data are also available.

All data, the latest publications and background information are available on the short-term business statistics section of the Eurostat website => Theme: Industry, Trade and Services => Short-term business statistics.

Examples

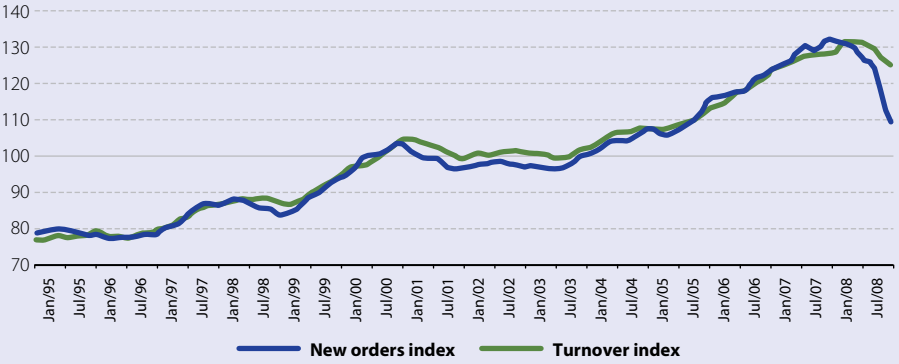
Graph 18: Industrial new orders, euro area
2000=100, seasonally adjusted



Source: Eurostat (sts_inno_m)

The graph above shows changes in the new orders index in the euro area for two main aggregates: *manufacturing industries working on orders* and *manufacturing industries working on orders excluding heavy transport equipment*. *Heavy transport equipment* (ships, railway and aerospace equipment) has considerable influence on *transport equipment* as a whole. It tends to be very volatile with a limited immediate impact on production. The aggregate *manufacturing working on orders excluding heavy transport equipment* is less volatile.

Graph 19: New orders and turnover in manufacturing industries working on orders, euro area
2000=100, trend data



Source: Eurostat (sts_impr_m and sts_inno_m)

This graph shows how changes in the new orders index are generally reflected in later changes in the turnover index. This illustrates its role as a leading indicator.

Production in construction

The production in construction index is a business cycle indicator showing the activity of the construction sector. It measures changes in the volume of output monthly (quarterly for smaller countries).

Economic importance

Developments in the production in construction index illustrate the economic cycles of the construction sector. The index reflects the volume trend in value added for this sector. It also helps with assessing the development of GDP as a whole. The major advantage of the production index over other (e.g. national accounts) indicators is that it is produced monthly.

Data compilation

The construction production index provides a measure of the volume trend in value added over a given reference period. As for the industrial production index, value added 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.

Income and expenditure classified as financial or extraordinary in company accounts is excluded from value added. Hence, subsidies on products are included in value added, whereas all taxes on products are excluded.

This indicator covers the total construction sector, according to the standard classification of the economic activities (NACE). In addition, the sector is subdivided into building construction and civil engineering construction using a classification of products called the Construction Classification (CC). Both NACE and CC classifications are available on the Eurostat classification server (Ramon).

The reference period is the month or the quarter, depending on the size of the country. Member States whose value added in construction in a given base year represents at least 2% of the European Community total must supply monthly data. Other Member States only need to supply quarterly data.

As with the industrial production index, the aim is to have a value added index but, in practice, the index is compiled using alternative series. Countries use different methods to approximate the volume of value added; a detailed description of these methods is provided in the 'Industrial Production' section. To compile their production indices in construction, most countries apply methods based on deflating output, followed by methods based on work input (hours worked).

In a few cases, they use methods relying on quarterly national accounts data and a model-based approach.

The EU Member States are asked to send time series in working-day-adjusted form. Eurostat calculates working-day-adjusted European aggregates as weighted averages of the data received from the Member States. In addition, Eurostat makes a seasonal adjustment of the European aggregates and of the national time series (where countries do not supply seasonally adjusted data).

The national and European production indices published by Eurostat are expressed with reference to a base year.

At the beginning of 2009 this indicator will move to NACE rev 2, base year 2005. More details about these changes and other additional methodological details are offered in the 'Explanatory notes', at the end of this chapter.

Data availability

Data are published for the euro area, the European Union and for each country separately, if data are available.

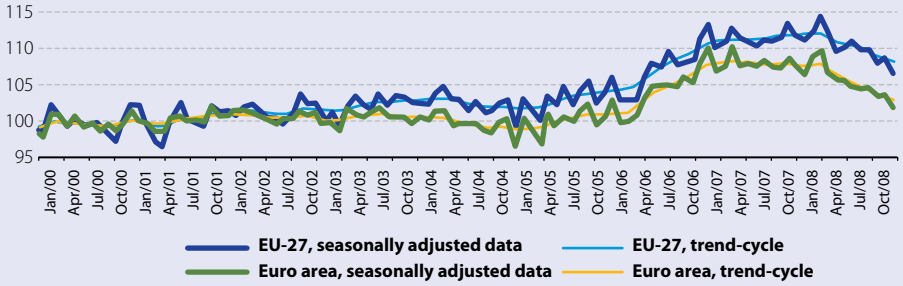
The production index for the construction sector is published monthly and quarterly. Countries send data to Eurostat no later than one month and 15 days after the end of the reference period (month or quarter); this deadline may be up to 15 days longer for smaller countries. The European aggregates are normally published one month and 17 days after the end of the reference period.

Data are presented in working-day-adjusted and in working-day and seasonally adjusted form, as indices and growth rates. Trend indices are also available.

All data, the latest publications and background information are available on the short-term business statistics section of the Eurostat website => Theme: Industry, Trade and Services => Short-term business statistics.

Examples

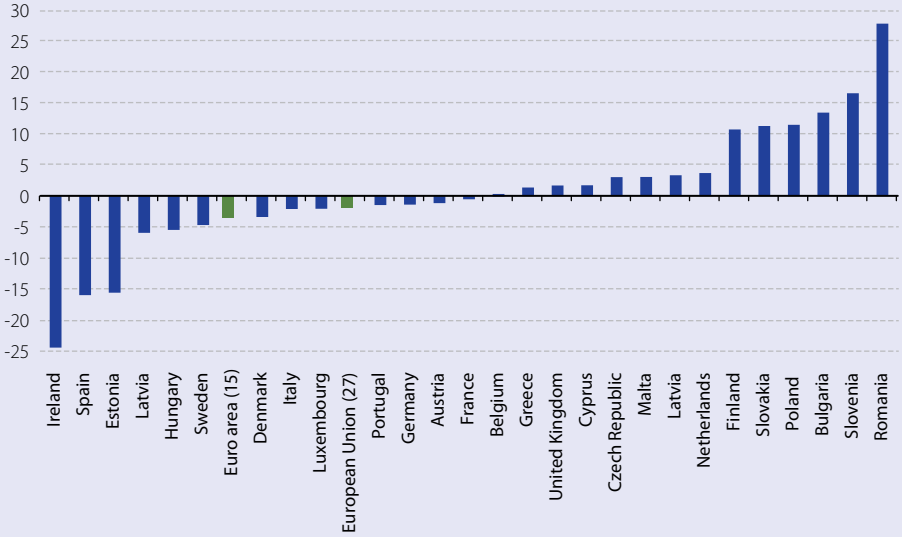
Graph 20: Monthly Index of Production in Construction
2000=100, seasonally adjusted and trend-cycle data



Source: Eurostat (sts_copr_m)

Both the EU-27 and the euro area, as shown in the above figure, experienced growth in construction production from the beginning of 2002. However, construction output grew more rapidly in the EU-27 than in the euro area. The decline that started in 2008 affects both the EU-27 and the euro area.
This graph compares the third quarter of 2008 with the same quarter of the previous year, for the euro area, the European Union and the 27 Member States. Among the Member States, output in the construction sector fell in 13 and rose in 14. Both the EU-27 and the euro area show a decline in output in this sector.

Graph 21: Quarterly Index of Production in Construction, third quarter 2008
% change compared to same period of the previous year, working-day adjusted



Source: Eurostat (sts_copr_q)

Retail trade turnover

The retail trade turnover index shows monthly retail sector activity by value and volume. The volume measure is more commonly referred to as the **index of the volume of (retail) sales** or the **index of deflated turnover** and is in fact the most closely followed series.

Economic importance

The retail trade turnover index is an important indicator for distribution. It is designed to show the development of the market for goods over time. Furthermore, the monthly data on retail trade turnover provides an indicator of quarterly household consumption in the national accounts.

Data compilation

Turnover comprises the sales invoiced by business during the reference period. 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, together with all duties and taxes on the goods or services invoiced by the unit, in order to separate changes in tax rates from other changes in turnover.

Price reductions, rebates and discounts and the value of returned packing must be deducted. Price reductions, rebates and bonuses conceded later, for example at the end of the year, are not taken into account. Income classified as other operating income, financial income and extraordinary income in company accounts is excluded.

This indicator covers all the activities included in the category *retail trade, except of motor vehicles and motorcycles* of the NACE classification of economic activities. The most important aggregates are the following: *total retail trade*, *retail trade in food, drinks, and tobacco products* and *retail trade in non-food products*. Data are also available for more detailed activities.

The national statistical authorities collect the data from businesses, mostly by using statistical sample surveys. The basic method may be either random sampling or purposive sampling.

The EU Member States are asked to send Eurostat time series in working-day-adjusted form.

Eurostat calculates working-day-adjusted European aggregates as weighted averages of the data received from the Member States. In addition, Eurostat makes a seasonal adjustment of the European aggregates and of the national time series (where countries do not supply seasonally adjusted data).

The national and European turnover indices published by Eurostat are expressed with reference to a base year. At the beginning of 2009 this indicator will move to NACE rev 2, base year 2005. More details of these changes and other additional methodological details are given in the 'Explanatory notes' at the end of this chapter.

Data availability

Data are published for the euro area, the European Union and for each country separately, where available.

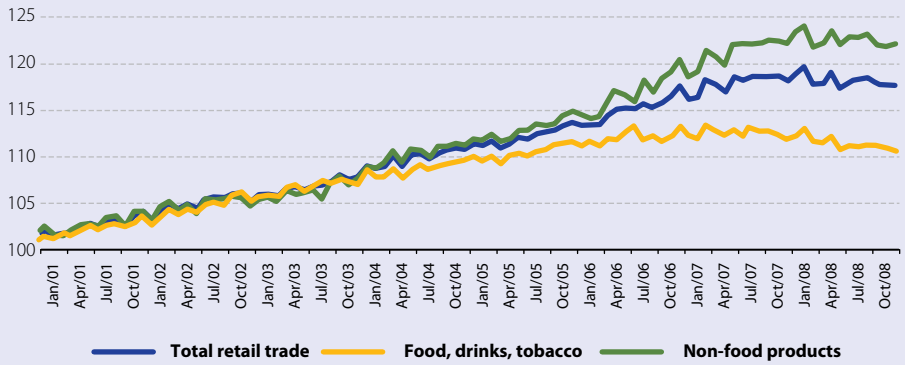
The retail trade turnover indices are published monthly. Countries send the three most important aggregates within one month after the end of the reference month. For more detailed data, the deadline may be longer — up to two months and 15 days after the end of the reference period, depending on the size of the country. The first European aggregates are normally published one month and three days after the end of the reference month.

Data are presented in working-day-adjusted form and in working-day and seasonally adjusted form, as indices and growth rates. Trend data are also available.

All data, the latest publications and background information are available on the short-term business statistics section of the Eurostat website => Theme: Industry, Trade and Services => Short-term business statistics.

Examples

Graph 22: Deflated Turnover for Retail Trade, EU
2000 =100, seasonally adjusted

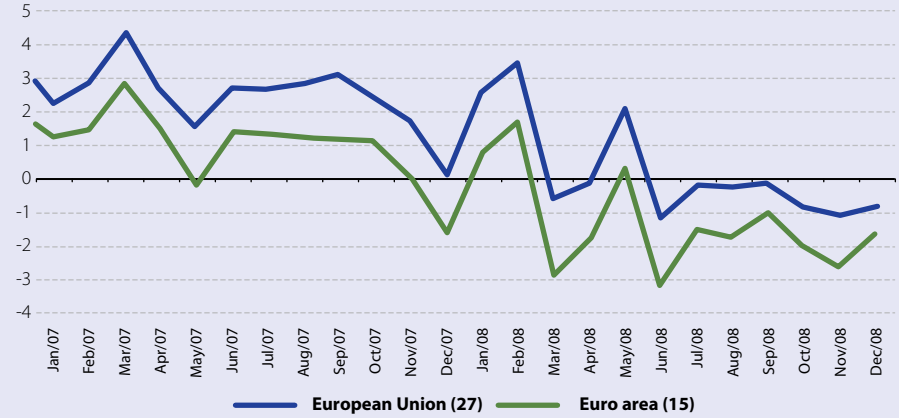


Source: Eurostat (sts_trtu_m)

This graph displays the development of the deflated turnover index in the European Union, for the three main groupings: *Total retail trade*, *Retail trade of food, drinks and tobacco* and *Retail trade of non-food products*. While movements in the three aggregates are rather similar up to the end of 2003, the picture changes afterwards. Since 2004, growth in total retail trade has obviously been led by non-food products.

Graph 23: Deflated Turnover for Retail Trade

% change compared to same month of the previous year, working-day-adjusted



Source: Eurostat (sts_trtu_m)

With a few exceptions, both the EU and euro area show positive rates for 2007. The picture changes in 2008, when the retail trade turnover starts declining, first for the euro area, then also for the EU. The EU outperforms the euro area in every period.

Explanatory notes on business indicators

The notes below refer to some common methodological details concerning the indicators presented in this chapter.

The delivery of all variables described in this chapter is imposed on the Member States by Council Regulation No 1165/1998 of 19 May 1998 concerning short-term statistics.

Observation unit

The observation unit is the entity about which the national statistical authorities collect the data. Usually, the observation unit for retail trade turnover and service producer prices is the enterprise. The observation unit for industrial producer prices, production, new orders and production in construction is the kind-of-activity unit (KAU). A kind-of-activity unit is a part of an enterprise or a whole enterprise, which engages in only one kind of (non-ancillary) productive activity or in which the principal productive activity accounts for most of the value added. Collecting data about KAUs rather than about whole enterprises is essential in order to achieve reliable statistical results by economic activity.

Compilation of European aggregates

As a rule, European aggregates are calculated as soon as the national data cover at least 60% of the total aggregate. However, in practice this coverage is close to 100%, at least for the main aggregates.

Series typically begin in 1998, the year the Regulation was adopted. Some countries have data for earlier years. The final European aggregate is a compilation of a number of countries that decreases the further back one wants to go.

To avoid potential level shifts in the aggregate each time a new national series is included, the level shifts are corrected. The correction influences the level of the aggregate but respects the growth rate of the corrected segment. Following the corrections in level shifts, the base year values may be altered. Therefore, the whole series will subsequently be rescaled to average 100 in the base year.

To calculate the euro area and EU series, Eurostat aggregates data from Member States and estimates the last missing observations with autoregressive integrated moving average (ARIMA) models. More information on ARIMA models can be found at http://www.bde.es/servicio/software/econome.htm.

The weights for aggregating the indices between various countries or branches are generally taken from Structural Business Statistics.

The following weighting variables are used:

- value added — for industrial production and production in construction
- turnover — for industrial and service producer prices, new orders and retail trade turnover

The weights are revised every five years.

Seasonal adjustment

All indices, except price indices, are seasonally adjusted.

Member States are not obliged but they are encouraged to send seasonally adjusted and trend-cycle indices. If they do not, Eurostat calculates the seasonally adjusted and trend cycle indices using the 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.

Seasonal adjustment aims, after eliminating the calendar and working/trading day effects, to filter out the usual seasonal fluctuations, i.e. those movements that occur with similar intensity in the same season each year. By eliminating such repetitive events, the seasonal adjustment discloses what is new in a time series.

Methodological changes in 2009

The methods used will change substantially in 2009, as follows:

- Implementation of the NACE Rev.2 classification

  The international and European classifications of economic activities and products underwent major revisions between 2006 and 2007. This means that the new classifications will be progressively implemented in all domains. Short-term statistics will use the new NACE classification in 2009. Starting with the first reference period (month or quarter) of 2009, Eurostat will publish all the indices according to NACE Rev.2. In order to keep long time series, the countries will backcast their historical time series in NACE Rev.2, normally back to at least 2000.

- Change in the base year and the weighting system

  In 2009, the base year will change from 2000 to 2005. At the same time, the weighting system will be updated. The new weights, based on data for the reference year 2005, have been estimated by the Member States in NACE Rev.2.

Details of the NACE and CC classifications can be found on the Eurostat classification server Ramon.

6

Government Finance Statistics

Government deficit/surplus

Government deficit/surplus is one of the key indicators for the government sector's financial position, defined in the Maastricht Treaty and *Protocol on the excessive deficit procedure*. It is used to monitor Member States' compliance with budgetary discipline. Government deficit/surplus is also one of the convergence criteria for European monetary union (EMU).

Economic importance

The fiscal framework of the EMU requires sound public finance of both euro area members and Member States outside the euro area. The Commission monitors the budget situation in the Member States. Under the rules on budget discipline under the EU Stability and Growth Pact, Member States must avoid excessive government deficits: the deficit (negative public balance) should not exceed 3% of GDP. It is thought that high deficits leading to unsustainable public finances in some Member States might have an adverse economic impact on others and affect common monetary policy-making.

Data compilation

According to the Protocol on the excessive deficit procedure, government deficit (surplus) means the net borrowing (net lending) of the whole general government sector (central government, state government, local government and social security funds). It is calculated according to national accounts concepts (the European System of Accounts, ESA95).

The net lending/net borrowing definition used for the excessive deficit procedure differs from that for the government balance in ESA95 in that the stream of payments on swaps and forward rate agreements are included in interest for the excessive deficit procedure (EDP D.41), but excluded from interest under ESA95 (D.41) and treated instead as financial flows.

European aggregates are based on the sum of the individual country data. For series provided in national currencies other than euro, Eurostat converts the data into euro using the annual average exchange rates (supplied by the ECB).

Data availability

Data are available in the following units: national currency, euro and percentage of GDP.

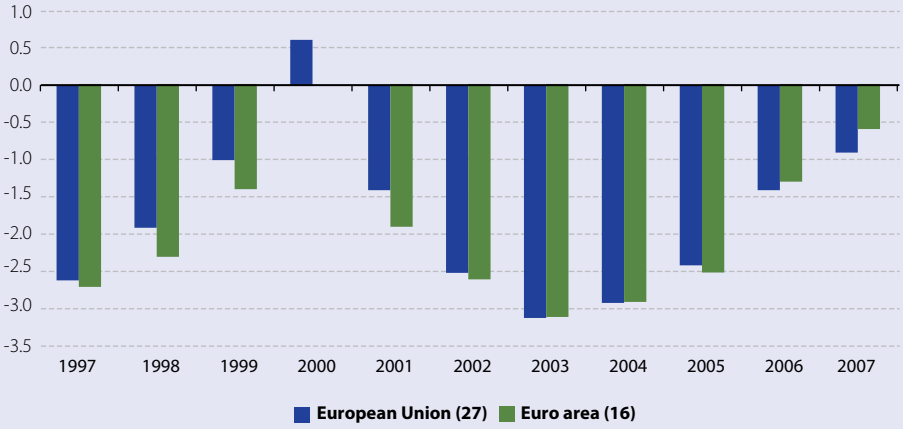
The *Protocol on the excessive deficit procedure* requires the Commission to provide statistical data for the implementation of the EDP. In this framework, all Member States report their data to Eurostat before 1 April and 1 October each year. Following assessment, within three weeks after the deadline, Eurostat must publish the actual government deficit/surplus data.

The aggregated and detailed data are available on Eurostat's website at http://ec.europa.eu/eurostat => Theme: Economy and finance => Data => Government statistics => Government deficit and debt.

Example

The following graph shows the government balance (net borrowing/net lending) for the EU-27 and the euro area over last 10 years. Apart from the year 2000, when the public balance was in surplus, both the EU and the euro area have been in deficit. In 2003, the EU and euro area deficit was above the Maastricht reference value of 3% of GDP. Since then, the deficit has been on the decline, and in 2007 it was 0.9% and 0.6% of GDP respectively.

Graph 24: Public balance
% of GDP



Source: Eurostat (gov_dd_edpt1)

General government gross debt

General government gross debt is another key indicator of the government sector's financial position. It is used to assess Member States' compliance with the budget discipline provided for under the Maastricht Treaty and the Protocol on the excessive deficit procedure. General government gross debt is also one of the convergence criteria for European monetary union (EMU).

Economic importance

The fiscal framework of the EMU requires sound public finance of both euro area members and Member States outside the euro area. The Commission monitors the stock of government debt and whether the ratio of government debt to GDP exceeds the reference value (60% of GDP) as defined in the Protocol on the excessive deficit procedure. The data allow country comparisons and give indications about changes in government debt over time.

Data compilation

According to the Protocol on the excessive deficit procedure, government debt is the gross debt outstanding at the end of the year of the general government sector measured at nominal (face) value and consolidated.

Government debt is the sum of government liabilities, as defined in ESA95, in currency and deposits, in securities other than shares, excluding financial derivatives, and in loans.

Sectors and instruments are broken down in accordance with ESA95. Foreign currency debt is converted into national currency using end-year market exchange rates (though special rules apply to contracts).

European aggregates are based on the sum of the individual country data. For series provided in national currencies other than euro, Eurostat converts the data into euro using end-year exchange rates supplied by the ECB.

Data availability

Data are available in the following units: national currency, euro, and percentage of GDP.

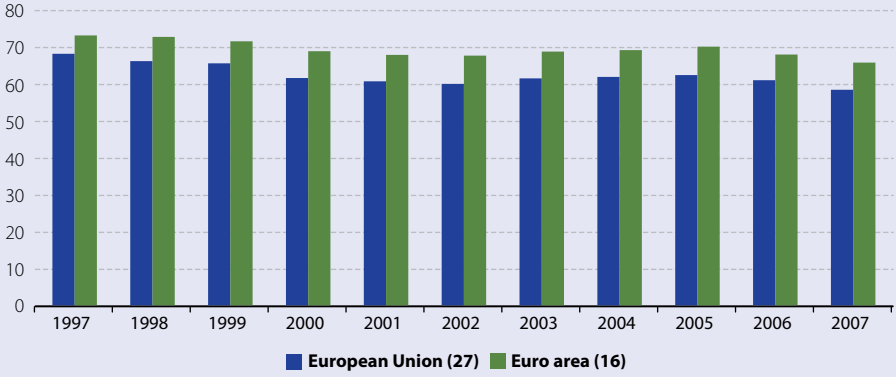
Under the EDP, all Member States report their data to Eurostat before 1 April and 1 October each year. Following assessment, within three weeks after the deadline, Eurostat must publish the actual government debt data.

The aggregated and detailed data are available on Eurostat's website at http://ec.europa.eu/eurostat => Theme: Economy and finance => Data => Government statistics => Government deficit and debt.

Example

EU-27 public debt decreased over the past decade and in 2007 was just below the 60% threshold. The difference between the debt level in the EU-27 and the euro area shows that countries outside the EMU have had lower public debt levels.

Graph 25: Public debt
% of GDP



Source: Eurostat (gov_dd_edpt1)

7

Financial Market

Three-month interest rate

An interest rate is the cost or price of borrowing, or the gain from lending, normally expressed as an annual percentage amount. Three-month money market rates apply to deposits or loans between banks with an original maturity of three months. Money market rates, also known as inter-bank rates, are interest rates used by banks for operations among themselves**.** In the money market, banks have the opportunity to trade their surpluses and deficits.

Economic importance

The three-month EURIBOR *(euro interbank offered rate)* is the benchmark rate of the large euro money market that has emerged since 1999. In addition, the three-month EURIBOR plays an important role in revolving credits. Therefore EURIBOR is often considered the key rate for both interbank lending and revolving credits to other customers. With the financial turmoil in 2008, the volume of the money market decreased.

Data compilation

The three-month EURIBOR is the rate at which euro interbank term deposits are offered by one prime bank to another prime bank.

The contributors to EURIBOR are the banks with the highest volume of business in the euro area money markets. The panel of banks consists of:

- banks from EU countries already part of the euro area,
- banks from EU countries not yet members of the euro area,
- large international banks from non-EU countries but with important euro area operations.

The number and the names of the reporting banks and further information on EURIBOR can be found on the EURIBOR website: www.euribor.org

Data availability

Data are compiled by the ECB and published by Eurostat as annual, quarterly and monthly series and become available between 10 and 15 days after the end of the reference period.

All data are available on Eurostat's website at http://ec.europa.eu/eurostat => Theme: Economy and finance => Data => Interest rates => Short-term interest rates.

All data are also available on the European Central Bank website: http://www.ecb.europa.eu.

Example

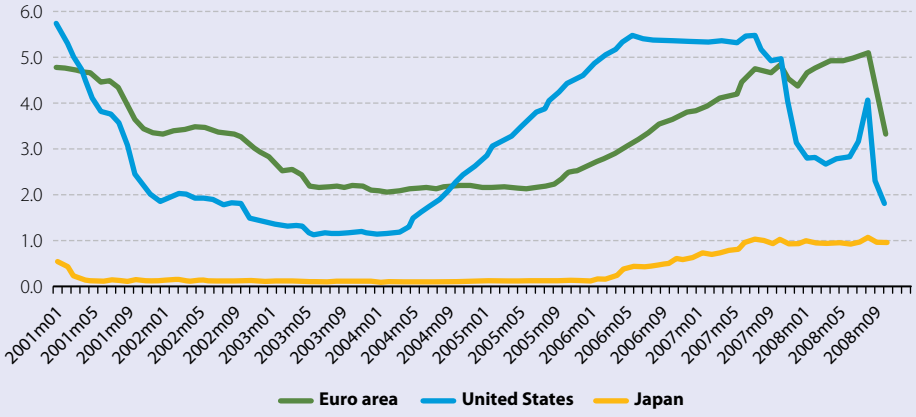
The following graph shows a comparison of interest rates in the euro area, Japan and United States.

In general, the rates fell worldwide between 2001 (especially after 11 September 2001) and 2004. In the euro area the three-month EURIBOR remained below 2.2% until September 2005. As a result, credit became cheaper and the volume of credit could grow. However, from autumn 2005 this benchmark for short-term interest rates rose continuously and remained high until October 2008. Concurrently with measures to minimise the effects of the 2008 'credit crunch', the EURIBOR decreased drastically between October 2008 and December 2008.

In the United States, three-month money market rates followed a slightly different pattern. Only the lowest rate was recorded for both in March 2004 (euro area 2.0%, US 1.1%). After that, US money market interest rates increased continuously with an adverse impact on customers paying variable interest on debt or customers renegotiating terms of payment. Since January 2008, US short-term interest rates have been lower than those of the euro area, partly reflecting different monetary policies to address the financial turmoil.

Japanese interest rates were always among the lowest in the world. Japanese three-month interest rates remained below 0.1% until March 2006. Since then, Japanese rates have increased significantly. However, only in October 2008 were three-month interest rates above 1%, still moderate compared with the three-month EURIBOR which stood at 3.3% in December 2008. In the US, three-month interest rates stood at 1.8%. This reflects the aim of the Federal Reserve Board to reduce interest rates while coping with the economic downturn.

Graph 26: Three-month interest rates
% per year



Source: Eurostat (irt_st_m), ECB

Long-term government bond yields

Long-term government bond yields are defined as the rates of interest, i.e. the yield, on government bonds with a maturity of ten years.

Economic importance

These rates are often used as a benchmark for the cost of long-term government debt and long-term interest rates at large. Furthermore long-term interest rates are one of the convergence criteria indicators for European monetary union (Article 121 of the Treaty establishing the European Community). Article 4 of the Protocol on the convergence criteria annexed to the Treaty states that a Member State must have an average nominal long-term interest rate that does not exceed by more than two percentage points that of, at most, the three best performing Member States in terms of price stability.

Data compilation

The long-term interest rate statistics for the Member States refer to the monthly average interest rates for long-term government bonds issued by each country, where applicable, quoted as percentages per annum. The statistical framework for the definition of long-term interest rates for EU countries outside the euro area follows the same principles as those specified and implemented in conjunction with the European Commission in preparation for stage three of economic and monetary union (EMU).

Interest rate levels are measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions. This means in practice that, for each country, data have to be collected on long-term (close to 10-year maturity) central government bonds (or a basket of several of these bonds) which are liquid on the secondary market (the interest rates for Cyprus are based on primary market rates). For all countries except Luxembourg and Estonia, the same principles for the calculation of long-term interest rates have been used.

Because Luxembourg and Estonia do not have outstanding long-term debt securities with a residual maturity of close to ten years, the indicator for Luxembourg is based on a basket of long-term bonds issued by a private credit institution. The current indicator for Estonia represents a weighted average interest rate on new EEK-denominated loans to households and non-financial corporations, including a large proportion of interest rates fixed for up to one year.

Data availability

Data are compiled by the ECB and published by Eurostat as annual, quarterly and monthly series and become available between 10 and 15 days after the end of the reference period.

All data are available on the Eurostat home page => Theme: Economy and finance => Data => Interest rates => Long-term interest rates => Maastricht criterion interest rates.

All data are also available on the European Central Bank website: http://www.ecb.europa.eu

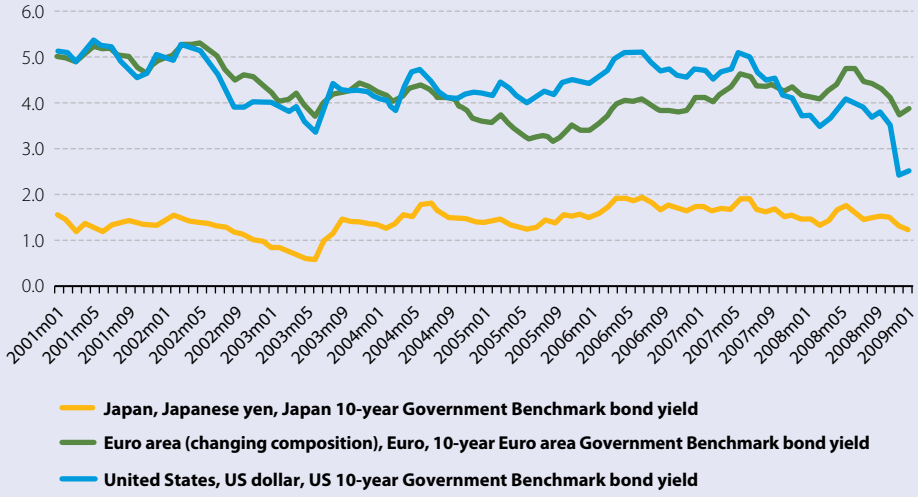
Example

The following graph shows changes in long-term interest rates for the euro area, for the US and for Japan. From early 2002 there was a global downward trend in both short-term and long-term interest rates. In the euro area, long-term interest rates decreased significantly, to 3.1% in September 2005. In the US, long-term interest rates stood at 3.3% as early as July 2003, and continued to increase until summer 2007, when they stood at 5.1%. The long-term interest rates in the euro area followed a similar pattern.

Following the market turmoil, starting in summer 2007, and central banks' interventions to safeguard liquidity, the Maastricht criterion interest rates in the euro area decreased on average, to 3.7% in December 2008, while the figure for euro area Member States varied between 3.1% and 5.1%.

As a result, not all of the Member States could take advantage of lower long-term interest rates. In early 2008 the spread between the Member States with the lowest and the highest long-term interest rates in the euro area was only 40 basis points. By the end of 2008 the spread had widened to 200 basis points. As a result, the interest rate to be paid on the public debt increased for some of the Member States despite a decreasing average rate in the euro area.

Graph 27: Long-term interest rates



Source: ECB

Euro exchange rates

The exchange rate is the price of one currency in terms of another. Most commonly, exchange rates are expressed as the number of units of domestic currency that will purchase one unit of foreign currency (e.g. the euro-dollar exchange rate is one euro expressed in United States dollars). An exchange rate may also be defined the other way around: the number of units of foreign currency that one unit of domestic currency will purchase.

Economic importance

The exchange rate plays a particularly important role in the economy. Among other things, it helps determine how much we pay for imported goods and services and how much we receive for what we export. When the value of the currency falls, imported goods become more expensive and we tend to reduce the volume of our imports. At the same time, other countries will pay less for some of our products and that will tend to boost export sales.

Together, interest rates and the exchange rate determine the monetary conditions in which the economy operates. Changes in the exchange rate affect spending and demand in the economy just as changes to interest rates can either increase or decrease the level of economic activity or consumer prices.

Data compilation

The ECB applies the following rules for the euro reference rates:

- The reference rates are based on the regular daily concertation procedure between central banks within and outside the European System of Central Banks, which normally takes place at 2.15 pm CET. The reference exchange rates are published both by electronic market information providers and on the ECB's website shortly after the concertation procedure has been completed.
- Only one reference exchange rate (i.e. the mid-rate) is published for each currency, using the 'certain' method (i.e. 1 euro = x foreign currency units).
- The number of significant digits used may vary between the currencies, reflecting market conventions. However, in most cases five significant digits are used.

Data availability

The source of the data is the European Central Bank.

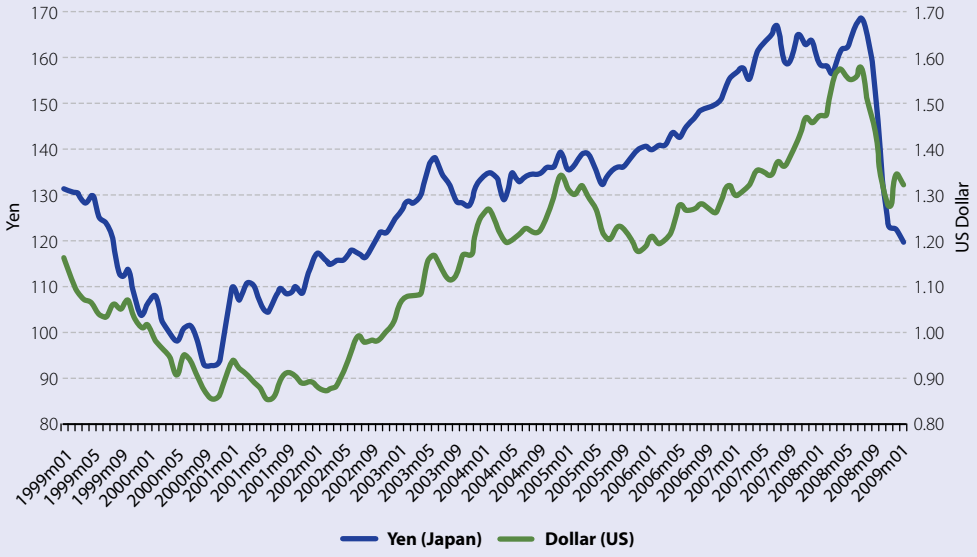
Data are released on the Eurostat website two working days after the reference day.

All data are also published on the European Central Bank website: http://www.ecb.europa.eu.

Example

After the introduction of the euro in 1999 its value decreased against the US dollar and the Japanese yen until the end of 2000. Thereafter the value of the euro increased significantly until July 2008, by 69% against the US dollar and 58% against the yen. Later, the value of the euro decreased again with the financial crisis.

Graph 28: Euro exchange rates
Monthly average



Source: Eurostat (ert_bil_eur_m), ECB

8

Economic Sentiment Indicator

The economic sentiment indicator (ESI) is a monthly index that reflects overall perceptions and expectations of the economic situation among consumers and business managers.

Economic importance

The basic idea behind the ESI is that sentiment among consumers and business managers concerning the current and future general economic situation, and their own financial situation, gives a signal of whether they intend to increase consumption and production respectively. The ESI aims to measure how the public perceives the current economic situation and the short-term economic prospects. In this sense, it can be considered an early indication of future economic activity, and hence be used as a guideline for both businesses and policymakers.

Data compilation

The economic sentiment indicator is based on monthly sentiment surveys held among businesses and consumers in the EU Member States,[5] conducted by the European Commission in cooperation with national institutions.

For each country, a subset of 15 questions across the five sectors covered by the surveys is used in to construct the Economic Sentiment Indicator. Weights are allocated to the different sectors to calculate the composite indicator:

Industry:	40%
Services:	30%
Consumers:	20%
Construction:	5%
Retail trade:	5%

The relevant weights are set according to two criteria: the 'representativeness' of the sector in question and its 'tracking performance' in terms of the reference variable. Given the broad scope of the ESI, the obvious reference variable is GDP growth, tracking the movements of the economy as a whole.

To calculate the European aggregates, Eurostat uses weights based on value added for the industry, service and construction surveys, and on private consumption for the consumer and retail trade surveys.

Based on the complete set of standardised balance series[6] underlying the individual confidence indicators, the ESI combines the judgments and attitudes of producers and consumers by means of a weighted aggregation of standardised input series.

5 Since May 2008 the surveys have been temporarily discontinued in Ireland.
6 Balances are computed as a difference between positive and negative answers to each specific question in the survey.

The ESI is calculated as an index with a mean value of 100 and standard deviation of 10 over a fixed standardisation sample. Currently the movements are calculated over the period 1990-2007. The data are seasonally adjusted using the DAINTIES method. This method is based mainly on the use of 'filters'. Filters are made up of sets of weightings that are applied to the series in the same way as for computing weighted moving averages. These filters have properties determined in advance on the basis of the conventional assumption of the breakdown of the series into three components, known respectively as seasonal, trend and irregular.

The main advantage of DAINTIES is that there are no revisions when data are added at the end of the time series. As business and consumer survey data are economic agents' opinions at a certain point in time, revision of the historical data seems undesirable.

A complete description of data handling and of the aggregation method used to build the EU and euro area aggregates can be found in a regularly updated User Guide.

Data availability

The economic sentiment indicator has been published on a monthly basis since 1985. Data are available for EU/EA aggregates and for EU Member States.

It is published on the second last working day of each reference month.

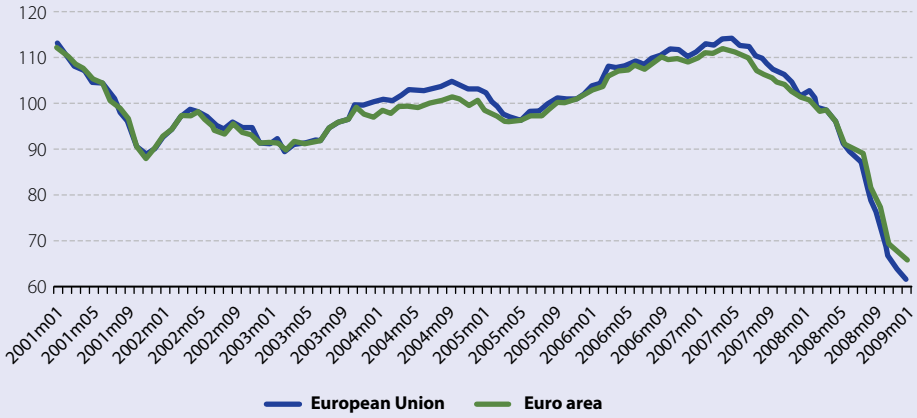
All data are available on the websites of:

- the Directorate-General for Economic and Financial Affairs (http://ec.europa.eu/economy_finance/index_en.htm) => Economic databases and indicators => Business and consumer surveys
- Eurostat =>Euroindicators/PEEIs => Business and consumer surveys.

Example

There is usually no significant difference between the euro area and EU as a whole. Note the sharp downturn at the end of 2001 after the terrorist attacks in the USA.

Graph 29: Economic Sentiment Indicator
Seasonally adjusted



Source: DG ECFIN

Annexes

Annex 1: PEEIs on the Eurostat website

In order to facilitate access to PEEIs and Euroindicators, Eurostat has put all relevant information together in a single place on its website, under a special topic 'Euro-Indicators/PEEI'.

This special topic is designed to give a general overview of the recent past and the near future of the euro area, European Union and Member States' economic situation. It is essentially addressed to specialist users such as official statisticians and economists, academics, researchers, journalists, etc., but it also contains information useful to students and the general public interested in the economic situation of Europe.

Picture 1: Overview table

Selected Principal European Economic Indicators[1]

European Union *
Euro Area **

Print

	Release date latest	Release date next	Unit	Reference period					
				2007q03	2007q04	2008q01	2008q02	2008q03	2008q04
GDP in volume	07/04/2009	15/05/2009	% (Q/Q-1)	0.7	0.6	0.5	-0.1	-0.3	-1.5
			% (Q/Q-4)	2.8	2.5	2.0	2.3	1.1	-1.6
Private final consumption in volume	07/04/2009	03/06/2009	% (Q/Q-1)	0.7	0.4	0.2	-0.2	0.0	-0.4
			% (Q/Q-4)	2.4	2.2	2.0	1.4	0.8	-0.5
Investments in volume	07/04/2009	03/06/2009	% (Q/Q-1)	1.2	1.3	0.3	-1.0	-1.1	-3.3
			% (Q/Q-4)	4.6	4.3	2.8	2.7	-0.1	-5.1
				2008m10	2008m11	2008m12	2009m01	2009m02	2009m03
External trade balance	17/04/2009	18/05/2009	mio euro	-18721.0	-19781.0	-13865.9	-21763.5	-13053.9	(:)
				2007q03	2007q04	2008q01	2008q02	2008q03	2008q04
Current account- Total	22/04/2009		mio euro	-33161	-21568	-46160	-73196	-67416	-57288
				2008m10	2008m11	2008m12	2009m01	2009m02	2009m03
Inflation (HICP all items)	16/04/2009		% (M/M-1)	0.0	-0.4	-0.2	-0.6	0.5	0.3
			% (M/M-12)	3.7	2.8	2.2	1.8	1.8	1.3

The special topic contains:

- the 'Selected Principal European Economic Indicators' page which contains a set of 22 most relevant and timely short-term economic indicators for the euro area and the European Union (see picture 1). This is the Euro-indicators/PEEIs special topic homepage;
- for each indicator, a short description and a full metadata file with more general and methodological information;
- data structured as tables, and a short term indicators database;
- Eurostat news releases and a link to the annual Eurostat and Economic and Financial Affairs DG release calendar;
- official Eurostat statistical publications, Euro-Indicators working papers and Euro-Indicators online publications;
- links to recent events relating to PEEIs and Euroindicators, such as conferences and seminars.

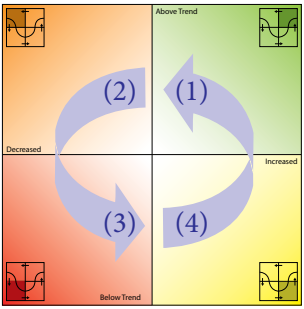
To access the Euro-Indicators/PEEI special topic, click on 'Euro-Indicators/PEEI' on the left side of the homepage of the Eurostat website.

Annex 2: The Business Cycle Clock

In order to show the up- and downswings of European economies in an animated fashion, Eurostat has developed a Business Cycle Clock (BCC). It is a graphical interface for displaying the movements of the Principal European Economic Indicators within Europe. The BCC covers most PEEIs including GDP, consumption, investment, exports and imports, (un)employment, economic sentiment, and industrial production. For the purposes of the BCC, all the series have been recalculated to show only their cyclical component.

The BCC shows that many economic indicators change in a similar way in close proximity to one another. Moving as a 'cloud', some clearly move early — e.g. economic sentiment — while others lag behind. These and other dynamic patterns can be visually observed, and can help in understanding economics past and present. The animated graph can be fine-tuned by selecting the specific indicators and the countries you want to watch and compare.

The BCC is available on the Eurostat website, currently in English only. Acknowledgement is due to Statistics Netherlands for sharing their visual concept of tracing business cycles.



The cyclical behaviour displayed by the graph (see figure) distinguishes four phases:

(1) the indicator is above its long-term trend and is increasing,
(2) it is still above the long-term trend, but after having reached a peak it is now gradually moving downwards,
(3) after subsequent decreases it reaches levels below the long-term trend and is heading into a trough, and
(4) gradually picks up again by pulling itself out of this trough with positive numbers even though still below the long-term trend.

Each of these phases are coloured correspondingly. In general, the indicators move in time in the direction of the arrows, evolving from one phase into the other. Sometimes a full cycle takes around four years, other times it could be more or it could be less; there is no rule of thumb for forecasting cyclical time span.

For each indicator, the BCC also offers a complete table and interactive graphs and maps. For the moment these interactive graphs and maps only work if your browser is SVG-enabled. Eurostat is working on technical improvements to help resolve this soon.

On the Eurostat website and click on 'Business Cycle Clock' on the right side of the screen to get started. If you do not see the animated graph, please check whether your browser has a flash plug-in.

Abbreviations

CPA	Statistical Classification of Products by Activity in the European Economic Community
COICOP/HICP	Classification of Individual Consumption by Purpose adapted to the needs of the HICP
CPI	Consumer price index
DG	Directorate General (of the European Commission)
DG ECFIN	The European Commission's Directorate General on Economy and Finance
ECB	European Central Bank
EEA	European Economic Area
EFTA	European Free Trade Area
Ecofin Council	European Council (economic and financial affairs ministers)
ECU	European Currency Unit
EICP	European Index of Consumer Prices
ESA or ESA95	European System of National and Regional Accounts
ESI	Economic sentiment indicator
GDP	Gross domestic product
HICP	Harmonised index of consumer prices
KAU	Kind-of activity-unit
LCI	Labour cost index
NACE	Statistical Classification of Economic Activities in the European Community
PEEI	Principal European economic indicators
SAD	Single administrative document
PPI	Producer price index (or Industrial Output Price Index)
SPPI	Services producer price indices
STS	Short-term statistics

STS-R	Short-term statistics Regulations (COUNCIL REGULATION (EC) No 1165/98) of 19 May 1998 concerning short-term statistics and REGULATION (EC) No 1158/2005 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 July 2005 amending Council Regulation (EC) No 1165/98 concerning short-term statistics
UVI	Unit value indices

EU-27	European Union of 27 Member States
EU-25	European Union of 25 Member States
Euro area, EA	the countries participating in the euro area in the reference year
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria

PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom
HR	Croatia
MK	the former Yugoslav Republic of Macedonia
TR	Turkey
IS	Iceland
NO	Norway
CH	Switzerland

Further information

Free access to most Eurostat data is available through the Eurostat website, which can be found at: http://ec.europa.eu/eurostat. The website presents a vast array of information in the form of tables, databases, methodology and publications: these are all structured primarily by subjects/themes.

Data are generally provided for the European Union as a whole (EU-27), the euro area and the Member States, and, where available, for the candidate countries and the EFTA countries.

All statistical classifications and many definitions can be found on Eurostat's metadata server Ramon (http://ec.europa.eu/eurostat/ramon/).

The Eurostat data code

A code (such as 'tec00027') has been inserted as part of the source wherever Eurostat data is presented in this publication. This code allows the reader to easily access the complete and most recent data on the Eurostat website, by using the search function. The PDF version contains hyperlinks leading directly to the data set. Please consult 'The Eurostat data code' on the Eurostat home page for more details.

European Commission

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A statistical guide

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http://ec.europa.eu/eurostat

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