

## NATIONAL ACCOUNTS FREQUENTLY ASKED QUESTIONS

### ***ON GDP***

- *Does GDP measure well-being?*
- *Is the unobserved/illegal economy included in gross domestic product (GDP)?*
- *Does the expenditure of tourists increase GDP?*
- *Why is there no GDP by industry?*
- *What is the difference between "real GDP growth" and "GDP volume growth"?*

### ***NATIONAL ACCOUNTS METHODOLOGY, CONCEPTS AND SOURCES***

- *Do exports and imports of the European Union include trade between Member States?*
- *What is a statistical discrepancy?*
- *What is the difference between the GDP deflator and the Harmonised Index of Consumer Prices (HICP)?*
- *Why are national accounts final consumption of households figures different from Household Budget Surveys (HBS)?*
- *Why are NA employment figures different from Labour Force Survey (LFS)?*
- *How are European aggregates calculated?*
- *Why are changes in inventories (or the external balance etc.) for European aggregates not available as a chain linked series?*
- *How do I calculate annualised growth rates?*
- *Do French figures include Départements d'outre-mer (DOM)?*
- *Do national accounts data for Cyprus include the northern part of the island?*
- *What is the difference between SNA and ESA?*

### ***AVAILABILITY OF DATA***

- *Why is there no data on European aggregates available for 1970?*
- *I need more detailed breakdowns (or longer time series, more countries, etc.) than those available in Eurostat's online database. Can I have them on request?*
- *Where can I find national accounts data for China (Russia, India, Brazil, the Faroe Islands, etc.)?*
- *Do you have revision triangles for GDP available?*
- *Where can I find national accounts employment data on Eurostat's website?*

### ***DATA DIFFERENCES***

- *Are the figures on Eurostat's website for a country identical to the corresponding ones on national websites?*
- *Why are the implicit GDP deflators for the euro area published by Eurostat different from the OECD's?*
- *I have compared figures for a euro area country from Eurostat with those from another source. Although both are expressed in Euro, they differ for years before 1999. Why is that?*

Further queries can be addressed to this e-mail address:

[ESTAT-GDP-QUERY@EC.EUROPA.EU](mailto:ESTAT-GDP-QUERY@EC.EUROPA.EU)

## ***ON GDP***

### ***Does GDP measure well-being?***

The national accounts framework deliberately sets a "production boundary" to fix which activities are to be recorded in the accounts and which are not. Evidently, this production boundary cannot serve all analytical purposes equally well. Own-account production of certain services inside households for example is excluded, while the same services would be included were they produced by a service provider outside the household. See ESA 95 §3.09 for some detail on this. Beyond the question of which activities are counted as production in the accounts, attributing monetary values to them will not necessarily coincide with the amount of "utility" actually derived from consuming them. The SNA gives a brief introduction to the subject at <http://unstats.un.org/unsd/sna1993/tocLev8.asp?L1=1&L2=10>.

In consequence, GDP is not a comprehensive measure integrating all aspects that influence well-being of a society and was never intended to be one. It is an indicator of economic production which results in goods and services that potentially contribute to well-being.

### ***Is the unobserved/illegal economy included in gross domestic product (GDP)?***

Due to its colourful nature, the issues of illegal activity and "shadow economy" regularly gain public attention incommensurate with their actual importance for the accounts.

The national accounts framework deliberately sets a "production boundary" to fix which activities are to be recorded in the accounts and which are not. Legal aspects are not instrumental in defining this production boundary. The SNA §6.30 and ESA 95 §3.08 give further detail on this.

As an example, the production of pharmaceuticals is an economically productive activity, regardless of

- whether the producing unit has acquired appropriate licences for the production,
- whether the product itself is subject to constraints in distribution,
- whether regulations on labour safety, environmental protection, product labelling etc. have been respected,
- whether revenue generated from the production has been duly declared to tax authorities.

The following cases can be distinguished:

1. unrecorded legal production: Perfectly legal production may go unrecorded in official records either deliberately (eg. if reporting thresholds are set for reducing administrative burden) or by accident, the most common example being administrative registers with missing or outdated entries.
2. concealed legal production: Perfectly legal production may be concealed from recording for a number of reasons, many of which may involve an element of illegality outside the productive activity itself. The most important example is legal production concealed for the purposes of tax evasion. Another common example is production which is legal in principle, but illegal when carried out by unauthorised producers.

Problems that fall in category 1 and 2 are common in national accounts. Assessing and improving the exhaustiveness of data sources constitutes a major part of the national accounts compilation.

3. illegal production: the production of goods or services whose sale, distribution or possession is forbidden by law. These laws may vary between countries. By their very nature, this type of production tends to be unrecorded by official sources. Important activities in this category (that may also fall in category 2 depending on circumstances and national law) include the following:
  - production of drugs (for which, in many cases, an authorized legal production exists as well)
  - smuggling (which usually amounts to production of transportation services concealed for the purposes of tax evasion),
  - prostitution (for which legal forms may exist as well),
  - unlicensed gambling
  - re-production of copyrighted material (where the same activity would be legal if properly authorised).

Since these activities fall inside the production boundary, they must be included in national accounts estimates regardless of aspects of legality. This can be done, for example, by expanding the volume of recorded (legal) activity by mark-ups for the unrecorded elements. Details depend largely on the specific circumstances of national law and data sources. For practical reasons and due to a severe lack of data however, illegal activities are not included in the national accounts estimates of some countries.

Allowing for unrecorded activities is but one element in the national accounts compilation process. In verifying the exhaustiveness of National Accounts compiled by Member States, Eurostat also addresses the matter of unrecorded activity, but no separate figures for either unrecorded or illegal activity are collected by Eurostat.

<b><i>Does the expenditure of tourists increase GDP?</i></b>
--

National accounts distinguish the following concepts:

- Domestic concept - refers to economic activity on the economic territory of a country
- National concept - refers to economic activity of the residents of a country

It is important to note that, in the case of natural persons, residence does not coincide with nationality.

In the case of final consumption expenditure, these two concepts translate as follows:

- Domestic concept - consumption expenditure incurred on the economic territory, by residents and non-residents
- National concept - consumption expenditure incurred by residents, regardless of where the expenditure is incurred

The national concept is the standard concept used for consumption expenditure in National Accounts (see ESA95 §3.75). At the same time, the consumption expenditure of residents incurred outside the economic territory is also counted as an import, and the consumption expenditure of non-residents on the economic territory is also counted as an export.

This means that the consumption incurred by non-residents (e.g. incoming tourists) in a country increases its GDP via an increase in exports, not in consumption. On the other hand,

consumption incurred by residents outside the country (e.g. outgoing tourists) increases both consumption expenditure and imports, and has hence no effect on GDP.

***Why is there no GDP by industry?***

GDP is valued at market prices, which includes taxes and less subsidies on products. Value-added type taxes (VAT) form the bulk of this category. While the sources for taxes less subsidies on products as a whole are excellent, they are commonly not so for the attribution to sectors, industries or regions.

Value added by industry is usually given at basic prices, ie excluding taxes and subsidies on products. GDP from the output approach is then calculated as the sum of gross value added (GVA) of the various industries plus taxes and less subsidies on products for the economy as a whole. So GVA (at basic prices) is available in a breakdown by industry (or sector or region), but GDP (at market prices) is available only for the economy as a whole.

***What is the difference between "real GDP growth" and "GDP volume growth"?***

For GDP, both terms mean exactly the same thing, namely that part of change in nominal GDP that is not caused by price increases, but by increases in the quantity or quality of goods and services produced. "Volume growth" is a term usually reserved for production-related aggregates such as the GDP, for which physical quantity and quality can be directly measured and observed, at least in principle. "Real growth" is a wider term also used for income-related aggregates, which do not relate directly to an observable volume. Such aggregates are often deflated using an implicit price index derived from a different aggregate that has an observable volume, for example GDP.

## ***NATIONAL ACCOUNTS METHODOLOGY, CONCEPTS AND SOURCES***

### ***Do exports and imports of the European Union include trade between Member States?***

National Accounts figures, in contrast to foreign trade statistics, are currently not consolidated for intra-EU trade. This means that exports and imports of the EU (the euro area) are increased by trade within the EU (the euro area). Their levels are hence not directly comparable with those of, for example, the United States or Japan. In external balance (ie exports minus imports) however, trade inside the EU (the euro area) cancels out, as an export by the exporting Member State will be countered by an import in the receiving Member State.

The sector accounts for the EU and the euro area also include the "rest-of-the-world" account, for which it is necessary to remove cross-border flows within the area concerned. Consequently, EU (euro area) imports and exports are much smaller in the (consolidated) sector accounts than in the (non-consolidated) national accounts, since about half of the external trade of the individual Member States is within the euro area / EU. Consolidation of exports and imports in other areas of national accounts is envisaged for the mid-term future.

### ***What is a statistical discrepancy?***

National accounts are compiled from a large variety of sources with varying degrees of coverage and reliability. It is therefore not uncommon to arrive at different numerical values when calculating the same variable independently from different approaches.

In these cases national accountants closely assess the reliability of their data sources. In a subsequent process of reconciliation, a single figure for the variable under consideration is arrived at. If the difference to the original values cannot be attributed to elements of the calculation, it is shown as a statistical discrepancy. Whether or not a statistical discrepancy is shown depends on the specific circumstances of the national accounts system and its data sources in each country.

For a deliberately crude example, assume that GDP from the expenditure approach has been calculated as 98, while the calculation from the output approach has resulted at 105. Assessment of data sources may justify assigning higher reliability to the data sources for the expenditure components, and GDP is fixed at 100 in the reconciliation. On the expenditure side components, small adjustments to consumption and investment may accommodate for half of the difference, while the remaining 1 unit is attributed to changes in inventories. On the output side, there may not be a convincing way of attributing the difference of 5 units to specific industries. Rather than possibly distorting the components by a more or less arbitrary attribution, the value 5 is shown in a separate discrepancy item which makes the accounts balance out.

### ***What is the difference between the GDP deflator and the Harmonised Index of Consumer Prices (HICP)?***

National accounts are commonly compiled both in current prices ("nominal GDP") and in constant prices. For the latter, the standard approach is now to move the price base ahead

every year and derive a chain-linked GDP volume rather than GDP at constant prices. Once these two have been compiled, the elementary equation

$$\text{value} = \text{volume} \times \text{price}$$

can be used to derive a measure for price changes. These are referred to as "implicit deflators" in national accounts, because they are implied mechanically once values and volumes have been compiled. The implicit GDP deflator for example is calculated straightforwardly as GDP at current prices divided by GDP chain-linked volumes and usually presented in index form.

By nature of their construction, implicit deflators are aggregate price measures that can be used in a wide range of contexts where price changes shall be removed ("deflating") or shall be imposed on some fixed volume ("inflating"), in particular in a macro-economic context. In the national accounts for example, implicit deflators of GDP, domestic demand or private consumption are used for deflating nominal variables for which no proper volume is defined, such as gross national income or gross wages and salaries.

The deflators' implicit nature means they are not based directly on observations of price movements. A vast amount of direct price observations at different levels of detail goes into the compilation of national accounts at constant (previous year's) prices, alongside direct quantity or volume observations. In the implicit deflators, these are compounded into a macroeconomic aggregate price measurement. The implicit GDP deflator is the broadest of these aggregates, covering all goods and services produced or imported in the economy.

Price statistics on the other hand, notably in the form of producer and consumer price indices, are based on direct price observations, the best known index being the HICP (harmonised index of consumer prices) which measures directly the changes over time in the prices of consumer goods and services acquired, used or paid for by households. When "inflation" is referred to in public without further specification, it is most often understood to mean the HICP.

***Why is NA final consumption of households figures different from Household Budget Surveys (HBS)?***

The Household Budget Surveys (HBS) in the Member States of the European Union are sample surveys of private households spending carried out regularly – albeit not on a yearly basis – under the responsibility of the National Statistical Offices. The HBS is only one of the sources of information used to compile household consumption expenditure in the national accounts. Business surveys, foreign trade statistics and VAT statistics are other important sources.

The HBS is primarily intended as an instrument to learn about the micro-economic behaviour of households as consumers. It is not designed for the estimation of macro-economic aggregates such as the total household consumption expenditure in an economy. The HBS concepts – such as the definition of household and consumption expenditure – are neither identical to the corresponding national accounts ones nor fully harmonised between countries or over time.

For more information on HBS please consult the metadata information on:

[http://epp.eurostat.ec.europa.eu/portal/page/portal/living\\_conditions\\_and\\_social\\_protection/introduction/household\\_budget\\_surveys](http://epp.eurostat.ec.europa.eu/portal/page/portal/living_conditions_and_social_protection/introduction/household_budget_surveys)

### ***Why are NA employment figures different from Labour Force Survey (LFS)?***

The EU LFS is a quarterly household sample survey carried out in the Member States of the European Union, Candidate Countries and EFTA countries (except Liechtenstein) that provides essential information about (short-term) developments in the labour market of the European Union. The LFS is only one of the sources used in the compilation of employment in the National Accounts. The extent of use of LFS figures in National Accounts varies widely among EU Member States, depending on the quality of available alternative data sources, such as employment registers, social insurance statistics, tax records, population censuses and business surveys.

For more information on EU LFS please consult the information on:

[http://epp.eurostat.ec.europa.eu/portal/page/portal/employment\\_unemployment\\_lfs/introduction](http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/introduction)

For further details on differences between employment in national accounts and the labour force survey see also press release 77/2006 of 14 June 2006, annex II:

[http://epp.eurostat.ec.europa.eu/cache/ITY\\_PUBLIC/2-14062006-AP1/EN/2-14062006-AP1-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/2-14062006-AP1/EN/2-14062006-AP1-EN.PDF)

### ***How are EU aggregates calculated?***

The annual accounts of the EU and the euro area are essentially a summation of Member States accounts. The quarterly accounts are derived by breaking up the annual values into quarters following the movements of the sum of quarterly accounts as far as these are available from Member States.

More details about this procedure and the issues involved can be found in the following document:

[http://epp.eurostat.ec.europa.eu/portal/page/portal/national\\_accounts/documents/COMPILING%20EU%20ACCOUNTS.pdf](http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/documents/COMPILING%20EU%20ACCOUNTS.pdf)

### ***Why are changes in inventories (or the external balance etc.) for European aggregates not available as a chain linked series?***

Strictly speaking, any national accounts variable that, by definition, can take on both positive or negative values is not suited for chain-linking, the sign of the resulting chain is uninterpretable, values close to zero lead to large fluctuations in the chain, and any real zero in the series would cause the chain to either break or fix the series at zero for all following observations.

The main variables concerned in national accounts are the changes in inventories, the acquisition less disposal of valuables and the external balance. In certain cases, this also concerns elements of gross fixed capital formation. The problems encountered in chaining these can be addressed or bypassed in different ways, which often produce additional problems of their own.

For an example, chain-linked changes in inventories could be approximated by the difference of independently chain-linked series of stocks at the beginning and at the end of the reference period. Apart from demanding information on stock levels which are often less reliable than data sources on changes in stocks, calculating differences from chain-linked data is again a problematic operation.

In consequence, it is common to not provide any volume series for these variables at all, but to show them only at current prices and at previous year's prices, and to supplement this with their contributions to GDP growth from an auxiliary calculation.

### ***How do I calculate annualised growth rates?***

Quarterly growth rates can be calculated with respect to the previous quarter (quarter-on-quarter) or with respect to the same quarter of the previous year (year-on-year). While the former can reasonably be calculated only from seasonally adjusted data, the latter can be calculated from both seasonally adjusted and from unadjusted data, because the comparison between similar quarters in different years supposedly removes most of the seasonal effect.

One advantage of the quarter-on-quarter growth rates is that a change in the phase of the business cycle is visible in the numerical values quite early. Year-on-year growth rates on the other hand have the advantage of being immediately comparable to annual growth rates.

Annualising quarterly growth rates is an attempt to combine both advantages in a single growth rate. This advantage however comes at the price of sometimes dramatic volatility. Annualised quarterly growth rates are calculated from the seasonally adjusted quarterly growth factor (that is the 1 plus the quarter-on-quarter growth rate divided by 100) by putting this value to the power of four. The result can be interpreted as annual growth if four quarters with identical quarterly growth were observed in a row. Annualised growth rate are widely used for instance in the United States.

For an example, consider the following seasonally adjusted time series:

2007Q1: 100  
2007Q2: 101  
2007Q3: 105  
2007Q4: 115  
2008Q1: 125

For 2008Q1,

- the quarter-on-quarter growth rate is  $(125/115-1) = 8.7\%$
- the year-on-year growth rate is  $(125/100-1) = 25.0\%$
- the annualised growth rate is  $((125/115)^4-1) = 39.6\%$

### ***Do French figures include Départements d'outre-mer (DOM)?***

French national accounts figures as used by Eurostat (GDP, employment and population data) do include the DOM (i.e.: Guadeloupe, Martinique, Guyana, Reunion), but not the TOM (territoires d'outre-mer). The DOM are explicitly included in the euro area and are hence also included in the euro area accounts.



***Do national accounts data for Cyprus include the northern part of the island?***

National accounts figures for Cyprus as used by Eurostat (GDP, employment and population data) cover the government-controlled area, they hence do not include the northern part of the island.

***What is the difference between SNA and ESA?***

SNA, the "System of National Accounts" is the world standard for the compilation of National Accounts according to harmonised methodology. It was produced under the auspices of the United Nations, the World Bank, the IMF, the OECD and the EU Commission. The current version is SNA 93 from 1993.

The ESA95 is the harmonised European methodology for the compilation of national accounts. It was approved as a Council Regulation in June 1996 (Council Regulation 2223/96).

ESA95 and the SNA93 are broadly consistent. Formally, the ESA95 is a legal act, it specifies Member States obligations for the production and transmission of national accounts data, it has more precise definitions and it is intended as reference guide. The SNA93 on the other hand includes more explanations and background information, and it can be used as teaching handbook for statisticians worldwide.

## **AVAILABILITY OF DATA**

### ***Why is no data on European aggregates available for 1970?***

For economic analysis, the following features are considered important for national accounts data:

- methodological consistency across time
- length of time series
- concepts and classifications adapted to current needs

Evidently, these three requirements are in (partial) conflict. In general, revisions and adjustments to data calculations that require reinterpolation of data series are very demanding in terms of time and labour. With the adoption of ESA 95 major improvements and changes on the earlier ESA 79 have been introduced. Progress has been achieved in further harmonisation of methodology and precision of concepts, definitions, classifications and accounting rules.

Eurostat compiles the accounts of the EU and the euro area on the basis of the accounts of the Member States. Current availability of data for the Member States does not permit the estimation of European aggregates for years before 1995 at a sufficient level of reliability and consistency with the post-1995 figures.

In particular many of the countries that joined the EU in 2004 and 2007 had to apply major changes to their statistical systems in the preparation for introducing the ESA standards. The backward calculation of data is particularly difficult under these circumstances, as many of the source statistics simply did not exist.

Some figures arrived at by linking series in old and new methodology can be found in DG ECFIN's AMECO database

[http://ec.europa.eu/economy\\_finance/indicators/annual\\_macro\\_economic\\_database/ameco\\_en.htm](http://ec.europa.eu/economy_finance/indicators/annual_macro_economic_database/ameco_en.htm)

For historic compositions of the EU, Eurostat provides longer series for annual GDP only at [http://epp.eurostat.ec.europa.eu/portal/page/portal/national\\_accounts/documents/EC6-9-10-12%201970-2006.xls](http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/documents/EC6-9-10-12%201970-2006.xls)

### ***I need more detailed breakdowns (longer time series, more countries, etc.) than those available in Eurostat's online database. Can I have them on request?***

All data information cleared for public dissemination that Eurostat receives from national statistical authorities is made available in Eurostat's online database. Additional detail is hence not available from Eurostat. More detail may however be available from national statistical institutes.

### ***Where can I find national accounts data for China (Russia, India, Brazil, the Faroe Islands, etc.)?***

Eurostat is the Statistical Office of the European Communities. It publishes statistical data for the Member States of the EU, candidate and EFTA countries. Some data is also collected for

other European and Mediterranean countries, but these countries do not participate in the specific exchange of national accounts data established between the EU, candidate and EFTA countries.

Eurostat retrieves some main aggregates of national accounts for the United States and Japan from public sources and disseminates it together with the EU figures. Data for other countries can either be found on the internet sites of the respective national statistical authorities or on the internet sites of other international organizations. Important sources of national accounts data are for instance:

- Organisation for Economic Cooperation and Development (OECD) – Statistics portal > National accounts
- International Monetary Fund (IMF) - World Economic Outlook Databases (publication of country series in April and September each year)
- United Nations Statistics Division (UNSD) (updated on the basis of annual collections of the official annual national accounts statistics)

Links are maintained on Eurostat home page > Links > International organizations

#### ***Do you have revision triangles for GDP available?***

Revision triangles show how the value for a specific variable and a specific observation period has evolved with subsequent data releases (vintages). They are an important means for the analysis of reliability of national accounts.

Revision triangles for some central national accounts variables for the EU and the euro area are available in the ESA95 Core national accounts dedicated section on Quarterly accounts page at [http://epp.eurostat.ec.europa.eu/portal/page/portal/national\\_accounts/methodology/quarterly\\_accounts](http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/methodology/quarterly_accounts)

#### ***Where can I find national accounts employment data on Eurostat's website?***

Employment data in the national accounts framework is available in Eurostat's online database. They are included in the "National Accounts detailed breakdowns (by industry)" branch of the data selection tree. The totals are also included, together with population, in the "Auxiliary indicators (Population, employment and conversion rates)" branch of the selection tree.

## ***DATA DIFFERENCES***

***Are the figures on Eurostat's website for a country identical to the corresponding ones on national websites?***

Data for single Member States are almost always compiled by the national statistical authorities and then supplied to Eurostat, so that figures found at Eurostat and in national sources should be the same. Divergences however can appear for a variety of reasons.

- A natural reason for divergence is that data published by national statistical authorities has not been yet transmitted to Eurostat, or that it has been transmitted but is still being processed at Eurostat. This usually takes one to two days before data become visible on Eurostat's online database.
- For derived indicators, such as growth rates, index series, per-head figures etc., small differences can arise from differences in precision or rounding applied at the various stages of the calculation. This is particularly common when growth rates are calculated from series which have been rounded, e.g. GDP-per-head figures rounded to the nearest 100 Euro.
- Figures presented in reports and other "fixed" publications, including pdf-files, are almost never updated after their publication. If the publication is a regular one, updated figures will only appear in the following edition. Depending on their contents, publications may become available only significantly after the cut-off date for the data used. In any case, differences between data found in publications when compared to data in online databases are usually due to different revision status, with the online databases usually having the more up-to-date contents.
- Another common reason for differences in data is improper adequation of concepts or data parameters, i.e. comparing figures which are not supposed to be identical. The most commonly overlooked differences are:
  - o Differences in geographical composition (historic vs. fixed composition of EU)
  - o Differences in currency unit (national currency, fixed Euro, ECU/Euro, PPS)
  - o Differences in seasonal adjustment status of quarterly figures
  - o Differences in the reference year for chain-linked volumes
  - o Differences in valuation (nominal vs. volume)

***Why are the implicit GDP deflators for the euro area published by Eurostat different from the OECD's?***

Eurostat's GDP deflator is calculated implicitly by dividing GDP measured at current prices by chain linked GDP volumes. This is done both in national currency and in Ecu/Euro. The latter is thus affected by exchange rates movements in current prices. This also applies for euro area members for the time before their entry into the euro area and for the euro area itself in fixed composition for years before that composition was actually achieved, so in any case before 1999.

OECD's deflator is calculated as a weighted average of movements in countries implicit deflators calculated from national currencies. While the result is not strictly implicit from the euro area's accounts in nominal and volume terms, it indicates a pure price movement unaffected by exchange rate effects.

***I have compared figures for a euro area country from Eurostat with those from another source. Although both are expressed in Euro, they differ for years before 1999. Why is that?***

Eurostat publishes variables expressed in monetary terms in both national currency (including euro converted from former national currencies using the irrevocably fixed rate for all years) and in ECU/euro (ECU = European Currency Unit). These are two distinct series which coincide for years after the entry into the euro area (1999 in most cases), but differ for earlier years because the former uses the fixed conversion rate, the latter uses time-varying exchange rates for the earlier years.

Euro area countries have converted their former national currency series to euro by using the irrevocably fixed conversion rate to all years, that is even for years before they actually joined the euro area. This procedure ensures that national time series preserve their growth rates without exhibiting a break due to change of currency unit or exchange rate fluctuations of their former currency. This national currency series expressed in Euro are referred to as "fixed Euro" or "national Euro" series. On the other hand, the euro/ECU series for all countries (including countries in the euro area) are calculated with market exchange rates, which are variable for years before adoption of the euro (1999 in most cases). These series are suited for international comparisons and in particular for geographical aggregations such as Eurostat does in order to construct EU aggregates.

This means that

- National currency series (including fixed euro series for euro area Member States) are suitable for studying the development of a variable in a single country over time.
- ECU/euro series are suitable for internal comparison and aggregation. When comparing them over time, account must be taken of exchange rate effects.
- Both series coincide for years after accession to the euro area. They differ for earlier years due to exchange rate movements.
- National statistical institutes usually only publish their national series in "fixed Euro", which must be compared to the series in "national currency" in Eurostat's online database, not to the series in "ECU/Euro".