Methodological sheet

Gross domestic product

I. Definition and content

Gross domestic product (GDP) is the monetary expression of the total value of goods and services newly created in a given period in a particular territory; it is used to monitor the performance of the overall economy. It can be defined or calculated by use of three methods: the production method, the expenditure method and the income method.

The GDP of the Czech Republic (the key indicator of the system of national accounting) and the main components of GDP expenditure are calculated in line with the Eurostat national accounting methodology (ESA 2010).

All the indicators are initially calculated at current prices and then converted to constant prices to exclude the influence of price fluctuations.

II. Sources and methodology of ascertainment

When the national accounts are compiled, information is drawn from a large number of data sources taken both from statistical surveys organised by the Czech Statistical Office (CZSO) and from administrative data sources from external institutions. All the data sources are broken down into main and supplementary ones according to their character of use.

With the exception of household budget surveys, the main data sources are always comprehensive. This enables an entire sequence of accounts – all current accounts, accumulation accounts and balance sheet accounts – to be compiled for each such source. Supplementary data sources are used to supplement, refine and otherwise correct individual accounts compiled from the main data sources.

The quarterly estimates of economic growth are methodologically closely linked to the annual national accounts in terms of the content of the indicators, but differ quite substantially in terms of scope and procedures used. The basic aims of the quarterly and annual calculations are also different – the point of short periodicity is to obtain a relatively quick yet reasonably accurate estimate of the year-on-year rate of formation and use of GDP. The time series of methodologically comparable quarterly indicators, which can be a suitable tool for forecasting, also play an important role.

III. Breakdown

The main data sources for the quarterly estimates include short-term statistical surveys, customs and price statistics, outputs from the processing of the statements of budgetary and contributory organisations, information on taxes and subsidies from the Ministry of Finance, and banking and balance of payments statistics from the Czech National Bank.

Two price levels are used at the CZSO to assess the level and growth of the economy:

- a) data at *current prices* reflect the recorded prices at which all purchases and sales were executed in the period under review. In the case of inventories the values determined in this way are net of any gains or losses resulting from holding inventories due to price fluctuations;
- b) constant prices express the evolution of volume indicators net of price effects.

IV. Method of calculation

Gross domestic product can be calculated in three ways:

- (1) Using the *production method*, GDP is calculated as the sum of gross value added of the various institutional sectors or the various industries plus net taxes on products (which are allocated to sectors and industries). It is also the balancing item of the total economy production account, where output is recognised on the resources side and intermediate consumption on the use side. Gross value added is the difference between output and intermediate consumption. Since output is valued at basic prices and use at purchase prices, the resources side for the total economy is supplemented by taxes net of subsidies on products.
- (2) Using the *expenditure method*, GDP is calculated as the sum of final uses of goods and services by resident institutional units (final consumption and gross capital formation) plus exports and minus imports of goods and services. Actual final consumption is derived via social transfers in kind from the final consumption of households, government and non-profit institutions serving households. Gross capital formation is broken down into gross fixed capital formation, changes in inventories and net acquisitions of valuables.
- (3) Using the *income method*, GDP is calculated as the sum of primary incomes for the total economy: compensation of employees, taxes on production and exports less subsidies, gross operating surplus and mixed income (or net operating surplus and mixed income and fixed capital consumption).

V. Change in methodology

At the end of June 2024, the CZSO published the results of an extraordinary revision of the national accounts incorporating numerous improvements to the estimates over the whole time series and also some changes to data sources.

The revision itself was brought about by new information, which stemmed from the 2021 Population and Housing Census and from an update of other data background materials. Further, recommendations and enhancement of methods especially in relation to the ongoing harmonisation process within the EU, which also includes an audit of the gross national income calculation, were implemented there, too. ithin the revision, almost forty enhancements have been made. Most of the changes rather impacted the levels of individual macro-indicators and their structures with a minimum impact on the total GDP growth rate. In terms of an impact on the GDP level, the most important changes are related to services in the area of housing. There, results of the 2021 Census have an effect as well as a modification of provided lifetime period of dwellings resulting from recommendations of results of the working group of Eurostat. Having an effect in the opposite direction is a modified estimate of subthreshold software, for which direct data sources are used more in calculations. The following have also significantly contributed to an increase in the GDP level: an update of an in-house software estimate model and an update of parameters of a labour balance model.

The extraordinary revision also changed the reference year used for indicators at constant prices (from 2015 to 2020). The published data are mutually comparable over the whole time series and are methodologically consistent with the European System of Accounts 2010 (ESA 2010).

VI. Reporting population

The CZSO's National Accounts Department obtains numerical source data for the quarterly GDP estimates from the CZSO's departments of industry and cross-sectional statistics and from external sources (in particular the Czech National Bank and the Ministry of Finance). The most important sources of information, however, are the results of the processing of quarterly statistical statements, which are always supplemented so as to arrive at a complete set of units.

More specific GDP data can be found on the CZSO website at www.csu.gov.cz.