

30 INTERNATIONAL COMPARISONS

Methodological notes

The chapter contains selected statistical indicators enabling to compare economies of countries of the European Union (EU Member States) and some other countries. The indicators are compiled by Eurostat from data transmitted regularly by national statistical institutes, some data are provided by international organisations (e.g. the OECD, the European Central Bank).

The countries indicators of which are compared in the tables are listed alphabetically by their name in Czech. A Czech-English list of names of the countries is given in the end of the methodological notes to the chapter. Data for the European Union and the euro area (EA19, eurozone) are, provided that they were available, in the beginning of the tables above individual countries.

The **European Union (EU27)** is an economic and political grouping of 27 countries of Europe. The table below briefly summarises development of the EU from 1993, when the Maastricht Treaty came into force.

EU Member States	Date of joining the EU	Abbreviations of the groupings					
Belgium, Denmark, France, Ireland, Italy, Luxembourg, Germany, Netherlands, Portugal, Greece, Spain, United Kingdom of Great Britain and Northern Ireland ¹⁾	1 November 1993 (the Treaty on European Union)	EU	EU15				
Finland, Austria, Sweden	1 January 1995			EU25		EU27	EU28
Czech Republic, Estonia, Cyprus, Lithuania, Latvia, Hungary, Malta, Poland, Slovakia, Slovenia	1 May 2004						
Bulgaria, Romania	1 January 2007						
Croatia	1 July 2013						

¹⁾ The United Kingdom of Great Britain and Northern Ireland left the European Union on 31 January 2020.

The tables present data for the EU27, i.e. the European Union – 27 countries (from 2020).

The **euro area (EA19, eurozone)** is the territory of those Member States of the European Union, which introduced the euro as their common currency pursuant to the Treaty establishing the European Community. The euro area had 19 members as at 1 January 2015. The table below gives an overview of dates when the countries introduced the euro.

Countries of the euro area	Date of euro introduction	Abbreviations of the groupings						
Belgium, Finland, France, Ireland, Italy, Luxembourg, Germany, Netherlands, Portugal, Austria, Greece, Spain	1 January 2002	EA12	EA13	EA15	EA16	EA17	EA18	EA19
Slovenia	1 January 2007							
Cyprus, Malta	1 January 2008							
Slovakia	1 January 2009							
Estonia	1 January 2011							
Latvia	1 January 2014							
Lithuania	1 January 2015							

Under “**Other**,” tables are extended by selected European countries and countries with a mature economy from other continents (Japan, the United States of America), for which comparable data are available.

Notes on Tables

Table 30-1 Area, population, and population change in 2020

The total area is including inland waters; it is expressed in km². The average population is calculated as the arithmetic mean of the population on 1 January of two consecutive years.

The natural change per 1 000 persons is the ratio of the natural increase/decrease during the year (live births minus deaths) to the average population in that year. A positive natural change, also known as natural increase, occurs when live births

outnumber deaths. A negative natural change, also named as natural decrease, occurs when live births are less numerous than deaths. Total population change per 1 000 persons is the ratio of the population increase/decrease during the year to the average population in that year. The population change consists of two components: natural change and net migration.

Table 30-2 GDP per capita in Purchasing Power Standards (PPS)

Gross domestic product (GDP) is a measure for the economic activity. It is defined as the value of all goods and services produced less the value of any goods or services used in their creation. The volume index of GDP per capita in Purchasing Power Standards (PPS) is expressed in relation to the European Union average set to equal 100. If the index of a country is higher than 100, this country's level of GDP per head is higher than the EU average and vice versa. Basic figures are expressed in PPS, i.e. a common currency that eliminates the differences in price levels between countries allowing meaningful volume comparisons of GDP between countries. Please note that the index, calculated from PPS figures and expressed with respect to EU27_2020 = 100, is intended for cross-country comparisons rather than for temporal comparisons.

Table 30-3 Real GDP growth rate

The calculation of the annual growth rate of GDP volume is intended to allow comparisons of the dynamics of economic development both over time and between economies of different sizes. For measuring the growth rate of GDP in terms of volumes, the GDP at current prices are valued in the prices of the previous year and the thus computed volume changes are imposed on the level of a reference year; this is called a chain-linked series. Accordingly, price movements will not inflate the growth rate.

Table 30-4 Real labour productivity per person employed

Labour productivity is measured as a ratio of GDP (gross domestic product, chain-linked volumes, reference year 2010 in PPS) per person employed (total employment, all industries, in persons). "Persons employed" does not distinguish between full-time and part-time employment.

Table 30-5 General government gross debt

General government gross debt is defined in the Maastricht Treaty as consolidated general government gross debt at nominal (face) value, outstanding at the end of the year in the following categories of government liabilities (as defined in the ESA 2010 classification): currency and deposits, debt securities and loans. The general government sector comprises the subsectors: central government, state government, local government, and social security funds.

Table 30-6 Gross domestic expenditure on R&D (GERD)

GERD (gross domestic expenditure on R&D) as a percentage of GDP. "The research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications" (Frascati Manual, 2002 edition, paragraph 63).

GERD includes expenditure from business enterprise, higher education, government and private non-profit expenditure on R&D. The indicator measures the key R&D investments that support future competitiveness and result in higher GDP.

Table 30-7 Inflation rate

Annual average rate of change in Harmonized Indices of Consumer Prices (HICPs). HICPs are designed for international comparisons of consumer price inflation. HICP is used for example by the European Central Bank for monitoring of inflation in the Economic and Monetary Union and for the assessment of inflation convergence as required under Article 121 of the Treaty of Amsterdam. For the United States of America and Japan national consumer price indices are used in the table.

Table 30-8 Comparative price levels

Comparative price levels of final consumption by private households including indirect taxes. Please be aware that this indicator has been rescaled, i.e. data are expressed in relation to EU27_2020 = 100. Thus, they are not comparable with previous releases. Comparative price levels are the ratio between Purchasing Power Parities (PPPs) and market exchange rate for each country. PPPs are currency conversion rates that convert economic indicators expressed in national currencies to a common currency, called Purchasing Power Standard (PPS), which equalises the purchasing power of different national currencies and thus allows meaningful comparison. The ratio is shown in relation to the EU average (EU27_2020 = 100). If the index of the comparative price levels shown for a country is higher/lower than 100, the country concerned is relatively expensive/cheap as compared with the EU average.

Table 30-9 Employment rate

The employment rate is calculated by dividing the number of persons aged 15+ years in employment by the total population of the same age group. The indicator is based on the EU Labour Force Survey.

Table 30-10 Unemployment rate

Unemployment rates represent unemployed persons as a percentage of the labour force. The labour force is the total number of people employed and unemployed. Unemployed persons comprise persons aged 15–74 years who were:

- a) without work during the reference week,
- b) currently available for work, i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week,
- c) actively seeking work, i.e. had taken specific steps in the four weeks period ending with the reference week to seek paid employment or self-employment or who found a job to start later, i.e. within a period of, at most, three months.

Table 30-11 Long-term unemployment rate

The indicator measures the share of the economically active population aged 15 to 74 who has been unemployed for 12 months or more. Unemployed persons are defined as all persons who were without work during the reference week, were currently available for work and were either actively seeking work in the last four weeks or had already found a job to start within the next three months. The unemployment period is defined as the duration of a job search, or as the length of time since the last job was held (if shorter than the time spent on a job search). The economically active population comprises employed and unemployed persons. The indicator is part of the adjusted, break-corrected main indicators series and should not be compared with the annual and quarterly non-adjusted series, which have slightly different results.

Table 30-12 At-risk-of-poverty rate after social transfers

The share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers). This indicator does not measure wealth or poverty, but low income in comparison to other residents in that country, which does not necessarily imply a low standard of living.

Table 30-13 Internet purchases by individuals

Data are collected annually by the National Statistical Institutes and are based on Eurostat's annual model questionnaires on ICT (Information and Communication Technologies) usage in households and by individuals. Last online purchase: in the 12 months.

Table 30-14 Adult participation in learning

Adult participation in learning (previously named "lifelong learning") measures the share of people aged 25–64 years who stated that they received formal or non-formal education and training in the four weeks preceding the survey (numerator). The denominator consists of the total population of the same age group, excluding those who did not answer to the question "participation in education and training". Both the numerator and the denominator come from the EU Labour Force Survey. Adult learning covers both general and vocational formal and non-formal learning activities. Adult learning usually refers to learning activities after the end of initial education.

Table 30-15 Total fertility rate

Total fertility rate (the sum of age-specific fertility rates): the average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year, and surviving.

Tables 30-16 and 30-17 Life expectancy at birth – males, females

Life expectancy at birth is defined as the mean number of years a newborn child can expect to live if subjected throughout his or her life to the current mortality conditions.

Table 30-18 Municipal waste generated

Municipal waste is mainly produced by households, similar wastes from sources such as commerce, offices and public institutions are included. The amount of municipal waste generated consists of waste collected by or on behalf of municipal authorities and disposed of through the waste management system. The concept of municipal waste includes different waste

streams in different municipalities. Especially, the extent to which waste generated by offices and small businesses are included differs from municipality to municipality. For areas not covered by a municipal waste collection scheme the reporting countries estimate the amount of waste generated.

Table 30-19 Share of energy from renewable sources

The share of energy from renewable sources shows the percentage of gross final energy consumption in the country for the given calendar year. The calculation of the share includes four indicators: transport, heating and cooling, electricity, and total renewable energy sources. The submission of the results (energy balance) is in line with NACE Rev. 2.

Table 30-20 Industrial production index

The industrial production index shows the output and activity of the industry sector (mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply – sections B, C, and D according to the NACE Rev. 2 classification). It measures changes in the volume of output on a monthly basis. Industrial production is compiled as a fixed base year Laspeyres type volume index. The current base year is 2015 (index 2015 = 100). The index is presented in calendar, not seasonally adjusted form.

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Further information can be found on the website of the Czech Statistical Office at:

– www.czso.cz/csu/czso/international_data

A complete database of comparison indicators for the EU can be found on the website of Eurostat at:

– ec.europa.eu/eurostat

Names of the countries in Czech and English:

Belgie	<i>Belgium</i>	Kypr	<i>Cyprus</i>	Rumunsko	<i>Romania</i>
Bulharsko	<i>Bulgaria</i>	Litva	<i>Lithuania</i>	Řecko	<i>Greece</i>
Česká republika	<i>Czech Republic</i>	Lotyšsko	<i>Latvia</i>	Severní Makedonie	<i>North Macedonia</i>
Dánsko	<i>Denmark</i>	Lucembursko	<i>Luxembourg</i>	Slovensko	<i>Slovakia</i>
Estonsko	<i>Estonia</i>	Maďarsko	<i>Hungary</i>	Slovinsko	<i>Slovenia</i>
Finsko	<i>Finland</i>	Malta	<i>Malta</i>	Spojené státy	<i>United States of America</i>
Francie	<i>France</i>	Německo	<i>Germany</i>	Španělsko	<i>Spain</i>
Chorvatsko	<i>Croatia</i>	Nizozemsko	<i>Netherlands</i>	Švédsko	<i>Sweden</i>
Irsko	<i>Ireland</i>	Norsko	<i>Norway</i>	Švýcarsko	<i>Switzerland</i>
Island	<i>Iceland</i>	Polsko	<i>Poland</i>	Turecko	<i>Turkey</i>
Itálie	<i>Italy</i>	Portugalsko	<i>Portugal</i>	Velká Británie	<i>United Kingdom of Great Britain and Northern Ireland</i>
Japonsko	<i>Japan</i>	Rakousko	<i>Austria</i>		