

30. INTERNATIONAL COMPARISONS

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 names 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 eurozone are, provided that they were available, in the beginning of the tables above individual countries.

The **European Union (EU28)** is an economic and political grouping of 28 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				
		EU	EU15	EU25	EU27	EU28
Belgium, Denmark, France, Ireland, Italy, Luxembourg, Germany, Netherlands, Portugal, Greece, Spain, United Kingdom of Great Britain and Northern Ireland	1 November 1993 (the Treaty on European Union)	EU	EU15	EU25	EU27	EU28
Finland, Austria, Sweden	1 January 1995					
Czech Republic, Estonia, Cyprus, Lithuania, Latvia, Hungary, Malta, Poland, Slovakia, Slovenia	1 May 2004					
Bulgaria, Romania	1 January 2007					
Croatia	1 July 2013					

The **eurozone (the euro area, EA19)** 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 eurozone 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 eurozone	Date of euro introduction	Abbreviations						
		EA12	EA13	EA15	EA16	EA17	EA18	EA19
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 the European Free Trade Association (EFTA) countries, countries wanting to join the EU (Macedonia (the former Yugoslav Republic of) and Turkey), and countries with a mature economy from other continents (Japan, the United States of America), for which comparable data are available.

Notes on Tables

Table30-1 Area, population, and population change in 2016

The total area is including inland waters; it is expressed in km², at 1 January. 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 (EU28) average set to equal 100. If the index of a country is higher than 100, this country's level of GDP per capita 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 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 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. "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. 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 (EU28 = 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 long-term unemployment rate expresses the number of the long-term unemployed aged 15–74 years as a percentage of the active population of the same age. The long-term unemployed (12+ months) comprise persons aged at least 15, who are not living in collective households, who will be without work during the next two weeks, who would be available to start work within the next two weeks and who are seeking work (have actively sought employment at some time during the previous four weeks or are not seeking a job because they have already found a job to start later). The total active population (labour force) is the total number of the employed and unemployed population. The duration of unemployment is defined as the duration of a search for a job or as the period of time since the last job was held (if this period is shorter than the duration of the search for a job).

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

The 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 Public expenditure on education

This indicator is defined as total public expenditure on education, expressed as a percentage of GDP. Generally, the public sector funds education either by bearing directly the current and capital expenses of educational institutions or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations. Both types of transactions together are reported as total public expenditure on education.

Table 30-14 Adult participation in learning

Adult participation in learning (previously named “lifelong learning”) refers to persons aged 25–64 years who stated that they received education or 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. The information collected relates to all education or training whether or not relevant to the respondent’s current or possible future job.

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 provided age-specific fertility rates recorded in a reference calendar year will remain unchanged during her childbearing period (age 15–49 years).

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

Life expectancy at birth is defined as the mean number of years still to be lived by a person at birth, if subjected throughout the rest of his or her life to the current mortality conditions.

Table 30-18 Municipal waste generated

Municipal waste consists to a large extent of waste generated by households, but may also include similar wastes generated by small businesses and public institutions and collected by the municipality; this part of municipal waste may vary from municipality to municipality and from country to country, depending on the local waste management system. For areas not covered by a municipal waste collection scheme the amount of waste generated is estimated.

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 2010 (index 2010 = 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

Czech and English names of the countries:

Belgie	<i>Belgium</i>	Kypr	<i>Cyprus</i>	Rakousko	<i>Austria</i>
Bulharsko	<i>Bulgaria</i>	Litva	<i>Lithuania</i>	Rumunsko	<i>Romania</i>
Česká republika	<i>Czech Republic</i>	Lotyšsko	<i>Latvia</i>	Řecko	<i>Greece</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>	Makedonie	<i>Macedonia (the former Yugoslav Republic of)</i>	Spojené státy	<i>United States of America</i>
Francie	<i>France</i>	Malta	<i>Malta</i>	Španělsko	<i>Spain</i>
Chorvatsko	<i>Croatia</i>	Německo	<i>Germany</i>	Švédsko	<i>Sweden</i>
Irsko	<i>Ireland</i>	Nizozemsko	<i>Netherlands</i>	Švýcarsko	<i>Switzerland</i>
Island	<i>Iceland</i>	Norsko	<i>Norway</i>	Turecko	<i>Turkey</i>
Itálie	<i>Italy</i>	Polsko	<i>Poland</i>	Velká Británie	<i>United Kingdom of Great Britain and Northern Ireland</i>
Japonsko	<i>Japan</i>	Portugalsko	<i>Portugal</i>		