



METHODOLOGICAL EXPLANATION

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GROSS DOMESTIC PRODUCT AND EMPLOYMENT BY REGION

This methodological explanation relates to the data releases:

- Gross domestic product by region, Slovenia, annually (First Release)



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1 PURPOSE

The purpose of the statistical survey is to estimate gross domestic product (GDP), gross value added (GVA), employment, compensation of employees and hours worked by economic activities and by statistical and cohesion regions of the Republic of Slovenia.

The key statistics are absolute figures and structural shares of GDP by regions, GDP per capita by regions, level index of GDP per capita by regions, the structure of GVA by activities and by regions, employment (employees, self-employment and farmers) by activities and by regions, etc.

2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\) \(only in Slovene\)](#)
- [National Statistics Act \(OJ RS, No. 45/95 and 9/01\)](#)
- Regulation (EU) No. 549/2013 of 21 May 2013 on the European system of national and regional accounts in the European Union (CELEX: 32013R0549).
- Regulation (EC) No. 1059/2003 of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS) (CELEX: 32003R1059).
- Commission Regulation No. 1319/2013 of 9 December 2013 on amending annexes to Regulation (EC) No. 1059/2003 (CELEX:32013R1319).
- Commission Regulation No. 2381/2015 of 17 December 2015 on implementing Regulation (EC) No. 1059/2003 regarding the transmission of the time series for the new regional breakdown (CELEX: 32015R2381).

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The units described by the published data are: GDP, GVA, employment, hours worked and compensation of employees. The data of the presented unit are broken down by individual economic activity and by groups of economic activities according to NACE Rev. 2 and by statistical territorial units, i.e. statistical and cohesion regions.

4 SELECTION OF OBSERVATION UNIT

Observation units are all institutional units performing economic activity on the economic territory of the Republic of Slovenia for an extensive period (one year or more) in economic activities following the concept of production by the ESA 2010. Such institutional units are known as resident units, irrespective of nationality, legal form or presence on the economic territory of the Republic of Slovenia at the time of the activity.

According to the selected variables and data sources, the following observation units are included:

- Institutional units whose data are used for calculating GDP and other main aggregates of the national accounts for Slovenia.
- Local kind of activity units (LKAU) whose data on average monthly earnings of employed persons, hours worked and paid are used for calculating the keys that are used for the regionalization of national data.
- Persons in employment are employees, self-employed persons and farmers engaged in production activities under the production boundary of national accounts (ESA 2010).

Coverage is full, meaning that all institutional units which are residents in the Republic of Slovenia and perform activities within the production boundary of the ESA 2010 are included in the survey.

5 SOURCES AND METHODS OF DATA COLLECTION

Data are collected annually.

The main sources of data are regular statistical surveys:

- Gross domestic product (NR-BDP/L): value-added, taxes and subsidies on products and services, gross operating surplus, net mixed-income, consumption of fixed capital, compensation of employees, employment, hours worked, and population. More information on the survey is available in the methodological explanation Gross domestic product, other aggregates of national accounts, and employment.
- Working-age population (DAK): the number of employees and self-employed persons by groups on the basis of insurance, by municipality/region of job and separately according to the principle of its own business and organizing principle. More information on the survey is available in the methodological explanation Persons in employment.
- Statistical business register of Slovenia (SPRS): registration number of the company and units in the composition, municipality/region. More information on the survey is available in the quality report Statistical business register.
- Earnings of persons in paid employment by legal persons (ZAP/M): average monthly gross earnings by industry and by region. More information on the survey is available in the methodological explanation Earnings of persons in paid employment by legal persons.
- Hours worked (ZAP-DELURE): estimation of hours worked, and estimation of paid hours by persons in paid employment by legal persons and by persons in paid employment by registered natural persons, by organizing principle, by cohesion regions. More information on the survey is available in the methodological explanation Hours worked.
- Register-based census of population, households, and housing (REGISTRSKI POPIS): number of dwellings by equipment with central heating and the usable surface of dwellings. More information on the

survey is available in the methodological explanation Register-based census of population, households, and housing.

- Estimation of the construction of buildings and dwellings (GRAD-STAVBE): number of completed dwellings and the usable surface. More information on the survey is available in the methodological explanation Estimation of the construction of buildings and dwellings.
- Population structure (DEM-PREB/ČL): population structure by regions. More information on the survey is available in the methodological explanation Population.
- Farm Structure Survey (KME-JUNSTRK/3L): the utilized agricultural area and annual working units, by regions. More information on the survey is available in the methodological explanation Farm Structure Survey.
- Agricultural Census (POPIS-KME/10L): the utilized agricultural area and annual working units, by regions. More information on the survey is available in the methodological explanation Farm Structure Survey.
- Electricity and heat production with technical information on energy devices (E1-EE/L): data on producing electricity. More information on the survey is available in the methodological explanation Annual energy statistics.

Data provided by the Ministry of defense (MORS) (employees by location) and the Slovenia Forest Service (data on forest management by municipalities) are used for the purposes of calculation GDP and other aggregates of the national accounts by region.

6 DEFINITIONS

Regional accounts are a subsystem of national accounts where specified spatial units (in our case the cohesion and the statistical regions) are the main object of the survey. Concepts used in regional accounts are the same as those used in national accounts.

Gross domestic product by the *income approach* equals the sum of compensation of employees, net taxes on production and imports (taxes on production and imports less subsidies on production) and gross operating surplus and mixed-income.

Value-added at basic prices equals the sum of compensation of employees, other taxes on production, less other subsidies on production, and the sum of gross operating surplus and gross mixed-income.

Compensation of employees is the sum of gross wages and salaries, personal allowances, and employers social contributions. *Gross wages and salaries* include all gross payments for regular and overtime working hours and premiums for productivity. *Personal allowances* comprise expenses for food, transport to and from work and reimbursement for annual vacation and include tips in restaurants and personal services as well as estimation of private use of business cars. *Employers social contributions* include actual (compulsory and voluntary) and imputed social contributions. *Imputed social contributions* comprise payments by employer to employees during the absence from work

due to sickness, accidents, etc.

Operating surplus is the residual category of value-added in financial and non-financial corporations and in housing activities of households. The category can be shown either as net or gross, together with the consumption of fixed capital.

Mixed-income is the residual category in the calculation of value-added of self-employed persons and unincorporated enterprises. It equals compensation for work performed by the owner and members of his or her family and cannot be separated from entrepreneurial profits. The category can be shown either as net or gross, together with the consumption of fixed capital.

Employment by the domestic concept covers all permanently employed persons and self-employed persons together with unpaid family workers in agriculture and self-employed persons in other household activities. Employment by the national accounts methodology also covers student work and other forms of part-time employment, employment in transport by sea on our ships, diplomatic and consular representatives abroad, enterprises without employment, etc.

Hours worked include hours actually worked during normal working hours, paid and unpaid overtime, time spent at the place of work on tasks such as preparing the site and time of short rest periods at the workplace. These are the hours of work that contributed to the production and can be identified with the concept of the production boundary of national accounts. The concept of hours worked excludes hours paid but not actually worked, such as the hours of annual leave, state holidays and work-free days, sick leave, time spent for meal breaks and time used for commuting between home and work.

7 EXPLANATIONS

7.1 CLASSIFICATIONS

GDP and other aggregates of national accounts by region are calculated and published according to the:

- **Nomenclature of Territorial Units for Statistics (NUTS)**. NUTS has three hierarchical levels – NUTS 1, NUTS 2 and NUTS 3. NUTS 1 level represents Slovenia as a whole country, at NUTS 2 level the country is divided into two cohesion regions – Vzhodna Slovenija and Zahodna Slovenija – and at NUTS 3 level the country is broken down into 12 statistical regions – Pomurska, Podravska, Koroška, Savinjska, Zasavska, Posavska, Jugovzhodna Slovenija, Osrednjeslovenska, Gorenjska, Notranjsko-kraška, Goriška and Obalno-kraška region. More information about classification is available on <http://www.stat.si/StatWeb/en/mainnavigation/methods-and-classifications/classifications> in the field Territorial code list.

Data are published at the levels:

- - NUTS 1: regional GDP, regional GVA at basic prices and growth rates, employment, hours worked and compensation of employees.
 - NUTS 2: regional GDP, regional GVA at basic prices and growth rates, employment, hours worked and compensation of employees.
 - NUTS 3: regional GDP, regional GVA at basic prices and employment.
- Regional estimations of GDP and other aggregates of national accounts are calculated **by groups of economic activities of NACE Rev. 2 at the A10 level as laid down in ESA 2010.**

At the A10 level the economic activities are grouped into categories:

- - A10 - Total
 - A - Agriculture, forestry and fishing
 - B+C+D+E - Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities
 - C - Manufacturing
 - F - Construction
 - G+H+I+J - Wholesale and retail trade; transport; accommodation and food service activities; information and communication
 - G+H+I - Wholesale and retail trade, transport, accommodation and food service activities
 - J - Information and communication
 - K+L+M+N - Financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities
 - K - Financial and insurance activities
 - L - Real estate activities
 - M+N - Professional, scientific and technical activities; administrative and support service activities
 - O+P+Q+R+S+T - Public administration and defence; compulsory social security; education; human health and social work activities; other service activities
 - O+P+Q - Public administration, defence, education, human health and social work activities
 - R+S+T - Other service activities

More information about classification is available on <http://www.stat.si/StatWeb/en/mainnavigation/methods-and-classifications/classifications> in the field of Economic Classifications.

7.2 DATA PROCESSING

DATA EDITING

Data were edited by using appropriate individual corrections.

For more, see the general methodological explanations [Statistical data editing](#).

WEIGHTING

Weighting was not performed.

SEASONAL ADJUSTMENT

Seasonal adjustment is not applicable.

DATA PROCESSING OTHER

GDP, GVA and other aggregates of national accounts by region are not directly measured in local kind of activity units. Based on data availability, regionalization is made by using the indirect method and selected indicators consistent with the ESA 2010 concepts.

In general, regionalization can be done by using bottom-up methods, top-down methods or mixed methods:

- *Bottom-up methods* of estimation involve the use of information on units that are resident in the region and ascending by addition until the regional value of the aggregate is established. The regional values must add up to the corresponding national value;
- *Top-down methods* of estimation involve the distribution of a national figure across regions, without attempting to single out resident units, by means of a distribution indicator which is distributed across regions in the same way as the variable to be estimated. The methods are called top-down because the aggregate is allocated to a region and not to a single unit. However, the notion of a residential unit is needed in order to have correct regional coverage of the key to be used (one-regional and multi-regional institutional units) ;
- Bottom-up methods are rarely encountered in their pure form. *Mixed methods* are also acceptable. Regional estimates of a variable or an aggregate of variables may be done with the bottom-up method at NUTS 1 level. For a detailed regional level, a top-down method is applied.

National GDP, GVA and other main aggregates are allocated to the region by using the top-down and the mixed method. More information about the methods of regionalization is available in Regional accounts inventory and generally in Manual on Regional Accounts Methods.

7.3 INDICES

Indices are not published.

7.4 PRECISION

The precision is not calculated.

7.5 OTHER EXPLANATIONS

8 PUBLISHING

- SiStat Database: Economy – National accounts – [Regional accounts](#). Absolute data, indicators, structural shares and index levels are published. Data are published according to the classification of the statistical territorial units at NUTS level 1 (Slovenia), NUTS level 2 (cohesion region), and NUTS level 3 (statistical regions). Data by economic activities are published according to NACE Rev. 2 sections and groups of sections.
- First Release (GDP and national accounts, Regional accounts): »Gross domestic product by region, Slovenia, annually«.
- [Slovene statistical regions and municipalities in numbers](#)
- [EUROSTAT \(Statistical Office of the European Union\)](#)
- [The Organisation for Economic Co-operation and Development \(OECD\)](#)

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

Published data on regional accounts are not indicated with the status (provisional or final data) due to the specificity of national and regional accounts data.

Data on GDP and other aggregates of national accounts by region are consistent with annual data of national accounts. National accounts data are published at the end of August and cover the first detailed estimate of the data of the previous year and revised data from the pre-previous three years. Data on regional accounts are published in December, so the revisions of national accounts data i.e. annual gross domestic product are taken into account. The reasons for the revision of the regional data are also smaller improvements and changes in methodology within the regional accounts, new or improved sources for calculating the indicators for regionalization, and amendment of the NUTS classifications. These revisions can be performed on the entire time series of regional accounts data.

Publishing of provisional and final data is planned. Due to the needs of users for timely information, provisional data are published that meet the criteria of the quality of official statistical data but do not meet the quality that can be met with complete coverage. Data are revised when recent, more complete and better

data can significantly contribute to the quality of data-based decision-making.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

In time series of the regional accounts data are no breaks, so all time points are comparable from 2000 reference year onwards.

In 2011 GDP and other aggregates of national accounts by region for the 2000–2008 period were compiled and published according to the new NACE Rev. 2 (before the old NACE Rev. 1.1 was in force). Since 2009 data have been collected, calculated and published by NACE Rev. 2.

In 2015 GDP and other aggregates of national accounts by region for the period 2000 to 2014 were calculated and published according to the newest standard ESA 2010, which entered into force in September 2014. Before that ESA 1995 was in force. More information on the implementation of ESA 2010 in national accounts can be found [here](#) (only in Slovene).

In 2015 the newer version of the classification of statistical territorial units i.e. NUTS 2013 entered into force, which brought changes in the cohesion border and in the borders of four statistical regions for Slovenia. With the requirements set out in ESA 2010 GDP and other aggregates of national accounts by region for the 2000–2014 period were calculated and published according to the NUTS 2013. More information about changes in statistical territorial units is available on the [SURs website](#)

10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURS's website are available at <https://www.stat.si/statweb/en/Methods/QuestionnairesMethodologicalExplanationsQualityReports>.

- Questionnaire:
 - SURS does not collect data for this survey by using a questionnaire.
- Quality report:
 - Statistical business register

Theme: Enterprises, Subtheme: Enterprise structure and performance

- Methodological explanations:
- Gross domestic product, other aggregates of national accounts and employment

Theme: Gross domestic product and national accounts, Subtheme: Gross domestic product and economic growth

- Persons in employment

Theme: Labour market, Subtheme: Employees, self-employed and unemployed

- Earnings of persons in paid employment by legal persons

Theme: Earnings and Labour Cost, Subtheme: Earnings

- Hours worked

Theme: Labour market, Subtheme: Employees, self-employed and unemployed

- Register-based census of population, household and housing

Theme: Population, Subtheme: Population number and structure

- Estimation of the construction of buildings and dwellings

Theme: Construction, Subtheme: Construction of buildings and dwellings

- Population

Theme: Population, Subtheme: Population number and structure

- Farm Structure Survey

Theme: Agriculture, forestry and fishery, Subtheme: Farms and agricultural census

- Annual energy statistics

Theme: Energy, Sub-theme: Energy Production and Consumption

- Reference Metadata in Euro SDMX Metadata Structure: (ESMS): Regional Economic Accounts (nama_10reg), available on the national accounts department
- [Regional Accounts Inventory](#), Statistical Office of the Republic of Slovenia, Ljubljana, 2021
- [Manual on regional accounts methods](#), 2013 edition, Statistical office of the European Communities, Luxembourg, 2013