



METHODOLOGICAL EXPLANATION

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SATELLITE ACCOUNTS FOR EDUCATION

This methodological explanation relates to the data releases:

- Satellite accounts for education, 2018–2020, Slovenia, annually (First Release/Electronic Release)



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1 PURPOSE

The purpose of the publication is to show production and expenditure, and to describe transactions in the field of education and training. The data are the basis for the assessment of investments in human capital, expressed as the sum of expenditure for education and training. The tables show the value of supply and use, financing and structure of expenditure and costs for education and training by institutional sectors and education and training purposes (types). The data are shown at current prices. In addition to the monetary data, the non-monetary data on education and training are shown.

The data are published as experimental statistics because the statistical survey is new and the measuring instruments and methodology for data preparation and calculation of indicators are still being developed.

2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\)](#) (only in Slovene)
- [National Statistics Act](#) (OJ RS, No. 45/95 and 9/01)

The calculated data are based on the methodological guidelines for the preparation of satellite accounts for education and training: "Satellite account for education and training: Compilation guide" (SAET), prepared within the United Nations Economic Commission for Europe.

The mentioned methodological guidelines are based on the definitions and principles of the European System of Accounts - ESA 2010. Existing international work in the field of education is also taken into account (UNESCO's methodology of accounts for education; UNESCO-OECD-Eurostat (UOE) manual on concepts, definitions and classifications for the collection data on formal education from 2016).

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The units described by the published data are the transactions of economic entities related to education and training in the territory of Slovenia. Transactions are observed from the point of view of supply on the domestic market (production and import), use (intermediate consumption, final consumption, capital formation and exports), cost structure and sources of financing. Some non-monetary data are also provided.

4 SELECTION OF OBSERVATION UNIT

Institutional units of all sectors of the economy, in connection with the activity of education and training, are included.

The data calculation covers all units in accordance with the concept of production according to the System of National Accounts (SNA) and the European System of National and Regional Accounts (ESA). Additionally, transactions related to in-house training in companies and other organizations are also included.

The selection of observation unit is complete.

5 SOURCES AND METHODS OF DATA COLLECTION

Data are annual, for the 2018–2020 period, and are experimental statistics in the survey Satellite Accounts for Education (SARI).

Various administrative sources, results of statistical surveys and other information were used.

The main sources of data for estimating the value of supply, use and sources of financing:

- annual accounting statements of companies and other organizations, obtained from the Agency of the Republic of Slovenia for Public Legal Records and Services
- budgetary statistics: additional budgetary accounting report of the Republic of Slovenia and analytical data on municipal budget expenditure, for education programs, obtained from the Ministry of Finance
- national accounts statistics
- education statistics
- other administrative sources and statistical information

Basic sources for estimating the expenditure of companies on in-house training programs:

- Continuing vocational training in enterprises (ŠOL-ZAP)
- Labour costs survey (ZAP-SD)
- Working time structure (ZAP-SDČ)
- Labour force survey (ANP)
- labour cost indices
- consumer price indices

Data sources for non-monetary indicators related to education and training:

- Socio-economic characteristics of the population and migrants (SEL-SOC)
- Students in the pre-tertiary education and those who have completed education at these levels (ŠOL-DOTERC)
- Enrolment of students in the post-secondary and higher education (ŠOL-ŠTUD)
- Graduates from tertiary education (ŠOL_DIPL-TERC)
- Persons employed in formal education (ŠOL-KADRI)
- Persons in employment according to register sources, structural data

- Labour force survey (ANP)

6 DEFINITIONS

Purposes (types) of education and training

Preschool education represents the education and care of children in kindergartens (first and second age periods). The activities of kindergartens are taken into account in their entirety; in addition to educational activities, care component is also included. (This type of education corresponds to ISCED 2011 level 0 - Early childhood education.)

Basic education includes education from 1st to 9th grade of 9-year elementary school. (This type of education corresponds to ISCED 2011 level 1 – Primary education plus ISCED 2011 level 2 – Lower secondary education.)

Upper-secondary education represents education in upper-secondary vocational, technical and general programs. (This type of education corresponds to ISCED 2011 level 3 – Upper-secondary education.)

Tertiary education is connected with short-cycle higher vocational education programs and higher education programmes at 1st, 2nd and 3rd Bologna level. (This type of education corresponds to ISCED 2011 levels 5–8 – Tertiary education.)

Education in the field of culture, sport and recreation includes activities of education and training in the field of sport and recreation and in the field of culture and art.

Other education and vocational training includes activities of driving schools, programs of education and training not elsewhere classified, auxiliary activities in the field of education and training and care programs for children with special needs.

The company's in-house training programs for employees include educational activities in companies (market and non-market producers) related to the preparation and implementation of their own professional training programs for their employees.

The first four categories are defined in the education statistics as formal education, and the rest as nonformal education.

The tables also show, as a special category, **education-related products/services and administrative services** which could not be classified by other purpose (types) of education and training. They include expenditure related to products and services that support the implementation of education and training or are necessary in the educational process (e.g. expenditures for schoolbooks, workbooks, etc. school supplies, and computers). Expenses for transportation, food and accommodation are not included because they are not directly related to the implementation of education and training.

Institutional sectors

Institutional units are grouped into sectors according to the type of producers and their principal activity and functions that indicate economic behaviour.

The general government sector includes all resident institutional units that are non-market producers whose output is intended for individual and collective consumption, and are financed by compulsory payments made by units belonging to other sectors, and institutional units principally engaged in the redistribution of national income and wealth. The general government sector is divided into subsectors: **central government**, **local government** and social security funds.

The household sector consists of individuals or groups of individuals as consumers and as entrepreneurs who produce marketable goods and non-financial and financial services (market producers).

The non-profit institutions serving households sector (NPISH) consists of non-profit institutions that are separate legal entities that serve households and are private non-market producers. Their principal resources are voluntary contributions in cash or in kind from households in their capacity as consumers, from payments made by general government and from property income. Examples of NPISH are trade unions, professional and learned societies, political parties, religious societies, cultural societies, sports clubs, charities, etc.

Other sectors (market producers), consist of non-financial and financial corporations. These are institutional units that are independent legal entities and market producers, and whose principal activity is the production of goods and services.

The rest of the world sector consists of non-resident units that are engaged in transactions with resident institutional units, or have other economic links with resident units. The institutions of the EU and international organizations are also included in the rest of the world sector.

Transactions are determined by the ESA 2010:

Production is the value of products and services produced within a production unit in a calendar year. It includes production intended for sale on the market, production for own final consumption and other non-market production. It is valued at basic prices. The basic price is the value received by the manufacturer from the customer for a unit of the manufactured product or service, from which all taxes are deducted, and subsidies on products related to this unit are added.

Intermediate consumption consists of goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services are either transformed or used up in the production process.

Gross fixed capital formation consists of acquisitions (purchases) of new and used fixed assets, reduced by disposals (sales) of used fixed assets and increased by transaction costs of used fixed assets. Fixed assets also include

intellectual property products.

Compensation of employees is defined as the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during an accounting period. It is gross wages and salaries, personal remunerations and employers social contributions. 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, etc. Personal remunerations consists of expenses for food, transport to and from work and reimbursement for annual vacation.

Taxes on products are taxes that are paid per unit of a specific product or service and are calculated when the goods are produced, sold or imported (value added tax, excise duties, import duties and other special taxes on products and transactions).

Other taxes on production consists of all taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods and services produced or sold. Other taxes on production may be payable on the land, fixed assets or labour employed in the production process or on certain activities or transactions.

Subsidies are current unrequited payments, which general government or the institutions of the EU make to resident producers, with the objective of influencing their levels of production, their prices of products or the remuneration of the factors of production. There are two types of subsidies. **Subsidies on products** are subsidies paid per unit of a product or service. They can be paid upon production, sale or import of a product or service. **Other subsidies on production** include other subsidies that the company can get from the state as a result of its involvement in production.

Transfers consist of other current transfers, capital transfers and scholarships. **Other current transfers** are net non-life insurance premiums, current transfers within general government, current international cooperation, miscellaneous current transfers and VAT- and GNI-based EU own resources. **Capital transfers** require the acquisition or disposal of an asset, or assets, by at least one of the parties to the transaction. They consist of investment grants and other capital transfers.

Final consumption expenditure consists of expenditure incurred by resident institutional units on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community. Final consumption expenditure consists of final consumption expenditure of households, non-profit institutions serving households and the government.

Supply is the sum of domestic production at basic prices, imports and net taxes on products (taxes minus subsidies).

Use is the sum of final consumption expenditure, intermediate consumption and exports.

Tables of satellite accounts for education:

Monetary tables of satellite accounts for education

- Education and training output by provider and education and training purpose (type);
- Education and training expenditure by consumer and education and training purpose (type);
- Financing of education and training by sector and education and training purpose (type);
- Cost structure by education and training purpose (type) and sector.

The first two tables are based on supply and use tables and represent the value of production or supply of education and training by type of producer or provider (non-market – general government (central and local) and NPISH, market producers in educational activity, other market producers, imports) on one hand and use i.e. final consumption expenditure of the general government (central and local), NPISH and households, and intermediate consumption of domestic sectors and exports on the other hand. Gross fixed capital formation in educational activities is also shown.

The financing table shows how different institutional sectors (central and local government, NPISH, households, other domestic sectors, and the rest of the world) finance educational activities by purposes (types) of education and training and the type of financial flows (direct financing - final/intermediate consumption or transfer).

The cost structure table shows the cost elements associated with domestic education and training activities.

Non-monetary tables of satellite accounts for education

To complement the monetary tables, the following tables with physical indicators were produced (based on the data related to education and training from existing statistical surveys):

- Population aged 15 or more, by educational attainment, sex and age groups;
- Participants and teachers or academic staff (tertiary education), adjusted to the calendar (financial) year, by levels of formal education;
- Population aged 15–64 enrolled in education and training in the last four weeks, by type of education and training, sex and age groups;
- Tertiary education graduates by type and field of education (KLASIUS-P-16, 1st level) and sex;
- Persons in employment by occupational group (SKP-08), educational attainment and sex.

7 EXPLANATIONS

7.1 CLASSIFICATIONS

The data are shown by the general government sector subsectors, as defined by the Standard Classification of Institutional Sectors (SKIS): <http://www.stat.si/StatWeb/Methods/Classification>.

Correlation between purposes (types) of education and training at the national level and the International Standard Classification of Education (ISCED 2011) are explained. More information on the ISCED classification is available at:

http://ec.europa.eu/eurostat/statistics-explained/index.php/International_Standard_Classification_of_Education

7.2 DATA PROCESSING

DATA EDITING

Data are statistically edited using appropriate systematic and individual corrections.

Data are edited at the macro level; the aggregate control method is used. The discrepancies detected at the macro level are corrected at the micro level.

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

The data of various administrative and statistical sources are processed in accordance with the ESA 2010 methodology.

Administrative sources are linked by identifiers.

7.3 INDICES

Indices are not published.

Methodological explanation

7.4 PRECISION

The precision is not calculated.

7.5 OTHER EXPLANATIONS

8 PUBLISHING

- SiStat Database: [GDP and National Accounts](#) – Satellite accounts - Satellite accounts for education. We publish data in the form of absolute values (million EUR) and at current prices, by type of transactions defined by the ESA 2010, by institutional subsectors and by educational purpose (types). We also publish non-monetary data on education and training.
- First Release (GDP and National Accounts - Satellite accounts – Satellite accounts for education: »Experimental statistics: Satellite accounts for education, 2018-2020«.
- Electronic Release (GDP and National Accounts - Satellite accounts – Satellite accounts for education): »Experimental statistics: "Satellite accounts for education, 2018–2020«.

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

The data are the result of experimental collection, so they are not defined as having the "temporary/final" status.

Data revision is planned. Due to the needs of users for timely information, 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, completed and more quality data respectively can significantly contribute to the quality of data-based decision-making and when – due to publication deadlines determined by the European legislation – less accurate data are published on the basis of incomplete coverage.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

There are no breaks in time series, so all points in time are comparable.

Methodological explanation on revision of statistical data is available on: <http://www.stat.si/dokument/5299/RevisionOfStatisticalDataMEgeneral.pdf>.

10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURSs 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.
- Satellite Account for Education and Training SAET <https://unece.org/DAM/stats/publications/2020/ECECESSTAT20201.pdf>
- European System of Accounts ESA2010 <http://ec.europa.eu/eurostat/documents/3859598/5925693/KS-02-13-269-EN.PDF/44cd9d01-bc64-40e5-bd40-d17df0c69334>
- UOE data collection on formal education https://circabc.europa.eu/sd/a/849a866e-d820-4006-a6af-21cb1c48626b/UOE2016manual_12072016.pdf