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based on ESA 2010 — 2018/LV/NA-BOP'

REGIONAL ACCOUNT INVENTORY

(ESA 2010)

Report D6-Final Report

2021

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Abbreviations

CSB	Central Statistical Bureau of Latvia
EDP	Excessive Deficit Procedure
ESA 2010	European System of Accounts, 2010
FISIM	Financial intermediation services indirectly measured
GDP	Gross domestic product
GVA	Gross value added
NACE	Statistical Classification of Economic Activities in the European Community Rev. 2
NPISH	Non-profit institutions serving households
SBS	Structural business statistics
KAUs	Local kind-of-activity units
NUTS	Nomenclature of Territorial Units for Statistics
TP	Transmission programme
SBR	Statistical business register
P.1	Output
P.2	Intermediate consumption

1. Summary: overview of organization, methodology and sources

1.1. Organisation of the statistical process for compiling regional GVA

Regional accounts are a regional specification of the corresponding accounts of the national economy. Regional accounts provide a regional breakdown for major aggregates such as gross value added (GVA) by industry. The accounts are prepared in accordance with the European System of Accounts (ESA 2010).

The economic assessment of Latvia's regions is necessary in order to define and implement a regional development policy that promotes the improvement of the quality of life of the population and balances the development of the entire territory of the country. Regional economic analysis of gross domestic product (GDP) can identify the role of each industry of the country's economy in GDP growth and develop sectoral state support programs that promote the creation of additional GVA. Sectoral state aid programs must be assessed and coordinated from the point of view of regional development, so a regional analysis of GVA is very important in order not to create development imbalances between regions.

Latvia Regional Accounts are compiled in their entirety at Central Statistical Bureau of Latvia (CSB). The CSB is a direct administration institution, which operates under the supervision of the Ministry of Economics. The structure of the Central Statistical Bureau of Latvia is available at: https://www.csp.gov.lv/en/structure.

The CSB is responsible for the organization of statistical work in the Republic of Latvia and for the accuracy of data obtained by compiling information received from respondents. When producing official statistics, the CSB co-operates with the Bank of Latvia, ministries, and other state and local government institutions. In order to fulfil the requirements of the national Statistics Law, the Cabinet of Ministers annually issues the "Regulations on Official Programme of Statistics" that comprises various types of the most significant statistical information, which is collected and compiled by the CSB, ministries and other state institutions, and is available to the information users in a published form or by making requests regarding the collection of information to the responsible institution.

The compilation of regional accounts at CSB is responsibility of the Annual National Accounts Section of the Macroeconomic Department. Directly 1 person in full time equivalent is involved in the compilation of the regional accounts.

1.2. Overview of the methodology of regional GVA compilation

1.2.1. Regional territory

Regional economy of a country is part of the total economy of that country. The total economy is defined in terms of institutional units and sectors. It consists of all institutional units which have a centre of predominant economic interest in the economic territory of a country.

The economic territory of each country of the European Union, as defined in Commission Decision 91/450 / EEC19, also includes the extra-regio, which consists of parts of the economic territory which cannot be added to a specific region (airspace, territorial waters and continental shelf, territorial enclaves, in particular embassies, consulates and military bases, as well as deposits of oil, natural gas, etc. in international waters, off the continental shelf used by companies established in the territory). Consequently, the economic territory of a country can be divided into regional and non-regional territories. The extra-regional territory consists of those parts of the economic territory of the country which cannot be directly linked to one region.

The Nomenclature of Territorial Units for Statistics (NUTS) was developed decades ago to ensure the division of the economic territory of the European Union into territorial units for the production of regional statistics and targeted policy intervention at regional level. The NUTS classification applies only to the economic territories of the Member States and does not fully cover the territory covered by the Treaty establishing the European Community.

On 1 July 2021, an administrative-territorial reform was implemented in Latvia, and instead of the current 119 local governments, 43 new local governments were established - 7 territories of state cities and 36 local governments. Instead of the current six statistical regions, 5 planning regions were created. This is provided for in the Law on Administrative Territories and Settlements, which entered into force on 23 June 2020.

In accordance with the regulations of the Cabinet of Ministers No. 418 "Regulations on the Territories of Planning Regions" there are five planning regions in Latvia:

- Kurzeme planning region;

- Latgale planning region;

- Riga planning region;

- Vidzeme planning region;

- Zemgale planning region.

According to the Law on Administrative Territories and Settlements, there are 10 state cities in Latvia:

- Daugavpils;
- Jelgava;
- Jēkabpils;
- Jūrmala;
- Liepāja;
- Ogre;
- Rēzekne;
- Riga;
- Valmiera;
- Ventspils.

The structure of statistical regions was approved by the amended Cabinet of Ministers Order No. 271 of 28 April 2004 "On the Statistical Regions of the Republic of Latvia and the Administrative Units Included in Them".

In Latvia, both statistical and planning regions were established in accordance with the basic principles set out in Regulation (EC) No 1257/1999 of the European Parliament and of the Council of 26 May 2003. 1059/2003 on the establishment of a common classification of territorial units for statistics (NUTS). In Latvia, NUTS currently coincides with statistical regions.

Table 1 NUTS codes of statistical regions of Latvia

Code	NUTS 1	NUTS 2	NUTS 3
LV0	Latvija		
LV00		Latvija	
LV003			Kurzeme
LV005			Latgale
LV006			Rīga
LV007			Pierīga
LV008			Vidzeme
LV009			Zemgale
LVZ	Extra-Regio NUTS 1		
LVZZ		Extra-Regio NUTS 2	
LVZZZ			Extra-Regio NUTS 3

In 2021, the CSB started the first recalculation of regional accounts, taking into account the new administrative-territorial division – into 5 planning regions, 10 state cities and 36 municipalities. The whole time series will be recalculated no earlier than at the end of 2023.

1.2.2. Statistical unit and residence

In accordance with the ESA 2010 guidelines, two types of units and two corresponding ways of subdividing the economy are used in regional accounts in Latvia: the institutional unit and the local kind-of-activity unit (local KAU).

An institutional unit is an economic entity characterised by decision-making autonomy in the exercise of its principal function.

A local KAU groups all the parts of an institutional unit in its capacity as producer which are located in a single site or in closely located sites, and which contribute to the performance of an activity at the class level (four digits) of the NACE Rev. 2. If there are two or more different kinds of activity (e.g., shop and café) in one address, each of them is regarded as local KAU. Multi-regional enterprises with local KAUs in different regions are allocated to the regions where local KAUs are located.

An institutional unit comprises one or more local KAUs; a local KAU belongs to one and only one institutional unit. Currently, Latvia is using legal units as a proxy for institutional units.

1.2.3. Classifications of industries and sectors

Classification of institutional sectors and classification of industries should be highlighted as the basic schemes used in National and Regional Accounts.

In Latvia all industries are classified according to NACE Rev.2 - Statistical Classification of Economic Activities in the European Community. The CSB compiles and publishes regional statistics by 21 kind of economic activities (see Annex 1).

NACE Rev. 2 classification is used for grouping local KAUs into industries. According to ESA 2010, an industry consists of a group of local KAUs engaged in the same or similar kind-of-activity. At the most detailed level of classification, an industry consists of all the local KAUs falling within a single class (four digits) of NACE Rev. 2 and which are therefore engaged in the same activity as defined in the NACE Rev. 2.

Industries comprise both local KAUs producing market goods and services and local KAUs producing non-market goods and services. An industry by definition consists of a group of local KAUs engaged in the same type of productive activity, irrespective of whether or not the institutional units to which they belong produce market or non-market output.

Industries are classified into three categories:
- industries producing market goods and services (market industries) and goods and services for own final use. Services for own final use are housing services produced by owner-occupiers, and domestic services produced by employing paid staff;

- industries producing non-market goods and services of general government: non-market industries of general government;
- industries producing non-market goods and services of non-profit institutions serving households: non- market industries of non-profit institutions serving households.

Institutional units are economic entities that are capable of owning goods and assets, of incurring liabilities and of engaging in economic activities and transactions with other units in their own right.

For purposes of ESA 2010 system, the institutional units are grouped together into five mutually exclusive domestic institutional sectors:
- non-financial corporations (S.11);
- financial corporations (S.12);
- general government (S.13);
- households (S.14);
- non-profit institutions serving households (S.15).

More information about composition of each institution sector is given in Annex 2.

Although the RA is published in S.1 (Total economy) and Regional GVA at A*21 NACE Rev. 2 level, all main aggregates of the Regional Accounts are estimated at a more detailed level: by each institutional sector and at a 2- and even 3-digit level of NACE activity classification if necessary. For example, at 4-digit level the financial corporations' sector is calculated.

1.2.4. Business register

For statistical needs the CSB has built up and maintains the Statistical Business Register (SBR). SBR covers all legal units without threshold by size, legal form or activity class, namely, enterprises (including seasonal enterprises), legal and natural persons carrying out economic activities and budgetary institutions. It is used to verify all economically active units, allocating them to the corresponding institutional sector. The SBR has harmonized definitions, characteristics, scope and updating procedures. SBR detects and constructs the statistical units and it is used to prepare statistical surveys by providing a harmonized sample frame. The main sources used for the maintenance of the SBR are the Enterprise Register and Taxpayer's Register.

Enterprise Register of the Republic of Latvia, as provided by the law "On the Enterprise Register of the Republic of Latvia", is aimed at registering business entities, establishing legal status thereof and ensuring/verifying reliability of the information and legal facts on the entities to be registered.

Taxpayer's Register is maintained by the State Revenue Service. In accordance with the law "On the State Revenue Service", it carries out functions of tax administration.

1.2.5. Methods used at the regional level

Calculation of Regional GVA in Latvia is carried out on the basis of production approach of GDP. Regional indicators of output (P.1) and intermediate consumption (P.2) are derived from the same data sources as used for calculation at the national level. Gross value added is calculated as difference between P.1 and P2.

In general, regionalisation is possible according to three kinds of methods: bottom-up methods, top-down methods and combined methods. The bottom-up means that all information is collected from the local KAU and summing-up this information until the regional value of aggregate is established. The top-down method means that the aggregate of GVA in these sectors is allocated to a region and to an industry and not to the local units. Pseudo-bottom-up method aggregates are formed as an estimate for the local units from the institutional unit level or activity unit level.

As the existing data accounting system in Latvia does not allow to obtain sufficiently detailed data to directly calculate the GVA for each local KAU, which can be summed up to directly obtain GVA estimates in different regions, pseudo-bottom-up method is used. The calculations assume that all employees in the same industry in all local KAUs are equally productive, i.e. those working in the same industry generate the same amount of GVA regardless of the location of local KAU.

For all institutional sectors, except of non -profit institutions serving households (S15), the allocation of regional gross value added is done on the basis of local KAUs economic activity indicator and number of employees at local KAU. For S.15 gross value added is calculated at institutional level and regionalisation is done on the basis of the legal address of the institutional unit. The sum of regions for each institutional sector is pro-rated to be consistent with national accounts aggregates.

1.3 Main sources used for the compilation of regional GVA

Compilation of Regional GVA is based on existing data sources used for calculation gross value added at national level and supplemented by data sources needed to receive regionalisation.

The list of main data sources used in compilation of regional GVA:

- CSB statistical report form 1-annual "Complex report on activities". This report is also used for Structural business statistics (SBS) needs and for calculation of annual national accounts indicators. Target population of the survey is all economically active enterprises, the number of employees or annual turnover whereof exceeds a set threshold value. The threshold used for the number of employees has been defined based on the reference year. As of 2017, the threshold is 20+ employees. Enterprises with less than 20 employees are not surveyed, however, are included in calculations by using the information of the State Revenue Service. Data on economically active self-employed persons are also included.

- CSB annual statistical report form 1-KAU "Survey of the local KAUs activity" – local kind-of-activities (KAUs) survey collects data from units, which provide 1-annual or 2-annual statistical report forms and have local KAUs; KAU economic activity's codes (NACE Rev. 2) and corresponding number of employees at this unit;
- CSB statistical report form 2-annual "Complex report on activities" – collects data from the budget-financed institutions.
- The State Revenue Service data (annual balance sheet; revenue-expenditure account data) – collects data from societies, foundations and trade unions, religious organizations and political organizations (parties) and their unions.
- The Treasury data (annual statement on state budget execution: expenditure of public authorities by programme/ subprogramme) – collects data related to persons employed outside the territory of Latvia.
- Statistical Enterprise Register data – used for classification purposes (NACE, institution sector).
- Indicators of the System of National Accounts of Latvia – are basis for key macroeconomic indicators.
- Latvijas Banka (annual report) and the Financial and Market Commission data- are used for calculation of S.12 institutional sector.

Data sources used to compile Regional GVA in breakdown by institutional sectors are listed below:

Non-financial corporations (S.11)

Main data source for S.11 is Structural Business Survey (1-annual) and "Survey of the local KAUs activity" (1-KAU).

Financial corporations (S.12)

Primary data sources for the Financial corporation's sector (S.12) are the State Revenue Service data (profit or loss statement), Latvijas Banka balance sheet and profit or loss statement, the data from Financial and Market Commission, "Complex report on activities" survey (1-annual) and 'Complex report on activities' (2-annual). "Survey of the local KAUs activity" (1-KAU) number of employees is used as distribution key for GVA by regions.

General government (S.13)

Main data source for S.13 is CSB statistical report forms: "Complex report on activities" (2-annual), (1-annual (for transferred units from S11 to S13)) combined with 1-KAU "Survey of the local KAUs activity".

Households (S.14)

Primary data sources for S.14 is SBS survey "Complex report on activities" (1-annual) combined with "Survey of the local KAUs activity" (1-KAU).

Non-profit institutions serving households (NPISH) (S.15)

Main data source for S.15 is the State Revenue Service data from 'Revenue and expenditure accounts' and 'Balance sheets indicators on assets and liabilities' submitted by all non-profit institutions. Process of regionalisation is done on basis of the legal address of the institutional unit.

1.4. Compilation table and meta data table

There is no special software developed for compilation of Regional accounts. MS Excel is used for Regional accounts compilation. There is no separate metadata table for regional accounts.

2. Release and publication timetable, revision policy, access for the public

2.1. Timetable for release and publication of provisional and final estimates

2.1.1. Publication calendar

According to ESA 2010 Transmission Programme, the regional accounts at NUTS 2 level are published not later than 12 months after the reference year (for instance, data for 2017 were published in December 2019). Final results at NUTS 2 and at NUTS 3 level are published not later than 24 months after the reference year.

Regional account GVA are published online once a year in December at NACE A*10/21 industry classification. Regional accounts data are always consistent with the latest published national accounts data as all national accounts' revisions are considered in regional accounts compilation.

The release calendar for national and regional accounts are available on the CSB website:

https://stat.gov.lv/lv/kalendars?Dates=%22N%C4%81kamais+gads%22&Themes=%22125%22

Table 2 shows the timetable for the release of regional indicators according to ESA 2010 Transmission Programme and Table 3 shows the timetable for regional indicators which are published only in National data base.

Table 2 Timetable for release of regional indicators by ESA 2010 TP

Table No	Timeliness	Subject of the tables	Period covered
10	T + 12 months	Tables by region, (NUTS 2) (Semi-final results)	2000 onwards
10	T + 24 months	Tables by industry and by region, (NUTS 2; breakdown A*10) (Final results)	2000 onwards

Table No	Timeliness	Subject of the tables	Period covered
12	T + 24 months	Tables by industry and by region, (NUTS 3; breakdown A*10) (Final results)	2000 onwards
13	T + 24 months	Household accounts by region, (NUTS 2) (Final results)	2000 onwards

Table 3 Timetable for release of regional GVA for National needs

Table No	Timeliness	Subject of the tables	Period covered
IKR010	T + 24 months	Gross domestic product by region and city (at current prices)	2000 onwards
IKR020	T + 24 months	Value added and its share by kind of economic activity and region and city (at current prices)	2000 onwards
IKR040	T + 24 months	Dispersion of regional (NUTS 3) GDP per inhabitant (at current prices; per cent)	2000 onwards
IKR050	T + 24 months	Gross domestic product and gross value added by kind of activity by planning region and city at current prices (after administrative-territorial reform in 2021)	2019 onwards
IKR060	T + 24 months	Gross domestic product and gross value added by planning region, city and municipality at current prices (after administrative-territorial reform in 2021)	2019 onwards
IKL060	T + 24 months	National accounts: nominal labour productivity per capita by region based on value added	2000 onwards
IKL070	T + 24 months	National accounts: nominal labour productivity per capita by region based on value added by kind of activity	2007 onwards
IKL080	T + 24 months	National accounts: total employment (persons employed) per capita by region	2000 onwards

2.1.2. Current revisions

Regional account GVA revisions are always harmonized with other National Accounts datasets. Two main factors influence the timetable for compiling the national accounts: ESA 2010 data transmission programme and production process of source statistics.

Minor revisions in time series are carried out and published in each compilation round. Revised data are published together with the first releases at the end of the year.

The most important annual routine revisions are GDP data revisions, government accounts revisions (including Excessive Deficit Procedure (EDP)).

2.2. Policy on benchmark revision

Benchmark revisions are not used while compiling regional gross value added. Major revisions in regional accounts are implemented at the same time as in National Accounts. Revised data are published together with the first releases at the end of the year unless there is a special need to publish them earlier.

2.3. Comparability over time

All currently published data are comparable over time. Comparable data are available from 2000. There is no break in time series because all revisions have been conducted for the whole time series. NUTS 2 and NUTS 3 levels are recalculated as soon as the National Accounts are recalculated. For the compilation of the previous year's price data no special methods which differ from annual national accounts are used as previous year's prices are published only at NUTS 2 level (Latvia). If revision in connection with the latest census result occurs, the indicator "GDP per capita in the region" for all time series is recalculated according to the data on the average annual population of the region. Data relating to years up to and including 2013 are converted by using the fixed exchange rate 1 EUR=0.702804 Latvian lats.

2.4. Transmission to international institutions other than Eurostat

CSB does not make any special transmission to international institutions other than to Eurostat.

2.5. Accessibility for the public

All published regional accounts data tables are available to any interested party in electronic form on CSB website.

The regional accounts figures are presented in five tables:
- Gross domestic product by region and city
  (https://data.stat.gov.lv/pxweb/en/OSP_PUB/START__VEK__IK__IKR/IKR010/);

- Value added and its share by kind of economic activity and region and city (https://data.stat.gov.lv/pxweb/en/OSP_PUB/START__VEK__IK__IKR/IKR020/);
- Dispersion of regional (NUTS 3) GDP per inhabitant (https://data.stat.gov.lv/pxweb/en/OSP_PUB/START__VEK__IK__IKR/IKR040/);
- Gross domestic product and gross value added by kind of activity by planning region and city at current prices (https://data.stat.gov.lv/pxweb/en/OSP_PUB/START__VEK__IK__IKR/IKR050/)
- Gross domestic product and gross value added by planning region, city and municipality at current prices (after administrative-territorial reform in 2021) (https://data.stat.gov.lv/pxweb/lv/OSP_PUB/START__VEK__IK__IKR/IKR060/).

2.6. Policy of metadata

The metadata of the regions' gross domestic product and gross value added are compiled according to the SIMS 2.0 standard, which is a standard for the quality and descriptive metadata of the European Statistical System, which characterizes the processing, availability and quality of statistics from various aspects.

The information mentioned above in English is available on CSB website: https://stat.gov.lv/en/metadata/2403-regional-gross-domestic-product-and-gross-value-added-regions/sims2.

3 Methodology for the calculation of regional GVA

3.1. Principles applicable to all industries

The compilation of Regional GVA under ESA 2010 follows the same concepts and methods like National Accounts. As a result, all modifications that are introduced at the national level have corresponding impact on the regional level.

Regional GVA and GDP in Latvia are calculated according to the guidelines of the "Manual on Regional Accounts Methods", 2013 edition, issued in accordance with ESA 2010, Chapter 13 "Regional Accounts".

In Latvia, the estimation of National GVA is based on direct data sources and conceptual and exhaustiveness adjustments (for example, unobserved economy) as well as balancing across the three sides of GDP (production, income and expenditure). Regional GVA is calculated only according to the production approach and it is not possible to make all the conceptual and exhaustiveness adjustments at regional level. The difference between the National GVA and the Regional GVA is

also due to the fact that the Regional GVA is calculated at the Local-KAU level, but at the National level GVA (NUTS 1 and 2) is estimated at the enterprise level. The Regional values have to be adjusted to the national level. Differences between National and Regional Accounts are allocated to regions broken down by calculated region GVA structure.

At the level of local KAUs, the regional GVA at basic prices (output minus intermediate consumption) is calculated by institutional sectors: S.11+S.14; S.12; S.13; S.14.

At the national level the main data source used for estimates of output and intermediate consumption of Non-financial corporations (S.11) and Households (S.14) is SBS survey "Complex report on activities" (1-annual). The basis for Regional GVA calculation for S.11 and S.14 is shown in Table 4. In the regions data are divided using number of local KAUs employees.

Table 3 Regionalisation process of GVA for institutional sectors S.11 and S.14

Regional GVA by the production approach	Process of regionalisation
equal output	Regional information about sales of products and services. The basis for **output** *equal*: net turnover *minus* excise tax from production *plus* other income from economic activity *plus* changes in unfinished goods, unfinished orders and finished goods
minus intermediate consumption	Regional information on the intermediate consumption. The basis for **intermediate consumption** *equals*: raw materials, base materials, consumables and other goods ensuring enterprise activities *plus* goods and services purchased for sale *plus* payments for services.

At the national level General Government institutional sector (S.13) gross value added is calculated as the sum of costs (compensation of employees, consumption of fixed capital and other taxes on production less other subsidies on production). In the Regional estimations value of compensation of employees of institutional units are used as indicator to calculate regional GVA and is broken down by region based on the number of employees. Other taxes and subsidies on production and consumption of fixed capital are allocated to regions proportionally to GVA.

The estimation of regional GVA in Financial corporation (S.12) is done at institutional unit level. Difference between national GVA and regional GVA are allocated to regions proportionally to GVA. More details about indicators used for calculation of regional GVA by each of S.12 NACE activity and subsector are described in the section 3.2.2.

The output of S.15 as non-market producer at national level is valued at the total costs of production. The calculation of Regional GVA at the level of organizations and associations is based on the sum of such indicators: the value of compensation of employees, depreciation (for accounting needs) and other taxes on production minus other subsidies on production. The calculated GVA by institutional units is broken down by region according to the legal address of the organization. Difference between national GVA and regional GVA are allocated to regions proportionally to GVA.

3.1.1. Available sources and information
Regional accounts are compiled using existing data sources that are used for national accounts. Administrative and fiscal data are obtained regularly on annual or even more frequent basis and cover all relevant units. The main direct data sources for all industries are SBR surveys: 1-KAU "Survey of the local KAUs activity", 1-annual "Complex survey of activities" and 2-annual "Complex survey of activities" and the State Revenue Service data.

3.1.2. Use of benchmarks and extrapolations
Benchmarks and extrapolations are not used while compiling regional GVA. All data sources are available in time for the timely release of national GDP data.

3.1.3. Treatment of multi-regional enterprises, sources and variables used
The same data sources are used for treatment of multi-regional enterprises that are used for other enterprises to compile regional accounts (1-KAU, 1-annual, 2-annual, SRS). Each Local-KAU is assigned a local activity industry code.

3.1.4 Treatment of ancillary activities
There is no separate treatment of ancillary activities. Ancillary activities including headquarters are allocated to the same activity as the principal activity of the institutional unit they belong to. Ancillary activities are allocated to the region where the ancillary activities are situated. The identification of ancillary units is responsibility of Business Register Section of the CSB. If there is an indicator 'Local-KAU performs only ancillary functions' in the SBR 1-KAU report, this KAU is allocated to the enterprise main industry as an entity which only carries out ancillary activities for the enterprise which it belongs to, and it cannot be considered as a separate unit.

3.1.5 Treatment of the Extra-regio

The extra-regio territory is made up of parts of the economic territory of a country, which cannot be attached to a single region.

Latvia's extra-regio territory is small, and it is part of the General government sector. In practice, Latvia's extra-regio consists of military and defence representatives and diplomatic missions abroad. Data for Extra-regio is obtained from the Treasury's report "Expenditure of the State Budget Institutions Basic Budget by Functional and Economic Categories".

3.1.6 Approach to exhaustiveness

Non-exhaustiveness is dealt at national level. No specific calculations of exhaustiveness adjustments at regional level are made. Therefore, the national level exhaustiveness adjustments are allocated to regions proportionally to the non-adjusted regional GVA figures.

3.1.7 Calculation of FISIM by user industries

FISIM (financial intermediation services indirectly measured) refers to services produced by financial corporations for which no direct fee is charged. FISIM are calculated and attributed to industries at national level. Therefore, the national level FISIM are allocated proportionally to the region GVA figures.

3.1.8 Adjustments for commuting

No adjustments for commuting are needed because regionalizing is based on the legal address of the place of production or organisation and GVA is broken down by region based on the number of employees, the place of work, and residence is not taken into account.

3.1.9 Transition from GVA to GDP

In order to obtain regional GDP at market prices, taxes on products are added to and subsidies on products are deducted from gross value added at basic prices. Taxes and subsidies on products are allocated to regions proportionally to regional gross value added. There is no direct data available for regional allocation of taxes and subsidies on products to statistical regions.

3.1.10 Method used for the compilation of regional GDP per capita

According to the ESA 2010, the total population on a given date includes all nationals or foreigners who are permanently residents in the economic territory of the country, even if they are temporarily absent. Annual averages from population estimates provide a suitable basis for calculating national accounts variables or will be the common denominator in comparisons. The total population for national accounts is determined according to the concept of residence. A person who resides or intends to reside in the economic territory of the country for one year or more is considered to be

permanently residing there. A person is considered to be temporarily absent if he or she resides in the country but resides or intends to stay in the rest of the world for less than one year.

To obtain regional GDP per capita, the population of each region is calculated according to national accounts data on the total population of Latvia.

The data source for determining the population in the national accounts is demographic statistics.

Demographic statistics are obtained by compiling and analysing only recorded changes in population (both natural increase and net migration balance). The number of inhabitants by months, taking into account the assessment of unregistered migration, as well as birth / death data, is recalculated according to the month of the event in the 2nd quarter of the following year.

The population variable in the national accounts is the average at the beginning of the quarter, for example, for the first quarter it would be the average of the population in the first and second quarters.

The annual population is the average of the quarters.

Demographic statistics on the average population of Latvia's statistical regions are used by the structure to determine the national account of Latvia's population in the regions. It is then possible to calculate GDP per capita in the regions.

Data on the total population in Latvia are available in Eurostat data table No T0110 - Population and employment prepared under the ESA 2010 transmission program.

3.2 Specific methods and sources for compiling regional GVA

For almost all industries the compilation of regional GVA is based on universal calculation methods, which is described in section 3.1. Specific methods and data sources are applied on certain industries; this is described in this section. These industries are: Agriculture, forestry and fishing (A), Financial and insurance activities (K), Real estate activities (L), Public administration and defence; compulsory social security (O) and Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T).

3.2.1 Agriculture, forestry and fishing (A)

For this section it is necessary to make correction for activity: Crop and animal production, hunting and related service (NACE REV2; 01) as the main data source (SBS survey) only partly covers this activity. To cover missing part, additional information is received from CSB Business register about net turnover of farms (NACE Rev 2; 011-015). This data is broken down by region and net turnover

structure is calculated. The difference between the national level GVA and obtained Regional GVA is multiplied by the obtained farm net turnover structure, and then attributed to the region concerned.

3.2.2 Financial and insurance activities (K)

The estimation of regional GVA in Financial corporation (S.12) is done at institutional unit level. The indicators used for calculation of regional GVA are chosen to receive regional GVA as close as possible to national GVA level. Difference between national GVA and regional GVA are allocated to regions proportionally to GVA. The indicators used for calculation of regional GVA in breakdown by subsectors and NACE are given below:

- NACE 64.19 subsector (S.122) Other monetary intermediation (excluding central bank): for output (P.1) calculation interest income plus commission fees income, intermediate consumption (P.2) -interest expenses plus commission fees expenses plus other expenses and plus administrative expenses are used as indicators.

- Subsector (S.127) NACE 64.20 Financial holding companies, NACE 64.30 Trusts, funds and similar financial entities and NACE 64.99 Other financial service activities, except insurance and pension funding: - as this subsector is estimated as sum of costs at national level for calculation of regional GVA compensation of employees plus depreciation (for accounting needs) is used as indicators.

- NACE 65 (S.128) and (S.129) Insurance, reinsurance and pension funding, except compulsory social security for calculating Regional GVA- the breakdown by region is based on output indicators. For life and non-life insurance activities (NACE 65.11 and NACE 65.12) gross premiums at enterprise level are used as indicators, for NACE 65.30 - operating income plus interest income are used as indicators.

After the obtained institutional unit level data for calculation of regional GVA the results are broken down by regions based on the number of Local KAU employees. Difference between national GVA and regional GVA are allocated to regions proportionally to GVA.

3.2.3 Real estate activities (L)

The real estate activities (NACE Rev. 2; 68) can be split into two parts:

1) services of the owner -occupied dwellings (NACE Rev. 2; 68a),
2) other real estate activities (NACE Rev. 2; 68).

The other real estate activities are calculated using universal formula which is applied to other S.11 and S.14 institutional sectors' activities. Services of owner-occupied dwellings at national level are calculated using the User cost method as the actual rent sector in Latvia is very small. The services of owner-occupied dwellings are broken down by region considering the average apartment management price (rent per square metre) and the area (in square metres) of owner-occupied

dwellings corresponding to each region. The square metre data is obtained from Real Estate State Cadastre Information System (RESC), but information on average management costs – from the CSB survey "Survey on management of housing stock" (5-housing stock).

3.2.4 Public administration and defence; compulsory social security (O)

In the calculation of regional accounts in this industry, the output of Latvian residents outside Latvia is separated (Extra-regio). The main data source for sector O is "Complex survey of activities" (2-annual) and additional information for the calculation of Extra-regio is obtained from the Treasury's report "Expenditure of the State Budget Institutions Basic Budget by Functional and Economic Categories".

There are two government programs for calculating Extra-regio in Latvia:

- diplomatic missions abroad;
- military and defence representatives abroad.

3.2.5 Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T)

There is only one activity in NACE T specified in the National accounts of Latvia – "Activities of households as employers of domestic personnel" (NACE Rev. 2; 97). Information about NACE 97 is not statistically surveyed from production approach. Private households with employed persons are not typical in Latvia. To cover this activity the estimates only for services of nannies are made by exhaustiveness adjustment using the indirect calculation method. It is assumed that the number of nannies depends on the number of children aged 1-4. The National GVA for NACE 97 is divided into regions based on the structure of children in 1-4 age group. Data for obtaining the structure are taken from the CSB database table " Population in regions and cities by age and gender at the beginning of the year" (available at CSB Database:

https://data.stat.gov.lv/pxweb/en/OSP_PUB/START__POP__IR__IRD/IRD040/).

3.3. Methods and sources for compiling regional GVA at current prices for the most recent year (preliminary data)

GVA at current prices for the most recent year (t+12) corresponds to NUTS 2 level, which in Latvia corresponds to national level (Latvia). Therefore, total GVA estimate of national accounts (preliminary data) is calculated according to the basic calculation principles of quarterly national accounts. The data sources and methods for extra-regio for the most recent year (t+12) are the same as described in sections 3.1.5 and 3.2.4 (t+24).

3.4. Regional GVA at constant prices and regional growth rates

As Latvia publishes regional GVA at constant prices only at NUTS 2 level which corresponds to national level data (Latvia), there are no differences between calculation methods used for value added data at constant prices for annual national accounts and data published in Table 10 (Tables by industry and by region (NUTS 2); ESA 2010 Transmission programme). For the same reason, the growth rate of Regional GVA also is the same as for national level.

4. Quality assessment and improvement

4.1. Self-assessment of the methodology for compilation of regional GVA

The methodology for compiling regional GVA is considered satisfactory. The compilation of Regional GVA under ESA 2010 follows the same concepts and methods like National Accounts. The methods used for the compilation of regional GVA is in accordance with the guidelines of the "Manual on Regional Accounts Methods", 2013 edition, issued in accordance with ESA 2010, Chapter 13 "Regional Accounts". The data is collected using the pseudo-bottom-up method, which covers 92% of the total published national accounts GVA.

4.2. Plans for further improvement

Over the next two years, the entire time series of macroeconomic indicators of regions will be recalculated according to the division of administrative territories created as a result of Latvia's regional reform - by planning regions, cities and counties, classifications of Latvian administrative territories and territorial units.

ANNEXES

ANNEX 1. Statistical Classification of Economic Activities in the European Community Rev. 2

- Agriculture, forestry and fishing (Section A)
- Mining and quarrying (Section B)
- Manufacturing (Section C)
- Electricity, gas, steam and air conditioning supply (Section D)
- Water supply; sewerage, waste management and remediation activities (Section E)
- Construction (Section F)
- Wholesale and retail trade; repair of motor vehicles and motorcycles (Section G)
- Transportation and storage (Section H)
- Accommodation and food service activities (Section I)
- Information and communication (Section J)
- Financial and insurance activities (Section K)
- Real estate activities (Section L)
- Professional, scientific and technical activities (Section M)
- Administrative and support service activities (Section N)
- Public administration and defence; compulsory social security (Section O)
- Education (Section P)
- Human health and social work activities (Section Q)
- Arts, entertainment and recreation (Section R)
- Other service activities (Section S)
- Activities of households as employers; undifferentiated goods- and services- producing activities of households for own use (Section T)
- Activities of extraterritorial organizations and bodies (Section U)

ANNEX 2. Classification of sectors

- **Non-financial corporations (S.11)**. The non-financial corporations sector (S.11) consists of institutional units which are independent legal entities and market producers, and whose principal activity is the production of goods and non-financial services. The non-financial corporations sector also includes non-financial quasi-corporations.

- **Financial corporations (S.12)**. The financial corporations sector (S.12) consists of institutional units which are independent legal entities and market producers, and whose principal activity is the production of financial services. Such institutional units comprise all corporations and quasi-corporations which are principally engaged in:
  - financial intermediation (financial intermediaries); and/or
  - auxiliary financial activities (financial auxiliaries).

- **General government (S.13)**. The general government sector (S.13) consists of institutional units which 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.

- **Households (S.14)**. The households sector (S.14) consists of individuals or groups of individuals as consumers and as entrepreneurs producing market goods and non-financial and financial services (market producers) provided that the production of goods and services is not by separate entities treated as quasi-corporations. It also includes individuals or groups of individuals as producers of goods and non-financial services for exclusively own final use.

- **Non-profit institutions serving households (S.15)**. The non-profit institutions serving households (NPISHs) sector (S.15) consists of non-profit institutions which are separate legal entities, which serve households, and which 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.

ANNEX 3. Regional GVA, compilation table (overview)

GVA at current prices 2018, thousand EUR

	Industries A21 (NACE rev. 2)	Bottom-up methods				Top-down methods	Adjustment to national accounts	Total	Share of GVA
		Survey data	Administrative data	Specific methods	Sub-total				
		1	2	3	4=1+2+3	5	6	7=4+6	8
A	Agriculture, Forestry and Fishing	779 128	71	180 780	959 979	-	87 725	1 047 703	4%
B	Mining and quarrying	133 110	0	-	133 110	-	-2 048	131 062	1%
C	Manufacturing	2 775 828	0	-	2 775 828	-	301 956	3 077 784	12%
D	Electricity, gas, steam and air conditioning supply	1 352 964	0	-	1 352 964	-	-946 839	406 125	2%
E	Water supply, sewerage, waste management and remediation activities	213 421	0	-	213 421	-	2 959	216 380	1%
F	Construction	1 340 084	0	-	1 340 084	-	268 503	1 608 587	6%
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	3 279 090	9	-	3 279 098	-	345 711	3 624 809	14%
H	Transportation and storage	3 455 918	472	-	3 456 390	-	-1 216 301	2 240 088	9%
I	Accommodation and food service activities	372 208	2	-	372 210	-	136 085	508 295	2%
J	Information and communication	1 293 021	471	-	1 293 492	-	105 328	1 398 820	6%
K	Financial and insurance activities	31 857	862 558	12 123	906 537	-	0	906 537	4%
L	Real estate activities	1 410 055	3 764	1 928 895	3 342 715	-	-204 559	3 138 156	12%
M	Professional, scientific and technical activities	985 458	13 479	-	998 937	-	163 581	1 162 518	5%
N	Administrative and support service activities	1 077 032	9	-	1 077 041	-	-276 869	800 172	3%
O	Public administration and defence; compulsory social security	932 538	9 200	34 373	976 111	-	990 898	1 967 009	8%
P	Education	856 204	13 778	-	869 982	-	349 889	1 219 871	5%
Q	Human health and social work activities	1 352 246	15 425	-	1 367 672	-	-367 598	1 000 073	4%
R	Arts, entertainment and recreation	460 771	12 338	-	473 109	-	64 181	537 290	2%
S	Other service activities	82 258	58 865	-	141 123	-	115 479	256 603	1%
T	Activities of households as employers	0	0	48 474	48 474	-	0	48 474	0%
U	Activities of extraterritorial organisations and bodies	-	-	-	-	-	-	-	-

ANNEX 4. Metadata of sources and variables used for the regionalisation of GVA by industry

Contact organisation	Central Statistical Bureau of Latvia, Annual National Accounts Section
Data description	Regional GVA is a measure of economic activity of producer unit residents in a region. In monetary terms GVA is expressed as a difference in value between the output of goods and services and intermediate consumption at current prices of the respective year.
Classification system	Regional classification: NUTS Level 2 and Level 3: https://m.likumi.lv/ta/id/328252-par-latvijas-republikas-statistiskajiem-regioniem-un-tajos-ietilpstosajam-administrativajam-vienibam Classification of Administrative Territories and Territorial Units, version 2021: https://www.csp.gov.lv/en/classifier/classification-administrative-territories-and-territorial-units-version-2021 Statistical Classification of Economic Activities in the European Community, Revision 2: https://www.csp.gov.lv/en/klasifikacija/nace
Coverage - sector	Regional Accounts are not available for all institutional sectors
Statistical unit	In accordance with the ESA 2010 guidelines, two types of units and two corresponding ways of subdividing the economy are used in regional accounts in Latvia: • the institutional unit • the local kind-of-activity unit (local KAU).
Coverage - Time	Regional accounts according to ESA2010 is available starting with the reference year 2000.
Unit of measure	Values are shown in Euro
Reference Period	The periods referred to are calendar years. For NACE breakdowns and NUTS 3 the reference period is 2000-2019
Release calendar	Regional GVA dataset is released on December of each year. Final results at NUTS 2 and at NUTS 3 level are published not later than 24 months after the reference year. Release calendar access: https://stat.gov.lv/en/calendar?activeTab=pending
Frequency of dissemination	Annual. Regional accounts are released based on data transmissions at the end of December of each year.
Accessibility for the public	All regional accounts data tables published are available in electronic form on CSB website: https://data.stat.gov.lv/pxweb/en/OSP_PUB/START__VEK__IK__IKR/?tablelist=true