



QUALITY REPORT FOR STATISTICAL SURVEY

First Quarterly Gross Domestic Product Estimate for Fourth Quarter of 2024

Organisational unit: National Accounts Aggregates Department

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March 2025

0. Basic information

• Purpose, goal, and subject of the survey

The calculation of the quarterly gross domestic product at current prices, constant prices of the previous year and constant prices of the reference year (2021 = 100). The calculation is performed according to the methodology of the European System of National and Regional Accounts (ESA 2010), and it is available according to three approaches:

- the production approach at current and constant prices: output, intermediate consumption, value added, aggregates broken down by activities
- the expenditure approach at current and constant prices: final consumption expenditure of households, government and non-profit institutions serving households (NPISH), gross fixed capital formation, changes in inventories, export and import of goods and services
- the income approach at current prices: compensation of employees, taxes and subsidies on production and import, gross operating surplus and mixed income.
- Reference period

IV quarter

• Legal acts and other agreements

Regulation (EU) 2023/734 of the European Parliament and of the Council of 15 March 2023 amending Regulation (EU) No 549/2013 on the European system of national and regional accounts in the European Union and repealing 11 legal acts in the field of national accounts (OJ L 97, 5.4.2023)

Regulation (EU) 2019/516 of the European Parliament and of the Council of 19 March 2019 on the harmonisation of gross national income at market prices and repealing Council Directive 89/130/EEC, Euratom and Council Regulation (EC, Euratom) No 1287/2003 (GNI Regulation) (OJ L 91, 29.3.2019)

Commission Delegated Regulation (EU) 2015/1342 of 22 April 2015 amending the methodology for the classification of products by activity given in Annex A to Regulation (EU) No 549/2013 of the European Parliament and of the Council (OJ L 207, 4.8.2015)

Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (OJ L 174, 26.6.2013) Commission Decision of 30 November 1998 clarifying Annex a to Council Regulation (EC) No 2223/96 on the European system of national and regional accounts in the Community as concerns the principles for measuring prices and volumes (notified under document number C(1998) 3685) (OJ L 340, 16.12.1998)

Commission Decision of 17 December 2002 further clarifying Annex A to Council Regulation (EC) No 2223/96 as concerns the principles for measuring prices and volumes in national accounts (notified under document number C(2002) 5054) (OJ L 347, 20.12.2002)

Commission Implementing Decision of 26 June 2014 on granting derogations to Member States with respect to the transmission of statistics pursuant to Regulation (EU) No 549/2013 of the European Parliament and of the Council concerning the European system of national and regional accounts in the European Union (notified under document C(2014) 4164) (OJ L 195, 2.7.2014)

Commission Regulation (EU) No 715/2010 of 10 August 2010 amending Council Regulation (EC) No 2223/96 as regards adaptations following the revision of the statistical classification of economic activities NACE Revision 2 and the statistical classification of products by activity (CPA) in national accounts (OJ L 210, 11.8.2010)

Commission Delegated Regulation (EU) 2023/137 of 10 October 2022 amending Regulation (EC) No 1893/2006 of the European Parliament and of the Council establishing the statistical classification of economic activities NACE Revision 2 C/2022/7104 (OJ L 19, 20.1.2023)

• Classification system

National Classification of Activities 2007, Classification of Individual Consumption by Purpose (COICOP 2018), Classification of the Functions of Government (COFOG)

• Statistical concepts and definitions

The Macroeconomics Statistics Directorate follows ESA 2010 methodological guidelines as well as working papers and manuals published by Eurostat and other statistical organisations. Certain deviations from the ESA 2010 methodology are still present. For the purpose of consistent application of methodologies, the Croatian Bureau of Statistics conducts data revisions. In recent years, special attention is also given to the problem of consistent recording of data through different national accounts domains. The main data sources for quarterly GDP compilation are data from regular surveys of the Croatian Bureau of Statistics, the Croatian National Bank, the Ministry of Finance, the Croatian Financial Services Supervisory Agency, the Croatian Regulatory Authority for Network Industries (HAKOM) and the Croatian Pension Insurance Institute. Tax Administration data on taxable and non-taxable values of goods and services are also used in the process of evaluation of added value, along with data from various surveys.

The calculation has been done on the basis of available statistical data according to the National Classification of Activities 2007, at the division level at current and constant prices on the production side, while on the expenditure side it has been done for the final consumption expenditures of households, government expenditures, the final consumption expenditures of non-profit institutions serving households, investments as well as the export and import of goods and services.

Statistical unit

Following the ESA 2010 guidelines, in national accounts two types of units and two corresponding ways of subdividing the economy are used: (a) institutional unit; (b) local kind-of-activity unit (local KAU). The first type is used for describing income, expenditure and financial flows as well as balance sheets. The second type of units is used for the description of production processes, for input-output analysis and for regional analysis.

An institutional unit is an economic entity characterised by decision-making autonomy in the exercise of its principal function. A resident unit is regarded as constituting an institutional unit in the economic territory where it has its centre of predominant economic interest if it has decision-making autonomy and either keeps a complete set of accounts or is able to compile a complete set of accounts.

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 NKD-a 2007.

An institutional unit comprises one or more local KAUs, while a local KAU belongs to one and only one institutional unit.

The Croatian annual GDP has been compiled on the institutional unit level, using mainly administrative data sources. The regional accounts are based on the local KAU. Sector accounts are compiled at the institutional unit level.

Statistical population

The national accounts population of a country consists of all resident statistical units (institutional units or local KAUs). A unit is a resident unit of a country where it has a centre of predominant economic interest on the economic territory of that country, that is, when it engages for an extended period (one year or more) in economic activities on this territory.

National accounts are exhaustive. This means that all resident statistical units are covered.

1. Relevance

1.1. Data users

Primary users of the national accounts data in Croatia are Ministry of Finance, Ministry of Economy, financial institutions, Croatian National Bank, Croatian Chamber of Economy, scientific and academic institutions which conduct macroeconomic research as primary activity, and newspapers specialised in the field of macroeconomics. International organisation such as the IMF and the OECD, as well as scientific and academic institutions that conduct macroeconomic research also use the data of the Croatian Bureau of Statistics.

Internal users from the Croatian Bureau of Statistics: other departments from national accounts, social statistics, business statistics, etc.

1.1.1. User needs

National accounts data provide key information for economic policy monitoring and decision making, for forecasting, for administrative purposes, for informing the general public about economic developments (directly or indirectly via news agencies), and as input for economic research.

1.1.2. User satisfaction

Views and opinions of users of national accounts statistics can be collected and analysed as one of the tools to 'measure' the relevance of national accounts data. Users can ask questions and provide suggestions via e-mail addresses <u>stat.info@dzs.hr</u> (for information and user requests) and <u>press@dzs.hr</u> (for journalist requests).

1.2. Completeness

In most countries, national accounts cover the domains of the main aggregates of national accounts, government accounts, sector accounts, regional accounts, as well as supply and use tables. However, the content of the data on these domains as well as the various breakdowns (by region, sector, industry, product, etc.) may deviate per country, depending on national needs and available sources. The ESA 2010 Transmission Programme, consisting of 22 tables across all national accounts domains defines the minimum national accounts data set that must be available in all EU Member States.

1.2.1. Data completeness rate

The data completeness rate is 100%.

2. Accuracy and reliability

2.1. Sampling error

Not applicable.

2.1.1. Sampling error indicators The indicator is not applicable.

2.2. Non-sampling error

Not applicable.

2.2.1. Coverage error Not applicable.

2.2.2. Over-coverage rate

The indicator is not applicable.

2.2.3. Measurement errors

Controls are conducted on all relevant data sources and calculations.

2.2.4. Non-response errors Not applicable.

2.2.5. Unit non-response rate The indicator is not applicable.

2.2.6. Item non-response rate The indicator is not applicable.

2.2.7. Processing errors Not applicable.

2.2.8. Imputation rate The indicator is not applicable.

2.2.9. Model assumption error Not applicable.

2.3. Data revision

2.3.1. Data revision – policy

National accounts data are subject to continuous revisions as new input data become available. They are called routine revisions and entail regular revisions of country data and of the European aggregates.

More rarely, exceptional revisions (called benchmark revisions) will result from major changes in data sources, classifications or methodology. For example, when changing from ESA 95 to ESA 2010, a benchmark revision occurred at the country level and at the euro area / EU data level.

Two working groups developed proposals for a more harmonised approach to benchmark and routine revisions. The one under the auspices of Directors of Macroeconomic Statistics (DMES) dealt with the benchmark revision policy, while the other one under the auspices of the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB) dealt with routine revisions.

Regarding the revision policy for national accounts, the Croatian Bureau of Statistics published in April 2020 a national revision policy for the domain of national accounts titled "Revision Policy for the Domain of National Accounts and Government Finance Statistics / Excessive Deficit Procedure Statistics". The Croatian Bureau of Statistics and Eurostat reached an agreement during the preparation of the revision policy draft. The document in available on the website of the Croatian Bureau of Statistics.

The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics, on the link – <u>General Revision Policy of the CBS</u>

2.3.2. Data revision – practice

While revisions should be seen as a process of progressively improving the quality of national accounts as e.g. better sources and/or methods become available, the availability of metadata on revisions is a key element for understanding national accounts data and revisions between successive releases. Therefore, information on the main reasons for revisions and their nature (new source data available, new methods, etc.) as well as possibly quantitative and qualitative assessment on the average size of revisions and their direction based on historical data is required.

In 2024, the Croatian Bureau of Statistics conducted a benchmark data revision on numerous methodological changes. The most important changes refer to subsidies on products and subsidies on

production; recording of daily allowances for business trips; calculation of the production value for tradesmen subject to income tax; calculation of the value of production of own-account software; calculation of consumption of fixed capital for sector S.13 General government; calculation of expenditure values on research and development; calculation of imputed dwelling rent according to the data of the Census of Population, Households and Dwellings in 2021; calculation of financial intermediation services indirectly measured (FISIM); gross fixed capital formation and revision of households in 2021. The revision was published in the First Release NR-2023-2-2 Annual Gross Domestic Product, 1995 – 2022, Revised Data. After every revision of annual data, a revision of quarterly GDP, regional GDP, sector accounts and input-output tables was conducted.

2.3.3. Data revision – average size

The indicator is not computed.

2.4. Seasonal adjustment

The seasonal adjustment process (identification and assessment of seasonal and calendar effects) uses the JDemetra+ software package, version 2.4.4., which has been the officially recommended software package for seasonal adjustment for all members of the European Statistical System since February 2015. Seasonal and working-day adjustment has been done by using the X13 ARIMA method.

Due to the characteristics of the implemented adjustment method, the adding of new quarterly or monthly data to the series may cause changes in the seasonally and working-day adjusted indices for previous periods.

3. Timeliness and punctuality

3.1. Timeliness

National accounts data should become available to users as timely as possible, taking into account the frequency of the data (annual or quarterly), the character of the data (information on the structure of an economy or on conjuncture developments) and an adequate balance between accuracy and timeliness. The ESA 2010 Transmission Programme defines the required timeliness for all national accounts tables. Quarterly tables should become available in T + 60 days.

3.1.1. Timeliness – first results

Timeliness of first results is T + 60.

3.1.2. Timeliness - final results

The indicator is not applicable.

3.2. Punctuality

Good practice requires that the dates on which national accounts data become available are announced in advance and respected. National accounts data in the framework of the ESA 2010 Transmission Programme should be punctually delivered to Eurostat in accordance with the predefined delivery schedule (or before).

3.2.1. Punctuality – delivery and publication

Punctuality is 4.

4. Accessibility and clarity

The Croatian Bureau of Statistics always publishes First Releases after the new calculation is done. First Releases are available on the website. In addition to First Releases, national accounts data are disseminated in Statistical Information, Croatia in Figures and Statistics in Line. The regularly updated data versions can be found in the MS Excel form using the link <u>NR-2024-1-1-4 First Quarterly Gross</u> <u>Domestic Product Estimate, Fourth Quarter of 2024 | Croatian Bureau of Statistics</u>

4.1. News releases

First Release NR-2024-1-1/4 First Quarterly Gross Domestic Product Estimate, Fourth Quarter of 2024 from 27 February 2025.

4.2. Online database

Statistics in Line 12.1. Gross Domestic Product

4.3. Microdata access

Conditions under which certain users can have access to microdata are regulated by <u>the Ordinance on</u> <u>Conditions and Terms of Access and Use of Confidential Statistical Data of the Croatian Bureau of</u> <u>Statistics for Scientific Purposes</u> (NN, No. 5/23).

4.4. Documentation on methodology

The general methodological framework for the compilation of national accounts in the EU is ESA 2010. In addition, several handbooks have been developed to help statisticians produce national accounts data. Some of the most important methodological manuals are the Handbook on quarterly national accounts, the Manual on regional accounts methods and the Manual on Government Deficit and Debt. Also, guidance manuals on specific topics are available, e.g. the Compilation guide on land estimation, the Compilation guide on inventories and the Manual on measuring Research and Development in ESA 2010. The aforementioned manuals specifically apply to EU national accounts statistics. However, international equivalents are also available: the SNA 2008, the Quarterly National Accounts Manual, the Handbook on Input-Output Table Compilation and Analysis, and the Government Finance Statistics Manual.

5. Coherence and comparability

5.1. Asymmetry for mirror flows statistics

Mirror statistics between countries is the subject of Eurostat examinations. Over time, this issue has become increasingly important.

5.2. Comparability over time

As the data for all reference periods are compiled according to the requirements of the ESA 2010, national accounts data have become fully comparable over time. Also, in the case of fundamental changes to methods or classifications, revisions of long-term series are performed, usually going far back into the past.

5.2.1. Length of comparable time series

Domain	Domain value	Comment	Q1	Q2	Q3	Q4
			116	116	116	116

5.2.2. Reasons for break in time series

The reasons for a break in time series can be various, e.g. the lack of a previously existing indicator or a change in methodology for one of the calculation components.

5.3. Coherence – short-term and structural data

The indicator is not applicable.

5.4. Coherence – national accounts

The indicator is not computed.

5.5. Coherence – administrative sources

The indicator is not computed.

6. Cost and burden

6.1. Cost

Not available.

6.2. Burden

Not applicable.