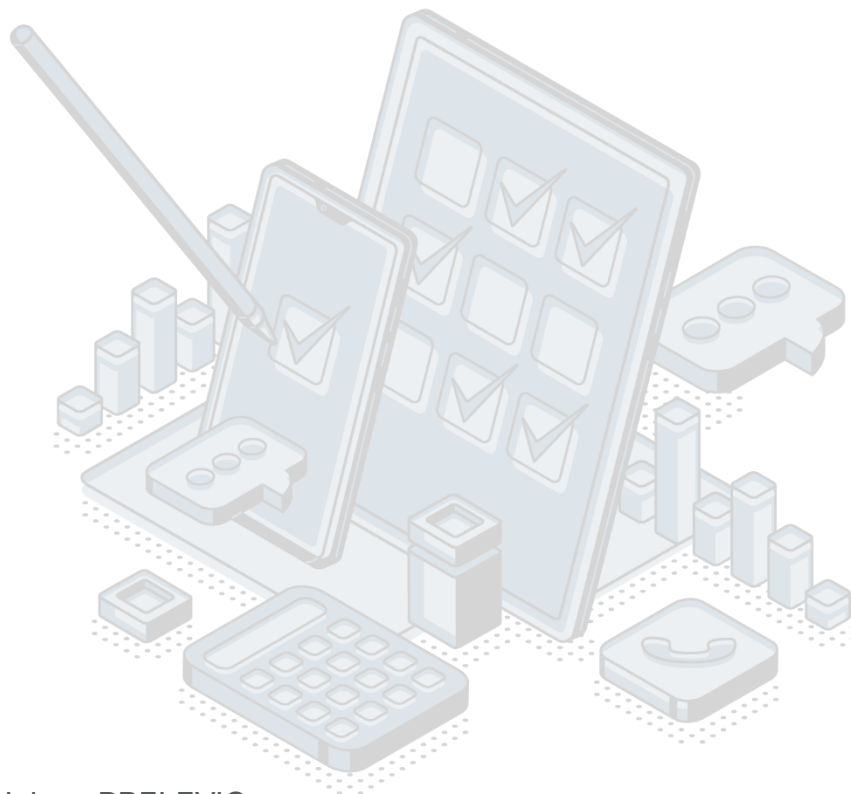


QUALITY REPORT

Turnover in wholesale trade 2023



Odgovorno lice: Milena JOLIC and Jelena PRELEVIC

Naziv odsjeka: Department for short-term indicators

Content:

1. Introduction – Basic information about the survey	3
1.1 Purpose, goal and subject of the survey	3
1.2 Legal basics.....	3
1.3 Statistical units	3
1.4 Coverage and scope of survey	3
1.4.1 Sectors.....	3
1.4.2 Statistical population.....	3
1.5 Referent geographical area.....	4
1.6 Concepts and definitions	4
1.7 Classifications	4
1.8 Frequency of data collection.....	4
1.9 Frequency of data dissemination.....	4
1.10 Methodology	4
1.11 Base period	4
1.12 Unit of measure	4
1.13 Source of data	5
1.14 Method of data collection.....	5
2. Relevance – Data users	5
2.1 User needs	5
2.2 User satisfaction	5
3. Accuracy and reliability	5
3.1 Accuracy – Overall remark.....	5
3.2 Sampling error	6
<i>Indicators of sampling error.....</i>	6
3.3 Non-sampling error	6
3.3.1 Coverage error	6
Indicator of coverage error	6
3.3.2 Error of measurement.....	6
3.3.3 Non response error.....	7
Item non-response	7
3.3.4 Data processing error.....	7
Imputation rate.....	7
3.4 Seasonal adjustments.....	7
3.5 Data revision.....	7
3.5.1 Data revision policy	7
3.5.2 Data revision practice	7
3.5.3 Data revision - average size	8
4. Timeliness and punctuality	8
4.1 Timeliness.....	8
4.2 Punctuality	8
5. Availability and clarity.....	8
5.1 Statistical Release Calendar.....	8
5.2 Access the data Release Calendar	9
5.3 Releases.....	9
5.4 Publication	9
5.5 On-line databases.....	9
5.6 Access to micro data.....	9
5.7 Metadata occupancy.....	9
6. Comparability	9
6.1 Comparability - geographical.....	9
Not relevant.....	9
6.2 Time comparability.....	9

1. Introduction – Basic information about the survey

1.1 Purpose, goal and subject of the survey

The aim of survey is to evaluate the total turnover of the wholesale trade by commodity groups. The data are used to monitor volume and dynamics of turnover trends; to analyse the effects of trade policy measures; to analyse scope and structure of turnover in wholesale trade by commodity group.

1.2 Legal basics

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12, 47/19) defines provisions for collection, processing, and dissemination of data. The Law provides to the Statistical Office legal powers to collect and access the data necessary for the implementation of Programme and Annual Plan. The Law gives a priority to the use of administrative data and right of access to individual data that are a result of survey of other official statistical producers. As an annex to legal provisions, Statistical Office has signed several memoranda on cooperation with administrative data providers.

1.3 Statistical units

The units of statistical observation for which data are produced are the enterprises classified in the Statistical Business Register in area 46 of NACE Rev2.

1.4 Coverage and scope of survey

1.4.1 Sectors

Reporting units are all enterprises (companies) whose main activity is wholesale and which are classified in the Statistical Business Register in area 46 of NACE Rev2.

1.4.2 Statistical population

The sample frame was based on the data from the Statistical Business Register and includes all active businesses in the wholesale area 46 NACE Rev2. Enterprises with turnover = 0 are excluded. The stratification of the sample is done on the base of class and group of companies. Classes are determined by turnover of companies:

Class 1: 0 - 24 999 Euro

Class 2: 25 000 - 199 999 Euro

Class 3: 200 000 - 999999 Euro

Class 4: 1 000 000 - 4 999 999 Euro

Class 5: more than 5 000 000 Euro.

The sample includes all companies in the class 4 and 5 and the rest is determined by random sampling. Groups are determined by activity of enterprise (NACE Rev2):

GROUPS	ACTIVITY (KD_NACE_Rev2)
1	461
2	462
3	463
4	464
5	465
6	466
7	467
8	469

1.5 Referent geographical area

The whole territory of Montenegro.

1.6 Concepts and definitions

Indices of turnover in wholesale show the dynamics of the value of turnover in wholesale trade in the territory of Montenegro. Wholesale trade includes activities in the field of 46 KD NACE Rev2. The wholesale trade involves the sale of new or used goods, without processing, for further sale or processing, and sales of major consumer goods for their own consumption.

1.7 Classifications

- 🚩 Statistical classification of economic activities in the European Union - NACE Rev. 2
- 🚩 Classification of individual consumption according to purpose - COICOP

1.8 Frequency of data collection

Once a year during three months (February - April).

1.9 Frequency of data dissemination

Data are published annually, in June of the current year for the previous year.

1.10 Methodology

Methodology of wholesale trade is available on website: [Methodology](#).

1.11 Base period

The previous year is taken as the base year.

1.12 Unit of measure

The data obtained from this survey are expressed in Euros and percentages.

1.13 Source of data

Data are collected on a sample of reporting units including Statistical Business Register (SBR) in MONSTAT which are registered according to 46 NACE Rev. 2 classifications. Company filled information based on accounting records.

1.14 Method of data collection

Data are collected by paper and e-questionnaire (mail or email).

2. Relevance – Data users

2.1 User needs

International users:

- ✚ Eurostat
- ✚ World Bank,
- ✚ UN organizations,
- ✚ International Monetary Fund.

National users:

- ✚ Ministries and other public administration bodies;
- ✚ Local government and other local government bodies;
- ✚ Central bank;
- ✚ Non-governmental organizations;
- ✚ Students;
- ✚ Researchers;
- ✚ Media.

2.2 User satisfaction

The Statistical Office has adopted the Quality Management Strategy, the Guidebook to the Implementation of the Quality Management Strategy, as well as the Plan for the Implementation of the Quality Policy. In order to measure the degree to which fulfills obligations towards users and within the new quality policy, the Statistical Office conducted User satisfaction survey. The results of the survey are available on the Statistical Office website, link: [User satisfaction report](#)

3. Accuracy and reliability

3.1 Accuracy – Overall remark

The yearly wholesale trade survey results are based on a sample of reporting units and are subject to the usual types of errors associated with sampling techniques, as well as non-sampling errors, measurement errors, processing errors and non-response.

3.2 Sampling error

Since the survey does not include all units of a target population but rather a randomly selected sample of units, there are sample errors that may occur in estimations. A variation coefficient is a relative measure (percentage) of the accuracy of an estimate. Along with these measures, a lower and upper limit of a confidence interval is calculated.

Indicators of sampling error

Sampling error is regularly calculated for each year for the turnover index on the level of Division 46. The coefficient of variance was 1.8 in 2023.

3.3 Non-sampling error

There are four types of non-sampling errors:

- 1) Coverage errors - errors that occur between the target population and the sample frame;
- 2) Measurement errors - errors that occur during data collection. The source of these errors may be the information system, the interviewer, or the data collection method;
- 3) Processing errors - errors that occurred after data collection, e.g. errors during input, editing, and weighting;
- 4) Non-response errors - errors that occurred as a result of an unsuccessful attempt to obtain the desired information from the reporting unit.

3.3.1 Coverage error

Coverage errors can be:

- 1) over coverage coverage;
- 2) under coverage coverage.

Indicator of coverage error

Overcoverage represents the share of units from the sample frame that do not belong to the target population (eg companies registered in area 46 of NACE Rev2, and do not engage in that activity, which means that they should not have been included in the survey). Only 7.2% of units in the sample in 2023 were defined as overcoverage, which has no impact on the final result.

Undercoverage is a problem that arises due to insufficient coverage (e.g. failure to include companies that registered in area 46 of NACE Rev2 during the observed year.) Undercoverage can cause underestimation, as units left out of coverage can affect the bottom line. The share of undercoverage in 2023 was 4.2 %.

3.3.2 Error of measurement

Measurement errors are errors that occur during data collection and cause recorded values of variables to be different from the true ones. Indirect analysis based on the results of the editing phase is implemented for correction. Every year, reporting units require the same variables, which facilitates filling out the questionnaire.

3.3.3 Non response error

Non-response errors are errors due to an unsuccessful attempt to obtain the desired information from the selected unit. Two main types of non-response errors are considered:

- 1) Unit non-response, which refers to the absence of information on the entire units (enterprises) selected in the sample;
- 2) Item non-response that refers to the situation in which the sampled unit was successfully surveyed, but not all the necessary information was obtained.

Non-responding unit rate

Unit non-response is an indicator that tells how many units (enterprises) did not respond to the questionnaire. The rate of unresponsive units in 2023 was 33,1 %.

Item non-response

The item non response rate is calculated as the ratio of the eligible units which have not responded to a particular item and the in-scope units that are required to respond to that particular item. Average item non response rate in 2023 was about 8.7%.

3.3.4 Data processing error

Once data have been collected, they pass through a range of processes before the final compilation (estimates, etc.) are produced: coding, keying, editing, imputing, weighting, tabulating, etc. Errors introduced at these stages are called processing errors.

Imputation rate

The average imputation rate on the field level in 2023 was 9.1%, while the average imputation rate on the level of the questionnaire amounted to 3.2%.

3.4 Seasonal adjustments

Not relevant.

3.5 Data revision

3.5.1 Data revision policy

Statistical office of Montenegro has adopted revision policy and it is available on the website: [Revision policy](#)

3.5.2 Data revision practice

Survey on Wholesale uses regular revisions. Large and unplanned audits are only used in the specific cases defined by the revision policy.

3.5.3 Data revision - average size

Not available.

4. Timeliness and punctuality

4.1 Timeliness

Preliminary data are published 6 months after the end of the reference period. The final data are published 9 months after the end of the reference period.

Time lag of the first results

The indicator of the timeliness of publication of preliminary data represents the time between the date of the last day of the reference period and the date of publication of preliminary data. Preliminary data are published 6 months after the end of the reference period.

Timeliness of preliminary data: T+6 months after the end of the reference period.

Time lag of the final results

The indicator of timeliness of publication of final data represents the time between the date of the last day of the reference period and the date of publication of final data. The final data are published 9 months after the end of the reference period.

Timeliness of final data: T+9 months after the end of the reference period.

4.2 Punctuality

Accuracy indicator represents the time difference between Actual date of the effective provision of the statistics and Scheduled date of the effective provision of the statistics.

$P3 = dact - dsch$.

In wholesale trade survey, punctuality = 0, which means that we have met the calendar: not earlier and not later published.

5. Availability and clarity

5.1 Statistical Release Calendar

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12 and 47/19.) stipulates that official statistical producers prepare, update, and publish Statistical Release Calendar. It is published on the website of Statistical Office not later than 20 December for the next year, for all official statistical producers that includes date of releasing statistical data. Any change in date of releasing in the Calendar is published in advance in accordance with the Procedure on Unplanned Revisions.

5.2 Access the data Release Calendar

The calendar of data publication is available on the following link: [Release Calendar](#)

5.3 Releases

The annual release of the survey Turnover in wholesale trade is available on the website: [Release](#)

5.4 Publication

All publications published by the Statistical office of Montenegro are available at the link: [Publication](#)

5.5 On-line databases

Data are available on web site: [Database](#)

5.6 Access to micro data

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12 and 47/19) regulates rules under which external users can obtain access to individual data for the needs of research. Article 58 defines types of scientific and research organizations that can obtain such data. Providing individual data without identifiers is possible only upon a written request of scientific and research institutions, with the purpose of performing scientific and research activities as well as international statistical organizations and statistical producers from other countries. The research entity signs the agreement with the Statistical Office, and it signs the statement on respecting the confidentiality principle. Official statistical producers keep a separate record of users and the purpose of using the statistical data given to these users.

5.7 Metadata occupancy

The ratio of the number of metadata elements provided to the total number of metadata elements applicable. For the survey Turnover in wholesale trade, the metadata fill rate is 100%.

6. Comparability

6.1 Comparability - geographical

The data of the survey Turnover in wholesale trade are used exclusively for national needs and refer to the entire territory of Montenegro.

6.2 Time comparability

Comparable data are available from 2006 until today and are available on the MONSTAT website in the section [Data](#).

Time comparability indicator

Length of comparable time series indicator is calculated as follows:

$$CC1 = J_{last} - J_{first} + 1$$

J_{last} - number of the last reference period with disseminated statistics.

Turnover in wholesale trade

Jfirst - number of the first reference period with comparable statistics.

Length of comparable time series: 17 years.