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**QUALITY REPORT 2017  
Turnover in Wholesale trade**

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## 1. Introduction – Basic information about the survey

### 1.1 Purpose, goal and subject of the survey

The aim of this survey is the assessment of the total turnover in wholesale trade by commodity groups. The data collected are used for monitoring volume and dynamics in turnover, analysis of effects of trade policy measures, analysis of volume and structure of turnover in wholesale trade by commodity groups and analysing the total economy trends.

### 1.2 Legal basics

The Law on Official Statistics and Official Statistical System ([Official Gazette of Montenegro No 18/12) defines provisions for collection, processing, and dissemination of data. The Law provides to the Statistical Office clear and wide 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

For wholesale trade survey the reporting and observation unit are the same. Units of statistical observation and reporting for which data are provided, are enterprises with main activity in the Statistical Business Register is in Division 46 NACE Rev2.

### 1.4 Coverage and scope of survey

#### 1.4.1 Sectors

Reporting units are all enterprises (companies) whose main activity is trade and who are in the Statistical Business Register registered in the area of 46 NACE Rev2. Entrepreneurs and enterprises with turnover = 0 are excluded. Data are broken down by turnover size of statistical units (enterprises). Five classes are applied in accordance with accounting standards:

- Class 1: 0 - 24 999 EUR
- Class 2: 25 000 - 199 999 EUR
- Class 3: 200 000 - 999999 EUR
- Class 4: 1 000 000 - 4 999 999 EUR
- Class 5: more than 5 000 000 EUR

#### 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. Entrepreneurs and 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 EUR
- Class 2: 25 000 - 199 999 EUR
- Class 3: 200 000 - 999999 EUR
- Class 4: 1 000 000 - 4 999 999 EUR
- Class 5: more than 5 000 000 EUR

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.

Transport of goods with VAT included - The total turnover of the company realized during the year on the territory of Montenegro expressed in euro. It includes the total turnover including VAT which the company achieved, regardless of whether it was recorded in wholesale trade or other activities.

VAT - value added tax value as established by the customer.

Inventories - the value of stock purchase prices that are in warehouses and warehouses of the Company as at the end of the year.

Number of employees - defined as the total number of employees who work in the observation unit (including working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit they belong to and which it pays (eg. commercial representatives, workers at the delivery, repair and maintenance teams). Also to include workers who do not work full time under the law of the country and who are not on the payroll, as well as seasonal workers, craftsmen and workers who work at home, and who are on the payroll.

Transport of goods with VAT by goods - goods sold by the structure of the sales range from the tax on value added for each commodity group.

### **1.7 Classifications**

NACE Rev2 COICOP

### **1.8 Frequency of data collection**

Yearly.

### **1.9 Frequency of data dissemination**

Yearly.

### **1.10 Methodology**

Methodology of wholesale trade survey is available on MONSTAT website:  
<http://www.monstat.org/userfiles/file/trgovina/Metodologija-tr%20veliko.pdf>

### **1.11 Base period**

The base year is 2010.

### **1.12 Unit of measure**

Turnover - in Euro

Number of employees - counted numerically

Changes compared to the previous periods – indices numbers

### **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 collection data**

Data are collected through paper questionnaires (by post, email or fax).

## **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**

With purpose of determining user satisfaction with quality data and defining their needs, Statistical Office for the first time carried out the User Satisfaction Survey in 2017. The survey was done from 1 September to 20 October. The survey link was sent to users that sent request to the official email address in period 2013-2017. Additionally, the questionnaire is put on the website of Statistical Office. The processing of data obtained by the mentioned survey is ongoing, while final result are ready until the end of year, both for total users satisfaction, and by domains.

## **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 (A1)*

Sampling error is regularly calculated for each year for turnover index on the level of Division 46. Standard error for 2017 for wholesale – total turnover of Division 46 is 0,01. Coefficient of variance is 0,01.

### **3.3 Non-sampling error**

Non-sampling errors are tied to other errors that are not related to the sample. Non-sampling errors include: Coverage errors, Measurement errors, Processing errors and Non-response errors.

#### **3.3.1 Coverage error**

Coverage error is the divergence between the frame population and the target population. The coverage errors include: over – coverage and under – coverage.

#### *Indicators of coverage error (A2)*

Over - coverage is appearing when a company which is registered in 46(the area that is the subject of observation) deliver information to deal with the some other activity (not wholesale), and in case when the company is closed. Only 1,23% of the units in the sample in 2017 are defined as over - coverage, which did not affect the final result. Under - coverage can cause an underestimation, because those units that have remained outside the frame can affect the final result. For this reason, the real impact assessment units which are not included in the coverage. The under - coverage includes units engaged in wholesale, and are registered in other activities, as well as those companies which are registered in the course of the observed year, and beyond the frame for the choosing of the sample. Share of under - coverage in 2017 was 6.71%

#### **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 on editing phase is implemented for correction. Every year, from reporting units is required the same variables, which facilitates filling out the questionnaire.

#### **3.3.3 Non-response error**

Non-response errors occur when the survey fails to get response to one, or possibly to all questions of the survey. non-response errors include unit non response and item non response.

#### *Unresponsive unit rate (A3)*

The unit non-response rate is calculated as the ratio of the number of units which did not responded to the total number of eligible units (unweight rate). Average unit non-response rate in 2017 was about 10.6%.

#### *Non response rate*

The item non-response rate is calculated as the ratio of the eligible units that 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 2017 was about 4.7%.

### 3.3.4 Error processing the data

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 2017 was 4.7%, while average imputation rate on the level of the questionnaire amounted to 6.9%.

### 3.4 Seasonal adjustment

The first results are published 6 months after the end of the reference year. Questionnaires are sent to reporting units at the beginning of the year. The deadline for replies is May 10 of current year for reference year.

### 3.5 Data revision

#### **3.5.1 Data revision policy**

Statistical Office has adopted the revision policy and it is available on the website <http://www.monstat.org/userfiles/file/o%20nama/2017/Revision%20policy.pdf>

#### **3.5.2 Data revision practice**

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

#### **3.5.3 Data revision - average size (A6)**

Not available

## 4 Timeliness and punctuality

### 4.1 Timeliness

The first results are published 6 months after the end of the reference year. Questionnaires are sent to reporting units at the beginning of the year. The deadline for replies is May 10 of current year for reference year.

#### *Time lag of the first results*

The number of days (or weeks or months) from the last day of the reference period to the day of publication of first results:

$T1 = d_{\text{first}} - d_{\text{ref}}$ ,

$T1 = 6 \text{ months and } 20 \text{ days}$

$d_{\text{first}}$  - release date of first results

$d_{\text{ref}}$  - last day (date) of the reference period of the statistics.

Deadlines for publication wholesale trade data during 2016 are published according to the Release Calendar. The Release Calendar is available on the MONSTAT website: [http://monstat.org/userfiles/file/o%20nama/2017/Kalendar\\_2017\\_eng\\_Monstat.pdf](http://monstat.org/userfiles/file/o%20nama/2017/Kalendar_2017_eng_Monstat.pdf)

#### *Time lag of the final results*

The number of days (or weeks or months) from the last day of the reference period to the day of publication of complete and final results. Wholesale data are published 200 days after the end of the reference period in accordance with release calendar. Information on the new release are treated as preliminary until the next release. Time gap of publication of final data in the wholesale releases is one year.

## 4.2 Punctuality

Not relevant.

## 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) 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

[http://monstat.org/userfiles/file/o%20nama/2017/Kalendar\\_2017\\_eng\\_Monstat.pdf](http://monstat.org/userfiles/file/o%20nama/2017/Kalendar_2017_eng_Monstat.pdf)

### 5.3 Releases

New release are available on the MONSTAT website :  
<http://www.monstat.org/eng/page.php?id=525&pageid=38>

### 5.4 Publication

Statistical Office publishes the following regular publications:

1. Monthly Statistical Review,
2. Statistical Yearbook,
3. Montenegro in Numbers,
4. Annual Statistics of Transport, Storage and Connections,
5. Number and Structure of Business Entities.

In addition to the above regular ones, Statistical Office publishes also additionally publications. Some of the most important additional publications are as it follows:

1. Women and Men in Montenegro,
2. Children in Montenegro,
3. The most often used statistical data.

All publication published by Statistical Office are available at the following link:  
<http://monstat.org/eng/publikacije.php>

### 5.5 On-line database

Data of wholesale trade are available on web site: <http://monstat.org/eng/pxweb.php>

### 5.6 Access to micro data

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



and it signs the statement on respecting the confidentiality principle. Official statistical producers keeps a separate records on users and 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 a annually wholesale survey, the metadata fill rate is 100%.

## **6. Comparability**

### **6.1 Comparability - geographical**

No data are available by geographic areas that since the trade data refer to the whole territory of Montenegro and for national purposes.

### **6.2 Time comparability**

Wholesale data have been produced for more than 50 years, but since 2006 they have been working according to the new methodology. By 2006, all businesses engaged in wholesale were included in the sample, regardless of the activity they are registered in. Since 2006, only companies that are registered in the 46 NACE Rev 2 (wholesale) sector are in the sample frame. Since 2006 there has been no interruption of the series.

#### *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.

$J_{first}$  - number of the first reference period with comparable statistics.

Length of comparable time series: 10 years.