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QUALITY REPORT 2017
Turnover index in retail trade

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Content:

1. Introduction – Basic information about the survey	1
1.1 Purpose, goal and subject of the survey	1
1.2 Legal basics	1
1.3 Statistical units	1
1.4 Coverage and scope of survey	1
1.4.1 Sectors	1
1.4.2 Statistical population	1
1.5 Referent geographical area	2
1.6 Concepts and definitions	2
1.7 Classifications	2
1.8 Frequency of data collection	2
1.9 Frequency of data dissemination	2
1.10 Methodology	2
1.11 Base period	2
1.12 Unit of measure	2
1.13 Source of data	2
1.14 Method of collection data	3
2. Relevance – Data users	3
2.1 User needs	3
2.2 User satisfaction	3
3. Accuracy and reliability	3
3.1 Accuracy – Overall remark	3
3.2 Sampling error	3
3.3 Non-sampling error	3
3.3.1 Coverage error	4
3.3.2 Error of measurement	4
3.4 Seasonal adjustment	4
3.5 Data revision	4
3.5.1 Data revision policy	4
3.5.2 Data revision practice	5
3.5.3 Data revision - average size (A6)	5
4 Timeliness and punctuality	5
4.1 Timeliness	5
4.2 Punctuality	5
5. Availability and clarity	5
5.1 Statistical Release Calendar	5
5.2 Access the data Release Calendar	6
5.3 Releases	6
5.4 Publication	6
5.5 On-line database	6
5.6 Access to micro data	6
5.7 Metadata occupancy	6
6. Comparability	6

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 and monitoring the dynamics of turnover in retail trade. Retail trade index can be used for research of current trends and conditions on the consumer goods market, from the viewpoint of changes in the commodity turnover, and seasonal and other changes in the volume of sales and trade by commodity groups and as input for National accounts statistics. The data set refer to retail trade turnover value and volume indices. Value indices show turnover movements in current prices. Volume of sales indices in retail trade represents the changes in the value of turnover in constant prices.

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 retail 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 47 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 47 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 retail trade area 47 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	4730
2	4711
3	4721+4722+4723+4724+4725+4726+4729
4	4773+4774+4775
5	4751+4771+4772+4759+4753+4763+4743+4754+4752+4761+4762+4764+4765+4776 +4777+4778+4741+4742
6	4779
7	4791+4781+4782+4789+4799+4791
8	4719

1.5 Referent geographical area

The whole territory of Montenegro.

1.6 Concepts and definitions

Indices of turnover in retail trade at current prices show the dynamics of the turnover of retail trade in the referent period. Indices of turnover in retail trade at constant prices show the dynamics of turnover volume of retail trade in the referent period. Retail trade turnover as defined in CR 1503/2006: Turnover of goods in retail trade shows the value of goods delivered by retail trade enterprises/organizations to final consumers (primarily to final consumers for personal consumption or use in households, and to legal and physical entities for performing their activities). Turnover includes VAT, but for Eurostat needs this variable is re-coded in turnover without VAT. VAT - value added tax value. Turnover covers flows during the calendar month. Deflated indicators represent the value of turnover in constant prices.

1.7 Classifications

NACE Rev2 COICOP

1.8 Frequency of data collection

Monthly.

1.9 Frequency of data dissemination

Monthly according to the Statistical Data Release Calendar.

1.10 Methodology

Methodology of retail trade survey is available on MONSTAT website:
<http://www.monstat.org/userfiles/file/trgovina/2014/Metodologija%20trgovine%20na%20malo%20ENG.pdf>

1.11 Base period

The base year is 2010.

1.12 Unit of measure

Turnover - in EUR

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 47NACE Rev. 2 classifications.

1.14 Method of collection data

Data are collected through paper questionnaires (by post, email or fax) and by e-questionnaire (on-line).

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 is ready until the end of year, both for total user's satisfaction, and by domains.

3. Accuracy and reliability

3.1 Accuracy – Overall remark

The monthly retail 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 month for turnover index on the level of Division 47. Standard error for turnover chain index of December 2017 for Retail trade – total turnover of Division 47 (as defined in Annex C of STS Regulation), 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 47 (the area that is the subject of observation) deliver information to deal with some other activity (not retail), and in case when the company is closed. In a survey of retail trade there are not many such cases. Only 1.18% 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 retail, 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 11.1%.

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.

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 12.1%.

Nonresponse rate (A4)

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 2017 was about 6.8%.

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 6.8%, while average imputation rate on the level of the questionnaire amounted to 6.2%.

3.4 Seasonal adjustment

Not available.

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

Monthly survey of retail trade 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 around 30-35 days after the end of the reference month. Questionnaires are sent to reporting units at the beginning of the year (questionnaires are sent for all 12 months in the year). The deadline for replies is 15 days after the reference month. In the case of data collection via Internet application for reporting units is opened 20 days after the end of the reference month. The survey is in general closed 25 days after the reference month.

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:

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

$T1 = 35$ days

d_{frst} - release date of first results

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

Deadlines for publication retail trade data during 2017 are published according to the Release Calendar. The Release Calendar is available on the MONSTAT website: <http://www.monstat.org/eng/page.php?id=12&pageid=12>

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. Retail trade data are published 35 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 monthly releases retail trade 75 days.

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. $P3 = d_{\text{act}} - d_{\text{sch}}$. In retail trade survey, punctuality = 0, which means that we have met the calendar: not earlier and not later published.

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

5.3 Releases

New release are available on the MONSTAT website:
<http://www.monstat.org/eng/page.php?id=445&pageid=38>

5.4 Publication

Statistical Office publishes the following regular publications: 1. Statistical Yearbook, 2. Montenegro in figures, 3. Monthly statistical review. 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. 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

Gross data of turnover and volume of sales index in retail 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 keep 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 monthly retail trade survey, the metadata fill rate is 100%.

6. Comparability

6.1 Spatial comparability

Methodology of our retail trade survey is the same as in other European countries, that is the reason why our data are comparable geographically with data of other EU countries.

6.2 Time comparability

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: 135 months (reference period) = 11 years and 3 months.