QUALITY REPORT 2017

Turnover index in services

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1. Introduction – Basic information about the survey

1.1 Purpose, goal and subject of the survey
The purpose of the statistical survey on turnover in other services is the quarterly statistical monitoring of turnover (income from sale of goods and services) in service activities as well as the measuring of the dynamics of its change. The quarterly compilation of the turnover index is intended for a simple monitoring of change flows in economic development. It is suitable for short-term observations and analyses of the economic development. Just like in other short-term conjunctive statistics, the basic purpose is not the level of a particular phenomenon but rather its dynamic of change.

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 services 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 Divisions: G, H, I, J, K, L, M, N, P, Q, R and S NACE Rev2.

1.4 Coverage and scope of survey

1.4.1 Sectors
The survey on turnover in service sector includes all business entities (legal units, tradesmen and free lances) if their prevailing activity is one of the following: G, H, I, J, K, L, M, N, P, K, R and S NACE Rev.2 Entrepreneurs and enterprises with turnover = 0 are excluded. Data are broken down by number of employees:
- Class 1: 0 – 9
- Class 2: 10 – 49
- Class3: 50 – 249
- Class 4: >250

1.4.2 Statistical population
The sample frame was based on the data from the Business Register of the Statistical Office of Montenegro and includes all active businesses in the areas of H, I, J, K, L, M, N, P, Q, R and S Nace Rev.2. Enterprises are excluded from the scope of entrepreneurs and businesses that have turnover = 0 For sampling classes are determined by turnover of companies:
- Class 1: 0 - 24 999 EUR
- Class 2: 25 000 - 199 999 EUR
- Class 3: 200 000 - 999 999 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.

1.5 Referent geographical area
The whole territory of Montenegro.
1.6 Concepts and definitions
Indices of turnover in other services show the dynamics of the turnover in the observed sector.
Turnover comprises the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties.
Turnover includes all duties and taxes on the goods or services invoiced by the unit with the exception of the VAT invoiced by the unit vis-a-vis its customer and other similar deductible taxes directly linked to turnover.
Number of employees - defined as the total number of employees who work in the observation unit (including working proprietors, partners working regularly and unpaid family workers).
Hours worked including working hours which employees are held in operating activities during the reporting quarter.

1.7 Classifications
NACE Rev. 2

1.8 Frequency of data collection
Quarterly.

1.9 Frequency of data dissemination
Quarterly.

1.10 Methodology
Methodology of other services survey is available on MONSTAT website:

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
Survey is done on the basis of a sample includes companies that are registered in sections G, H, I, J, K, L, M, N, P, Q, R and S NACE Rev. 2. Company filled information based on accounting records.

1.14 Method of collection data
Data are collected through 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,
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
The quarterly other services 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)
Quarterly survey of other services is done on a sample basis, so it is logical that there is an error in random sampling. Sampling error is regularly calculated for each quarter and was about 0.01 as like as coefficient of variance.

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 services deliver information to deal with the some other activity and in case when the company is closed. Only 1.5% of the units in the sample in 2016 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 services, 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 2016 was 2.3%
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 2016 was about 5.6%.

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
Quarterly survey of services 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 50 days after the end of the reference quarter.

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:

\[ T_1 = d_{frst} - d_{ref}, \]

\[ T_1 =505 \text{ days} \]

d_{frst} - release date of first results

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

Deadlines for publication other services data during 2017 are published according to the Release Calendar. The Release Calendar is available on the Monstate website: 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. Services data are published 50 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 services releases is 110 days.

**4.2 Punctuality TP3**

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**


**5.3 Releases**


**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/publikacje.php](http://monstat.org/eng/publikacje.php)

**5.5 On-line database**

Data of turnover in services (2010=100) are available on web site: [http://monstat.org/eng/pxweb.php](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 quarterly other services survey, the metadata fill rate is 100%.

6. Comparability

6.1 Comparability - geographical
Methodology of services 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 Comparability - over time
Comparable data have been published since 2010.

Time comparability indicator
Length of comparable time series indicator is calculated as follows: \[ CC1 = J_{\text{last}} - J_{\text{first}} + 1 \]  
\( J_{\text{last}} \) - number of the last reference period with disseminated statistics. \( J_{\text{first}} \) - number of the first reference period with comparable statistics. Length of comparable time series: 6 years.