



## METHODOLOGICAL EXPLANATION

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# TURNOVER IN SERVICE ACTIVITIES

This methodological explanation relates to the data releases:

- Turnover in service activities, Slovenia, monthly (First Release)



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## 1 PURPOSE

The purpose of publishing data on turnover indices in service activities is to show monthly changes of turnover in service activities.

The key statistic is value turnover index of service activities.

## 2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\)](#) (only in Slovene)
- [National Statistics Act](#) (OJ RS, No. 45/95 and 9/01)
- Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics (CELEX: 32019R2152)

## 3 UNIT DESCRIBED BY THE PUBLISHED DATA

The unit described by the published data is turnover from the sale of services in enterprises whose principal activity is classified into accommodation and food service activities, transportation and storage, information and communication, real estate activities, professional, scientific and technical activities and administrative and support service activities. Data on turnover refer to the total enterprise turnover, including turnover from potential side activities not related to the activities mentioned above. Turnover is observed according to enterprises activity based on NACE Rev. 2.

## 4 SELECTION OF OBSERVATION UNIT

Observation units are enterprises whose principal activity (NACE Rev. 2) is classified into accommodation and food service activities, transportation and storage, information and communication, real estate activities, professional, scientific and technical activities and administrative and support service activities.

Observation units in the STOR/M survey are selected based on threshold coverage. The criteria for the definition of units included in the survey are the principal registered activity, annual turnover of the enterprise and the number of persons in paid employment according to the Statistical Register of Employment. The survey covers all enterprises whose main activity is classified into one of the service activities within the sections H, I, J, L, M and N of NACE Rev. 2, that:

- have annual turnover higher than EUR 180,000 for the units from previous coverage or EUR 300,000 for newly selected units,

- have annual turnover higher than EUR 90,000 and more than 2 persons in paid employment for the units from previous coverage or EUR 150,000 and more than 2 persons in paid employment for newly selected units,
- have more than 5 persons in paid employment.

Data on employed persons are obtained from the Statistical Register of Employment (SRDAP). The STOR/M survey includes approximately 11,000 units.

From the above-described selection we determine units that will complete the questionnaire, while data of the remaining units are obtained from the administrative source.

Observation units that answer the questionnaires are determined on the basis of their previous turnover in two steps: at the level of the survey and at the level of the activity group. The units are sorted by descending turnover, and then we select a sufficient number of units from the beginning of the list so as to exceed the defined share (approximately 60%) of turnover in the total turnover of units covered in the selected survey and in the selected activity group, respectively.

## 5 SOURCES AND METHODS OF DATA COLLECTION

Data are collected monthly.

The data are obtained with survey Monthly report on service activities (STOR/M). The data in this survey are obtained by:

- Monthly questionnaire "Monthly report on service activities" (STOR/M), which is available electronically.
- Administrative data being reported by enterprises to the Financial Administration of the Republic of Slovenia for the value added tax purpose (DDV-O forms). These data are available to the Statistical Office approximately 45 days after the reference period.

Reporting units are obliged to deliver the requested data for the previous month to the Statistical Office no later than the 20th of the month. Observed units fill in the data electronically via the eSTAT web application.

Administrative data used in survey are data being reported by enterprises to the Financial Administration of the Republic of Slovenia for the value added tax purpose (DDV-O form)

## 6 DEFINITIONS

**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 also includes all other charges linked to the buyer, even if these charges are listed separately in the invoice. Turnover

excludes VAT and other similar deductible taxes directly linked to turnover as well as all duties and taxes on the goods or services invoiced by the unit. Reduction in prices and discounts must be deducted. The sale for loan is registered in the month of invoicing.

Mostly comparable to the above definition is also turnover that is calculated from several items of the VAT return form (DDV-O).

**Value indices:** current prices are considered, the impact of the change of prices is not eliminated.

## 7 EXPLANATIONS

### 7.1 CLASSIFICATIONS

Results are published according to SKD 2008, the national version of the standard classification, which includes the entire European classification of activities (NACE Rev. 2) but also adds some national subclasses.

A more detailed explanation of the classification is available on the following link: <https://www.stat.si/StatWeb/en/Methods/Classifications>.

#### **Activities and codes by the Standard Classification of Activities (NACE Rev. 2) included in the results of the survey**

Service activities are covered according to Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 acts in the field of business statistics.

<b>NACE Rev. 2 ACTIVITIES</b>	<b>NACE Rev. 2 CODES</b>
<b>SERVICES – TOTAL</b>	<b>49, 50, 51, 52, 53, 55, 56, 58, 59, 60, 61, 62, 63, 68, 69, 70.2, 71, 73, 74, 77, 78, 79, 80, 81, 82</b>
<b>H Transportation and storage</b>	<b>49, 50, 51, 52, 53</b>
Land transport and transport via pipelines	49
Water transport	50
Air transport	51
Warehousing and support activities for transportation	52
Postal and courier activities	53
<b>I Accommodation and food service activities</b>	<b>55, 56</b>
Accommodation	55
Food and beverage service activities	56
<b>J Information and communication</b>	<b>58, 59, 60, 61, 62, 63</b>
Publishing activities	58
Motion picture, video and television programme production, sound recording and music publishing activities	59
Programming and broadcasting activities	60

Telecommunications	61
Computer programming, consultancy and related activities	62
Information service activities	63
<b>L Real estate activities</b>	<b>68</b>
<b>M Professional, scientific and technical activities</b>	<b>69, 70.2, 71, 73, 74</b>
Legal and accounting activities	69
Management consultancy activities	70.2
Architectural and engineering activities; technical testing and analysis	71
Advertising and market research	73
Other professional, scientific and technical activities	74
<b>N Administrative and support service activities</b>	<b>77, 78, 79, 80, 81, 82</b>
Rental and leasing activities	77
Employment activities	78
Travel agency, tour operator reservation service and related activities	79
Security and investigation activities	80
Services to buildings and landscape activities	81
Cleaning activities	81.2
Office administrative, office support and other business support activities	82

## 7.2 DATA PROCESSING

### DATA EDITING

Data were edited with the combination of systematic corrections, individual corrections and imputation procedures. The following imputation methods were used: logical imputations, mean imputations, historical imputations and structural imputations.

For more, see the general methodological explanations [Statistical data editing](#).

### WEIGHTING

Weighting was not performed.

### SEASONAL ADJUSTMENT

Besides unadjusted data series, seasonally adjusted data series are published from January 2000 on (base year 2015), except for L68 Real estate activities, M69 Legal and accounting activities, M70.2 Management consultancy activities, N77 Rental and leasing activities and N81 Services to buildings and landscape activities. Data for these service activities are available since 2015. All seasonally adjusted data series are directly seasonally adjusted

For seasonal adjustment of time series we use the TRAMO/SEATS method. A time series model is set up, and it is revised in detail and corrected about once

a year. By using the model, the time series is decomposed into:

- the trend-cycle component (which consists of the trend and cyclical movements over a period longer than one year),
- the seasonal component (which consists of the seasonal effects and the calendar effects; the calendar effects are composed of the working day effect, the leap-year effect, the holiday effect and the Easter effect),
- the irregular component (which consists of random fluctuations and some outliers).

Seasonally adjusted data are original data from which the seasonal and calendar effects are eliminated.

For more, see the general methodological explanations [Seasonal adjustment of time series](#).

### 7.3 INDICES

The basic index for each activity group is calculated by comparing the current monthly turnover (v with the previous one:

$$I_{M/M-1} = \frac{\sum_{i=1}^{N_M} TURNOVER_i^M}{\sum_{i=1}^{N_{M-1}} TURNOVER_i^{M-1}} * 100$$

Whereby:

$M$	month
$M - 1$	previous month
$I_{M/M-1}$	index based on the previous month
$TURNOVER_i^M$	turnover of observation unit i, which belongs to representative activity group in the current month
$TURNOVER_i^{M-1}$	turnover of observation unit i, which belongs to representative activity group in the previous month

Calculation of turnover indices published in the First Release:

- Indices based on the average of the base year (Ø2015 = 100):

$$I_{BAS_{M/\text{Ø}2015}} = \frac{I_{BAS_{M-1/\text{Ø}2015}} * I_{M/M-1}}{100}$$

- Indices of turnover based on the corresponding month of the previous year, which are working day adjusted:

$$I_{YEAR_{M,YCal}} = \frac{I_{BAS_{M,YCal}}}{I_{BAS_{M-12,YCal}}} * 100$$

- Indices of turnover based on the previous month, which are seasonally adjusted:

$$I_{MON}_{M,SA} = \frac{I_{BAS}_{M,SA}}{I_{BAS}_{M-1,SA}} * 100$$

Whereby:

$M$	month
$M - 1$	previous month
$M - 12$	corresponding month of the previous year
$I_{BAS}_M / \emptyset 2015$	index based on the average of the base year
$I_{BAS}_{M-1} / \emptyset 2015$	index based on the average of the base year for the previous month
$I_{M/M-1}$	index based on the previous month
$I_{YEAR}_{M,YCal}$	index based on the corresponding month of the previous year, working day adjusted
$I_{BAS}_{M,YCal}$	index based on the average of the base year, working day adjusted
$I_{BAS}_{M-12,YCal}$	index based on the average of the base year for the corresponding month of the previous year, working day adjusted
$I_{MON}_{M,SA}$	index based on the previous month, seasonally and working day adjusted
$I_{BAS}_{M,SA}$	index based on the average of the base year, seasonally and working day adjusted
$I_{BAS}_{M-1,SA}$	index based on the average of the base year for the previous month, seasonally and working day adjusted

- Indices of the current year's cumulative values based on the corresponding period of previous year are calculated by the same method as the indices based on the corresponding month of the previous year, whereby the sum of the indices based on the average of the base year for the current year is compared to the sum of the corresponding indices from the previous year.

## 7.4 PRECISION

In statistical surveys different kinds of errors can occur (e.g. sampling error, non-response error, measurement error) influencing the reliability and accuracy of the statistical results. Errors deriving from the random mechanisms determine the precision and consequently the reliability of the statistical estimates. The precision of the statistical estimate is estimated by calculating the standard error (SE). The Statistical Office of the Republic of Slovenia draws attention to less reliable estimates by flagging them with a special sign.



If the table contains estimated indices, publishing limitations are determined by the standard errors of the estimates (SE) of the indices. In such cases it holds:

If the standard error (SE) of the estimate of a proportion is

- 10 or below ( $SE \leq 10$ ) the estimate is reliable enough and is published without limitations;
- between 10 and up to 30 ( $10 < SE \leq 30$ ) the estimate is less reliable and is flagged for caution with letter M;
- over 30 ( $SE > 30$ ), the estimate is too unreliable to be published and therefore suppressed for use by letter N.

For more, see the general methodological explanations [Precision of statistical estimates](#).

## 7.5 OTHER EXPLANATIONS

In 2018 we started to publish turnover from the sale of services for new service activities: real estate activities (L68), rental and leasing activities (N77) and services to buildings and landscape activities (N81). In division N81 to cleaning activities (N81.2) were added also combined facilities support activities and landscape service activities (N81.1 and N81.3). We are also separately observing legal and accounting activities (M69) and management consultancy activities (M70.2), which used to be monitored together. Data for new service activities are available in the SI-STAT Database since 2015.

Data that are statistically protected to respect the confidentiality of reporting units are replaced with the letter »z«.

## 8 PUBLISHING

- SI-STAT Database: Trade and services – Other services – [Indices of Turnover in Service Activities](#) Value indices are published as the original and adjusted data (data are seasonally and working day adjusted). Data are published according to the Standard Classification of Activities (NACE 2008).
- First Release (Turnover in service activities, Other services): »Turnover in service activities, Slovenia, monthly«.
- EUROSTAT (Statistical Office of the European Union)

## 9 REVISION OF THE DATA

### 9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

Data for the last 10 months are provisional. With each release the data for the last 10 months can be corrected and supplemented with new data.

Publishing of provisional and final data is planned. Due to the needs of users for timely information, provisional data are published that meet the criteria of the quality of official statistical data but do not meet the quality that can be met with complete coverage. Data are revised when recent, more complete and better data can significantly contribute to the quality of data-based decision-making.

### 9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

From 2009 on indices are calculated and published according to the SKD 2008, while indices for the period before 2009 were calculated according to the 2002 version of the SKD. In 2009 all series from 2000 on were recalculated into the new classification of activities.

Methodological explanation on revision of statistical data is available on

<https://www.stat.si/dokument/5299/RevisionOfStatisticalDataMEgeneral.pdf>.

## 10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURSs website are available at <https://www.stat.si/statweb/en/Methods/QuestionnairesMethodologicalExplanationsQualityReports>.

- Questionnaire:
  - Poslovne in druge storitvene dejavnosti (STOR/M)

Theme: Trade and services, Subtheme: Other services

- Quality report for the survey:
  - Monthly report on service activities (STOR/M)

Theme: Trade and Services, SubTheme: Other services