



METHODOLOGICAL EXPLANATION

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FOREIGN TOURISTS IN SLOVENIA

This methodological explanation relates to the data releases:

Foreign tourists and their expenditures, Slovenia, multiannual – for selected periods (First Release)

Foreign tourists and their expenditures, Slovenia, multiannual (Electronic Release)



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1 PURPOSE

The purpose of the data release is to present the characteristics of foreign tourists staying in Slovenia, the data on average expenditure of foreign tourists and the structure of the expenditure. The key statistics are the number of foreign tourists, the number of overnight stays and the average expenditure in EUR.

2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\) \(only in Slovene\)](#)
- [National Statistics Act \(OJ RS, No. 45/95 and 9/01\)](#)

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The unit described by the published data is a foreign tourist who in the selected month stayed in a selected hotel or camping site in Slovenia. Foreign tourists are shown according the characteristics of arrival and staying (the organisation of travelling, the organisation of staying, the sources of information on coming, etc.), their average expenditure and the structure of the expenditure.

4 SELECTION OF OBSERVATION UNIT

The basic observation unit is a foreign tourist who stayed at a selected hotel or camping site in the selected month.

The basis for the sampling frame of the survey on foreign tourists is data from the monthly accommodation statistics (TU/M) for the previous year. With the monthly accommodation statistics we collect the data on the number of arrivals and nights spent by domestic and foreign tourists in every (tourist) accommodation establishment in Slovenia by citizenship. Due to the effect of the COVID-19 epidemic on activity of accommodation establishments, for preparing the sample for 2021 besides the data for 2020 the data for 2019 were used.

When designing the sample framework, only data on the number of arrivals of foreign tourists are taken into account. The sample is a two-stage stratified sample. Stratum allocation was defined proportionally in line with the number of tourists in each of the strata in the TU/M survey in the selected months of the previous year. The strata are defined for each month or the period surveyed, by:

- type of tourist municipality (health municipalities, mountain municipalities, seaside municipalities, Ljubljana, urban municipalities and other municipalities), whereas before 2012 by: type of resort (Ljubljana, health resorts, seaside resorts, mountain resorts and other selected tourist

- resorts);
- type of accommodation establishment (hotel, camping site).

Sampling units of the first level are accommodation establishments (hotels and in July-August besides hotels also camping sites) and sampling units of the second level are groups of five tourists (in each of the periods April–May, September–October and December–January the sample size was 1,700 foreign tourists and in July–August 3,400 foreign tourists). Accommodation establishments were selected with probability proportional to size by repetition. The size of a tourist establishment was defined by the number of tourists staying in it.

The second level units (i.e. groups of five tourists) are randomly assigned survey days for the month for which they have been selected.

5 SOURCES AND METHODS OF DATA COLLECTION

Data are collected every three years. Because in 2019 the survey was conducted with a delay, i.e. after four years, consecutively the survey was again conducted after two years in 2021.

We obtain the data with the survey “Foreign tourists in the Republic of Slovenia” (TU-TURISTI). Data are gathered with the questionnaire “Survey on foreign tourists” (TU-TURISTI). The questionnaire is translated into the languages of the countries where the majority of foreign tourists are coming from.

Questions were grouped into the following six groups:

- basic data on foreign tourists (country of residence, sex, age, economic status, standard of living);
- data on arrivals and stays of foreign tourists in Slovenia (the main purpose of visit, influence of various factors on their decision to visit, use of the internet, organization of the trip, means of transport, etc.);
- data on expenditure of foreign tourists (travel and accommodation expenses, package tours, expenditure in the place of interview, etc.);
- data on the usage of mobile phone in Slovenia;
- data on viewing and publishing content on the Internet during their stay in Slovenia (included in 2021);
- data on evaluation of satisfaction of foreign tourists by the elements of the tourist offer in Slovenia.

The exact day of interview and the number of interviews that was needed to be carried out in each accommodation establishment was determined. Each interviewer obtains the data by personally interviewing tourists; only exceptionally the tourists may answer the questionnaire themselves and the interviewer if necessary offered help to solve together undistinctnesses.

Data for the survey are not obtained from administrative sources.

6 DEFINITIONS

Tourism includes the activities of people travelling and staying away from their place of usual environment for at least one day (spending at least one night), but not more than a year (365 days) continuously, for leisure, business or other reasons.

Tourist is a person who travels to and stays in a place that is not part of their usual environment and who spends at least one night there (but not more than 365 nights consecutively) for leisure, business or other reasons, but not to make profit in the place visited (they are not remunerated).

Foreign tourist is a person who comes to Slovenia from abroad and temporarily stays in a certain place in Slovenia where they spend at least one night in a hotel or some other tourist accommodation. The tourist declares in which county they live.

The main purpose of the visit is why the foreign tourists came to Slovenia. Without that purpose there wouldnt be a certain journey. The reason of the visit can be personal (holidays, leisure, recreation, visiting friends and relatives, health care, education, sport training camps, competition, culture) or business (sent by the company to a business meeting, conference, seminar, fair) or the tourist was only passing through Slovenia (transit).

7 EXPLANATIONS

7.1 CLASSIFICATIONS

Type of tourist municipality. According to statistical criteria, municipalities are classified into the following types:

- Health (spa) resorts are municipalities where the health resorts are located that have fulfilled the strict conditions required for inclusion in the national health care system
- Mountain resorts are municipalities located in the area of Alps (Julijske Alpe, Kamniško-Savinjske Alpe and Karavanke) or in the area of Pohorje
- Seaside resorts are municipalities located along the sea coast
- The Slovenian capital, Ljubljana
- Urban municipalities
- Other municipalities are all those municipalities not falling within any of the above groups

In this survey we merged the last two types.

7.2 DATA PROCESSING

DATA EDITING

Data were statistically edited with the combination of systematic corrections, individual corrections and imputation procedures. We used the logic imputation method, the hot-deck imputation method and the hot-deck imputation method with adjustment for the value of the matching variable.

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

WEIGHTING

With weighting we want to achieve representativeness of the sample, so that the weighted data give us as good population estimates as possible.

Weighting of data collected with the survey is done in several steps:

- weighting due to unequal probability of selection of foreign tourists
- weighting due to non-cooperation of accommodation establishments and due to non-response of tourists in the establishment and
- data calibration to the population data. Calibration is done in view of the type of accommodation establishment, the type of resort and the country of residence of interviewed persons. Since 2021 in the process of weighting data are calibrated to the population data also according to the number of overnight stays at the place of the interview.

Because in the time between sample preparation and implementation of the survey re-categorization and changes in types of tourist accommodations may appear, the data by type of establishment may be slightly different than the data of monthly accommodation statistics.

SEASONAL ADJUSTMENT

Seasonal adjustment was not performed.

7.3 INDICES

Indices are not published.

7.4 PRECISION

In statistical surveys different kinds of errors can occur (e.g. sampling error, non-response error, measurement error) influencing the accuracy of the statistical results. Errors deriving from the random mechanisms determine the precision of the statistical estimates. The Statistical Office of the Republic of Slovenia draws attention to less precise estimates by flagging them with a

special sign or by not publishing them at all.

In the tables that contain estimated number of units with the certain characteristics, publishing limitations are determined according to the estimated standard errors. In the tables that contain estimated population totals of (continuous) variables, estimated averages of continuous variables or estimated ratios of population totals of (continuous) variables, publishing limitations are determined by the relative standard errors or the coefficients of variation (CV). In such cases it holds:

If the coefficient of variation (CV) of the estimate is

- 10% or below ($CV \leq 10\%$), the estimate is of acceptable precision and is published without limitations;
- in the interval from 10% and up to 30% ($10\% < CV \leq 30\%$), the estimate is less precise and is flagged for caution with letter M;
- over 30% ($CV > 30\%$), the estimate is too imprecise to be published and therefore suppressed for use by letter N.

In estimating the number of units with a certain characteristic or proportions of units with a certain characteristic (expressed with values between 0 and 1), publishing limitations are determined by the standard errors of the estimates (SE) of the proportions. In such cases it holds: if the standard error (SE) of the estimate of a proportion is

- 0.05 or below ($SE \leq 0.05$), the estimate is reliable enough and therefore published without limitations;
- between 0.05 and up to 0.15 ($0.05 < SE \leq 0.15$), the estimate is less reliable and is flagged for caution with letter M (written as superscript: ^M);
- over 0.15 ($SE > 0.15$), the estimate is too unreliable to be published and therefore suppressed for use by letter N.

7.5 OTHER EXPLANATIONS

Totals are not always accurate due to rounding.

Calculation of average daily expenditure for missing months and annual estimates

For the average daily expenditure of foreign tourists accommodated in hotels in Slovenia, the Statistical Office of the Republic of Slovenia calculated and published estimates of average daily expenditure by individual months, and the annual estimate of average daily expenditure for 2019. Due to covid-19 epidemic the interviewing of foreign tourists in 2021 began in the summer season and consequently lasted until spring in 2022, the annual estimates of average daily expenditures refer to June 2021–May 2022 period.

Calculation of average daily expenditure for missing months

Because in 2019 the interview was conducted only in selected two-month periods (April–May 2019, July–August 2019, September–October 2019, December 2019–January 2020), we estimated the average daily expenditure for

the missing months. In the years 2021–2022 we estimated the average daily expenditures for June 2021, November 2021, February 2022 and March 2022.

Based on the interview microdata for the year 2019, we modelled the impact of selected variables on the daily expenditure of tourists. We used the variables gender, age, nationality of the tourist, categorization of hotel accommodation (number of stars), type of municipality in which the foreign tourist is accommodated and number of overnight stays. In 2021-2022 we estimated average daily expenditures for the missing months using average daily expenditures for representative months by type of municipality and categorization and poststratified them according to data from the survey on tourist arrivals and overnight stays for the missing months. We selected a representative period for each estimated month. For the assessment of January 2019, we took interview data on average daily expenditure for January 2020, reduced them by the annual inflation rate (2%) and took this as the final assessment. For February 2019, we used interview data from December 2019 and January 2020 (winter season), which we also reduced by the annual inflation rate (2%). We used April and May 2019 (spring season) to estimate the data for March, July and August 2019 (summer season) for the June estimate, and September and October 2019 (autumn season) for the November estimate. In 2021–2022 we used July and August 2021 (summer season) for the June 2021 estimate, September and October 2021 (autumn season) for the November 2021 estimate, December 2021 and January 2022 (winter season) for February 2022 estimate and April and May 2022 (spring season) to estimate the data for March 2022.

The impact of selected variables on the average daily expenditure was in 2019 modelled with a linear regression model on data for a representative period. Model estimates of average daily expenditure were calculated for all combinations of variables, which were then post-stratified according to the number of overnight stays from the survey on tourist arrivals and overnight stays. In 2021 data were not modelled, only post-stratified according to the categorization and type of municipality.

The structure of daily expenditure for imputed months is the same as the structure of the representative period.

Calculation of annual estimates

The annual structure of expenditure is calculated on a basis of average monthly expenditure, the number of monthly overnight stays (from the survey on tourist arrivals and overnight stays) and the structure of expenditure by individual categories of the structure (e.g. food, accommodation, other purchases, gambling, health services) on a monthly basis. These component values are summed up on an annual basis and divided by the value of the total expenditure of foreign tourists staying in hotels.

The average annual expenditure was calculated separately by variables: categorization of accommodation (number of stars of the hotel), type of municipality and the country of arrival of the tourist. Estimates of expenditure by variable are taken for representative periods from the collected interview microdata and multiplied by the number of overnight stays from the survey on tourist arrivals and overnight stays in Slovenia. The number of overnight stays from the survey on tourist arrivals and overnight stays is also multiplied by the

estimates of daily expenditure for the imputed months. The value of expenditure at the annual level, separated by variables, is then divided by the number of overnight stays from the survey on tourist arrivals and overnight stays by annual level.

8 PUBLISHING

- SiStat Database: [Tourism](#) – Foreign tourists and travellers – Foreign tourists in Slovenia. Data are published as absolute numbers, shares and average values.
- First Release: Tourism, Foreign tourists and travellers: »Foreign tourists and their expenditures, Slovenia, April–May – provisional data«.
- First Release: Tourism, Foreign tourists and travellers: »Foreign tourists and their expenditures, Slovenia, July–August – provisional data«.
- First Release: Tourism, Foreign tourists and travellers: »Foreign tourists and their expenditures, Slovenia, September–October – provisional data«.
- First Release: Tourism, Foreign tourists and travellers: »Foreign tourists and their expenditures, Slovenia, December–January – provisional data«.
- Before 2019: First Release: Tourism, Foreign tourists and travellers: »Foreign tourists and their expenditures, Slovenia, multiannual – for selected periods«.

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

Provisional and final data are published. Provisional data are published 5.5 months after the reference period. Final data are published 8 months after the last reference period observed.

Due to the needs of users for timely information, we publish provisional data that meet the quality criteria of official statistics, even if they do not reach the quality that can be achieved with more complete and accurate reporting. We revise the data because newer, more complete or higher quality data can be a significantly better basis for quality decisions.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

Since 1994, the questionnaire has been slightly amended and supplemented with each survey. Some statistics remained the same, others changed, questions were added and deleted. The comparability was also influenced by the slightly different reference periods valid for each implementation.

Foreign tourists were interviewed in hotels and camps, whereas only in 1994 and 1997 was the survey conducted also in tourist offices and agencies that rent out rooms.

In 2009, the methodology for calculating average daily expenditure was changed, so the data from 2009 on are not fully comparable with the data from previous years.

In 2021, we changed the methodology of calculating average daily expenditure of foreign tourists in Slovenia. Therefore, the data on average daily expenditure for selected periods of 2021–2022 are not completely comparable with the data of previous years.

10 OTHER METHODOLOGICAL MATERIALS

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

- Questionnaire:
 - Survey on Foreign Tourists (TU-TURISTI)
Theme: Tourism, Subtheme: Foreign tourists and travellers
- Quality report for the survey:
 - Survey on Foreign Tourists (TU-TURISTI)
Theme: Tourism, Subtheme: Foreign tourists and travellers