‘Tourism industries and employment: Main concepts, definitions, data sources and variables’

Dr. Nagore Uresandi Espinosa
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• Key concepts, definitions and classifications
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Tourism industries also sell services to non-visitors so not all employment is attributable to tourism.
Differentiating Employment in the Tourism Industries

Dr. Nagore Uresandi Espinosa
Employment in tourism industries refers to all jobs (or persons employed) providing tourism and non-tourism services in all tourism industry establishments.

IRTS, 2008.
Employment in tourism industries

Direct tourism employment in tourism industries

Direct tourism employment (jobs that can be attributed to tourism spending in tourism and non-tourism industries)

Total employment in the economy
Employment in tourism

Tourism employment can be measured as:
1. direct tourism employment
2. and as direct tourism employment in tourism industries.

1. The first measures jobs in tourism industries that can be attributed to tourism spending plus jobs in non-tourism industries that can be directly attributed to tourism spending.

2. The second refers to the jobs that can be attributed to tourism spending in the tourism industries.

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Jobs in tourism industries versus jobs due directly to tourism, 1997-2012: example of Canada
FOCUS ON:

Measuring employment in the tourism industries
Key Concepts

EMPLOYED PERSON – JOB(s)
EMPLOYMENT
PAID EMPLOYMENT
SELF-EMPLOYMENT
EMPLOYEES
EMPLOYERS
OWN ACCOUNT WORKERS
CASUAL EMPLOYEES
WORKERS IN SHORT-TERM EMPLOYMENT
WORKERS IN SEASONAL EMPLOYMENT
OUTWORKERS
# Key Concepts

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<th>Observation units</th>
<th>Main related characteristics</th>
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<td>Classes (Overnight visitor-tourist-/same-day visitor-excursionist)</td>
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<td>Travel party</td>
<td>Country of residence / regions</td>
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<td></td>
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<td>Trip</td>
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<td>Main purpose</td>
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<td>Modes of transport</td>
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<td>Types of accommodation used</td>
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<td>Tourism industries</td>
<td>Establishment</td>
<td>Monetary</td>
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<td>Output</td>
</tr>
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<td>Intermediate consumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gross value added</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compensation of employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gross Fixed Capital Formation</td>
</tr>
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<td></td>
<td></td>
<td>Non-monetary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-monetary characteristics specific to each tourism industry</td>
</tr>
<tr>
<td>Employment</td>
<td>Establishment (in the tourism industries)</td>
<td>Persons</td>
</tr>
<tr>
<td></td>
<td>Households</td>
<td>Size</td>
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<tr>
<td></td>
<td></td>
<td>Status in employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jobs</td>
</tr>
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<td></td>
<td></td>
<td>Duration of work</td>
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<td></td>
<td></td>
<td>Full-time equivalent jobs</td>
</tr>
</tbody>
</table>
**Key Concepts**

**EMPLOYED PERSON**

The category **employed person** in the tourism industries can be:

- employees (individuals who work for a company in exchange for remuneration in cash or in kind as agreed upon)

- or self-employed (own-account workers who have the type of work defined as "self-employment" and have not continuously employed any "employees" during the reference period).
EMPLOYEE
All those workers who hold the type of jobs defined as “paid employment”. There is an agreement, which can be either formal or informal, between an enterprise and a person, whereby the person works for the enterprise in return for remuneration in cash or in kind. Employees with stable contracts are those “employees” who have had, and continue to have, an explicit (written or oral) or implicit contract of employment, or a succession of such contracts, with the same employer on a continuous basis. “On a continuous basis” implies a period of employment, which is longer than a specified minimum determined according to national circumstances. (If interruptions are allowed in this minimum period, their maximum duration should also be determined according to national circumstances). Regular employees are those “employees with stable contracts” for whom the employing organization is responsible for payment of relevant taxes and social security contributions and/or where the contractual relationship is subject to national labor legislation.
Key Concepts

SELF EMPLOYMENT

(self employment jobs) are those jobs where the remuneration is directly dependent on the profits (or the potential of profits) derived from the goods and services produced.
EMPLOYERS are those workers who, working on their own account or with one or a few partners, hold the type of job defined as a “self-employment job” and, in this capacity, on a continuous basis (including the reference period) have engaged one or more persons to work for them in their business as “employee(s)”. 
OWN-ACCOUNT WORKERS
those workers who, working on their own account or with one or more partners, hold the type of job defined as a “self-employment job”, and have not engaged on a continuous basis any “employees” to work for them during the reference period. It should be noted that during the reference period the members of this group might have engaged “employees”, provided that this is on a non-continuous basis. (The partners may or may not be members of the same family or household.)
Some employed persons may have more than one job; as a consequence, the number of jobs (demand side) and the number of persons employed (supply side) are not similar categories and therefore usually do not match.
Single versus multiple job holders in the tourism industries

Persons employed in the tourism industries (all jobs) = 1, 3, 4a
Persons employed in the tourism industries (main job) = 1, 3
Jobs in the tourism industries = 1, 3, 3a, 4a

IRTS, 2008: 63
Employment in the tourism industries: basic categories of employed persons

Persons employed persons in tourism industry

In paid employment
- At work for wage or salary in cash or in kind
- With a job not at work

Employees
Also the following particular groups are included: casual workers, workers in short-time employment, workers in seasonal employment, outworkers

In self-employment
- At work for profit or family gain in cash or in kind
- With an enterprise but not at work

Employers, own-account workers, members of producers’ cooperatives, contributing family members.
Also the following particular groups are included: casual workers, workers in short-time employment, workers in seasonal employment, outworkers

IRTS, 2008: 65
Relationship between different measures of tourism employment in a given period

**KEY CONCEPTS**

IRTS, 2008: 66
The intensity of work may vary from job to job, industry to industry and from period to period. Jobs may differ by working time of persons employed and therefore be expressed in terms of full- or part-time jobs. For this reason, it is not sufficient to have data on the number of jobs or persons employed in order to obtain information on the volume of labour performed during a specified period of time (for example, a month or a year). Data on the total number of working hours will be required. Finally, if all jobs are converted into full-time equivalent employment or annual total hours worked, the total volume of labour of a given tourism industry for a given period can be obtained.
Full-time equivalent employment (FTE)

It is a unit for measuring employed persons so that they are comparable even if they work or study a different number of hours per week.

The unit is obtained by comparing the average number of hours worked by employed persons with the average number of hours of a full-time worker. Therefore, a full-time person is counted as a FTE, while a part-time worker is scored in proportion to the hours worked.

For example, a part-time worker employed for 20 hours per week when the full-time job consists of 40 hours, is counted as 0.5 FTE.
The figures on "number of jobs by employment status" and "number of full-time equivalent jobs by employment status" should refer to tourism industries.
To summarise, employment in the tourism industries, depending on the needs of the users, can be expressed in terms of:

- Number of persons;
- Number of jobs (full time/part time);
- Number of hours worked;
- Full-time equivalent employment.

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It is recommended that countries collect the following key variables for each tourism industry identified in chapter 6 above and for tourism industries as a whole:

- Employment by age group, gender and nationality/country of residence (if applicable);
- Employment by type of establishment (size, formal, informal, etc.);
- Employment classified by occupation and employment status;
- Permanent/temporary employment expressed in terms of the number of jobs, hours of work, full-time equivalent employment, etc;
- Employment by educational attainment;
- Working hours (normal/habitual, hours actually worked, paid); and
- Organisation of working time.

- Compensation of workers including wages and salaries payable in cash or in kind, and the value of social contributions payable by employers, for each industry and by categories of workers.
- Labour costs which, in addition to remuneration for work performed, include employers' costs of vocational training, welfare services and mixed costs that are not necessarily included in workers' remuneration, such as workers' transport costs, provision of work clothes and recruitment costs, as well as taxes considered as labour costs.
- Mixed income of the self-employed.
It is recommended that data collection on employment in tourism industries should be integrated into a regular national statistical system. To achieve better coverage and to obtain more detailed characteristics of persons employed in tourism, countries should, to the extent possible, use the following main groups of data collection sources:
It is recommended

1. Measuring labour demand: establishment-level data: establishment censuses and establishment-based sample surveys;
2. Measuring labour supply: household-level data: population censuses and household-based sample surveys; and
3. Administrative records, such as: employment office registers; social security files; unemployment insurance records; labour inspection records; tax records, etc.

PhD. Nagore Uresandi Espinosa

ILO & UNWTO, 2014: 40
A special mention should be made of the National Accounts as the major synthetic data source used to produce **TSA table 7 Employment in the Tourism Industries**. The employment data from the National Accounts form the basis for the final results of table 7 (e.g. employment full-time equivalents). It is used for extrapolating structural information (breakdown by sex, according to ISIC or NACE19, at a 2-digit-level) from other sources to ensure compatibility with the Tourism Satellite Account.

Statistical classification of economic activities in the European Community (NACE)
the International Standard Industrial Classification of All Economic Activities (ISIC)

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ILO & UNWTO, 2014: 40
### Table 7

**Employment in the tourism industries**

<table>
<thead>
<tr>
<th>Tourism industries</th>
<th>Number of establishments</th>
<th>Employees</th>
<th></th>
<th></th>
<th>Self-employed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Accommodation for visitors</td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1.a. Accommodation services for visitors other than 1.b</td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1.b. Accommodation services associated with all types of vacation home ownership</td>
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</tr>
<tr>
<td>2. Food- and beverage-serving industry</td>
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<tr>
<td>3. Railways passenger transport</td>
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<td></td>
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<tr>
<td>4. Road passenger transport</td>
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<tr>
<td>5. Water passenger transport</td>
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<tr>
<td>6. Air passenger transport</td>
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<td></td>
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<tr>
<td>7. Transport equipment rental</td>
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<td></td>
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<tr>
<td>8. Travel agencies and other reservation services industry</td>
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<td></td>
<td></td>
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<tr>
<td>9. Cultural industry</td>
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<tr>
<td>10. Sports and recreational industry</td>
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<td></td>
<td></td>
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<tr>
<td>11. Retail trade of country-specific tourism characteristic goods</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>12. Country specific tourism industries</td>
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<tr>
<td>Total</td>
<td></td>
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</tr>
</tbody>
</table>

*Number of jobs by status in employment *)
### Employment in the tourism industries

<table>
<thead>
<tr>
<th>Tourism industries</th>
<th>Number of hours worked by status in employment (*)</th>
<th>Number of full-time equivalent jobs by status in employment (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
<td>Self-employed</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>1. Accommodation for visitors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.a. Accommodation services for visitors other than 1.b</td>
<td></td>
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<tr>
<td>1.b. Accommodation services associated with all types of vacation home ownership</td>
<td></td>
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<tr>
<td>2. Food-and beverage-serving industry</td>
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<tr>
<td>3. Railways passenger transport</td>
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<td>5. Water passenger transport</td>
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<td>6. Air passenger transport</td>
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<td>7. Transport equipment rental</td>
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<td>8. Travel agencies and other reservation services industry</td>
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<td>9. Cultural industry</td>
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<tr>
<td>10. Sports and recreational industry</td>
<td></td>
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<tr>
<td>11. Retail trade of country-specific tourism characteristic goods</td>
<td></td>
<td></td>
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<tr>
<td>12. Country specific tourism industries</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td></td>
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</tbody>
</table>

(*) In the reference period.
Establishment Surveys

From a data collection point of view, establishment-based sample surveys have some advantage over other sources of statistics on jobs, persons employed, earnings, wages and hours of work on a current basis and at frequent intervals.

Firstly, establishments, which hire and pay workers, are best placed to provide detailed information on jobs, employment, wages paid, hours worked, labour cost, etc. Secondly, establishments can be easily identified by type of economic activity and geographical location. Therefore, when the focus is on specific industries, as in the case of tourism industries, establishment surveys, given an appropriate sampling frame, can provide an in-depth picture of the target industries.

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ILO & UNWTO, 2014: 40
Establishment Surveys

All these multiple topics are covered by a variety of establishment surveys, each designed to obtain specific information such as production; export; employment, average earnings and hours of work; occupational employment and wage structure; labour cost; job vacancies, hiring and firing practices; skill level; future employment prospects.

Notably, as informal establishments are not covered by conventional establishment surveys, employment in the informal sector is measured with specially designed informal sector surveys.

However, an establishment survey counts each employee, whether full- or part-time, regular or casual, as one person employed, which results on double counting through the enumeration of some individuals in more than one job or in more than one establishment. Measurement errors in the data on a single large establishment may have a substantial effect on total findings.

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ILO & UNWTO, 2014: 40
Establishment Surveys

Reliable, up-to-date economic censuses and business registers are critical to build a representative sample that does not only take into account large enterprises.

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ILO & UNWTO, 2014: 40
In addition to investigating such topics as household demographic, social characteristics and educational characteristics, population censuses also collect data on the following economic characteristic of the population: activity status, occupation, industry, status in employment and, in addition, may be specially designed to capture time worked, income, employment in the informal sector and the like.

Census is also a source for information on previous job, if unemployed or out of the labour force at the time of the observation. This is useful for analyses of persons who formerly had a job in the tourism sector.

Further, it is a source of valuable information on individual’s nationality, ethnicity and immigration status, where appropriate. It should be noted that in case of tourism, the census information on the economic characteristics of the population classified by occupation, industry, status in employment and educational level is of particular usefulness and importance.
Household-based sample surveys are among the most flexible methods of data collection.

In theory almost any population-based subject can be investigated through household surveys.

In sample surveys part of the population is selected from which observations are made or data are collected and then inferences are made to the whole population.

Because in sample surveys there are smaller workloads for interviewers and a longer time period assigned to data collection, most subject matter can be covered in greater detail than in censuses.

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Household labour force sample survey

Household labour force sample survey is an important data source that can in principle cover the entire population of a country, all industries, and all categories of workers, including the self-employed and casual workers. It can also capture work performed in both formal and informal sectors, as well as informal employment.

because of tourism activities usually are not evenly distributed across the country geographically, and because they usually constitute a small proportion of the national economy a household survey may reflect a relatively small number of cases of employment in the tourism industries unless the sampling plan has been designed to compensate form this.

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ILO & UNWTO, 2014: 42
Statistics based on administrative records (such as social security files, tax reports, employment reports) are usually by-products of administrative processes. They are often based on continuous operations, and can therefore be a useful source of flow statistics and other longitudinal data.

Direct use of individual administrative records by statistical agencies has been growing rapidly during the past two decades. One of the advantages of statistics collected from various administrative sources is that their maintenance is much cheaper than any of the above-mentioned statistical observations. Also, statistics from administrative source are not subject to sampling error and hence, unlike LFS, provide accurate information for local areas.

A principal distinction between the use of administrative records, as opposed statistical data from statistical sources, is the degree to which a statistician is in control of the design and collection of the records. In their majority, administrative records are initially designed with little or no thought about their possible statistical use. The coverage rules, content, reference periods, concepts, and definitions reflect the administrative system which exists in a given country.
Problems that affect the nature of administrative records and their applications, and that can limit their value, fall into the following categories:

- Quality of data themselves: the accuracy, with which the entities in question are counted, processed and reported;
- Incongruity of concepts, definitions used and the content of administrative records per se within and across countries (question of cross-country comparability);
- Scope and coverage: in most cases administrative records do not refer to the total working age population and do not cover persons employed in the informal sector or person occupying informal jobs (undercount and various types of biases);
- Confidentiality of information registered on individual records (limitations on use imposed by national legislation vary from one country to another); and
- Access, particularly, when registers are kept outside the NSO.

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ILO & UNWTO, 2014: 42
EXAMPLES OF COUNTRIES
The *TSA Employment Module of Austria* represents an approach to draw a more comprehensive picture of the tourism industry impact on the labour market, considering *tourism characteristic industries*. In order to get a better idea about the composition of employment, a *supply-side approach* is mainly used which is adjusted using *demand related data* (TSA tourism ratios). The methodological basis of the Austrian measurement mainly refers – apart from the TSA:RMF – to the *OECD Manual on Tourism Satellite Account and Employment* (2000). In the Austrian TSA Employment Module the figures are displayed according to two concepts encompassed in the *System of National Accounts*, “*number of jobs*” and “*full-time-equivalents*” (FTE). The main data source used is the *employment-related data* from the National Account statistics. In order to maintain consistency with the Austrian TSA results, these figures form the Austria Manufacturing basis for the extrapolation of structural data classified by sex and according to NACE (Rev. 2) at 4-digit-levels. The data are mainly derived from the most recent results of the *Austrian Labour Force Survey*, *Statistics and Services Survey*, *the Economic Census* and *cultural statistics*. In addition, *relevant administrative data* are also used.²
2 Entidades involucradas:
• Institute of Geography and Statistics of Brazil – IBGE
• Institute of Applied Economic Research (IPEA)

The IBGE is responsible for the development of a Tourism Satellite Account of Brazil, which interlinks macroeconomic aggregates of the tourism characteristics activities/industries – value added, number of jobs, total paid income and consumption of tourism characteristic products by families. The collection of this structural information is carried out annually.

The IPEA measure both tourism employment in the tourism industries and employment in the tourism industries. The measurement of employment in the tourism industries is straightforward, whereas measuring tourism employment in the tourism industries requires data from a special telemarketing survey conducted by the IPEA. It should be emphasized that the IPEA focuses mainly on statistics of tourism employment in the tourism industries.
The IPEA, in partnership with the Ministry of Tourism, has developed an integrated Tourism Labour Market Information System (SIMT). The SIMT provides basic statistics and indicators on the importance and evolution of employment in tourism to support policy formulation for the sector. SIMT statistics are estimates of the formal and informal employment in the following seven tourism characteristic activities/industries (TCAs) in Brazil: accommodation services, food services, transport, auxiliary transport, travel agencies, rental transport, culture and leisure activities. In addition, it contains data on regions and states broken down by sex, age, education, occupations, compensation, size of establishment, length of service (job tenure) and some other employment relevant characteristics. The IPEA Telemarketing Survey, conducted through telephone interviews, yields a percentage share of tourists’ and residents’ monthly consumption by TCAs and by state. It is carried out once every five years. Findings of the survey are used to build coefficients of tourism services within the 7 TCAs.
In the first quarter of 2020, as a consequence of the declaration of the state of alarm (Royal Decree 463/2020 and 487/2020) motivated by the COVID-19 pandemic, the sample size of the first EPA interviews in weeks 11 to 13 has been lower than in other quarters, so the coefficients of variation of the most disaggregated estimates may be higher than usual. It is recommended to consult the INEbase tables related to said coefficients of variation.
Tourism-related jobs according to EPA

In-house processing by Turespaña

Information on the number of active population, employed and unemployed, in economic activities relating to the tourism sector, based on data from the Labour Force Survey (EPA), conducted by the National Statistics Institute (INE) and the National Classification of Economic Activities (CNAE 2009).

Graphs over time

Employed in tourism-related activities

Average employed Q1 quarter
## Latest available data

<table>
<thead>
<tr>
<th></th>
<th>Q1 quarter 2022</th>
<th>% annual variance</th>
<th>Average from January</th>
<th>% Year to date variance of average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed (thousands)</td>
<td>2.428</td>
<td>16.83%</td>
<td>2.428</td>
<td>16.83%</td>
</tr>
<tr>
<td>Unemployed (thousands)</td>
<td>324</td>
<td>-23.16%</td>
<td>324</td>
<td>-23.16%</td>
</tr>
<tr>
<td>Unemployed over active population</td>
<td>11.8%</td>
<td>-30.20%</td>
<td>11.8%</td>
<td>-30.20%</td>
</tr>
</tbody>
</table>

## Download data

- Employed in tourism-related activities - Quarterly series from Q1 2009
- Unemployed in tourism-related activities - Quarterly series from Q1 2009
- Unemployed over active population in tourism-related activities - Quarterly series from Q1 2009