



Data sources – data processing

Developing National Systems of Tourism Statistics: Challenges and Good Practices
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Statistics of International Trade in Services Section



- **Collecting economic data**
- **Administrative data sources**
- **Statistical surveys**
 - **Census**
 - **Sample survey**

There are two basic mechanisms for collecting economic data:

(a) access to data already being collected for **administrative** purposes, and

(b) direct **survey** by the statistical office.

Administrative sources

- Administrative processes are set up in response to legislation and regulation. Each regulation results in a register of the institutional units – enterprises, persons, etc. – bound by that regulation and in data resulting from application of the regulation.
- The register and data are referred to collectively by the statistical office as an *administrative source*.

Administrative sources 2

Main advantages of the administrative source

- (a) **Complete coverage** of the population to which the administrative process applies and perceived to have negligible non-response;
- (b) Avoidance of **response burden**: the responding units make available the information as part of the administrative procedure;
- (c) **Cheaper** for the statistical office to acquire data from an administrative source than to conduct a survey (though in some cases processing of the same may be costlier);
- (d) **No sampling errors**; and
- (e) Data reported may be more accurate because of intense **data checks** by administrative authorities.

Administrative sources 3

Main disadvantages of the administrative source

- (a) **Discrepancy between administrative concepts and statistical concepts:** As the administrative processes are not under statistical office control concepts regarding variables and units in respect of data coverage, content, quality and consistency comply to the administrative objectives. This limits the use of administrative data for statistical estimation and analysis purposes;
- (b) **Poor integration with other data of the statistical systems** particularly when administrative units do not correspond to statistical units. Even if the variables existing in the administrative register perfectly fit to the needs of the statistical office, matching problem can prevent from using them;

Administrative sources 4

Main disadvantages of the administrative source

- (c) Risks with respect to stability: Administrative processes are **subject to change** in response to new legislation without much (or any) regard for the impact on the statistical series. This may cause systematic bias;
- (d) Even when the administrative authorities check data, they generally **focus on** the variables that are important to their **administrative processes**. They may not apply the same level of scrutiny to variables that are of statistical interest;
- (e) Data may become available with **unacceptable delay**;
- (f) Legal constraints (**access to data and confidentiality**).

- In order to make data from administrative sources more useful to statisticians, it is necessary to have a **harmonization** in concepts and classification system among different types of statistics.
- To achieve this, it is important that statisticians of different branches of the government **coordinate works in setting national statistical standards**.

Administrative data sources for tourism statistics:

- Border authority / immigrations data
 - Entry/departure cards
- Data from international transport / airlines
- Hotels and restaurants registrations
- Tax records / VAT returns
- Bank transactions records

Data gathered in the administrative sources are not sufficient to produce detailed tourism data so the required information shall be collected by the statistical office directly from the units concerned.

This could be done either by

- enumerating all the units in the population (census)
- or eliciting response only from few representative units scientifically (random) selected from the population (sample survey).

Census

The **census** approach, which covers the whole of population of statistical units in a subject matter, is obviously a time consuming and the resource intensive exercise and shall rather be used while collecting data from business units.

Sample survey

The weaknesses inherent in the administrative data in respects of concept and coverage of the statistical units and the target population are overcome in adopting the **sample survey** as the means for data collection because the planning, execution of the sample surveys, data collection and the processing procedures are under the control of the statistical office.

Survey data sources for tourism statistics:

- Enterprise survey
 - Accommodation survey
 - Travel agencies, tour operators
 - Hotels and restaurants
- Household survey
 - Holiday survey
 - Time use survey
- Visitor survey
 - At airports, hotels, tourist attractions etc.