

Sources of official statistics

Official statistics:

Official statistics are statistics published by government agencies or other public bodies such as international organizations as a public good. They provide quantitative or qualitative information on all major areas of citizens' lives, such as economic and social development, living conditions, health, education, and the environment. During the 15th and 16th centuries, statistics were a method for counting and listing populations and State resources. The term statistics comes from the New Latin statistical collegium (council of state) and refers to science of the state. According to the Organization for Economic Co-operation and Development, official statistics are statistics disseminated by the national statistical system, excepting those that are explicitly not to be official.

Governmental agencies at all levels, including municipal, county, and state administrations, may generate and disseminate official statistics. This broader possibility is accommodated by later definitions. For example: Almost every country in the world has one or more government agencies (usually national institutes) that supply decision-makers and other users including the general public and the research community with a continuing flow of information. This bulk of data is usually called official statistics. Official statistics should be objective and easily accessible and produced on a continuing basis so that official statistics result from the collection and processing of data into statistical information by a government institution or international organization. They are then disseminated to help users develop their knowledge about a particular topic or geographical area, make comparisons between countries or understand changes over time. Official statistics make information on economic and social development accessible to the public, allowing the impact of government policies to be assessed, thus improving accountability.

Statistical information produced, collated, and disseminated by national governments, their agencies, and the international bodies which link them. These data are almost invariably nationally representative, because they are obtained from complete censuses or very large-scale national sample surveys, and they usually seek to present definitive information conforming to international definitions and classifications or other well-established conventions. The impersonal character of official statistics, and their resistance to innovation, stand in sharp contrast to statistics and data-sets from other sources: academic research, market research, independent research institutes, commercial organizations, local, regional,

Official statistics used invariably to be published in large tomes and preserved in book and stat bodies. libraries as the definitive record. This method of dissemination underlined their inflexibility, forced the results of enquiries to be presented in a relatively small number of selective statistical indicators and indexes, and is disappearing rapidly with extensive use of information technology. In the 1990s and beyond, government statistical information is far more likely to be disseminated as computer tapes of anonym zed micro, as data subsets on diskette, or as specially compiled harmonized time-series on diskette with monthly updates sent through national and international computer networks or the telecommunications system. Instead of finding the statistics one needs in a printed volume, interested parties may now have to create and extract them from a diskette with built-in software, or dial into a national-user-service computer center from a desk-top terminal and extract the figures required from regularly updated databases. As yet, national governments have refused to pass legislation permitting large-scale data linkage between government agencies, and such a proposal would require a system of unique identity-card numbers (or other referencing system) for each person in the population, to be used from birth to death. Data protection policies currently impede such a development within the commercial sector also, although area-based social profiles are widely used in Western industrial societies. Until such time as massive government data-banks are permitted, the only information held by central government agencies is that supplied directly to them by citizens in response either to public enquiries, or to regulations that specify events to be formally recorded in public records and the like.

Almost all official statistics originally came from registers in which were recorded the details of specified events as and when they occurred: births, deaths, marriages, divorces, crimes, certain contagious diseases, and later modifiable diseases such as cancer, AIDS, and so on. Similar procedures are involved in administrative records of non-compulsory activities, such as claiming unemployment benefits. A decreasing proportion of data comes from these sorts of records. Their chief advantage is that they constitute complete censuses of the events in question, and are thus reliable, up-to-date, and cheap to use as sources of statistics. The obvious disadvantage is that only a fairly narrow range of information lends itself to being collected through such procedures. While the fact of a death may be easy to record, its cause may be more arguable; and other related factors are simply too complex to deal with in that way, however relevant. Certain statistics are still obtained from compulsory registrations and administrative records—for example hospital records of patient illnesses, police records of crime, and records of people claiming various types of social insurance benefits. But they are supplemented with, and increasingly replaced by, specially designed data collections:

compulsory censuses of population, housing, and employment, and voluntary interview surveys with national samples of the whole adult population or particular sections of it. Censuses are usually carried out only once a decade, and are supplemented by a range of regular surveys that provide statistical information on a quarterly basis, an annual basis, or at less frequent intervals. Most countries now have an annual multi-purpose household survey to collect social and economic data in the inter-censal decade. In Germany it is called the micro census and in the United States the Current Population Survey; in most other countries it is called the Labor Force Survey; and it collects a much wider range of information than the census it replaces. In addition there is a great variety of other data collections using survey methods with personal, postal, or telephone questionnaires to collect information of a kind that can be coded and quantified to produce statistics on a great range of matters: earnings and incomes; trade; illness, health, and usage of the medical services; housing, job change, and migration; household expenditure patterns; the Retail Price Index; national economic accounts; government expenditures; patterns of food consumption and nutrition; any experience as the victim of crime; leisure activities; travel patterns to work, for business, and for leisure; international travel, immigration, and emigration. In addition, there is a huge range of ad hoc sample surveys carried out by national governments on a wide variety of topics of public concern, sometimes on a once-off basis, sometimes with repeat surveys every five, ten, or twenty years.

The exact number and variety of regular and *ad hoc* national government-funded surveys varies in line with local needs and circumstances. In many cases they are funded and carried out jointly with other bodies, such as independent research institutes, international bodies, charitable foundations, or commercial organizations. The dividing-line between 'official' and 'non-official' statistics and data-sets is being eroded by the change of emphasis from public-sector records and registers, which are necessarily a government preserve, to interview surveys, which are available to all sectors of society, and may even be more successful if carried out by a non-governmental agency.

The goal of statistical organizations is to produce relevant, objective and accurate statistics to keep users well informed and assist good policy and decision-making.

Various categories:

The Fundamental Principles of Official Statistics were adopted in 1992 by the United Nations Economic Commission for Europe, and subsequently endorsed as a global standard by the United Nations Statistical Commission. According to the first Principle "Official statistics

provide an indispensable element in the information system of a democratic society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation.

The categorization of the domains of official statistics has been further developed in the Classification of Statistical Activities, endorsed by the Conference of European Statisticians and various other bodies.

Most common indicators used in official statistics:

Statistical indicators provide an overview of the social, demographic and economic structure of society. Moreover, these indicators facilitate comparisons between countries and regions.

✚ For population, the main indicators are:

- Total population
- Population density
- Population by age
- Life expectancy at birth and at age 65
- Foreign born
- Foreigners in population
- Total fertility rate
- Infant mortality

✚ The gender statistics include:

- Women in labor force
- Gender pay gap

✚ In the employment category:

- Employment rate
- Unemployment rate
- Youth unemployment rate
- Economic activity rate (women and men)
- Employment in major sectors: agriculture, industry, services

✚ There are many indicators for the economy:

- Gross Domestic Product
- Gross Domestic Product per capita
- Real GDP growth rate

- GDP by major economic sectors: agriculture, industry, services
- Consumer price index
- Purchasing Power Parity
- Exchange rate
- Gross external debt

 For trade indicators we find:

- Exports of goods and services
- Imports of goods and services
- Balance of payments
- Trade balance
- Major import partners
- Major export partners

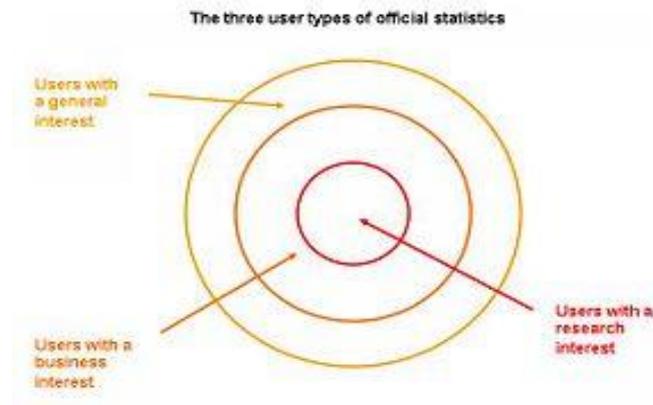
 Environment indicators:

- Land use
- Water supply and consumption
- Environmental protection expenditure
- Generation and treatment of waste
- Chemical use

 For the energy field:

- Total energy consumption
- Primary energy sources
- Energy consumption in transport
- Electricity consumption
- Consumption of renewable energy sources

Users:



The three user types of official statistics,

Official statistics are intended for a wide range of users including governments (central and local), research institutions, professional statisticians, journalists and the media, businesses, educational institutions and the general public. There are three types of users: those with a general interest, business interest or research interest. Each of these user groups has different needs for statistical information.

Users with a general interest:

Users with a general interest include the media, schools and the general public. They use official statistics in order to be informed on a particular topic, to observe trends within the society of a local area, country, region of the world.

Users with a business interest:

Users with a business interest include decision makers and users with a particular interest for which they want more detailed information. For them, official statistics are an important reference, providing information on the phenomena or circumstances their own work is focusing on. For instance, those users will take some official statistics into consideration before launching a product, or deciding on a specific policy or on a marketing strategy. As with the business interest users, this group does not usually have a good understanding of statistical methodologies, but they need more detailed information than the general users.

User with a research interest:

Users with a research interest are universities, consultants and government agencies. They generally understand something about statistical methodology and want to dig deeper into the facts and the statistical observations; they have an analytical purpose in inventing or explaining interrelations of causes and effects of different phenomena. In this field, official statistics are also used to assess a government's policies.

One common point for all these users is their need to be able to trust the official information. They need to be confident that the results published are authoritative and unbiased. Producers of official statistics must maintain a reputation of professionalism and independence.

The statistical system must be free from interference that could influence decisions on the choice of sources, methods used for data collection, the selection of results to be released as official, and the timing and form of dissemination. Statistical business processes should be transparent and follow international standards of good practice. Statistical programs are decided on an annual or multi-annual basis by governments in many countries. They also provide a way to judge the performance of the statistical system.