

Population and migration

19.11.2021 | | Počet zobrazení: null

Demography is the social science dealing with the study of reproduction of human populations. It focuses on all the demographic events and processes related to reproduction of human populations.

Demographic statistics deals with quantifying of demographic events and processes.

The system of demographic statistics in the SR based on monthly processing of data on demographic events drawn from the exhaustive population survey, regularly performed censuses of population and housing and supplementary population surveys (microcensuses); provides the decisive bulk of information on population as a whole, on its spatial distribution, number, structures, and characteristics in the specific period of time.

Demography is the social science dealing with the study of reproduction of human populations (gr. demos - people, grafein - describe)

The object of demography: human populations

Population (lat. populus - people) - the social formation encompassing human beings with individual qualities, living in a given geographic area or space, and the reproduction taking place among them.

The focus of demography: demographic events (phenomena) related to reproduction of human populations; demographic reproduction

The demographic event - a vital event directly related to human reproduction; an individual event in life of human being and for him/her is a real transition from one state to another; demographic events include: marriage, birth, abortion, death, divorce, change of address of residence

The demographic process - a process where demographic events are registered and monitored as collective phenomena. The demographic process is manifested by a demographic event; the demographic processes are: marriage rate, migration rate

The structure of demography:

1. Demographic statics (the number and structures of population);
2. Demographic dynamics (marriage, birth, abortion, death, divorce, change of the address of residence);
3. Demographic prognostics (projections, extrapolations.)

The methods of demography: research, statistics, analysis, projection, modelling

The branches of demography: historical demography, theoretical demography, mathematical demography, geodemography, regional demography, economic demography, demographic

methodology

The basic sources of demographic data: demographic reporting; population censuses; population registers

The prominents of the world demography:

- John Graunt (1620 -1674), Eng. - a founder of demography
- Edmund Halley (1656 -1742), Eng. - designed the first life tables
- Thomas Robert Malthus (1766 -1834), Eng. - stated a formal relationship between growth of food supply and population growth
- Adolphe Lambert Quételet (1796 - 1874), Belg. - set the rules of modern population censuses and founded the international statistical institute (1853)
- Achille Guillard (1799 -1876), Fr. - the first to use the term 'demography' for the science on population (1855), and he defined demography as a natural and social science on the human race
- Wilhelm Lexis (1837 -1914), Eng. - prepared the conception for calculation of the gross and net reproduction rates
- Axel Gustav Sundbarg (1857 -1917), Swed. - published the classification of populations' age structures (1900)
- Alfred James Lotka (1880 - 1949), Am. - constructed models of the stable population (in relation to reproduction rates)
- Antonín Boháč (1882 - 1950), Czech. - a founder demography in Czechoslovakia
- Louis Henry (1911 - 1991), Fr. - published manuals on demographic analysis, methods of population projections
- Ronald Pressat (1923), Fr. - dealt with the problems of demographic analysis
- Gary Stanley Becker (1930 - 2014), Am. - applied mathematical and economic models to demography
- Dirk van de Kaa (1933), Netherl.- evaluates recent demographic changes in Europe

The prominents of the Slovak demography:

- Matej Bel (1684 -1749) - a polymath, described Slovak districts paying special attention to local inhabitant's customs and way of life
- Samuel Timon (1675 -1736) - a polymath, a founder of the critical historiography
- Ján Čaplovič (1780 -1847) - described the problems of ethnic groups living in Slovakia
- Emil Stodola (1862 - 1945) - dealt with the problems of ethnic composition of municipalities
- Štefan Janšák (1886 - 1972) - studied population of Slovakia using the questionnaire method
- Alojz J.Chura (1899 - 1979) - analysed the demographic regression
- Ján Svetoň (1905 - 1966) - compiled demographic data of Slovakia from the 18th and 19th century data, and analysed the reasons and the extent of Slovak emigration

Demographic Statistics

- the oldest type of statistics
- the basic method of demography

Demographic statistics - a specialised activity for the collection and processing of quantitative population data

The object of demographic statistics: the individual (inhabitant)

The focus of demographic statistics: quantifying of demographic events and processes

The content of demographic statistics:

- the number of population (population on 1 January, midyear population, population on 31 December, population on the Census date)
- the structures of population (by sex, age, ethnic nationality, marital status)
- the population flow (marriage, divorce, birth, abortion, death, immigration, emigration)

The content of analytical demographic statistics:

- relative indicators, i.e. crude rates, specific rates, difference rates

Demography statistics along with regularly performed population and housing censuses and along with the system of supplementary population surveys (microcensuses) provides the decisive bulk of information on population as a whole, on its spatial distribution, numbers, structures and characteristics in the specific period of time.

I. DATA COLLECTION

Demography statistics is collected by way of statistical survey on population changes (vital events and migration) conducted each year by the Statistical Office of the SR by means of statistical reports OBYV 1-5/12.

The survey covers the whole population of the SR including the foreign citizens who have been granted the permanent residence permit in the SR. It is an exhaustive survey conducted under the Programme of National Statistical Surveys. The Programme of National Statistical Surveys is a legislative document imposing the reporting duty concerning all statistical surveys on reporting units according to § 18, Par. 3 of Act No. 540/2001 Coll. on State Statistics.

Demography statistics in the Slovak Republic covers the following demographic events: birth, marriage, divorce, change of address of permanent residence and death. The data are collected from the reporting units including municipal and city authorities in charge of keeping birth, marriage and death registers (i.e. registry offices), health institutions, competent courts, residence registration offices of municipal and city authorities, competent departments of the Ministry of Interior for foreigners. There is also a special register of the vital events that occurred to SR citizens abroad.

Demographic data are drawn from the following reports on demographic events for each SR

citizen as well as for each foreigner granted permanent residence permit in the Slovak Republic:

- OBYV 1-12 (Statistical Report on the Conclusion of Marriage)
- OBYV 2-12 (Statistical Report on Birth)
- OBYV 3-12 (Medical Report and the Statistical Report on Death)
- OBYV 4-12 (Statistical Report on Divorce)
- OBYV 5-12 (Statistical Report on Change of the Address of Permanent Residence/Report on Migration)

Statistics on marriages: the "Statistical Report on the Conclusion of Marriage (OBYV 1-12)" is the source of the data; registry offices are reporting units. The following information is collected:

- date of marriage
- personal data on groom and bride (birth number, marital status, highest level of completed education, ethnic nationality)
- address of permanent residence
- serial number of marriage
- for the divorced, or widowed date of divorce, or date of spouse's death

Statistics on births: the "Statistical Report on Birth (OBYV 2-12)" is the data source; registry offices are reporting units. Before sending the report to the Statistical Office, the registrar checks reliability and completeness of the data filled in by the health institution where the child was born. The following information is collected:

- personal data of child (date of birth, sex, citizenship at the time of birth)
- basic characteristics of birth (vitality, type of birth, birth weight, birth length, duration of pregnancy in weeks, serial number of the present birth, date of birth of the former child)
- details on child's parents (highest level of completed education, ethnic citizenship, address of permanent residence, date when the marriage was concluded)
- marital status of mother

Statistics on deaths: the "Medical Report and the Statistical Report on Death (OBYV 3-12)" is the source of the data; registry offices are reporting units. Before submitting the report to the Statistical Office, the registrar checks reliability and completeness of the data filled in by the medical doctor. Collected information includes:

- date of death
- personal data on the deceased (date of birth, address of permanent residence, sex, marital status, ethnic nationality, state citizenship)
- cause of death
- information on autopsy
- details on children deceased under 1 year of age (duration of life, location of death, birth weight, whether father of child was husband of the child's mother)

Statistics on divorces: the "Statistical Report on Divorce (OBYV 4-12)" is the source of the data; district (regional) courts are reporting units. The following information are covered:

- date of concluding the marriage
- number of living children born in wedlock (from which minor children)
- spouses' latest common address
- highest level of completed education
- ethnic nationality
- serial number of divorce
- cause of the marriage breakdown
- data on court procedures (items are defined by the Ministry of Interior and include type of divorce application, results of proceedings, grounds for dismissal of divorce application, appeal against court's decision, etc.)

Statistics on change of the address of permanent residence: the "Statistical Report on Change of the Address of Permanent Residence/Report on Migration (OBYV 5-12)" is the source of the data, and municipal and city authorities and competent departments of the Ministry of Interior for foreigners, are reporting units. The following data are collected:

- details on the person who has changed her/his address of permanent residence (date of birth, sex, marital status, highest level of completed education, ethnic nationality, citizenship)
- date when the person was registered on residence
- reason for move
- address of the former and of the new permanent residence, or country of departure and country of arrival

From 1958, demography statistics includes also data on spontaneous and induced abortions. The data are drawn from the information system of the Ministry of Health. The National Health Information Centre under the Ministry of Health produces the abortion data by means of processing the form "Application for Abortion and the Report on Abortion".

II. DATA PROCESSING

Processing of demographic data is performed under the integrated statistical information system (ISIS) encompassing the following three databases: the source database, the production database and the public database. The source database is loaded with primary data, the production database with outputs from primary data processing, and the public database is opened to external users, e.g. bodies co-operating with the Statistical Office of the SR, such as the Ministry of Health, the Ministry of Interior and the Ministry of Justice.

The data processing has the following phases:

- recording and checking data from the OBYV 1-5/12 reports
- loading data into the source database
- processing outputs for the production database
- production of output tables and of other aggregates

Demography statistics is processed continually, separately for each month and for the whole

year.

Data on population change are processed in monthly statistical processing, and, as a result, the following outputs are available:

- statistics on population change (basic absolute and relative indicators, population growth and population numbers by sex for a given period)
- tables on individual demographic events (statistics on marriages, divorces, births, abortions, deaths and the change of permanent residence)
- specific age-related indicators for concerned persons (e.g. fiancés, mothers of the new live-born, the dead, divorced couples, females who have undergone abortion, etc.)

In case of delays in administrative registration of individual demographic events with registry offices, or with other reporting units such as residence registration offices or district courts, an undesirable gap between the date where a demographic event took place *de facto* and the period of its statistical processing can arise. Therefore, the population number on 30 June of a given year (i.e. mid-year population) calculated by using monthly results of statistical processing is the preliminary data, and so are the relative data calculated from the preliminary data on mid-year population. On the other hand, data aggregates (quantitative data) for the whole year (e.g. total number of marriages, births, deaths) are the definitive data.

The definitive data on mid-year population is calculated by using annual results of statistical processing at the end of year that is performed for compilation of the population's age structure (the balancing method). The annual results include the numbers of all demographic events processed and assorted already by date where they took place *de facto* (i.e. all the events that took place really till 30 June of a given year).

The definitive data on mid-year population is used for calculation of definitive relative indicators in a detailed territorial structure.

Concerning annual statistical processing, 'annual files' are produced by aggregation of 'monthly files'. The annual files are used for:

- balancing population change (by sex, year of birth, territory where the person was born, marital status and ethnic nationality)
- producing aggregated table files for the presentation and publication purposes (e.g. the age structure of the population)
- producing a file of combining tables (the demographic source book)
- producing special outputs such as life tables, marriage tables, etc.

III. SUPPLYING AND PRESENTATION OF DATA

The following outputs are available as a result of monthly statistical processing: aggregated data for quarter of year, for six months and for the whole year (basic data on marriages, births, deaths, infant deaths under 1 year of age and population numbers are supplied for the UN Bulletin each month) and:

- preliminary population numbers by sex for the SR and for its regions, districts, cities
- preliminary results for individual files (i.e. marriages, divorces, births, abortions, deaths, changes of permanent address) for the SR and for its districts in absolute and relative figures
- statistics on population change for the SR and for its regions, districts, cities

The following outputs are published as a result of annual data processing:

- definitive data on population change for the SR and for its districts, cities in absolute and relative figures
- the number and the structure of population by ethnic nationality for the SR and for its regions, districts
- the age structure of SR population by sex, marital status and by ethnic nationality for the SR
- outputs of balancing population change by sex for the SR and for its regions, districts, municipalities (new live births, deaths, natural increase, immigrants, emigrants, migration increase, total increase, population on 1 January, mid-year population, population on 31 December)
- the age structure of SR population by sex for the SR and for its regions, districts

In addition to the abovementioned publications, the outputs of demographic statistics such as the basic tendencies of population change and migration are presented also on regular press conferences.

The quarterly journal 'Slovak Statistics and Demography' is devoted to specific theoretical and methodological issues as well as problems of population and housing census and results of other censuses. It also contains analyses of the population structure and of population development from different points of view. Various demographic characteristics are also included, and interrelations amongst development of population, employment, education and health care are highlighted in the journal.

Another forum for the data presentation are demographic conferences held by the 'Slovak Statistical and Demographic Association' once in two years.

IV. POPULATION PROGNoses

The projections of population development and of households development are prepared irregularly, upon the requests of the SR government and of other central bodies. The projections are calculated for the SR as a whole and for its territorial units.

In co-operation with the Demographic Research Centre, the Statistical Office of the SR has prepared new projections of population development and of households development, each processed for the whole SR and for its regions with the upper time limit represented by the year 2025. The new projections for the whole SR have been calculated using the population number by sex and by age on 31 December 2001 already after taking into account results of the Population and Housing Census carried out on 26 May 2001.

The new projections of population development for the whole SR have been processed in three alternatives (the low, the middle and the high one), each based on a specific scenario of development of reproduction indicators and migration. The scenarios were designed by combination of fertility, mortality and migration rates.

The new projections of population development for SR regions up to the year 2025 has been processed for each individual region of the SR and for each individual year of the period concerned. The projections was calculated by using the population number and the population age structure of each region on 31 December 2002. Development scenarios were designed for each individual region by combining development alternatives of fertility, mortality and migration rates till 2025.

The projections of households development for the SR as a whole and for its regions with the upper time limit represented by the year 2025 were processed in a similar way.

V. INTERNATIONAL COMPARABILITY

In order to achieve comparability of demographic indicators within the European Statistical System, the data are processed for the national (NUTS 1), the regional (NUTS 2 and NUTS 3) and the local (LAU 1 and LAU 2) levels. For the purposes of countries designation and for the purposes of processing data on international migration, the country-code list after the international standard ISO 3166-93 is used. Data on causes of death are processed after the 10th International Classification of Diseases and Related Health Problems (ICD - 10).

Demographic outputs of data processing from the monthly population survey covering the total SR population provide reliable population data, therefore, it is not necessary to calculate population estimates or estimates of individual demographic characteristics for the Slovak Republic.

VI. STATISTICS ON FOREIGN MIGRATION

Statistics on Foreign Migration - legal migration, resulting from the Regulation (EC) No. 862/2007 of the European Parliament and of the Council on Community statistics on migration and international protection (hereinafter the "Regulation on statistics on migration"), from the Article 3, "Statistics on international migration, usually resident population and acquisition of citizenship".

The Statistical Office of the SR is the national contact point for the processing and supply of the aforementioned migration statistics. For the international purposes and to meet requirements of the Regulation on statistics on migration, the Statistical Office of the SR uses information on migration of the citizens of the Slovak Republic. Information on migration of foreigners is drawn from the information system "Registration of Foreigners" of the Bureau of Border and Aliens Police of the Presidium of the Police Force. Since the year 2003, the Statistical Office of the SR and the Bureau of Border and Aliens Police of the Presidium of the Police Force have cooperated on the development and implementation in practice of the Regulation on statistics

on migration. Regarding the terminology and fulfilling requirements of the Article 3 of the Regulation on statistics on migration, -legal migration-means persons' entry to the territory of the SR, stay in the territory of the SR and departure from the territory of the SR under condition of meeting international agreements and lawful orders of the SR. The conditions for foreigners' entry to, stay on and departure from the territory of the SR are laid down in Act No. 48/2002 Coll. on Stay of Aliens as amended. Under the Act "foreigner" means any person who is not a citizen of the Slovak Republic, including stateless persons. Thus, foreigners are citizens of another EU Member State, nationals of any other State party to the Agreement on the European Economic Area (EEA), nationals of the Swiss Confederation and members of their families, third-country nationals and stateless persons. The entry and stay of EU/EEA citizens in the Slovak Republic are subjects to a special legal regime approximating to the rights of the citizens of the Slovak Republic.

There are two residence permit regimes in the SR: the registration and granting of residence permits. The registration applies to EU/EEA citizens, while other foreigners have to request for a residence permit and then they may be granted. Legal migration is based on the granting of a temporary stay permit to third-country nationals, granting of a permanent residence permit to third-country nationals and advantaged foreigners, the registration of a permanent residence permit of EU/EEA citizens and the granting of a tolerated stay permit to third-country nationals. Thus, the legal system of the SR distinguishes the temporary stay permit, which is bound to a particular purpose, the permanent residence permit and the tolerated stay permit.

According to the type and nature of stay, migration statistics supplied to Eurostat include groups of foreigners with a temporary stay permit, foreigners with a permanent residence permit and foreigners having their registered permanent residence in the territory of the SR.

The number of immigrants and the total population usually resident in the territory of the SR include also foreigners who were granted the asylum, based on which their residence is considered the permanent residence in the territory of the SR, and persons who were provided with subsidiary protection, based on which their residence is considered the temporary stay in the territory of the SR. The number of immigrants and the total population usually resident in the territory of the SR do not include applicants for international protection, nor persons having their tolerated stay in the territory of the SR, which results from the nature of stay (the maximum length of a tolerated stay is granted for 180 days, but may be extended repeatedly).

Statistics on international protection (Article 4 of the Regulation on statistics on migration) - the Migration Office of the Ministry of Interior is the national contact point for the collection, processing and supply of the statistics.

Statistics on the prevention of illegal entry and stay (illegal migration)(Article 5 of the Regulation on statistics on migration) - the Bureau of Border and Aliens Police of the Presidium of the Police Force is the national contact point for the collection, processing and supply of the statistics.

Statistics on residence permits and residence of third-country nationals (Article 6 of the Regulation on statistics on migration) - the Bureau of Border and Aliens Police of the Presidium

of the Police Force is the national contact point for the collection, processing and supply of the statistics.

Statistics on returns (Article 7 of the Regulation on statistics on migration) - the Bureau of Border and Aliens Police of the Presidium of the Police Force is the national contact point for the collection, processing and supply of the statistics.

Statistics on foreign workers in the territory of the SR are subjects to the collection, processing and distribution by the Centre of Labour, Social Affairs and Family.

VII. THE INTERRELATIONS BETWEEN THE ROUTINE STATISTICAL SURVEY ON POPULATION AND THE POPULATION CENSUS

In the Slovak Republic, demography statistics is built upon results of the Population Census. In the intercensal period (i.e. between two subsequent censuses), the number of population is calculated by means of the balancing method.

The Population Census is usually carried out in the course of the year, i.e. not in the beginning (1 January), nor in the end (31 December) of the year. Therefore, the number of population on 1 January is computed from population data referring to the Census date by using the balancing method.

The following equation illustrates this process:

- The number of population on 1 January = the number of population on the Census date - the number of the new born (from 1 January to the Census date) + the number of the dead (from 1 January to the Census date) - net migration (from 1 January to the Census date).

Although Census results differ from results of the routine statistical survey on population change, the data are not revised after the subsequent Census. The differences in the results are caused mainly by the fact that in the Census the method of self-enumeration is used and not each inhabitant does fulfil his/her reporting duty. A difference in data on the population number can occur also in case where SR citizens, or foreigners granted permanent residence in the SR, fail to check out from competent bodies before leaving for the permanent residence abroad. (The 'competent bodies' means the Register of Inhabitants of the SR, for SR citizens, and the Bureau of Border and Aliens Police, for foreigners granted permanent residence in the SR).

Anyway, Census results are the basic data that serve for balancing the population data in the intercensal period in the Slovak Republic.