

HUMAN FERTILITY DATABASE DOCUMENTATION: HUNGARY

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1 General information

This report documents data for Hungary collected for the Human Fertility Database (HFD), namely data on live births and on the parity composition of women.

Since the establishment of the independent country in 1918, the Hungarian Central Statistical Office (HCSO, Központi Statisztikai Hivatal) has been the main governmental body collecting population data in Hungary.

The time series of live births by age of the mother cover the years 1920+. Monthly data on births are available since 1919. These datasets are processed in the HFD for the period starting in 1950, due to a lack of reliable population estimates prior to that year (see below). Data on births by age of the mother and birth order are available from 1952 onwards.

The population data since 1950 have been processed and documented in the Human Mortality Database (HMD, www.mortality.org). Data for the female population by age and parity are available on a yearly basis (as of January 1) since 1970.

The data used for the HFD calculations are specified in Appendix 1.

1.1 Territorial coverage

The population and vital statistics data pertain to the territory of the country as defined in the Treaty of Trianon in 1920. The vital statistics of 1919 and 1920 differ from these data because they cover the territory under the actual Hungarian administration. The discrepancies were caused by subsequent readjustments of the frontiers and the changes in the territory, which mainly affected areas of western Hungary.

Czechoslovakia ceded southern Slovakia and southern Subcarpathia (now in Ukraine) to Hungary on 2 November 1938. Romania ceded half of Transylvania to Hungary on 30 August 1940. The territorial change was overturned following the defeat of Germany in 1945, and Hungary lost again

all the territory it had gained (Wikipedia 2011). However, all data available for HFD pertain to current territory. For the period covered by the HFD (1950+), Hungary has not experienced any territorial changes.

1.2 Data collection and availability

The Hungarian Central Statistical Office is the main institution responsible for collecting statistical data (including population statistics) in Hungary.

1.3 Specific episodes in the demographic history of Hungary

The prohibition of abortion introduced in 1953–1955 led to a sudden increase in births during this period. The revolt against the Stalinist government in October–November 1956 caused numerous civilian and military deaths and emigration of about 200,000 people but did not have direct effect on fertility levels. The babyboom in 1974, induced by complex population policy programme, caused fast change in births between 1973–1974 (Spéder and Kamarás 2008).

During the 1990s, there were large waves of immigration from Romania (return migration of ethnic Hungarians) and the former Yugoslavia (war refugees) (Németh et al. 2018).

2 Birth count data

The main HFD dataset covers the period 1950–2020. The original data files cover the period 1920–1949 as well, although with less detail, and are available in the Input data section on the HFD country page. The data were provided by the Hungarian Central Statistical Office, except for the data on live births by age of the mother for 1946–1951, and of live births by age of the mother and birth order for 1952–1960, which were provided by the Observatoire démographique européen (courtesy of Jean-Paul Sardon).

3 Population count data

The population data since 1950 have been processed and documented in the Human Mortality Database (HMD, www.mortality.org).

The Hungarian Central Statistical Office processes and publishes the distribution of women by single year of age and year of birth, and by the number of children ever born for 1970–2015 (as of January 1). The procedure for obtaining the parity composition starts with the data from the population censuses of 1970, 1980, 1990, 2001, and 2011; which are recalculated retrospectively for January 1. The continuous registration of the inter-census period (1970–1979, 1980–1989, 1990–2000, 2001–2011, and 2012–2020) is based on the yearly balance of live births, deaths and migrations, which have been available from the demographic database since 1970. Although that data on parity distribution are available, their quality is not clear. There are certain problems with annual population estimates related to the post-censal character of annual estimates during the inter-censal period (see for details Németh et al. 2018). Parity population estimates may be affected by the same problem.

The yearly live birth statistics allowed for an estimation of the parity distribution of women having a live birth in a given year. On the basis of death statistics, information is collected regarding the total number of children ever born alive to the deceased women. The parity distribution of migrant women is assumed to be the same as that of the native women of the same age.

4 Specific details

4.1 Definition of live birth

“Live born is the foetus if after the separation from the mother’s body it shows the evidence of life (such as breathing, beating of the heart or pulsation of the umbilical cord) irrespective of the duration of pregnancy and the duration of its life.” This definition has not changed since the first part of the 1950s, when it was introduced in response to WHO recommendations.

4.2 Age

The data are available by both age of the mother and birth cohort (i.e. by Lexis triangles). The date of a vital event always refers to the actual date of occurrence.

4.3 Birth order

The live birth order refers to the numerical order of the child in relation to all of the previous live-born children of the mother. In the case of multiple deliveries, each child is accounted for separately according to the order of birth.

4.4 Revision history

Changes with the June 2016 revision:

Data for 2010–2014 were added. There are no other changes as compared to the data release of November 1, 2011.

Changes with the November 2018 revision:

The release includes new data for 2015–2017.

Changes with the November 2021 revision:

The release includes new data for 2018–2020.

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References

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APPENDIX 1

INPUT DATA USED FOR HFD CALCULATIONS

BIRTHS

Period	Type of data	Age range	Birth order	RefCode(s)
1950–1951	Annual number of live births by age of mother, mother's year of birth and birth order (Lexis triangles)	–14, 15,...,59, 60, unknown	—	2
1952–1960	Annual number of live births by age of mother, mother's year of birth and birth order (Lexis triangles)	–14, 15,...,49, 50+, unknown	1, 2,...,10+, unknown	2
1961–1962	Annual number of live births by age of mother, mother's year of birth and birth order (Lexis triangles)	–14, 15,..., 55, unknown	1, 2,...,10+	3, 4
1963–1969	Annual number of live births by age of mother, mother's year of birth and birth order (Lexis triangles)	–14, 15,..., 55	1, 2,...,10+	3, 4
1970–2020	Annual number of live births by age of mother, mother's year of birth and birth order (Lexis triangles)	12,..., 55	1, 2,...,10+	5, 9, 10, 12
1919–1939; 1941–1942; 1944–2020	Annual number of live births by month	—	—	6, 5, 9, 10, 12

FEMALE POPULATION: Distribution by age and parity

Period	Type of data	Age range	Parity	RefCode(s)	Notes
01.01.1970 – 01.01.2006	Women by age and parity	14, ..., 51	0, ..., 9, 10+	7, 8, 5	Data for 01.01.1970 are used as a "Golden Census"
01.01.2007 – 01.01.2021	Women by age and parity	14, ..., 89, 90+	0, ..., 9, 10+	5, 9, 10, 12	

FEMALE POPULATION: Exposure by age and year of birth

Female exposure population by calendar year, age and year of birth (Lexis triangles) is estimated using data on population size and deaths from the Human Mortality Database, which is available at <http://www.mortality.org> or <http://www.humanmortality.de>.