

## Hungarian Labour Force Survey

The Hungarian Labour Force Survey (HU-LFS) is a continuous, quarterly survey of households conducted by the Hungarian Central Statistical Office (HCSO) from 1992 onwards. It provides information on the employment and unemployment experience of the Hungarian's population. The HU-LFS contains demographic characteristics of each respondent, and a wide range of data on labour market status and related topics such as training, qualifications, disability. The data set contains data of 50,000-90,000 people, depending on year and quarter. The data are available in Stata 13.0 format.

### Data host

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### The harmonised database

The harmonised data set was created at the Centre for Economic and Regional Studies (CERS, in Hungarian: Közgazdaság- és Regionális Tudományi Kutatóközpont), H-1097 Budapest, Tóth Kálmán u. 2-4. The harmonisation of the data was conducted by Mr Gyula Nagy and Mr János Köllő.

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### Access to the data

The original data are available for research on the basis of agreement with the Central Statistical Office. The harmonised data are available for the permanent fellows of the Centre for Economic and Regional Studies.

## **Data collection and sampling of the harmonised HU-LFS**

The HU-LFS is carried out by the Central Statistical Office in accordance with the recommendations of the ILO and Eurostat. The survey is suitable for the analysis of trends in the Hungarian labour market and comparison with other countries. The HCSO calculates the main labour market indicators from the HU-LFS.

Detailed information about the data collection can be found in the publications of the CSO (Methodology of the Labour Force Survey 1998, Methodology of the Labour Force Survey 2002 and Methodology of the Labour Force Survey 2006). Both are published as part of the statistical methodology booklets of the HCSO. These publications can be found in Hungarian in the directory [Adattar\LFS\Dokumentacio\Modszertan].

Hereafter a shorter version of these descriptions is presented.

### ***Coverage***

The HU-LFS is based on a systematic random sample design which makes it representative of the households living in Hungary. It includes demographic characteristics such as gender, age, qualification, marital status, family status on each member of the household, and labour market information on the age-group 15-74. These data apply to a specific reference period, normally a period of one week (or four weeks – depending on the topic) immediately prior to the interview.

### ***Sampling***

#### **Reference population, sampling frame, sampling procedure**

The reference population of the HU-LFS is people at age 15-74, living in private households. The sampling units are dwellings.

The sampling frame is constructed from the address register of the Population Census (until 2002 from the address register of the Population Census 1990, after June 2004 from the register of the Population Census 2001 and between these periods partly from the register of 1990 and partly from the register of 2001; after 2012 from the register of the Population Census 2011). The sample is drawn using multi-stage stratified sample design.

The sample design strata are defined in terms of geographical units, size categories of settlements and area types such as city centers, outskirts, etc.. Further stratification is made by constructing secondary strata using the share of the registered unemployed within the permanent population of the localities.

*Until 2002 the sampling frame of the LFS consisted of the 12,775 enumeration districts (EDs) of the 1990 census, covering 751 settlements of the country, and contained about 626,000 addresses. In settlements with 15,000 or more inhabitants (which were self-representing settlements) enumeration districts (EDs) were primary sampling units (PSUs) and dwellings were secondary sampling units (SSUs). From the other settlements altogether PSUs were settlements, SSUs are EDs and ultimate sampling units are dwellings.[Source: KSH]*

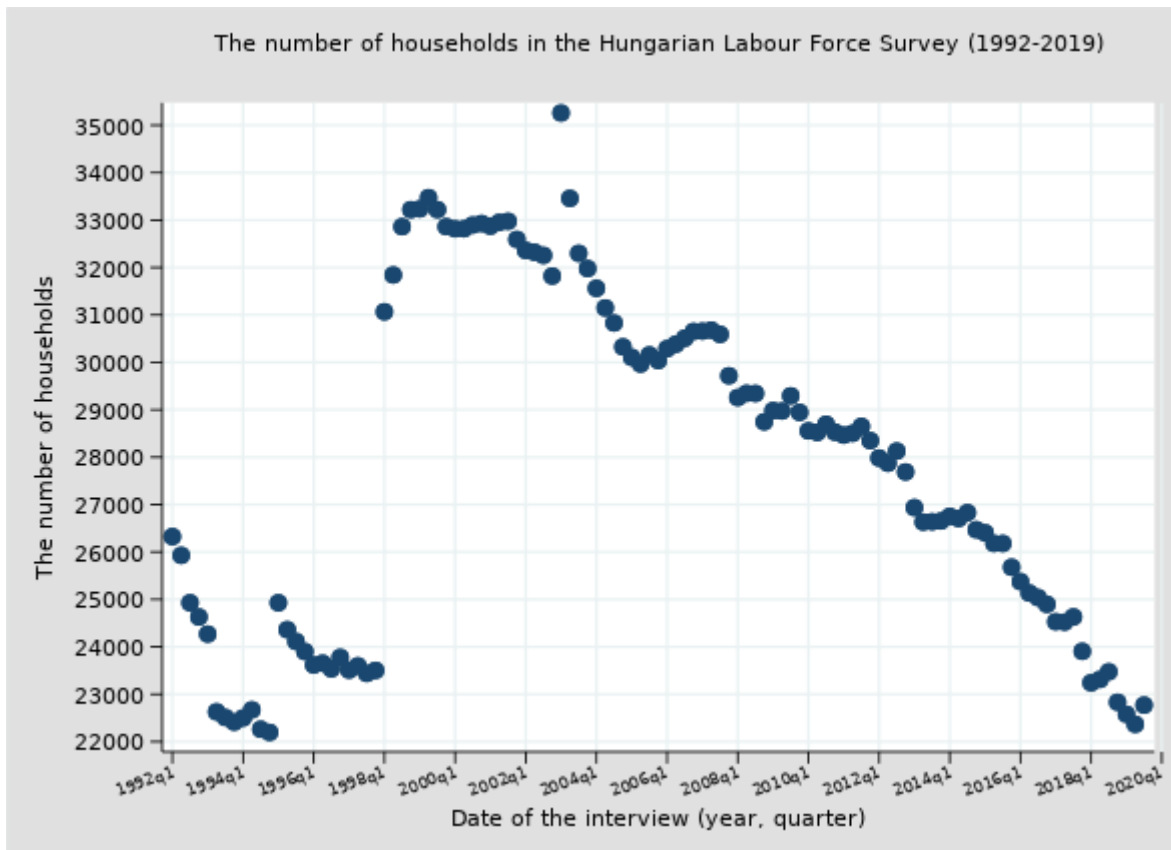
In the new samples based on the address register of the Population Census 2001 the sizes of the localities were determined using the number of dwellings in the given locality. In the self-representing part of the sample the primary (and at the same time final) sampling units are dwellings. In the non self-representing part the primary sampling units are localities, while the secondary (and at the same time final) sampling units are dwellings.

### **Rotation scheme**

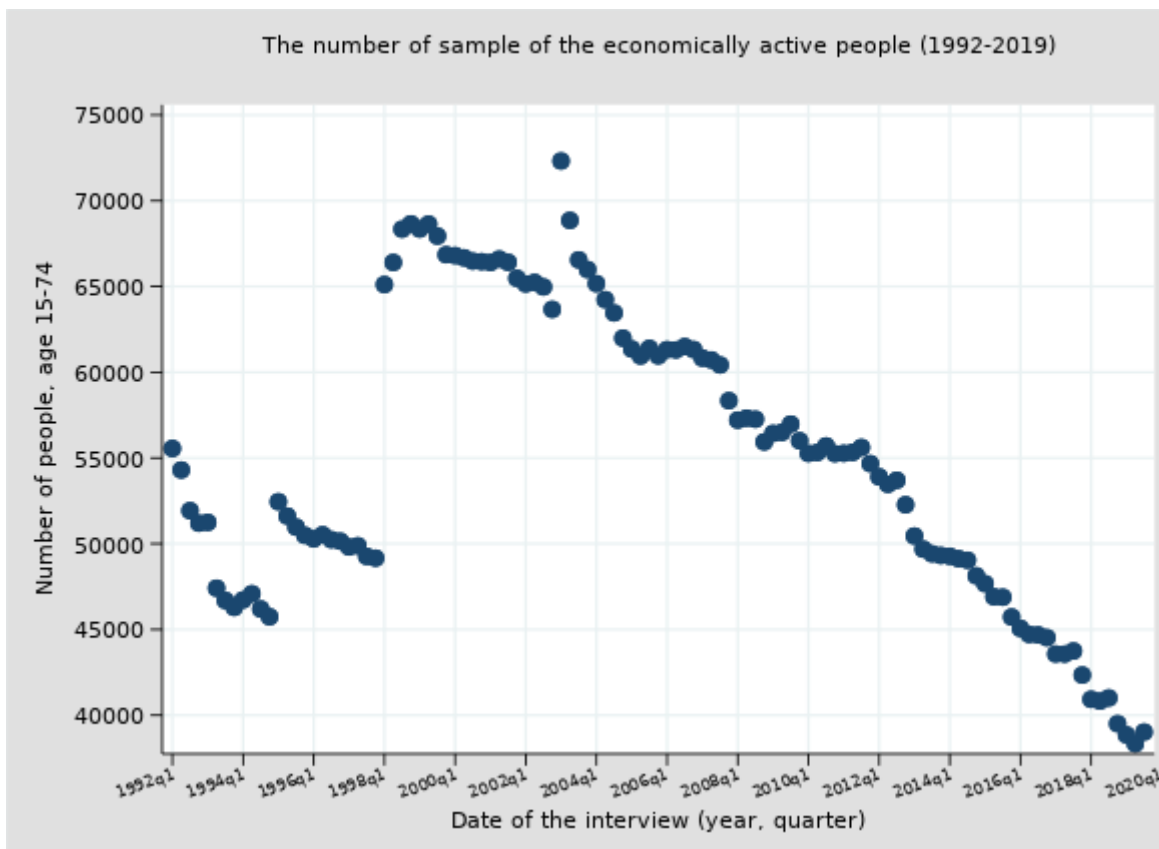
A rotation system comprising six waves is used. Each sampling unit is kept in the sample for six consecutive quarters. In principle, 5/6 of the sample of two consecutive waves is the same, and 1/6 of the cross-section sample can be followed for 1.5 years, In practice, the survival rate is lower due to sample attrition and changes in sampling (see later).

### **Development of the sample-size**

The effective sample-size is smaller than the determined sample-size because of non-response. The number of observed households varied between 22,000 and 34,000 in the period of 1992-2019 (except 2003) as shown in the following graph.



The files include 40,000-70,000 people aged 15-74 and between 12,000 and 20,000 people outside this age range. The sample-size was reduced in 1993, and raised in 1995, 1998 and 2003 as you can see in the chart below.



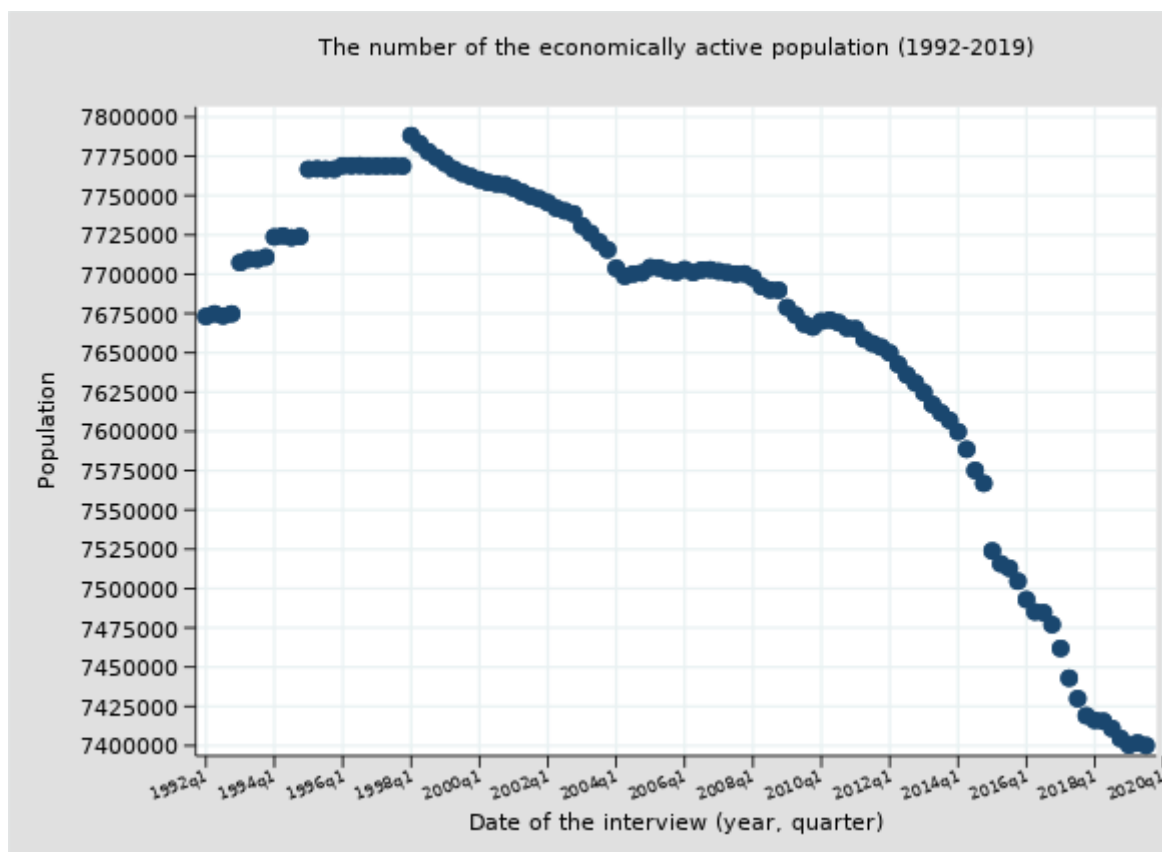
## **Weighting**

Weighting system ensures that the sample is representative. These are household level weights, which mean that every member of a given household is assigned the same weight<sup>1</sup>. Weights are determined in two steps. Primary weights show how many similar households are represented by the household within the given stratum. In the second step these primary weights must be adjusted to correct for the biases caused by non-response. These adjusted weights appear in the database.

Since 2003, the weights used to make the sample representative are based on the 2001 census population record base. At the same time, the 2001–2002 data was recalculated and replaced as well. The LFS-based time series published in this volume use the following weighting schemes: (i) in 1992-1997 the weights are based on the 1990 Census (ii) in 1998-2001 the weights based on the 1990 Census have been corrected using data of the 2001 Census (iii) in 2002-2005 the weights are based on the 2001 Census (iv) from 2006 onwards the weights based on the 2001 Census have been corrected using the 2011 Census. It is important to know that in 1992 we have no weights for the economically inactive population (aged under 15 or over 74). In 1993 and in 1994 the value of the weight variable is zero for

<sup>1</sup> Exceptions are the waves of the years 1992, 1993 and 1994. See the next paragraph.

these observations. Further comment regarding the weights is that from 2003 onwards the weight variable contains also fractions, but before 2003 it contains only integers. The following graph shows the weighted number of the economically active population (at age 15-85) in the HU-LFS.



## Questionnaires

The questionnaires (the original, designed by HCSO) can be found in the folder [Adattar\LFS\Dokumentacio\Kerdoivevek\] in Hungarian. The structure of the questionnaires, the meaning and the contents of the variables has changed since 1992, they were modified in 1993, 1995, 1997, 1999, 2000, 2001 and from 2003 per annum. The basic interview is made up of two questionnaires: “General, demographic characteristics of the households’ members” and “Information on the economically active”.

## Structure of the questionnaire, skipping questions

Respondents have to answer different questions depending on their labour force status. Often, these questions do not follow each other; the answer given to a question determines if the respondent has to skip to a specific question. This also means that the range of respondents is hard to be determined by examining only one question of the questionnaire.

We constructed flowcharts that illustrate the structure of the questionnaire in order to make the structure of the questionnaires more clear. It is also easier to identify the sample of respondents of a given question using these flowcharts. The flowcharts can be found in the directory [Adattar\LFS\Dokumentacio\Ugratasok].

### ***The structure and content of the original data files***

The Centre for Economic and Regional Studies receives the original data per annum, broken down by quarters (in format .txt before 2003 and .csv after 2003). These files include each variable coming from the basic interview. (Exceptions are the files of 1992, where the quarterly waves are created from the files containing quarterly individual data about the economically active population and from files containing household level data, which are broken down by months. In these later files only demographical data about the household and the members of the household is contained.)

### **The structure of the harmonised database and the variables**

The harmonised files (directory path [Adattar\LFS\Data], after 2014 [Adattar\LFS\KSH\_Data]) were accomplished by reading the original data into Stata, attaching variable and value labels, and creating harmonised variables.

The name of the files is made up of the “alfs” which refers to the “anonymised labour force survey” and a number that means the serial number of the survey wave. The first wave was conducted in the 1<sup>st</sup> quarter of 1992 and the last took place in the 3<sup>rd</sup> quarter of 2019.

## Selected publications based on data from the HU-LFS

Analyses based on data from the survey are regularly published in the series of Budapest Working Papers on the Labour Market. The series is published by the Institute of Economics of CERS in collaboration with the Department of Human Resources at the Budapest Corvinus University. Analyses based on the HU-LFS data also can be found in The Hungarian Labour Market yearbooks published by the CERS in collaboration with the Hungarian Employment Foundation. The following, not complete list contains some further publications using basic data from the HU-LFS.

Ábrahám Árpád – Kertesi Gábor: A munkanélküliség regionális egyenlőtlenségei Magyarországon 1990 és 1995 között. *Közgazdasági Szemle*, 1996 (XLIII. évf.) július-augusztus, 653-681. p.

Bálint Mónika – Köllő János: A gyermeknevelési támogatások munkaerő-piaci hatásai, *Esély*, 2008/1, 3-27. p.

Bardasi Elena – Lasosa Ana – Micklewright John – Nagy Gyula (2001): Measuring the Generosity of Unemployment Benefit Systems: Evidence from Hungary and elsewhere in Central Europe. *Acta Oeconomica*, 51. évf., 1. sz., 17-42. o.

Berde Éva – Scharle Ágota: A kisvállalkozók foglalkozási mobilitása 1992 és 2001 között. *Közgazdasági szemle*, 2004. (LI. évf.), április, 346-361. p.

Cseres-Gergely Zsombor: "Inactivity in Hungary - the persistent effect of the pension system", Budapest Working Papers on the labour market 2007/1 (<http://www.econ.core.hu/doc/bwp/bwp/bwp0701.pdf>)

Cseres-Gergely Zsombor – Csorba Gergely: Műkincs vagy működő tőke? *Közgazdasági szemle*, 2006 (LIII. évf.), október, 902-918. p.

Frey Mária: A munkaidőrendszerek rugalmassá válása. *Közgazdasági szemle*, 2000 (XLVII. évf.), december, 1008-1026. p.

Galasi Péter – Nagy Gyula: Jövedelmek és munkanélküli-ellátások, *Közgazdasági szemle*, 2008 (LV. évf.), június, 473-502. p.

Kertesi Gábor – Köllő János: A 2001. évi minimálbér-emelés foglalkoztatási következményei. *Közgazdasági szemle*, 2004. (LI. évf.), április, 293-324. p.

Kertesi Gábor – Köllő János: Felsőoktatási expanzió, „diplomás munkanélküliség” és a diplomák piaci értéke. *Közgazdasági szemle*, 2006. (53. évf.), 3. sz., 201-225. p.



- Kertesi Gábor: Cigány gyerekek az iskolában, cigány felnőttek a munkaerőpiacon. *Közgazdasági szemle*, 1995. (XLII. évf.), 1. sz., 3065. p.
- Köllő János – Nagy Gyula: Bérek a munkanélküliség előtt és után. *Közgazdasági szemle*, 1995. (XLII. évf.), 4. sz., 325-357. p.
- Micklewright, John – Nagy, Gyula: Az álláskeresés ellenőrzése és a munkanélküliség időtartama. *Közgazdasági szemle*, 2006. (LIII. évf.), július-augusztus, 641-660. p.
- Micklewright John–Nagy Gyula (2002): The informational value of job search data and the dynamics of search behaviour: Evidence from Hungary. *Acta Oeconomica*, 52. évf., 4. sz., 399-419. o.
- Nagy Gyula: Munkanélküli-segélyezés Magyarországon a kilencvenes években. *Közgazdasági szemle*, 2000. (XLVII. évf.), október., 799-816. p.
- Nagy Gyula (2001): A nők gazdasági aktivitása és foglalkoztatottsága. *Statisztikai Szemle*, 79. évf., 1. sz., 35-55. o.
- Scharle Ágota: Önfoglalkoztatás, munkanélküliség és családi kisvállalkozások Magyarországon. *Közgazdasági szemle*, 2000. (XLVII. évf.), március., 250-274. p.
- Tímár János: A munkaerő-kínálat alakulása 2010-ig. *Közgazdasági szemle*, 1996. (XLIII. évf.), július-augusztus., 682-698. p.