

## **METHODOLOGICAL SUMMARY**

### Revision using the impact factors

A revision of the LFS time series from 2010 to 2020 was performed. In accordance with the Eurostat recommendations for correcting breaks in time series, for the revision purposes, in 2020 a parallel pilot survey (according to the new methodology, valid from 2021) and a regular survey (according to the old methodology, valid until 2020) were conducted. By comparing the results of the regular and pilot survey, correction factors were obtained for the estimate of the break, caused by changes in methodology.

Methodological approach used to calculate the correction factors implies two estimates of the same variable available according to the old and new methodology for several points in time, based on which correction factors are determined as the quotient or difference of value estimate according to the new and old methodology. As the correction factors calculated at different time points may be different, correction factors obtained by comparing the results in the fourth quarter of 2020 were used to correct the break, as the most reliable ones. The revision of the LFS time series from 2010 to 2020 was performed by applying these correction factors in the following way:

- If the correction factor is calculated as the quotient of value estimates according to the new and old methodology, it is applied as a multiplicative factor, meaning that the revision is performed so that each value in the time series is multiplied by that factor.
- If the correction factor is calculated as the difference between the value estimates according to the new and old methodology, it is applied as an additive factor, meaning that the revision is performed so that each value in the time series is added by that factor.

After that, in order to maintain the multivariate structure of the LFS time series and meet the appropriate linear constraints (e.g. to make the sum of the revised data by gender and / or age groups equal to the revised series of totals), additional correction factors were applied in accordance with Eurostat recommendations given at the workshop dedicated to this topic.

Additionally, the justification for choosing this approach in correcting breaks and the reliability of the obtained results were confirmed by applying correlation analysis to the revised time series of the LFS and data on registered employment from the SORS database.

Backward corrected time series for period 2010-2013 was additionally adjusted in accordance with the change introduced from 2014 year concerning the change of the estimation system, in order to provide break free time series for the whole period 2010-2020.