SPATIOTEMPORAL VARIATION of NON-MARITAL FERTILITY across CZECHIA CONTRASTED to GENERAL FERTILITY CHANGE.

Nonmarital fertility has been dramatically increasing in Czechia from the start of the 1990s. The percentage of nonmarital live births grew from 9.8 in 1991 up to 48.5 in 2018, and the share of live births to single mothers, among live births outside marriage, rose from 72.6 % in 1991 up to 90.3 % in 2018. The research on spatial variation of non-marital fertility often focuses on country differentials or on the administrative division based on nuts3. The objective of the contribution is to investigate the recent sharp increase of nonmarital fertility (intensity and structure) in Czechia, using two spatial perspectives: a) municipality size (9 categories) and smaller territorial units, i.e. Municipalities with Extended Powers (MEP). There are 205 units and the city of Prague (in total 206 MEPS). The population size of MEPS varied (1.1.2019) between 8 649 in Králíky, 380 681 in Brno and 1 308 632 inhabitants in the capital city Prague. Though, MEP represents the smallest unit for which is still reasonable to compute fertility indicators as: total fertility rate, total fertility rates for the first, second and third birth order, mean age at first childbearing, percentage of live births to single mothers, average birth order of live births born to single and married women, and mean age of first childbearing of single and married women. The main aim of the contribution consists of contrasting patterns of single motherhood against marital childbearing and of investigating the total fertility rate change. The “old traditional” pattern of fertility decisions between marriage and single motherhood (year 1991) is compared to “newly” established arrangements when the number of nonmarital first order live births exceeds those firstly born to married women (year 2018). The analysis is based on computing indicators from individual anonymous records. In order to identify and compare the spatial fertility patterns, based on above listed indicators, Optimized Hotspot Analysis was used (ArcGIS Pro 2.4.2). To assess the impact of changing legitimacy status of live births, mother’s age and municipality size on average birth order, the multiple regression with categorical predictors was applied (SAS 9.4. Proc. Genmod).

In 1991 as well as in 2018, the difference between single and marital birth orders was statistically significant when controlling for age and municipality size. Lower birth order (predominantly the first) of live births among single mothers and the increase in the proportion of such live births have affected total fertility levels towards lower values over time. It also indicates that single motherhood is still not a full alternative to a family based on marriage in Czechia. Spatial patterns with the use of Optimized Hotspot Analysis provide many interesting and contrasting views. The core regions with high nonmarital fertility (North-West Bohemia) and low levels (South-Est) have not changed much between 1991 and 2018. But contrary to expectations, the sharp increase in the proportion of live births to single mothers up to 2018 moderated the spatial differences, since the areas showing non-significant differences in this indicator have enlarged. The opposite time trend can be observed when looking at spatial pattern of total fertility rate. While in 1991, higher total fertility rate (1.86) meant also deeper regional dissimilarities, in 2018 (TFR=1.71), all Czechia appeared without any statistically significant differences. The increase of mean age at first childbearing from 22.4 in 1991 into 28.4 in 2018 has surprisingly resulted in spatial homogenisation in 2018.

New important demographic patterns have emerged from the beginning of the 1990s in Czechia. However, when looking at spatial fertility differentials, they do not follow, to some

extent, the “expected” trajectories. Sometimes higher values do not lead into heterogenization and vice versa.