

How the labour market uncertainty affects childbearing in the Czech Republic?

Olga Sivková¹

The Czech Republic officially exists from 1993 and belongs to group of countries which after the collapse of communist regime underwent profound socio-economic transformation. With no doubts a switch from a command to market economy brought into people decision making more uncertainty. Economy became organised by new rules which were unknown for major population. Although family formation via a child birth is a complex process influenced by factors both at micro and macro level, it is reasonable to assume, that people perceive general economic development and situation at the labour market in their country and reflect that either directly or indirectly to their decision about family formation and child birth. Therefore, the aim objective of the contribution is to examine effect of labour market uncertainty on fertility level in the Czech Republic in the period 1993-2012. Both states of labour market and fertility development are studied utilizing two approaches: macro and micro. While at the macro level time series of labour market indicators in relation to fertility level are examined based on available data of the Czech Statistical Office, at the micro level individual data of the European Union Statistics on Income and Living Conditions (EU-SILC) for the Czech Republic 2008-2011 are utilized. Besides the overall development trends, an effect of recent economic downturn in Europe on fertility level in the Czech Republic is discussed.

A broad range of relevant literature focused on the issue in developed countries declares a negative relationship between fertility and family formation variables and unemployment as a proxy of uncertainty. Örsal et al. (2010) using data for 22 OECD countries showed that increase in both male and female unemployment in the period 1976-2008 had a negative effect on the period total fertility rate. The fertility rate declined with the increase in unemployment. Adsera (2010) who documented that high female unemployment caused the first-birth postponement in Europe since the 1980's, obtained similar result. The negative relationship captured also Neels (2010) for Belgium, France and the Netherlands, Berkowitz-King (2005) for the USA, Hoem (2000) for Sweden, Huang (2003) for Taiwan, Adsera et al. (2011) for Latin America, and Amariei (2012) for Romania. On the other hand, research based on individual data revealed that unemployment may have also a positive effect on fertility level. For example, aggregate and individual data for Norway in the period 1992-1998 revealed that women who were unemployed for twelve months prior to childbirth had slightly higher first-birth rates than others (Kravdal, 2002). Furthermore, Kreyenfeld (2010) emphasises that a childbirth postponement at insecure labour market differs according to woman expectations, weather she expects to be

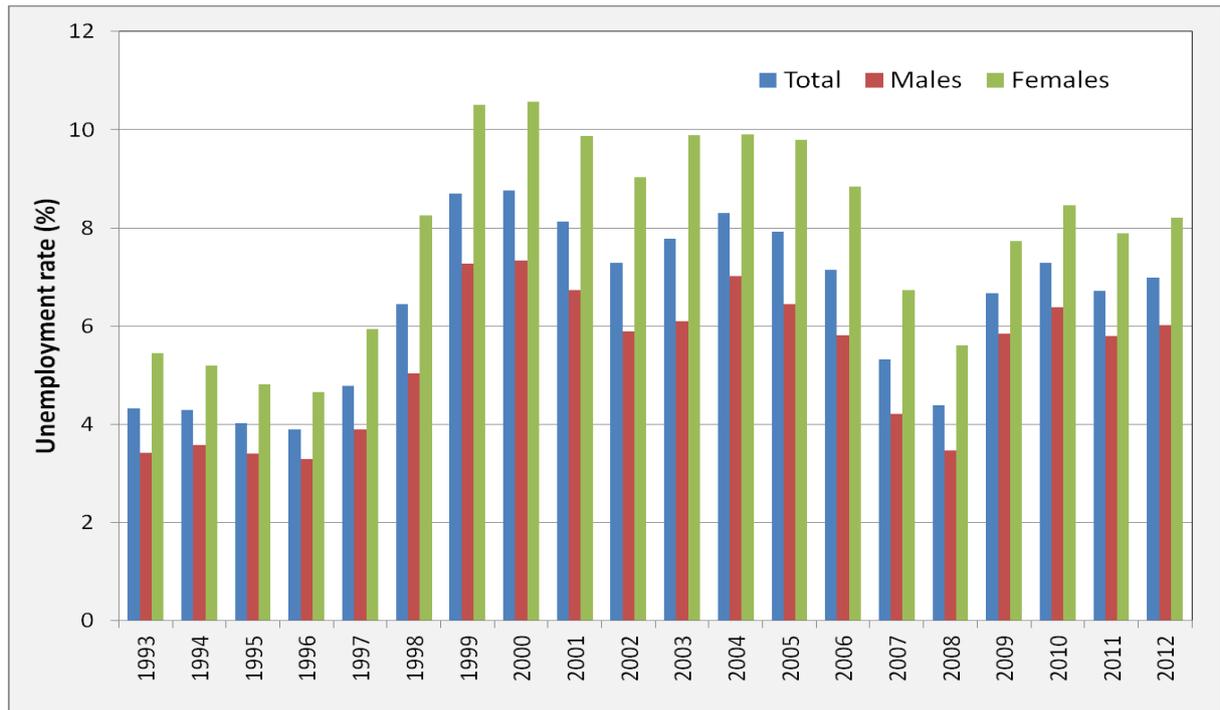
¹ Charles University in Prague, Institute of Sociology of the Academy of Science of the Czech Republic, email: olga.sivkova@natur.cuni.cz

a caregiver or household provider after childbirth. Also Bernardi et al. (2008), based on qualitative research held in Germany, highlight that the effect of uncertainty on fertility varies in time, by type of uncertainty and across population groups and that reactions to uncertainty are moderated by culture. In the Czech Republic the research focuses more often on labour market itself rather than its consequences to fertility level (e.g. Bartošová, 2011; Bičáková et al., 2011; Tomešová Bartáková, 2010; Saxonberg et al., 2007; Kuchařová, 2008; Kuchařová et al., 2000).

A few years after the Velvet Revolution in 1989, the unemployment rate was kept in comparison with other transforming economies at relatively low level around 4 % (see chart 1). This extraordinary development is explained by highly qualified workforce, effective tripartite negotiation, active policy on labour market including restrictive wage policy, geographical location, because alongside borders with Austria and Germany was lower unemployment rate, and unsaturated sector of services which could capture a part of unemployed economically active population. The unemployment rate started to rise with an economic downturn in 1997, when less qualified or less flexible workforce could not find a job. Regional disparities due to structural adjustment of the economy became also significant. While since 2004 the unemployment rate gradually diminished to cca 4 % in 2008, the period of rise occurred afterwards, because the Czech economy was hidden by economic recession caused by a worldwide economic downturn. Considering the total fertility rate, chart 2 shows a significant fall of the value from 1.67 to 1.13 children per women in the period 1993-1999. After that the total fertility starts to rise primarily due to two reasons: compensation effect of childbearing postponement and fertility of the abundant cohorts born in 70's. Since 2008, the total fertility rate is in range from 1.50 to 1.45 children per woman, what is insufficient level for population renewal. Chart 2 also illustrates based on average age of mothers and average age at first marriage how demographic reproduction changed in the Czech Republic in the period 1993-2012. The presenting pattern of fertility development in the Czech Republic is predominantly explained by the Second demographic transition concept, the Postponement hypothesis (Kohler et al. 2002), the Hypothesis of economic crisis formulated by the United Nations for transforming economies, and the approach perceiving the family as an externality (Mlčoch, 2008; Sivková, 2012).

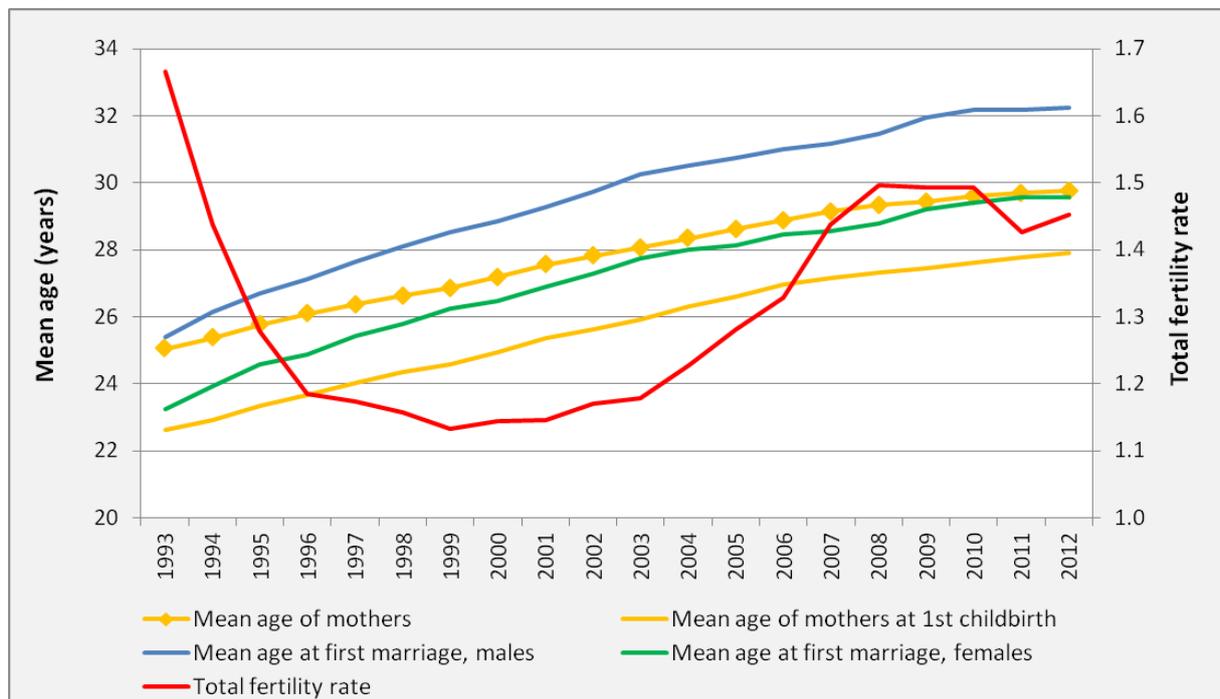
The contribution deals with the issue of relationship between economic and population development and examines state of affairs in the Czech Republic in the period 1993-2012. Both specific and general aspects are discussed, because while at the beginning of the studied period it is reasonable to assume impact of economic transformation in the Czech Republic, in the end of the period significant effect of worldwide economic downturn on Czech labour market is evident. Preliminary results at macro level revealed, that population heterogeneity is an important aspect of relationship between labour market uncertainty and fertility level in the Czech Republic. Therefore, microanalysis is in progress recently.

Chart 1: Unemployment rate by sex, Czech Republic, 1993-2012



Source: Czech Statistical Office

Chart 2: Total fertility rate, mean age of mothers, mean age at first marriage, Czech Republic, 1993-2012



Source: Czech Statistical Office

Literature and data sources:

- Adsera, A. Where are the babies? Labor market conditions and fertility in Europe. *European Journal of Population*. 2010, Vol. 27, No. 1, pp. 1-32.
- Adsera, A.; Menendez, A. Fertility changes in Latin America in periods of economic uncertainty. *Population Studies*. 2011, Vol. 65, No. 1, pp. 37-56.
- Amarei, A. The Impact of Unemployment on Fertility in Romania. *Procedia Economics and Finance*. 2012, No 3., pp. 475-480.
- Bartošová, M. Význam placené práce v kontextu životního běhu mladých žen. *Sociológia*. 2011, Vol.43, No.1, pp. 158-182.
- Bičáková, A.; Slačálek, J.; Slavík, M. Labor supply after transition: Evidence from the Czech Republic. *Fiance a úvěr-Czech Journal of Economics and Finance*. 2011, Vol. 61, No. 4, pp. 327-347.
- Berkowitz-King, R. The case of American women: Globalization and the transition to adulthood in an individualistic regime. Chapter 12 in: Blossfeld, H-P.; Klijsing, E.; Mills, M; Kurz, K. *Globalization, Uncertainty and Youth in Society*. London/New York: Routledge. 2005, pp. 305-325, ISBN 10: 0-415-35730-6.
- Bernardi, L.; Klärner, A.; von der Lippe; H. Job insecurity and the timing of parenthood: A comparison between Eastern and Western Germany. *European Journal of Population*. 2008, Vol. 24, No. 3, pp. 287-313.
- Czech Statistical Office. 2013. Available from WWW: <www.czso.cz>.
- Hoem, B. Entry into motherhood in Sweden: The influence of economic factors on the rise and fall in fertility, 1986-1997. *Demographic Research*. 2000, Vol. 2, No. 4.
- Huang, Jr-T. Unemployment and fertility behaviour in Taiwan. *Journal of Family and Economics Issues*. 2003, Vol. 24, No. 1, pp. 27-48.
- Kohler, H. P., Billari, F., Ortega, J. The emergence of lowest-low fertility in Europe. *Population and Development Review*. 2002, Vol. 28, No. 4, pp. 641-680.
- Kravdal, Ø. The Impact of Individual and Aggregate Unemployment on Fertility in Norway. *Demographic Research*. 2002, Vol. 6, No. 10, pp. 263-294.
- Kreyenfeld, M. Uncertainties in Female Employment Careers and the Postponement of Parenthood in Germany. *European Sociological Review*. 2010, Vol. 26, No. 3, pp. 351-366.
- Kuchařová, V.; Zamykalová, L. Rovnost příležitostí žen a mužů na trhu práce. Praha: VÚPSV. 2000. 105 p. Available from WWW: <<http://praha.vupsv.cz/cgi-webisnt/ref.wis>>.
- Kuchařová, V. Harmonizace rodiny a zaměstnání podle formy rodinného soužití. *FÓRUM sociální politiky*. 2008, Vol. 2, No. 6, pp. 8-14.
- MLčoch, L. Family as an economic agent under the pressure of markets, in Šulová L., Gillerová, I. 2008. The individual and the proces sof socialisation in the environment of current society. Prague: Matfyzpress. 2008.
- Neels, K. Temporal variation in unemployment rates and their association with tempo and quantum of fertility: Some evidence for Belgium, France and the Neatherlands, paper presented at the Annual meeting of *the Population Associtaion of America*. 2010, Dallas, 17. April.
- Örsal, D. D. K.; Goldstein, J. R. 2010. *The increasing importace of economic conditions for fertility*. Rostock: Max Planck Institute for Demographic Research. 2010. MPIDR Working Papers WP 2010-014.
- Pailhé, A.; Solaz, A. The influence of employment uncertainty on chilberaing in France: A tempo or quantum effect?. *Demographic Research*. 2012, Vol. 26, No. 1, pp. 1-40.
- Saxonberg, S.; Sirovátka, T. Re-familisation of the Czech Family Policy and its Causes. *International Review of Sociology*. 2007, Vol. 17, No. 2, pp. 319-341.
- Sivková, O. *The Family as an Externality within a Market Economy*. LAP Lambert Academic Publishing. 2012.
- Tomešová Bartáková, H. Gender Division of Work and the Labour Market Re-entry of the Czech Women after the Parental Leave. *Sociológia*. 2010, Vol. 42, No. 3, pp. 191-212.