

## **An assessment of the PhD thesis of Martina Štípková: “*Family change and its impact on the health of newborns in the Czech Republic*”**

### **General assessment**

This is an excellent doctoral dissertation that deserves to be praised. It skilfully links two broader topics—the spread of childbearing outside marriage and disparities in health status of infants—and provides a balanced mix of theory, literature review, data analysis, and discussion. I especially liked several features that are frequently missing in population research:

- First, very clear theoretical overview and literature review. The thesis gives a very useful and readable review of the literature and research issues, reviewing wealth of international literature. The author cites, by my estimate, some 400 studies, which is far above the usual standard.
- Second, research issues and hypotheses are clearly formulated and there is a close connection between theoretical and empirical parts of the thesis. I would like to highlight especially the formulation of key hypotheses explaining observed trends in non-marital childbearing and in birth weight of infants and the subsequent effort to operationalize these hypotheses in empirical models. The thesis is truly multidisciplinary, treading on the boundary of demography, sociology and public health.
- Third, related to that, is careful work with the data and models. Martina Štípková puts a lot of effort to distinguishing between cohabiting mothers and “unpartnered” single mothers. This has been common in international research for several decades, but still is far from being a standard in Czech population research, where many contributions make only a very basic distinction between married and unmarried women or men. At a time when unmarried cohabitation has become a part of the “pathways to adulthood”, the distinction between partnered mothers and those without a partner can no longer be ignored, even if the data are not ideal. In many models presented in the paper, the author gives a skilled effort to identify interactions between different factors as well as potential non-linear effects of broader (regionally defined) factors such as unemployment or the spread of nonmarital childbearing.
- Fourth, Martina puts “social status” as defined by the level of education in the centre of her analyses and shows how non-marital childbearing as well as birth weight are strongly shaped by mothers’ education level. This research closely mirrors the accumulating wealth of literature showing how education of men, women as well as their parents shapes family behaviours and outcomes, partnership, health, and mortality.
- Fifth, the thesis is well written, mostly in accessible language, very good English and, in short, it reads well! Again, this is unusual in many texts written in Czech, and even more so in those written in English. The decision to write this thesis in English will potentially make this work accessible to much broader audience.
- Sixth, this is not purely academic and purely theoretical research as it also has policy relevance. The thesis makes a clear case for a better recognition of unmarried couples, who enjoy at present very limited rights and recognition compared to the married ones. This pertains especially to situations when unmarried unions dissolve as fathers’ rights and obligations towards their children are not well defined thereafter.

The thesis was already in an excellent shape in its first version and since then it has been further improved. Tables and graphs have been nested within the text, which makes them considerably more accessible. Some models and results are presented in a simpler fashion. Theoretical part has been further expanded and some models have been revised to allow for finer interactions between different factors.

### **The usefulness of analysing partnership status of mothers**

Elaborating on my earlier assessment, I would like to highlight some of the findings which I find particularly useful. I focus especially on the more “demographic” parts of the thesis, which relate to my area of expertise.

I liked in particular the reconstruction and analysis of the rise in the share of children born out of wedlock by mother’s partnership status and level of education. The rise of nonmarital childbearing since the 1990s in the Czech Republic has repeatedly attracted attention of researchers and the media. The debate focused especially on two issues: is this trend a family change driven by new values and attitudes to family life, or is this a manifestation of a “pattern of disadvantage”, typical of low-educated younger women, typically, “single mothers” living without a partner? But the analytical armament in this debate was often poor, as most of the contributions relied on the statistics of non-marital births which did not allow distinguishing partnership status or living arrangement of mothers of children born out of wedlock. Survey data (RHS, FFS and GGS surveys of the 1990s and 2000s) have occasionally been used to provide a better-informed analysis, but a majority of contributions relied on simple statistics by marital status. Consequently, at a time when research in most countries has drawn a clear distinction between mothers living in union and the ‘true’ single mothers (with some interim categories occasionally recognised, such as “living apart together” with a partner who has another place of residence), many contributions by Czech researchers simplistically continued using a term denoting legal marital status (“single”) when referring to the mothers having children outside wedlock. Thus, much of the debate was informed by a misleading distinction between married mothers and single mothers (*svobodné matky*), ignoring the vast differences between ‘genuine’ single mothers and unmarried mothers living with a partner.

Over time three *stylised facts* have emerged on nonmarital childbearing in the Czech Republic

- Most women having children outside wedlock are “single mothers” without a partner
- Their behaviour was partly determined by policies which make it advantageous for them not to declare the child’s father in order to claim higher social benefits
- Non-marital childbearing is by and large concentrated among low-educated women and its increase is also dominated by the group of lower-educated

Martina Štípková has drawn on two kinds of available data to tackle these issues—individual birth records which also provide information on the child’s father since 2007 (and only distinguish legal marital status of the mother before that), and Labour Force Surveys (LFS), which also served for a validation of trends obtained from the imputed data on the partnership status of the mother in 1990-2006. Based on the existing theories and arguments, she outlined three broad hypotheses explaining the rise of non-marital childbearing over time, the “individualisation hypothesis”, the “economic uncertainty hypothesis”, and the “policy

adjustment hypothesis,” alluding to the fact that policies that potentially motivated mothers not to declare child’s father changed over time. Next she was able to operationalise these hypotheses with the limited amount of data at hand. “Individualisation” implies a continuous increase in the share of non-marital births over time (especially among the better-educated), “economic uncertainty” implies that the rise in the share of nonmarital births should take place especially in economically uncertain times and/or in the most disadvantaged regions and social groups (unemployment rate served as a proxy for that) and “policy adjustment” implies that shifts in policies should correspond to the breaks in the trend in the share of non-marital births.

Based on these assumptions which were built into numerous models constructed in this dissertation as well as simple analyses of trends over time, what are the major new findings?

- The rise of non-marital childbearing was driven especially by the spread of cohabitation, i.e., more women having children with a partner rather than by an increase in single motherhood. A majority of the mothers of non-marital children now live with a partner at the time the child is born—over three quarters according to live births records and around two thirds according to the LFS data
- There are two persistent education gradients in non-marital births: 1) the lower the mother’s education the more likely she is to have a child outside marriage. These contrasts by level of education are still huge despite recent accelerated increases in the share of higher-educated women having non-marital birth. 2) the higher the mother’s education, the more likely she is to live with a partner when having a child outside marriage.
- An uninterrupted rise in the share of non-marital births over time, in all regions and across all education groups, lends support to the “individualisation” hypothesis
- The policy influence revealed in the analysis is most interesting: policies that made single motherhood potentially more advantageous had only limited effect on the likelihood of having a child within marriage. Rather, they motivated some of the women having children outside wedlock (and their partners) not to register the child’s father. Once the preferential treatment of “single mothers” ended in 2009, paternity declaration in non-marital births increased considerably, but, interestingly, there was no perceptible effect on marriage that might have been expected.

The importance of making a distinction between partnered and unpartnered mothers of children born outside marriage has clearly showed up in the part analysing the determinants of birth weight, especially low birth weight (LBW). Both descriptive analysis (e.g. Figure 12.4) and regression models (Table 12.6) show that the main dividing line lies not between married and unmarried women, but between those with and without a partner, especially in the more recent period. Unmarried mothers with a partner have very similar incidence of LBW to those who are married, especially after 2000 when both groups almost converge at 4-5%. When controlling for other factors such as mothers’ education, age and child’s birth order as well as some contextual variables (unemployment), children of unmarried women with reported father even have a slightly lower incidence of LBW than the married ones. This is completely in contrast to women without partner, who have elevated levels of LBW which are almost three times higher than those of the married and partnered women.

These and other findings have a potential to redirect the discussion on the rise of non-marital childbearing in the Czech Republic.

### **What can be improved?**

The thesis is in a very good shape now, so it's mostly minor things that might be further elaborated. Any publication stemming from this analysis should be able to trim the text and the number of tables & illustrations. The main text may acknowledge yet more strongly data problems & study limitations, especially the way currently available data still limit research on partnership status of mothers. Minor problems remain with the terminology used, but can be easily corrected. The share or proportion of children outside marriage should not be labelled as "rate". Rates in demography always refer to the intensity of the process controlling for the "population at risk"—e.g., non-marital birth rate would most commonly reflect number of births per thousand unmarried women by age. Parity usually refers to the number of children a woman has had prior to the child of a given birth order analysed. So women who are having their first birth are (still) at parity zero just prior to the time the birth occurs. What's now labelled as "parity" throughout the paper should in fact be labelled as "child's birth order".

The very high share of mothers with elementary education levels who have children without established paternity can in part reflect the difficulties of these women (and their partners) to officially register paternity. Hence the "real" proportion of single mothers with low education might be lower—however, more research is needed to confirm this.

### **Conclusions**

In sum, this is a remarkable dissertation. By reading it I learned a lot about the research on the topics covered. Both the author and, presumably, also the thesis supervisor Martin Kreidl, did a splendid job.

I wish more doctoral dissertations will reach such a high level in terms of their quality, relevance and analytical mastery. I also wish this thesis will become widely available and that Martina Štípková will be able to publish as many of the presented results as possible in various research papers and other publications. Finally, I wish that this thesis would mark the start of Martina's successful academic career. The topics she discussed deserve much more attention in the future and her analyses of determinants of child health might be expanded to include other factors than birth weight should relevant data become available.

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