Socio-demographic correlates of second and subsequent births. Estimates based on Russian Census data

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Introduction

1. First births are very common in Russia. Childlessness is still very low spread in the country on the whole it and is usually involuntary (Biryukova, Tyndik 2015).
2. Second and consequent births are less universal.
3. At the same time stimulation of second and subsequent births has been one of the main goals of Russian family policy since 2007.
4. New policy measures consist mostly of monetary components. *Who can and will respond to them?*
5. In many countries fertility declines during economic recession (Sobotka et al. 2011). It concerns both period and cohort fertility indicators.
6. Generally to understand family policy potential and target group we have to know which women are more likely to react to economic signals — macroeconomic dynamics or monetary policy measures.

The aim of this study is to define groups of women responding to the monetary measures of family policy in Russia, and to compare the magnitude of the effects from macroeconomic and policy changes.
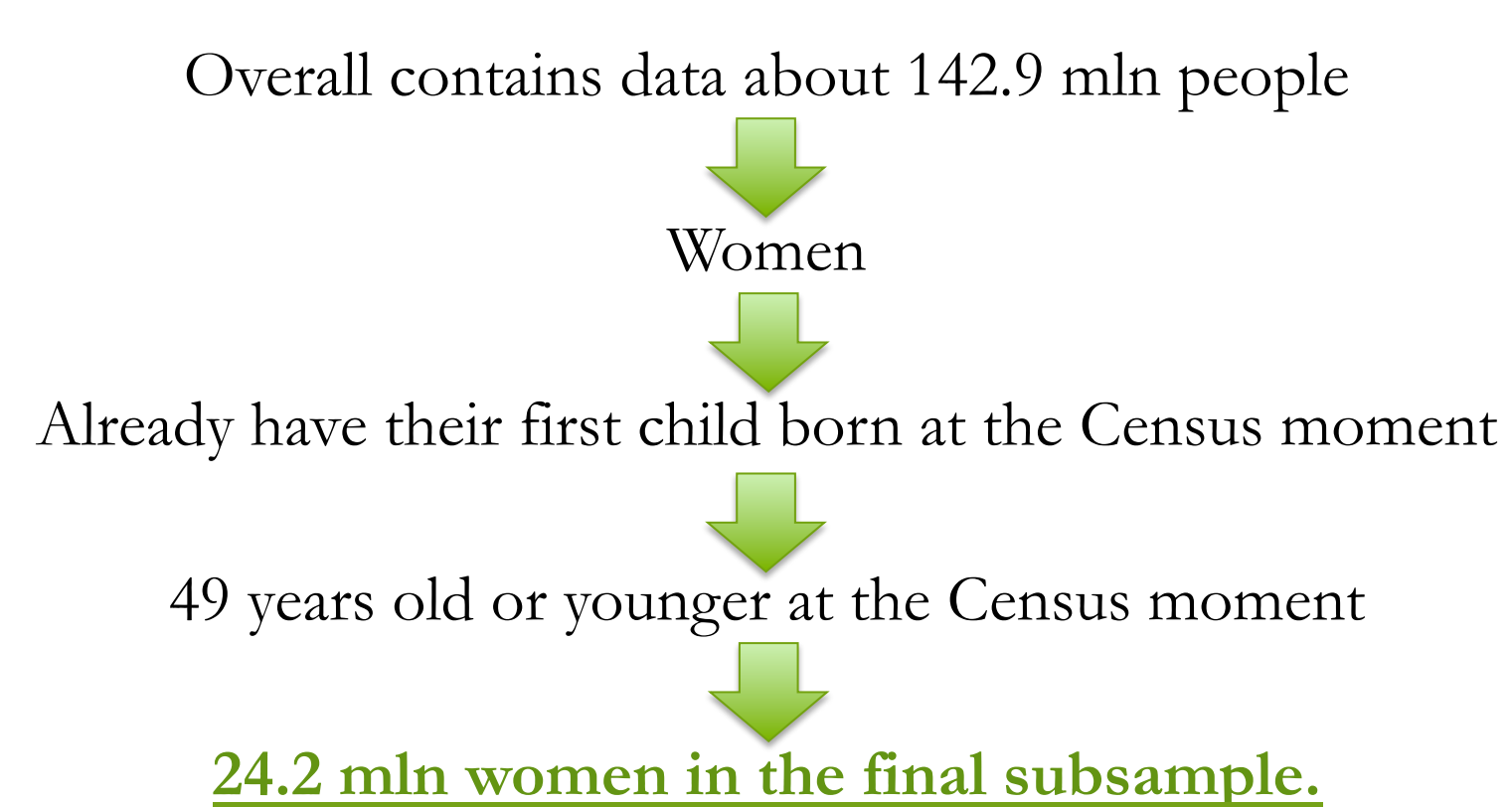
On the first stage of the study we focus on the following questions:

a) As for now, which groups of women experience the highest chances of having second and consequent children?
b) At that, do we observe any change for younger generations?
c) Does macroeconomic dynamics correlate with probability of second and consequent births in Russia? Do we observe any evidence in statistics?
c) Can we see any reaction to the new policy measures in the statistics yet?

Statistical Database

RUSSIAN CENSUS-2010 MICRO DATA

Was published by Russian Statistical Agency in 2013 in the form of custom cross tables available for .csv downloads.

Overall contains data about 142.9 mln people

⬇

Women

⬇

Already have their first child born at the Census moment

⬇

49 years old or younger at the Census moment

⬇

24.2 mln women in the final subsample.

First Results

➢ Rural-urban differences appear to be the most influential factor with respect to the second and subsequent births.

➢ For the third or subsequent births differences between urban and well-educated rural women become less significant.

➢ **Low-educated women living in rural area have the highest chances of having second and subsequent children.**

➢ Both for second and for third and subsequent children **we observe a plateau in 1990-2000 for all women**. These years frame a period of economic turbulence and of vast structural economic reforms in Russia.

➢ All women who had their first child born during the economic recession of the 1990-s have very similar chances of having all the next children by the Census moment. **It might be economic instability which affected their behavior.**

➢ We do not observe any fluctuations after 2007/2008 (introduction of the new policy measures). Yet, the observation period is far too short for now.

Fig. 1. Share of women who had their second (top) and third (bottom) child born *by number of years elapsed since the first child was born*
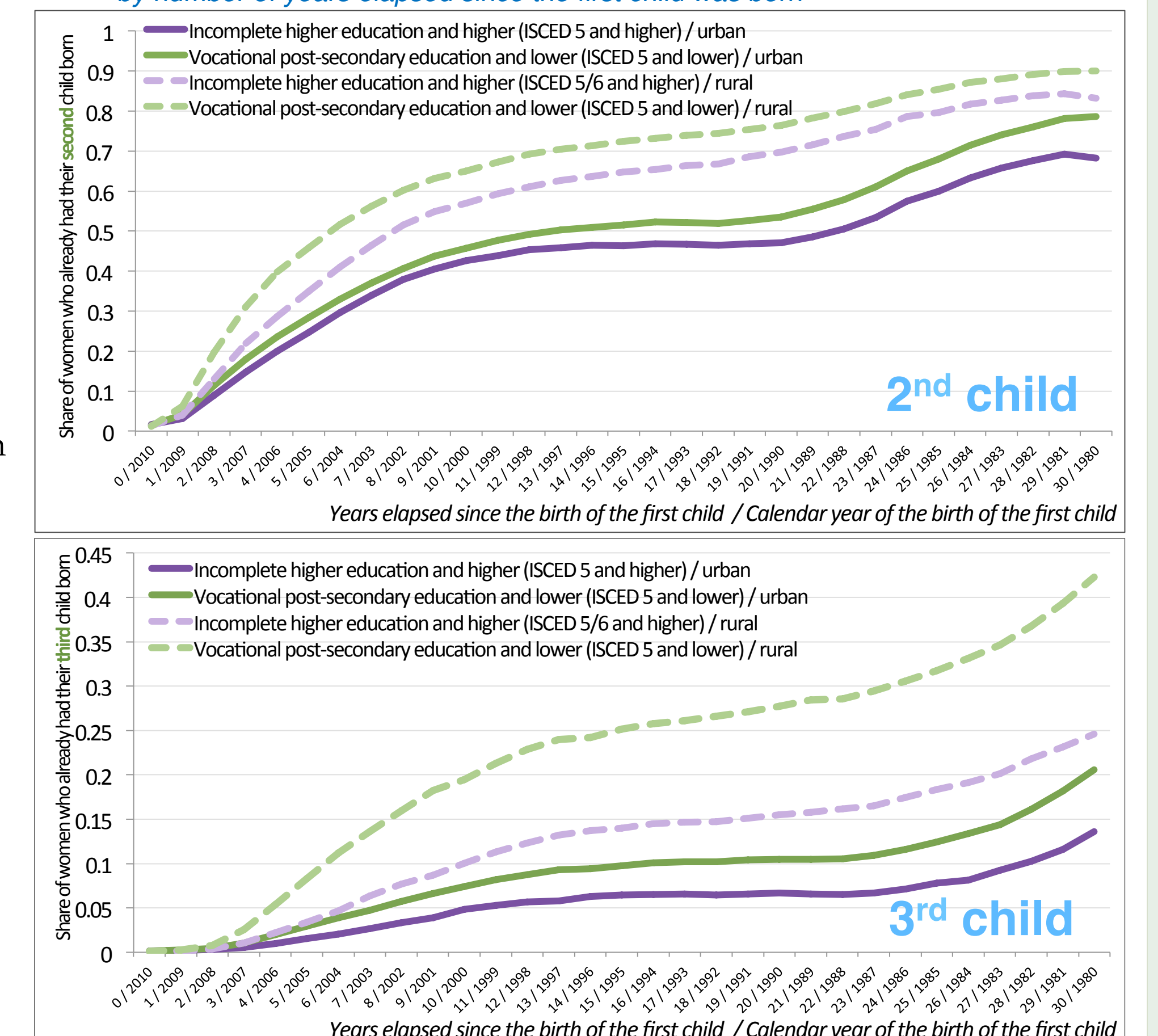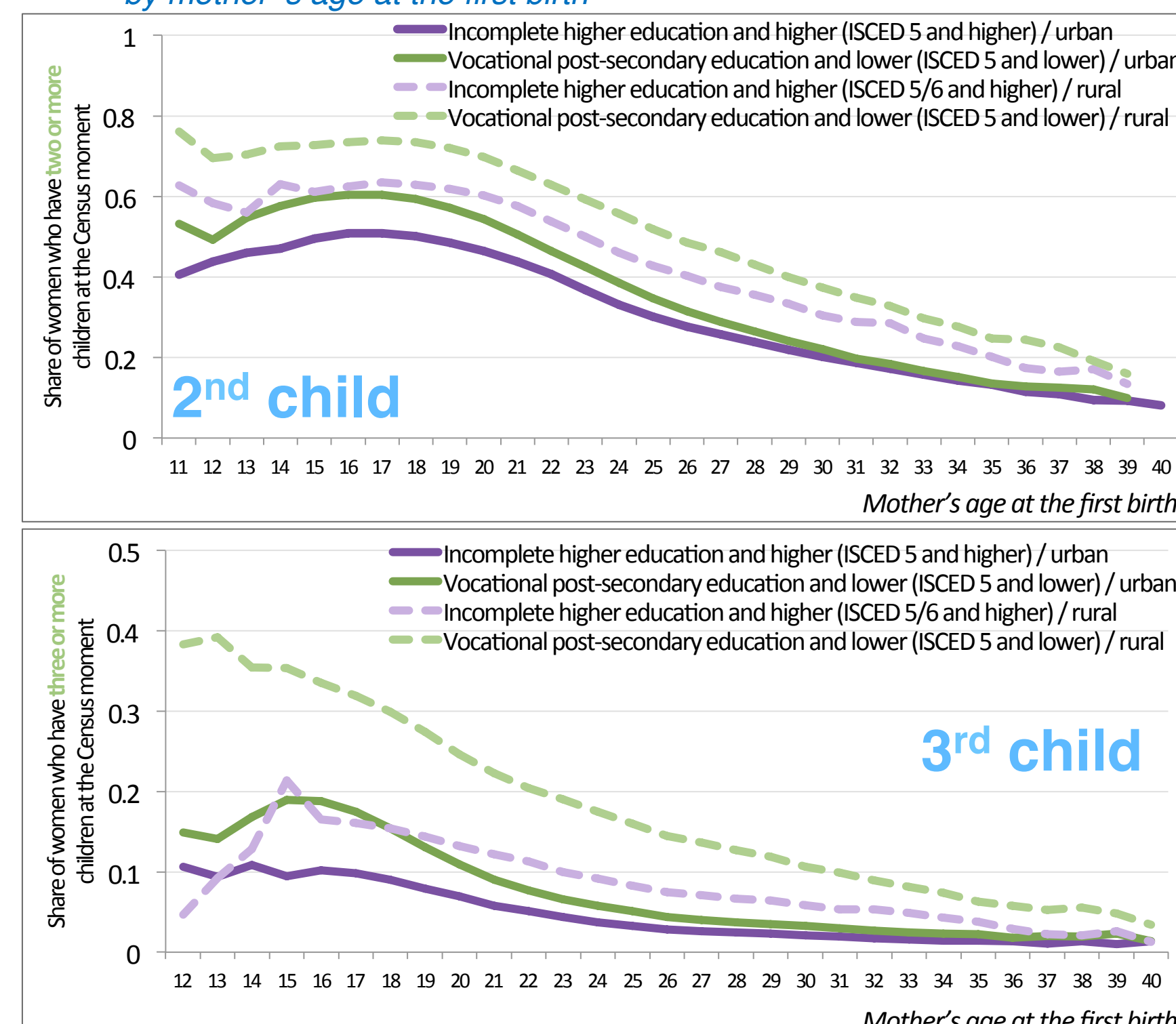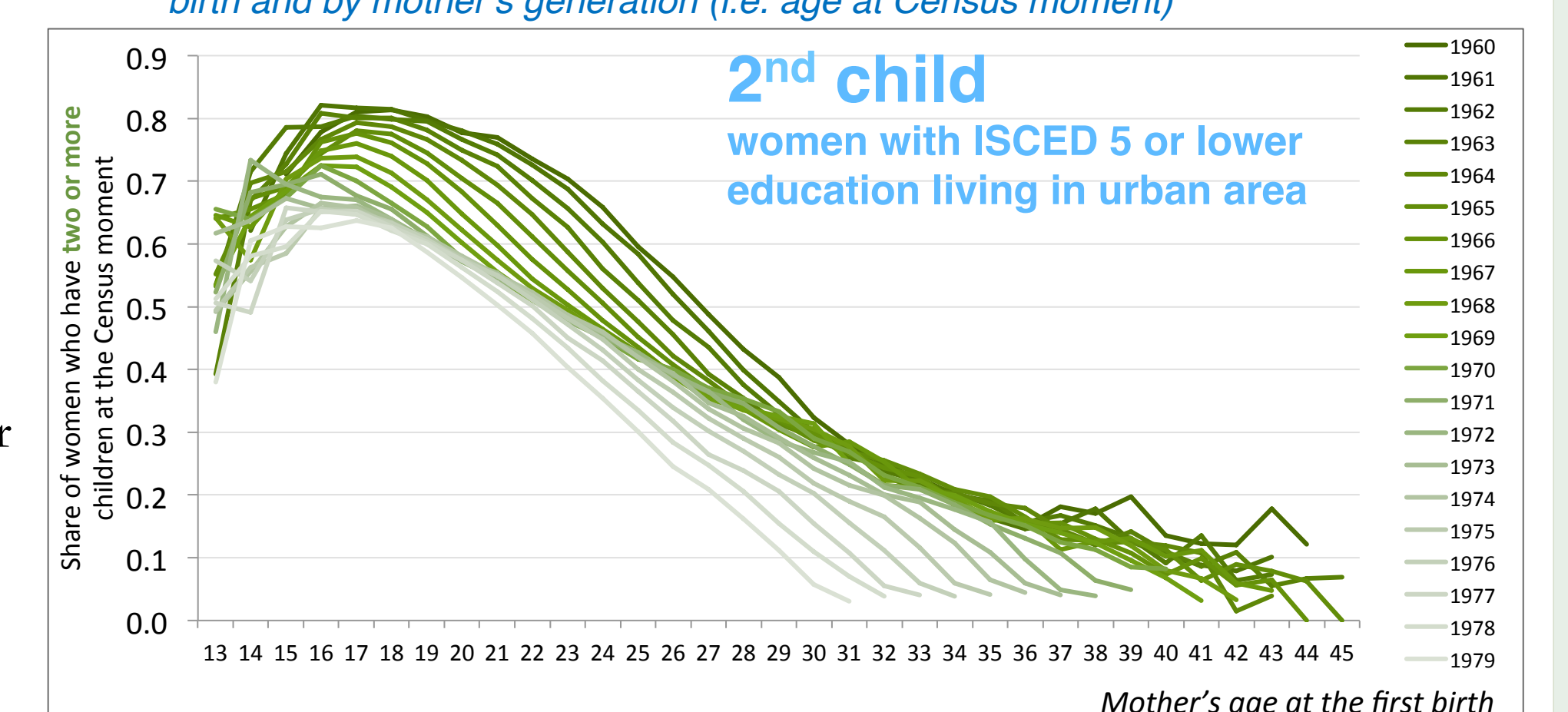

Fig. 2. Share of women who had their second (top) and third (bottom) child born *by mother's age at the first birth*

- **Extremely early first birth lowers chances of having consequent children** significantly both for rural and urban women. "Extremely early" here stands for 16 or younger, which usually means unplanned and often unwanted pregnancies.

- The gap is generally smaller in rural area and it almost vanishes among low educated rural women with respect to third children.

- Generally the highest chances to have second child are observed among women who had their first child at the age of 17-18, and the highest chances to have third child among those, who had their first child at the age of 15-16.

➢ Shape of the distributions discussed above is similar for the four groups of women we distinguished.

➢ We observe flatter curves for the youngest generations among those who come close to the end of reproductive period (i.e. women born in 1965-1970). This means that age at the start of reproduction career gradually becomes a little less strong correlate of the second and subsequent births.

Fig. 3. Share of women who had their second child born *by mother's age at the first birth and by mother's generation (i.e. age at Census moment)*

Plans for Further Research & Discussion

1. **Study group differences more closely. Try to separate intergenerational changes (second demographic transition) and temporary changes due to economic or policy changes.**

2. Regression analysis:
   - fitting a regression model for a large-scale Census data,
   - Including macroeconomic background into the model, for example, using variables such as *average rate of economic growth or consumer prices index during 3 or 5 years before the first child birth*,
   - Including family policy changes into the model.

3. Analyze the data of **Pre-Census Survey of 2015** (also known as micro Census, can cover up to 5% of population), which should give a clearer picture for post-2007 years.

4. Estimate effects of positive and negative economic changes, and of policy changes, and then of policy changes accompanied by economic changes.

References

Biryukova, S. S., & Tyndik, A. O. (2015). Prevalence and determinants of childlessness in Russia and Moscow. *Genus*, 71(1).

Sobotka, T., Skirbekk, V., & Philipov, D. (2011). Economic recession and fertility in the developed world. *Population and development review*, 37(2), 267-306.