

The absence of post-war baby boom in Estonia: societal shock or early consolidation of the two-child norm?

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1. Background

Recently a scholarly interest has developed towards the temporary increase in fertility in the mid-20th century that in many Western countries interrupted the transition to low fertility (van Bavel and Reher 2013). In literature, this is referred to as the baby boom (BB). In many countries, the large cohorts born during that period around the 1950s and early 1960s are reaching the retirement age and pose serious challenge to existing social security systems. At the same time, researchers are still unable to fully understand the driving forces behind this significant increase in childbearing that occurred in some countries. There are several explanations to the BB, attributing the fertility recuperation to economic growth that followed the war, relative cohort size (Easterlin 1961), and female labour force participation rates (Doepke et al. 2007). It has also been proposed that labour-saving household products reduced the cost of children and thus initiated the BB (Greenwood et al. 2005). Large part of existing research on the BB is focused on the experience of the USA and the comprehensive account of the developments in many European countries is still missing.

In this study, we investigate the Estonian case which, from the BB perspective, might be interesting for several reasons. Although Estonia belongs to the group of countries that shared the West-European marriage pattern and early fertility transition, the post-WWII fertility trend appears markedly different from Western European countries that experienced the BB in the post-war decades. Compared to other forerunners of fertility transition, that experienced sub-replacement fertility between the two world wars, Estonian fertility remained below replacement level in the 1950s and most of the 1960s. Some authors (Katus 1997; Frejka and Sardon 2004) have related the low post-WWII fertility in Estonia to forced societal re-arrangement and repressions that took place during the Stalinist era, but this hypothesis has not been tested in empirical analysis.

2. Questions and hypotheses

In order to understand the peculiar fertility trend in Estonia, we pose a question whether the low post-WWII fertility level is a continuation of the interwar trends or rather a result of a large-scale societal shock. To cast light into this issue, we seek to analyse the factors that shape aggregate fertility levels (the proportion of never-married, stability of marital unions, level of childlessness, timing of childbearing, and progression to higher order births).

Besides analysing the general pattern, we pay attention to differentials in educational attainment and social status. On the one hand, it may be hypothesised that stable and low post-war fertility emerged due to quick propagation of two-child norm across educational and social groups. In the context of extensive and almost linear decrease in childlessness, associated with disappearance of the West-European marriage pattern, we expect to observe convergence towards the two-child family in all educational groups. On the other hand, from the point of societal shock hypothesis, we expect that the completed fertility level would be in particular affected among the highly educated strata and elite who can be regarded a politically vulnerable groups. Thus, it may be expected that different educational and social groups would respond differently to societal shock and exhibit divergent fertility outcomes.

3. Data and methods

The data used for the study come from several sources.

First, the 1979, 1989 and 2000 censuses in Estonia, which allow exploration of trends in

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completed fertility in generations born between 1900 and 1960. Mostly descriptive measures (proportion of never-married, CTFR, proportion of childlessness, parity progression ratios and relative parity distributions), broken down by educational attainment, are used to assess the changes in completed fertility and its proximate determinants. The 2000 census, that collected information on the age at first birth, allows us to estimate changes in transition to first child.

Second, in addition to census data, retrospective survey data from the Estonian Family and Fertility Survey (1994/1997) and Estonian Generations and Gender Survey (2004/2005) is used to describe and model fertility transitions in maternal generations of the survey respondent (that is, childless women are excluded). The survey data on mothers (complete fertility histories, partial partnership histories, socio-economic characteristics, experience of repressions) relate to women born between the late 1900s and 1950. For the analysis of survey data, we will apply transition rate models.

4. Preliminary results

The results based on the 1979, 1989 and 2000 censuses can be briefly summarised as follows:

- 1) Among the native population, completed cohort fertility had already fallen below replacement in generations born around the turn of the 20th century. The decrease observed in oldest cohorts, covered by the 1979 census, evidently represents the tail end of the transition from uncontrolled high to controlled low fertility that commenced after the mid-19th century.
- 2) In generations born in the late 1910s, the CTFR showed signs of stabilisation at the level of 1.80–1.85. This was followed by a further decrease to 1.70–1.75 children among women born in the mid- and late 1920s, whose prime childbearing years fall into early post-war decades. From the birth cohorts of the late 1920s, a gradual increase in completed cohort fertility began in Estonia. It continued until cohorts born in the late 1950s and early 1960s that took period fertility temporarily to replacement level in the 1970s and 1980s.
- 3) The propensity to have a first child systematically increased considerably since generations born at the beginning of the 20th century. The percentage of childless women decreased about three times, from a maximum of 25–26 per cent in these oldest cohorts to a minimum of 7–8 per cent in the cohorts born in the 1950s. The decline in childlessness was paralleled by the decrease in the proportion of never-married.
- 4) The propensity to move from the first to a second child changed relatively little among women born between 1900 and the early 1930s. In these generations, between 66–71% continued from first to second birth, with a slightly lower propensity in the cohorts born in the 1920s. This was followed by a rise that took the PPR 1>2 close to 80% women born in the 1950s.
- 5) The census data reveal a marked decrease in the propensity of women to proceed to a third birth among older generations. In the birth cohorts of early, 1900s, the secular decrease in the progression to higher parities was not yet complete as more than 60% of two-child mothers went on to have a third child. In generations of the early 1920s, the proportion dropped below 50%, the decrease accelerated among women born in the early and mid-1920s. Finally, the downward trend came to a halt among the cohorts born in the late 1940s and early 1950s, at the level of 34-35%. Thus the analysis seems to suggest suggests that the absence of the baby boom and low fertility in the early post-war results from the persistent decrease in the propensity to have large families. In the following generations the probability of having a third child turned to moderate increase. Like the progression to a second birth, the 2>3 parity progression ratios peaked among women born around the turn of the 1960s. In these generations, more than two-fifths (41–42%) of women with two children went on to have a third child.
- 6) The described shifts in parity progression ratios determine the ultimate family size of generations. The cohorts born until the 1920s featured a relatively similar proportion of women with 0, 1, 2, and 3+ children, and it was still the most common for women in these

generations to have large families with three or more children. Below replacement fertility in these cohorts embedded a remarkable diversity in reproductive outcomes. A fairly high proportion of women with large number of children was offset by an almost equally high proportion of childless women: in fact, in the birth cohort of the 1900s and the 1910s childless women ranked second among our four family size categories.

- 7) The acceleration of shifts in parity distribution in generations born around 1920, lead to the consolidation of the two-child family model in Estonia. In the cohorts born at the turn of the 20th century, women with two children accounted for only 20% of the generation. In the birth cohorts of the late 1940s and early 1950s, the corresponding percentage reached 43–44%.
- 8) With respect to timing, the disappearance of the European marriage pattern entailed a marked shift towards younger ages in all reproductive events, including sexual initiation, marriage and childbearing. Interestingly, the data from the 2000 census of Estonia indicate a temporary reversal of the rejuvenation of motherhood. Among native population, the shift towards earlier motherhood temporarily ceased in the 1917 birth cohort and moved in the opposite direction until the 1925 birth cohort. Moreover, it was not until women born in 1929 that the mean age at first birth dropped below the level achieved by the 1917 cohort. Considering mean age at first birth in the period (around 26-27 years) in these birth cohorts, the disturbance relates to the period postwar societal shock rather than the war years.

In the following stage of the analyses we will look into educational differences in cohort fertility and apply the methods of event history modelling to childbearing in maternal generations.

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