"Social capillarity" revisited: The relationship between social mobility and fertility in transitional Poland and Russia

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Abstract

This study explores the relationship between social mobility and fertility in Poland and Russia. These two countries shared a similar context when command economy practices provided relatively low incentives for upward mobility. They differed, however, in their economic performance during the transition process with Poland entering a path of gradual economic growth after a few years of economic turmoil and Russia undergoing a long-lasting crisis. This comparison offers a promising and so far unexplored setting for studying links between fertility and new opportunity structures in a post-communist context where mobility became more significant for men and women and where women have long been perceived as breadwinners but are still seen to be the main care providers. This study also contributes to our understanding of the rapid fertility decline in post-communist countries. We apply event-history analysis techniques to longitudinal micro-data from the Generations and Gender Programme.

Extended Abstract

The development of capitalism and democracy in France was accompanied by declining fertility, which was explained by Arsene Dumont (1849-1902) as "social capillarity": If family size is likened to a liquid, the thinness of this liquid affects the ease with which it can be pulled up a straw by the force of capillarity. In this manner, increased desire for upward mobility limited the size of families in this context. Dumont was the first to argue that a relationship between mobility and fertility exists (Bejin, 1989) and this idea flourished in post-war Sociology, provoking decades of inconclusive research on the subject (Westoff 1961, 1963; Tien 1961; Blau and Duncan 1967; Hope 1971; Bean and Swicegood 1979; Zimmer 1981; Stevens 1981; Sobel 1985; Kasarda and Billy 1985). Many researchers found the idea that childrearing and upward mobility were incompatible in terms of resource competition compelling (e.g., Berent 1952; Tien 1961; Zimmer 1981), but the debate over how this relationship should be modeled undermined the perception that any set of results was definitive (e.g., Hope 1971; Stevens 1981; Sobel 1985).

This study uses dramatically improved methods and data to explore the possibility of a relationship between social mobility and fertility. Past research was restricted to status comparisons at time points that were available in the data, which a) rarely captured status at points in the life course that are

theoretically important, b) prohibited the study of short-term mobility effects and c) did not treat the dependent variable as a process. In addition, the sequencing of events was largely ignored, which has serious implications for identifying the direction of the relationship. Past modeling also focused on men's occupational status mostly, which does not reflect the importance of women's expanded role in the labor market. Finally, the specificity under which mobility influences fertility has not been explored, when policy and welfare contexts, along with stratification systems, are likely to moderate mobility effects.

Comparative analysis of mobility effects is a useful way to assess whether there are conditioning factors to the mobility/fertility relationship as well as gain additional insight into the mechanisms at work in this relationship. This study explores the effect of mobility of women and men in two contemporary societies that have also recently developed market-oriented economies and democratic political structures: Poland and Russia. A comparative approach is extended across time periods as well. Russia and Poland shared a similar context before 1991 and 1989, respectively, when command economy practices provided relatively low incentives for upward mobility in regards to wages and potentially lower conflict between the demands of achieving upward mobility and childbearing. In contrast, the transitional periods were quite different in the two countries. Although both countries underwent a period of economic turmoil in the early 1990s, characterized by a rapid decline in GDP and a sudden increase in unemployment, this period was much shorter in Poland, where the implemented reforms led to economic stability. Since 1992, Poland has experienced gradual economic growth and in 1996 its GDP per capita already exceeded the level of 1989. Together with Czech Republic, Slovakia, Hungary and Estonia, Poland belongs to the most successful group of countries that went through the economic transformation (Wypłosz 2000). In contrast, Russia clearly experienced more difficulties with the transition process; the economic crisis of the early 1990s was much longer and deeper. The country returned to positive economic growth no sooner than 1997 and entered another economic crisis the following year. Russia did not achieve the 1989 level of GDP per capita until 2003. Therefore, a comparison of the two cases allows us to see how the relationship operated under different conditions.

Specifically, this study will observe how upward mobility mattered to second births in Russia and how both upward and downward mobility influenced second births in Poland. The effect of downward mobility on second births in Russia has already been explored in a recent study (Billingsley 2010): this direction of mobility appears to have influenced fertility only in the post-Soviet time period. *Inter*generational downward mobility was associated with higher second birth rates for women and *intra*generational downward mobility with lower rates for both women and men. The effect of intergenerational downward mobility was stronger in the short-term, whereas the negative influence of intragenerational mobility appeared to be long-lasting as well. Decomposing intragenerational mobility according to its timing shows that the experiences occurring after the first birth drove the negative association for women, whereas those before and after entering parenthood were influential for men.

Data and methods

We use multiple data sources for this analysis that come from the Generations and Gender Program. This project was designed as "a system of national and contextual databases, which aims at improving the knowledge base for policy-making in UNECE countries" (UNECE 2006).

For Russia, the data sources include the Russian Generations and Gender Survey (RGGS) and the Employment and Education Survey (EES)[i]. The 2004 RGGS is the first survey wave of a nationally representative sample of the 18-79 year-old resident population and provides us with information on partner and fertility histories as well as family of origin. In 2005, the EES was given to an 18-55 year old sub-sample of 2460 men and 3995 women who had participated in the RGGS and covers all employment and educational activity over the life of the respondent, starting from January of the year he or she turned 17. The sample on which this study is based consists of those who participated in both the RGGS and the EES.

The first wave of the Polish Generations and Gender Survey (PGGS) was conducted at the turn of 2010 and 2011 on a representative sample of 18-79 year old women and men. Its questionnaire largely corresponds to the RGGS, but additionally covers full employment histories of the respondents since the age of 15. It thus creates good opportunities for a comparison with the Russian datasets. A limitation of working with the above described datasets is that they provide retrospective histories of the respondents, but not of the partners.

Our study covers the years 1967 to 2004, with the oldest individuals born in 1950. We analyze second birth rates for men and women separately. The dependent variable of the second birth event is binary: 0=no second birth, 1=second birth. The respondents are censored eight months before their second birth, to account for a gestation period and accurately link conditions to the time at knowledge of conception, or eight months before the interview if they had not had a second child. A piecewise constant event history model is estimated to achieve the relative risk of a second birth, which allows the baseline hazard to vary according to pre-determined time segments since we would expect the hazard rate to differ over the time since the first child was born.

Our major explanatory covariate is the experience of social mobility. In measuring social mobility we rely on a variant of the Erikson-Goldthorpe occupational class schema – the European Socioeconomic Classification (SeC). This schema largely relies on employment relations, or whether a person is an employer, employee, self-employed or supervisor. Both datasets give the possibility to reconstruct the schema by using information on occupations. Non-working respondents who are assigned no occupational class are retained in the analysis and coded as non-employed. Respondents are supposed to experience downward (upward) intragenerational mobility when their occupational class is lower (higher) than the one associated with their previous job. Likewise, intergenerational mobility is observed if respondents' occupational class is different than their parents at the age of 15.

Our main interest is to study the experience of social mobility after the first birth. Nevertheless, the time period preceding the first birth may also offer important information on mobility experiences. For example, an individual may have received university education, been unable to find a suitable job, decided to have a first child anyway, but stopped after the first birth because of a desire to achieve a

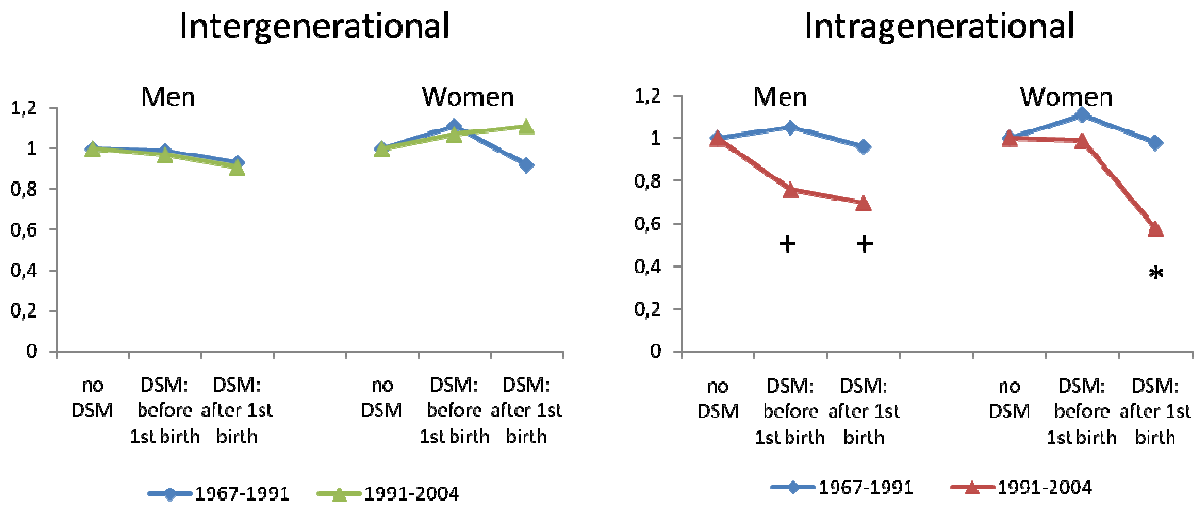
higher status. Therefore, some models measure social mobility by indicating whether it occurred before or after the first child was born.

In our models we control for a set of time-constant and time-varying observed characteristics. Among the time-constant characteristics we include the number of siblings to account for the family size to which the respondent is accustomed, urban / rural place of birth which is widely known to influence fertility behavior across many contexts as well as age at first birth. For Russia we also include a dummy that captures whether the respondent was surveyed in St. Petersburg and Moscow to account for unusually low response rate recorded in these two cities (15%). The following time-varying covariates are also included in all models and can change in monthly increments: respondents' partnership status, including marriage, time since the first, respondents' educational status and level. Respondents are also categorized as being unemployed, not participating in the labor force (NLFP) and participating as well as their occupational class. NLFP includes in education, in the military, and caring for a home/children. Finally, mobility measures are often interacted with a dummy variable that indicates whether the spell occurs before or after the political and economic regime change at the end of 1991.

Expectations:

Similar findings are expected in Poland for the effects of downward mobility. However, the effects may be stronger in Russia if the degree of economic instability affects the impact of downward mobility.

Figure 1. Selected results from hazard model of second birth rates for men and women in Russia, 1967-2004, "timing of ever experienced" intergenerational and intragenerational downward social mobility



Note: Statistical significance: + =10%, * =5%, ** =1%.

We also expect to find similar upward mobility/fertility relationships in Russia and Poland before their transitions from communism. The transitional period presents more challenges in predicting the relationships for upward mobility in the two countries. In contrast to downward mobility, upward mobility may have a stronger impact in Poland than Russia if the relationship is based on increased opportunity costs and higher returns to upward mobility. If the mechanism at work in the mobility-fertility relationship is not related to the rewards of working in a higher class, the direction and strength are difficult to predict. In contrast to the social capillarity mechanism, the relationship will be positive if it is related to Easterlin's (1987) relative economic effect. Non-pecuniary mechanisms may also be worth considering. For example, general well-being has been associated with higher second birth rates in Russia (Perelli-Harris 2009) and higher status attainment may very well increase well-being. Finally, the women who are upwardly mobile might be the most ambitious and career-oriented women who are already less inclined toward childbearing.

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[i] The "Education and Employment Survey for Russia" was conducted by the Max Planck Institute for Demographic Research (Rostock), the Independent Institute of Social Policy (Moscow), and the Demoscope Independent Research Center (Moscow). Information about the data source can be found in Bühler et al. (2007).