Planned or spontaneous? Fertility intentions and realization in Russia

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Abstract

From the beginning of 2000s there is fertility growth in Russia, which was partly accelerated by the family policy instruments introduced from 2007 and aimed at increasing the number of second and subsequent births. Previous research shows that the number of second and third births has increased from 2007. At the same time, age of entering motherhood is continuously increasing, although at a lower speed comparing to Western and CEEs countries. In this study we analyze how fertility outcomes are related to the previous time-dependent parity-progression fertility intentions using the data of three waves of Russian Generations and Gender Surveys (2004, 2007 and 2011). Micro level analysis allows us understanding better not only the proportion of planned or unintended births, as well as not realized intentions, but also the individual characteristics associated with each fertility outcome. Our findings show that realization of the first births has at least not changed from 2007 to 2011 comparing to 2004 – 2007, while realization of the second and subsequent births has substantially improved. In addition to fertility intentions, the most important factors of fertility outcomes are partnership status, parity, and age. The effects of social and economic variables are either completely insignificant or unstable.

Extended abstract

For more than a decade Russia was described as a country with the lowest fertility level. However, from the beginning of 2000s fertility is growing, and by 2012 TFR has reached 1.67. This growth was partly accelerated by the family policy instruments introduced from 2007, aimed at increasing the number of second and subsequent births. Statistical data and research show that the number of second and third births has increased from 2007, and the interval between births has started to decline. This growth was not interrupted by the economic crisis of 2008-2010.

At the same time, age of entering motherhood is continuously increasing, although at a lower speed comparing to Western and CEEs countries. By 2010 it has almost reached 25 years old. It means that the first births are most likely better planned now than several decades ago.

In the given circumstances it is interesting to look at the link between fertility intentions and outcomes in contemporary Russia. In this study we are particularly interested in the realization of the time-dependent parity-progression fertility intentions before the new family policy instruments were introduced and after. Because of the opposite trends in the first and subsequent births, we are looking at the realization of the first and subsequent births intentions separately.

Our paper follow previous research of fertility intentions (Testa and Toulemon 2006; Mencarini et al. 2010; Régnier-Loilier and Vignoli 2011; Spéder and Kapitány 2009). We adopt a theoretical framework developed by Miller and Pasta (1995). But also acknowledge the role of structural factors influencing fertility behavior that might contribute to the discrepancies between intentions and births (Bachrach and Morgan 2013).

Our analysis is based on the data of three waves of Russian Generations and Gender Surveys (2004, 2007 and 2011).

Our main hypotheses includes: after 2007, (1) intentions to have a child in 3 years have increased for 2nd and subsequent births and haven't changed for the 1st births; (2) realization of positive intentions to have a child (including indefinite) has improved for the second and subsequent births, (3) there are less unintended first births (particularly among those who definitely did not want to become a parent).

Micro level analysis allows us understanding better not only the proportion of planned or unintended births, as well as not realized intentions, but also the individual characteristics associated with each fertility outcome.

Fertility dynamics and new family policy in Russia

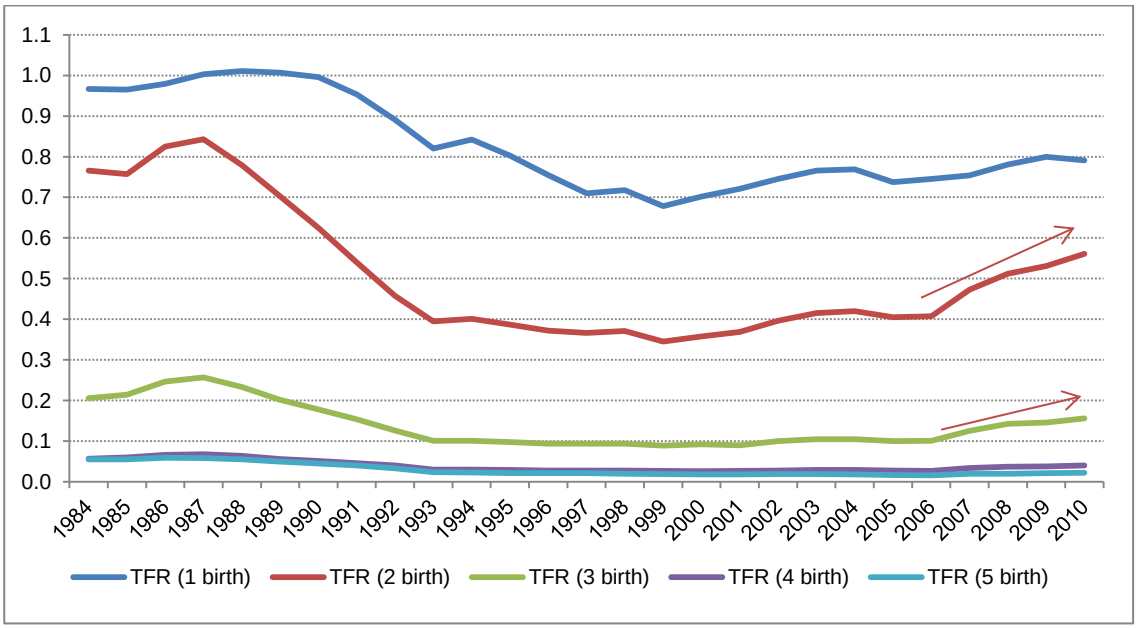
From the beginning of economic transition Russia has experienced a sharp decline in fertility (Zakharov 2008).. TFR has fallen from 2.2 in 1987 to 1.37 in 1993 and 1.16 in 1999. By 2011 it has increased up to 1.6. Completed fertility of the cohorts does not fluctuate so dramatically, although most of Russian demographers agree that it is steadily declining, and for the cohorts born in 1970-1980s it will be no more than 1.6 children per women (Zakharov 2008). Despite the two-child ideal family model is still dominant in Russia, the two-child family has become much less prevalent (Philipov and Jasilioniene 2007; Billingsley 2011), and there is a very small share of women with three or more children. More and more families have the only child (Frejka, 2008; Frejka and Sobotka, 2008).

From 2007 Russian government has introduced a set of family policy measures aimed at increasing the number of second and subsequent births. Many benefits related to child birth and child care until child's 18 months were either introduced or increased. In addition, the government has introduced a particular policy instrument, so called 'maternity capital', a certificate issued for the 2nd birth[1] that can be used for improving housing conditions, or child's education, or pension accumulations of the mother when the child turns 3.

Analysis of the TFR by parity shows that from 2007, this indicator has substantially increased for the 2nd births, slightly increased for the 3rd birth, while remained almost at the same level for the 1st birth (Figure 1). One of the reasons of the fluctuations of TFR relates to the process of ageing of fertility. Russia has not escaped the widespread postponement of parenthood visible across Europe in recent decades, although it still happens at a much slower speed than in CEE countries. Figure 2 shows that TFR for the 1st birth could be higher if women were not postponed these births to later ages. A trend of postponement of the 1st births continued for the whole period of the GGS in Russia – 2004-2011, at approximately the same speed (Figure 3). Comparing to other countries, we see that the potential of the ageing of the entering motherhood is still big (Figure 2).

To the contrary, it seems that the intervals between 1st and 2nd births, which were very big in Russia, started to shorten. In 2008 this average interval was at its maximum - 4.9 years, by 2010 it has reduced to 4.75 years.

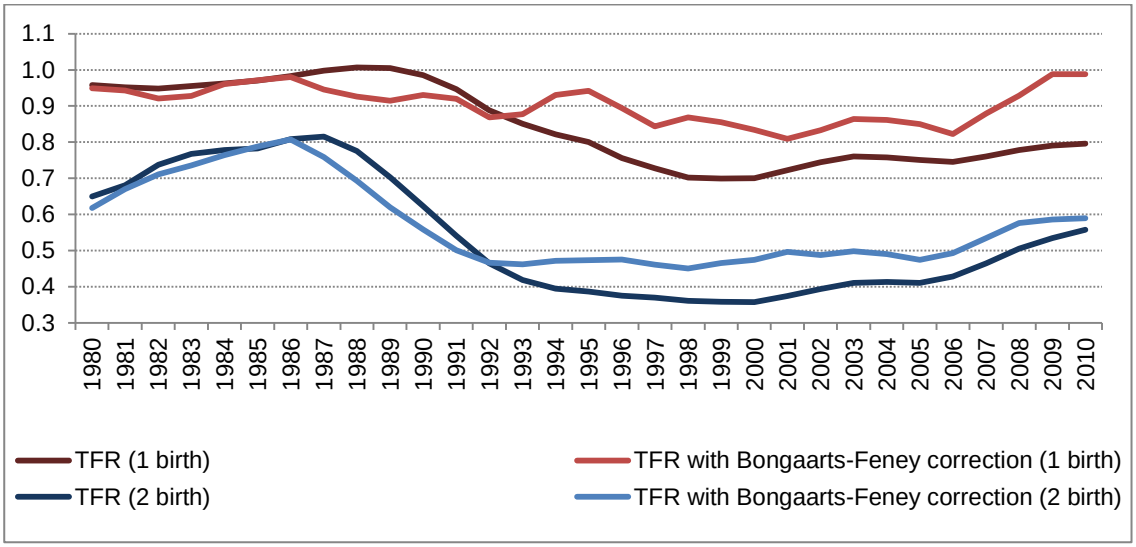
Figure 1 – TFR by birth order



Source: The Human Fertility Database (MPIDR)

[1] It can be also issued for the 3rd or subsequent birth if a woman didn't get it for the 2nd.

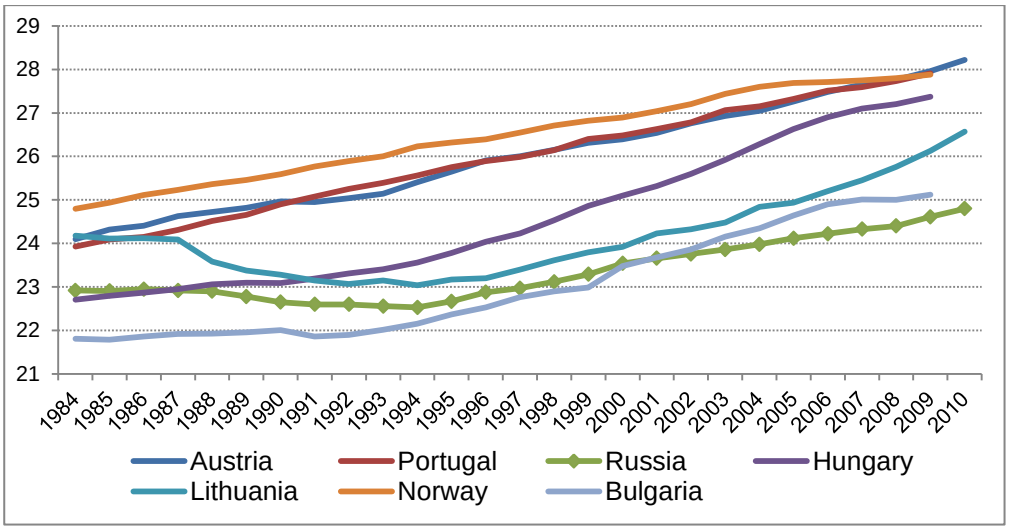
Figure 2 – TFR and adjusted TFR[2] for the first and second births



Source: The Human Fertility Database (MPIDR)

More recent statistical data also show the changes in the age-specific fertility rates. The largest increase in age-specific fertility rates was among women aged 30-34 -years-olds, mostly due to the growth of second and subsequent births. Moreover, average birth order in 2007-2010 shows moderate growth, which is also similar to the situation of the first half of the 1980s (Zakharov 2012[3]). It indicates a high concentration of second and subsequent births in 2007-2010, which was most probably stimulated by 2007 pronatalist policy measures.

Figure 3 – Mean age at first birth



Source: The Human Fertility Database (MPIDR)

Data and methods

The paper is based on three waves of Generations and Gender Survey (GGS), a part of the international Generations and Gender Program[4], conducted in Russia in 2004, 2007 and 2011. Russian GGS is based on a multistage probability sample representing the whole population of Russian Federation. In the first wave (11,261

[2] Used moving average for 3 years

[3] http://demoscope.ru/weekly/2012/0495/tema01.php

[4] The survey examines determining factors for individual demographic behaviour, with a focus on intergenerational and gender relations. It is a multidisciplinary survey, covering economic, sociological and psychological factors (Vikat, Spéder et al. 2007). In addition to its retrospective view of behaviour, the survey includes a prospective approach.

respondents aged 18-79 years old), the response rate was particularly low in the urban areas of St. Petersburg and Moscow (around 15%), but was 57% in all other areas (Independent Institute for Social Policy 2004). The total samples of the second and third waves are respectively 11,117 (18-82 years) and 11,184 respondents (18-86 years), which include both panel and new respondents[5]. The total sample attrition for seven years is 50% (balanced panel sample – 5622 obs.) and it is unequally distributed across different settlements and regions.

Our analysis rests on two panel samples combining two pairs – waves 1 and 2 (2004 – 2007) and wave 2 and 3 (2007 – 2011). We restrict analytical samples to men and women aged 18-44 (for cohabiting and married men age limit concerns his partner) in 2004 / 2007 with the exception of disabled people, pensioners, respondents with no sexual experience, pregnant women and those who could not have children in 2004 / 2007. Regression analysis is conducted on the sub-sample of women, which includes 1804 observations for 2004-2007 sample and 1508 observations for 2007-2011 sample. The total number of births between 2004 – 2007 is 170 (including 82 1st births, 76 – 2nd, and 12 – higher-order births). Between 2007 – 2011 205 children were born by respondents from our sample (including 73 1st births, 99 – 2nd, and 33 – higher-order births).

At this stage of the research we use binary logit models to reveal the factors associated with fertility outcomes between each pair of waves. Dependent variable is birth between waves. Models for the 1st, and 2nd births are estimated separately.

At the next step of this research we are comparing factors associated with realization and not-realization of intentions (both positive and negative). We are interested at revealing differences between those who realized positive fertility intentions (intended births), made unintended births and those who postponed or abandoned previously desired births. The latter group can be particular interesting from the policy perspective.

Also, we are planning to extend our empirical analysis to men.

Our main variable of interest is time-dependent parity-progression fertility intentions measured by the answer to the question: “Are you going to have a (another) child in the next three years?” (with possible answers of ‘definitely no’, ‘probably no’, ‘probably yes’ or ‘definitely yes’)[6]. We also control for the birth cohort, desired and actual number of children, partnership status (current status and duration of partnership)[7], level of education, employment situation, subjective estimation of the adequacy of household income, type of settlement and regions with low response or high attrition rate.

Results and discussion

Descriptive results

Overall, for 2004-2011 there are no fundamental changes in fertility intentions (all parities): 23-26% respondents plan to have a baby in the next three years, 20-25% prefer to do it later, while 51-54% are likely not to have more children. However, analysis of intentions by parity shows that only intentions to have a 1st child are pretty stable in all three waves (Figure 4). Intentions to have a 2nd child are slightly increasing by 2011, while growth of the proportion of people desiring to have a 3rd and subsequent births is more evident[8].

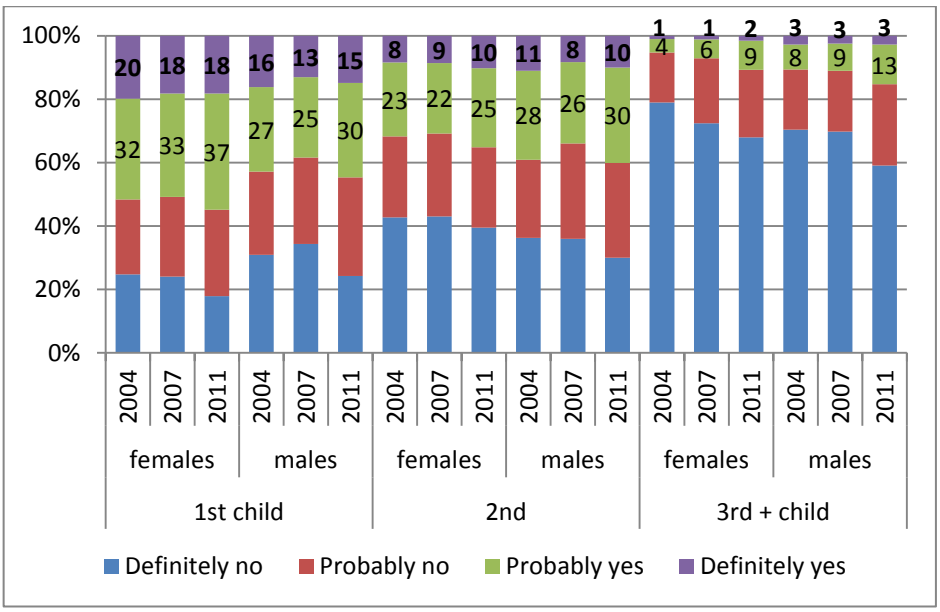
Figure 4 – Intentions to have a (another) child in 3 years, men and women

[5] In Russia each wave is representative at the national level.

[6] For descriprive analysis we use also the second question about plans to give birth later (“Let’s imagine that you do not plan to have a (another) child in the next three years; in general, would you like to have (other) children?” and they could reply again ‘definitely no’, ‘probably no’, ‘probably yes’ or ‘definitely yes’). Based on two questions we construct a variable of intentions to give birth ‘definitely in 3 years’, ‘probably in 3 years’, ‘later’ and ‘never’.

[7] We are going to include additional information about partnership history at the next step.

[8] However, the share of people wanted to have a 3rd (or further) child is still very low in Russia comparing to many other European countries.

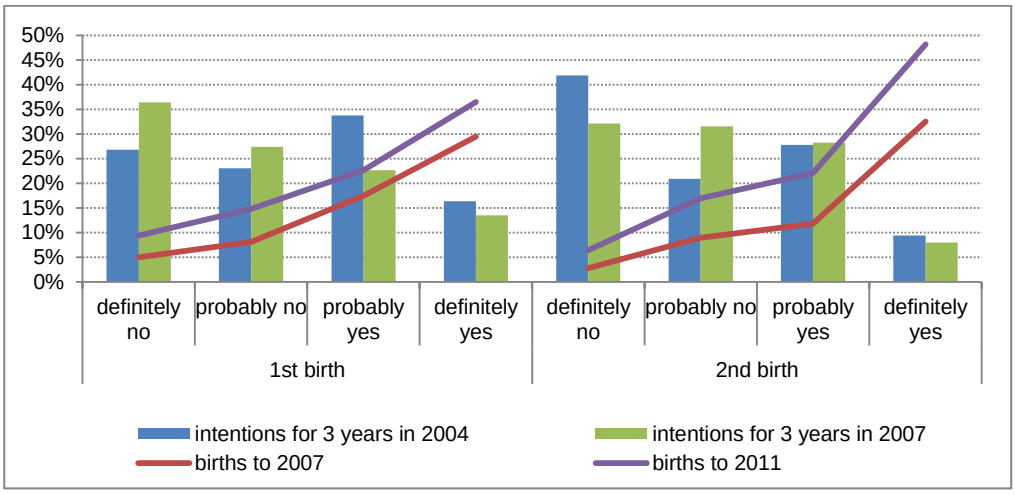


Source: cross-sectional Russian GGS data

In our panel samples we could even observe a slight decline in intentions to have a 1st child (Figures 5 – 6). However, the number of births is increasing from 2004-2007 to 2007-2011 both for the 1st and 2nd parities, which is particularly evident for men.

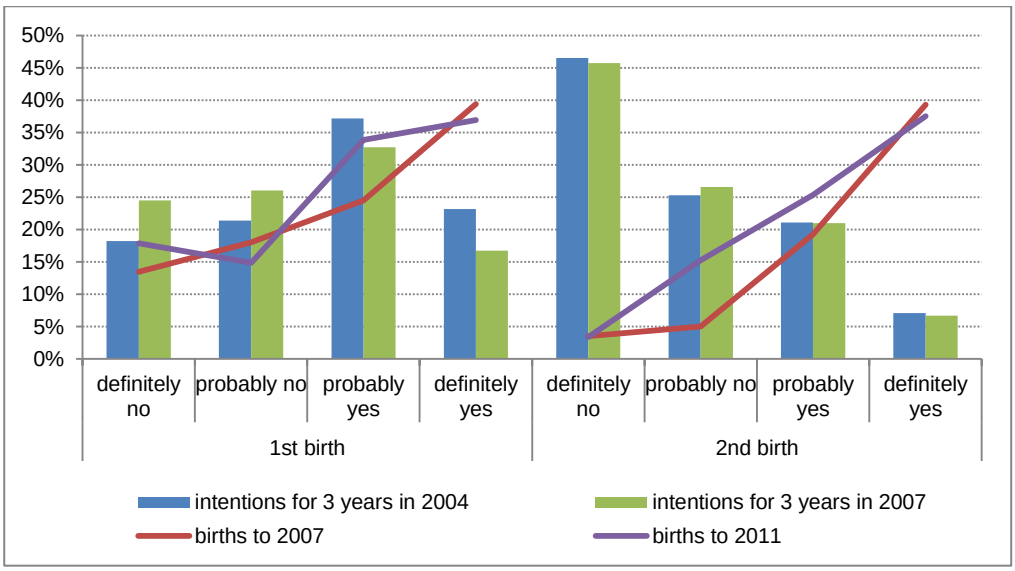
Descriptive analysis of actual births between 2004 and 2007 reveals that a) there is a close relationship between the degree of confidence in fertility intentions and subsequent births, and b) the negative intentions are better predictors of behavior than positive. At the same time, there are a lot of unintended first births, particularly among women. Second births are better planned.

Figure 5 – Intentions to have a (another) child in 3 years and subsequent births, men



Source: panel GGS data (2 analytical panels – for 2004 – 2007 and 2007 – 2011)

Figure 6 – Intentions to have a (another) child in 3 years and subsequent births, women

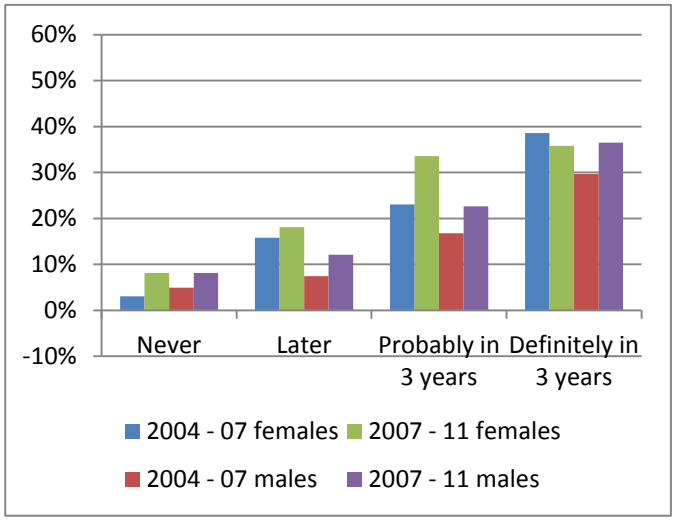


Source: panel GGS data (2 analytical panels – for 2004 – 2007 and 2007 – 2011)

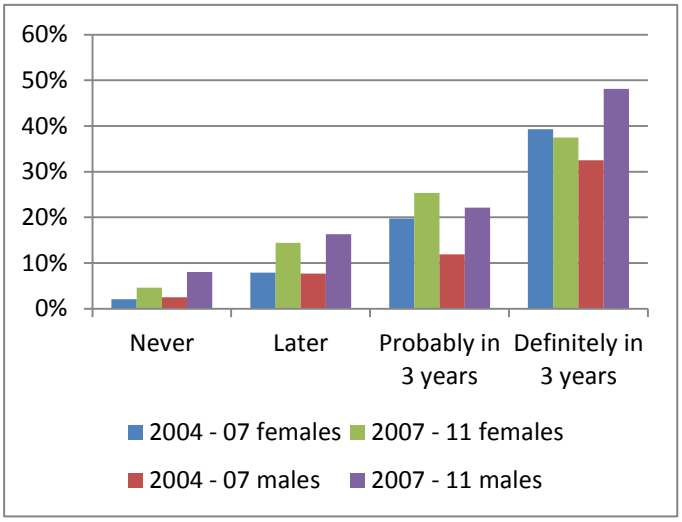
Based on Figures 5 – 7, it is possible to assume that fertility growth documented by statistical data, happened mostly among people who hesitated whether to have another child or not[9]. Among those who definitely wanted to have a (another) child the most evident growth of intended births was for the 3rd+ parity (Figure 7).

Figure 7 – Births between waves according to different intentions, by parity and respondent's sex

1st birth

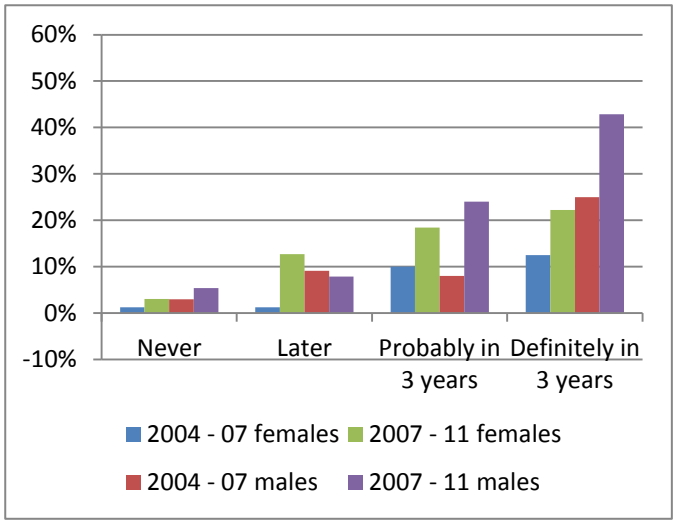


2nd birth



3rd birth

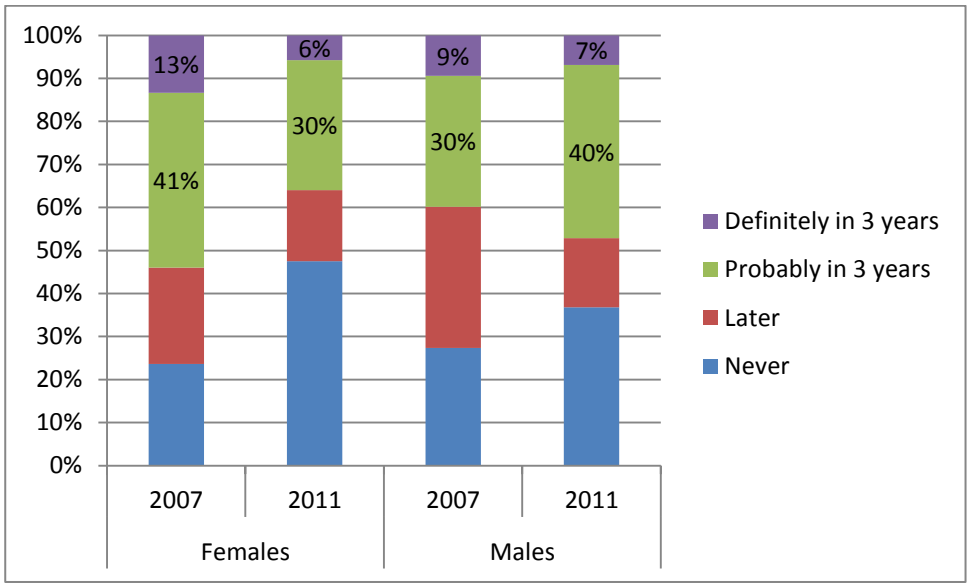
[9] 'probably yes' and 'probably no'



Source: panel GGS data (2 analytical panels – for 2004 – 2007 and 2007 – 2011)

However, up to now it is difficult to predict whether the observed fertility growth will continue in the future. There are signs that family policy measures introduced in 2007 could produce only a temporary calendar shift. For instance, intentions to have a 2nd child among women who didn't realize their intentions became less optimistic by 2011 (Figure 8).

Figure 8 – Intentions to give a 2nd birth in 3 years among those who planned to have it 3 years before but didn't have it



Source: panel GGS data (2 analytical panels – for 2004 – 2007 and 2007 – 2011)

Regression results

Table 1 and 2 present reduced form of binary logistic regression results for a series of models examining the factors of births. Overall, probabilities to have a child have increased between 2004-2007 and 2007-2011 for all intentions in reference to 'definitely no'. This increase is particularly high for women who 'probably' wanted to have a child.

However, the situation is different for the 1st births and 2nd and further births. The correlation between fertility intentions and outcomes (net of other factors) is higher for higher order births. For the 1st births, we could even see some signs of the weakening relations between intentions and births. To the contrary, realization of positive intentions to have a 2nd (or further) child is increased after 2007.

Also, the effect of intentions on births is higher when a woman already has a partner and 1 child at the time of the first survey. Obviously, stable partnership status reduces the uncertainty about the future and increases probability of intended births.

Table 1 – Odds ratios for births in 2004-2007 and 2007-2011 among women (binary logistic model)

	All births	**First birth**	**Second birth and higher**
Fertility intentions in three years, 2004			
Definitely no	1	1	1
Probably no	1,392	1,066	1,216
Probably yes	2,693***	1,447	3,371***
Definitely yes	5,609***	3,105**	9,144***
Fertility intentions in three years, 2007			
Definitely no	1		
Probably no	2,470***	,579	3,539***
Probably yes	4,114***	1,487	**5,734*** **
Definitely yes	6,377***	2,215	10,991***

Controlled for: birth cohort, desired and actual number of children, partner's status (duration of partnership), education, work status, household's socio-economic status, area

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table 2 – Odds ratios for births among women with partner and 1 child in household (binary logistic model)

	Births 2004-2007	**Births 2007-2011**
Fertility intentions in three years, 2004 and 2007		
Definitely no	1	1
Probably no	1,237	4,458***
Probably yes	**3,261*** **	**6,562*** **
Definitely yes	10,042***	16,456***

Controlled for: birth cohort, desired number of children, education, work status of partners, household's socio-economic status, area

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Except of the intentions, only the effects of the age, partnership status and actual number of births are statistically significant. The effect of a new partner is particularly high in models of first birth. The effect of the type of settlement is significant for the period of 2004-2007 (rural women give more births), and not significant for 2007-2011. It could be an indicator of the smoothing urban – rural differences in fertility but this effect could vary by regions. The effect of the desired number of children is significant in some models. Usually, it is higher when the difference between actual and desired number of children is bigger. Other social and economic variables have no stable and significant effect on fertility outcomes, when fertility intentions are included into the model.

Conclusion and future steps

Analysis of fertility outcomes (births) in 2004-2007 and 2007-2011 confirms that in Russia (as well as in other countries) a) there is a close relationship between the degree of confidence in fertility intentions and subsequent births, and b) the negative intentions are better predictors of behavior than positive. Net of the other factors, intentions to have a child in 3 years have strong significant effect on subsequent births.

Our findings show that realization of the first births has at least not changed from 2007 to 2011 comparing to 2004 – 2007, while realization of the second and subsequent births has substantially improved. Descriptive analysis allows suggesting that 2007 family policies had higher effect on families with at least 2 children. But this

group is still very small and hence cannot be analyzed separately. Also, there are evidences that one of the sources of fertility increase from 2007 is realization of indefinite intentions.

Other most important factors of fertility outcomes are partnership status, parity, and age. The effects of social and economic variables are either completely insignificant or unstable.

Our next steps include comparison of factors associated with realization and not-realization of intentions (both positive and negative). We are interested at revealing differences between those who realized positive fertility intentions (intended births), made unintended births and those who postponed or abandoned previously desired births. The latter group can be particular interesting from the policy perspective. Also, we are planning to extend our empirical analysis to men.