Fertility Prospects in Russia through the prism of the past two decades





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Outlines

- Measurement of Total Fertility in Russia: critics and interpretations of fertility trends in last decades
- Period and cohort fertility table Indicators in Russia: parity progression ratios, distribution of women by number of children ever born, mean age at childbearing
- Fertility intentions and their changes
- Can we predict the future trend for period TFR?



Is Fertility Increasing in Russia?

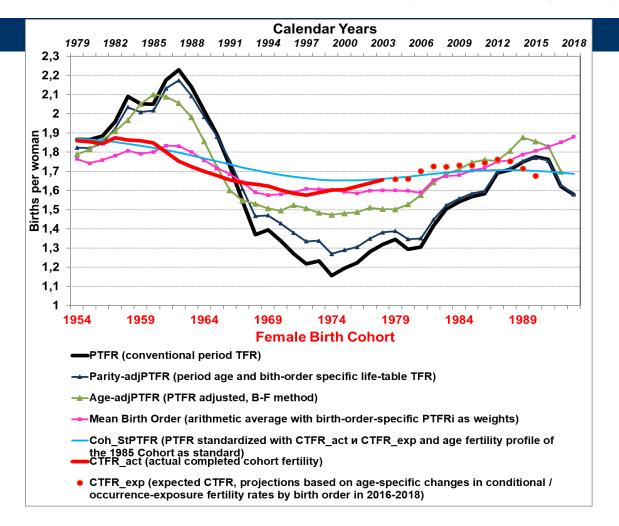
A VIEW THROUGH THE DEMOGRAPHIC MICROSCOPE



Indicators of Period and Cohort Total Fertility

(average number of births to a woman by age 50):

Russia, female birth cohorts 1954-1990 (actual an projected), period 1979-2018



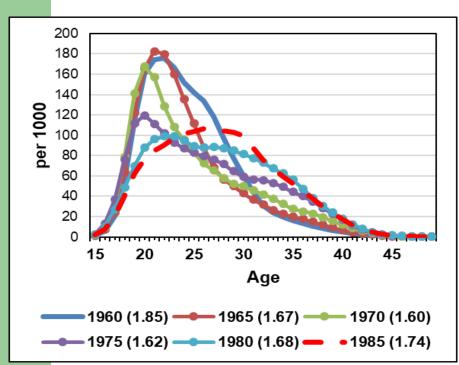
Source: Author's calculations and estimates based on unpublished official Rosstat data

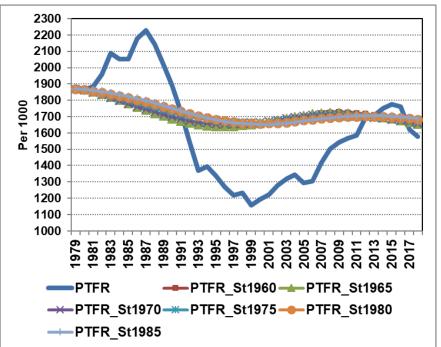


Cohort ASFR and Cohort TFR (1960-1980 Cohorts), Period TFR and Standardized Period TFR (1979-2018), Russia

Cohort ASFR, Russia

Standardized Russia's PTFRs, different standard age profiles applied







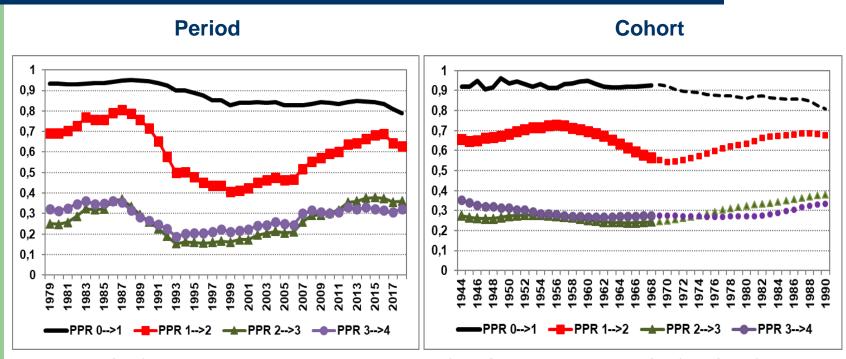
Minimum, Maximum, and Average Values of Selected Fertility Level Indicators in 1979-2018, Russia

	Minimum	Maximum	Average	∆max-min
Conventional PTFR	1.16	2.23	1.62	1.07
Age-Parity AdjPTFR (age- and birth order specific tables)	1.27	2.17	1.65	0.91
B-F AdjPTFR, 5-year moving average	1.47	2.10	1.71	0.63
Mean Birth Order	1.56	1.88	1.70	0.30
Coh-AdjPTFR 1985 cohort age profile as standard	1.65	1.87	1.73	0.22
1954-1990 Cohorts TFR (observed and expected)	1.58	1.87	1.71	0.29

Minimum, Maximum, and Average Values of Selected Fertility Level Indicators in 1999-2018, Russia

	Minimum	Maximum	Average	∆max-min
Conventional PTFR	1.16	1.78	1.48	0.62
Age-Parity AdjPTFR (age- and birth order specific tables)	1.27	1.77	1.51	0.50
B-F AdjPTFR, 5-year moving average	1.47	1.88	1.65	0.40
Mean Birth Order	1.59	1.88	1.69	0.29
Coh-AdjPTFR 1985 cohort age profile as standard	1.65	1.71	1.68	0.05
1979-1990 Cohorts TFR (observed and expected)	1.66	1.76	1.71	0.10

Parity Progression Ratios by age 50: Russia, period 1979-2018, female birth cohorts 1944-1990 (actually observed and expected*)

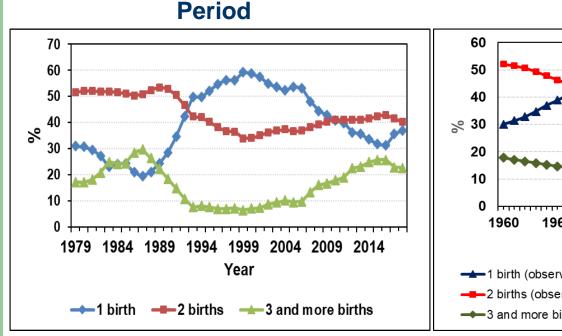


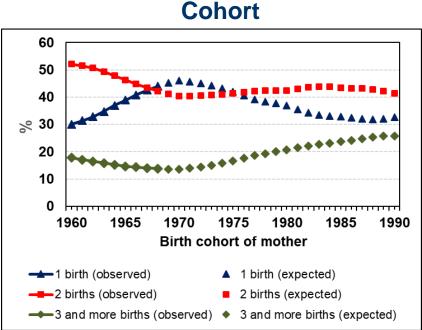
^{*} Extrapolation for cohorts that have reached 25 years of age in 2018: 4-6 order spline functions for the rates of change with age of period Qi (x) (i.e. fertility rates of the first kind by birth order) observed in 2016-2018.

 $(R^2 > 0.95 \text{ for first births and } R^2 > 99\% \text{ for second and subsequent births.}$

Source: Author's calculations and estimates based on Human Fertility Database and unpublished official Rosstat data

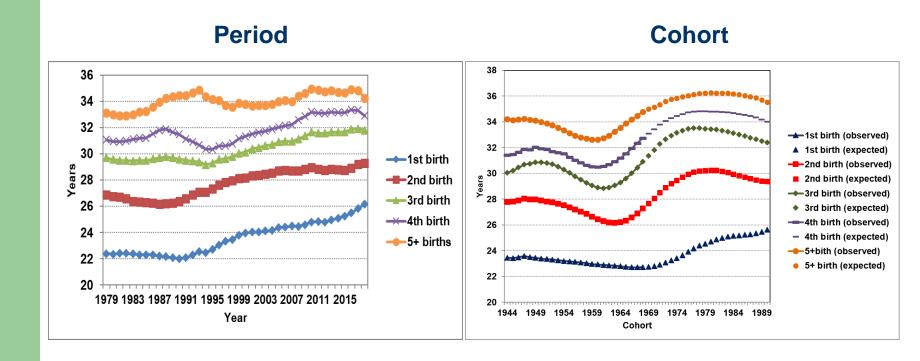
Distribution of Mothers by Children Ever Born by age 50 (Women who give a birth at least to one child), Russia, period 1979-2018, cohorts 1960-1990 (observed and expected), %





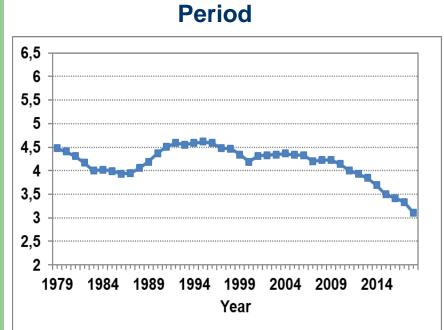


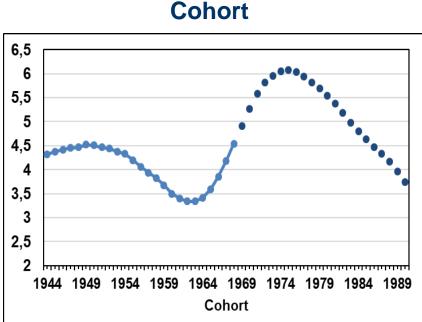
Mean Age of Mothers at Birth: Russia, period tables 1979-2018, cohort tables for women born in 1944-1990 (observed and expected)





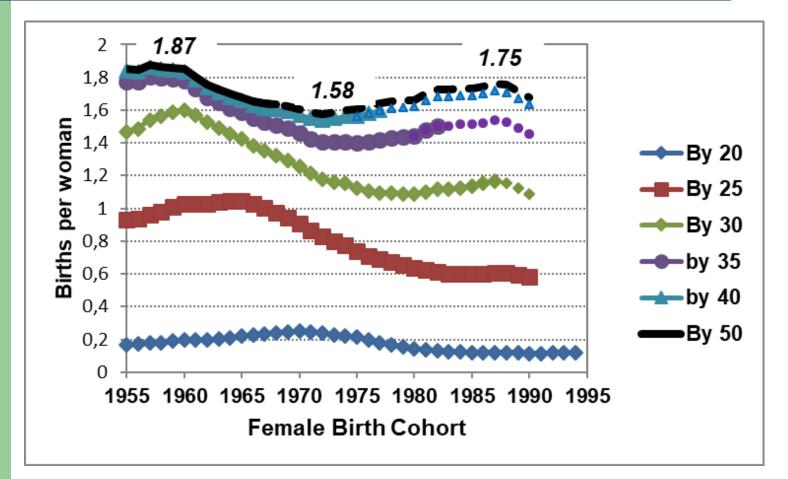
Mean Interval Between First and Second Births as of Difference of Mean Ages of Mothers at Births, Russia, years: period tables 1979-2018 and cohort tables for women born in 1944-1990 (observed and expected)







Average Number of Births per Woman by age of 20, 25, 30, 35, 40, and 50, Russia, cohort tables for women born in 1955-1994 (observed and expected)





Do Russians want to have more children?

A VIEW THROUGH A MICROSCOPE OF THE PUBLIC OPINION



Desired and Expected Number of Children, Russia: Levada Center Surveys in 2005 and 2019, the 1988 Cohort Fertility Table, and Period Fertility Tables for 2015 and 2018

	Desired		Expected			Period	
	June	October 2019	June 2005	October 2019	Cohort 1988 (expected)	Tables	
	2005					2015	2018
0	3	2	10	10	16	16	21
1	11	12	24	29	27	27	29
2	46	43	48	42	36	36	32
3	29	27	13	14	14	15	12
4	4	5	3	2	3	3	2
5+	6	10	2	3	4	4	4
Average	2,46	2,62	1,83	1,82	1,74	1,75	1,56

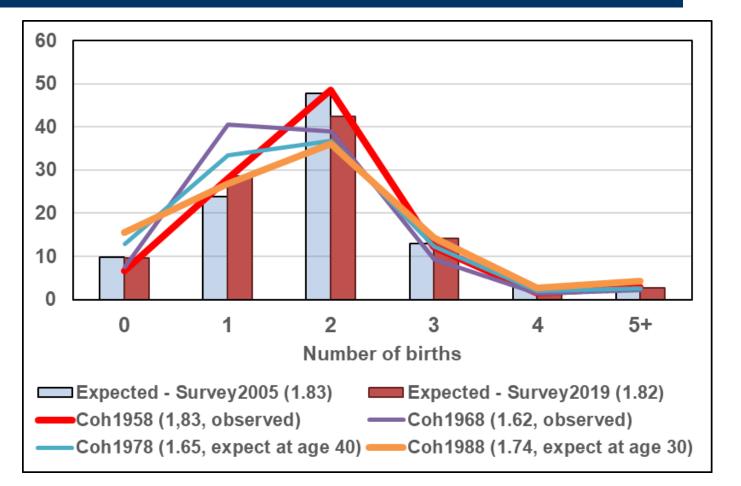
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2.33 1.81 2.29 1.92

Family and Fertility (Rosstat, 2009)

Fertility Intentions (Rosstat, 2013)

Distribution of Respondents by Expected Number of Children in 2005 and 2019 (Levada's Center Surveys), and Distribution of Women by Number of Children Ever Born: observed and expected (fertility tables for 1958, 1968, 1978, and 1988 cohorts)



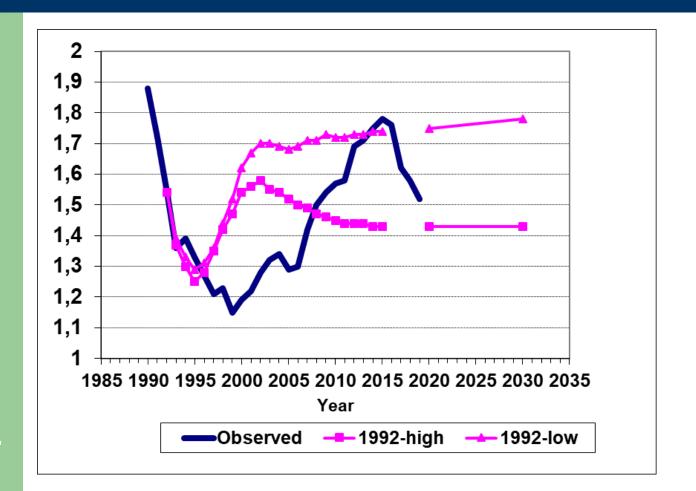


Is it Difficult to Predict Fertility Trends?

LESSONS FROM
THE 25 YEARS OF PROJECTIONS



Observed TFR in 1992-2019, and Projected TFR, High and Low Scenarios (IDEM, 1993)



Zakharov S.V., published in 1996, 1997, 2000



Conclusions (1):

- The more correctly the total fertility indicator takes into account timing shifts (age, intervals between births), the smaller the range of fluctuations in the indicator we observe.
- Over the four and/or the two last decades, we do not observe large changes in the quantum of fertility in Russia, if the quantum is understood as the ultimate total fertility of generations. At an average level, it can be estimated as 1.7 ± 0.1 births per woman.
- The fertility intentions of population are quite stable, and are in full agreement with our average estimates of the cohort total fertility of generations that are at the age of active procreation.
- Thus there are no reasons to expect any pronounced changes in the cohort total fertility.



Conclusions (2):

- The pronatalist policy does not bring any positive changes in relation to the first birth. Progression to the first child continues to decline.
- There are doubts about the long-term effects of family policy in improving the likelihood of second births. At the same time, the policy apparently prompted an increase in the probability of the third and, to some extent, of the fourth births. The heterogeneity of the Russian fertility model has increased in relation to the distribution of women by the number of children ever born.
- The pronatalist policy caused a reduction in the intervals between births, and in particular the interval between the first and the second birth, which is close to historic lows.
- In recent years, the process of increasing the age of motherhood has slowed down, and it is likely that in the near future the age of the mother at the birth of the second and subsequent children may even begin to decrease. But I strongly doubt that this will be a long-term trend.



THANK YOU FOR YOUR ATTENTION!

