

Lowest Low Fertility in Russia: General Trend or a Special Case?

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ABSTRACT

Lowest low fertility in Russia, with total fertility rate (TFR) fluctuating around 1.2-1.3 for some thirteen years since early nineties, remains a subject of hot political, public and professional debate. One universalistic explanation links decline in the country's fertility with the start of Second Demographic Transition. As predicted by scholars that share the idea of inevitability and universality of such trait of the Second Demographic Transition as postponement of giving birth to a first child, the trend that took place in Western Europe is spreading out to Eastern Europe and eventually will trickle down to Russia.

Alternative explanation links lowest low fertility in Russia with a postponed result of population policy that was implemented in the country in the 1980-s. Splicing birth intervals during the implementation of this policy have led, according to this view, to a drop of fertility in the nineties and later period. Other theory links low fertility in Russia, as well as in Germany, Italy and Spain, with the heritage of totalitarian regimes. There are some objections to the validity of this claim, one of them is the example of Portugal that has a dictatorial regime for quite a while and that still doesn't show the lowest low fertility rate.

It seems that the best explanation is the one that links lowest low fertility in the country experiencing transformational crisis after launching painful economic and political reforms. The impact of these reforms is many-fold: deterioration of standards of living, changes in stratification system, anomie, the burden of stress, deterioration of paternalistic institutions like

social security and medical system. All of these factors have demonstrated strong effect not only on fertility but on mortality rates as well. One comment should be made in this regards.

Uncertainty reduction theory predicts rise of fertility in case of a deterioration of social and political stability due to increased uncertainty. However, this theory applies mostly to a symbolic uncertainty that doesn't contain a strong element of deterioration of standards of living. This is definitely not the case with Russia during the decade that followed the start of political and economic reforms in the 1990.

Discussion on comparative analysis of fertility trends in Russia and other European countries and across time periods is useful for the purposes of specifying future trends as well as for refining and redefining existing population theories.

Introduction

Fertility decline in Europe has been attracting the attention of demographers for quite some time. In that regard many questions have been aroused. If patterns of demographic developments in the Western part of the continent trickle down to Central and Eastern European countries and, eventually, be seen in Russia? If universality in these trends prevails over the specifics of any given subregion or particular country? In other words, if fertility developments lead to homogeneity or, rather, a heterogeneity of the demographic profile of Europe? To what extent will the major premises of Second Demographic Transition theory work in all these European countries despite quite distinctive histories and their different cultural perceptions of individual freedom and self-actualization?

Analysis of recent demographic trends in Russia, particularly a steep decline in fertility, is of interest not just as a case study but also for clarifying these very questions. Indeed, Russia shares many common traits with the rest of European culture. Like other European countries, Russia has completed a demographic transition. However, Russian history has been marked with such catastrophes as wars, famines and repression. The country's specific path of institutional development was manifested in a late modernization. That has made a mark on the trajectory of demographic development including the fertility process.

Russian demographic history is well described by professionals in the area of population study (Demographicheskaya Modernizatsia v Rossii, 2006; Zakharov and Ivanova, 1996). The country started its demographic transition much later than most European countries. The end of the XIX-th century was marked with the first signs of a break with traditional society. This was found in changing attitudes toward high fertility practice and affecting the normative ban on birth control along with a subtle decline in mortality among the upper tier of society. Later, in the

course of further demographic transition in Russia, reductions in the number of children born were to be found across various social strata. The steep decline in fertility in Russia in comparison with Western European countries was attributable to a sharp break with the traditional agrarian structure of society. Attempts to modernize the country that have lagged behind its European neighbors, of course, have led to widespread urbanization and a corresponding change in demographic profile.

These shifts also included the “forced modernization” undertaken by Communist rulers. Among the results of their policies were catastrophes and social cataclysms that, in turn, have led to even more dramatic demographic changes. Along with long-term trends in demographic developments, the population landscape has also been affected by such short-term catastrophes. Three major catastrophes which caused severe demographic crises in XX-th century Russia were World War I, the Great October Revolution and Civil War, and collectivization accompanied by famine, repressions and intensive industrialization. Corresponding demographic consequences showed up during the years 1915-1921, 1928-1934 and 1941-1947. In regard to fertility all three catastrophes played a huge role transforming a previously smooth decline into an irreversible steep fall.

Typical trait of the Russian demographic pattern during the Soviet years was the spread of induced abortion. There were several legislative reforms concerned with induced abortions; for example, permissive legislation in 1920 was followed by prohibition in 1936 and, finally, new permissive legislation in 1955. Regardless of these switches, culture of abortion, both legal and illegal, was and still is widely accepted by the population.

With its demographic transition completed in Russia for the most part by the late 1960s, fertility had generally stabilized at a level slightly below the one needed for population replacement. For most of 1970-s the total fertility rate fluctuated around 2.00. Moderate decline from that level at the end of 1970-s and first two years of the 1980-s was reversed with the introduction of a new demographic policy in 1981. Since that time fertility has started to climb reaching highest level in 1987 (with TFR=2.23). From 1988, fertility began to fall again, with a huge acceleration of the new trend in the early 1990-s, a time of transformational crisis in Russia. The total fertility rate have reached its nadir of 1.17 in 1999, and the lowest low fertility level marked by TFR below the level of 1.35 has become a fixed part of Russian demographic profile for 13 years straight.

This extremely lowest low fertility phenomenon in Russia has been accounted for with various explanations. Among the major ones are:

1. A link between lowest low fertility and the heritage of the totalitarian regimes;

2. Attribution of the steep decline of fertility to a changing tempo of births caused by implementation of population policy in the 1980-s;
3. A link between lowest low fertility and the transformational crisis of the 1990-s;
4. Treatment of demographic trends as the result of the start of a Second Demographic Transition in Russia.

Some demographers combine various major explanations either by applying them to the same periods, or by attributing several of them correspondingly to various parts of the period of research interest. Each of these kinds of explanations relates to the major question formulated in this paper. The aim is to relate the level of universality (commonality) of manifested trends in Russian fertility to the degree of their specificity (uniqueness).

Indeed, any explanation of the lowest low fertility linking these phenomena to the consequences of totalitarian rule has a certain degree of universality. If this explanation worked, a general pattern of political regimes across countries from different parts of the world (such as Japan, Germany, Italy, Spain, Greece and Russia) would manifest the same demographic trend. Linkage of the lowest low fertility with consequences of changing fertility timing as a result of population policy implementation, on the contrary, clearly suggests Russia is a unique case. If proved right, this explanation won't hold even for any country of Eastern Europe because population policy was introduced there much earlier than in Russia while steep decline in fertility have manifested itself at the similar time. "Transformational crisis" explanation of fertility trends in Russia could have a decent degree of generality. If proved right, this explanation could be applied to either all countries of Central or Eastern Europe that underwent democratization and market reforms, or at least some of them.

Greatest degree of generality, perhaps, sits at the explanation of the lowest low fertility based on attributing steep decline in Russian fertility to the process of Second Demographic Transition. Indeed, similarly to classic demographic transition theory, its follow up, the one of second transition, also assumes universality of the population developments: once started at Western industrial democracies, the trends eventually trickle down to Central and Eastern European countries and, eventually, to Russia.

Paper elaborates on these major explanations of lowest low fertility in Russia with the goal of finding out which one comes closest to best account of this demographic phenomenon.

Impact of the Totalitarian Regimes

One theoretical explanation links lowest low fertility with the heritage of totalitarian political regime in the country. This explanatory claim was first brought up by Vishnevsky

(2005). It emphasizes political factor in determining lowest low fertility not only in the former USSR's successors, Russia including, but also in such countries as Germany, Italy, Spain and Japan. As well known, all of them have had a history of a totalitarian rule.

For the purposes of estimating the importance of this very factor in determining lowest low fertility in Russia, it is worth assessing the degree of uniformity of this impact across the countries with a totalitarian past. If other factors are proven to be insignificant for causing lowest low fertility, then proposed explanation receives fair amount of validity.

In that regard it is worth mentioning that, first, not all countries with history of totalitarian regimes are included in the list. Portugal, for instance, also having history of a totalitarian rule of Dictator B. Salazar, demonstrates higher total fertility rates than listed countries. Also, the pace of and timing of fertility decline there was quite different.

Second, equally important, "totalitarian rule heritage" theory fails to provide a universal mechanism of how political regime leads to changing of fertility behavior and patterns. This point was articulated by V. Perevedentsev at the round table discussion: "Where are the worst indicators (of fertility-Y. F.)? Besides us and European republics of the former USSR, it is Germany, Italy, Spain and Japan. What do all these countries have in common? Long ago I've learned from special literature that the cause is the totalitarianism. *No one knows how exactly long tradition of totalitarianism is related to the present day case of having little desire to have children.* (Underlined by Y. F.) But when analyzing situation in the world, one can see these countries have the worst indicators, in Italy, Spain and Japan they are even worse than here. It's a huge problem that is related not only to demography and requires research on political scientists and other experts" (Demographicheskay Modernizatsiya v Rossii v XX Veke, 2007, 128).

Facing shortage in special research on the mechanism of totalitarian regime affecting fertility behavior, let us analyze all possible factors of lowest low fertility in Germany, Italy and Spain. Germany is singled out as a special case in that regard. As noted by demographers (Klupt 2008; Seelib-Kaiser, 2000), there were several very specific factors that have contributed to the lowest low fertility in this country. First, and foremost, this is the policy for the denazification of Germany that was launched right after the end of the World War II. Any calls for increasing population or implementing a pronatalistic policy would have been looked upon as contradicting the goals of denazification policy. Hence, the policy that was adopted in the country, was rather familistic than demographic. This policy never had a goal of increasing fertility like in France and it was aimed primarily at maintaining minimal living standards for non-qualified workers, the breadwinners for a family with several children (with some three quarters of women rearing children under the age of fourteen were not involved in labor market). These differences in

population politics were, arguably, the major factor that determined stable differences in fertility dynamics between these countries for over the fifty-four year period (see Figure1).

Second important trait that has contributed to lowest low fertility in Germany was the population's negative attitude toward development of kindergartens. Rearing children in the latter was widely viewed as exercising totalitarian practices by "stealing" children from families. Finally, certain contribution to lowest low fertility in the later years could be attributable to the transformational crisis related to reunification of Germany.

It thus could be concluded that the lowest low fertility in Germany was caused by several factors. Along with undergoing Second Demographic Transition (SDT), similarly to the other countries of Western and Northern Europe, Germany had specific factors that have brought its total fertility rate further down. Some of these factors were indeed related to history of totalitarianism, including the process of its overcoming. The mechanism that provided the linkage between the nature of political regime in this country and fertility pattern is clearly defined.

Let us examine if the same theoretical claim works in regards to demographic behavior in Italy and Spain. It should have been the case of these countries demonstrating higher fertility given the later start of modernization process, lower women participation in labor force and the profound impact of Catholic Church prohibiting a use of contraception. However, other factors that contributed to lowest low fertility have prevailed.

If compared with fertility in most European countries, the ones in Italy and Spain have demonstrated one major distinctive feature. Unlike mid-Sixties when the share of non-marital births in the overall number of newborns was similar to those in other Western European countries, the difference in this indicator in the new millennium became much more pronounced. For instance, the shares of the non-marital births among all newborns in Germany, France and Netherlands were correspondingly 26, 1% in 2002, 44, 3% in 2002 and 25, 7% in 2003; in Italy and Spain these shares have equaled correspondingly 13, 6% in 2003 and 21, 8 in 2002.

Marital fertility rates in Italy and Spain is quite compatible with the ones in other Northern and Western European countries. The major difference in overall fertility between Spain and Italy, on one hand, and the most of other countries of Western Europe, on the other hand, is attributable to the fact that while in the latter low level of marital fertility is largely compensated with huge numbers of non-marital births, in Italy and Spain that was not the case. Large portion of institutionalism-oriented demographic research (Micheli, 2000; Speder, 2003; Klupt, 2008) have provided explanation of this phenomena. It emphasizes following factors that contribute to low fertility, especially a non-marital one, in Italy and Spain: tradition of strong family ties that, along with weakly developed mortgaging and high unemployment level, leads to

delaying leaving parental house and, thus postponing creation of a new family; strong attitude toward institution of marriage and, thus, hesitation to live in cohabitation unions; strict regulation of divorces and, hence, a caution in decision-making on marriage that, along with a little spread of cohabitation unions, results in lower number of births.

Without going into numerous details related to these explanations, let us single out what is essential for assessing the theoretical hypothesis of linking lowest low fertility with the impact of totalitarian regimes. It doesn't seem plausible that there is a universal mechanism of these regimes affecting fertility across different countries. Rather, it looks like denazification in Germany that, indeed, has impacted fertility in the country, is a special case. There is nothing in the provided explanations of lowest low fertility in other countries with totalitarian past, Italy and Spain that suggests the reasons are related to the nature of political regimes. So, without a support for universal mechanism of such impact, it doesn't look plausible this explanation applies to Russian lowest low fertility.

Let us, however, explore the possibility of Russia being similar to Germany in that regard. Even brief comparison shows it is not likely. Indeed, breakdown of the Soviet Union was not accompanied with the same degree of de-communization as was the case in Germany with the de-nazification. It was far less consistent and did not have the same international dimension as in Germany (e.g. the Nierenberg tribunal). No such negative attitude toward rearing children in kindergarten like in Germany was traced. Even more so, the new set of pronatalistic population policy in Russia that was launched in early 2000-s, was conducive with other social and economic developments in the country and was generally positively accepted by population.

Impact of Population Policy: Drops in Fertility as a Result of Changing Calendar of Births

Other explanatory claim relates decline in fertility in Russia with a specific part of country's demographic trajectory impacted by the implementation of population policy in the 1980-s. The bulk of this explanation is that policy having affected timing of births by enhancing procreation at earlier ages and narrowing intergenetic intervals, thus caused a drop in fertility later on, at the time when these births would have "normally" occur.

Population policy was introduced in the USSR in 1981. Policy included such measures as partially paid maternity leaves up to one year for young mothers having employment history, additional half year of unpaid maternity leaves for the same category, extra three days of paid vacation for women with two and more children, unpaid two week vacation for the same category, one time payment to mothers after giving birth to a child (with amounts increasing with every next order of birth), possibilities of part-time employment for women rearing children

under age fourteen, discounts on mortgages, tax deductions and additional expenditures for single mothers rearing four and more children, deductions on paying for placing children in kindergartens for the same category of women and several others.

Measures were introduced in several stages. First one was implemented in 1981 at the regions with the lowest fertility rates that included Siberia, Far East and Northern European Russia. Second stage, launched a year later, has encompassed regions that constitute remaining parts of Russia. Finally, at 1983 policy's measures were applied to other republics of the USSR, the ones that have later succeeded from the state. Among these republics there were mostly those typified by higher fertility like the ones of Central Asia (Kazakhstan, Uzbekistan and Tadzhikistan). The result of this policy was relatively moderate increase in fertility that lasted for a short period of time, from 1981 to 1987 (see Figure 2). After that fertility started to decline.

For the purposes of assessing a theoretical hypothesis on population policy's distant consequences having an impact on fertility decline at the early 1990-s and later period, two points are of primarily interest. First, to what extent the increase of fertility was caused by policy measures? And, second, to what extent enhanced fertility could be attributable to tempo effect (giving births at earlier ages and narrowing birth intervals), and to what degree this increase was related to change of quantum of births? Indeed, for assessing the plausibility of hypothesis on a compensatory drop in fertility at the years following the decade of policy implementation, one has to be positive, in first place, on the attribution of the most of demographic change to introduced policy measures' impact and, secondly, on the prevalence of a timing of birth change effect.

Let's start with examining of a first assumption. Though the increase of fertility in early 1980-s were widely hailed as the evidence of population policy impact, there is reason to believe the trend was already on the way. As noted before, policy measures were implemented at different parts of the country in three consecutive stages, one at a time. Still, a subtle trend in fertility increase has manifested itself at the very areas of Russian Federation where these measures have yet to arrive. One of the explanations relates this fertility change with the impact of forthcoming implementation (Arkhangelsky, 2006, 8). According to it, the very publication of the information on forthcoming measures that was issued without specification of the implementation dates at different areas, could have caused the demographic response

Even if one casts doubt in this explanation, there are also several accounts for moderate rise of fertility that happened even before 1981, the year when the first set of measures was launched. Zakharov (2006, 40-41), for instance, provides data showing stable increase of age-specific fertility rates for women aged 15-19 starting at 1975; also, author cites and provides evidence on birth rates started increasing in 1980 at some territories of Russia where population

policy had yet to be implemented (2006, 40-41). Author of this paper (forthcoming) have also found evidence of the period fertility increase in Russia in 1979 (that is before the very start of even announcement of population policy introduction) while performing age-period-cohort analysis for the period from 1952 to 1998. The implication of this part of analysis for the assessment of a compensatory post-policy fertility decline explanation is the following one: with having reasonable support for partial fertility increase being attributable to not just a policy effect, the scope of this explanation diminishes.

As for estimating the influence of population policy in regards to affecting quantum and tempo of fertility, there is largely a consensus among demographers about the latter having been impacted the most. Avdeev and Monnier (1995, 26-28) have estimated population policy's quantum effect at the level of 2 to 15 percent (for various cohorts) of the overall completed fertility. Archangelsky (2006, 35) assesses the "surplus" of births due to policy's measures in the amount of 0.1-0.2 children for the cohort of women born in 1953-1957, the one with most affected quantum of fertility. Zakharov (2006, 45) provides an estimate of actual additional births (not related to just change in timing) as of 3.6% of the total number of newborns.

Of great importance for assessing the hypothesis on the compensatory drop in fertility in the years following its initial rise after introducing population policy, is the analysis performed by Zakharov (2006). Based on comparison of actual and synthetic (conditional) cohorts, it allowed for not only discriminating tempo and quantum effects of population policy but also helped to estimate latter's impact on order of births and other changes in demographic behavior at different cohorts.

Among major findings of this analysis are the following ones. Changing of the timing of births, the main impact of population policy, have included further shift of the first birth toward younger ages and narrowing of the intergenetic intervals. Policy had little if any effect on reducing percentage of childless families, with their share in the total number of families staying at some eight percent. The probability of the second order births had significantly increased, especially at the early reproductive ages. There was also some increase of the probability of third order births (around 2-3 percent), especially at the ages over thirty years old (cohorts of 1945-1954 years of birth) and among those reaching this age before the year of 1990. There is no statistically significant increase in the births of fourth and next orders.

So, one of the major policy's impacts were enhancing number of families with two children, the trend that was already on the way. As mentioned before, most of this "surplus" reflected in the rise of total fertility rates, is attributable to changing of tempo of births. The differences in fertility behavior between cohorts have also manifested themselves, as demonstrated by the analysis. Cohorts of women born in the first half of the 1950-s, the ones

facing the decision to give births “now” or “never” at the time of population policy implementation, had the greatest share of additional quantum of fertility. Generation that belongs to second half of the 1950-s years of birth and the ones born at the beginning of the 1960-s (they were in their twenties at the time of policy measures introduction) have mostly changed their calendar of births. Finally, generations of the youngest women born in mid-1960-s and later, are typified with having a very early start of procreation activity and a deep drop in fertility at the middle reproductive ages.

Zakharov, assessing these findings, don't deny the possibility of social and economic crisis affecting this drop in the 1990-s. However, he equally emphasizes the impact of changing fertility tempo consequences (2006, 48-49). As one of the arguments in favor of this point of view he brings the following evidence: steep fall of fertility among women belonging to cohorts 1960-1965 years of birth that started at 1989; slowdown of family formation for the cohorts born at the first half of the 1950-s at mid-1980-s and for the cohorts of 1959-1960 years of birth – at 1988. Zakharov stresses the fact that these slowdowns and steep decline in fertility have happened before the beginning of systemic crisis at the early 1990-s and views it as an evidence of changing timing of births being a major cause of the drop in TFR.

In assessing these conclusions one has to agree there are definitely several factors affecting fertility decline in Russia, consequences of changing tempo of births being one of them. As demographers stress, there is no way to discriminate these effects by providing exact statistical estimation of each factor's contribution. Acknowledging the definite role of fertility tempo changes effect on decline of birth rates, I'd like to provide a qualitative assessment of the magnitude of alternative factors' impact (in the context of this very part of discussion, it is mostly the role of social and economic crisis).

First, the scope of changing tempo of births impact on further decline of fertility is limited by the fact that some of additional births, as mentioned earlier, are not attributable to the implementation of population policy. With its amount not exactly defined, this chunk of additional births that is not attributable to policy's impact could not be encompassed by an explanation related to consequences of changing timing of fertility. Indeed, tempo-related explanation works only for those affected by population policy.

Second, the core assumption of tempo-related explanation is that births occurred earlier due to implementation of population policy, would have otherwise took place later, according to a “normal” pace of fertility. But it is equally plausible to assume that, being delayed in the absence of policy measures, these births would have never occurred anyway because of the start of systemic crisis in Russia in the 1990-s. If this very scenario had been unfolded, fertility decline would not demonstrate the same steepness but the total fertility rates would be still similarly low.

Finally, one of the arguments in favor of tempo-related explanation of the drop of fertility is the one based on data on actual cohorts' birth rates. As mentioned before, this data demonstrates fertility decline at different cohorts have happened at the second half of the 1980-s, before the start of transformational crisis in the USSR/Russia. Indeed, collapse of the state, breakdown of social and economic system, collapse of such institutions as social security and medical insurance and inflation in four digits numbers have happened in the early 1990-s. However, signs of severe social and economic crisis have already manifested themselves in the late 1970-s but have significantly accelerated in the late half of the 1980-s.

Cook (1993) came up with a concept of a social contract between elite and population in the USSR. It has included stability of prices, guaranteed employment and provision of pensions and free medical care. Deterioration of this contract took place in the second half of the 1970-s and its breakdown took place in the late 1980-s (Cook, 1993).

Rising levels of "repressed" and "hidden" inflation characterized the economy of the late seventies and early eighties. The results of repressed inflation included persistent shortages of consumer goods, a steady increases in the ratio of collective farm market prices to state retail prices for comparable goods, rapid increases in the populations savings, proliferation of gray and black markets, growing corruption and, eventually, formal and informal rationing. Though shortages of goods were present in the Soviet economy most of the time and are considered to be the built-in trait of a command economy, in late seventies they have affected also some goods that were previously in surplus. The lines have increased. Poor harvests exacerbated food supply problems, and in 1981 formal rationing was instituted for some goods. Chronic shortages and unsatisfied consumer demand provided fertile soil for the growth of a "second economy". Those directly engaged in black market actively, both bribing and bribed, became recipients of an unofficial, unrecorded income. The official wages grew at that period, but at a slower rate.

There were certain deteriorations in the delivery of other important elements of the social contract such as welfare, medical services and childcare. Poorly trained caregivers, along with shortages of childcare, resulted in grandmothers taking care of children. The pattern of stagnation and decline was repeated in the area of health care. In the early eighties expenditures had dropped to a negative per capita growth rate, with health conditions significantly worsening. Brezhnev was able to fulfill the social contract-though at a declining level of performance-until 1981. After that period per capita spending on critical social services began to decline.

From 1986 through 1988 Gorbachev initiated or pronounced intent to institute policies that threatened to undercut the basic provisions of a social contract in all major policy areas: employment security, wage equality, price stability and socialized services. Changes in industrial policy began to erode employment security and stability, heightening demands for productivity

and the prospect of displacement. A wage reform, which increased differentials among skill grades, was also introduced. In addition, legitimization of a limited cooperative sector began to weaken state control over consumer prices and challenged the monopolistic position of state enterprises in the consumer sector. Proposed price reforms threatened state subsidies and other necessities.

In the context of this discussion it is important to look at the wage dynamics at this period. The idea of wage reform was to diminish egalitarian distribution of income and to tie wages with quality and productivity. In many enterprises the reform produced labor productivity gains and cuts in the labor force. This did not necessarily lead to unemployment because of the creation of new jobs and possibility to enter them. Through 1987 overall increases in industrial productivity exceeded wage increases. The greater differentiation in wages and their higher correlation with productivity were introduced by the reform.

In 1988, however, the impact of reform policies on wages markedly weakened, as the workers used new political freedoms to strike against lowering their wages. Though the strikes weren't massive, the government mostly stuck to the social contract and forced managers to comply with workers' demands. Also, by late 1988 industrial managers were also motivated to increase wages because of inflation in the consumer economy. Thus the drop of wages in 1987 was followed by their increase.

The broader instability related to the deterioration of a social contract could be found in the emergence of the threat in possibility of linking wages and employment with productivity. This possibility was later reversed. Reform policy did result, however, in some erosion of labor's social contract guarantees: some workers were released from their jobs, other experienced loss of wages, and many experienced unaccustomed economic insecurity. But by early 1989 new decisions or concessions had limited the painful effects for workers: factories were allowed to reabsorb released workers, bankrupt enterprises were bailed out, wage discipline was relaxed, privatization was severely limited, and retail price reform was indefinitely delayed.

The similar retreat from the initial reforms threatening other provisions of a social contract had happened in 1988-89. According to the new law, subsidies should be slashed to unprofitable state enterprises, with the goal of reducing subsidies to the loss-making plants by 30 percent in 1989. However, this hard decision was delayed several times and, in fact, industrial subsidies in 1989 and 1990 actually increased. Other important decision was related to the restructuring of the health sector including privatization of some medical services and creation of medical cooperatives. According to the plan, the paid services would have affected only about two percent of medical services over the next fifteen years. The legalization of cooperatives was formalized by the adoption of Law on Cooperatives on May 1988 and by the Fall, 1988 medical

cooperatives were rapidly developing. The results of the cooperatives' establishment were mixed and included public complaints about abuses and corruption in that sector.

Severe economic crisis had exploded in the U.S.S.R. in 1989 and culminated in 1990. This crisis had progressed and by 1990 it looked like the economy would disintegrate altogether. The reason for this crisis were reforms themselves that led to growing monetary imbalances, aggravated fiscal imbalances, an administrative stalemate, calamities in foreign trade, a decline in price stability (severe inflation) and shortages of the most basic goods.

So, it cannot be ruled out that to a certain extent fertility drop in the actual cohorts were caused by these very signs of social and economic crisis that, according to the provided analysis, have started to aggravate before the transformational crisis of the 1990-s, at the second half of the 1970-s and, to a much greater extent, at the late 1980-s. Total fertility rates have showed some increase in the 1980-s largely due to changing of birth calendar as a result of population policy implementation, but relatively steady decline in fertility decline in actual cohorts could be a more of a long-term reaction to the accelerated social and economic crisis.

Based on provided three arguments, it is possible to conclude that, along with definite impact of the timing of births on fertility decline, there are many reasons to believe in the significant role of the impact of other factors, crisis being one of them. Next section explores the role of these alternative factors brought up for the remaining explanations of lowest low fertility in Russia.

Transformational Crisis or Second Demographic Transition?

As mentioned earlier, decline of fertility in Russia started most recently in 1988, have dramatically accelerated since 1990. Coincidence with the start of transformational crisis provided grounds for establishing causation between two phenomena.

Transformational crisis in Russia was multifaceted. It was manifested, first of all, in the overwhelming economic disaster. National economy literally went into a tailspin, with gross domestic product started to decline at a rate of 17 percent in 1991, and at even higher rate since. In 1995 poverty rate was estimated at the level of 26 percent of the total population. Inflation have reached the record rate of over 2, 000 (!) percent in 1992. Most of amassed monetary savings of people was thus blown away. Non-payments of wages became common practice even at profitable Russian enterprises. Also, in some cities in the early 1990-s food coupons were introduced because of scarcity of even most basic foods.

Radical structural transformation also took place at that time. Lots of manufacturing facilities were closed and many new businesses dealing with trade, investment and finances have emerged instead. That gave a reason to a sociologist Michael Burawoy for defining the

developing mode of production a “merchandize capitalism”. Massive privatization of state-owned property was exercised at that time. Staged collateralized auctioning allowed for allocation of huge assets in the hands of a tiny circle of new oligarchs, cronies of political elite members.

Along with emerging of new classes like businessmen, racketeers and private security services, traditional well to do strata like physicians, teachers, research fellows and qualified workers have increasingly found themselves not being in demand (and, thus, moving beyond poverty line).

Transformational crisis has also carried a political dimension. In 1991 USSR was dissolved, and that have led to quite a few global implications including types of relationships with newly formed independent states, formerly Union republics. Among problems related to this development were the ones with Russian-speaking populations in these states and the painful dissolution of “imperial consciousness”. New forms of political activity including participation in civil movements and newly formed alternative parties have emerged as well.

Many ideational changes were also associated with this ongoing transformation. It was a radical break with what referred to as “socialist greenhouse” ideology (Sobotka, 2002, 41-46). There were no longer such things as guaranteed employment and free access to medical care. This break was even more pronounced given that leading reformers of the 1990-s, E. Gaidar and A. Chubais, were guided by experience of liberal economic policies conducted by M. Thatcher and R. Reagan, with their emphasis on leizzer-fair, minimal level of state support and reliance on individual. Implementation of these practices in Russia was accompanied with unfair and corrupted privatization and has generated strong ideological resistance on the part of broad segment of population. Society was marked with huge polarization between those accepting new values (that still differed significantly from their Western counterparts) and those who did not.

Ideational changes that took place during transformation in Russia have also included the ones directly related to demographic behavior. Those are the values reflecting permissiveness on sexual norms and behaviors including non-marital births and living in consensual unions. Acquiring these values was a sharp breakaway with Puritanism professed by official Soviet propaganda.

It is important to mention that the period of interest (from 1990 to nowadays) was not homogeneous in regard to described changes. In mid-1990-s first signs of moderate economic growth have showed up. Financial crisis and default of 1988 interrupted this trend for sometime. However, by the turn of decade (and millennium) the trend was reversed and economic growth have significantly accelerated on the wings of skyrocketing oil prices and implemented market reforms. Not only shortages of basic goods were over in most of the large cities of Russia but

also new opportunities have emerged as well. One of them, long-term consumer loans and mortgages that were introduced in early 2000-s, became available for many citizens. New employment opportunities, especially in big cities, have resulted in creation of a tiny but steadily growing middle class.

The question that divides demographers in regard to providing an explanation of the emerged lowest low fertility in Russia is whether major reason for the phenomena was the period effect of the transformational crisis, or it was rather long-term trends of changing fertility behavior due to the spread of new values conducive to Second Demographic Transition that had the greatest impact? With general consensus that both factors matter, the question is which of them prevails in impacting Russian fertility phenomena. Also, to what extent this factor prevails.

Let us start with analysis of the extent Second demographic Transition (SDT) theory is applicable to post-communist Russia. I'll break this analysis into two parts. In first one, I'll speculate on applicability of the general premises of the theory including ideational changes in their relation to structural changes in society. In the second part I'll examine interpretations of fertility behavior in Russia in regard to major manifestations of this behavior described by SDT theory.

Major premise of this theory, as well known, is the explanation of changes in demographic behavior by huge shifts in the prevailing societal values. Van de Kaa emphasizes these new values of "postmodern epoch". Among them he mentions "...the overwhelming preoccupation with self-fulfillment, personal freedom of choice, personal development and lifestyle, and emancipation..." (Van de Kaa, 1996, 425). European Value Survey conducted in the Northern, Eastern and Southern parts of the continent have confirmed connection between new models of demographic behavior and such conducive to SDT theory's values as stress individual autonomy, weaker civil morality, world orientation, and tolerance toward minorities, self-fulfillment and other postmaterialist values (Surkyn and Lestaeghe, 2004, 54).

Van de Kaa stresses relationship of these values' emergence with social, economic and structural conditions of societies: "Rising incomes and the economic and political security which democratic welfare states offer their populations has helped trigger a 'silent' revolution", a shift in a 'Maslovian' post-materialism direction where an individual's sexual preferences are accepted for what they are, and decisions on cohabitation, divorce, abortion, sterilization and voluntarily childlessness are largely left to the discretion of the individuals and couples involved" (1996, 425).

To what extent Russian society matches the criteria of postmaterialism that is a prerequisite for the emergence of described value shifts? In first place, postindustrial societies are typified with the prevalence of service economy sector. This is definitely not the case with

Russia even nowadays, with lion share of the state profits being generated from the sales of natural resources. Russia in the 1990-s definitely was not a welfare state offering economic security to its citizens, the one Van de Kaa was referring to in regard to Second Demographic Transition. Structurally, middle class is claimed to be the “modernized part of population”, thus, “type of its marital behavior shares European and American pattern” (Srednii Class, 2008, 39). According to results of the survey conducted by Independent Institute for Social Policy, the share of middle class has constituted 20 percent of country’s active population in 2000. Some estimates of the same category for 1998 is 9.4 percent and for 2006 – 22 percent. In rural areas of Russia the share of middle class is estimated at the level of 13-15 percent (Sredii Class, 2008, 39).

What is equally important of assessing the possibility of widespread transition to new demographic behavior in Russia is the level of polarization in society. According to data published by Roskomstat (Russian Committee for Statistics), in 2007 incomes of top 10 percent of population have 16, 8 times exceeded the ones of bottom 10 percent. Overall, Russian social structure resembles the one Europe had forty-fifty years ago (Srednii Class, 2008, 39). At this very time, a period of 1955-1965, for the most European countries SDT had yet to come.

This is not to be said that economic and structural conditions in Russia rule out the fact of SDT took a start in Russia. Rather, the point is that given these conditions, there is, most likely, a very tiny segment of population in nowadays Russia (and even more so in the 1990-s) that fully acquire values conducive to the ones described by SDT theory. This very segment is mostly concentrated in big cities, growing regional centers and oil rich cities. It is likely that with increase of cities’ development and overall modernization of the country this chunk of population will increase.

I would go beyond purely structural analysis given the fact that the values could to some degree trickle down to lower strata, outside of statistically defined boundaries of middle class. I’d like to speculate on the very values conducive to SDT: to what extent they are shared by the “demographically advanced” group, Russian middle class? As seen from the list of these values cited above, it is quite a heterogeneous group. The question of which of these values were internalized in Russia, and to what extent, merits special research. In the absence of that, I’ll try just speculating on the topic.

Tolerance toward minorities is definitely not the value in great supply in Russia. Killings of foreign students with different color or just from different ethnic groups by skinheads became a common practice in quite a few cities of Russia, St. Petersburg being first among them. Sobotka cites characterization for all the post-Soviet states that include existence of such traits as ...”xenophobia and authoritative nationalism” (2002, 50).

The idea of such values as self-fulfillment, freedom of choice, personal development and individualistic lifestyles being acquired in full by the broad segments of Russian population has been qualified by a prominent demographer as being “out of touch with reality” (Klupt, 2008, 323). Indeed, unfair allocation of the most attractive assets in the hands of elite’s inner circle, widespread corruption, authoritarian type of modernization undertaken by President B. Yeltsin, as well as domination of criminals in economic structures don’t contribute to self-actualization and enjoyment of freedom. However, there are certain shifts in the direction of spreading of those values. Plurality of the forms of ownership provided certain choices for individuals. Ability to earn more money created stimulus for hard work and education, those accumulated wealth started, in accordance to Mazlow, thinking of higher forms of human existence like self-actualization.

One value related to freedom and self-expression, however, has not only emerged but became dominant. That is consumerism. Actually, drive for consumerism has appeared before 1990. In discussion, provided on that issue, Sobotka (2002, 57) cites a point of view linking collapse of the Communist regimes with their inability to satisfy consumer demands. With gradual rise of supply of goods in the second half of 1990-s not only demand for them was matched but the whole culture of consumerism have emerged and expanded in Russia.

Summarizing this part of discussion, one can conclude that not only economic and structural conditions of Russia have limited the advance and scope of SDT but the very uneven internalization of various values conducive to the initiation of new demographic behavior, most likely, have made a mark on its advance.

Let us turn to the analysis of SDT theory’s manifestations of demographic behavior in Russia. Following features of such behavior are defined: increase in the numbers of consensual unions; increase in proportions of non-marital childbearing with an accompanying increase in the mean age at childbearing outside marriage; decline of induced abortions and increase in use of modern contraception; change in the position and shape of distribution of birth by age including shift in the share of teenage fertility; increase of the mean age of legal marriage, mean age at giving first birth, and mean age of maternity.

Let us start with analysis of the first two features. Russia in the 1990-s have demonstrated relatively high and still growing rate of cohabitation. Higher prevalence of cohabitation of the women aged 20-24 and 25-29 in comparison with many other Eastern European countries, with tendency of increase, is presented by Sobotka (2002, 33). Also, Figure 3 clearly demonstrates comparisons of dynamics of proportion of marital births with the proportion of women living in consensual union at age 25-29 in the 1990-s. A definite change towards increased non-marital

childbearing coupled with higher prevalence of cohabitation is clearly illustrated for three countries, Russia being one of them.

These trends could well speak in support of SDT start in Russia. However, both spreading of cohabitation unions and increase in the share of non-marital births could equally reflect severe economic and social conditions. Klupt (2008, 320) emphasizes the movement of significant share of incomes into economic “shady” areas that, along with weakening of legal system, have led to diminishing of the role of marriage institution as the one securing provision of material support from the former husband for rearing a child. Author also stresses that despite commonalities in changes of sexual relationships between Russia and Western Europe, their impact on fertility differed. While in most Western European countries non-marital fertility is almost equaled the one in legal marriages (due to favorable economic conditions for rearing a child by a lone mother), the spread of cohabitation unions in Russia have resulted in overall fertility decline. So, increase in number of couples living in cohabitation unions and the number of non-marital births, most likely, reflect the impact of two major factors: first, spreading of new sexual norms conducive to SDT and, second, devaluation of the institution of marriage due to transformational crisis.

As for the third manifestation of SDT, there is strong evidence that Russia have definitely demonstrated decline in induced abortions (see Table 1) and relatively high rate of using modern contraception (mostly IUD) (see Table 2). It is evident from Table 1 that Russia, with TIAR level of 2.08 in 1999, still has the high rate of induced abortions, perhaps highest among countries of Central and Eastern Europe including former Soviet republics (with no data available for Ukraine). But consistent trend of gradual decline since second half of the 1980-s is evident: 3.66 percent in 1985, 3.31 percent in 1989, 3.05 percent in 1990, 2.62 percent in 1995, 2.40 percent in 1997, 2.24 percent in 1998 and 2, 08 percent in 1999.

Induced abortions decline is a more unambiguous indicator of SDT that increase in living in consensual unions. The latter could point out for both the start of demographic transition and for the impact of transformational crisis as well, while decline in induced abortions and increase in the use of modern contraception clearly speaks of the signs of long-term processes like SDT expansion.

Postponement of marriages and parenthood is viewed as the main feature of the SDT (Lesthaege and Moors, 2000, 124). The importance of timing change in fertility is emphasized, in particular, by Sobotka (2003). He notes that postponement of childbearing depresses the TFR to lower level than the one it would have reached in the absence of timing changes. So, for the explanation of the extent to which TFR decline is attributable to postponement of births (the main feature of SDT) is essential for a given discussion.

Russia has demonstrated a trend of increasing of the ages of both marriage and parenthood, as for the first order births, as well the mean one (see Figure 4). It was not as pronounced, though, like in most countries of Central and Eastern Europe. And, as with the share of those living in cohabitation unions, this indicator could be interpreted both as a sign of the SDT advance, as well as a manifestation of economic crisis. Klupt, for instance, mentioned possibility of this postponement being partially attributable to the “behavior of young women from depressive regions that performed several abortions before the birth of a first child, and have postponed those latter due to lack of permanent job and reliable partners” (Klupt, 2008, 322).

However, there is an indicator designed to split “real” reduction in fertility level (quantum) from the one caused by *timing* effects: it is adjusted total fertility rate introduced by Bongaarts-Feeney. Tables 3 and 4 reflect ratios of tempo (timing) and quantum components in the decline of the period TFR at 1998-2000. Clear division in the major “contributors” to fertility low TFR across Central and Eastern European countries is evident. While in Hungary and Czech Republic the decline of TFR was mainly attributable to the timing effects (the *tempo* component) and in Baltic States, Poland and Slovakia the impact of calendar of births was also quite substantial, in Bulgaria, Romania and Russia tempo effect in TFR was very modest: correspondingly 30, 20 and 16 percent. So, for Russia quantum component of lowest low fertility was the prevalent one, and that speaks in favor of a limited effect of SDT.

What seems very insightful for assessing degree of Russian fertility trends’ universality is the “two layer model” proposed by Sobotka (2002, 2003). According to it, the split between Central and Eastern European countries in regard to described above differences in types of demographic behavior and patterns reflect the pace of implemented reforms. Countries that have underwent smooth transition to market economy (Czech Republic, Slovenia, Poland and Hungary) demonstrate greater signs of acquiring fertility behavior conducive to SDT (which is reflected in prevailing influence of birth postponement on the decline of TFR). Second category experienced economic and societal near-collapse in the course of transformation and thus demonstrate emphasis on survival values. Thus major factor in TFR decline for these countries was the quantum effect not related to timing effects of postponing births. So, impact of SDT (for which postponing births is one of the major indications) was not so pronounced for the countries of second category that includes Bulgaria, Romania and most post-Soviet states, including Russia (Figure 5 demonstrates difference in change of purchasing power parity in these countries in connection with change in postponement of first births).

Summarizing this discussion, it could be concluded that there are clearly indications of SDT have indeed started and generated an impact on fertility in Russia. However, at the period

of interest (1990 to nowadays) its impact seems to be relatively insignificant. Here are the major arguments in favor of this point of view based on provided discussion:

First, level of country's modernization and the corresponding social structure typified with tiny portion of "demographically advanced" middle class, assume significant limitations for fertility behavior conducive to SDT;

Second, the societal values that generate SDT were not evenly acquired: some of these important values were shared by very small segments of population;

Finally, various manifestations of fertility behaviors conducive to the ones described by SDT theory, differed in degree of acceptance. While some of them (decline in the induced abortions, increase in the use of modern contraception) demonstrated significant dynamics, others, like the most important one, delaying of first and other births, were not as pronounced. Most of TFR decline was attributable *to quantum* rather than *tempo* effect.

There are several other factors that, along with the provided above indirect indication in favor of possibility of strong impact of transformational crisis on lowest low fertility, also suggests of this very explanation. One of them being the fact that SDT that took place in most Western European countries, have not caused such prolonged and steep decline of fertility (except for Germany, Italy and Spain for the special reasons discussed above). However, for the countries that underwent transformational crisis, there are striking similarities in steepness and duration of fertility decline. (Table 5 that demonstrates TFR of Russia in a recent decade in comparison with other developed industrialized countries illustrates this point).

Other indirect evidence of demographic behavior's sensitivity to economic situation is the drop in fertility in Russia in 1999, right after financial default of 1998 (see Figure 2). Shortly after the start of financial and economic recovery TFR gradually started to climb. Also, evidence in favor of significance of economic crisis impact on fertility is supported by the data of sociological survey conducted by VTsIOM (the Russian Center for Public Opinion Research). According to it, in the first half of the 1990-s people cited the decline of living standards, unemployment and other factors that are directly tied to the economic crisis among major reasons limiting the desired number of children in a family (Kashperov, 2004, 61).

Uncertainty Reduction: an Argument against Crisis Explanation?

Crisis explanation of the steep decline fertility in Russia have gathered fair amount of empirical support. Period fertility indicators consistently demonstrate extremely low level of fertility for around two decades that could be largely attributed, along with alternative or complementary factors that have also affected the process, to the impact of a transformational

crisis in the country. However, there is also a set of data that could direct for quite an opposite line of explanation. The one I'm referring to is the micro-data that was obtained in the course of conducting Russian Longitudinal Monitoring Survey (RLMS). The results of this survey were extensively described and analyzed by Kohler and Kohler (2002, 233-262).

RLMS have sampled different parts and types of residential areas of Russia and covered the period from 1992 to 2000. It used both objective and subjective indicators of labor market uncertainty. The former consist of such measures as unemployment or non-payment of wages by employer, and the latter include individual subjective evaluation of the chance of losing one's primary job. Some of the findings of RLMS have altered premises of microeconomic theory of fertility (Becker, 1981) on the relationship between standard of living downsizing and fertility level. Kohler and Kohler (2002, 247-248) report several findings, among them:

- female unemployment is not significantly associated with the probability of having a child;

- work at companies with stable pattern of non-payment of wages to employees is positively associated with the probability of having a child;

- women with an unemployed husband have higher probability of childbirth than women with employed husband;

- unemployment is positively associated with childbirth.

These findings that were obtained using objective measures of labor market uncertainty were generally confirmed when introducing subjective measures as well. As Kohler and Kohler note, these findings ...” shed a rather puzzling light on recent fertility behavior in Russia” (2002, 249). Indeed, they cast doubt in the very core of the “transformational crisis” explanation. The latter, based on premises of microeconomic theory of fertility, assumes drop in birth rates is related to the deterioration of standards of living. And, as mentioned before, macro-data on period fertility could be interpreted as the one supporting crisis explanation.

Authors explain this counter-intuitive fertility behavior by bringing in premises of other theory, uncertainty reduction (Friedman, Hechter and Kanazava, 1994). According to this theory, giving birth to a child is viewed as a way to compensate of uncertainty in other spheres of individual lives. It is clear, however, that despite certain differences in birth rates among those experiencing greater market uncertainties and the ones with relatively lesser degree of the latter, both groups still demonstrate very low level of fertility. And that results in the corresponding lowest low level of macro-aggregate fertility indicators. Kohler and Kohler, however, emphasize the prevailing role of the “overall socioeconomic situation, including general income levels, the costs of children, the effects of labor market crisis, etc.” (2002, 257) that, according to premises of microeconomic theory, negatively affects fertility, despite discrepancies attributable to

uncertainty reduction strategy. So, following this explanation, one can still conclude the negative impact on social and economic conditions on decline of fertility conducive to crisis explanation, still prevails.

But I will go beyond that reasoning and cast a doubt even in these relatively minor variations in fertility found in the course of conducting RLMS being attributable to uncertainty reduction. For this purpose let us briefly outline major premises of uncertainty reduction theory and elaborate on empirical examples provided in its support.

Uncertainty reduction theory assumption could be formulated in a following way: *Actors will always desire to reduce uncertainty by converting it into a certain, even if risky, situation.* As authors of uncertainty reduction theory stress, because actors value uncertainty reduction as an end in itself rather than just as means to various other ends, it is an *immanent* rather than an *instrumental* value.

People can reduce uncertainty in two ways. The first one is to gather information that transforms uncertainty to risk for a local choice problem. The second one is to pursue global strategies designed to reduce uncertainty regarding whole strings of future courses of action.

The authors of the theory point out several such global strategies. The principal ones in developed countries are stable careers, marriage and children. Most importantly, Friedman et al argue that having children reduces uncertainty because parenthood is irreversible and irrevocable. This is because, first, having children involve actors in recurrent social relations, and, second, creates an irrevocable commitment to a stream of expenditures over a long period of time.

Uncertainty reduction theory thus provides a set of hypotheses linking types of uncertainty with strategies for its reduction. Specifically, it predicts that two categories of individuals are more likely than others to seek parenthood: (1) those that face greater uncertainty and (2) those that have less access to other means of uncertainty reduction. Friedman et al. suggests that an example of the first category is minorities with the poorer prospects of stable successful career who will seek parenthood more to reduce uncertainty, while an example of the second category is persons with poorer prospects of stable marriage.

Uncertainty reduction theory contains a subsidiary assumption of the enhancement of marital solidarity. This assumption asserts that husbands and wives will seek to increase solidarity in their marriages. Parenthood thus could be hypothesized from the perspective of reducing uncertainty by increasing the stability of marriage (possibility correlated with parenthood).

Propositions from uncertainty reduction theory and its subsidiary assumptions can be derived for women's acting alone as well as for couples making joint decisions. The important point of the theory is awareness that other factors could affect fertility and thus should be

controlled. For that reason uncertainty reduction theory is said to be problematic in application to developing countries, where it is hard to disentangle the uncertainty reduction motivation from the economic motivation. Children in developing countries may increase a household's production capacity, and for that reason fertility behavior leads both to maximization of wealth and to uncertainty reduction. Uncertainty reduction theory thus provides a set of hypotheses linking types of uncertainty with strategies for its reduction. Specifically, it predicts that two categories of individuals are more likely than others to seek parenthood: (1) those that face greater uncertainty and (2) those that have less access to other means of uncertainty reduction. Friedman et al. suggests that an example of the first category is minorities with the poorer prospects of stable successful career who will seek parenthood more to reduce uncertainty, while an example of the second category is persons with poorer prospects of stable marriage.

The hypothesis that arguably gathers the biggest empirical support is the one on negative effect of prospects for a stable and successful career on the propensity to parenthood. The derivation from this hypothesis is that stable employment and career are effective means to reducing uncertainty and thus subgroups with the poorest prospects for achieving them (like poor African-American teenaged women) are more likely to seek parenthood.

The work of Geronimus (1987) strongly supports this hypothesis. Based on a large set of data as well as on previous research, the author states that among urban poor Black Americans teen pregnancy became a norm. The figures are as follows: while only 23% of white American first births are to teenagers, almost 50% of Black American first births are to teenage mothers. The figure is even higher for poor Black urban American mothers, one of the most disadvantaged groups in society in regards to having stable and successful careers.

What looks like even more convincing support of the uncertainty reduction theory's premise is that there is a differentiation in teenage childbearing *within* that group. Geronimus states that there is a different norm in the urban black community for teenage and out-of-wedlock childbearing for those women exhibiting exceptional academic achievement. The author argues, "Those teenagers believed to possess the skills necessary to overcome chronic barriers to achievement and upward social mobility are selected out of the peer group and are discouraged from bearing children during their teens" (Geronimus 1987, 256). So, even within a group of poor urban Black American young women those having prospects of a stable career as a means of uncertainty reduction do not need to use another mean of its reduction – that is, early and/or out-of wedlock parenthood.

As a certain support for the hypothesis of the impact of stable and successful careers on fertility one can consider the work of Rindfuss, Morgan and Swicegood (1984). Their finding is that women with at least a college degree are substantially less likely to become mothers than

other women. The authors explain it by the fact that “these are precisely the women who enter careers that effectively compete with the prospect of childbearing for woman’s time” (Rindfus et al. 1984, 369).

The second hypothesis that is derived from the uncertainty reduction theory and that has empirical support is the one of positive effect of divorce on the propensity to parenthood. Divorce is viewed here as an uncertainty, so increased fertility is seen as a way to prevent it. The support for this hypothesis surfaced in some interviews, conducted in the course of a scientific study of people who are childless by choice (Veevers, 1980). The author notes that “marital insecurity often time leads to a more immediate decision about having children” (Veevers 1980, 37). Though specialists doubt that having a child is an effective solution of marital problems, respondents often times believe otherwise.

As evident from the provided examples that illustrate uncertainty reduction theory, it could be hardly applied to a situation in Russia at the 1990-s. One of the important rationales of reducing uncertainty by giving birth to a child is, according to Friedman et. al, an irrevocable commitment to a stream of expenditures related to rearing for a long period of time. It is obvious that both groups singled out by Kohler and Kohler, were not able to afford it. Even those having lesser degree of job insecurity and better history of non-payments by the employer, were very short of funds, leaving alone the fact that they, as well as the other group, were facing problems with getting quality healthcare services (given breakdown of medical system), lack of clear pathway in career and criminogenic environment. In opposite to the example with poor urban Black American women that, in case of establishing career would have avoided most of such perspectives. It should be also noted that most of examples supporting the uncertainty reduction theory deal with symbolic uncertainty not directly related to the decline standards of living. However, those were material-related uncertainties that Russian women faces the most at the times of transformation.

Findings of RLMS seem to be of great importance for understanding the nature of fertility trends in Russia. In my view, they merit further theoretical interpretation but could be hardly explained by uncertainty reduction theory. Thus, general premise of transformational crisis having negative affect on fertility remains sound.

Conclusion

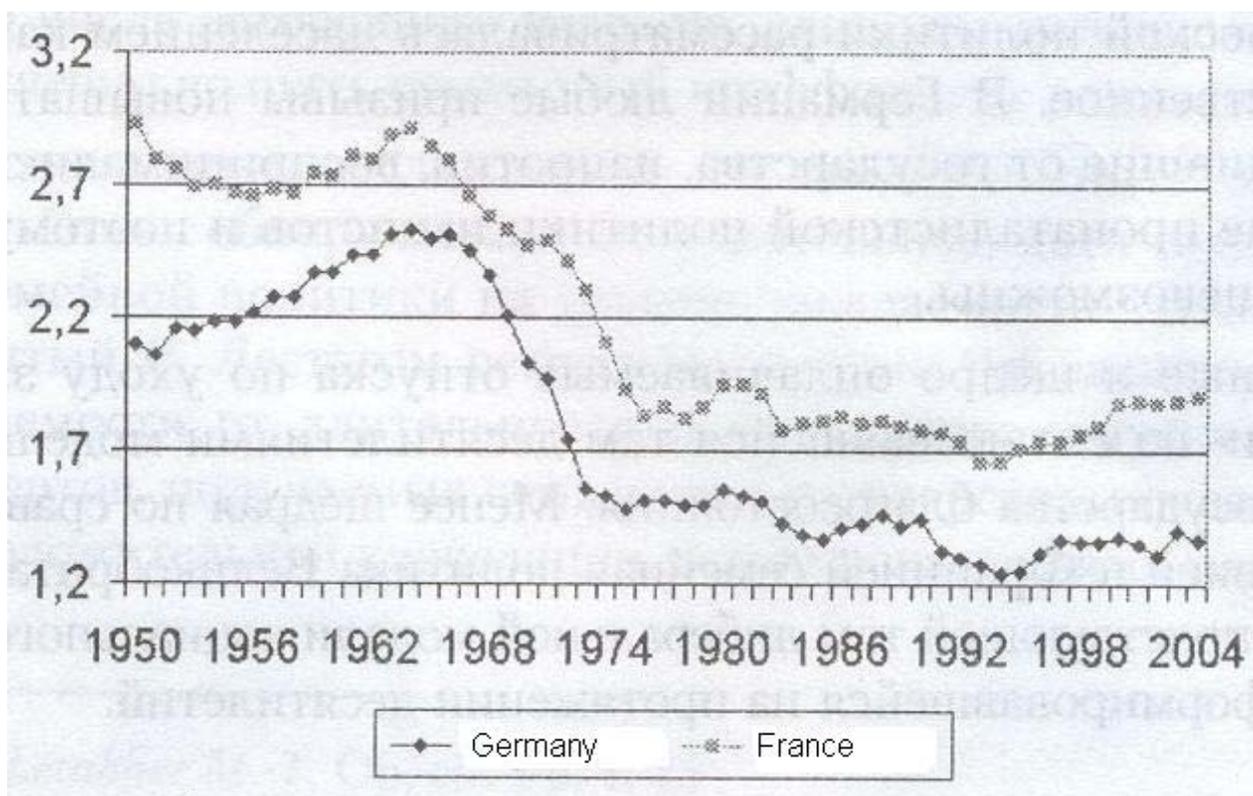
Lowest low fertility in Russia is a multifaceted phenomenon. With many reasons affecting it, there is a theoretical and methodological problem defining the contribution of each of them. On the basis of undertaken analysis, it looks like the explanation emphasizing the role of totalitarian rule in the country, fails to generate enough grounds and empirical support. All

three remaining factors – the effect of population policy in the 1980-s, the start of Second Demographic Transition and the transformational crisis all played a role in the prolonged lowest low fertility in the country. In that sense Russian fertility behavior represents both universal trends and unique features. SDT is a process that encompasses most of developed industrialized countries, and transformational crisis is typical for all Central and Eastern European countries that underwent economic and political reforms at the end of past century. On the other hand, the way new values and different traits of demographic behavior conducive to SDT was acquired in Russia contained certain specifics; at the same time it resembles the paths of less successful countries in regards to reforms implementation like Bulgaria, Romania, Ukraine and Moldova. Effect of population policy in the 1980-s on further compensatory drop in fertility was a pretty unique feature of Russian demographic development. Other European countries with history of population policy implementation, introduced demographic measures much earlier so it is not likely they experienced the similar impact in the 1990-s.

Though all three factors, SDT, population policy and transformational crisis played a role in fertility phenomena, the impact of the latter, in my opinion, is the strongest. Economic component of transformational crisis was the major one but the latter is not reducible just to it. Overall transformation of values, political changes, introduction of new lifestyles, habits and consumer goods have comprised a unique phenomenon that implies very specific demographic response on the part of population. “Two layer” model proposed by Sobotka in regards to various countries of Central and Eastern Europe could be extended not only to social strata in each country but to every single individual exercising fertility behavior s well. Indeed, it is quite possible that the demographic decision of a person at times of transformational crisis is guided by both advance of modern contraception (a feature of SDT) and decline in the standard of living (a feature of transformational crisis).

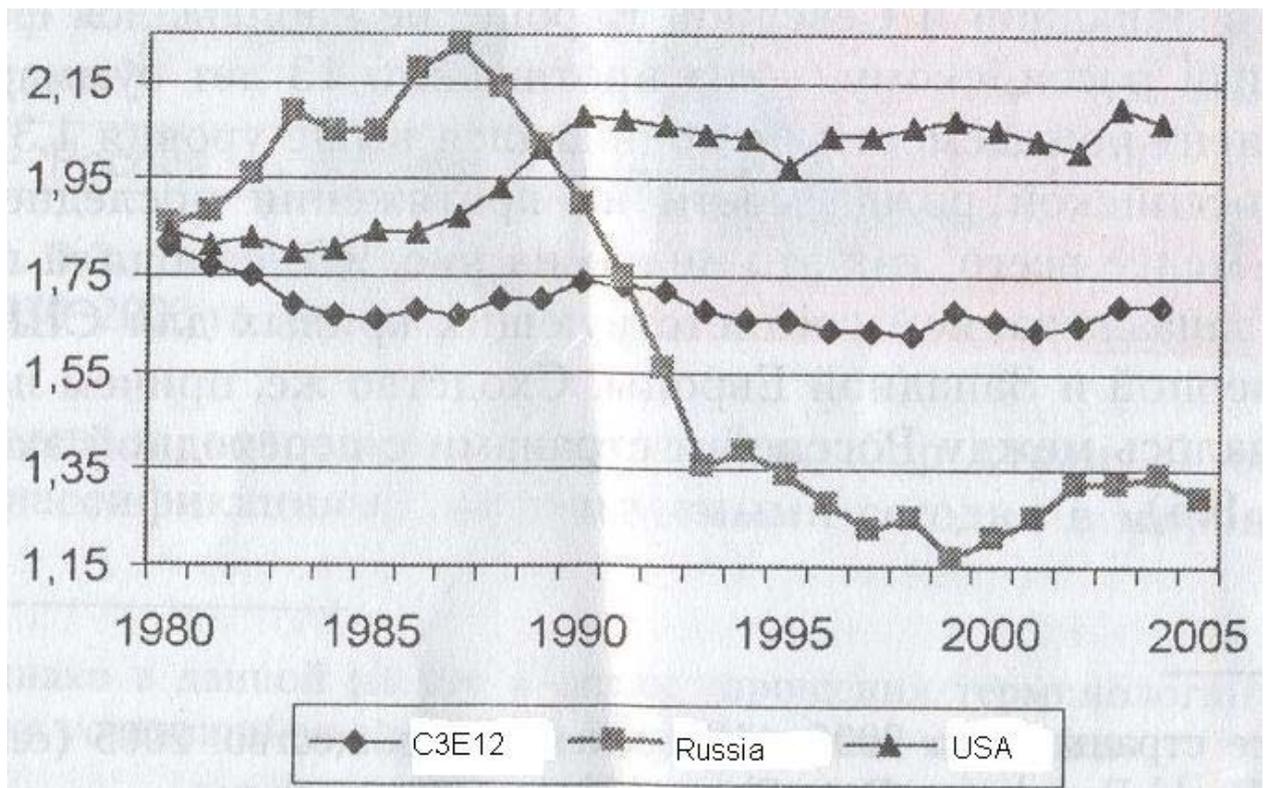
This synergetic effect could work on a societal level as well, with transformational crisis plying a role of enhancer of long-term processes like SDT. Microeconomic theory of fertility explains only part of the transformational crisis impact theory related to economic hardship. It seems that a very promising approach in this direction of extending the scope of transformational crisis explanation was proposed by Philipov (2002) who introduced the concept of the personal evaluation of own incomes and brought up for further analysis such aspects as discontinuity, disorderliness and anomie. Indeed, this could well explain why, after overcoming the nadir of a crisis, fertility in many countries, Russia including, stays low. However, theory that could provide a full account of the transformational crisis impact on fertility has yet to be developed.

Figure 1. TFR in Germany and France in 1950-2004.



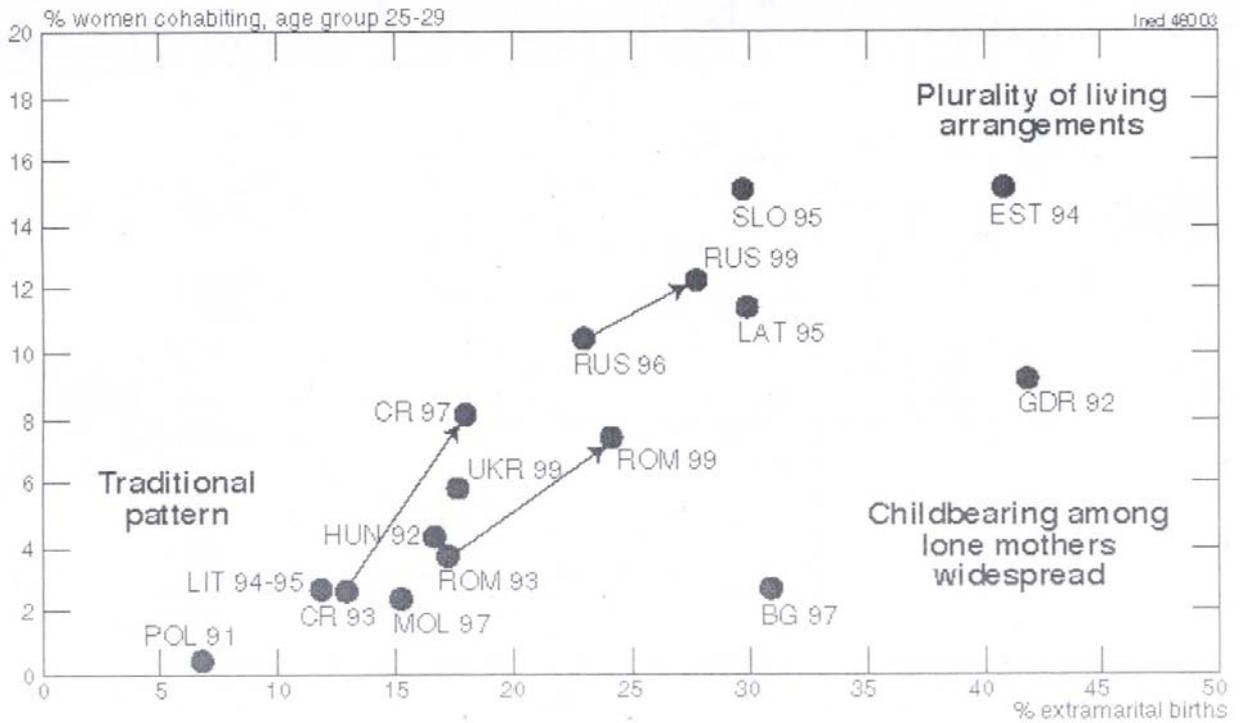
Source: Klupt, M. Demografia Regionov Zemli. 1998: Piter.

Figure 2. TFR in Russia, USA and 12 Countries of Western and Northern Europe (C3E)



Source: Klupt, M. Demografia Regionov Zemli. 1998: Piter.

Figure 3. Living in Cohabitation Unions



Source: Sobotka, T. Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of Communist Regimes. // "Population"2003, Vol4/5 (58).

**Table 1. Induced Abortions Rates Dynamics in the Countries
of Central and Eastern Europe**

	1985	1989	1990	1995	1997	1998	1999	2000
Central Europe								
Croatia	–	–	–	–	0.30	–	0.25	–
Czech Republic	1.13	1.50	1.51	0.67	0.59	0.55	0.53	0.47
Hungary	1.09	–	1.22	1.06	1.03	0.96	0.92	0.83
Poland ^(a)	–	–	0.2	0.0	0.0	0.0	0.0	0.0
Slovak Republic	0.92	1.23	1.23	0.75	0.55	0.52	0.47	0.45
Slovenia	1.19	1.04	0.96	0.72	0.65	0.62	0.59	0.58
Former GDR	0.74	0.63	0.57	–	–	–	–	–
South-eastern Europe								
Bulgaria	1.78	2.25	2.37	1.69	–	1.52	1.25	–
Romania ^(b)	1.92	1.19	6.07	3.04	2.07	1.61	1.53	1.51
Baltic states								
Estonia	–	2.17	–	1.70	1.62	1.53	1.46	1.33
Latvia	–	2.21	–	–	1.16	1.09	1.07	1.04
Lithuania	–	1.68	–	1.14	0.83	0.78	0.70	0.59
Post-Soviet countries								
Belarus	–	3.06	–	–	2.04	–	–	–
Moldova	2.72	2.67	2.20	1.55	–	1.17	–	–
Russia ^(c)	3.66	3.31	3.05	2.62	2.40	2.24	2.08	–
Ukraine	–	2.65	–	–	–	–	–	–

Source: Sobotka, T. Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of Communist Regimes. // "Population", 2003, Vol4/5 (58).

Table 2. Use of Contraception in the Countries of Central and Eastern Europe

	Pill	Condom	IUD	Modern methods ^(a)	Traditional methods ^(b)	All users ^(c)	Unknown	No method used ^(d)
Czech Republic 1995 (RHS)	12.5	19.8	15.3	49.6	22.4	71.0	0.8	27.2
Czech Republic 1997 (FFS)	26.7	16.4	7.4	56.8	9.3	61.8	16.4	19.6
Hungary 1992-93 (FFS)	50.3	6.4	12.3	71.3	6.0	75.6	2.9	21.5 (8.9)
Poland 1991 (FFS)	3.6	11.0	6.6	23.7	32.2	52.2	27.3	20.5 (6.3)
Slovenia 1995 (FFS)	29.7	9.8	16.5	57.8	13.5	71.4	6.7	21.9 (9.6)
Former GDR 1992 (FFS)	64.4	0.0	3.9	71.1	3.3	72.0	-	26.0 (20.6 ^(e))
Bulgaria 1997-98 (FFS)	9.4	11.4	3.4	25.1	17.1	42.0	9.4	48.6 (37.8)
Romania 1993 (RHS)	4.0	5.5	6.3	17.5	48.4	65.9	-	34.1
Romania 1999 (ages 25-34, RHS)	11.9	10.5	8.0	36.6	33.5	70.1	-	29.9
Estonia 1994 (native-born only, FFS)	5.8	17.7	31.5	55.9	21.4	63.9	0.0	36.1 ^(f) (12.2)
Latvia 1995 (FFS)	11.2	15.4	25.8	50.8	8.1	58.8	16.5	24.7 (10.0)
Lithuania 1994-95 (FFS)	4.4	15.6	17.8	38.9	18.0	56.7	8.9	34.4 (19.4)
Moldova 1997 (ages 25-34, RHS)	3.0	6.5	41.6	54.0	21.8	75.9	-	24.1
Russia 1996 (avg. 3 regions, RHS)	7.5	30.3	12.3	55.0	16.8	71.8	-	28.2
Russia 1999 (avg. 3 regions, RHS)	7.4	25.1	15.6	53.3	19.5	72.8	-	27.2
Ukraine 1999 (RHS)	3.3	16.0	19.3	42.0	29.7	71.6	-	28.4

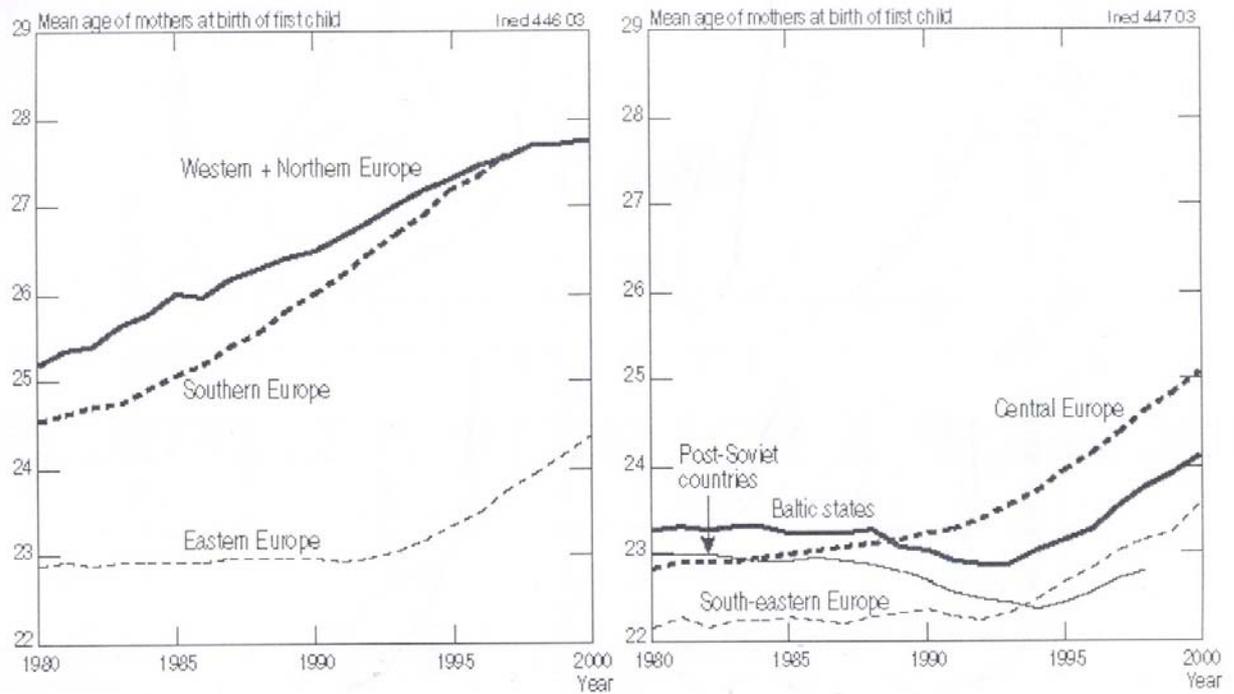
Notes: the table shows contraceptive use among all women in union aged 25-49, irrespective of fecundity, pregnancy status, and sexual activity. When available, nonuse among women who are not currently pregnant, sexually inactive or infertile is indicated in brackets in the last column. Data on contraceptive prevalence may be underestimated, when they are computed on a total that includes unknown cases. FFS data include the use of multiple methods; in the RHS data, only the main method used currently is reported.

^(a) The pill, condoms, the IUD, injections, diaphragm, and sterilization.
^(b) Periodic abstinence and withdrawal.
^(c) Due to the use of multiple methods (FFS surveys only), the sum of the respondents using modern and traditional methods may be higher than the total proportion of contraceptive users.
^(d) Total proportion of women who do not use contraception. The figures in brackets indicate nonuse among fecund, not pregnant and sexually active women.
^(e) Including unknown cases.
^(f) Including 19% of women reported as sexually inactive. These probably include unknown cases.

Sources: FFS (1991-1998) and RHS (1993-1999) surveys.

Source: Sobotka, T. Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of Communist Regimes. // "Population", 2003, Vol4/5 (58).

Fig. 4. Mean Age of Mothers at Birth of First Child at European Countries



Source: Sobotka, T. Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of Communist Regimes. // "Population"2003, Vol4/5 (58).

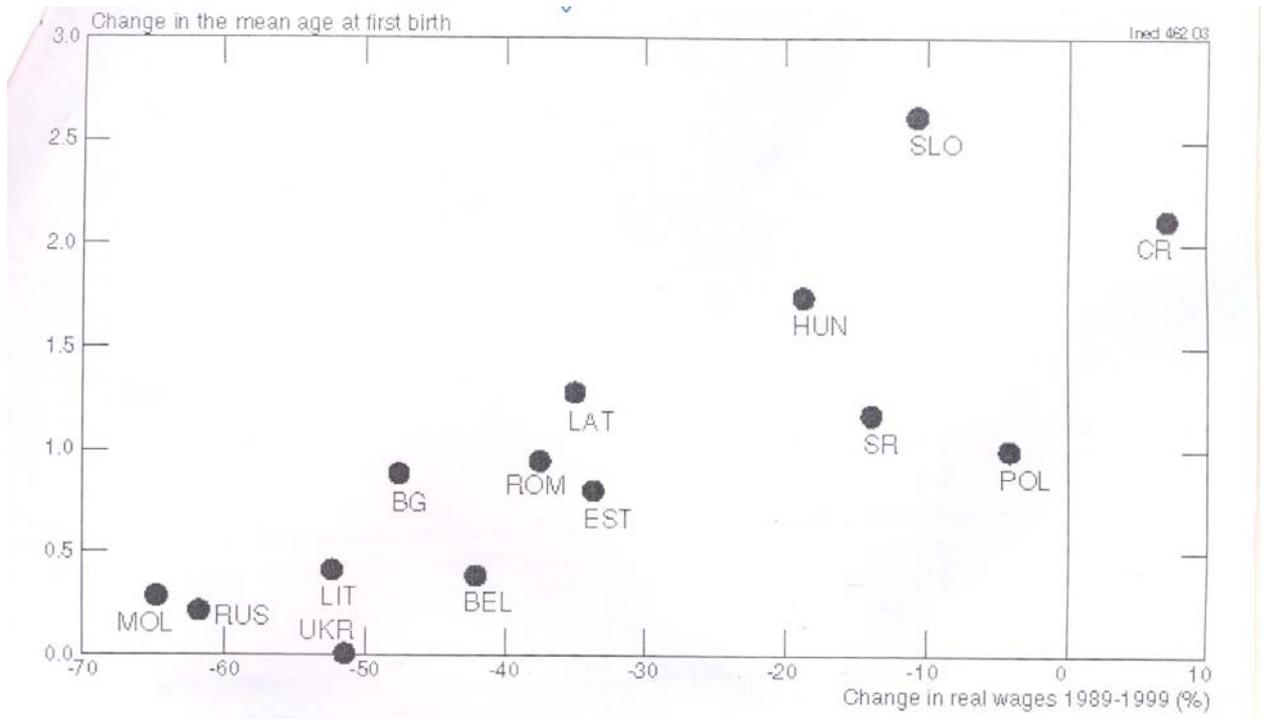
Table 3. Adjusted TFR in the Countries of Central and Eastern Europe

	Population ^(a) 2000	TFR		Adjusted TFR ^(b) avg.1998-2000	% extramarital births	
		1989	2000		1989	2000
Central Europe						
Croatia (CRO)	4,568	1.67	1.40	-	6.6	9.0
Czech Republic (CR)	10,278	1.87	1.14	1.67	7.9	21.8
Hungary (HUN)	10,043	1.82	1.32	1.71 (97-98)	12.4	29.0
Poland (POL)	38,654	2.08	1.34	1.69	5.8	12.1
Slovak Republic (SR)	5,399	2.08	1.29	1.72	7.2	18.3
Slovenia (SLO)	1,988	1.52	1.26	1.63	23.2	37.1
Former GDR (GDR)	15,217	1.57	1.22	-	33.6	51.4
South-eastern Europe						
Bulgaria (BG)	8,190	1.90	1.30	1.47 (97-00)	11.5	38.4
Romania (ROM)	22,456	2.21	1.31	1.50 (98-99)	-	25.5
Baltic states						
Estonia (EST)	1,439	2.21	1.39	1.67	25.2	54.5
Latvia (LAT)	2,424	2.05	1.24	1.61	15.9	40.3
Lithuania (LIT)	3,699	1.98	1.27	1.63 (98-99)	6.7	22.6
Post-Soviet countries						
Belarus (BEL)	10,020	2.03	1.31	-	7.9	18.6
Moldova (MDL)	4,282	2.78	1.30	-	10.4	20.5
Russia (RUS)	145,559	2.01	1.21	1.47 (95)	13.5	28.0
Ukraine (UKR)	49,851	1.94	1.10	-	10.8	17.7

Notes:
^(a) Population: Population on 1 January in thousands
^(b) Adjusted TFR: Bongaarts-Ferney (1998) tempo-adjusted period total fertility rate

Source: Sobotka, T. Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of Communist Regimes. // "Population", 2003, Vol4/5 (58).

Fig. 5. Relationship of Change in the Mean Age of Birth with Change in Real Wages



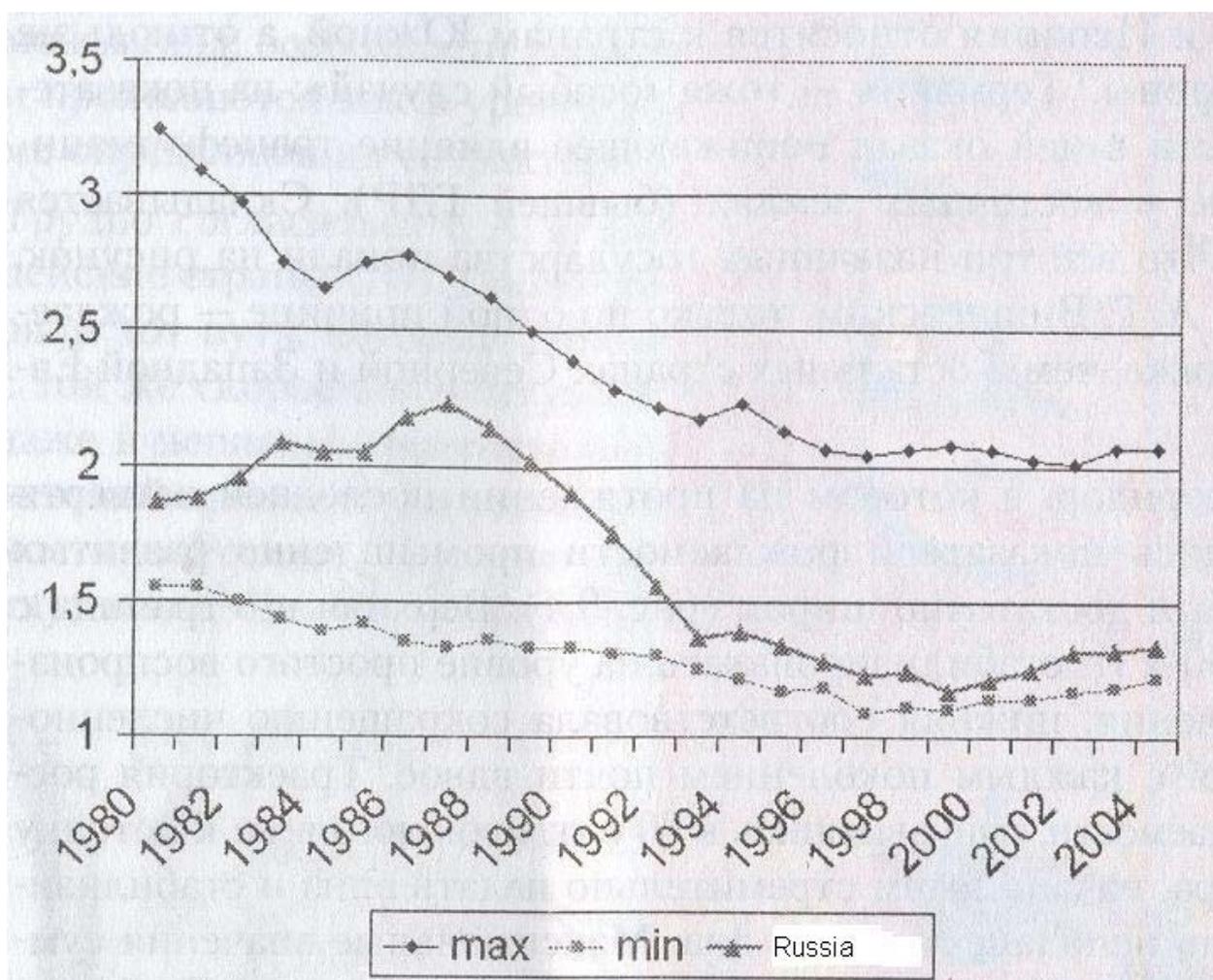
Source: Sobotka, T. Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of Communist Regimes. // "Population"2003, Vol4/5 (58).

Table 4. Adjusted TFR in the Countries of Countries of Central and Eastern Europe

	Central Europe					South-eastern Europe		Baltic states			Russia
	Czech Republic	Hungary	Poland	Slovak Republic	Slovenia	Bulgaria	Romania	Estonia	Latvia	Lithuania	
TFR											
1990-1993	1.78	1.80	1.97	1.99	1.39	1.62	1.59	1.75	1.78	1.90	1.63
1994-1996	1.30	1.56	1.67	1.55	1.30	1.27	1.34	1.33	1.27	1.48	1.33
1998-2000	1.15	1.31	1.38	1.33	1.24	1.21	1.31	1.29	1.17	1.33	1.21
Adjusted TFR											
1990-1993	1.94	1.98	2.13 ^(c)	2.09	-	-	1.62	-	-	1.80	1.44 ^(c)
1994-1996	1.94	1.86	2.02	1.85	1.71	1.54 ^(d)	1.59	-	-	1.65	1.47 ^(c)
1998-2000	1.67	1.71 ^(d)	1.69	1.72	1.63	1.47 ^(e)	1.50 ^(f)	1.67	1.61	1.63 ^(b)	-
TFR of birth order 1											
1990-1993	0.85	0.78	0.81	0.85	0.68	0.86	0.77	-	-	0.95	0.91
1994-1996	0.57	0.65	0.67	0.64	0.61	0.68	0.71	0.66 ^(g)	-	0.75	0.82
1998-2000	0.55	0.57 ^(h)	0.61	0.57	0.61	0.69	0.67	0.63	0.59	0.63	0.72 ^(g)
Adjusted TFR of birth order 1											
1990-1993	0.92	0.87	0.86 ^(c)	0.87	-	-	0.80	-	-	0.90	0.82 ^(c)
1994-1996	0.90	0.83	0.76	0.78	0.84	0.82 ^(d)	0.85	-	-	0.81	0.91 ^(c)
1998-2000	0.78	0.79 ^(d)	0.74	0.77	0.86	0.82 ^(e)	0.77 ^(b)	0.79	0.77	0.80 ^(b)	-
<i>Notes:</i> ^(a) 1997-98, ^(b) 1998-99, ^(c) 1991-93, ^(d) 1995-96, ^(e) due to large fluctuations data refer to the 4-year period of 1997-2000, ^(f) 1994-95, ^(g) 1998 AdjTFR: Bongaarts-Feeney (1998) adjusted TFR based on the parity-specific changes in the mean age of mothers. <i>Data sources:</i> Council of Europe (2002), EUROSTAT (2002-2003), CNFS (1990-1997), CSU (2000a, 2000b), GUS (1993-99) and unpublished data											

Source: Sobotka, T. Re-Emerging Diversity: Rapid Fertility Changes in Central and Eastern Europe after the Collapse of Communist Regimes. // "Population"2003, Vol4/5 (58).

Fig.6. Russia in the corridor of TFR values for 40 Industrial Developed Countries in 1980- 2004



Source: Klupt, M. Demografia Regionov Zemli. 1998: Piter.

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