
PREFACE

Since the fall of the Soviet Union, the demographics of the Russian Federation have revealed several adverse trends. Although thought to be recent, many of these trends actually continue the rocky demographic history that characterized the Soviet Union. These demographic variables indicate substantial challenges confronting both policymakers within the Russian Federation and members of the international community concerned about Russia. This report reviews the major demographic trends that are currently affecting Russian social welfare and that will shape options for Russian policymakers in future years.

This report grew out of a conference on “Russia’s Demographic Crisis in Comparative Perspective,” held in 1995 at RAND with researchers from Russia’s Center for Demography and Human Economy, part of the Russian Academy of Sciences. In 1996, RAND issued conference proceedings that included the major papers delivered at the conference (DaVanzo, 1996). In 1997, we published an issue paper based on the conference proceedings that used updated statistics where available (DaVanzo and Adamson, 1997). For this report, we have again updated information based on the latest available statistics. We have also updated and expanded our interpretations of these statistics and their implications.

This research has been presented to the U.S. State Department Bureau of Intelligence and Research, the Winter Colloquium of the Morrison Institute for Population and Resource Studies at Stanford University, the board of directors for the Center for Russia and Eurasia at RAND, and the RAND board of trustees.

This report, which should be of interest to all persons who are concerned about the policy implications of demographic issues in Russia, was prepared for the *Population Matters* project within the RAND Labor and Population Program. The primary focus of *Population Matters* is synthesizing and communicating the findings and implications of existing research in ways that policy analysts and others will find accessible.

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SUMMARY

In the past decade, the Russian Federation has experienced many seemingly unfavorable demographic trends, the two most significant of which are a declining number of births and a rising number of deaths. These trends are likely to continue for some time. Some analysts fear that the Russian population, currently at about 145 million, could decline to less than 100 million. This demographic decline raises several issues for Russia, including the need for health care improvements; the challenges posed by a declining working-age population to support a growing elderly population; and still other issues affecting Russia's ability to reform its economy, government, and society. This report examines trends in overall population size, fertility rates, and mortality rates and issues in health care, elderly support, and national security arising from these trends.

Since 1992, the population of Russia has declined by three million. The annual number of Russian births fell by 1.3 million between 1987 and 1999, while the annual number of Russian deaths increased by 500,000. Net immigration has prevented Russian population losses from being even greater, with many ethnic Russians migrating to Russia from borderlands formerly in the Soviet Union. The most recent statistics, however, indicate that this ethnic Russian immigration is declining and, as a result, it is unlikely to be an important source of population stabilization in the future. There is also public resistance to immigration and concerns about the security risks created by immigration of nonethnic Russians. If Russian immigration cannot be increased, then the only other alternatives for population stability are to increase birth rates or to reduce death rates.

Russian fertility rates fell throughout the 20th century. A century ago, Russian women bore, on average, more than seven children in a lifetime; today, this average is just over one. Declining fertility rates are not unique to Russia. Since the 1950s, fertility rates have fallen throughout Europe and North America and are now below replacement level (about 2.1 children per woman) in a number of nations. Soviet officials periodically attempted to boost fertility with pronatalist incentives, but, as has happened in every other nation instituting such incentives, these failed to boost fertility significantly for an extended period of time. The increase in fertility arising from the most recent pronatalist effort in the 1980s appears to have affected the timing of births more than their ultimate number.

The economic conditions of the 1990s appear to have had their own effect on Russian fertility rates. Whereas the Russian fertility rate in the early 1990s was comparable to that of France and the United Kingdom, and just below that of the United States, today it is among the lowest in the world. Birth rates do not decline or remain low solely because of economic troubles, however. Both Spain and Italy have fertility rates as low as that for Russia despite having seen great economic improvements in recent decades. Within Eastern Europe, economic recovery in nations such as Hungary and Poland has not reversed fertility rate declines.

Accompanying the low fertility rate in Russia is one of the highest abortion rates in the world. Some Russian women have had ten or more abortions in their lifetimes; more than three in four Russian women who have ever been pregnant have had an abortion. Currently about 70 percent of Russian pregnancies end in abortion. The substantial health problems caused by high rates of abortion, including secondary sterility and health complications, and the resulting stress on the health system have led to recent efforts to increase contraceptive use. Prior to the 1990s, abortion was the main means of fertility regulation used by Russian women, but wider availability of modern means of contraception has led to a decline in abortion rates in recent years.

In the shorter term, population problems indicated by high mortality levels may be more amenable to immediate policy initiatives. As the Soviet health system helped bring infectious and communicable diseases under control, Russian life expectancy at birth increased

rapidly and nearly matched that of the United States in the mid-1960s. Since then, however, little progress has been made in Russia against “civilization” diseases, i.e., the causes of death, such as neoplasms and cardiovascular diseases, more prevalent in advanced societies. This is particularly apparent in the climbing death rates for working-age males. In recent years, deaths to working-age males from circulatory diseases and from external causes—particularly accidents, poisoning, or violence that accompany high levels of alcohol consumption typical of Russia—have had the greatest adverse effect on Russian male life expectancy, which is lower now than it was in the mid-1960s.

Because of its emphasis on specialized acute curative care over general preventive care, the Russian health system cannot effectively address the problems it currently faces. Furthermore, given its deterioration in recent years, it is falling behind against diseases it had largely brought under control. Tuberculosis death rates, for example, are now at their highest levels in nearly 30 years. Other ominous problems loom; intravenous drug use in particular has led to a rapidly growing HIV/AIDS problem.

In addition to a deteriorating health care system, other problems affect Russian health and mortality, including a polluted environment, high rates of alcohol and tobacco consumption, and social and economic change. The Soviets treated the Russian environment recklessly for decades, and industrial pollution remains much higher than that prevalent in the European Economic Community. While such extreme conditions can adversely affect public health, they cannot explain the concentration of health problems among working-age males or the recent sharp fluctuations in overall mortality rates. Russian alcohol consumption, which is higher among males than females, has been strongly correlated with working-age male mortality in recent years. Whenever alcohol consumption declined during the past two decades (e.g., during the antialcohol campaign of the mid-1980s), male life expectancy increased. Social and economic change have also contributed to deteriorating health and increasing mortality, particularly through an increase in cardiovascular diseases related to stress after the breakup of the Soviet Union.

The unique demographic history and conditions of Russia have given it a unique age structure. In coming years, Russia can expect growth in its elderly population but shrinkage in its working-age and youth populations. Population aging will present more challenges to a health system already facing myriad other problems. The government has few resources to strengthen the safety net for the elderly, and the elderly have few resources of their own on which they can draw. Declining cohorts at younger ages also pose special problems. The number of Russians of military age will soon decline sharply. Many European states with declining populations have been able to develop technologically sophisticated and capital-intensive forces to maintain their military strength, but it is unclear whether such a course is open to Russia. If Russia cannot pursue force modernization to compensate for its declining numbers of military-age youths, it may be forced to rely on weapons of mass destruction, including nuclear weapons, for its security. Fluctuations in youth populations will also affect planning for health and educational services.

What can be done to address policy issues arising from demographic trends in Russia? In the short term, improvements to the health care system might be most beneficial. Continuing improvements in contraceptive access can help Russian women to lead more stable and healthy reproductive lives. Broader public health education, similar to that undertaken in the United States, can help improve Russian health behaviors. Neighboring nations can also offer Russia many lessons both in health education and in restructuring its health system. Judicious spending of additional health care funds, particularly if taking into account regional variation in health care problems, also might yield immediate benefits.

Many long-term demographic problems may prove intractable without substantial economic improvement. Russia has tried to boost its fertility rate and population with pronatalist incentives, but these were not effective for long, and Russia cannot now afford to fund such incentives at a level that could have a perceptible effect on fertility rates. Immigration can, theoretically, help stabilize a declining population, but the Russian public is not likely to tolerate the high levels of immigration needed to offset large natural population losses. Because of its recently improving economy and current trends resulting from its unique population age structure (particularly a respite before resumption of growth in its elderly

population), Russia does have a window of opportunity to address its demographic issues and their implications. In doing so, Russia may find it better to focus more on qualitative indicators, such as the health and welfare of its current population, rather than on quantitative indicators, such as the overall size of its population, in improving its demographic health.

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RUSSIAN DEMOGRAPHY AND ITS IMPLICATIONS

RUSSIAN DEMOGRAPHIC TRENDS IN THE 1990s

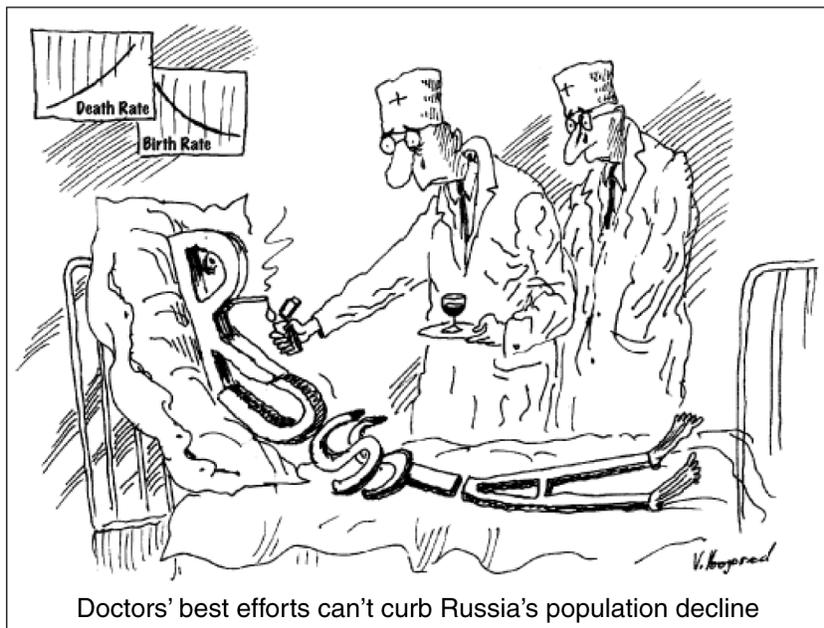
Throughout the 1990s, Russia has experienced many seemingly unfavorable demographic trends. The number, depth, and interaction of these trends have led many to suggest that Russia is experiencing a demographic “crisis.” The fall in the number of Russian births, coupled with a rise in the number of deaths, has caused concern among many Russians (Figure 1.1).

When the number of deaths first exceeded the number of births shortly after the fall of the Soviet Union, many popular media analyses suggested the need “to save Russia from depopulation.”¹ Communists, self-proclaimed patriots, and devout churchgoers periodically implore the Duma to address the dire demographics of Russia by providing benefits to couples rearing children, limiting contraceptive access, restricting abortion rights, or even permitting polygamy (Zakharov, 1999a; Klomegah, 2001). Many persons blame the “neoliberal” economic policies instituted by Russia after the fall of the Soviet Union for the demographic “crisis,” with some labeling its results as “genocide.”²

¹ See Zakharov and Ivanova (1996) for discussion of public reaction to demographic trends.

² For discussion of elite Russian opinion on demographic conditions, see Field (2000). One of the five principal accusations that the Russian Duma made in an ill-fated attempt to remove Boris Yeltsin from office in the spring of 1999 was that he had presided over the “genocide” of the Russian people (Zakharov, 1999c).

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SOURCE: Reprinted with permission from *Moscow Times*, January 27, 2000. Artist V. Bogorod.

Figure 1.1—Russian Concern About the Demographic Situation

The more rapid population growth of non-Russian ethnic groups in the federation during recent years has underscored the demographic decline of ethnic Russians. Among the 23 largest ethnic groups in Russia, only 10 have had smaller rates of recent growth than ethnic Russians, and many of these are groups such as Germans, Jews, and Ukrainians that have had high rates of emigration in recent years (RF Goskomstat, 1999a).³

³In personal correspondence, Cynthia Buckley (2000) indicates that ethnic nationalism has clouded Russian perceptions of demographic issues for decades. Analyses of the early 1970s, for example, such as that by Zaslavskaja and Kalmyk (1972) noting that several rural Soviet villages were not demographically viable in the long term, were attacked as anti-Russian and efforts to destroy the Russian soul by destroying the rural village. Anti-Semitic sentiments also on occasion clouded popular judgment of demographic studies and analyses.

The postponement for at least three years of the national census scheduled for 1999, which would have been the first complete census in the post-Soviet era, led to some speculation that the situation is so severe the Russian government does not want its full extent to be known (Karush, 1999).⁴ Russian President Vladimir Putin has not proposed formal or explicit government measures to deal with demographic problems, but he has offered his own diagnosis of them. In his State of the Nation Address to the Duma in July 2000, he said, “For many people, it is difficult to bring up children, to secure for their parents the conditions for a dignified old age. It is difficult to live. Year by year, we, the citizens of Russia, are getting fewer and fewer. . . . We face the threat of becoming a senile nation” (Reuters, 2000b). Putin’s cabinet reiterated its intentions to develop a plan to improve Russia’s health and increase its birth rate and immigration (Karush, 2001).

Russians themselves are aware of the declining birth rate and the rising death rate. Many blame alcohol and tobacco consumption for poor Russian health, as seen in the *Moscow Times* cartoon reproduced in Figure 1.1. Other popular explanations for recent population losses include stress and dislocations resulting from the fall of communism, the collapse of the Soviet-era health care system, and “ecocide,” i.e., the poisoning of the air, land, and water during Soviet

⁴ A more likely and less alarming reason for the postponement of the census is the present inability of the Russian government to conduct it. In personal correspondence, Sergei Zakharov (2000a) indicates that “the experience of previous censuses of the USSR [is] of no use. The previous censuses were taken in conditions of a totalitarian state based on the planned economy and included a rather limited list of questions which is unsatisfactory.” The Soviet government could compel, in a way the Russian Federation cannot, both compliance with the census and the participation of more than one million interviewers from the ranks of teachers, physicians, faculty and students of universities, and others. Furthermore, the Russian Federation has few persons skilled enough to organize and conduct a census and is slowly adopting the technology, primarily based on a network of personal computers rather than centralized mainframe machines, needed to tabulate a modern census. Finally, the Russian Ministry of Justice contends that laws on the conduct of the census contradict the constitution of the Russian Federation, allowing surveys only with the voluntary agreement of participants. Nevertheless, Russia is making progress toward its goal of conducting a census in October 2002. The State Statistics Committee has been working with the Justice Ministry toward an acceptable legal formulation enabling it to submit a draft census law to the Duma, stipulating that it is permissible to gather information on individuals for abstract, or statistical, rather than personal purposes (Vedomosti, 2001). The Committee recently conducted a trial census in select areas (Yablokova, 2000b).

times (Yablokova, 2000a). We explore the validity of these explanations in Chapters Three and Four of this report.

The decreasing population of Russia, combined with continued rapid growth in several large developing countries, means that Russia is increasingly less prominent among the most populous nations of the world. For most of the past half century, the USSR was the third most populous country in the world, and Russia by itself would have comprised the fourth most populous nation, surpassed only by China, India, and the United States. In 2000, Russia had the sixth largest population in the world, behind that of Indonesia and Brazil, as well as China, India, and the United States (Table 1.1). At its projected rate of population loss, by 2010 Russia is expected to be only the ninth most populous nation in the world, as Pakistan, Bangladesh, and Nigeria are all projected to surpass it. Long-term projections are even more foreboding for the standing of Russia; by

Table 1.1
Estimated and Projected Populations for 15 Most Populous Nations,
2000, 2010, and 2040

2000			2010			2040		
Rk	Country	Pop	Rk	Country	Pop	Rk	Country	Pop
1	China	1,262	1	China	1,359	1	India	1,540
2	India	1,014	2	India	1,168	2	China	1,492
3	USA	281	3	USA	300	3	USA	378
4	Indonesia	225	4	Indonesia	260	4	Indonesia	329
5	Brazil	173	5	Brazil	187	5	Nigeria	261
6	Russia	145	6	Pakistan	171	6	Pakistan	249
7	Pakistan	142	7	Nigeria	156	7	Brazil	207
8	Bangladesh	129	8	Bangladesh	150	8	Bangladesh	197
9	Japan	127	9	Russia	142	9	Ethiopia	156
10	Nigeria	123	10	Japan	127	10	Congo	149
11	Mexico	100	11	Mexico	115	11	Mexico	148
12	Germany	83	12	Phillipines	98	12	Phillipines	143
13	Phillipines	81	13	Vietnam	90	13	Russia	127
14	Vietnam	79	14	Germany	85	14	Vietnam	116
15	Egypt	68	15	Ethiopia	82	15	Japan	109

SOURCE: U.S. Census Bureau (2000).

NOTES: Rk = rank. Pop = population (in millions).

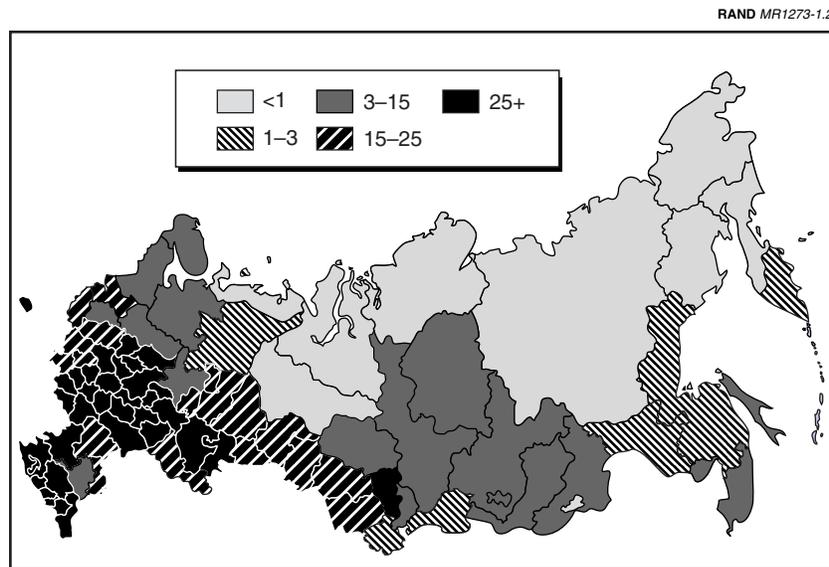
2040, current long-term projections show Ethiopia, the Democratic Republic of the Congo, Mexico, and the Philippines all surpassing Russia in population. This has been difficult for some Russians to accept, given the legacy of Soviet gigantism and widespread and traditional views linking population size with military and economic strength.⁵

POLICY ISSUES ARISING FROM DEMOGRAPHIC TRENDS

Demographic trends in Russia are shaping policy options available to Russia and how the international community must deal with Russia. Some analysts hold that demographic conditions will prevent Russia from returning to the ranks of great powers in coming decades (Eberstadt, 1999). Demographic instability in Russia also may lead to political instability affecting both Russia and the international community.

Within Russia, demographic trends underscore the need for health care improvements; the problems the working-age population will face in supporting the growing elderly population; and still other issues affecting the ability of Russia to reform its economy, government, and society. The enormous size of Russia, comprising a territory about twice the size of the United States and straddling 11 time zones, means Russia also must deal with substantial regional variation in these trends and issues. Russia has, for example, a very uneven distribution of population. While population density in the western regions is similar to that of other nations in eastern Europe, large expanses of Siberia and the Far East have less than one person per square kilometer (Figure 1.2).

⁵ Zakharov (1999b) notes that “pronatalist ideology was a long-established tradition [in the Soviet Union, which] regarded quantitative growth of human resources . . . as a specific means to escape economic problems as well as a source of continued expansion of military and geopolitical power.”



SOURCE: Pashintseva et al. (1998).

Figure 1.2—Population Density (Persons per Square Kilometer) by Region, 1998

Policymakers need to know the facts and understand the causes and consequences of demographic trends in Russia. Russia is certainly facing many worrying trends, but these vary in their severity, implications, and how much can be done to address them. As we will show in this report, many of these trends are not unique to the last decade in Russia. Some demographic trends in Russia are similar to those in many European countries. Others originated well before the fall of the Soviet Union and the advent of economic, political, and social reform, and will require time to change.

In this report, we examine these trends and discuss their underlying causes and policy implications. In Chapter Two, we examine trends in the overall population of Russia, including how migration to and from Russia has affected the size of the total population. In Chapter Three, we review declining fertility rates in Russia and their contribution to population decline and the trends in abortion and contra-

ceptive use that underlie them. In Chapter Four, we examine increasing mortality rates and some of the explanations for high Russian death rates. In Chapter Five, we discuss the policy needs indicated by the current age distribution in Russia. We conclude in Chapter Six by noting some of the policy initiatives that might be undertaken to alleviate problems arising from Russian demographic conditions. Demographic trends pose great challenges to Russian policies on health care, elderly support, and national security. There are some measures that Russia can undertake now to meet these challenges, such as public health education or taking advantage of a demographic “window” available to prepare for an elderly population that will burgeon in size in coming years. Many aspects of these problems, however, may prove intractable to short-term policy initiatives; to address them will require more fundamental social and economic change.

POPULATION CHANGE IN RUSSIA

POPULATION LOSS IN THE 1990s

Russia has lost population every year since 1992, when its resident population peaked at 148.4 million (Institut National d'Études Démographiques [INED], 2000). By late 2000, the Russian population had dropped to 145 million, a loss of more than 3 million in eight years, and Russian statisticians were predicting losses would continue for decades to come, including additional losses of 11 million persons by 2015 (*New York Times*, 2000; Karush, 2001).¹

Population change has varied considerably by region in recent years. From 1989 to 1998 losses were heaviest in the North and Far East, while southern and southwestern regions, particularly the Volga and Caucasus regions, gained persons (Figure 2.1). These losses are attributable primarily to shifting patterns of domestic migration. Prior to the fall of the USSR, the Soviet government subsidized residence in the northern and eastern regions (Zayonchkovskaya, 1999a). Population growth from 1959 through 1989 was greatest in these areas (Pashintseva, Voronina, and Kazachenko, 1998).

¹ Most projections by other sources also show the Russian population will continue to decline in the next decade, but the range of these projected losses varies. For a range of Russian population forecasts for 2010, see Fedorov (1999), particularly p. 67, and Vishnevsky (1996). Some analysts fear that new crises, such as an AIDS epidemic, might accelerate Russian population losses, perhaps pushing the Russian population below 100 million; see, for example, Feshbach (2000). For an analysis of how population might shift by region in Russia, particularly from the north and east to the south and west, see Andreev, Scherbov, and Willekens (1998).