Too Few Good Men

The Security Implications of Russian Demographics

Julie DaVanzo, Olga Oliker, and Clifford Grammich

From the days of the Russian Empire until the collapse of the Soviet Union, the sheer size and population of the territory governed from Moscow helped to guarantee its place among the world's great powers. The U.S.S.R. was not only physically larger than any other country in the world, but it was also the third most populous for most of its history, behind only China and India. Such circumstances fed a legacy of Soviet gigantism and widespread views that a large population contributed to military strength.

Times have changed. While the Russian Federation is physically still the largest state in the world, it is only the seventh most populous nation, trailing China, India, the United States, Indonesia, Brazil, and Pakistan. Moreover, recent and projected population losses caused by a number of deaths nearly double that of births will push Russia further down the ranks of the most populous nations. In the past decade alone, the Russian population has decreased by three million; over the next ten years, it is projected to decrease by another three million. By 2020, Bangladesh and Nigeria are projected to surpass Russia in population; by 2040, should current projections prove accurate, the Democratic Republic of the Congo, Mexico, and the Philippines will do so as well.¹

Russia's options for maintaining its security and stability are limited by its demographic circumstances.² Russia is not the

Julie DaVanzo

directs the Population Matters program at RAND and is a coauthor of Dire Demographics: Population Trends in the Russian Federation.

Olga Oliker, a

defense policy analyst at RAND, is the author of Russia's Chechen Wars: Lessons from Urban Combat and the co-author of Assessing Russia's Decline: Implications for the USAF.

Clifford Gram-

mich is a member of the RAND Research Communications Group and co-author of Dire Demographics: Population Trends in the Russian Federation. TOO FEW GOOD MEN

2003			2020			2040		
Rank	Country	Population (millions)	Rank	Country	Population (millions)	Rank	Country	Population (millions)
1.	China	1,287	1.	China	1,424	1.	India	1,522
2.	India	1,050	2.	India	1,297	2.	China	1,452
3.	U.S.A.	290	3.	U.S.A.	336	3.	U.S.A.	392
4.	Indonesia	235	4.	Indonesia	288	4.	Indonesia	328
5۰	Brazil	182	5۰	Brazil	212	5۰	Nigeria	264
6.	Pakistan	151	6.	Pakistan	200	6.	Bangladesh	251
7-	Russia	145	7.	Bangladesh	190	7-	Pakistan	249
8.	Bangladesh	138	8.	Nigeria	189	8.	Brazil	228
9.	Nigeria	134	9.	Russia	139	9۰	DR Congo	149
10.	Japan	127	10.	Mexico	128	10.	Mexico	148
II.	Mexico	105	11.	Japan	123	11.	Philippines	138
12.	Philippines	85	12.	Philippines	III	12.	Russia	127
13.	Germany	82	13.	Vietnam	100	13.	Egypt	119
14.	Vietnam	82	14.	Egypt	97	14.	Vietnam	114
15.	Egypt	75	15.	DR Congo	92	15.	Japan	108

Table 1: Estimated and Projected Populations for the 15 Most Populous Nations in 2003, 2020, and 2040.

Source: U.S. Census Bureau, International Data Base, http://www.census.gov/ipc/www/idbnew.html (as of April 19, 2003).

only country to confront these problems, but it has fewer alternatives for mitigating the negative effects of population loss than do wealthier states. At the same time, Russia's role in the world, its nuclear arsenal, and its geostrategic location make its security a concern beyond its borders, particularly in this age of interrelated transnational threats, such as organized crime, proliferation, terrorism, and trafficking in people and illegal materials.³

Ominous Numbers. At the core of Russian population losses are a declining number of births and a rising number of deaths. After peaking at 2.5 million in

1987, the annual number of births fell to 1.4 million in 1993 and is now about 1.3 million. The annual number of deaths has generally been increasing since 1960, and is now about 2.3 million. The annual number of deaths has exceeded the annual number of births since 1992, resulting in cumulative natural population losses since then of nearly 9 million persons, although, as we will see, these losses have been somewhat offset by immigration.⁴

The full impact of these staggering losses has yet to be felt. The difficulties of supporting an aging population will be especially problematic for Russia in the coming years. The pension-age population in Russia (males at least 60 years of age and females at least age 55) is currently about 30 million and is projected to grow to 37.4 million by the year 2020, or from 21 to 27 percent of the population. This aging population will be increasingly more difficult for the working-age population (males 15 to 59 and females 15 to 54) to support since the working-age population is projected to decrease from 91.4 million to 77.9 million, or from 63 to 56 percent of the population by 2020.

Russian public health is another cause for concern. Between 1992 and 1994, Russian life expectancy fell more than two and a half years for females and nearly four and a half years for males. Neither has yet to recover completely. In 2001, Russian female life expectancy at birth was 72.3 years, while that for males was only 59.0.⁵ This difference—more than 13 years—is one of the largest in the world.⁶ Male life expectancy in Russia in 2001 was lower than that in Bangladesh (61.9), Egypt (65.3), Guatemala (63.6), Indonesia (64.4), the Philippines (64.2), and Vietnam (66.9), among others.

Among males 15 to 64 years of age, mortality has been increasing since the mid-1960s, or well before the fall of the Soviet Union (Figure I). While there have been some fluctuations coinciding with social and economic conditions (e.g., increased mortality in times of economic decline, decreased mortality coinciding with an anti-alcohol campaign in the mid-1980s), current mortality is not much different from what might be predicted from a long-term trend line (indicated by dotted line in Figure I).⁷

Much of the increase in Russian mortality stems from the inability of the health system to control diseases prevalent in the West, such as cancer, cardiovascular disease, and those stemming from alcohol and tobacco use. The most recent data show that the amount spent on health care for each Russian is only 3 percent the amount spent on health care for each American, while Russian working-age male mortality from external causes, many of which are related to alcohol use, is nearly eight times the U.S. rate, and that from circulatory and respiratory disease is nearly four times the U.S. one.⁸

Declining educational standards may aggravate the public health situation, given survey findings on the salutary effects of education on health (independent of the effects of income on health).⁹ More generally, the effects of declining education may also be felt for years to come. Since the collapse of the U.S.S.R., Russia's schools have suffered from chronic under-funding, causing large wage arrears for teachers and leading fewer workers to enter or remain in the field of education.¹⁰

Who Will Serve? An important and illustrative implication of these demographic changes is their impact on the Russian military. Whether Russia maintains a predominantly conscript military or moves to a volunteer force over the coming decades, its armed forces will continue to rely on youth—but demographic trends suggest a dearth of desirable soldiers in the future.

The 15-to-24-year-old population in Russia—the population in or near military age—has actually grown since 1991, primarily due to a large number of births during the 1980s. This boom resulted in part from the many babies born in the late 1950s and early 1960s, who reached their childbearing years in the 1980s. It was also a result of pro-natal incentives that TOO FEW GOOD MEN



Figure 1: Mortality Rates by Sex for Russians 15 to 64 Years of Age, 1965 to 2000. Sources: France Mesl, Vladimir M. Shkolnikov, V ronique Hertrich, and Jacques Vallin, Tendances r centes de la mortalit par cause en Russie 1965–1994, and electronic data diskettes (Moscow: Centre de D mographie et d' cologie Humaine, 1996). World Health Organization Mortality Database, http://www3.who.int/whosis/mort/table1.cfm?path=whosis,mort,mort_table1&language=english (as of April 2, 2002).

included extended maternity leave and benefits for families with three or more children. While such policies boosted fertility rates temporarily, they were not enough to reverse the broader declining trend. As the number of births has fallen by about half in the past fifteen years, so the number of 15-to-24 year-old persons is expected to decrease by nearly half in the next fifteen years, or from 23.7 million to 13.5 million in 2018.^{II}

Even with the current, temporarily high number of persons in or near military ages, the Russian military is facing problems filling its ranks. Not only is reporting for conscription call-ups low, but, by some accounts, large numbers of Russian draftees are deemed unfit for service because of poor health.¹² For example, a Russian Defense Ministry official stated recently that not only are 31 percent of young men of conscription age unfit for service, but that 30 percent of the privates who do serve are subsequently placed under medical supervision—often due to being underweight.¹³ Members of the Russian military face many of the same health problems afflicting the general population.

Comparing the mortality of Russian military-age males with that of militaryage males in the United States illustrates the health problems of Russia's youth. In 1999, Russian males 15 to 24 years of age had a rate of death (322 per 100,000) nearly three times that of U.S. males (116 per 100,000) of a similar age. Russian young male adult mortality is growing as well, nearly doubling in the 1990s (from 209 per 100,000 in 1990 to 351 in 2000). Russian young male mortality rates (Figure 2) are particularly high for infectious and parasitic diseases (the rate of death is nine times that for U.S. males 15 to 24), circulatory and respiratory diseases (four times the comparable U.S. rate), and external causes (e.g., accidents, homicide, and suicide—nearly three times the comparable U.S. rate).¹⁴

Contributing to the potential problem in the supply of soldiers is the reported ability of many Russian youths to avoid military service through bribing others to have their health declared too poor for service. Those that cannot afford bribes or other mechanisms tend to be from the strata of society with less access to medical care—and thus in poorer health.

Russian officials have also expressed concern about the deteriorating education of those whom they are able to muster into the military.¹⁵ Aside from the student deferments that traditionally allow those pursuing higher education to avoid the draft, those who can afford to supplement their public education with private tutoring or schools are also those who can afford to pay the bribes to keep their sons out of military service—leaving the military to choose from a less welleducated remainder.

What Is To Be Done. Immigration has somewhat helped allay Russian pop-



Summer/Fall 2003 [21]

ulation losses. In 1994, for example, Russia had a natural population loss of about 870 thousand but net immigration that year of more than 810 thousand helped to limit the total population loss to less than 60 thousand.¹⁶ Conceivably, immigration could serve as a source of Russian population growth, but it is not clear whether Russia can attract the level of immigration needed to sustain its current population size. Historically, Russia has not been a destination for immigrants-before 1975, emigrants from the territory now comprising Russia exceeded immigrants by about 100 thousand per year-and in recent years annual net immigration has decreased to less than 75 thousand.¹⁷ By contrast, according to one estimate, Russia would have to attract more than a half million immigrants annually (or more than it senior personnel. Russian women have a long history of military success, including as fighter pilots in World War II. They also appear as willing as men to fight for their country if necessary.²¹ Nevertheless, attitudes towards women in the military remain hostile in many ways. Women are a minute percentage of the officer class, and they are banned from a variety of roles, including, reportedly, senior ranks in the navy.²² A greater reliance on female military personnel would require significant cultural changes that will not occur quickly.

Yet another option would be for Russia to make do with a smaller military, one that its shrinking population can better support. There are strong military and strategic arguments to be made that the Russian military force size is too large for its needs and its capacity, and should

Russia is likely to have an increasingly ineffective and inefficient military force.

has admitted in nearly every year of its history) in order to maintain its current population size.¹⁸ Immigration could also raise new security concerns, particularly if that by non-ethnic Russians, which has been growing as a percent of all immigration, were to increase in total numbers as well.¹⁹

Alternatively, Russia could rely on more female soldiers. Currently, women are not subject to conscription in Russia, but they do constitute a growing proportion of contract soldiers. In March 2001, an estimated 100,000 women were serving in the Russian armed forces.²⁰ Female enlisted personnel tend to serve longer than their male counterparts and are often deemed more reliable workers by be downsized regardless of the numbers of young men available to it.²³ Smaller, better-trained forces can in some circumstances be even more effective than larger forces, but would require greater capital and technology. Many European states have experienced declines in their military-age populations, but have mitigated this loss by investing more in capital and technology, both alone and in concert with allies.

Even though security, demographics, and economics all argue for a smaller force, attaining that goal poses considerable challenges for Russia, which lacks the resources and alliances that could help it finance a substitution of capital and technology for troops. While it has

plans to reduce its force to about threefourths its current size, and to better equip and train this smaller force, implementation of these plans has lagged (see "The False Dawn of Russian Military Reform" in this issue). There is broad opposition within the military establishment to any true reform, and little money in Russia's budget to support it. Although the Russian military has already reduced its size considerably, it has done so without the comprehensive restructuring needed for greater effectiveness. Rather, the reduction has, to a large extent, been one of becoming an ever-smaller, everless-capable, ever-deteriorating shadow of the old Soviet force. This is in large part because, while reform would be cost-effective in the long term, it is expensive in the short term. The resulting dilemma means that Russia is likely to have an increasingly ineffective and inefficient force.

Russia's recent economic growth may lead to some improvement in this situation, providing more funding for capital investments that can support a smaller military. In order to effect real investment in the military, however, this growth must not only be sustained over the long term, but it must also be allocated to the military budget. To date, this does not appear to be happening. Even if Russia were to begin significant investment in its military infrastructure, it would take years, maybe even decades, for these investments to improve the capacity of its fighting forces. Meeting critical demands for health and social services could also constrain the funds available for defense. Even in the best scenario, Russia could find itself in a race between demographic decline and economic investment, hoping that no real security

threats emerge before it can build a more capable force.

Further Security Implications.

The problems of the military are illustrative of the broader security challenges that Russian demographic trends present-which extend far beyond the capacity of its military to maintain a credible and capable force. A shrinking workforce with declining health and educational standards bodes ill for Russian economic growth. Moreover, Russia today faces a wide range of threats, and the military is a possible solution to only a few of them. Transnational threats, such as drugs, crime, terrorism, human smuggling, and proliferation, are of global concern, but most of the states of the former Soviet Union, Russia included, have particular reasons to be worried. These states face these problems on a regular basis, as areas of operation for criminal groups, as possible sources of materials and human beings for illegal transport, and as routes for the transit of those people and materials. The very existence of the former Soviet states is threatened by the rising impact of these problems on economies and politics.

Russia and its neighbors appear to recognize these emerging threats. Reportedly, Russia is cooperating with other post-Soviet states, as well as the European Union, to combat transnational terror and crime. The effectiveness of its measures, however, is questionable. Russian border controls and police along the nearly 20,000 kilometers of land borders (the longest border of any country in the world), much passing through sparsely populated areas, are weak, and reports of corruption are common.²⁴ The demographic trends that will hinder the military in staffing its ranks are also likely to hinder police forces, border guards, and other services and organizations that must combat transnational and domestic threats. At the same time, weakening health and education sectors may make Russian youth more prone to the use of illegal narcotics, further feeding a growing HIV/AIDS crisis, and increasing the work of agencies that combat such trends-while further decimating the ranks of those who might staff such agencies.²⁵ The result could be a cycle of decline that makes Russia dangerous not only to itself, but also to its neighbors and others around the world. Its failure to police crime, drugs, terror, and the weapons trade on its own territory will lead to the movement of these problems elsewhere.

This is particularly critical given Russia's nuclear capabilities and proximity to other states that have the potential to pose proliferation concerns. Further decline in police, border guards, and other internal security sectors could therefore be even more hazardous than that in the military. Unfortunately, Russian capacity for reform in these areas is also constrained. Little has been done to reform powerful internal security organs; in fact, these security services have gained influence during the presidency of Vladimir Putin. Perhaps Putin's presidency will mean greater central control and effectiveness for these organs. Absent reform of their structures and greater transparency, however, it is also possible that the continued strengthening of these groups will bring with it its own dangers, those of an increasingly authoritarian and secretive system.

Issues and Options for Russia.

Russian demographic trends have implications far beyond Russian borders. Beyond the obvious danger they pose for Russia in defending its huge landmass, demographic trends may adversely affect Russia's ability to respond to the rise and spread of transnational threats within and across its territory. This threatens the security of not just Russia's neighbors, but of the entire global community. Moreover, this is a problem that goes far beyond whether or not capital improvements and modernization efforts in the Russian military keep pace with personnel reduction or not.

Russia on its own can do little. While traditional security threats may be deterred through greater capital investment or increased reliance on weapons of mass destruction, transnational threats require not only a broader strategy within Russia, but also comprehensive cooperation with neighbors and others around the world. Such threats are not limited to one country, and neither can the response be. Russia, facing the pressure of its demographic challenges in coming years, will be particularly vulnerable. This means that the rest of us will as well.

Russia will need assistance in the short term with responding to a range of transnational threats. It is in the interests of the United States and European states to cooperate with Russia in defining and implementing responses, as is already being done on export control and border integrity issues. Given the effects of health and education on Russian security and vulnerability, aid programs should be given priority for both humanitarian and security reasons. Finally, global recognition that Russian economic growth and development is in both the security and economic interests of its neighbors and trade partners may suggest a more concerted effort on their part to help support Russian development.

All of these policies will have to be weighed against other priorities, of course, but their full security implications must be a part of that calculus. The fact is that if the United States and others do not help alleviate Russian problems, they, too, will feel their effects.

Author's Note: The authors thank Brian Nichiporuk for his review and helpful comments. This article was written with the support of the RAND Population Matters program, which is supported by a grant from the William and Flora Hewlett Foundation. The goals of Population Matters are to highlight the importance of population policy issues and to provide a more scientific basis for public debate over such issues.

NOTES

I U.S. Census Bureau, International Database, Internet, http://www.census.gov/ipc/www/idbnew.html (Date Accessed: 19 April 2003).

2 See Julie DaVanzo and Clifford Grammich, Dire Demographics: Population Trends in the Russian Federation (Santa Monica, CA: RAND, 2001).

3 See Olga Oliker and Tanya Charlick-Paley, Assessing Russia's Decline, Implications for the United States and the USAF (Santa Monica, CA: RAND, 2002).

4 Goskomstat of Russia, The Demographic Yearbook of Russia, annual; Current Statistical Survey 44 (31 March 2003).

5 Ibid.

6 World Health Organization, The World Health Report 2002, Internet, http://www.who.int/whr/2002/en/ (Date Accessed: 19 April 2003).

7 France Mesl , Vladimir M. Shkolnikov, V ronique Hertrich, and Jacques Vallin, Tendances r centes de la mortalit par cause en Russie 1965-1994, and electronic data diskettes (Moscow: Centre de D mographie et d' cologie Humaine, 1996). World Health Organization Mortality Database, Internet, http://www3.who.int/whosis/mort/tableI.cfm?path=w hosis,mort,mort_table1&language=english (Date Accessed: 2 April 2003).

8 Health expenditure data are from World Development Indicators, annual (Washington, DC: World Bank Group). Mortality data are from World Health Organization Mortality Database, Internet, http://www3.who.int/whosis/mort/table1.cfm?path=w hosis,mort,mort_table1&language=english (Date Accessed: 18 April 2003).

9 Stephen Shenfield, JRL Research and Analytical Supplement 17 (17 March 2003), citing Nina L. Rusinova and Julie V. Brown, "Social Inequality and Strategies for Getting Medical Care in Post-Soviet Russia," Health 7, no. 1 (January 2003).

10 See Nick Holdsworth, "Staying Power: A Russian Tale," UNESCO Courier (2001), Internet, http://www.unesco.org/'courier/2001_02/uk/education.htm (Date Accessed: 2 April 2002). Also see Y. I. Kuzminov, S. A. Belyakov, E. L. Klyachko, and L. I. Yakobson, "The Condition and Prospects for Development of the Russian Education System," paper presented at the International Monetary Fund Conference and Seminar on "Investment Climate and Russia's Economic Strategy," April 2000, Internet, available at http://www.imf.org/external/pubs/ft/ seminar/2000/invest/pdf/kuzmin.pdf (Date Accessed:

2 April 2002).

II Data on estimated and projected population by age for Russia and other nations are from the U.S. Census Bureau International Database.

12 Jeremy Brantsen, "Russia: Poor Fitness of Conscripts Points to Public Health Crisis," Johnson's Russia List 6028 (17 January 2002).

13 "Only 69 Percent of Youngsters of Call-Up Age Fit for Service," BBC Monitoring (ITAR-TASS) (30 October 2002).

14 World Health Organization Mortality Database, Internet, http://www3.who.int/whosis/mort/tableI.cfm? path=whosis,mort,mort_table1&language=english (Date Accessed: 18 April 2003).

15 See Theodore Karasik, "Do Russian Federation Health and Demography Matter in the Revolution in Military Affairs?" in Michael H. Crutcher, ed., The Russian Armed Forces at the Dawn of the Millennium (Carlisle Barracks, PA: U.S. Army War College Center for Strategic Leadership, 2001).

16 Goskomstat of Russia, The Demographic Yearbook of Russia.

17 Ibid.

18 Replacement Migration (New York: United Nations Population Division, 2000). In only two years, 1994 and 1995, has net immigration to Russia exceeded 500,000 persons. See Goskomstat of Russia, The Demographic Yearbook of Russia.

19 In 1993, ethnic Russians comprised 76 percent of net immigration to Russia from other former Soviet lands; in 2001, they comprised 60 percent. See Goskomstat of Russia, The Demographic Yearbook of Russia. Also See Timothy Heleniak, "Russia's Demographic Challenges," in Stephen K. Wegren, ed., Russia's Policy Challenges: Security, Stability, and Development (Armonk, NY: M. E. Sharpe, 2003).

20 "Women Rising Through Military Ranks,"

RFE/RL Newsline 5, no. 45, part I (6 March 2001). 21 "Ratnitzi," Armeiskii Sbornik (December 2000): 77-78.

22 "Rossiiskoy Armii Nuzhni Zhenshchini," Nezavisimoye Voynnoye Obozreniye (23 June 2000). "Russian Women Face Threat of Domestic Violence, Limited Choice of Professions," RFE/RL Newsline 4, no. 207, part I (25 October 2000).

23 See Oliker and Charlick-Paley, Assessing Russia's Decline.

24 Of particular concern may be the 3,645 kilometers of border that Russia shares with China. There

TOO FEW GOOD MEN

are some Chinese historical claims to territory now in Russia, and population density on the Chinese side is 15 to 30 times that on the Russian side, although the fears of some Russians regarding Chinese immigration exceed the reality. Regarding Chinese historical claims to Russian territory, see Frank Umbach, "Russia's Strategic and Military Interests in North and South East Asia," in Crutcher, ed., The Russian Armed Forces at the Dawn of Millennium. On population density along the Sino-Russian frontier, see Zhanna Zayonchkovskaya, "Chinese Demographic Expansion into Russia: Myth of Inevitability?" in Gregory J. Demko, Grigory Ioffe, and Zhanna Zayonchkovskaya, eds., Population Under Duress: The Geodemography of Post-Soviet Russia (Boulder, CO: Westview Press, 1999): 137-148. On perception and reality of Chinese migration to Russia, see Mikhail Alexseev, "'The Chinese Are Coming': Public Opinion and Threat Perception in the Russian Far East," Center for Strategic and International Studies Program on New Approaches to Russian Security, Policy Memo 184 (January 2001), Internet, http://www.csis.org/ruseura/ponars/policymemos/pm_0184.pdf (Date Accessed: 2 April 2002).

25 Current estimates of HIV prevalence in Russia range from 200,000 to 2 million, but all agree the disease is spreading rapidly. A National Intelligence Council analysis indicates prevalence may reach five to eight million persons in 2010, giving Russia an adult prevalence rate of 6-II percent. The disease is also thought to be spreading rapidly through the Russian military. For more on present estimates and likely future prevalence of HIV in Russia, see David Gordon, The Next Wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India, and China (Washington, DC: National Intelligence Council, September 2002), Internet, http://www.odci.gov/nic/pubs/index.htm (Date Accessed: 2 April 2002). For more on HIV in the Russian military, see Sarah A. Grisin and Celeste A. Wallander, Russia's HIV/AIDS Crisis: Confronting the Present and Facing the Future (Washington, DC: Center for Strategic and International Studies, September 2002), Internet, http://www.csis.org/ruseura/HIV.pdf (Date Accessed: 2 April 2002).