Russia’s demographic challenges are so severe that they warrant a full chapter in this book. The country is facing acute natural depopulation. From the early 1990s until 2006 the population shrank at a predictable rate of 750,000 people per year—a loss of more than 0.5 percent annually, compared with steady population growth in the other BRIC countries (Brazil, India, and China) and in virtually all the advanced industrial democracies. Since the mid-1960s, births have not kept pace with deaths (figure 6.1). As a result, the overall population is aging, although mortality among working-age Russian men is the same now as it was a century ago. Life expectancy for men lingers at about 59 years, with overmortality concentrated among middle-aged men, while Russian women live 14 years longer than the men, the greatest gender gap in the world. The working-age population is dwindling even as unemployment rises. Widespread alcohol abuse contributes to half of all deaths, and the availability of low-cost cigarettes supports pervasive tobacco use.

However, there has been some improvement recently: The number of babies born in 2007 was the highest since 1991, about 120,000 more than in 2006—an increase of 8.3 percent in the fourth consecutive year of growth. Infant mortality, the single most reliable indicator of a nation’s health, declined by half from 1993 to 2006 (figure 6.2), suggesting that the health care system is improving. The death rate has fallen and the rate of annual population loss is decelerating, with the death-to-birth ratio steadily declining.

The official interpretation is that several years of economic stability and prosperity have finally reversed almost two decades of demographic
Figure 6.1  Natural increase/decrease in population, 1960–2006

Figure 6.2 Infant mortality, 1960–2006

deaths per 1,000 live births

Note: Infant mortality is defined as deaths of infants under 1 year of age per 1,000 live births.

disaster. A sizable, emerging middle class feels motivated to eat better, exercise, and drink in moderation; women feel sufficiently optimistic about their families’ futures to have more children; and the government is pouring resources into a National Health Project. Extrapolating from these trends, Russia’s long-term development concept now aims to increase life expectancy to 72 and the population to 144 million by 2020.

But progress is uncertain. Recent achievements in health and demography are offset by persistent low fertility and high morbidity. This chapter assesses the likely impact of recent policy initiatives on population dynamics and implications for labor markets, economic development, and national security.

Russia’s Demographic Predicament

Russia’s current population is about 142 million, down from a peak of nearly 149 million in 1993. The decrease is due in part to declining fertility, which is the norm in advanced industrial societies. But European birth rates have fallen because of positive overall developments, such as women entering the workforce and the transition from agrarian to industrial and service economies. In contrast, reproduction in Russia has fallen because, during the decline of living standards in the 1990s, socio-economic conditions were not favorable for raising a child and the fear of poverty convinced women to delay or avoid having children.¹

Russia differs dramatically from its European neighbors in its numbers, patterns, and causes of death. Male life expectancy declined from 64 in 1965 to 61.7 in 1984, briefly spiked to 64.9 in 1987 because of Mikhail Gorbachev’s campaign against alcohol, plummeted to 57.6 in 1994, and now stands between 59 and 60, lower than in the early 1960s (figure 6.3).² That puts contemporary Russia in the company of Pakistan and Eritrea and considerably below the other BRICs: Male life expectancy is 68 in Brazil, 67 in India, and 71 in China.

Female life expectancy in Russia has followed roughly the same trajectory as for men, but women live 13 to 14 years longer than their husbands and brothers. By contrast, the gender gap in longevity in the United States is only five years. In fact, Russian women outlive men to a greater degree than anywhere else in the world. It appears that women’s health has been less vulnerable than men’s to the enduring impact of post-Soviet transition.

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¹. Valery Yelizarov, Demographic Policy in Russia: From Reflection to Action (Moscow: United Nations in Russia, 2008).

Figure 6.3 Life expectancy, 1960–2006

The correlation between Russia’s economic trajectory and life expectancy was as expected from the mid-1980s through 2000. After a rise due to Gorbachev’s restriction on alcohol consumption, life expectancy plummeted sharply with the upheaval of the economy and society. Then as overall welfare improved slightly in the mid-1990s, so did life expectancy, until the two fell in tandem with the 1998 financial crisis. But life expectancy has not risen with the remarkable economic growth from 1999 to 2007. Instead, it has remained stagnant. Demographers remain puzzled, as this contradicts the health-wealth connection that prevails in the world.

Paradoxically, Russia’s overall population is aging rapidly, in spite of low life expectancy, because of the anemic birth rates since the early 1990s. Over the next two decades, a shrinking workforce will be responsible for the pensions and long-term care of an ever-larger number of elderly retirees. In 2002 Russia had only 1.7 workers for every pensioner, and that ratio will steadily decline. Yet pension reform has been insufficient to meet the coming increase in demand. The World Bank estimates that the greater need for pension and health services, along with more demand for education, will require an increase in social expenditures from 14.1 percent of GDP in 2008 to about 17.3 percent in 2016–20.

In 2007 there were about 475,000 more deaths than births, down from more than 675,000 in 2006. Half of those deaths—about 1.1 million—were due to cardiovascular disease, and another half a million were due to trauma/accidents or cancer. Continuing widespread abuse of alcohol and tobacco lies behind all of these leading causes of death, primarily among working-age men. Although per capita alcohol consumption is as high in other countries as in Russia, nowhere are surrogate alcohols so widely used: Products such as aftershave lotions, lighter fluid, window cleaning solutions, and antifreeze contain substitute chemicals in the West but in Russia are based on highly concentrated alcohol, and they are not taxed. In addition, binge drinking (i.e., not necessarily frequent but severe intoxication) is a greater problem in Russia than elsewhere and leads to deaths from higher blood pressure, heart attack, and stroke. The contribution of alcohol to overall mortality is estimated at roughly 50 percent.

About 60 percent of Russian men and 20 percent of Russian women smoke—more than twice as many as in the United States or the United Kingdom. And smoking is on the rise, as the share of women who smoke doubled from 1992 to 2003. Over 17 percent of Russian deaths each year are caused directly by tobacco consumption. The World Bank has called

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smoking the single most preventable cause of death in Russia, linking it with cardiovascular disease, cancer, and chronic lung disease. A pack of low-end cigarettes in Russia costs about 50 cents compared with $7 in Europe.

Noncommunicable disease and injury are thus the leading causes of premature mortality in Russia. Infectious disease causes a small minority of all deaths, but it remains a nascent threat. The Western press has highlighted HIV/AIDS; official statistics put the number of Russian HIV infections at 428,000, but the actual number is probably closer to a million. Both anecdotal evidence and scientific studies indicate that the spread of HIV remains largely confined to injection drug users and their sexual partners, and Russia is very unlikely to experience an HIV crisis as in sub-Saharan Africa. Since 2006, both government and international funding have put thousands of patients on life-saving antiretroviral medications. It is still imperative, though, to focus more effort and attention on prevention-oriented interventions. Russia also has Europe’s highest tuberculosis mortality rate, 30,000 deaths per year, which is 20 times the Western average. Multi-drug-resistant tuberculosis is emerging as an increasing share of new tuberculosis cases. Hepatitis and tuberculosis coinfection with HIV are attracting attention as serious but previously neglected problems.

**Economic Effects of Poor Health and Demography**

From a humanitarian perspective, the level of sickness and death in Russia over the last two decades is tragic. But these health and demographic trends also have an important impact on Russia’s economic growth and national security. Absenteeism due to ill health is a drain on the economy, as employers annually lose an average of 10 days per employee due to illness, more than 25 percent more than in the EU-15 countries. And the mortality rates of working-age men are almost four times those for women (figure 6.4). If Russia decreased mortality rates from noncommunicable disease and injury to EU-15 rates by 2025, its GDP would rise by 3.6 to 7.1 percent (depending on initial assumptions about future GDP growth).

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7. This and some of the following sections draw from Judy Twigg, “Trends and Policy Priorities in Russia’s Health Sector” (background paper for the National Bureau of Asian Research Discussion Workshop on Russia’s Political Economy: Trends and Implications, Washington, April 24, 2008).

8. World Bank, *Dying Too Young*.

9. Ibid.
Figure 6.4  Mortality among working-age people, 1960–2006

![](image)


According to Russian government statistics, by 2020 the working-age population will have fallen to 77.5 million people, resulting in a labor deficit as high as 14 million (another study cites a deficit of 19 million by 2025).\(^\text{10}\) The Russian press is beginning to take note of these potential constraints on economic development.\(^\text{11}\) Some trends are already visible. With increased economic growth, the demand for labor has risen, but the quality of the labor force is not rising accordingly, which has led to shortages in many categories of skilled labor and often extremely high salaries even by American standards.\(^\text{12}\) Companies and regions will face a choice: to raise productivity dramatically, to attract migrants, or to abandon projects. Regions and industries are already competing with one another for labor.

National unemployment reached a low of 5.6 percent of the labor force in the spring of 2008 but rose to 7.7 percent at the end of 2008 and is likely to continue to rise sharply. In some areas ( Kamchatka, Karelia, and Sakhalin), untapped labor reserves are sufficiently high that putting non-

\(^{10}\) Konstantin Gurdin, “Arguments of the Week,” available at the website of the Higher School of Economics, Moscow, Russia, www.hse.ru (accessed on February 12, 2009).


\(^{12}\) United Nations in Russia, Demographic Policy in Russia: From Reflection to Action (Moscow, 2008).
workers to work could plug at least part of the gap, but in most regions the unemployed have neither the skills nor the motivation to step in. People who traditionally have not worked, especially women with children, have already entered the labor force in droves in recent decades, but a successful strategy of encouraging higher birth rates and more children per family will likely keep many women out of the labor market.\textsuperscript{13} Enactment of a long-standing proposal to raise the extremely low retirement age of 55 for women and 60 for men might help both to stave off collapse of the pension system and to expand the workforce. In any case about one-quarter to one-third of pensioners continue to work, not least because public pensions are extremely small.\textsuperscript{14}

The projected impact of the shrinking working-age population varies with the direction of Russia’s economic development. A resource-based economy does not require a large, diverse, skilled labor force; even a smaller and less healthy population can provide the number of qualified personnel necessary for the oil and gas sector. Challenges persist, however, even at this extreme: Oil and gas production takes place in remote regions with extreme climatic conditions; recent studies indicate that transplants to these regions suffer health problems that harm their productivity.\textsuperscript{15}

If Russia is to continue diversification into modern manufacturing and services, it will be constrained by a lack of appropriately skilled personnel. Although investments remain concentrated in just a few sectors, non-tradable growth dominates: In 2007 wholesale and retail trade alone accounted for almost a third of economic growth, with construction and manufacturing responsible for another third, while growth in resource extraction practically stopped.\textsuperscript{16} Yet in 2002–07, real wages increased by an average of 13 percent a year, outpacing real GDP growth of 7 percent a year as well as productivity growth.\textsuperscript{17} As unemployment shrank to 6 percent of the labor force, the labor market was very tight in all dynamic regions. Rising labor costs, driven by labor shortages in some regions, are likely responsible for impeding growth in electrotechnical equipment, food, and chemicals. A June 2008 survey by the Institute for the Economy in Transition found 32 percent of enterprises in 2006, 35 percent in 2007,

\textsuperscript{13} Maxim Shishkin and Daria Nikolaeva, “Employment in Russia Is Reaching Its Limits,” Kommersant, July 9, 2008.

\textsuperscript{14} Mikhail Sergeev, “Ministry of Finance Is Preparing to Raise the Pension Age,” Nezavisimaya Gazeta, August 19, 2008.


\textsuperscript{16} World Bank, Russian Economic Report, 4–5.

\textsuperscript{17} Russian State Committee for Statistics, Basic Social-Economic Indicators, www.gks.ru (accessed on January 16, 2009).
and 40 percent in 2008 reporting deficits of skilled labor as a factor preventing increased output.18

The demographic constraints also indicate that by 2016 the number of men of conscription age will be half what it was two decades earlier. Yet Russia has not undertaken any meaningful military reform and has failed to effect the long-promised professionalization of the military personnel. The army may find that even with all deferments eliminated, too few draftees will be available. An Armed Forces General Staff spokesman declared in September 2008, “It is quite possible that the state security bodies’ demand for draftees will exceed the actual number of conscripts who can be enlisted by the armed forces by 2011.”19

An increasing percentage of conscripted men are suffering nutritional, health, and substance abuse problems, all of which draw attention and resources away from the core mission of national defense. But such statistics are not reliable because they reflect the widespread use of medical excuses among young men to escape military service. Moreover, those who can afford it purchase exemption from military service with a bribe of a couple of thousand dollars, so only the poorest actually do their military service. Finally, there are significant negative synergies between the conscription and labor force challenges: The same limited cohort of healthy, capable young men needed by the military will also be in demand both by potential employers and for higher education.

Remedies

Reducing Smoking and Drinking

Russia must combat smoking and drinking. Meaningful policy intervention to address these issues has been missing for too long, although some recent policy developments are encouraging.

For example, Russia joined the World Health Organization Framework Convention on Tobacco Control (FCTC), the world’s first public health treaty. It calls for comprehensive bans on tobacco advertising, promotion, and sponsorship. Since it came into effect in February 2005, 157 countries have ratified it, including most European countries, China, India, and, as of June 2008, Russia (the United States has signed but not ratified the convention). Russian government officials are drafting a national strategy against smoking that would comply with FCTC requirements and completely ban tobacco advertising within five years. In addition, the Duma


in early 2008 legislated that each cigarette pack must carry a large-print warning saying “Smoking Kills” as well as 12 further warnings (on the back of the pack) that smoking causes premature death, lung cancer, heart attacks, and infertility, among other health problems. A forthcoming national strategy may ban the marketing and sale of cigarettes to children and teenagers.

This tobacco policy aligns well with Russia’s recently passed three-year demographic policy plan, the primary aim of which is to reduce mortality from controllable causes in 2008–10. The government’s 2009 budget for the first time included significant funding for the promotion of healthy lifestyles, including anti-tobacco and anti-alcohol education. The Ministry of Health and Social Development formed a commission in 2008 to draft a strategy for health system development through 2020 (although formulation of the strategy did not include any significant input from reputable physicians, economists, and other experts). The plan calls for the 2009 launch of new initiatives to promote healthy lifestyles and reduce mortality from drinking and smoking, with a major cancer prevention program to follow in 2010. It also advocates the use of economic incentives: Smokers will, for the first time, pay higher public medical insurance premiums, and insurance will not cover injuries caused by drunkenness.

The most obvious area in need of intervention is alcohol policy. Decades of international research have consistently and convincingly revealed two kinds of policy actions that can effectively curtail alcohol consumption: price hikes and limits on availability. Yet increases of vodka excise duties have not exceeded the rate of inflation in Russia since 1998, even though real incomes have grown significantly. Although the mention of limitations on drinking in Russia is likely to produce a chuckle in most circles, recent public opinion studies indicate that well over half of Russians would support the reimplementation of Gorbachev’s anti-alcohol campaign if it were proposed today.

**Education and Immigration**

Much can be done to compensate for labor shortage through productivity gains, as Russian labor productivity lags behind the West by a factor of five to ten, although Russia’s GDP per capita in purchasing power parities is already one-third of the US level.

One strength of the Soviet system was education. Russian youth do invest in their own human capital: More than two-thirds go on to tertiary ed-

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ucation—more than in the European Union—and most of them pay significant tuition fees. But most of the education is not of very good quality. Weaknesses persist in subjects barely taught in the Soviet Union—business administration, law, and the English language—and in the shortage of vocational training (enterprises typically have to provide it themselves). Traditional Soviet strengths were math, science, and engineering, and these remain, although diminished in quality since communism. Recent international tests of high school students put Russian students at the same not very high level as American students in math and science.\footnote{OECD Program for International Student Assessment (PISA), \textit{PISA 2006: Science Competencies for Tomorrow’s World}, volumes 1 and 2 (2007), \url{www.pisa.oecd.org} (accessed on November 15, 2008).}

The most easily available solution is immigration of labor. The European Union and the United States rely on tens of millions of immigrant workers to make up their labor shortfalls, and the same is true in Russia, although much of the immigration is illegal. Millions of illegal laborers populate Moscow, St. Petersburg, and other major cities, employed primarily in construction, transportation, and trade. One recent study cites a need for legal immigration of one million per year—three times the average official annual flow over the last 15 years—to compensate for the shrinking working-age population.\footnote{Yuri Andrienko and Sergei Guriev, “Understanding Migration in Russia,” Policy Paper 23 (Moscow: Center for Economic and Financial Research, New Economic School, November 2005).}

In immigration, Russia benefits from a unique advantage: It has a huge pool to draw on—tens of millions of willing Russian-speaking residents of other former Soviet countries. Millions of immigrants from Ukraine, Moldova, the Caucasus, and Central Asia arrived after the collapse of the Soviet Union because all the former Soviet republics apart from the Baltic states and Kazakhstan have much lower wages. The most conspicuous recent migration consists of construction workers in Moscow from Tajikistan and Kyrgyzstan.

Most immigration is illegal, however, because of Russia’s administrative barriers to migration, and the number of illegal immigrants is assessed at 6 million to 12 million. In late 2006 Russia adopted legislation to facilitate immigration from the former Soviet republics, but its effect has been the opposite. Overall, Russian immigration policy has been inappropriately complex and repressive, pushing migrants into the shadow economy. Trapped in low-skill jobs, these illegal migrants lag in productivity, although they remain attractive to employers offering very low wages and poor working conditions. In addition, illegal immigrants, especially from Central Asia, suffer from Russian xenophobia. Murders and hate crimes are shockingly frequent.
Internal migration also holds significant possibilities, as workers in many Russian regions still face low wages and high unemployment; the same study estimates that over two million workers in these areas could easily find jobs in labor-scarce regions. Although it is easy to change jobs within one locality in Russia, it is exceedingly difficult to move from one region to another, primarily because of poorly functioning housing markets, and some regions, notably Moscow, remain closed to legal migration even for Russian citizens.

Limited Demographic Improvements

The increase in Russia’s birth rate likely follows the recent improvements in the overall socioeconomic situation and general mood of society. The government heralds the recent rise in birth rate as a result of its pronatal policies of the last several years: lump-sum payments increasing for second and subsequent children and enhanced social benefits. But the size of these benefits is hardly sufficient to have prompted women to decide to have more babies.

Yet, whatever its causes, the rise in the birth rate cannot possibly produce a sustained overall population increase to counter the sharp declines in the birth rate in the early 1990s. Women of childbearing age will be dramatically fewer over the next 20 to 25 years. Even a significantly higher reproduction rate now would not be enough to boost Russia’s population above its current low level. Consequently, international projections estimate that Russia’s population in 2025 will shrink to 135 million or, in the worst-case variants, as low as 120 million.

To the extent that the demographic situation has improved over the last few years, the Putin era’s economic growth and stability can take much of the credit. The main cause of the sharply reduced infant mortality is presumably the improved general availability of pharmaceutical drugs and medical equipment in the post-Soviet period. Official Russian commentaries, however, emphasize the health reforms undertaken through the Priority National Health Project first proposed in the fall of 2006. During 2006–07, the government allocated just over 200 billion rubles (about $9 billion) to a set of explicit objectives: to improve the health of the population, to improve the accessibility and quality of medical care, to strengthen primary care as well as health promotion and disease prevention activities, and to increase access to tertiary care. The National Health Project has added resources and training for primary health care, including for


pregnant women, funded HIV/AIDS prevention and treatment, and constructed new centers for high-tech tertiary care. Widely publicized new maternity incentives include expanded maternity leave and payments, educational vouchers for children, and “birth certificates” for pregnant women entitling them to free choice of facility for prenatal care and childbirth. During the first two years of the project, 13 million people received check-ups, 60 million were vaccinated, and 300,000 obtained high-tech medical care. Thousands of new ambulances were purchased and distributed to every region in the country.

Many of the National Health Project provisions are embodied in the Concept for the Development of Healthcare in the Russian Federation through 2020, finalized in December 2008 by the Ministry of Health and Social Development. But the project cannot guarantee the sustainability of the progress of the last few years. Russia is pursuing a classic, Soviet-style “storming” approach to its health and demographic challenge: throwing money at it. Money spent has been the primary official indicator of success. National Health Project spending has been chaotic and often thoughtless, with resources allocated according to political expediency. Equipment purchases have barreled forward seemingly without analysis of medical need, leaving millions of dollars’ worth of machinery idle. Ambulances unable to withstand the rough Russian roads spend more time in repair than on duty, and emergency services prefer older, more reliable jeeps. Salaries for primary care providers are still insufficient to attract talented students. New high-tech centers are being built but often have no qualified personnel. Monitoring and evaluation are absent. A recent study by the International Monetary Fund shows that countries that spend 30 to 40 percent less on health achieve health outcomes similar to Russia’s.26

The National Health Project has done little to address the structural imbalances that have plagued the Russian health care system since the Soviet period. Most care is still inefficiently provided by hospitals rather than by primary care providers. The compulsory national health insurance established in 1993 has neither functioned well nor delivered the intended market pressures for higher-quality, more cost-effective care. Doctors’ basic salaries remain rigidly set by education and years in service, rather than by quality and success of treatment. As a result of this inefficient allocation of resources, people often pay for care that is constitutionally guaranteed to be free of charge: 30 to 60 percent of health care costs are paid out of pocket, and 50 to 70 percent of Russians report for-
going medical care because they cannot afford it. As in other sectors, corrup-
tion is rampant—as much as one-third of health care spending occurs 
outside official channels.

These problems are not new. Analysts identified the need for structural 
reform in the late 1980s and recognized that money was a necessary but 
not sufficient condition to create modern health care in Russia. Even if the 
resources flowing into the health sector were spent highly efficiently, no 
health system can overcome the poor choices of too many Russians—
smoking, excessive and binge drinking, bad diet, and lack of exercise—
and the unhealthy environment (air and water pollution, poor food qual-
ity, and unsafe roads) in which many Russians live.

**Conclusion**

For several decades, Russia has focused on solving its health problems by 
tinkering with its health care system. The National Health Project, for all 
its flaws, is an important demonstration of political will, backed by sig-
nificant resources, to seriously address health problems. But health care 
reform alone cannot address the pathology behind Russia’s health and 
mortality crisis: Behaviors such as smoking and alcohol abuse are the pri-
mary contributors to premature mortality.

Some may argue that getting Russians to curtail their destructive be-
havior is a futile proposition, but similar pessimism surrounded the re-
lease of the 1964 US Surgeon General’s report on smoking in the United 
States, a landmark publication followed by a health education effort that 
reduced tobacco consumption immediately, significantly, and for the long 
term. In Russia a seat belt promotion campaign in 2006 doubled seat belt 
use (from 26.8 to 55.8 percent) in Bashkortostan in just a single month.27 
Behavioral interventions can also work in Russia.

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27. Leila Akhmadeeva, Valentina A. Andreeva, Steve Sussman, Zolya Khusnutdinova, and 
Bruce G. Simons-Morton, “Need and Possibilities for Seat Belt Use Promotion in Bashkort-