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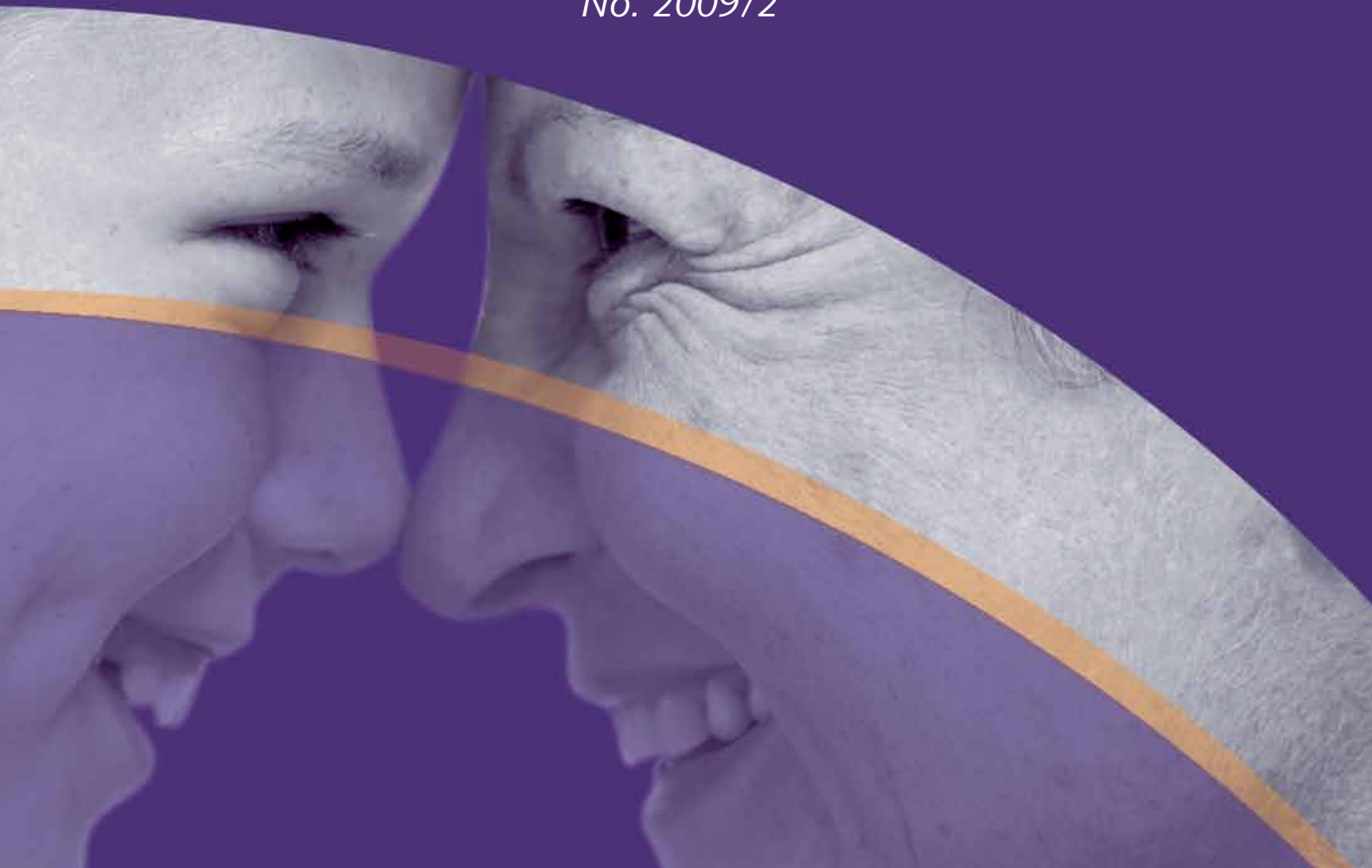
# The WDA – HSG Letters

*on Demographic Issues*

## Too Sick to Prosper - Russia's Ongoing Health Crisis Obstructs Economic Growth and Development

*by Nicholas Eberstadt and Hans Groth*

*No. 2009/2*



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# Too Sick to Prosper

Russia's ongoing health crisis obstructs economic growth and development

*By Nicholas Eberstadt and Hans Groth<sup>1</sup>*

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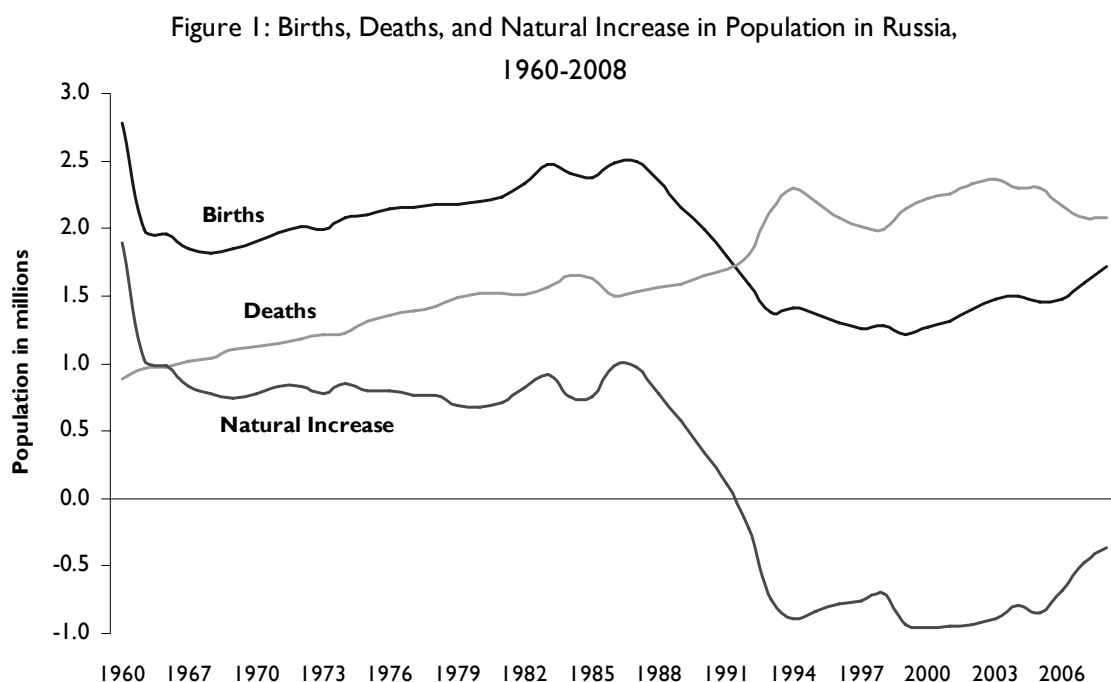
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<sup>1</sup> This paper is an extended version of an essay originally prepared for the World Economic Forum's Global Agenda Council.

Ever since the days of the famous British political economist Thomas Robert Malthus [1766-1834], demographic commentators have been faulted in some corners for excessive pessimism and despondency: that is to say, for being overly ready to find ubiquitous “population problems” in virtually every new demographic development. Be that as it may, serious or even disastrous population problems can still threaten real existing countries - even today. In fact, we are currently witnessing a demographic crisis of historic proportions before our very eyes.

The crisis, to which we refer, however, is not ravaging an illiterate and impoverished Third World country. Instead, it is unfolding in that particular European state which sent the first cosmonaut into space: the Russian Federation. Russia is in the grip of startling and anomalous demographic tendencies, trends whose humanitarian and economic consequences are not only self-evidently adverse, but quite arguably dire.

Today, Russia is, of course, a society at peace. However, if we only had vital statistics to go by, we might easily believe this is a country trapped in a prolonged and devastating war. Since the end of the Communist era in late 1991, the country’s birth rates have collapsed while its death rates have soared (Figure 1). Over the post-Communist era as a whole, Russia has reported three deaths for every two births. 2008 was a “good” year for modern Russia, insofar as it registered “only” five deaths for every four births.



SOURCES: 1960–2002 data: Goskomstat (Moscow), “Demographic Yearbook of Russia” (2004), table 2.25. 2004–2006 data: Goskomstat, “Demographic Yearbook of Russia” (2007), available at [www.gks.ru/bgd/regl/b07\\_16/Main.htm](http://www.gks.ru/bgd/regl/b07_16/Main.htm) (accessed April 30, 2009). 2007 data: Goskomstat, “Vital Statistics,” table 5.4, available at [www.gks.ru/bgd/regl/b08\\_12/lssWWW.exe/stg/d01/05-04.htm](http://www.gks.ru/bgd/regl/b08_12/lssWWW.exe/stg/d01/05-04.htm) (accessed April 30, 2009). 2008 data: Svetlana Nikitina, Goskomstat, personal communication with the authors, March 27, 2009. NOTE: 2008 numbers preliminary

Since the beginning of 1992, Russia has recorded nearly thirteen million more deaths than births, and the country's population has dropped by about seven million; only a net influx of migrants prevented the drop from being still steeper. Even so, the magnitude of Russia's population decline (to date) is overshadowed in our post-war epoch only by China's terrible population decline in the immediate wake of Mao's disastrous "Great Leap Forward". However, China's population decline abated as soon as Beijing's fanatical "Great Leap" policies were reversed. Russia's depopulation, on the other hand, is ongoing and no signs of a turnaround are as yet in sight.

One major component of the "demographic shock" that Russia has been experiencing of late was a sudden, radical reduction in fertility. In the late Soviet era - the *Perestroika* period - the Russian Federation's childbearing patterns held more or less at the levels required for long-term population replacement. By contrast, in the early years of the 21<sup>st</sup> Century, Russia's fertility rates have been almost forty percent below the "replacement level". Although the Kremlin unveiled an ambitious and expensive pro-natal population program several years ago, this seems to have elicited only a modest increase in births. Birth totals in early 2009 are once again down (albeit thus far only slightly down) on a year-to-year basis.

All other things being equal, steep sub-replacement fertility can be expected to accelerate the "graying" of a society and to hasten the shrinkage of its working age population - tendencies that can impede efforts to enhance economic growth and prosperity. Nevertheless, in this particular regard, Russia's circumstances are not so different from the rest of Europe, where steep sub-replacement levels of fertility commonly prevail nowadays. While low birth rates in Western Europe may constitute a challenge, few voters or policymakers in these countries would describe their local fertility picture as a "crisis", much less a "disaster".

What distinguishes modern-day Russia's demography from the rest of Europe's is not its fertility trends, but rather its patterns of mortality and survival, which can be described as shocking - even disastrous.

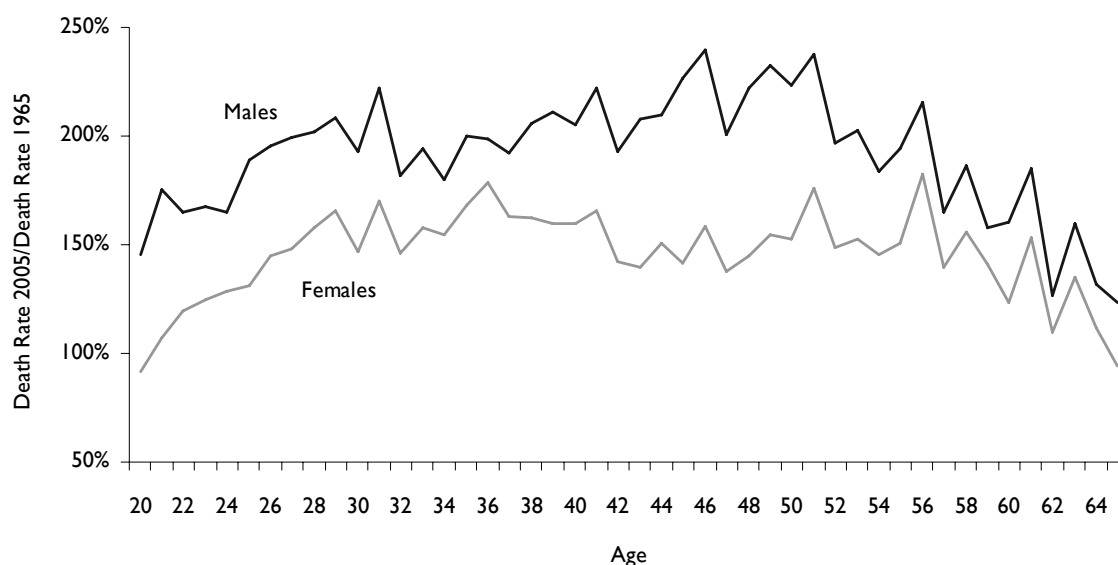
In the post-war era, the modern world has been all but exploding with health. According to the UN's Population Division, for the planet as a whole, life expectancy at birth jumped by about twenty years between the early 1950s and the early 2000s. However, Russia has been an exception to this global rule: according to those same UN estimates, the country's life expectancy was actually two years lower in 2000-2005 than in the late 1950s. Even though there has been some recovery since 2005, life expectancy for both males and females in the Russian Federation is lower now than it was four decades ago.

In contemporary Russia, worsening public health conditions have caused a catastrophic loss of life and a corresponding severe depletion of "human capital". Health conditions in Russia were far from ideal during the Gorbachev era and before. Yet, when measured against the country's survival schedules from the late 1980s,

post-Communist Russia has, thus far, suffered a toll of nearly seven million “excess deaths”.

When examined more closely, the details of Russia’s upsurge in death rates are nothing short of terrifying (Figure 2). For men in their thirties and forties, Russia’s death rates, today, are roughly twice as high as they were forty years ago. Scarcely less appalling are the death rates for females who are in their forties, which are fifty percent higher now than they were four decades earlier.

Figure 2: Death Rate Ratio Ages 20-65: Russia, 2005 vs. 1965



SOURCE: University of California, Berkeley, and Max Planck Institute for Demographic Research, “Human Mortality Database,” available at [www.mortality.org](http://www.mortality.org) (accessed June 16, 2009).

Cardiovascular disease - heart attacks, strokes and the like - kill four times as many people in Russia as in Western Europe, even after adjusting for population size and age. Furthermore, Russia’s death levels from injury - accidents, suicide, murder and so on - are positively “Fourth World”: the only other spots on the planet sustaining such terrible losses are the conflict- and post-conflict societies of sub-Saharan Africa, such as Angola and Sierra Leone.

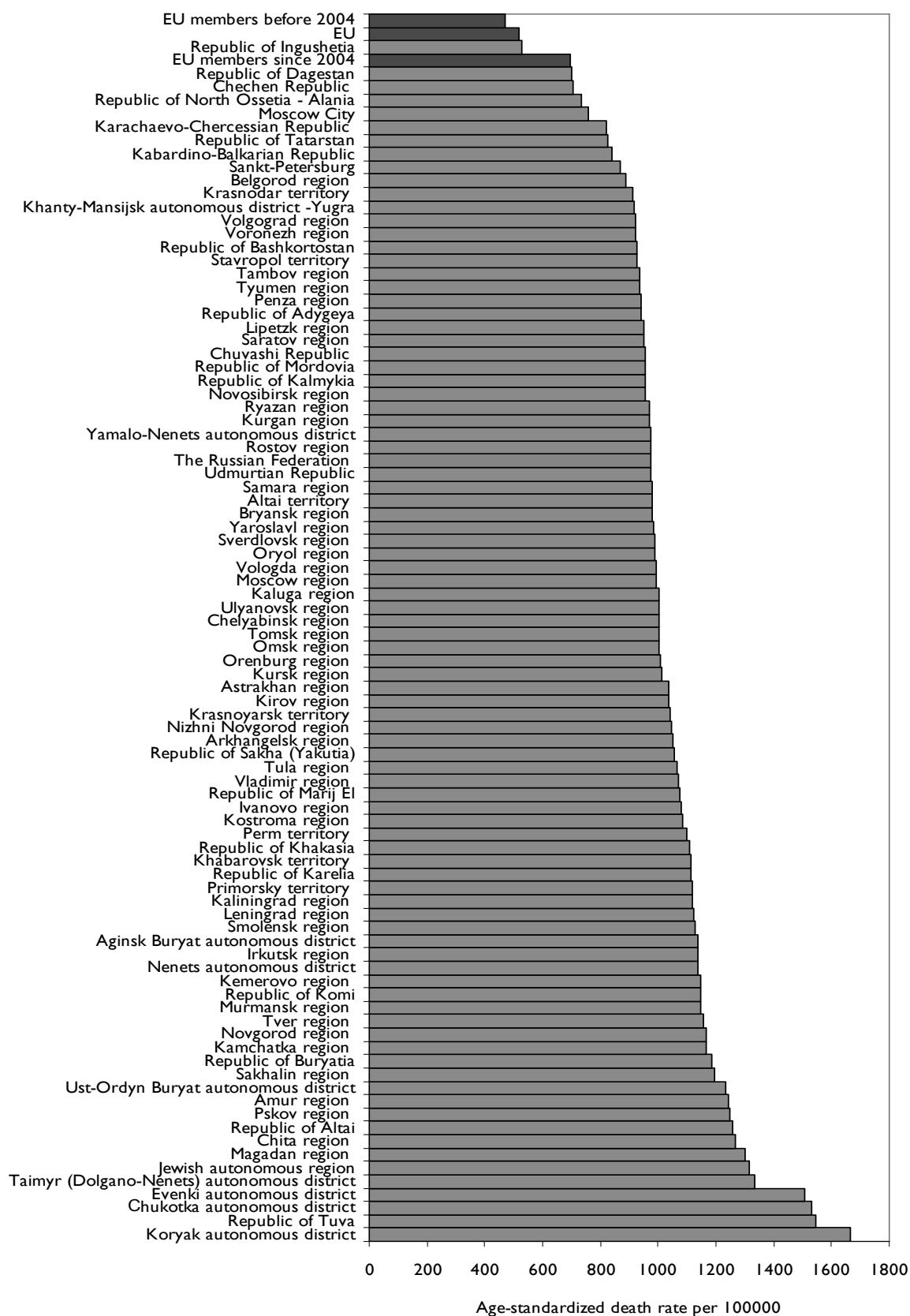
To be sure, Russia’s crisis in health and mortality is not uniform across the vast Russian expanse, but rather there are important regional variations in its intensity. This much can be seen in Figure 3, which compares age-standardized death rates for females among Russia’s administrative areas (*oblast*) on the basis of WHO data (We use female mortality rates here because, the story of premature mortality for Russian men is already widely known).

Some of the regional differences within Russia are striking. In 2006, for example, female mortality levels in the capital Moscow were about 24 percent lower than in the surrounding Moscow *oblast*. St. Petersburg's death rates were likewise about 23 percent below the adjacent Leningrad *oblast*. Furthermore, mortality levels in one of Russia's highest mortality regions (for example, the Tuva Republic - a predominantly minority area in distant Siberia, close to the Mongolian border and with a population about the size of Iceland) were more than twice as high as in, say, Dagestan (a heavily "Muslim" region with a two million-plus population stretching deep into the northeast Caucasus from its 400 km Caspian coast).

Be that as it may, the more important anecdote in these regional variations is the grim sameness of severe excess mortality across the whole of Russia - even for women. In statistical terms, the variation in these regional mortality levels is not so great. The country's "coefficient of variation" by *oblast* with respect to female mortality levels, for example, is markedly lower than the corresponding local variations in fertility. Moreover, all of Russia's regions appear to suffer female mortality levels well above those of Western Europe (i.e., pre-accession EU) and, with the exception of the quite possibly questionable reports for one small minority area bordering on Chechnya, every region in Russia records higher female mortality levels than the post-accession EU. The latter comparison may be especially meaningful, insofar as the vast majority of the population of post-accession EU is comprised of former Soviet Bloc countries.

Overall, Russia's age-standardized female mortality level in 2006 was 108 percent higher than Western Europe's and over 40 percent higher than the average for the new EU states (the discrepancies for males, needless to say, would look even more dismal). But, even more disconcerting, may be the comparison between Moscow and the new EU members. Moscow is one of Russia's most prosperous and developed regions - in terms of per capita income. In fact, it appears to be on par with some Western European populations (after making the appropriate adjustments for purchasing power parity). Yet Moscow's female mortality level in Figure 3 is over 60 percent higher than for the "old" EU—and it is over 10 percent higher than in the "new" EU, even though average PPP-adjusted income levels in that collection of countries would be distinctly lower than in Moscow itself. We are accustomed to thinking that "health equals wealth" in the modern world—but the situation in Russia should compel us to qualify our thinking here.

Figure 3: Age-Standardized Death Rates for All Causes, Females:  
Russia by Oblast vs. EU, 2006



Source: Goskomstat, Russian Demographic Yearbook (2007), Moscow; World Health Organization, WHO Europe Health for All Database, <http://www.euro.who.int/HFADB>



And we should not assume that Russia's health situation could not worsen any further. Russia also faces looming risks from infectious disease such as HIV/AIDS and drug-resistant tuberculosis (XDR TB). Current international estimates indicate that nearly one million Russians are now living with HIV and virulent new strains of XDR TB. Thus far, Russia's alarming health trends have been primarily due to non-communicable causes - but unexpected virulent epidemics/pandemics could exact their own grim toll on Russia in the years ahead.

Russia's continuing health crisis is without any doubt more than just a humanitarian catastrophe. These health problems also act as an economic straitjacket, stifling Russia's productivity and obstructing its goal of developing into a prosperous 21st century society. How can this urbanized and well-educated nation hope to become a vibrant (much less a leading) modern economy with a dwindling and debilitated workforce?

In our modern world, a country's health profile is an essential element of its economic potential. In Russia today, life expectancy is a full twelve years shorter than in Western Europe. Its per capita output - even with generous purchasing power adjustments - is still not much more than a third of the Western European levels. Simply put, Russia has little chance of narrowing the income gap with the EU unless it also closes the yawning health gap that separates Russians from the rest of Europe.

Russia faces an unhappy demographic triad, namely: (1) severe excess mortality among its working-age population groups, (2) pervasive population ageing with suboptimal health, and (3) steep sub-replacement fertility (all other things being equal, a portent of further long-term population decline and aging).

Needless to say, these factors present imposing challenges and severe constraints. However, not all of these constraints should be regarded as immutable. Quite the contrary, international experience demonstrates that there is indeed hope for redressing some of these problems. There is, so to speak, well-proven "medicine" that can address important aspects of Russia's present demographic afflictions. Perhaps most importantly, the first "treatment" is to swallow the pill of "political will" and pursue a public health strategy, which promises to deliver effective results and improvements for all Russian citizens.

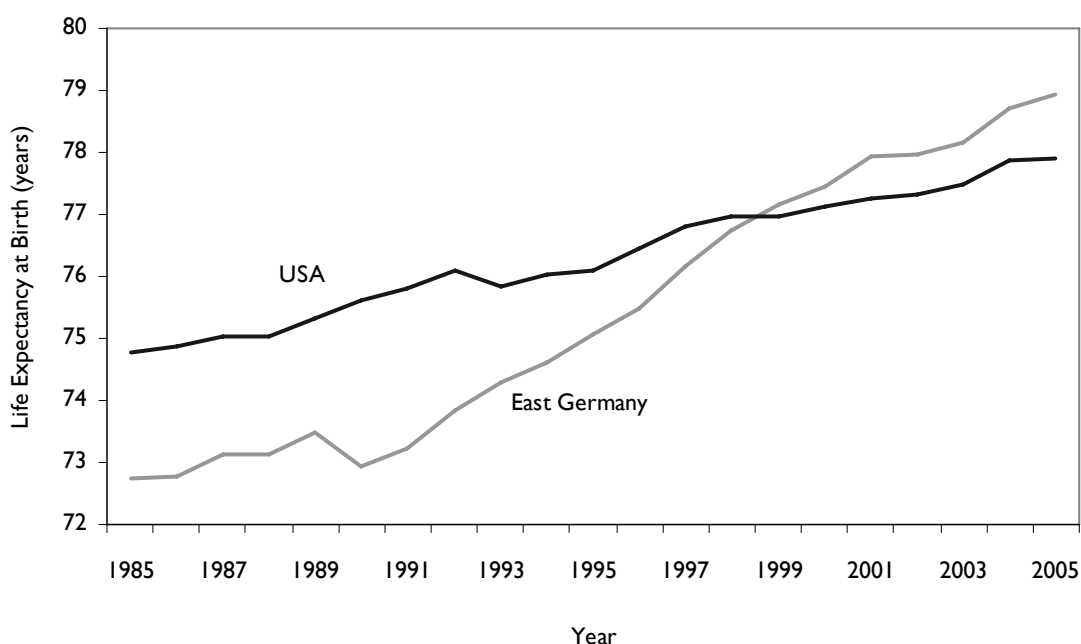
Russia, it is true, is burdened by the legacy of generations of Communist rule and has suffered travails in its "transition" away from Soviet-style socialism. However, Russia is not unique in this regard; the entire former Soviet Bloc faced that daunting situation. Furthermore, the record of the past two decades demonstrates that substantial - even dramatic - health progress *is* possible these days for any given post-Communist European population.

The most remarkable example of such progress is the former German Democratic Republic (now East Germany in the unified Federal German Republic). Life expectancy in Eastern Germany has soared since reunification (Figure 4). In the sixteen years from 1990-2006, overall life expectancy in East Germany is estimated

to have risen by over eight years - over three and a half days for every passing week! Despite four decades of Communist-era disadvantage, life expectancy at birth for the population in Eastern Germany has converged with that of Western Germany; today it stands within just a few months of the Western German level.

This tremendous accomplishment is a consequence of broadly-based improvements arising from a still ongoing transformation of East Germany's population with increased wealth, freedom of mobility, unrestricted access to high quality healthcare, etc. and hence improved health and levels of happiness. Such factors have led to significant improvements in survival prospects for men and women of all ages, not just selected groups of beneficiaries. This accomplishment looks all the more breathtaking when we compare the life expectancy trajectories of East Germany and the United States over the past two decades. In 1985, overall life expectancy at birth was two years higher in the USA than in Eastern Germany; by 2005 overall life expectancy *was a year higher in Eastern Germany than in America*.

Figure 4: Overall Life Expectancy at Birth, United States vs. Eastern Germany, 1985-2005 (males plus females)



SOURCE: University of California, Berkeley, and Max Planck Institute for Demographic Research, "Human Mortality Database," available at [www.mortality.org](http://www.mortality.org) (accessed June 16, 2009).

East Germany may offer the most spectacular example of post-Communist health progress, but it is hardly an isolated case. On the contrary, as highlighted by cross-national analyses provided by researchers at the Human Mortality Database (HMD), substantial health improvements have been enjoyed by a number of other post-Communist populations in Europe since the days of the "revolutions of 1989". Since 1989, for example, overall life expectancy has risen by nearly five years in the Czech Republic. Similar gains have been seen in Slovenia as well. Even Hungary - a notorious health laggard under Communism from the 1960s onward - has seen a turnaround, with overall life expectancy improvements being a full four years over the 1989-2006 period.

Russia's ongoing health crisis may justify an air of gloom, but it must not encourage fatalism. There is definitely reason for alarm in Russia today, but, most importantly, there are also good reasons for hope.

This path of hope requires first and foremost that the realities of the situation need to be acknowledged - and then followed by a firm determination to act. Improving population health is more than a statistical accomplishment. It is about humanity and preparing a nation to move up the ladder of growth and prosperity. Russia is no exception to this rule.

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