Russia's Demographic Constraints: Dimensions and Strategic Implications

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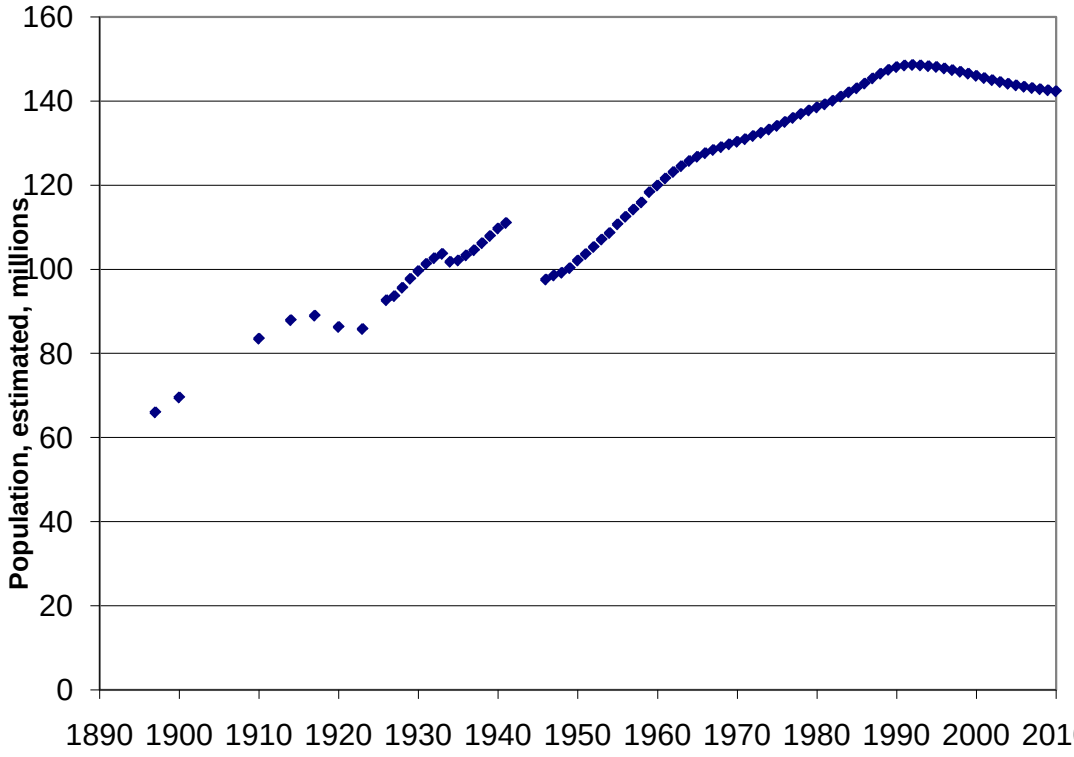
Over the decades since the dissolution of the Soviet Union, the Russian Federation has been in the grip of an unrelenting demographic crisis. Admittedly, "demographic crisis" is a term that is thrown around these days with an all-too-promiscuous—and sometimes quite unwarranted—abandon. But the particulars of the Russian Federation's demographic travails provide empirical demonstration for the proposition that Russian society is beset by severe demographic paroxysms that are directly and adversely affecting both individual wellbeing and economic potential—and will do so for some time to come.

Since the end of the Soviet era, the Russian Federation has witnessed a pronounced and continuing depopulation: from 1992 to the present, the country's total population has reportedly fallen by almost 7 million (almost 5%), with almost continuous year-on-year population declines. Russia, to be sure, was by no means the only country to experience population decline during those years—but the magnitude of this fall-off was exceptional. In absolute terms, the only drop larger than this one in the postwar era was the bout China suffered in the wake of Mao's catastrophic "Great Leap Forward" campaign (a decline in relative terms roughly similar to Russia's post-Communist population decline to date).

The Russian nation, of course, is no stranger to sudden bouts of depopulation: in fact, it has suffered four of these in the past century alone. [SEE FIGURE 1] The first three of these, however, were the consequence of war, political upheaval, and state-directed violence; depopulation ceased when the afflicting cataclysms abated. Today's depopulation by contrast proceeds in a time of peace—and requirements for reversing it are correspondingly not at all obvious.

Figure 1: Russia's Estimated Population: 1897-2010

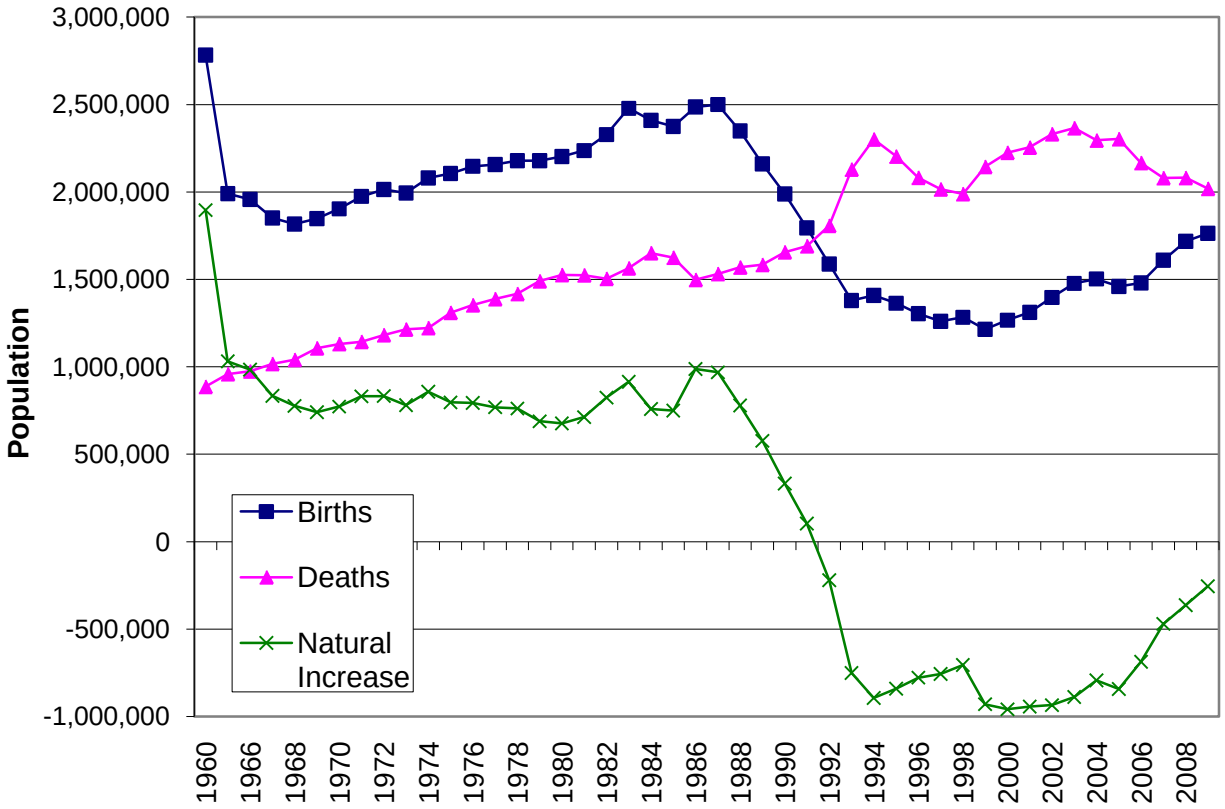


Source: Reproduced from Dalkat Ediev, "Application of the Demographic Potential Concept to Understanding the Russian Population History and Prospects: 1897-2100," Max Planck Institute for Demographic Research, 2001, Figure 1.

In arithmetic terms, Russia's present depopulation has been driven by negative natural increase: more specifically, by a sharp falloff in births conjoined with an upsurge in deaths. [SEE FIGURE 2] Between 1992 and 2008, according to official figures, Russia registered almost 13 million more deaths than births (almost 3 funerals for every 2 live deliveries). Russia's negative natural increase during these years was of a scale equivalent to eliminating the entire contemporary population of the country of Angola.

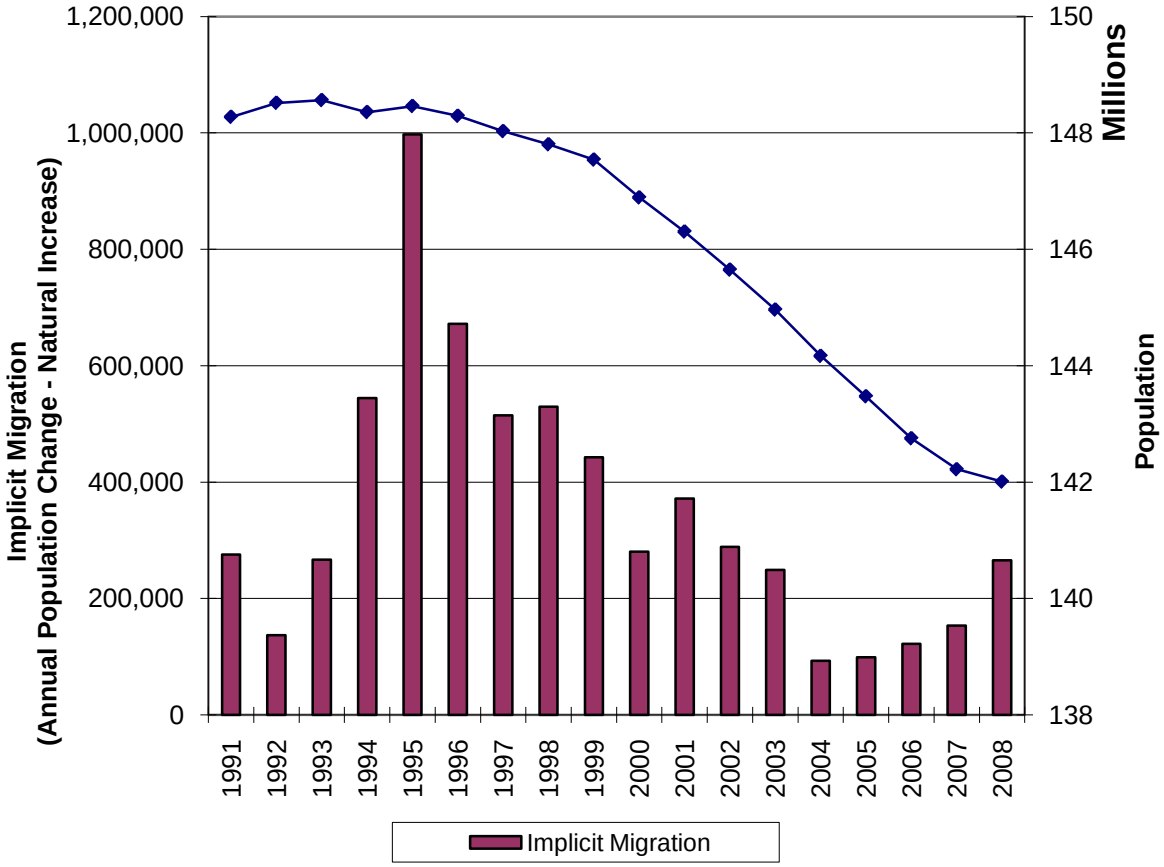
Net immigration partly mitigated the country's population decline over these years, but was by no means sufficient to compensate for it entirely. We can calculate Russia's implicit trends in net migration by subtracting the country's annual net surfeit of deaths over births from its reported annual changes in total population. [SEE FIGURE 3] Migration statistics for Russia today are problematic—about which more later. Estimates of net implicit migration should also be treated with caution. Nevertheless, the continuing decline in Russian population totals is occurring despite net inflows of immigrants from abroad, not because of it.

Figure 2: Live Births, Deaths, and Natural Increase in Russia, 1960-2009



Sources: The Russian Federation Ejegodnik: 2004 (State Committee of the Russian Federation on Statistics, Moscow, 2004), Table 2.25, Source for 2004-05 figures: Federal Statistics Service, accessed December 6, 2007, 2:00 PM. Source for 2006-2008 figures: Goskomstat, http://www.gks.ru/bgd/regl/b09_12/IssWWW.exe/stg/d01/05-04.htm, accessed February 25, 2010. Preliminary 2009 data from Interfax, "Average Life Expectancy in Russia Approaches 70 Years," February 17, 2010.

Figure 3: Russian Population vs. "Implicit Migration": Goskomstat Data, 1991-2008

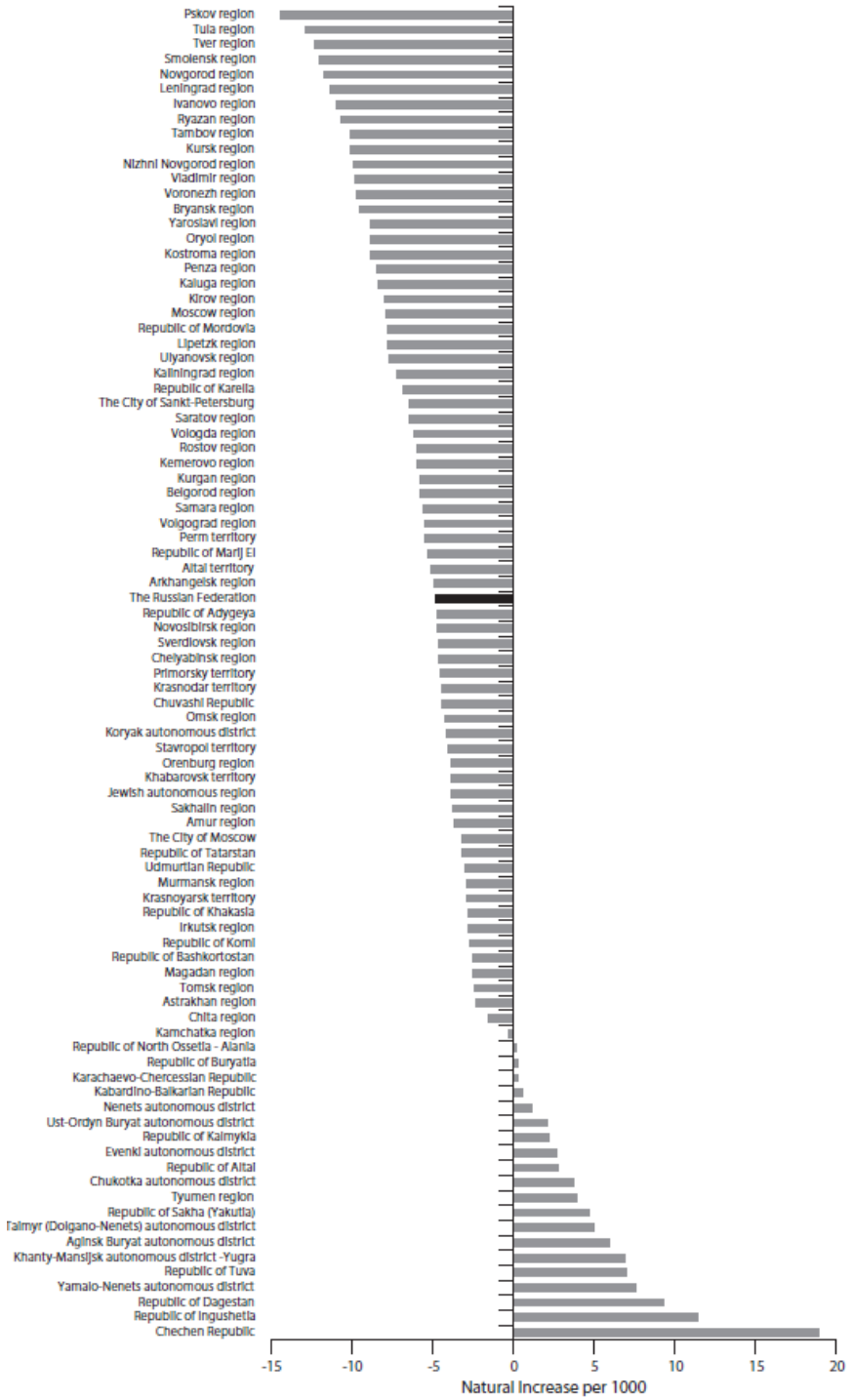


Source: The Russian Federation Ejegodnik: 2004 (State Committee of the Russian Federation on Statistics, Moscow, 2004), Table 2.25, Source for 2004-05 figures: Federal Statistics Service, accessed December 6, 2007, 2:00 PM. Source for 2006-2007 figures: Interfax News Agency, "Russia's Population Shrinks by 0.24 Million in 2007," March 27, 2008. Source for 2008 figures: Itar-Tass News Agency, "Russia's population reduces 141 mln in January-November 2008 - statistics," January 28, 2009. Note: 2008 data only to November.

Russia's depopulation is not, of course, unfolding uniformly over the entire expanse of the Federation's territories. Several differential subsidiary aspects of the ongoing population decline are worth mentioning here.

First, there is the differential pressure for depopulation now being generated by varying rates of "negative natural increase" among the regions of the Russian Federation. (Migration, to be sure, is also playing a role in regional population change within Russia—but we will deal with that aspect of population redistribution more thoroughly later in this study.) Local variations in "negative natural increase" within the Russian Federation for one recent year (2006) are highlighted in Figure 4. [SEE FIGURE 4]

Figure 4: Natural increase per thousand, by region: Russian Federation, 2006



Source: Goskomstat, "Demographic Yearbook of Russia" (2007), Table 2.3

In the year 2006, Russia's overall rate of "negative natural increase"—its excess of death rate over birth rates—amounted to 4.8 per 1000 population: that is to say, a tempo of just under

three-fifth of a percentage point per year. But there was very considerable regional variation within this overall national average[ii]

Of Russia's 89 provinces (*oblast*), 68 reported more births than deaths that year—many of these entailing very substantial local surfeits of mortality. In 10 oblasts, the net excess in mortality amounted to 1 percent a year, or more; in the Pskov oblast, net mortality was running at the staggering pace of nearly 1.5 percent a year. The areas where rates of negative natural increase tended to be highest, incidentally, also happen to be concentrated in the original, historical "heartland" of Russia, including its "black earth zone" (*chernozem*).

Interestingly enough, the excess of deaths over births were well above the national average in the country's two most important (and affluent) metropolitan centers: Moscow and St. Petersburg. In St Petersburg, all other things being equal, forces of natural increase would have made for a population decline of roughly two-thirds of a percent in 2006 alone—and for a somewhat less pronounced but nonetheless negative balance in Moscow as well. Given these demographic fundamentals, neither city could grow—or even remain stable in size—without a constant influx of newcomers.

Not all provinces in Russia are subject to negative natural increase these days. In 2006, 20 oblasts reported more births than deaths. As it happens, however, the areas of natural population increase were generally areas in which the country's ethnic and/or religious minorities were represented disproportionately. In 2006, for example, 19 of the 20 oblasts with positive natural increase were officially designated either as "republics" for particular indigenous non-Russian nationalities, or "autonomous districts" for given non-Russian peoples. Just two regions within the Russian Federation reported rates of natural increase in excess of 1 percent that year: Ingushetia (where ethnic Russians accounted for barely 1 percent of the enumerated population in the 2002 Census) and adjoining Chechnya, where net natural increase approached 2 percent.

In 2007, 19 oblasts or regions within the Russian Federation reported positive natural increase. Fifteen of these 19 regions were, "republics" or "autonomous districts". These 19 areas, moreover, still accounted for only a tiny share of the Russian Federation's population: less than 10 percent. About 90 percent of the Russian Federation's residents in 2007 lived in regions where death rates were higher than birth rates.[iii]

The Russian Federation's extraordinary peacetime depopulation has already taken us out of the realm of familiar social, economic and demographic relationships widely canvassed on the contemporary world stage, and into terra incognita for the modern student of global affairs. By many indications, Russia is heading still further into these historically unfamiliar reaches—may remain there, indeed, for decades to come.

Russia's demographic explorations in the dominions of depopulation are of course a matter of more than purely academic interest. The circumstances generating population decline in the Russian Federation today, for example, should arouse tremendous humanitarian concern.

From an economic standpoint, moreover, there is as yet no obvious historical example of a society that has demonstrated sustained material advance in the face of long-term population decline.

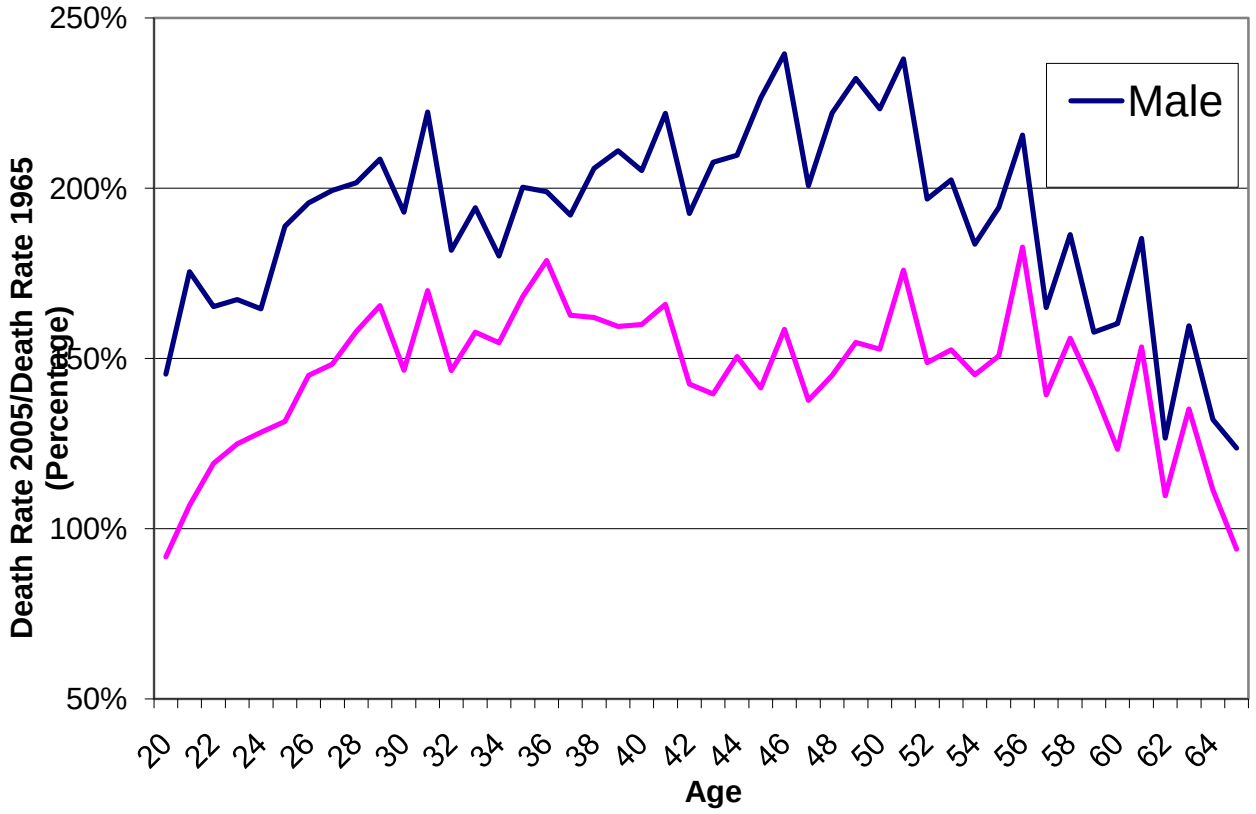
Mortality and Morbidity in the Russian Federation: A Crushing Burden

The Russian Federation's peacetime demographic crisis is characterized not only generalized mortality crisis, but by an especially severe health crisis concentrated in the adult population of working ages (as conventionally defined). This working-age health crisis has important ramifications for Russia's old-age support capacities, both today and in the years to come.

By the World Bank's schema for ranking countries by levels of per capita income, contemporary Russia qualifies as an "Upper Middle Income Economy" (indeed, after PPP adjustments, as one of the more affluent states within this grouping).[iv] Yet Russia's estimated life expectancy at age 15 was far lower than would have been expected for a country with such a relatively favorable economic ranking. For females, life expectancy at age 15 was a decade or more below levels prevailing among "high income economies"—but it was also lower than in many "upper middle income economies" (such as Turkey and Brazil), and in fact lower than in a number of "lower middle income economies" (such as China or Morocco). Even more striking, combined male and female life expectancy at age 15 was lower for the Russian Federation than for such "lower middle income economies" as India. As for male life expectancy at 15, Russia's appears to be one of the world's very lowest—markedly lower, indeed, than in many of the World Bank's "low income economies", including such desperate places as Benin, Haiti or even the "failed state" of Somalia.

The deterioration in general health conditions for Russia's population of working ages over the past decades has been dramatic, and indeed extraordinary. This deterioration is mirrored by a general upsurge in death rates for working age men and women alike, as Figure 5 demonstrates. [SEE FIGURE 5] Over the four decades between 1965 and 2005, age-specific mortality rates for men in their 30s and 40s typically rose by around 100%. Scarcely less stunning, mortality levels for women in their 30s and 40s shot up by nearly 50% during that same period.

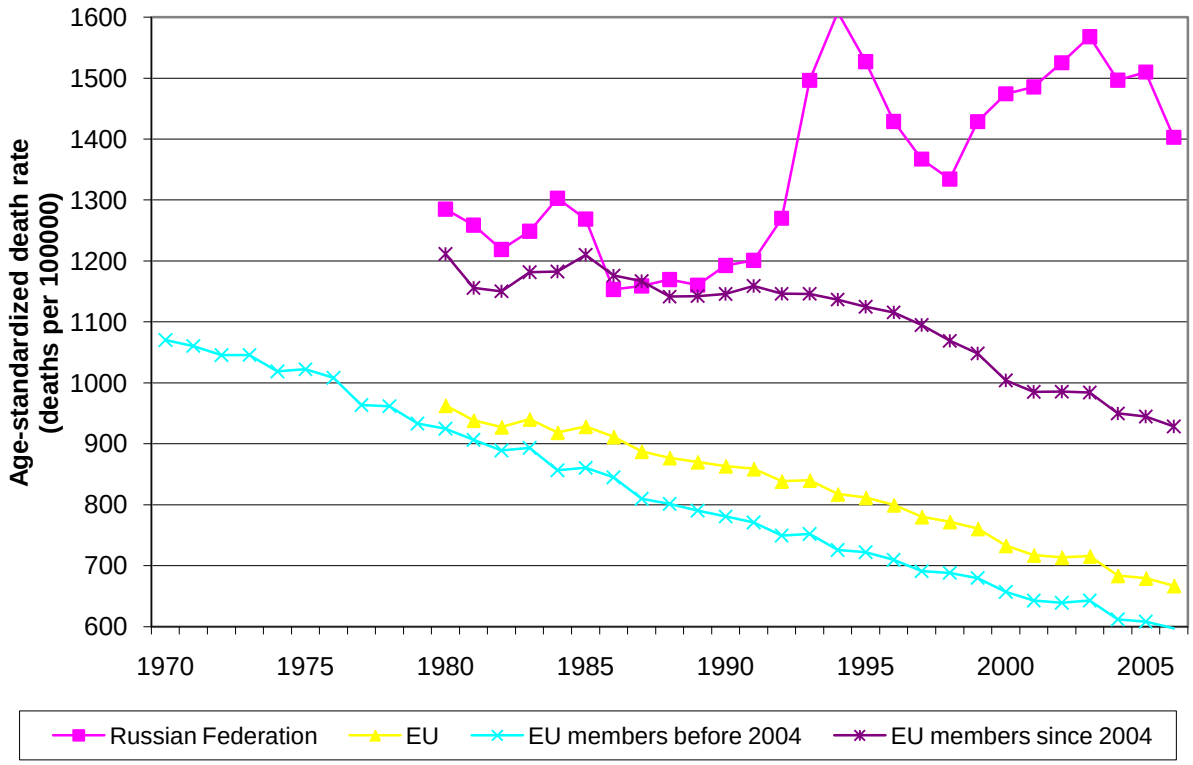
Figure 5: Death Rate Ratio, Ages 20-65: Russia, 2005 vs. 1965



Source: Human Mortality Database. University of California, Berkeley and Max Planck Institute for Demographic Research. Available at www.mortality.org, Accessed February 26, 2010.

The deterioration of health conditions for Russia's working age population has been a primary driver of divergence in overall health trends between Russia and the rest of Europe. By 2006, according to WHO, age-standardized mortality in the Russian Federation was over twice as high as in "pre-accession" states of the European Union (i.e., Western Europe). Hardly less noteworthy is the divergence in mortality patterns that has emerged between Russia and the "new" EU members (in the main, former Soviet bloc states from the Baltic and Central Europe). At the end of the Soviet era, age-standardized mortality rates were similar for the aggregated "new" EU states and the Russian Federation. Just fifteen years later, mortality levels were about 40% higher in Russia: while the new EU states recorded substantial improvements in overall mortality levels after the demise of Soviet-style rule, Russia's death rates veered erratically upward.[v] [SEE FIGURE 6]

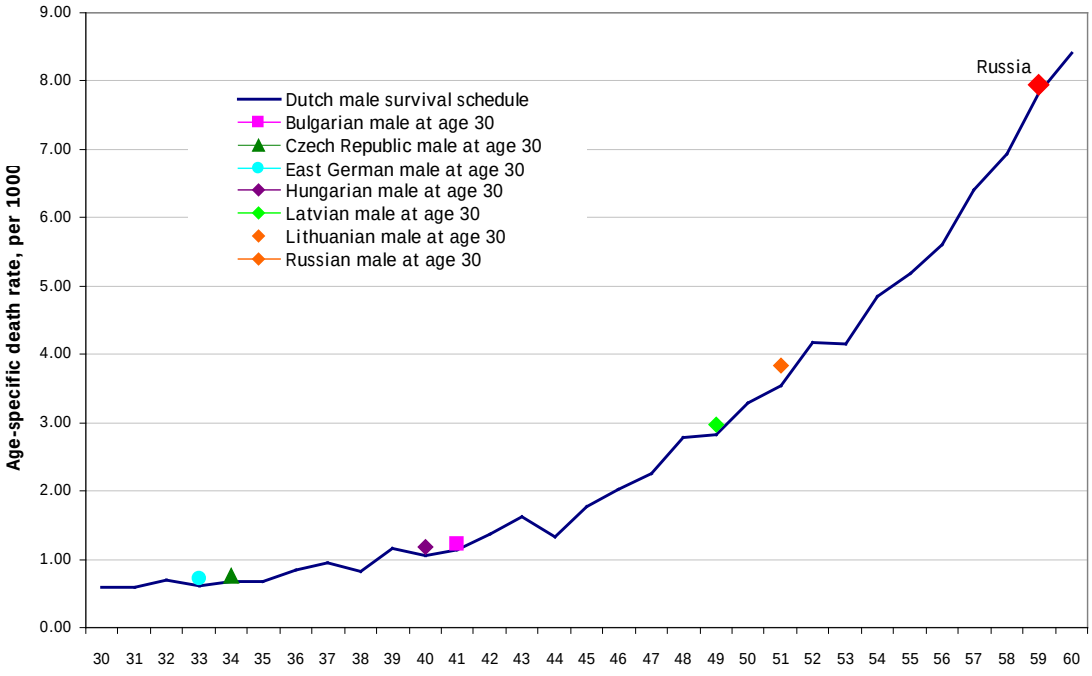
Figure 6: Death rates from all causes, Russia vs. EU, 1970-2006 (males plus females)



Source: Europe Health For All Database, World Health Organization, July 2008. Accessed February 26, 2010.

Labor productivity in Russia is sharply affected by the problems of severe excess death and premature mortality, altering the productivity outlook not only today, but also tomorrow. Some of the dimensions are illustrated in Figure 7, which place recent (2005) death rates for 30-year old men from post-Communist European societies on the mortality curve traced out by Dutch men between the ages of 30 and 60. (There is nothing especially significant, incidentally, about our selection of adult mortality schedules from Holland, by the way. We could have used any other developed society to make this same point.) Whereas 30-year-old men from Eastern Germany face the same mortality risks as Dutch men only a few years older, the situation is totally different in Russia. There, young Russians contend with death rates that Dutch adults do not see until they are well into middle age. Russian men aged 30 have higher death rates than Dutch men at age 57. By this most fundamental of biometric measures, young adults in Russia who should be near the peak of fitness and vigor look to be effectively between 15 and nearly 30 years more elderly than their counterparts in a randomly selected developed society. They are for all intents and purposes far more “grayer”, in terms of mortality risk, than their calendar age would indicate—and by extension, we may also suspect they tend to be more frail, more restricted in their capabilities. Education-related health heterogeneity notwithstanding, such high rates of peacetime mortality clearly augur ill for productive potential in Russia’s working ages.

Figure 7, Adult Male Mortality Schedules:
Netherlands vs. Selected post-Communist Countries, 2006

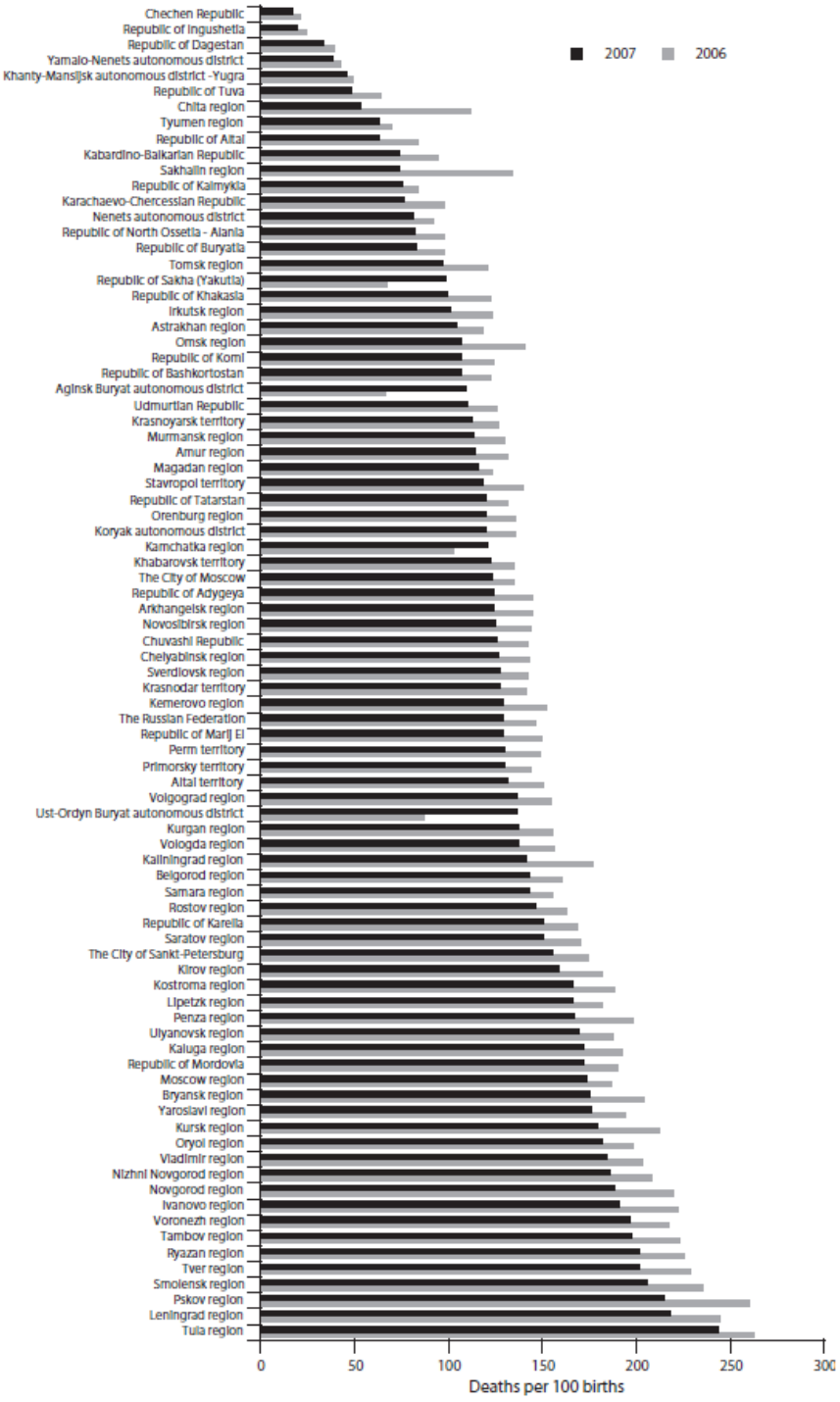


Source: Human Mortality Database. University of California, Berkeley and Max Planck Institute for Demographic Research. http://www.mortality.org. Accessed February 26, 2010.

Regional ratios of deaths to births are also a matter on interest for a country undergoing prolonged depopulation. Consider the year 2006. For Russia as a whole, nearly three deaths were recorded for every two births in the year 2006—a ratio roughly in keeping with the country's long-term average since the end of Communist era. But there were also tremendous regional variations in this death-to-birth ratio every year, as may be seen in Figure 8.

In both 2006, five regions within Russia reported fewer than half as many deaths as births: these included Dagestan, nearby Ingushetia, and of course Chechnya (where in 2006 an average of over five births were registered for every death). At the same time, a fair number of other regions within Russia saw over twice as many deaths as births: 7 of them in 2007, 14 in 2006. The most extreme disproportion between deaths and births, again, tended to be seen in the country's historic, Western-most, heartland. Evidently, prosperity alone was not enough to stave off an imbalance between deaths and births: in both Moscow and St. Petersburg, the country's two most affluent population concentrations, deaths far outnumbered births in both 2006. The imbalance between deaths and births in St. Petersburg, in fact, ranked well above the national average for Russia as a whole in recent years.

Figure 8: Deaths per hundred births by region: Russian Federation, 2006 and 2007



Source: Goskomstat, 2006 data from "Demographic Yearbook of Russia" (2007), Table 2.3 and 2007 data from "Demographic Yearbook of Russia" (2008), Table 2.3

A second sub-national aspect of the Russian Federation's depopulation concerns its impact on the ethnic composition of the country. Figure 8 strongly suggests that historically Russian regions were especially subject to negative natural increase, while the oblasts registering

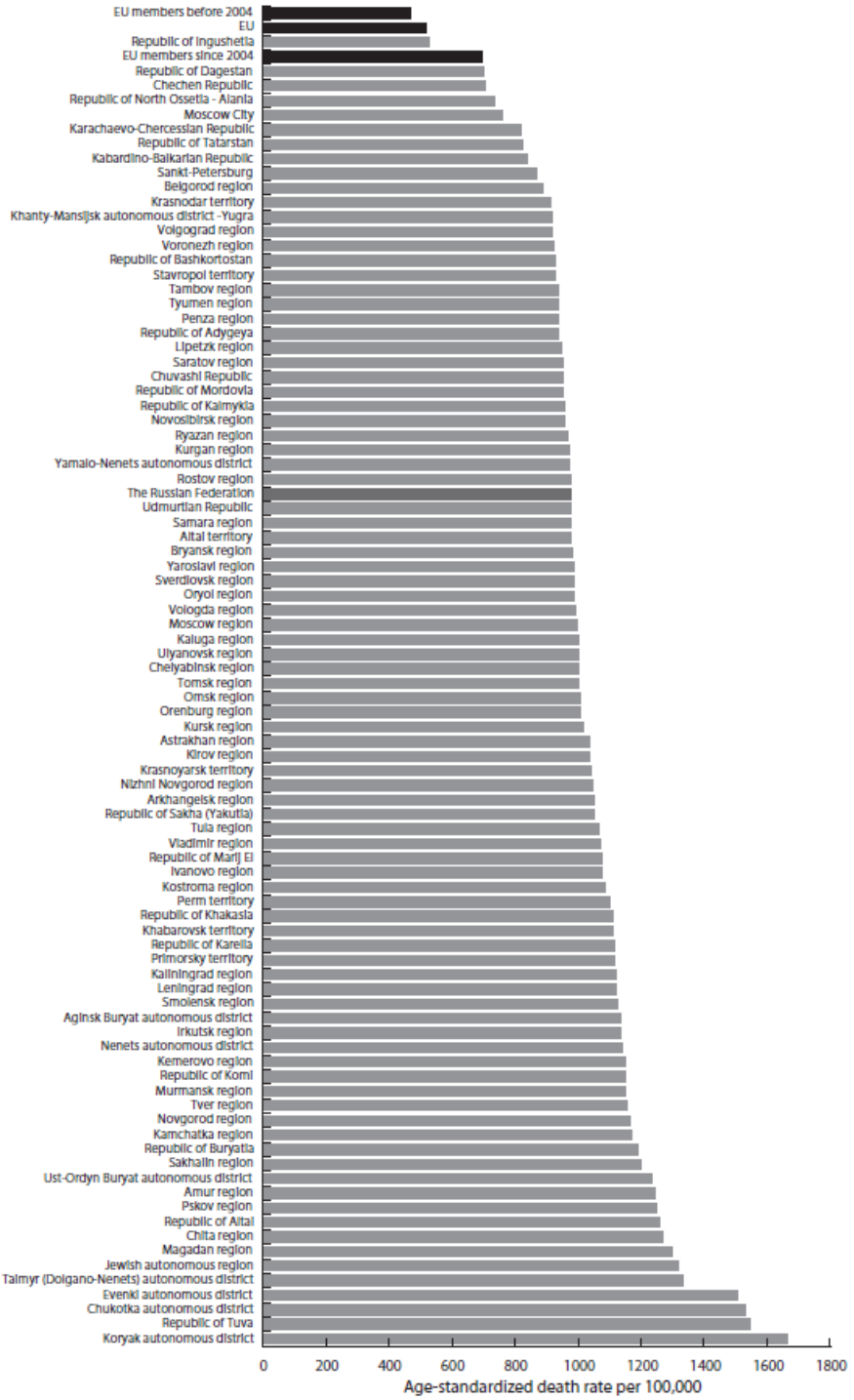
natural increase were almost exclusively regions originally established for indigenous or ethnic non-Russian minorities. Nationality data from the two most recent censuses—the 1989 Soviet census and the 2002 Russian Federation census—seem to corroborate this surmise: they would seem to indicate a disproportionate decline in the ethnic Russian population within the RF.

Between the 1989 and the 2002 censuses, the present-day Russian Federation's population fell from 147 million to about 145.2 million, a drop of about 1.8 million. Over that same period, the reported share of ethnic Russians within the country fell as well: from 81.5 percent to 79.8 percent.[vi] These numbers implied a drop in the ethnic Russian population of the RF from just under 120 million to just under 116 million—a decline of nearly 4 million persons, over twice the reported countrywide population decline for the period in question. But we should remember but the Russian Federation also absorbed a net influx of perhaps 5 million or more immigrants during those same years—and many millions of the new immigrants appear to have been ethnic Russians from the "near abroad" (former Soviet republics). Without that influx, in other words, the Russian Federation's population of Russians would have dropped much more dramatically during those years. According to Goskomstat data, for example, between 1989 and 2005, net in-migration by ethnic Russians accounted for 3.5 million out of a total net inflow to the Russian Federation of 5.3 million net newcomers.[vii]

We will have more to say about the impact of migration on post-Communist Russia's demographic profile in a moment. For now, we may simply note that absent immigration, the Russian Federation's ethnic Russian population might have declined by much more between 1989 and 2002 than the notional 4 million decline suggested by national census data. A driving force behind Russia's depopulation, in other words, looks to be the demographic decline of the Russians themselves. Indeed: in aggregate, official statistics indicate the non-Russian population of the RF actually increased in size somewhat between 1989 and 2002.

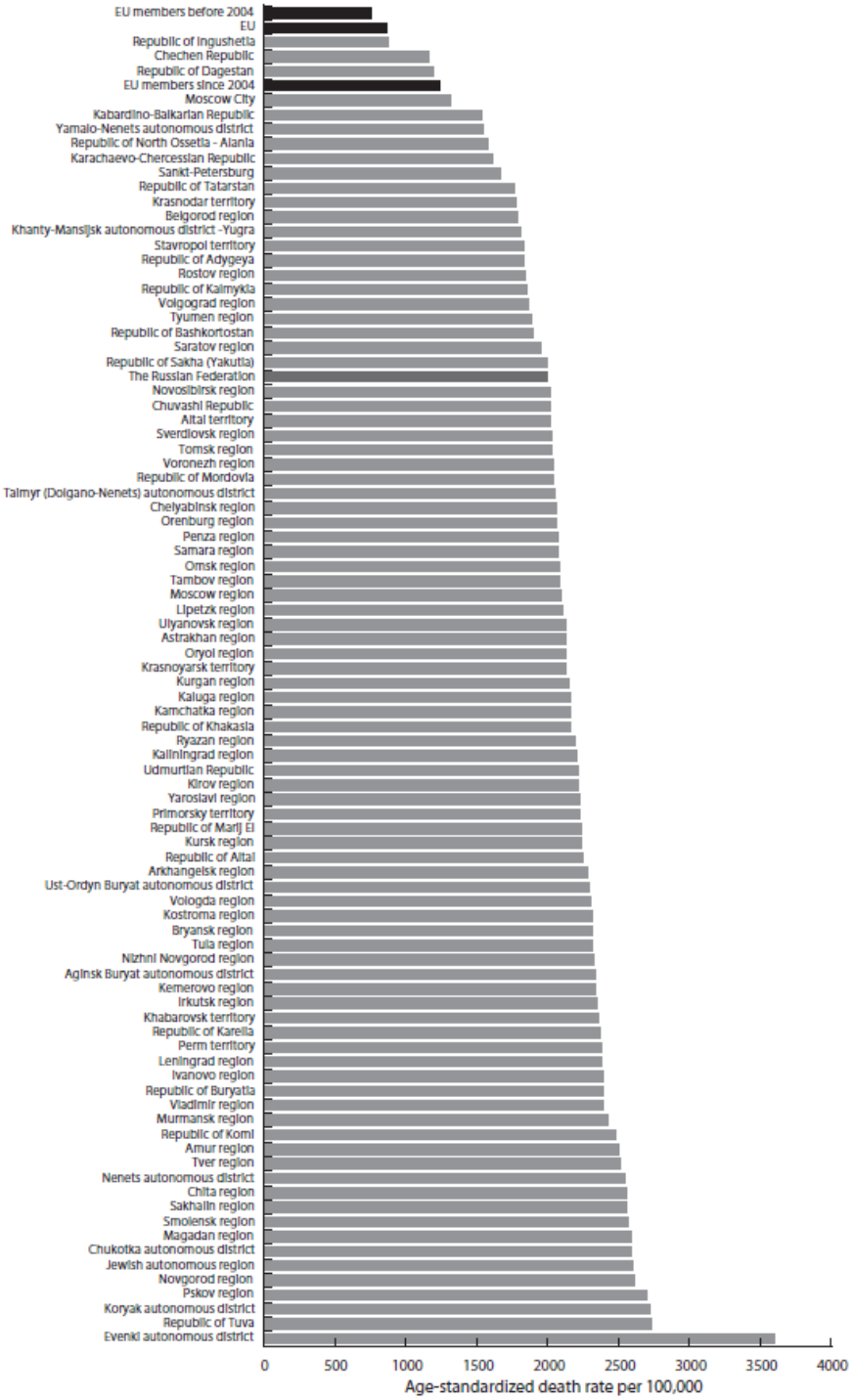
To what extent does excess or premature mortality seem to vary over this vast and diverse country? Data from Goskomstat and the WHO Regional Office for Europe's European Health for All Database (HFA-DB) help us to answer this question.[viii] These sources offers estimates of age-standardized mortality for the Russian Federation at the *oblast* (or provincial) level, and for the rest of the European region, respectively-- calculating these mortality rates against a common "European standard population"[ix] model structure, so that the death rates for Russia's diverse regions will be in principle comparable with corresponding mortality rates from other locales in the WHO-Europe Region. The WHO HFA-DB offers regional mortality data for both Russia and Western Europe, but as of this writing, that series is updated only through the year 2001. By relying upon Goskomstat data for Russian regional mortality patterns and DFA-DB data for requisite EU comparisons, we can examine the regional dimensions of the Russian mortality crisis (in conjunction with come international benchmarks) for the year 2006 in Figures 9 and 10.

Figure 9: Age Standardized Death Rates for All Causes, Females, 2006: Russia by Oblast or region vs. EU



Sources: Russian Demographic Yearbook 2007, Goskomstat & WHO Health for All Database

Figure 10: Age Standardized Death Rates for All Causes, Males, 2006:
Russia by Oblast or region vs. EU



Sources: Russian Demographic Yearbook 2007, Goskomstat & WHO Health for All Database

As is immediately apparent in these graphics, pronounced regional variations characterize age-standardized levels of aggregate mortality (deaths from all causes) for both males and females in Russia nowadays (2006). While the particulars for the two stories differ, the general storyline in much the same. In each case, the region with the highest death rates suffers from mortality levels well over twice as high as for Russia's lowest mortality provinces. In both of these stories, further, Moscow and St. Petersburg, the nation's very largest and most prosperous metropolitan areas, enjoy decidedly better than average mortality levels (with Moscow's being consistently lower of the two). And curiously, the regions immediately surrounding Moscow and St. Petersburg turn out to be areas of unusually poor health, even in Russia's awful current context.

In Moscow oblast, age-standardized death rates fall lie distinctly above the Russian national average—for males and females alike. For its part, age standardized mortality in Leningrad oblast in 2006 was over 27 percent higher for females and nearly 43 percent higher for males than in adjacent St. Petersburg. Clearly, proximity to affluence and amenities did not confer any health advantages on suburban Moscow or St. Petersburg. Controlling for differences in population structure, indeed, the total death rate reported for Leningrad oblast in 2006 was a chilling 19 percent higher for males and 15 percent higher for females than Russia's already dismal national average. To go by the metric of mortality, residents of suburban St. Petersburg would have been better off if they had lived in Siberia.

There appear to be some broader regional patterns in Russia's more local mortality differences. Goskomstat provides age-standardized mortality rates for 88 oblasts and territories within Russia for the year 2006. For males, 7 of the 10 regions with the very highest mortality were to found in remote Siberia or the harsh Russian Far East. (For females, 9 of the 10 regions with the country's worst mortality tolls were likewise in Siberia and the Russian Far East in 2006.) But it is worth noting that the country's westernmost, "European" areas generally tend to have mortality levels above the national average. These oblasts are representative of what might be called "the Russian heartland": they include some of the earliest territories of the Russian state, places of tremendous cultural and historical significance in their "Russian-ness", and areas that remain today overwhelmingly Russian in terms of ethnicity.

By contrast, the country's "healthiest" (or perhaps more accurately, least unhealthy) regions, to go by these mortality data, look to be Ingushetia, Chechnya and Dagestan—a localities peopled overwhelmingly not simply by non-Russian ethnicities, but by folk of Muslim descent or cultural heritage. This speaks to a broader pattern: for 7 of the 10 country's lowest-mortality provinces for men, and 8 of the 10 lowest for women, are likewise places with sizeable non-Russian ethnic populations including a considerable representation of peoples from Muslim cultural traditions. Exceptionally wealthy Moscow—with a reported capita income roughly three times the national level—is one of only two predominantly "Russian" regions to rank at this better end of the country's health spectrum for both males and females. (The other place is St. Petersburg.)

These regional differences in mortality are meaningful in themselves, and perhaps as well suggestive of some of the underlying factors and tendencies generating mortality differentials

within Russian society today. But what is required to place these differentials in perspective is, in fact, some perspective. For when all is said and done, a view possessed of perspective will corroborate the critical fact that Russia's regional variations in mortality are rather modest in comparison to the differential between Russia and other European countries.

It is not that Russia's regional mortality differentials are insignificant—Figures 9 and 10 attest directly to the contrary. Rather, the point here is that the most dramatic regional mortality differentials involving Russia are not internal, but external: not the ones within the country, but instead the ones that separate the country as a whole from Europe (and for that matter, the rest of the Western world).

Consider, to begin, the health situation in Moscow. Age-standardized mortality rates there in 2006 were about 22 percent below the national average for females, and 34 percent below the national average for males. This made Moscow one of the very healthiest places to live—if, of course, one had to live within the Russian Federation. But Moscow's death rate for women that same year was over 60 percent higher than the comparable rate for the 15 Western European countries that had joined the European Union before the EU's rounds of expansion in 2004 and after. In Moscow, similarly, the mortality level for men in 2006 was over 70 percent higher than in Western Europe's (as represented by these "old" EU members).

Remember: Moscow is one of Russia's very most prosperous and developed regions. In terms of per capita income, it in fact appears to be on par with some Western European populations (after making the appropriate adjustments for purchasing power parity). Yet even more dismaying may be the comparison between Moscow and the new EU members. For males and females alike, age-standardized mortality is higher in Moscow than in the "new" EU on average—even though the average PPP-adjusted, population-weighted income levels in that collection of countries is today far lower than in Moscow itself. We are accustomed to thinking that "health equals wealth" in the modern world, and vice versa. The mortality situation in Moscow today may provide a conspicuous local exception to this global generalization.

Consider, further, St. Petersburg—Russia's second largest city, her second most affluent metropolis, and her second-healthiest urban agglomeration. St. Petersburg's death rates in 2006 were almost 90 percent above the EU-15 level for females, and no less than 110 higher for males. In relation to the "new" EU states, the overwhelming majority of whose populations live in post-Communist societies, St. Petersburg's age standardized mortality is 25 percent higher for females and 40 percent higher for males. These are truly stunning differentials--but perhaps not really surprising ones, given what we have already seen of St. Petersburg's life expectancy in comparison with Third World urban centers.

Dagestan and Chechnya may have reported the very lowest (credible) death rates for any Russian regions in 2006[x], but these were over 50 percent higher for women and over 60 percent higher for men than the corresponding average levels prevailing throughout the EU 15 that same year. Death rates in "healthy" Dagestan, further, were 24 percent higher for females

and 45 percent higher for males than the corresponding levels reported for Denmark, the Western European country with the very highest mortality rates as of 2006 (Denmark).

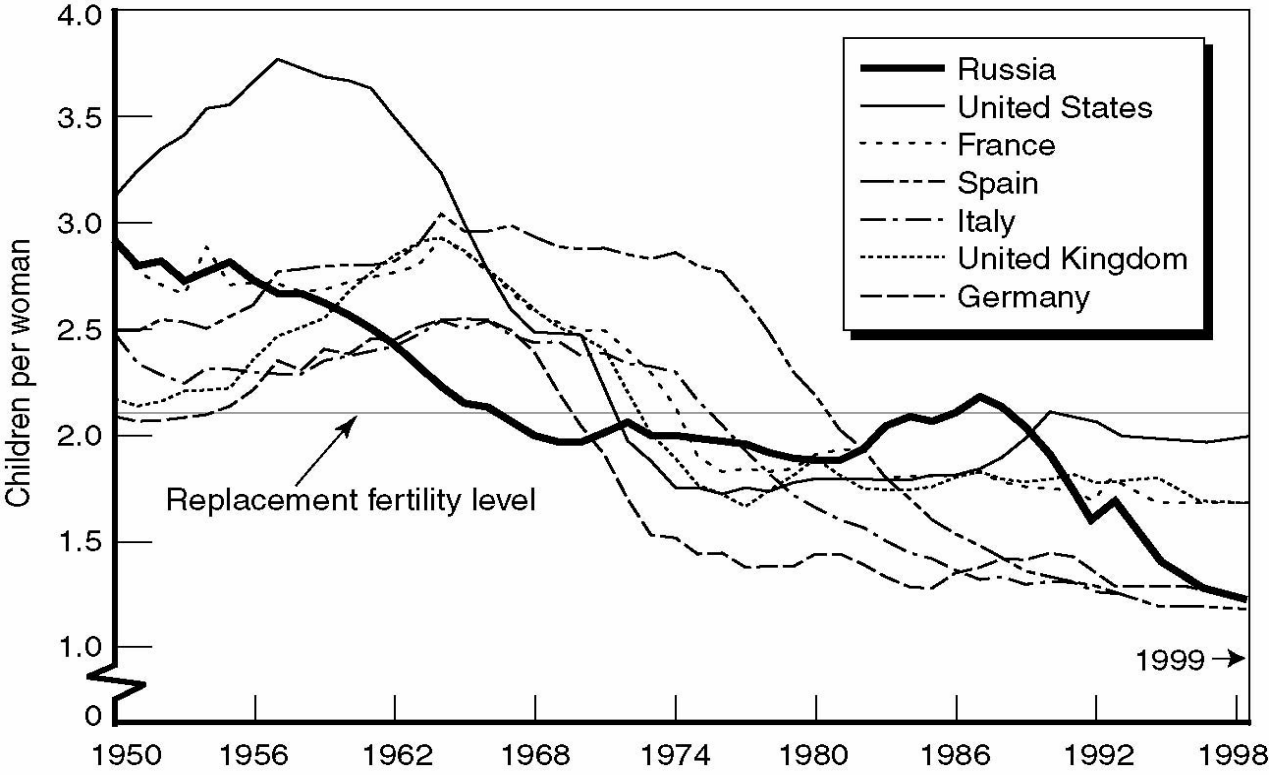
In effect, there was no mortality overlap whatever between Western Europe and Russia, big intra-regional variations in mortality within both of those geographic zones notwithstanding. If we could somehow transport them through space, Western Europe's very worst health region would immediately qualify as Russia's very best—and vice versa. Without minimizing the importance of understanding the reasons why some regions in Russia have higher, or lower, mortality levels than others, the key finding in a geographical review of mortality differentials within the Russian Federation today is the overarching dreadful sameness of the tableau---the relative lack of differences in death levels from one part of the country to the next.[xi] From one end to the other in world's largest country, astonishingly high death rates are the unremitting norm.

Fertility Trends in the Russian Federation

Russia experienced a dramatic drop in births during the "transition" period after the end of Soviet Communism, to be sure. But Russia's low levels of childbearing today cannot be attributed entirely to "systemic shock". To the contrary: low levels of fertility have been characteristic of modern Russia, both under Communist rule and in the years since Communism ended. In the days of Khrushchev and Brezhnev, Russia's period ("snapshot") total fertility rate (or TFR—a synthetic measure of births per woman per lifetime, taking age-specific rates of childbearing in all childbearing ages for a given calendar year) was among Europe's very lowest. The same is true today. And the same is true if we examine "completed" TFRs (a measure which eliminates potential distorting effects of intervening changes in birth timing and spacing decisions): here once again, Russia's fertility trends have consistently ranked among Europe's very lowest. Russia's long-term fertility patterns, in short, look entirely "normal" in a European content—although they are close to the lower boundary witnessed in Europe, and stand far below the levels required for long-term population replacement absent compensatory net immigration.

Figure 11 places Russia's trends in a broader perspective, comparing and contrasting them against total fertility rates of countries from Western Europe for the decades since 1950.

Figure 11: Total Fertility Rates in Russia vs. Selected Western Nations, 1950-2000



SOURCES: Vishnevsky (1996) for pre-1993 data; U.S. Census Bureau (2000) for post-1992 data.

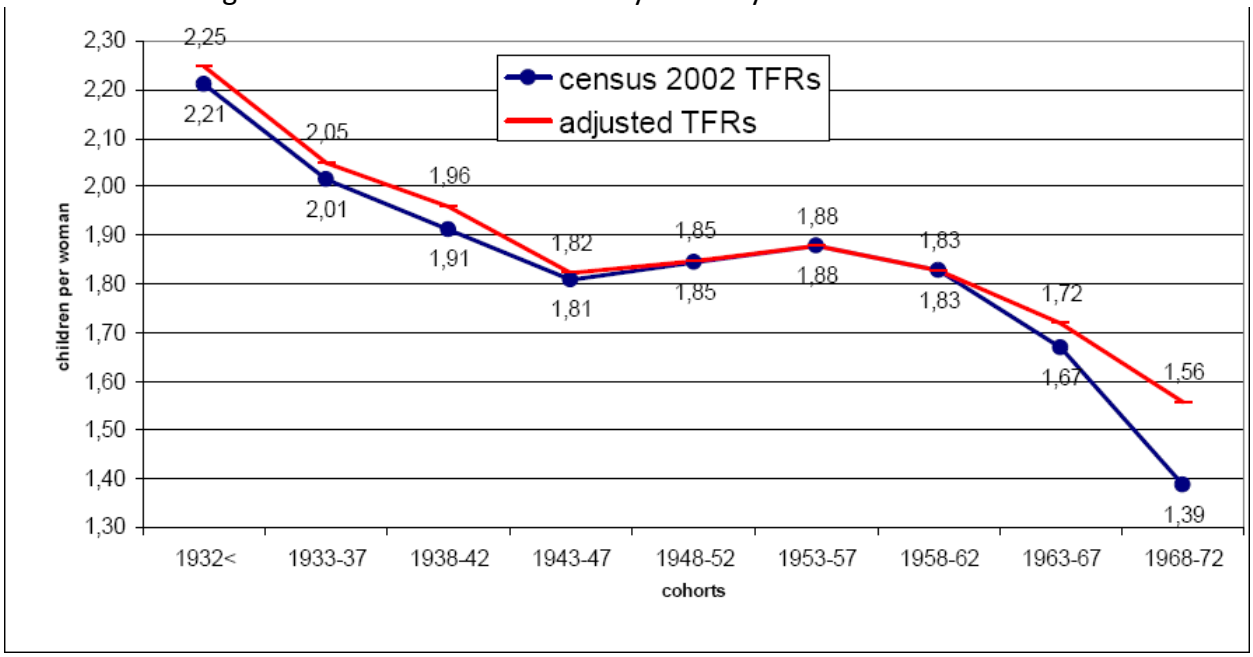
From Julie DaVanzo and Clifford Grammich, Dire Demographics: Population Trends in the Russian Federation. RAND, 2001.

In the late 1980s, near the end of the Communist era, Russia qualified as a high-fertility society within the pan-European space: in 1987, none of the Western European countries listed in this chart or the United States had higher TFRs. By 2000, on the other hand, Russia would look like a low-fertility European society—by then, there were only a few European societies with lower TFRs.

If we looked only at these endpoints, we might conclude that Russia's fertility collapse over the past two decades was a consequence of post-Communism. But a longer record than that is available for inspection—and it presents a rather more qualified and nuanced picture of Russia's long-term fertility changes. As may be seen, back in 1960, Russia also had one of the lower European fertility levels, just as it does today. To judge by this longer perspective, the Gorbachev era may have been the aberration in Russian fertility trends—not the current period. For whatever (complex) reasons, Russia seems to have evinced relatively low fertility

levels for a European country over much of the past half century: that is to say, both under Communism, and after it.

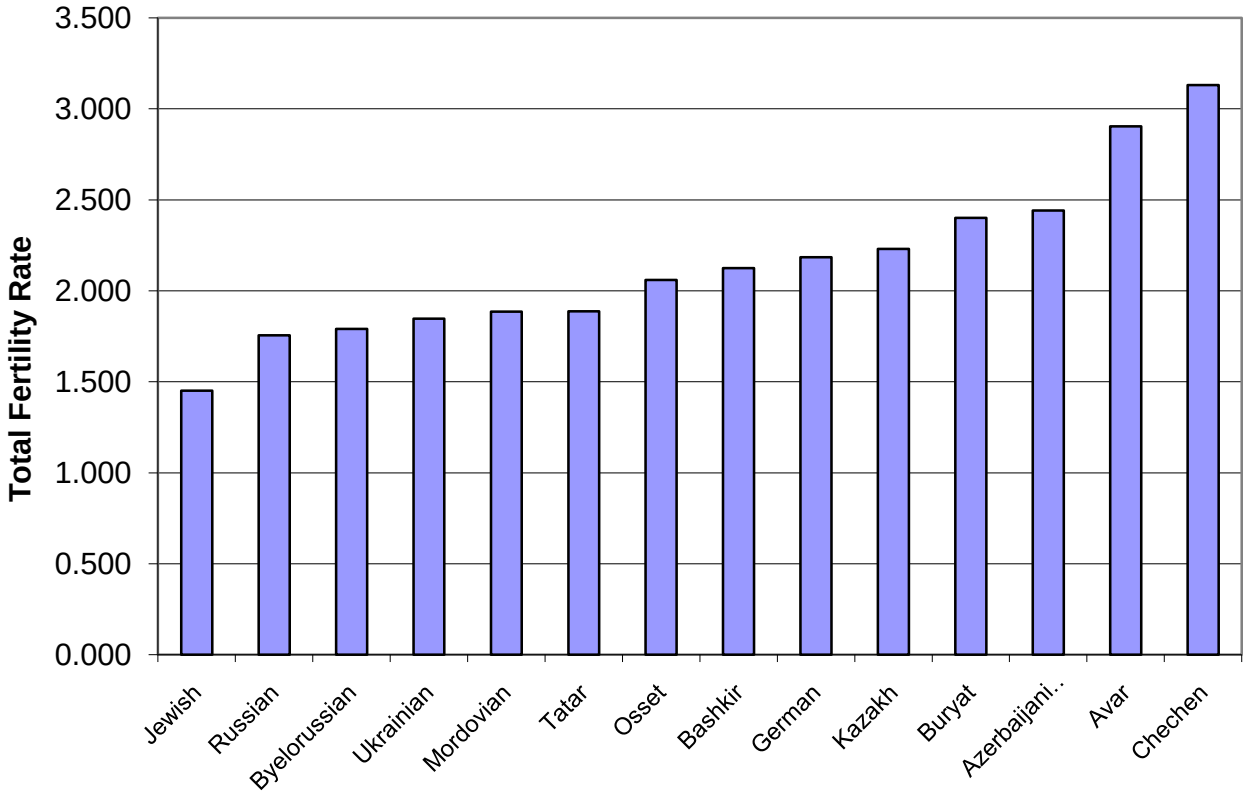
Figure 12: RF Cohort Total Fertility Rates by Birth Year Of Woman



Source: Irina E. Kalabikhina, "Fertility in Russia," Moscow State University, Picture 3, available at http://www.infostat.sk/vdc/epc2006/papers/epc2006s60535.pdf

Further decomposition of the Russian Federation's completed fertility levels by ethnicity is possible on the basis of the 2002 Census, and is presented in Figure 13. According to these data, Russian Federation women born in 1958-62 averaged 1.82 births—but self-identified Russians averaged just 1.76. Of the 43 ethnic groups or nationalities in Russia for whom completed fertility was calculated, only Russia's Jews reported a lower level of fertility. At the same time, it should be noted that something like a country-wide convergence over time in fertility trends is also evident from the 2002 data: the statistical dispersion in fertility levels by ethnicity for women born between 1958 and 1962 was just one fourth as great as it had been in their mother's generation (birth cohorts 1933 to 1937).[xii]

Figure 13: Total Fertility Rate for Women Born 1958-62:
Russian Federation, by Nationality (2002 Census)



Source: Derived from Irina E. Kalabikhina, "Fertility in Russia," Moscow State University, Table 1, available at http://www.infostat.sk/vdc/epc2006/papers/epc2006s60535.pdf

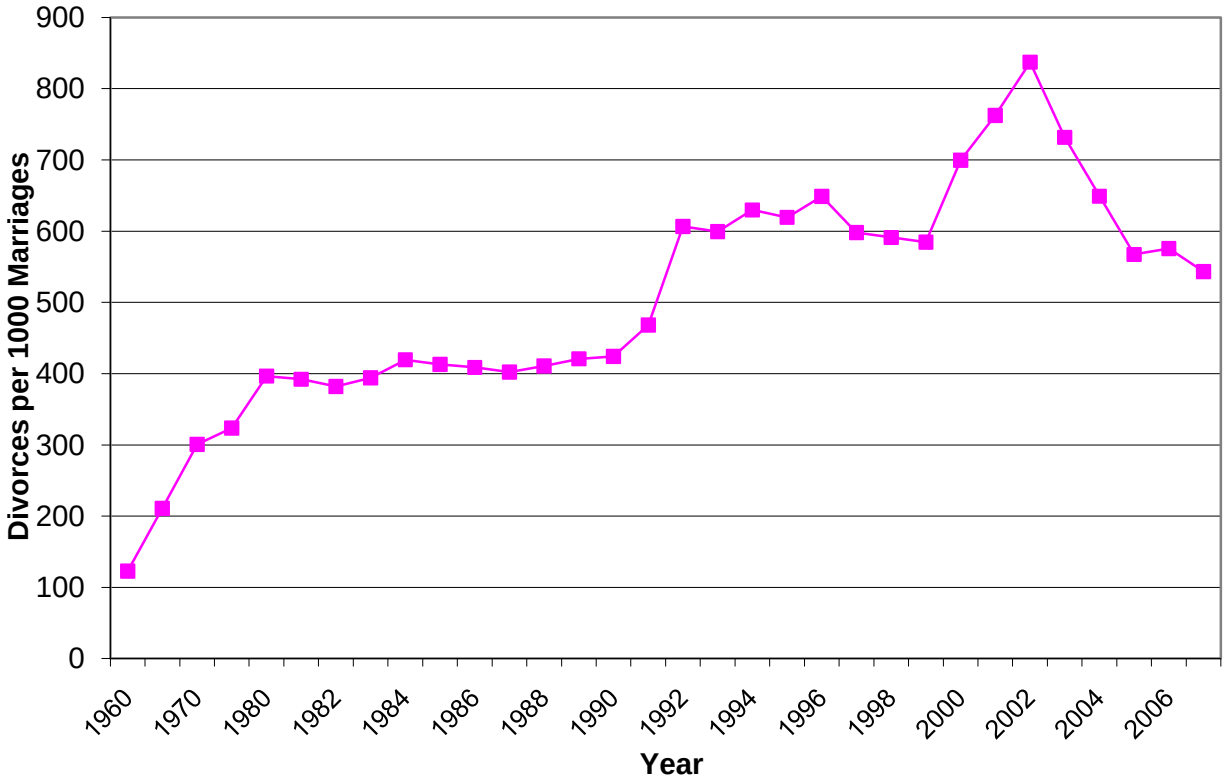
In short: extreme sub-replacement fertility is clearly new to peacetime Russia, but sub-replacement fertility, just as manifestly, is not. This point needs to be kept in mind in any discussion about future fertility prospects for the Russian Federation—not least the Kremlin's bold new "demographic concept" for reversing the country's demographic decline.

The Russian Federation's changing norms on the family are also underscored by trends in marriage and divorce rates. Marriage is not only less common in Russia today than in the recent past: it is also markedly less stable. This much can be divined from aggregate data in marriage and divorce for the country as a whole.

In 2005, the total number of marriages celebrated in Russia was down by nearly one fourth from 1980 (a fairly typical Brezhnev-era year, at least for marriages); the country's crude marriage rate fell by 27 percent over this period. On the other hand, the total number of divorces recognized in Russia has been on an erratic rise over the past generation, with crude divorces rates trending unsteadily upward since the end of Communism. Consequently, the ratio of divorces to marriages has tilted markedly over the past generation, rising from under 400 divorces per 1000 marriages in 1980 to a peak over 800 in 2002. The reported ratio fell

substantially after 2002—but was nonetheless close to 600 as of 2005 and 2006. A high crude ratio of divorce to marriage prevails across practically all of the Russian Federation today. As of 2007, that ratio was below 500 in just 16 of Russia's 86 reporting oblasts, republics and okrugs: and the ratio was said to be at its lowest in some of the traditional areas of Muslim heritage—Dagestan, Ingushetia, and Chechnya.

Figure 14: Divorces per 1000 Marriages (1960-2007), Russian Federation



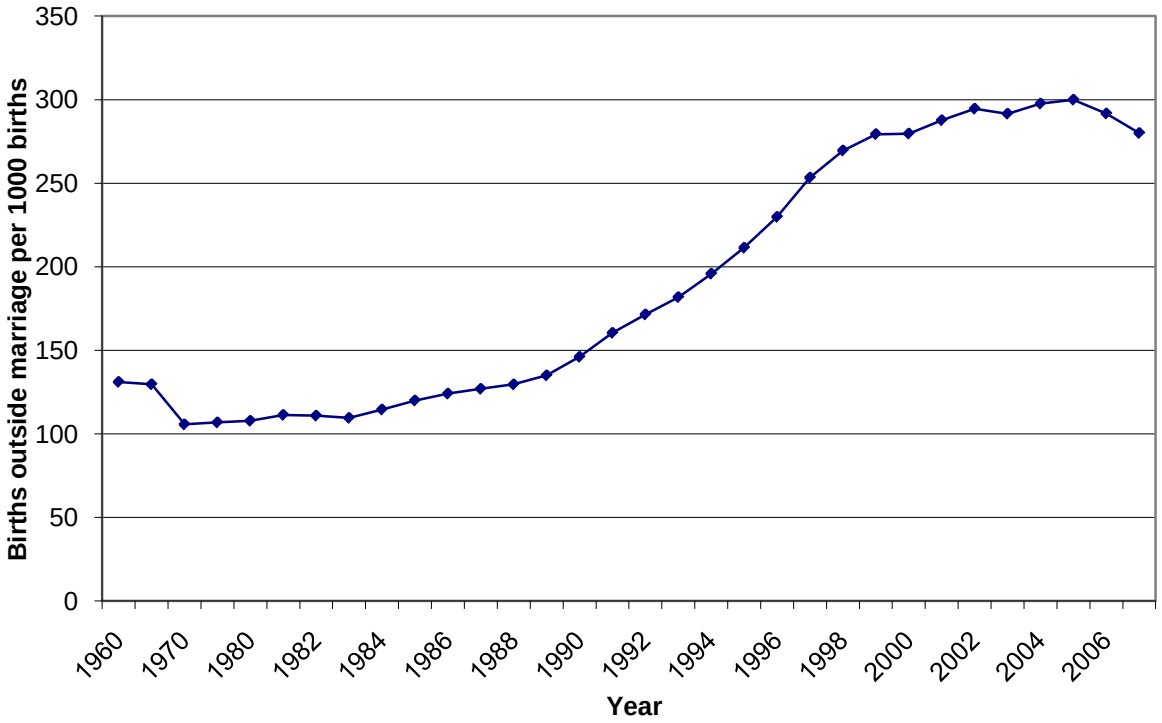
Source: The Demographic Yearbook of Russia: 2008 Statistical Handbook, State Committee of the Russian Federation on Statistics (Goskomstat of Russia), Moscow, 2008, Table 3.1; accessed February 25, 2010.

This crude ratio of divorces to marriages, we should probably caution, does not offer an accurate indication of the true probability that marriages will end in divorce—either in Russia or any other land. The annual number of marriages and divorces constitute a flow, whereas the proper denominator for such calculations would be a stock: namely, the total number of extant marriages in a society. Conceptually, the appropriate measures for gauging the prevalence of marriage and the likelihood of divorce would be what demographers call the "total marriage rate" and the total divorce rate": the former measuring the likelihood, under prevailing age-specific marriage patterns, that a random women could expect to have been married by the time she reached age 50, the later utilizing age-specific divorce data to calculate the odds that a married woman would find herself divorced by age 50.

Taken together, Russia's total marriage and total divorce rates indicate an extraordinary—and extraordinarily rapid—shift in family formation patterns immediately upon the end of the Soviet era. In 1990—that is to say, in the late Gorbachev era—universal marriage was still the norm, and while divorce was very common, given prevailing nuptiality and divorce patterns, a distinct majority of Russian Federation women (60 percent) could expect to have entered into a first marriage and still remain in that marriage by age 50. By 1996, the picture was radically different: given the sudden plunge in nuptiality and the continuing rise in divorce, the new patterns for the country would have implied that barely a third of Russia's women (34 percent) would get married, and stay in that same marriage until age 50!

The Russian Federation's changing norms on the family are further underscored by trends in out-of-marriage childbearing. In 1980, fewer than one newborn in nine was reportedly born out of wedlock. By 2005, the country's illegitimacy ratio was approaching 30%--almost a tripling in just 25 years. Interestingly enough, in Moscow and Saint Petersburg, the nation's most affluent and "modern" population centers, out-of wedlock births accounted for a lower proportion of births (around a quarter of the total) than for the nation as a whole. Conversely, and no less surprising, in Russia's rural regions, births to unmarried mothers accounted for a distinctly higher share of childbearing—fully 34 percent as of 2005—than in the cities. Russia's highest illegitimacy ratios nowadays are being registered in some of the country's most remote regions, with a number of territories in Siberia and the Russian Far East reporting half or more newborns registered to unmarried parents.

Figure 15: Non-marital births per 1000 births, Russian Federation 1960-2007



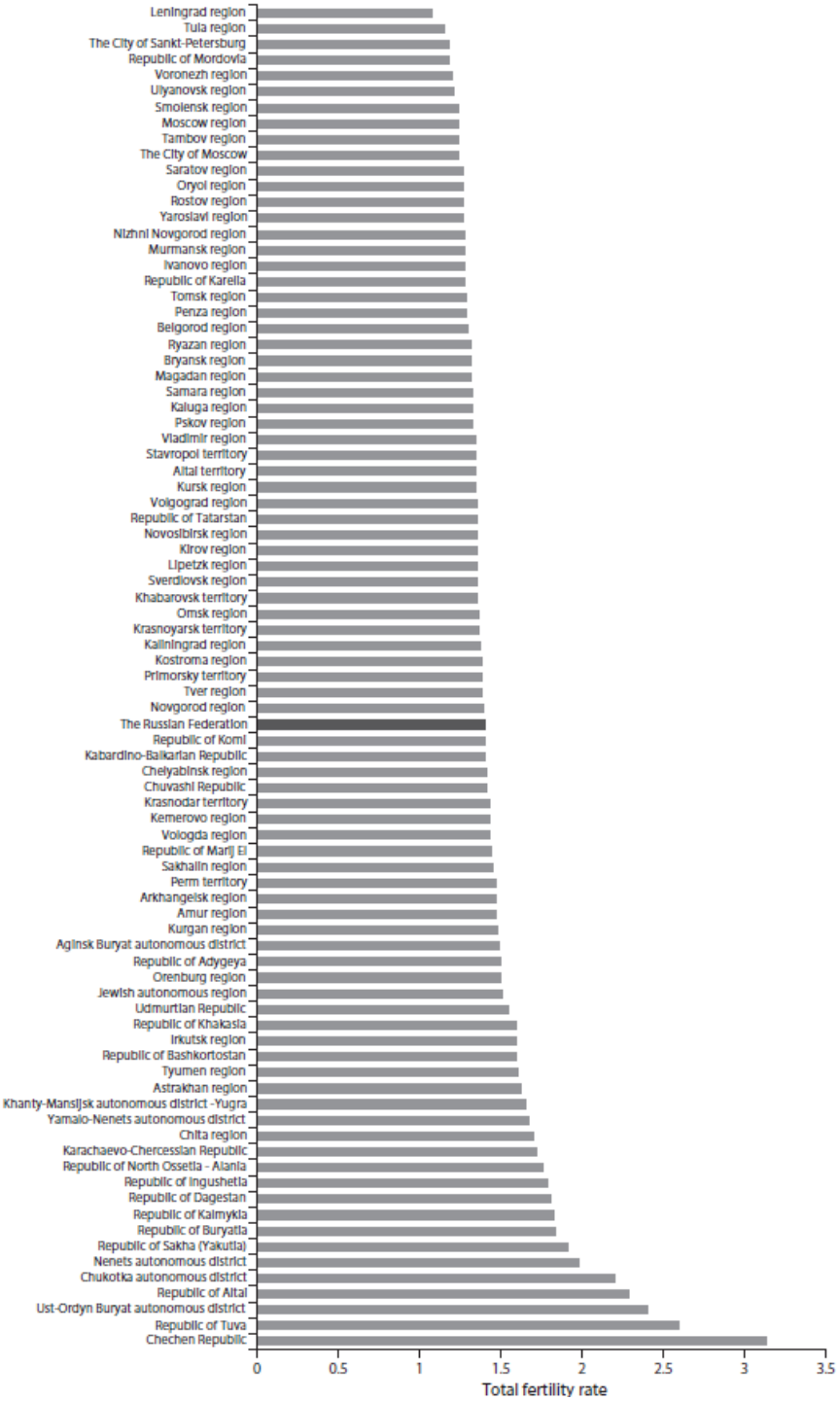
Source: The Demographic Yearbook of Russia: 2008 Statistical Handbook, State Committee of the Russian Federation on Statistics (Goskomstat of Russia), Moscow, 2008, Table 4.6; accessed February 25, 2010.

The increasing likelihood that a Russian baby will be born to parents not themselves married, however, is only one aspect of the profound change in family patterns that can be highlighted in contemporary Russia. Marriage is not only less common in Russia today than in the recent past: it is also markedly less stable.

Regional Trends in Russian Fertility

The regional contours of Russia's new fertility situation are illustrated in Figure 16. Perhaps the strongest impression this graphic conveys of the pervasive regularity within Russia's diverse regions of the current patterns of steep sub-replacement fertility. By standard statistical measures, there appears, perhaps surprisingly, to be quite fair degree of uniformity in fertility levels among Russia's oblasts—certainly much less variation with respect to fertility regimens than we saw in regional patterns of natural increase.[xiii] As of 2007, just 5 of the 84 provinces for which data were available recorded total fertility rates of 2.0 or more, while 60 of the regions reported TFRs below 1.5.[xiv] Moscow's reported rate was only 1.24, and St. Petersburg's was just 1.19: the very lowest level for the nation, at 1.08, was set by the area immediately surrounding St. Petersburg, Leningradskaya oblast. These are among the very lowest fertility levels being registered around the globe nowadays—not so different from with estimated 2007 TFR of the current world's lowest-fertility countries, Singapore (1.07) and Taiwan (1.12).

Figure 16: Total fertility rate by region: Russian Federation, 2007



Source: Goskomstat, *The Demographic Yearbook of Russia 2008 (Moscow: FSUE, 2008), table 2.8*

Perhaps not surprisingly, the very highest fertility rate within Russia is registered nowadays in the Chechen Republic. Given Chechnya's reputation within Russia for fearsomely high

fecundity, purportedly supported by Chechen ethnic heritage and Muslim background, what may be somewhat surprising is how the actual level of fertility reported by Russia's very highest TFR region looks when placed in international perspective. The Chechen Republic's total fertility rate in 2006 was 2.77, and 3.18 in 2007. That would be well above the replacement rate: demographers tend to use a TFR of 2.1 as the notional demarcation for replacement (although that is not actually a strict numerical benchmark). But Chechnya's fertility rate is far below the levels prevailing today in such traditionally Muslim countries as Pakistan (where the Census Bureau's estimate of 2007 TFR is 3.7) or Iraq (4.1).[xv] In an American context, moreover, such childbearing patterns would not at all look unfamiliar. Chechnya's registered fertility level in 2006, for example, is only a bit higher than that of the state of Utah (2.6). The Chechen region's fertility level in 2007, moreover, is not much higher than the TFR currently registered in the United States for the Mexican-American population (3.0)[xvi], who comprise a much larger share of the US population than do Chechens in the Russian Federation. As for Dagestan—the region with the largest population of peoples from culturally and historically Muslim groups—current TFRs in 2007 reportedly averaged just 1.8—a level lower than was recorded in 2006 in such hardly unexceptional American states as Connecticut, Minnesota and Kansas, and indeed lower than America's nationwide average for its "Anglo" (non-Hispanic Whites) population.[xvii]

If Chechnya's fertility looks amazingly high to Russians today, it may be partly because Russian Federation fertility levels overall are so remarkably low. Indeed: apart from Chechnya, not a single region in the vast Russian expanse reported above- replacement childbearing patterns in 2005.[xviii] Even historically "Muslim" Dagestan, Russia's region containing the country's single largest concentration of people who trace their ancestry to Islamic cultural roots (and itself comprised almost entirely of such people)[xix], reported a TFR in 2007 of just 1.81—a level well below America's officially estimated TFR that same year of 2.12.[xx] Suffice it to say that a country's fertility level must be very low indeed for a sub-replacement region such as Dagestan to be regarded as relatively prolific.

In 2006, in addition to Chechnya, two other regions had crept above net replacement—but their combined population of these two places that year was negligible (less than 200,000 persons—barely a tenth of one percent of the RF national total).[xxi] In 2007, the total number of regions registering above-replacement fertility rose to five—and the total 2007 population of these five spots, including Chechnya, was officially placed at under 2 million.[xxii] Evidently, over 98 percent of Russia's population that year resided in oblasts, republics, or autonomous districts and okrugs where childbearing patterns were not on course for replacement fertility.

The surfeit of births over deaths in most of those regions looks to be, at least for now, unsustainable. On existing fertility schedules and absent immigration, none of regions—apart from Chechnya—have reported consistently the sorts of fertility that would be necessary to avoid an eventual depopulation, all other things being equal.

Migration: Russia's and Unfamiliar New Dilemmas of Personal Choice

Despite the Russian polity's well-chronicled and widely lamented drift away from its initial liberal aspirations in the early years of the post-Communist era, the Russian population today almost certainly enjoys greater freedom to move about as they please—both at home and abroad—than at any previous time in the past several centuries, and perhaps even than at any previous juncture in their country's long and troubled history. This centrally important fact of demographic life should not be overlooked, for it holds true despite the past decade's consolidation of an increasingly unaccountable and closed political apparatus under the Vladimir Putin coterie over the past ten years. Unlike so much of the demographic terrain in contemporary Russia, furthermore, this enhancement of personal choice in the realm of migration is full of positive portent for both individual wellbeing and national economic potential.

The Russian population's unprecedented ease of movement today speaks in part—but only in part—to the broader, global revolution in transport and communications, which has made travel progressively cheaper and more commonplace the world over these past several decades. But the main factor, of course, has been political in character, as erstwhile state shackles that bound Russia's people have been loosen—or broken altogether.

International migration trends in post-Communist Russia: What we know and how we know it

What sorts of information on international migration does the Russian government collect, and how good are these data? Addressing these questions would seem to be of the essence before proceeding to any discussion of what the available statistics seem to say about patterns of international migration for Russia today.

Table 1: Main Migration Data Systems in Russia

		Authority	*Quality of data and methodology*	*Availability*
Main migration data systems in Russia				
2-11- parts of Central data bank of foreigners (in future)				
1	Current statistics of migrants (based on registration procedure) – both foreign and internal flows	Ministry of home affairs/ Federal statistics service	Unsatisfactory, considerable underestimation	Available
2	Data on permits on arrival for residence (foreigners) and departure for residence (Russian citizens)	Ministry of home affairs	Moderate. Not processed since 2002.	Was partially available up to 2002
3	Data on refugees and asylum seekers	Ministry of home affairs (Federal migration service- FMS)	Satisfactory	Available
4	Data on work permits for foreign employees and Russian citizens employed abroad via Russian employment agencies	Ministry of home affairs (FMS)	Unsatisfactory, considerable underestimation	Available
5	Data on residence permits and permissions for temporary residence	Ministry of home affairs (FMS)	No information on methodology	Not available
6	Migration cards statistics	Ministry of home affairs (FMS)	No information on methodology	Not available
7	Border statistics	Federal security service (Federal Border Service)	No information on methodology	Partially available
8	Data on foreign students	Ministry of science and education	Satisfactory	Available
9	Visas and invitations statistics	Ministry of foreign affairs	No information on methodology	Not available
10	Ministry of Taxes data	Ministry of Taxes	No information on methodology	Not available
11	Population Census	Federal statistics service	Satisfactory	Available

Source: Olga Chudinovskikh, Moscow State Lomonosov University, "Migration Statistics in Russian Federation: basic problems and possible solutions," PowerPoint presentation at UNECE/UNFPA/NIDI Workshop on Migration Statistics, January 24-28, 2005, available at www.unece.org/stats/documents/2005/01/migration/5.e.ppt. Accessed October 9, 2009.

Dr. Olga Chudinovskikh of the Laboratory of Population Economics and Demography at Moscow State (M.V. Lomonosov) University identifies 11 separate sources of statistical information currently being compiled by Moscow that relate to migration in and out of Russia, outlined in

Table 1. A multiplicity—indeed a far-flung and not entirely coordinated multiplicity—of organs, agencies and ministries are responsible for contributing to the country's statistical tableau on cross-border population movements. In addition to the Federal Statistical Service (Goskomstat) and the Federal Migration Service (a branch of the "Ministry of Home Affairs", or Interior Ministry), the generation of official Russian data on international migration involves the Ministry of Science Education, the Ministry of Taxes, the Ministry of Foreign Affairs, and even the FSB (the successor to the KGB).

To make matters worse, the numbers gathered for many of these data-series still lack the most basic degrees of methodological transparency. This is true of visa statistics, border control statistics, residence permit statistics, migration card statistics, and tax data. For better or worse, however, these methodological issues do not immediately pose problems for our research, since the information collected or those purposes are not available in any case to the general public.

Of the remaining sources of data on Russian migration, two of the most important, publicly available series are deemed to be of poor quality and reliability. These include the oft-cited figures on international migration from the Interior Ministry and Goskomstat, and the Interior Ministry's data on work permits for foreigners in Russia and Russians overseas. (An additional source of once-relatively reliable information—Interior Ministry data on permits for residence—reportedly stopped being processed in 2002.)

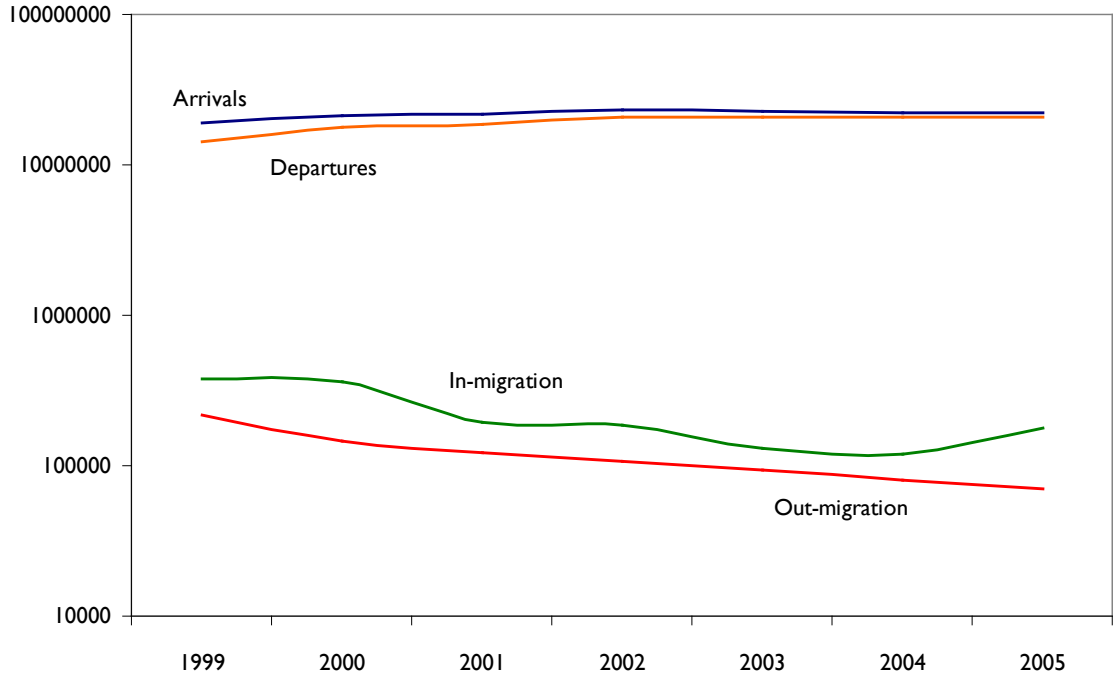
This leaves just three data sources that are both publicly available, and, in Chudinovskikh's judgment, of satisfactory reliability: data on refugees and asylum-seekers; data on foreign students; and census-based migration data (such as the stock of foreign born-born population living in Russia at the time of the national population count). Yet even here, as we will see with the census data on migration, some big questions about accuracy can be raised, without any entirely satisfactory answers.

It seems fair to say that the available data on immigration and emigration for the Russian Federation are highly problematic: incomplete, irregular, and riddled with contradictions and inconsistencies. While this may be disappointing, it should not be surprising. For today's modern societies with relatively sound vital registration systems, migration data are invariably the weakest link in the overall system of demographic statistics. In their manifest shortcomings and limitations, furthermore, we may note that Russia's migration data look more or less similar to the current figures on immigration being compiled in the rest of Europe and the non-European OECD countries.

This brief review of the availability and reliability of international migration data for the Russian Federation should underscore two points for us. First, we cannot simply take Russia's migration data as "given": they require more careful scrutiny than the birth and death numbers we have mainly used up to this juncture. Second: Shortcomings of Russia's migration data has likely resulted in underestimate of net immigration into the Russian Federation due to unauthorized and undocumented immigration—as is the case for the United States and the European Union.

Perhaps paradoxically, even as the official statistics for the post-Communist era were registering an ostensible slump in gross migration for the Russian Federation by comparison to the Soviet era, other official statistics were depicting a boom in international travel across Russia's borders (as Figure 17 indicates). In the year 2005, Goskomstat/Rosstat identified a total of just 177,000 immigrants relocating into Russia—but it recorded over 22 million entries into the country by international travelers.[xxiii] Furthermore, between 1993 and 2005, whereas officially registered immigration flows into Russia plunged by over 80 percent, reported cross-border travel into Russia jumped nearly fourfold. Clearly and incontrovertibly, vastly more people are traveling into—and out of—the Russian Federation nowadays than in Soviet times.[xxiv] When over one hundred times as many entrants as immigrants are being tabulated in by official authorities each year, the scope and scale for the potential under-reporting of both immigration and net migration should be immediately apparent.

Figure 17: Reported Arrivals and Departures;
and Reported In-migration and Out-migration in Russia, 1999-2005



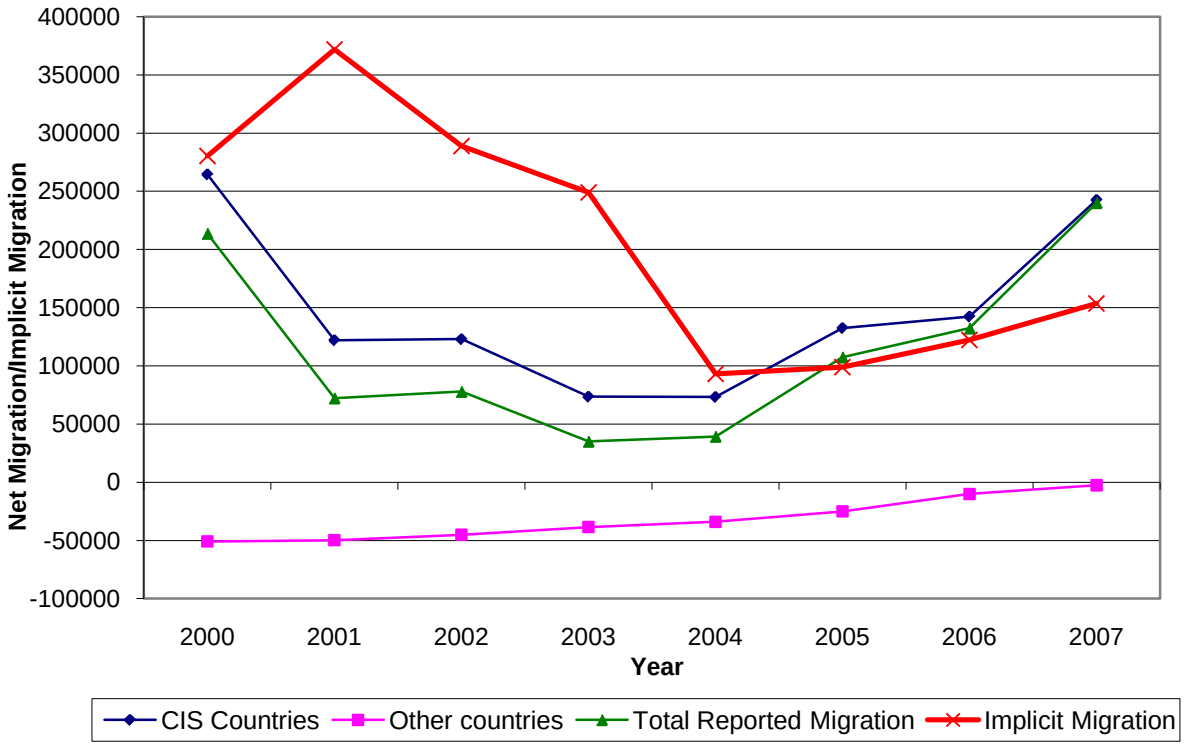
Sources:

Olga Chudinovskikh, Moscow State Lomonosov University, "Statistics of International Migration in the CIS Countries." PowerPoint presentation at United Nations Expert Group Meeting on Measuring International Migration: Concepts and Methods, December 4-7, 2006, New York United Nations Department of Economic and Social Affairs - Statistics Division, DESA, available at http://unstats.un.org/unsd/Demographic/meetings/egm/migrationegm06/DOC%206%20Moscow%20Univ%20CIS%20STATISTICS%20OF%20INTERNATIONAL%20MIGRATION%203.ppt. Accessed October 9, 2009. and Olga Chudinovskikh, Moscow State Lomonosov University, "Migration Statistics in Russian Federation: basic problems and possible solutions," PowerPoint presentation at UNECE/UNFPA/NIDI Workshop on Migration Statistics, January 24-28, 2005, available at www.unece.org/stats/documents/2005/01/migration/5.e.ppt. Accessed October 9, 2009.

"Net surviving migrants": an estimate of international migration flows based on official Russian data

It may be useful to offer one additional estimate of migration flows in the hope of diminishing rather than adding to the uncertainties confronting the reader. This metric we might term "net surviving migrants".

Figure 18: Net reported migration to Russia vs. "Implicit Migration", 2000-2007



Source: The Demographic Yearbook of Russia: 2007 Statistical Handbook, State Committee of the Russian Federation on Statistics (Goskomstat of Russia), Moscow, 2007, Tables 1.3, 7.1, and 7.4, 2007 migration data from Goskomstat website, table 5.9, available at http://www.gks.ru/bgd/regl/b08_12/IssWWW.exe/stg/d01/05-09.htm

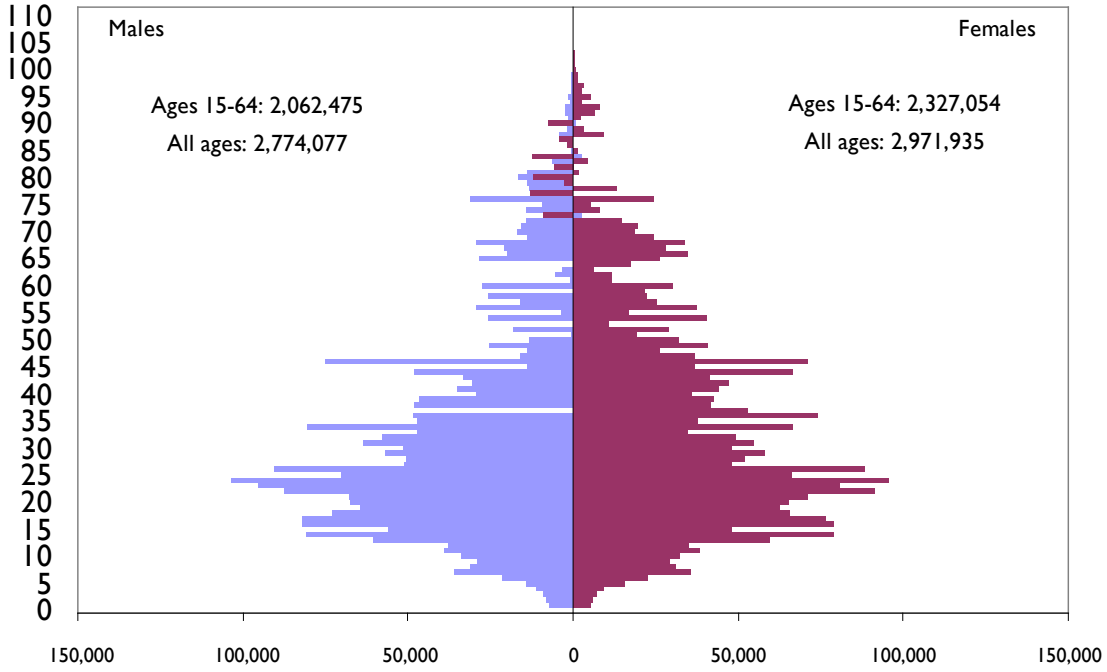
Since we have detailed estimates of Russian population for key dates (the 1989 and 2002 censuses), additional official estimates of population structure for other useful dates (e.g., January 1, 2007, the most recent date for which an officially estimated age-sex breakdown of the Russian population that concords with available mortality data), fairly accurate birth totals from 1989 onward, and carefully estimated age-specific Russian death rates by year for 1989 through 2006 (available from the Human Mortality Database), we can calculate the expected number of survivors of the 1989 census by age and sex for future years, under the assumption

of zero migration. We can then subtract those totals from Russia's actually enumerated or actually estimated population totals by age and sex in subsequent years. Finally, for those born after the 1989 census, we use official annual birth data from 1989 onward and annual mortality schedules from HMD to complete the overall calculation of the Russian Federation's "net surviving migrant" population for the 1989-2006 period.

This metric, of course, does not quite provide an estimate for the post-Communist period per se, since we are obliged, by dint of data limitations, to use the 1989 census year as the starting point for our calculations, rather than the actual end of the Soviet era (late December 1991). Our calculations are perforce for the period 1989-2006: and as such, these figures must be used with the understanding that they offer a necessarily imperfect first approximation of the actual but unobserved trends during the first decade and a half of Russia's post-Communist experience (1992-2006). This metric, furthermore, cannot measure or proxy *total* net migration flows for the period under consideration. Our method can only estimate the number of *survivors* from the post-1989 migration flows as of the beginning of 2007. The period under consideration spans 18 calendar years: inevitably, some (perhaps considerable) proportion of the contingent of migrants over who had arrived in Russia during those years would be expected to die of accidents or natural causes before its end. Our metric will necessarily understate overall net migration flows into Russia in direct proportion to the pertinent survival schedules for these newcomers. What this metric will offer, quite simply, is a reading of the role migration has played since 1989 in compensating for Russia's domestically-generated depopulation trends.

The results of our calculations are presented in Figure 19. As of the start of 2007, the Russian Federation's estimated population was about 5.7 million higher than would have been the case if the country had experienced its selfsame mortality patterns from 1989 through 2006, but in the absence of all international migration.

Figure 19: Indicative Net Immigration, by age and sex, Russia, January 1, 2007
("Estimated Net Surviving Migrants")

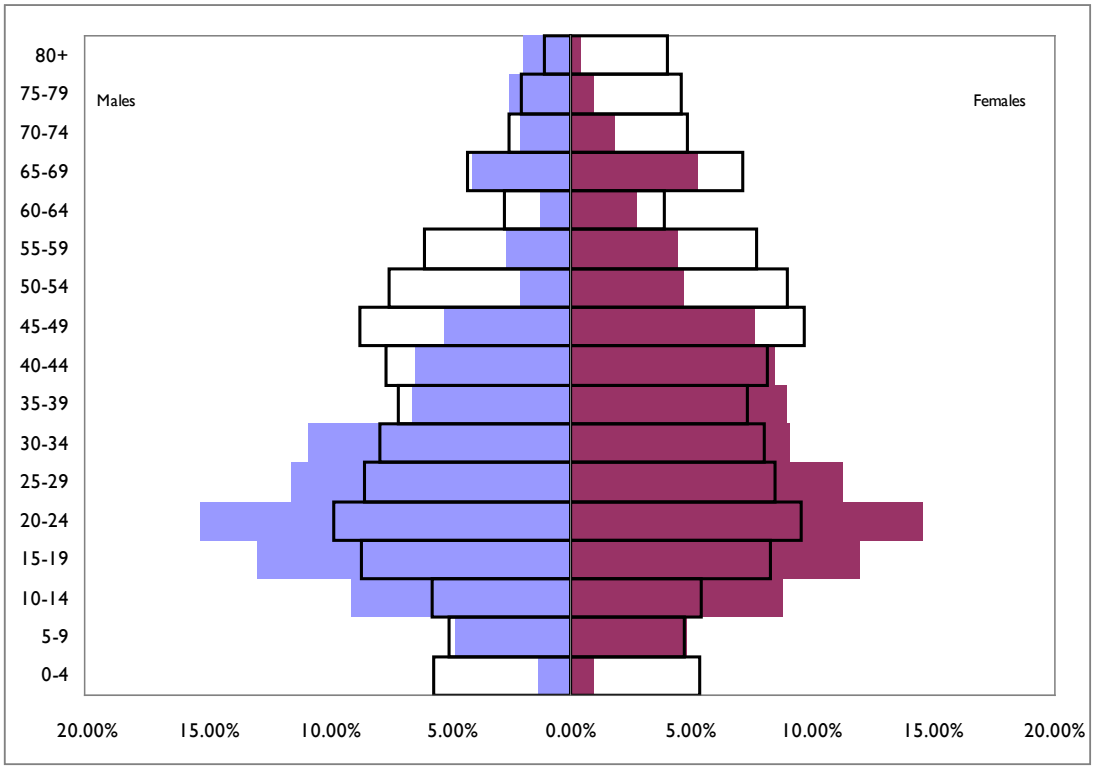


Total ages 15-64: 4,389,529; All Ages: 5,746,413

Source: Human Mortality Database. University of California, Berkeley and Max Planck Institute for Demographic Research. Available at www.mortality.org, accessed on April 30, 2009; The Demographic Yearbook of Russia: 2007 Statistical Handbook, State Committee of the Russian Federation on Statistics (Goskomstat of Russia), Moscow.

Our estimated "net surviving migrant" population is mainly (52 percent) female, while Russia overall population was 54 percent female at the beginning of 2007. Thus our estimated net migrant population is slightly more male than is Russia overall. At first glance, that sort of discrepancy might appear mildly consistent with what we would expect to find if economic factors were important in shaping the migration into Russia. Under an "economic paradigm of migration", furthermore, we would further expect migrants of working age to account for a disproportionate share of our estimated population grouping—and for people of younger working ages to be especially heavily represented. Sure enough: where just 63 percent of Russia's overall population in 2007 fell within in the country's official working age cohorts (16 through 59 for men, 15 through 54 for women), over 70 percent of the "net surviving migrants" came from these same age groups. By the same token: where men and women in their Twenties and Thirties accounted for 31 percent of the Russian Federation's overall population at the beginning of 2007, they made up over 42 percent of our "net surviving migrant population".

Figure 20: Age Distribution of Estimated "Net Surviving Migrant" Population vs. Total Population (black outline): Russian Federation, January 1 2007



Source: Human Mortality Database. University of California, Berkeley and Max Planck Institute for Demographic Research. Available at www.mortality.org, accessed on April 30, 2009; The Demographic Yearbook of Russia: 2007 Statistical Handbook, State Committee of the Russian Federation on Statistics (Goskomstat of Russia), Moscow.

Our estimated population, in sum, generally exhibits an entirely plausible structure and composition for a migrant population in which economic factors had helped affect the decision to move to a new country.[xxv] To be sure: some of the migration flow into Russia in the initial years after the breakup of the Soviet Union has been classified as "forced migration". Under non-catastrophic circumstances, such migrant flows would be expected to mirror the overall demographic structure of the populations from which they were drawn. Russia's net surviving migrant population of course includes, and represents those who were subject to such "forced migration"—but the overall contours of the net surviving migrant population suggest that economic influences were the more powerful determinant of migration into Russia during the post-Communist era.[xxvi]

Our indicative estimates of "net surviving migrant population" for the period 1989-2006 suggest that migration has played an important role in cushioning population decline in the Russian Federation, and that it has played an even greater role in slowing the drop of Russia's working age population. Between the Census of 1989 and the start of 2007, according to

Goskomstat figures, Russia's population declined by about 4.8 million, falling from 147.0 million to 142.2 million. Absent the next influx depicted in Figures 4-4 through 4-6, we would expect Russia's population to have dropped by well over 10 million by the start of 2007, or by more than twice that much. Put another way: by these calculations, migration looks to have compensated for a bit more than half of the population decline Russia would otherwise have experienced.

The demographic contribution of migration to Russia's potential workforce is equally apparent. Officially, the Russian government defines its population "of working ages" to comprise men 16-59 and women 16-54. By that definition, between the 1989 census and New Years Day 2007, Russia's official "working age population" actually increased in size, from 83.7 million to 90.1 million. Nearly two thirds of this increment—4.1 million out of 6.4 million—would have explained by estimated net immigration.

If we consider instead the definition of working age population conventionally used by demographers and others internationally—that is, ages 15 through 64 for men and women alike—an even starker picture would emerge. By that taxonomy, Russia's population of working ages would have increased by just 2.6 million: from 98.8 million in 1989 to 101.4 at the start of 2007. But our estimated net surviving migrant population made up 4.4 million members of Russia's conventionally construed population of working ages at the beginning of 2007. For this more broadly defined working-age population, in other words, migration was what made the difference between modest growth and what otherwise would have been absolute decline.

Not least important, migration apparently played a significant role in augmenting the ranks of Russia's younger labor force. In the event, net migration could not forestall the decline of Russia's cohorts Twenty-Somethings and Thirty-Somethings, which shrunk between 1989 and 2007 by over 3 million (from 46.9 million to 43.8 million). Without the net immigration Russia experienced after 1989, however, the country's pool of population between the ages of 20 and 40 would have fallen by almost another 2.4 million (that is, from 46.9 million to 41.4 million).

By our calculations, the net influx of migrants after 1989 accounted for about 4 percent of the officially estimated Russian Federation population as of Jan 1 2007—an addition equivalent to every twenty fifth person in the country. For the population "of working ages" (as Moscow defines it), such net migrant flows would have increased the prospective demographic pool by 4.8 percent—equivalent to every twenty second prospective worker in these age groups. And for Russia's young men and women in the Twenties and Thirties, the net migration after 1989 accounted for about 5.6 percent—an addition equivalent to every eighteenth person in this grouping.

By these estimates, we may glean some sense of the demographic—and by extension, the economic—contribution of net migration flows to post-Communist Russia. And of course, these estimated figures tend to understate those contributions, rather than exaggerating them. For one thing, the computations depend upon official Russian estimates of the country's population in 2007: to the extent that illegal or undocumented entrants and others are underestimated,

our estimates of the impact of net migration will correspondingly fall short of reality. Moreover, we are attempting to describe the significance of net flows—not gross flows, much less stocks. We know that many millions of people chose to leave Russia after the end of Soviet rule. Evidently, immigration flows were more than adequate to compensate numerically for the throngs of Russian citizens who seized the opportunity to move abroad once this freedom was generally available.

"Replacement Migration" for the Russian Federation?

Cross-border population movements have played an appreciable—and appreciably positive—role in Russia's post-Communist development: they may in fact be regarded as one of the brightest spots in the country's generally gloomy overall demographic tableau. But the migration picture for Russia is not without its complications. Possibly the most central of these concerns are the matters of ethnicity and assimilation in this multi-ethnic European state. Russia is by no means the only European state to face such questions, of course: but it is certainly one of the places where these issues are most acute.

The Russian Federation's constitution guarantees it citizens "fundamental rights and freedoms according to the universally recognized norms and principles of international law", and further specifies that

> the equality of rights and freedoms […shall be guaranteed regardless of…] race, nationality, language, origin,…religion…and also of other circumstances. All forms of limitations of human rights on social, racial, national, linguistic or religious grounds shall be banned. [xxvii]

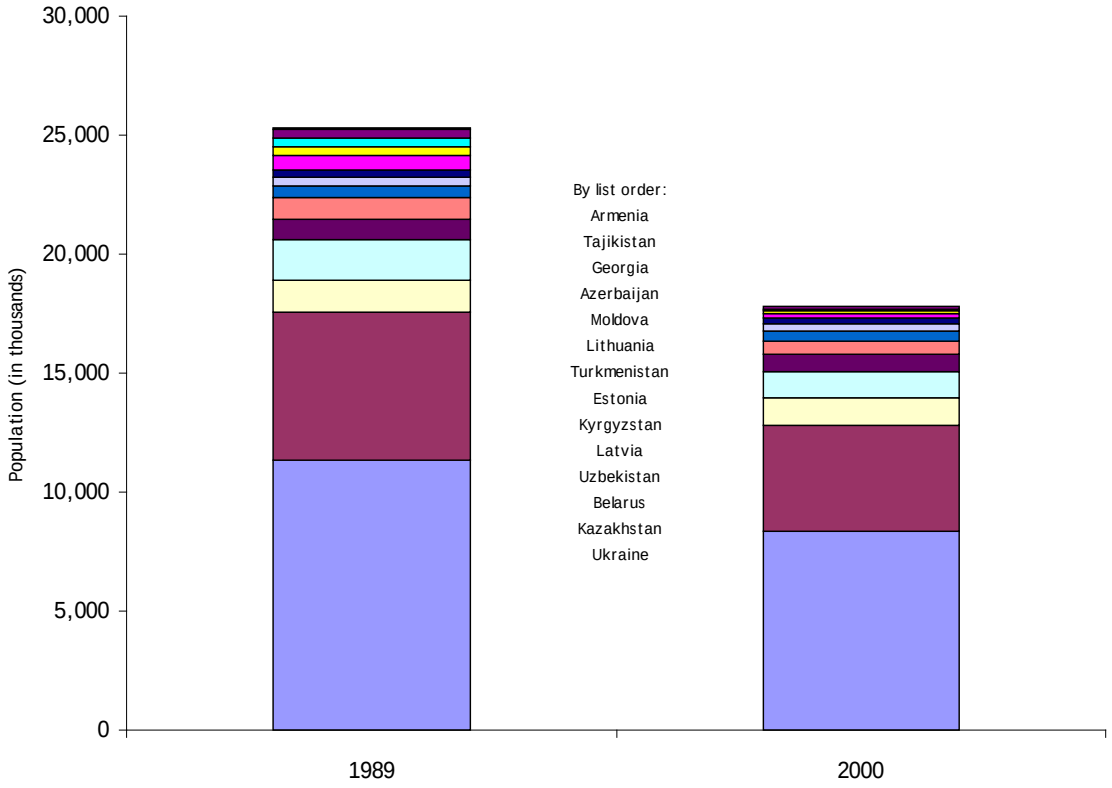
But of course the Russian Federation is also in essence a *Russian* multiethnic state. Its political tradition is decisively Russian. The country's culture is profoundly (albeit not exclusively) Russian. Its *lingua franca* is most assuredly Russian: the Russian Constitution, in fact, establishes it as "the state language of the Russian Federation across its territory" (Article 68). According to respondents to the 2002 census, furthermore, over 98 percent of the RF's population report they "freely command" the Russian language, with over 92 percent of the country's non-Russian population affirming the same.[xxviii] (Compare these proportion to the United States, where, according to the 2000 Census, over 8 percent of the population 5 years of age and older spoke English less than "very well", and over 4 percent spoke English "not well" or "not at all".[xxix]) And the overwhelming majority of its people—just under 80 percent, as of the 2002 census—identify themselves Russian in nationality. Might continuing immigration change the Russian Federation's ethnic composition—or change Russia's social fabric in other, potentially far-reaching, ways?

For Russian migration to comport with the country's current ethnic proportions on into the future, continuing inflows of Russian population from the other post-Soviet states—"the near abroad"—would look to be a prerequisite. But just how large are these potential reserves of prospective Russians? Figure 21 is indicative. As of the 1989 Soviet census, about 25 million

ethnic Russian were enumerated within the USSR but beyond the borders of the Russian Federation. That number has taken on an almost talismanic aura in certain circles within Russia, and the figure is often invoked in domestic political discourse, even at the highest levels.[xxx] But it is already overtaken by events.

As of roughly the dawn of the new century, the total number of ethnic Russians enumerated in the "near abroad" was not 25 million, but instead fewer than 18 million. The steep decline in the size of the Russian diaspora—roughly 30 percent in more or less a decade—can be explained by a number of factors. Something like three-plus million Russians, for example, may have already moved from the near-abroad to the Russian Federation. Some proportion of these overseas Russians may have changed their own "ethnic self-identification," given new post-Soviet realities in the lands they make their home. In addition, the Russian population in the rest of the NIS states is likely beset by the same sorts of demographic trends that characterize Russians within the RF: that is to say, sub-replacement fertility, serious excess mortality, and population decline due to negative natural increase. We should expect the Russian diaspora to continue to shrink in the years ahead.

Figure 21: Self-Identified "Russian" Population in CIS and Baltic States, 1989 and 2000



Source: 1989 data: Timothy Heleniak, "Migration of the Russian Diaspora After the Breakup of the Soviet Union" *Journal of International Affairs,* Spring 2004, vol. 57, no. 2. Page 109, Table 2. 2000 data: Alexandr A. Grebenyuk and Elena E. Pismennaya, "Immigration of Compatriots to Russia: Potential and State Policy," Paper presented at European Population Conference 2008, July 9-12, 2008, Barcelona, Spain, available at http://epc2008.princeton.edu/download.aspx?submissionId=80209.

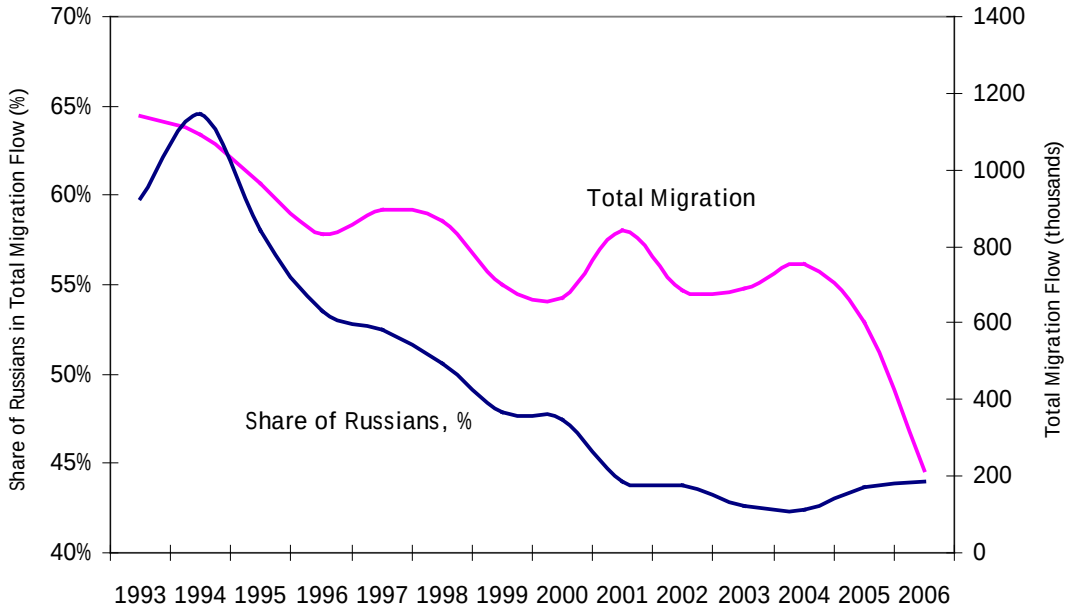
Note: Some data for 2000 is from census closest to year 2000.

Even if that diaspora were today somehow to resettle in the Russian Federation, this influx would not, under the aforementioned UNPD "replacement migration" scenarios, be sufficient to keep either Russia's total population or her working age population groups from sinking below their 1995 levels by the year 2050. But there is no reason, in any case, to expect renewed Russian in-migration to the Russian Federation (barring truly catastrophic upheavals in the "near abroad"). For the most part, the Russian populations in the "near abroad" appear to be tolerably well situated, generally enjoying, as the University of Maryland's Timothy Heleniak has observed, "superior social and economic status vis-à-vis the titular groups in the non-Russian [CIS] states".[xxxi] And most of the Russian diaspora has reason to regard these NIS states as their home: notes Heleniak, "a majority of the Russians in non-Russian states were born in

the republic they resided in...[with] 43.5 percent…liv[ing] there uninterruptedly since birth, and …22.8 percent [of the rest living] there 20 years or more".[xxxii]

Under the circumstances, it should not surprise that the migration of self-identified Russians into the Russian Federation has reportedly attenuated over the past decade—Russia's concomitant economic upsurge notwithstanding. According to official migration statistics, by comparison with the 1990s, the absolute inflow of Russian ethnic migrants fell sharply during the boom years of 2000-2006, averaging just under 100,000 a year as against a reported 433,000 per annum for the previous seven years. By the same token, the share of Russians within overall Russian Federation immigration stream has been on the decline, according to the official data Whereas Russian ethnics reportedly comprised 61 percent of the country's documented immigrant in the 1993-99 period, this was down to 58 percent for 2000-06—and to just 45 percent for the latest year available (2006).

Figure 22: Reported Volume and Ethnic Composition of Immigration from CIS and Baltic States to Russia, 1993-2006



Source: Alexandr A. Grebenyuk and Elena E. Pismennaya, "Immigration of Compatriots to Russia: Potential and State Policy," Paper presented at European Population Conference 2008, July 9-12, 2008, Barcelona, Spain, available at http://epc2008.princeton.edu/download.aspx?submissionId=80209.

Migration and the "Muslim" population of Russia

Even by official statistics, Russia's migration flows look to be altering the country's ethnic complexion. If we had truly accurate information on cross-border movements of population, the changes in trends for the Russian Federation would surely appear all the more pronounced. By definition, undocumented immigrants to the Russian Federation (whether temporary-stay workers or permanent residents) go uncounted in these official tallies. Obviously, there is reason to expect such newcomers to be overwhelmingly non-Russian—and, further, to emanate from the poorest reaches of the former Soviet Union.

There is nothing mysterious, or sinister, about this observation: to the contrary, it only points to obvious realities affirmed by the broader economic logic of global migration pathways. Simply stated, economic migrant tend to be attracted by the pull of higher wages—*ceteris paribus*, meaning that workers from countries with lower income levels tend to find countries with higher income levels more desirable destinations for employment, and to factor such income gaps into their decisions about whether or not to take the risk of moving to another country in search of work.

Problematic as Russia's migration data may be, the patterns they reveal are unmistakable. Quite clearly, RF citizens have tended to emigrate to countries with higher income levels than Russia's own (America, Germany, Israel) while Russia has absorbed influxes from poorer countries on its own periphery. The Baltic States, for instance, are more affluent than Russia[xxxiii]—and there has been relatively little migration from them to Russia, even by Russian ethnics. Moreover, within the former Soviet Union remittances account for a steadily decreasing share of national income as per capita income levels rise—or to put it the other way around, the poorer the country, the higher the share of remittances in its gross national income. Most of the poorest people in the former Soviet space live in Central Asia, where estimated per capita income levels range from a high of about 68 percent of Russia's in Kazakhstan down to 21 percent in Kyrgyzstan and Uzbekistan and to a mere 12 percent in Tajikistan. Culturally and historically, these are societies of Muslim heritage. For reasons historic and political as well as economic, the Russian Federation is the most likely destination for would-be guest workers from these places. Thus for Russia, the migration question ineluctably bears on the Muslim question.

How large actually is the Russian Federation's Muslim population? Within Russia and overseas, a wide range of numbers is currently used by seemingly authoritative sources to answer this question. At this writing, for example, the Russian Embassy in Washington reports that the Russian Federation's Muslim population is 19 million.[xxxv] Former President Putin, on the other hand, spoke in 2003 of the "almost 20 million Muslims" living in Russia. In 2005, the chairman of the Council of Muftis in Russia stated the population of the Russian Federation included 23 million Muslims who were "indigenous residents of our country, not migrants or immigrants, … living here from time immemorial". Henry Kissinger, for his part, wrote in 2008 of "Russia's 25 million Muslims". Taking such numbers even further, an extrapolating on what are said to be the very rapid growth rates of Russia's "Muslim" population, a number

of commentators both in Russia and abroad today prophesy that the Russian Federation will be a "Muslim majority" country by 2050.[xxxix]

Despite their diversity, there is a striking commonality of to all these assessments: none of them seems to rely upon available empirical evidence. Moscow's "Muslim" population does indeed number in the millions—but the notion of 20 million, much less 25 million, adherents to Islam in Russia today is by all indications utterly fanciful.

In point of fact, Goskomstat/Rosstat does not actually collect information on the religious affiliation of the country's population. (There is nothing unusual about this: data on religious adherence are not collected by the US government, or many Western European governments, either.) Thus any data-based estimate of Russia's "Muslim" population must be limited to examination of population totals for Russia's ethnic groups ("nationalities") with a Muslim cultural heritage or historical background.

The University of Maryland's Timothy Heleniak provides just such an analysis of the Russian Federation's censuses for 2002 and 1989. Heleniak identified 56 historically Muslim ethnic groups in the official Russian census tabulations and tracked their population totals. He concluded that Russia's nationalities of Muslim heritage accounted for 14.7 million people in Russia in 2002—just over 10 percent of the country's total population that year.

Table 2: Traditionally Muslim Ethnicities in Russia
as enumerated in 1989 Census and 2002 Census

Ethnic group	Population, 1989	Population, 2002	Change, 1989–2002
Tatars	5,543,371	5,554,601	11,230
Bashkirs	1,345,273	1,673,389	328,116
Chechens	898,999	1,360,253	461,254
Kazakhs	635,865	653,962	18,097
Avars	544,016	814,473	270,457
Kabards	386,055	519,958	133,903
Dargins	353,348	510,156	156,808
Azeri	335,889	621,840	285,951
Kumyks	277,163	422,409	145,246
Lezghins	257,270	411,535	154,265
Ingush	215,068	413,016	197,948
Karachay	150,332	192,182	41,850
Uzbeks	126,899	122,916	–3,983
Adygey	122,908	128,528	5,620
Laks	106,245	156,545	50,300
Balkars	78,341	108,426	30,085
Circassians	50,764	60,517	9,753
Kyrgyz	41,734	31,808	–9,926
Turkmen	39,739	33,053	–6,686
Tajiks	38,208	120,136	81,928
Abaza	32,983	37,942	4,959
Turks	9,890	92,415	82,525
Kurds	4,724	19,607	14,883
Arabs	2,704	10,630	7,926
Afghans[a]	858	n.a.[c]	n.a.
Other known ethnic Muslim groups	0	669,128	669,128
Other[b]	1,926,649	42,980	–1,883,669
Total ethnic Muslim population	11,598,646	14,739,425	3,140,779

[a]Ethnic Afghans were identified under a number of different ethnic groups (Pushtun, Tadjik, Uzbek, etc.) in 2002.
[b]Ethnicity not known or not listed. Population data are available for a much greater number of ethnic groups in the 2002 than in the 1989 census. Due to the limited specificity of published data on ethnicity, the "other" group may include a substantial number of ethnic Muslims.
[c]n.a. = not applicable.
Sources: Compiled from Goskomstat SSSR, 1990 and Goskomstat Rossii, 2004.

Source: Timothy Heleniak, "Regional Distribution of the Muslim Population of Russia," *Eurasian Geography and Economics*, 2006, 47, No. 4, pp. 426-448, reproduced from Table 3.

Heleniak urged caution in interpreting the data in Table 2. For one thing, he warned, not all of the members of these "historically Muslim" ethnic groups still regard themselves as Muslim nowadays (to say nothing of actually practicing Islam[xl]). Thus, these numbers on Russia's "Muslim" population probably offer a maximum upward boundary on the absolute and relative size of Russia's true Muslim population as of the time of the 2002 RF census. Second, the data from the 1989 and 2002 censuses ostensibly suggest a rise in Russia's "Muslim" population of about 26 percent over just 13 years: an implied rate of growth of about 1.8 percent a year in a country experiencing depopulation. But a considerable portion of this increase may well have

been artifactual rather than real. At issue here are differences between the Soviet-era population count of 1989 and the enumeration in 2002. In the post-Soviet environment, the phenomenon of "ethnic re-identification" was likely occurring—and it may have been especially pronounced among some of the historically "Muslim" nationalities in Russia, who had judged it disadvantageous under the old regime to represent their ethnicity accurately. (Unfortunately, though, the actual scale of such changes in reported ethnic affiliation over Russia's inter-censal period is impossible to determine.)

With these caveats, we can attempt to place Russia's "Muslim" population situation in a European perspective. For most of the rest of Europe, estimates of local "Muslim" populations are no less problematic than Russia's own. That being said, available information would seem to suggest that, at the dawn of the Twenty First Century, Russia's fraction of "Muslim" population was distinctly higher than for any country in Western Europe (rather higher, it would seem, than even in France, the Western European society with the highest concentration of people from "Muslim" cultural backgrounds). Indeed: to go by these numbers, more "Muslims" would be living in Russia than in all of Western Europe together. [xli]

Table 3: Estimated Muslim Populations of Selected European Countries (Early to Mid-2000s) and Russia (2002), in thousands

Country	Estimated Muslim Population	Total Population	Percent Muslim
Albania	2,200	3,100	71.0%
Kosovo	1,800	2,700	66.7%
Bosnia and Herzegovina	1,500	3,800	39.5%
Macedonia	630	2,100	30.0%
Bulgaria	942	7,719	12.2%
Serbia & Montenegro	405	8,100	5.0%
Subtotal Southeastern Europe	7,477	27,519	27.2%
France	4,000	60,000	6.7%
Netherlands	945	16,407	5.8%
Denmark	270	5,451	5.0%
Germany	3,500	82,500	4.2%
Switzerland	318	7,489	4.2%
Austria	339	8,185	4.1%
Belgium	400	10,364	3.9%
UK	1,600	58,800	2.7%
Sweden	206	9,017	2.3%
Norway	93	4,593	2.0%
Italy	825	58,103	1.4%
Greece	138	10,668	1.3%
Spain	500	40,341	1.2%
Finland	18	5,223	0.3%
Subtotal Western Europe	13,152	377,143	3.5%
Total Europe	20,629	404,661	5.1%
Russia	**14,739**	**145,649**	**10.1%**

Sources: Ceri Peach, "Muslim Population of Europe: A Brief Overview of Demographic Trends and Socioeconomic Integration, with Particular Reference to Britain," in Steffen Angenendt, et al, "Muslim Integration: Challenging Conventional Wisdom in Europe and the United States," CSIS, September 2007, Table 1, pg. 9; Russia from: Timothy Heleniak, "Regional Distribution of the Muslim Population of Russia," Eurasian Geography and Economics, 2006, 47, No. 4, pp. 426-448, reproduced from Table 3 and Russian Demographic Yearbook (2007), Goskomstat (Moscow), Table 1.3.

Even without the exaggerations that sometimes color discussions of the issue, it is apparent that "Muslims" account for a significantly greater fraction of total population for Russia than for the European countries with which Russian elites would prefer to be compared. Given the low levels of fertility now prevailing among Russians and other "European" nationalities, furthermore, we can expect an increase in the fraction of "Muslims" in the Russian Federation, immigration entirely notwithstanding. On the basis of the 2002 RF census, Judyth Twigg of

Virginia Commonwealth University has shown that "Muslim" ethnic groups accounted for just 9.5 percent of the country's total male population—but for 13.2 percent of the boys 5 to 9 years of age.[xlii] Embracing and integrating people from Muslim cultural backgrounds has proved to be a challenge for many contemporary Western societies. To go simply by these numbers, the scale of the challenge facing Russia would look to be even more daunting than the one facing Western Europe today.

Indeed, the challenge of integrating Muslims in Russia is further evidence by recent reports that the Russian defense ministry's public council cut the size of the military draft quota from the North Caucasus republics in order to reduce concentrations of Muslim soldiers in any military unit.[xliii] With such assimilation challenges, Russia will continue to face the challenge of reconciling its changing ethnic and cultural makeup with its military and political priorities.

Geographic resettlement in post-Communist Russia: The magnification of Moscow; the emptying of the Russian Far East

We have devoted most of this section to analyzing Russia's patterns of international migration. This final passage examines the country's patterns of internal population movement since the end of the Communist era.

According to official Goskomsat/Rosstat figures, domestic migration has been on a continuous downslide within Russia since the final collapse of the Communist system in 1991. According to these official data, in fact, fewer than half as many Russians moved to a new town or city in the year 2007 as in 1990.

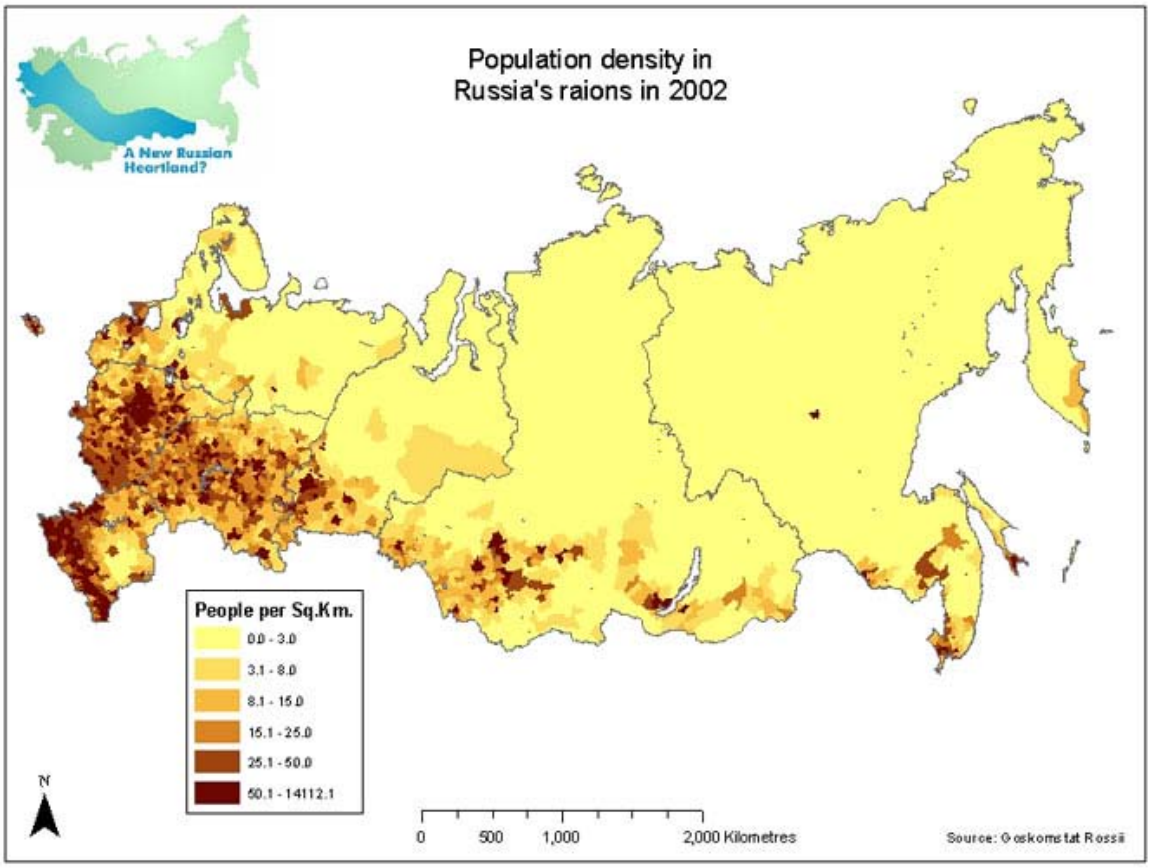
If we were to believe these numbers, we would conclude that the geographic mobility of the Russian population is drastically lower today than it was back in Soviet years. But the modern Russian data on domestic migration are fundamentally flawed. These statistics are based upon the bygone notion that newcomers to a Russian city or town will be universally registering their arrival with local authorities. In the old days, that presumption comported with political reality. Under Communist rule, city dwellers in Russia could not change residence without state approval. Every urban inhabitant over 16 years of age was obliged to carry an internal passport containing their sole state-authorized address (or *propiska*), and "a[n internal] passport without a *propiska* was considered invalid"[xliv]. Any legal geographic movement within the USSR was thus a statistically tabulated event. (For the first half century of the USSR's existence, incidentally, villagers and *kolkhozniks* were not even issued internal passports "and therefore had no right to move even within the borders of the [province] where they lived"[xlv]—they were effectively bound to the soil they tilled as socialist serfs.)

But with the end of Soviet control, the *propiska* system was delegitimized and overturned. In 1993, Russian Federation law replaced the compulsory *propiska* with a voluntary registration of local residence. [xlvi] As domestic migration became increasingly voluntary, spontaneous and unofficial, the statistical apparatus for tracking domestic migration, a leftover from the Soviet era, became an ever less faithful reporter of true national trends. For at least the past decade,

these Russian migration numbers are patently implausible on their face. Note, for example, that reported gross domestic migration in the Russian Federation declined markedly over the 1999-2007 period: boom years when economic growth officially averaged almost 7 percent per annum! [xlvii] Rapid and sustained economic growth can always be expected to elicit more mobility—not less of it.

The weakness of Russia's data on regional population movements perforce obscures the emerging similarities to patterns evident elsewhere in the world—as well as enduring or newly-increasing differences. Independent Russia's domestic migration dynamics may well still differ from those characteristic in established market economies, as a growing body of research (drawing upon a variety of available Russian data) is beginning to suggest.[xlviii] Russia's housing and financial markets are underdeveloped; such factors could constrain would-be migrants' responses to existing labor market opportunities away from home. There is some evidence, furthermore, that sheer lack of resources matters as well in domestic migration decisions in Russia today—that some fraction of the Russian populace may currently be caught in a "poverty trap" that hinders or prevents domestic relocation in search of a better life. And there is no doubt that current Russian proclivities for moving from one region to another are very significantly lower than in, say, Canada and the United States, all uncertainties attendant to that comparison notwithstanding.

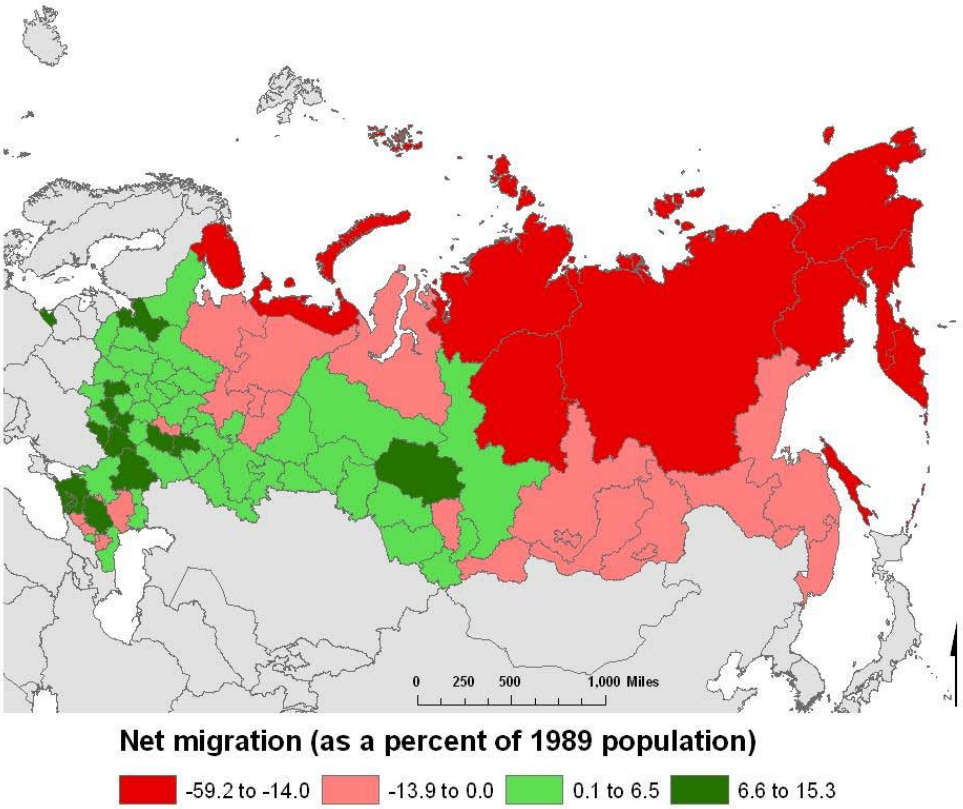
Figure 23: Russian Federation Population Density by Region, 2002



Source: University of Leicester, http://www.geog.le.ac.uk/russianheartland/DemographicMaps/Raions.html

But our understanding of Russia's domestic migration dynamics today is palpably limited by the quality and availability of information on that phenomenon. The plain fact is that Russian official data on domestic migration are so problematic and unreliable that they cannot as yet even be used to reconstructing the country's internal migration trends and levels for the by now many years since the collapse of the Soviet system. The overall level of domestic migration is a gross "flow" measure. While Russia's data on these gross domestic migration flows are of exceedingly poor quality nowadays, official Russian data on net migration (a "stock" measure) is of much greater reliability. This is because episodic census counts provide detailed information on current residence for the country's population. Using these census data in conjunction with vital statistics (birth and death numbers), it is possible to arrive at a reasonably accurate "residual" approximation of net migration within any given region in Russia for the intercensal 1989-2002 period.[xlix] On the basis of such official Russian data, Dr. Timothy Heleniak of the University of Maryland has estimated the aggregate regional net migration in the Russian Federation over the 1989-2002 period, mapping of the proportional impact on local population numbers by *oblast* across the country.

Figure 24: Net Migration in Russia, 1989-2002



Source: Timothy Heleniak, "Growth Poles and Ghost Towns in the Russian Far North," Presented paper at "Russia and the North" conference at Centre for Russia Studies Annual Conference, November 28-29, 2007, Norweigian Institute for International Affairs, Oslo, Norway. Figure 1.

It is also possible—in theory—to estimate trends in net regional migration for the Russian Federation for more recent years, since Goskomstat/Rosstat has provided annually updated estimates of the country's regional population distribution as of New Year's Day for each successive year since the 2002 census. Over time, to be sure, these intercensal regional population estimates tend to lose their accuracy.[I] With this proviso, we can examine official Goskomstat/Rosstat data on net migration flows within Russia for the 1989-2008 period, as compiled by Dr. Heleniak. These are presented in Table 4.[Ii]

Table 4: Net migration flows in Russia (thousands), 1989-2008

Region	Total Population, 1989	Total Population, 2008	Absolute Population Change, 1989-2008	Natural Increase, 1989-2008	Net Implicit Migration	Net Implicit Migration as a % of Total 1989 Population
Russian Federation	147,022	142,009	-5,013	-11,323	6,310	4.3%
Central Federal District	37,920	37,151	-769	-5,374	4,605	12.1%
Far East Federal District	7,950	6,486	-1,464	-91	-1,373	-17.3%
Northwest Federal District	15,237	13,501	-1,736	-1,671	-65	-0.4%
Siberian Federal District	21,068	19,553	-1,515	-879	-635	-3.0%
Southern Federal District	20,536	22,835	2,299	-352	2,651	12.9%
Urals Federal District	12,526	12,240	-286	-568	282	2.3%
Volga Federal District	31,785	30,242	-1,543	-2,205	662	2.1%
Moscow City	8,876	10,470	1,594	-946	2,540	28.6%
Moscow Oblast	6,646	6,673	27	-974	1,001	15.1%

SOURCE: Timothy Heleniak, Department of Geography, University of Maryland on the basis of Goskomstat/Rosstat data.

Figure 24 and Table 4 underscore many interesting aspects of the ongoing population movements within post-Communist Russia. In general, these data seem to support the "new Russian heartland" hypothesis proposed by geographer Michael Bradshaw of the University of Leicester, who argued that a Russia gradually shaped by forces of the market economy would see its domestic population moving westward and to the south (to "archipelagos" of vibrant economic activity surrounded by vast "empty spaces").[lii] Perhaps the two most important points revealed by these charts are the dramatic roles of net migration in bolstering the population of Moscow and its environs on the one hand, and in accelerating the depopulation of the Russian Far East on the other.

To go by official Russian figures, the country's total net interprovincial movement of population amounted to just over 9 million over the period between the 1989 census and the start of 2008.[liii] Of this total, over 2.5 million in net migration accrued to Moscow, the capital. For Moscow *oblast*, the region immediately surrounding the capital, a net inflow of an additional million persons was indicated for this same period. Thus Moscow—with just 6 percent of the Russian Federation's population in 1989—accounted for over a quarter of the country's net

regional immigration over the following two decades. And taken together, Moscow and Moscow *oblast*, with little more than a tenth of Russia's total population in 1989, were the venue for nearly two fifth's of the entire country's net provincial immigration in the 1990s and the first decade of the new century.

With the collapse of Communism, Moscow has become a sort of human magnet within Russia. The attractive pull of the capital and its environs, indeed, have been sufficiently powerful to overcome the powerful incipient forces of depopulation at work in the area. Between 1989 and the start of 2008, Moscow's deaths exceed births by almost one million (946,000, according to Goskomstat/Rosstat)—but the city grew by 1.6 million (nearly 18 percent) over those years nonetheless. In Moscow *oblast*, deaths likewise outnumbered births by almost one million over these years (974,000)—but because net immigration was even greater, the province's population rose slightly. In contemporary France one often hears talk of "Paris and the French desert".[liv] But the contrast between the capital and the hinterlands may be even more acute in post-Communist Russia, where the population of Moscow has been steadily growing even as the rest of the country experiences continuing depopulation.

With Moscow swelling as Russia shrinks, the relative size of the capital has appreciably increased over the past two decades (from 6 percent of the country's population in 1989 to 7.5 percent at the beginning of 2008). From the standpoint of economic geography, this appears to be accentuating a regional distortion that was already pronounced back in Soviet times—a peculiar mismatch between the actual and the expected size of the country's urban centers.

Economic and Political Implications of Far East Depopulation

As Gaddy and Hill persuasively demonstrate, Soviet-era settlement patterns in the Russian Far East were manifestly irrational from an economic standpoint.[lv] Without massive subsidies to keep them in operation, and a police state to keep their populations in place, many of the villages, towns, and cities in the harsh and inhospitable reaches of the then Soviet Far East simply were not viable, and may not yet be. Goskomstat/Rosstat numbers indicate that the exodus from the RFE has not yet stopped. According to these numbers, the Russian Far East has experienced net out-migration every year since the end of Communism.[lvi]

It is true that the RFE is rich in natural resources, including oil and gas. As the University of Leicester's Michael Bradshaw has noted, the manpower requirements of the Russian Far East's existing and prospective facilities for resource exploitation number in the tens of thousands, or perhaps the hundreds of thousands, but not in the millions.[lvii] Like Gaddy and Hill, Vladimir Kontorovich of Haverford College argues that a significantly smaller population for the Russian Far East is not only likely but desirable. It is a precondition for a needed restructuring that would conduce to prosperity for the local populace and sustainable development for the territory.[lviii]

Geography matters, though, and as fate would have it, the RFE shares borders with both China and North Korea (the Democratic People's Republic of Korea, DPRK). These fateful boundaries

raise inescapable security questions for an ever more sparsely settled Russian Far East. In the shorter term, potential instability in North Korea could conceivably lead to mass movement of refugees into China and Russia as well. Over the longer term, those boundaries beg the question of Chinese aims and interests in the neighboring Russian territories.

Since 1988 the Sino-Russian border has been open to trade and travel. Over those decades, there has been some immigration into the Russian Far East by Chinese traders and laborers. Because most of this movement is undocumented, estimates of the size of this newcomer population vary wildly. On the one hand, Russia's 2002 population census counts just 30,000 nationwide. On the other, Russian officials at a 2008 CIS conference reportedly offered an unofficial estimate of 2.5 million illegal Chinese immigrants in the Russian Federation. A few years earlier, Academic Alexei Yablokov (a former science adviser to President Yeltsin and a well-known environmentalist) reportedly asserted there were ten times as many Chinese as Russians in the Russian Far East.[lix]

For a variety of easily identifiable, if not terribly august, reasons (lack of direct personal contact or familiarity with these newcomers, narrow nationalist sentiment, and Russia's "yellow peril" mythology), Russian audiences often seem to be prepared to believe that there are vastly more Chinese in Russia today than could possibly be the case.[lx] The reality, as best can be determined, is that the actual current number of Chinese working or living in the Russian Far East (mostly on a temporary basis) is probably on the order of a few hundred thousand.[lxi]

Today's patterns of unauthorized Chinese migration into the Russian Far East, furthermore, most likely reflect labor market conditions in the region itself. As Andrei Zaibanko of Amur State University has argued, "The number of Chinese in any given place within the Russian Federation corresponds to the number that makes economic sense to the Chinese themselves. No more and no less."[lxii] Restricting that inflow—as Russian public opinion increasingly urges authorities to do—would not only entail costs and losses for the would-be immigrants, but for the economically depressed RFE as well.

Viewed in the context of the globalization underway in the rest of Asia, it is well to bear in mind, the economic and migratory linkages that have developed between northeast China and the RFE over the past two decades look distinctive, but only because they are so modest and tentative. Maria Repnikova of Oxford University and Georgetown University's Harley Balzer are more pointed. They describe the "Chinese-Russian border as Asia's least successful example of trans-border integration;" in their estimate, "the limited scale of Chinese labor migration to Russia has the appearance of a missed opportunity rather than a threat."[lxiii]

From an economic standpoint, Repnikova and Balzer's assessment appears persuasive. That judgment, however, will not necessarily answer the sorts of questions that strategists and security specialists might raise about the future of the Russian Far East. Can this far-flung, fragile and increasingly empty Russian expanse maintain its national identity and territorial integrity in the face of the impending geopolitical changes (including perhaps the great-power rivalries) that may lie in store for Northeast Asia in the century ahead?

Relations between Beijing and Moscow are fairly warm today, and seem to have been growing warmer in recent years. All the same, China is a rapidly rising power. Its polity is authoritarian, not democratic. Its long-term disposition toward Russia in general and the resource-rich Russian Far East in particular cannot be predicted with certainty today.

It is possible to imagine alternative futures for what is now the Russian Far East—some of them quite different from the social and political arrangements of today. One of these alternative futures was envisioned by Putin himself. In July 2000, then president Putin famously warned "If we do not take practical steps to advance the Far East soon, in several decades the local population—originally Russian—will be speaking mainly Japanese, Chinese, and Korean."[lxiv] From the other side of the border, a strikingly similar vision was conjured in the 2009 Chinese bestseller, *China Gets Angry*. As described by Paul Goble, the book talks about [Russia] as "a living space" for the still growing Chinese people. It pointedly suggests that "sober-thinking Chinese need to get rid of any doubt on this point: sooner or later we will be" in Siberia and the Russian Far East developing the vast areas that Moscow has not.[lxv]

These parallel visions, of course, depict only one of many possible alternative futures for the Russian Far East—and by no means the most likely one, at least from the current vantage point. Any future scenario that posits a continuing long-term out-migration of Russians from the Russian Far East, however, cannot help but raise questions about exactly how Moscow will maintain its interests in this vast and increasingly vacant territory (Alaska, remember, was once a part of the Russian Far East). The answers to those questions are not entirely self-evident today, especially given the uncertainties attendant to the rise of China. They could become much less clear with a progressive depopulation of the Russian Far East.

The challenge of voluntary migration and pro-migration policies

The phenomenon of voluntary migration—all but alien to Russian soil for centuries—now has suddenly come to characterize most population movement within and across the country's borders. Voluntary migration has opened new vistas for Russian society, and is already beginning to transform it. Because of voluntary migration, both the population of the Russian Federation and the size of the Russian workforce are millions larger today than they would otherwise have been. International migration has materially mitigated the country's population decline. Because of voluntary migration, both Russia and neighboring states (and populations) are richer today than they otherwise would have been. National income and living standards are both demonstrably higher, and the incidence of poverty is demonstrably lower than it would have been otherwise. More broadly, the advent of voluntary migration for the Russian Federation has marked a signal extension of personal choice and a correlative improvement in individual well-being, the benefits of which extend well beyond the readily tangible.

From an economic standpoint, the implications of Russia's new freedoms of movement are overwhelmingly positive. Yet man is not just an economic animal. Population movement also

raises political questions, and sometimes security issues, with which societies must also contend.

For all the economic benefits, voluntary immigration from abroad also inescapably raises the critical question of assimilation and social integration for the newcomers. In the Russian case, a question that is most pointed in the case of immigrants from the historically Muslim regions of the near abroad. With respect to international security, the sudden, steep and continuing depopulation of the Russian Far East begs potentially profound questions about future of this distant and formerly contested outpost of Russian sovereignty. To the extent that population matters in the determination of this future, the new political fact of voluntary migration has made for new complexities as well—complexities that did not trouble the masters of the erstwhile Soviet system. Voluntary migration has brought tremendous recent gains to Russia and its people. As other modern societies that enjoy this freedom can attest, such migration, however, is not without its accompanying challenges.

It seems clear that Russia will need to explore policy options for coping with a declining workforce, possibly through increased immigration. While one option could be to ease visa restrictions with the EU, the country would still face difficulties in attracting skilled talent from abroad and it would also reduce domestic the workforce. And as described above, the assimilation of Muslims from abroad will continue to be a challenge for Russia.

Projections of Russia's Demographic Trajectory over the Coming Decades

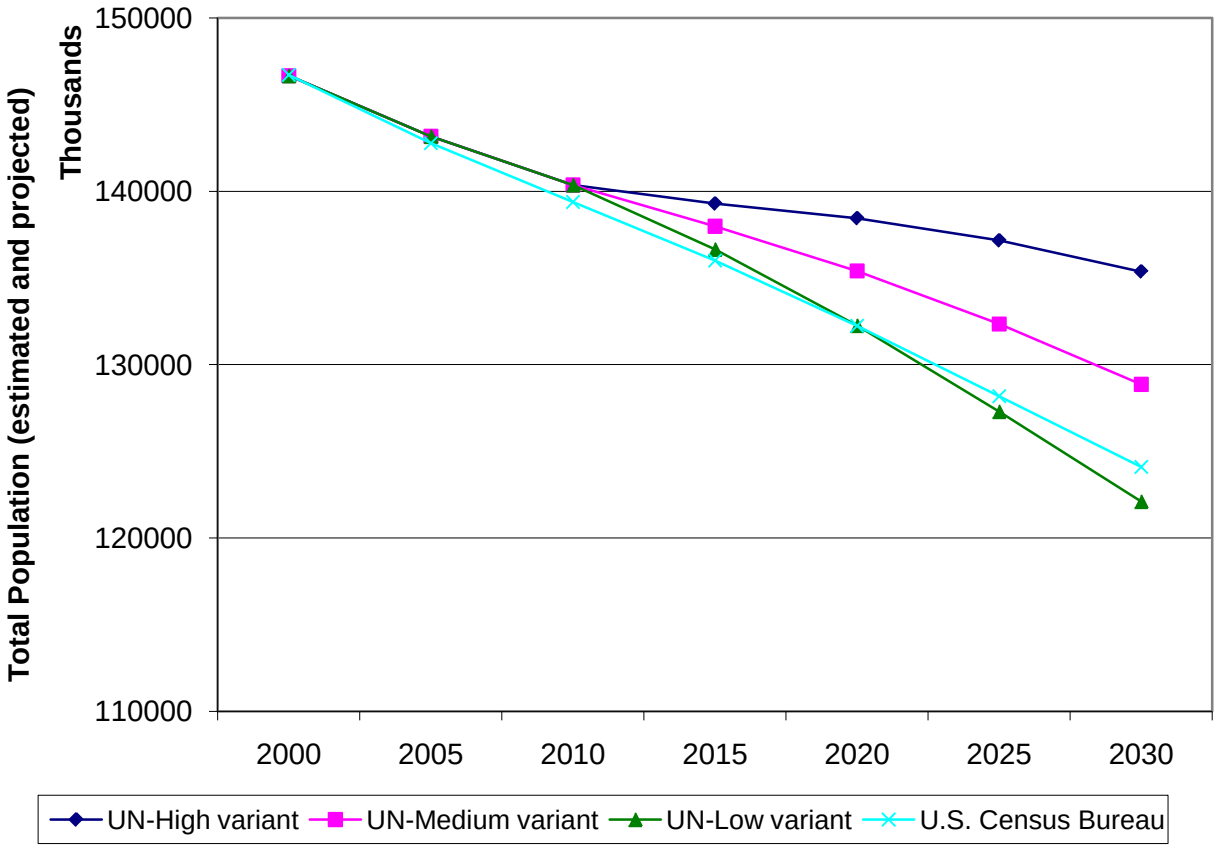
Where is the Russian Federation headed demographically in the years and decades immediately ahead? Obviously, there is no way to answer that question with certainty in advance. We can, however, get a sense of where some of the world's leading demographic institutions *expect* that Russia *could* be heading: their anticipations are laid out in their most recent projections for the Russian Federation. These projections, we must emphasize, are *not* forecasts—rather, they are simulations that generate internally consistent outcomes based upon assumptions about future fertility, mortality, and migrations patterns that are taken by their authors to be plausible today. Current demographic projections for Russia thus reveal what population experts regard as reasonable anticipations in the years ahead, at least from our current, necessarily limited, vantage point.

The two leading organizations offering global demographic projections would arguably be the United Nations Population Division (UNPD) and the U.S. Bureau of the Census (also known as the Census Bureau). Their latest projections for the Russian Federation are illustrated in Figure 25. UNPD offers three projections—a "high", "medium" and "low" variant, based upon what its staff regards as plausible alternative outlooks for future fertility trajectories; the Census Bureau offers just one projection for every country. But as we see, current Census Bureau and UNPD projections all trace a continuing, indeed unstopping, downward course for the Russian Federation's population over the generation ahead. As of midyear-2005, Russia's estimated population was around 143 million. UNPD projections for the year 2025 range from a high of

about 137 million to a low of about 127 million; for the year 2030, they range from 135 million to 122 million. The Census Bureau's single projection for the Russian Federation's population in 2025 and 2030 is 128 million and 124 million, respectively—very close to the "low variant" projections offered for Russia by UNPD (the UNPD and Census Bureau series are prepared independently of one another).

Demographic projections for the Russian Federation are also available from statisticians and population specialists in Russia itself. These latest Goskomstat projections run through the year 2025—and they envision a continuing and uninterrupted depopulation of the Russian Federation. In these projections, Russia's population would fall by another five and a half million between 2008 and 2025—a long-term decline averaging over 300,000 persons per year. By this scenario, Russia's population in 2025 would be less than 136 million. That would be higher than the level currently projected by the US Census Bureau, and higher than the UNPD's "medium variant"—but also somewhat lower than the UNPD's "high variant" alternative. The current assessment of Russia's population outlook by the Russian Federation's official demographic specialists, in other words, is broadly consistent with the evaluation offered by international demographic specialists.

Figure 25: Estimated and Projected Population of Russia, 2000-2030, UN and U.S. Census Bureau



Sources: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision and World Urbanization Prospects: The 2007 Revision, http://esa.un.org/unpp, February 26, 2010; US Census Bureau International Database. Available online at http://www.census.gov/ipc/www/idbnew.html, Accessed on February 26, 2010.

Russia's central authorities, we must note, today promote a vision of the Russian demographic future that differs fundamentally from the trajectories suggested in prevailing international projections. This "new demographic concept"—officially unveiled in 2007, and championed at the highest levels of government (by both then-President Vladimir Putin and current-President Dmitry Medvedev)—envisions a Russian demographic resurgence in the years ahead, stimulated by official policy interventions that reduce death rates, increase birth rates, and ultimately reverse the country's trend of population decline.

Let us leave aside the Kremlin's "new demographic concept"—and its feasibility—for the moment. For now, let us instead simply consider the available independent demographic projections. If the Census Bureau and UNPD projections turn out to be relatively accurate—admittedly, a big "if" for any long-range demographic projection—the Russian Federation will have experienced over thirty years of continuous demographic decline by 2025, and the better part of four decades of depopulation by 2030. If the Census Bureau's current projection, or the

UNPD's "medium variant" projection, end up being approximately on target for Russia and other countries, for example, the population of the Russian Federation would have dropped by about 20 million between 1990 and 2025, and Russia would have fallen in international ranking from the world's sixth to the twelfth most populous country. If, on the other hand, the UNPD's "high variant" projection ultimately turns out to be closer to the mark, Russia would experience a decline in population of "only" 13 million between the early 1990s and 2030. In relative terms, that would amount to not quite as dramatic a demographic drop as the one Russia suffered during World War II. In absolute terms, it would actually be somewhat comparable in magnitude. And even in the "high variant" version of a Russian demographic future, the depopulation would still be underway in 2030, and beyond.

A Dwindling Workforce

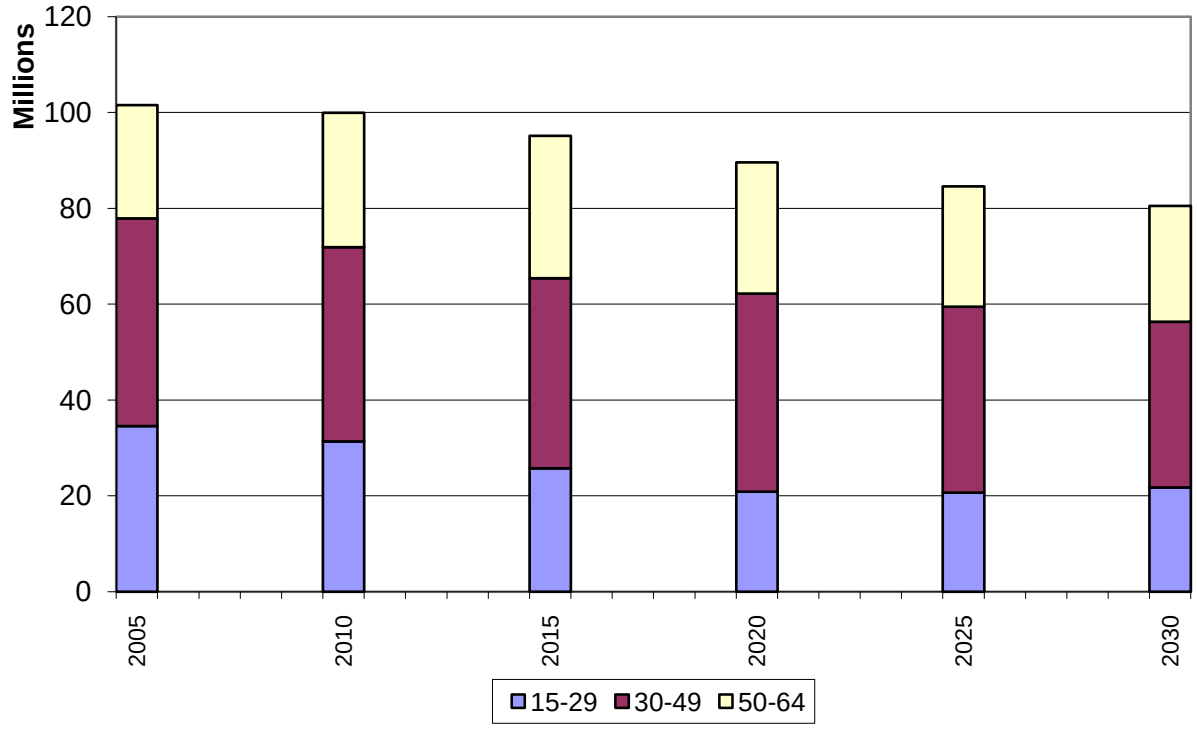
The overall tendency of population aging in the coming decades will be affecting the working age groups in Russian society, too. In 2005, to go by the estimates of the Census Bureau's International Data Base (IDB), the median age of the Russian Federation's 15–64 cohort was 40.2 years. In 2030, according to IDB projections, it would be 46.5 years, a sharp increase of over 6 years in a single generation. When we consider Russia's steep age-specific mortality curves for its population of working age, we can see that the prospective aging of the Russian Federation's labor force could exert downward pressure on both average levels of health and by extension average levels of productivity in the workplace. We can get a sense of the prospective mortality pressures facing Russia's working age population over the coming generation from the country's 2005 age-specific mortality schedules.[lxvi] Holding mortality by age and sex constant but adjusting for projected changes in the composition of the country's 15–64 population, average mortality levels for Russia's working age population would rise by over 18% between 2005 and 2030.[lxvii]

In addition to the overall graying of Russia's population of working ages, other demographic changes are also transforming Russia's manpower availability in an inauspicious fashion, at least from the standpoint of maintaining economic growth. We can see this by comparing the Census Bureau's numbers on projected demographic changes for the years 2005–30 in Russia and Western Europe for the 15–64 population. In 2005, Western Europe's conventionally defined population of working ages was over two and a half times larger than Russia's (265 million vs. 101 million). Both areas are expected to see their working age populations shrink between 2005 and 2030. Yet the Russian Federation's working age population is anticipated to decline more than Western Europe's in absolute terms (18 million for Western Europe vs. 21 million for Russia). While Russia's 15–64 group is projected to shrivel by over 20% during the course of this quarter century, the fall-off in younger manpower is expected to be especially drastic. For every five-year age grouping in the 15–34 range, population totals are seen as falling by over 35% between 2005 and 2030. For people in the early thirties, totals are projected to plummet by fully 40%. By contrast, the comparable declines in young manpower in Western Europe are set to range between 12% and 18% in those same age groups. Between now and 2030, Russia may only experience population growth within the conventionally defined working ages of 55–64.

For reasons we have already discussed, though, these men and women tend to be far less suited for sustained labor force participation than their counterparts in Western Europe and the West.

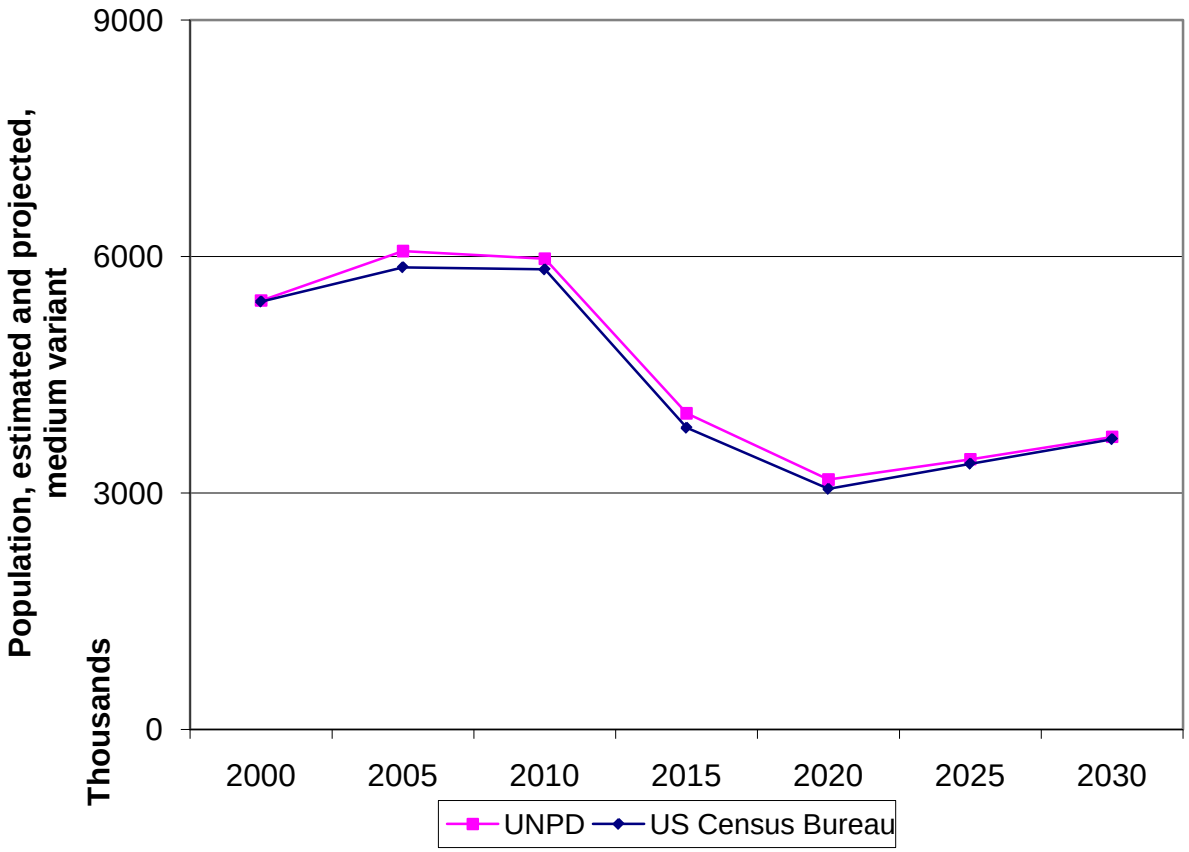
The Kremlin's own optimistic prognosis for Russia's population prospects flies in the face of some obvious and irreversible demographic realities. Foremost among these is the brute fact that Russia's birth slump over the past two decades has left Russia with many fewer potential mothers for the years just ahead than the country has today. Figure 27 includes estimates and projections from the UNPD and the US Census Bureau of the 20-24 female population in the decades between 2000 and 2030. [SEE FIGURES 26-28]

Figure 26: Adult Population 15-64 by Age Group: Russia, 2005-2030 (estimated and projected, millions)



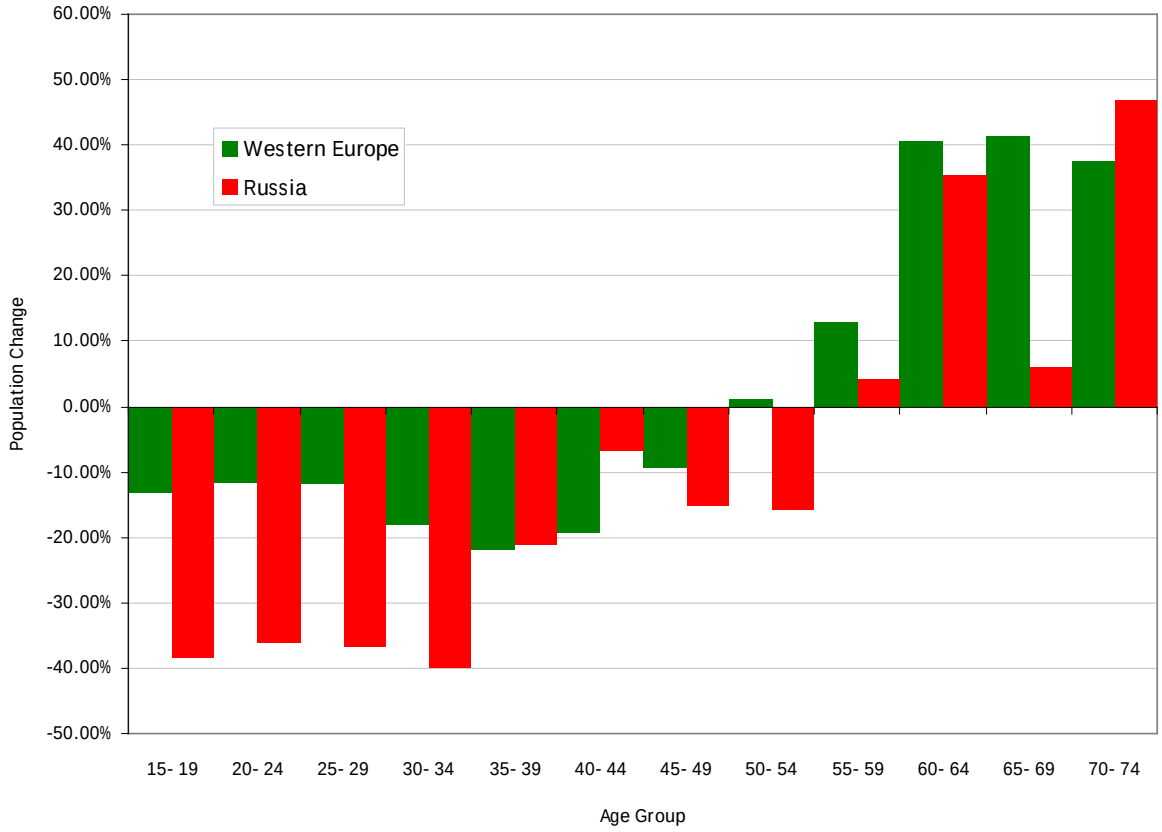
Source: U.S. Bureau of the Census International Database, available online at http://www.census.gov/ipc/www/idbacc.html; Accessed February 26, 2010.

Figure 27: Females aged 20-24 in Russia, estimated and projected, 2000-2030, UNPD and U.S. Census Bureau



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision and World Urbanization Prospects: The 2007 Revision, http://esa.un.org/unpp, February 26, 2010 and US Census Bureau International Database. Available online at http://www.census.gov/ipc/www/idbnew.html, Accessed on February 26, 2010.

Figure 28: Projected Population Change For Adult Age Groups, 2005-2030:
Western Europe vs. Russia (percentage change)



Note: Definition of "Western Europe" from U.S. Census Bureau
Source: U.S. Census Bureau, International Data Base, http://www.census.gov/ipc/www/idb/.

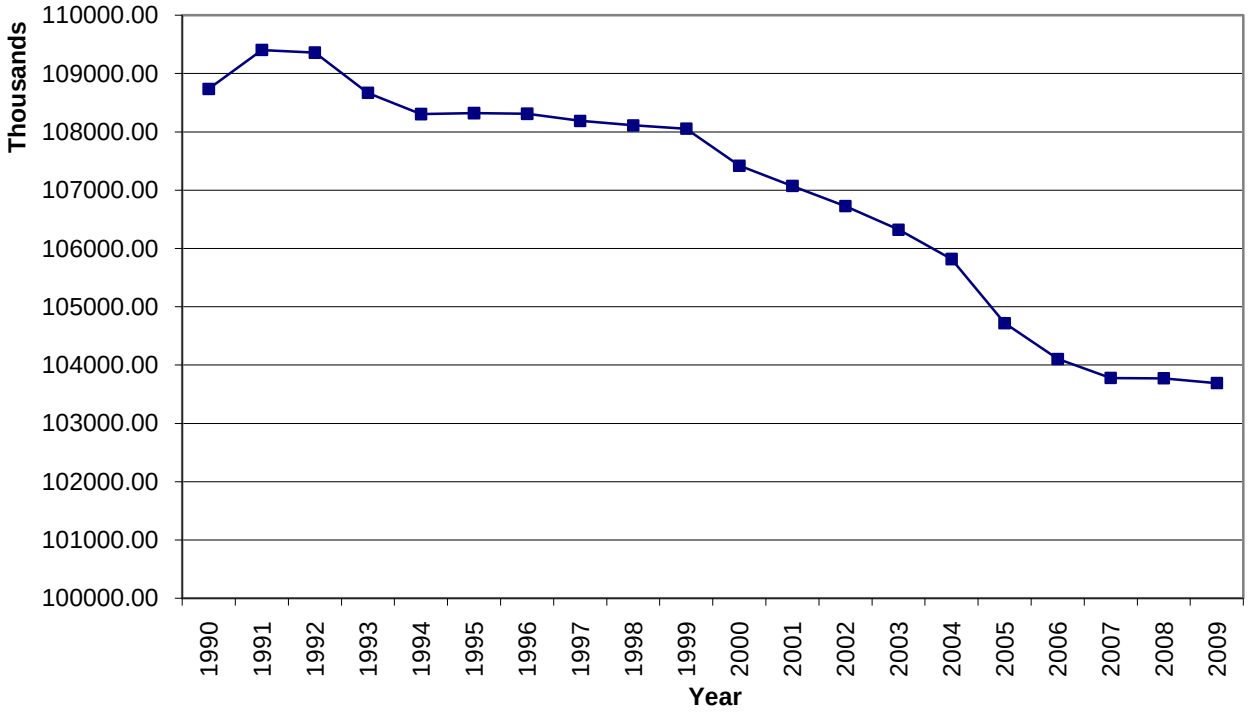
All of these figures do not bode well for Russia's prospects for future prosperity. Indeed, the widespread impact of Russia's demographic decline will have acute effects on the portion of the population responsible for economic production. And one corollary of this will be the marked decline in the population of cities, traditionally the centers of commerce and economic activity.

In a 2003 report to the UN Economic Commission for Europe, Goskomstat officials noted that "the urbanization process [in the Russian Federation] has come to a halt".[lxviii] According to Goskomstat figures, Russia's urbanization ratio was very slightly lower in 2002 (73.3 percent) than in 1989 (73.4 percent). But since Russia's population had declined over the inter-censal period, this meant that that Russia's urban population had also declined—and had in fact dropped by more, in relative terms, than the rural population.

Subsequent data reaffirmed this trend: Russia's depopulation has meant not only a shrinkage of Russia's cities, but a disproportionate decline in the country's urban population. Between 1991

and 2008, Goskomstat estimates indicate that Russia's urban population fell by over 5.5 million, and that the country's urbanization ratio dropped slightly as well, from 73.8 percent to 73.1 percent. With depopulation, Russia is witnessing an emptying of its cities—and even some incipient de-urbanization.

Figure 29: Russian Urban Population, 1990-2009 (estimated)



State Committee of the Russian Federation on Statistics (Goskomstat of Russia) Internet Database, http://www.gks.ru/scripts/db_inet/dbinet.cgi, accessed on February 25, 2010.

Along with the spread of "ghost villages" and the disappearance of rural hamlets, shriveling cities and even dying cities are now part of the Russian landscape. In 1989, the Russian Federation counted 688 urban settlements with populations of 20 thousand or more; by 2006, it only had 680 of these. In 2002, Russia had 330 cities of 50 thousand or more—but just 324 of them in 2006. Further, in 2002 Russia had 13 cities of one million or more; just four years later, there were only 11.[lxix]

Of the 36 cities that reported a population of half a million or more at some point in the 1989-2006 period, fully 23 were smaller in 2006 than in they had been 19 years earlier, including nine of the dozen largest cities in the nation. Between 2002 and 2006, another five of these cities—including St. Petersburg, the county's second largest city—lost population.

Virtually alone among Russia's very largest cities, Moscow grew dramatically and more or less steadily over this period, gaining about 1.75 million inhabitants and increasing in size by about 20 percent between 1989 and 2006. If one lived and worked only in Moscow, it would perhaps be possible to gather the impression—or rather, the severe misimpression—that Russia's urban centers are thriving, and that urban life in Russia is burgeoning today. Beyond the confines of the capital city, of course, any such notion would be virtually impossible to maintain.

A demographic crisis of such portent for individual well-being can hardly but have grave consequences for economic performance. Blessed as the Russian Federation may be with its vast endowments of natural resources, in the final analysis it is human resources, not underground deposits of minerals and organic compounds, that account for national wealth in the modern world.

Implications for Russia's Defense Potential

In 2007 Sergei Stepashin, formerly prime minister and currently comptroller general of the Russian Federation, warned that the "reduction in the size of the population and the reduction of population density…will create the danger of weakening of Russia' s political, economic, and military influence in the world."[lxx] As he explicitly recognized, Russia's demographic crisis places inescapable limits on the country's defense potential. Those demographic constraints on the country's military power are set to tighten significantly in the years immediately ahead.

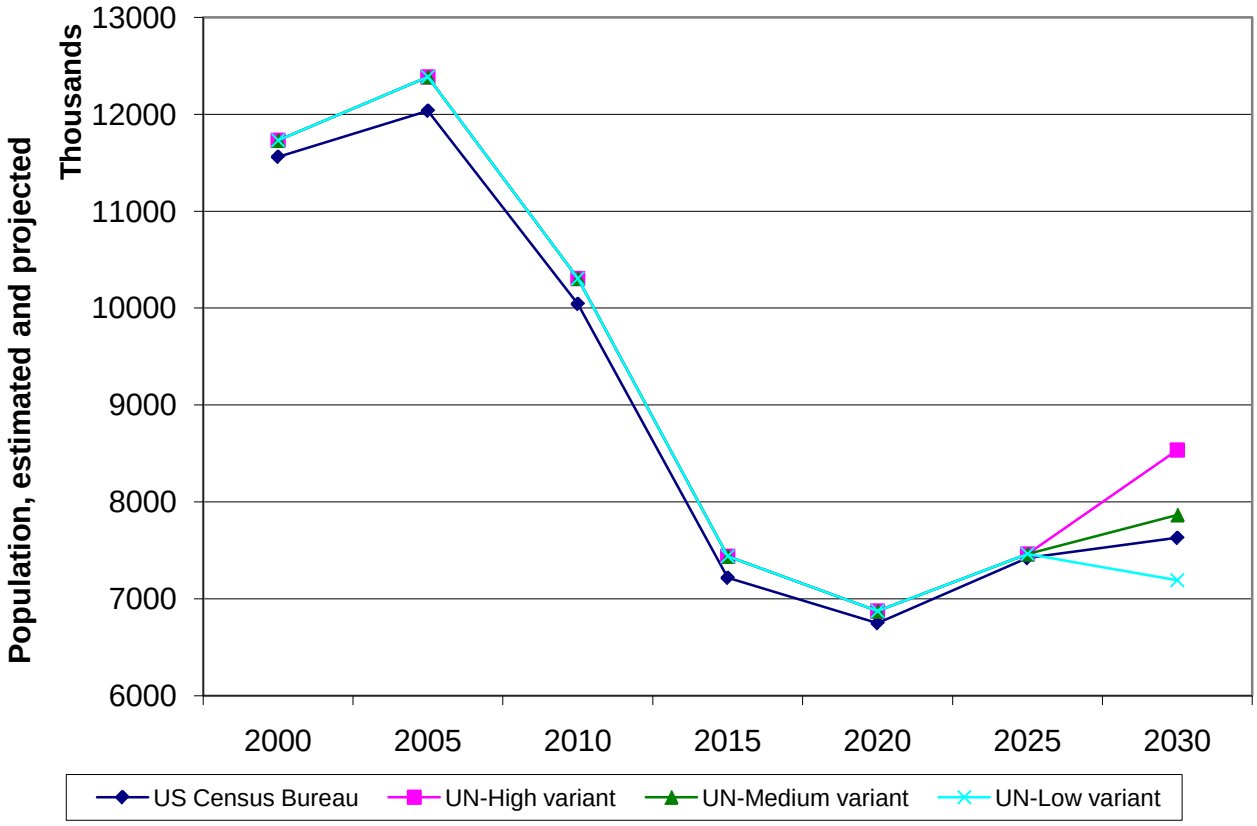
The most obvious constraints imposed by the ongoing demographic crisis concern military manpower. Maintaining the country's current (2008) force structure—a military of 1.027 million, mainly comprised of young conscripts obliged to serve twelve-month term of service[lxxi]—will not be feasible in the years immediately ahead.

The Russian military of 2008 was manned very largely by young men born 18 years earlier. In 1990, just over one million (1.021 million, to be exact) boys were born in Russia. In 1999, however, the corresponding total had slumped to 626,000, a drop of 39%.[lxxii] Very roughly speaking, this means Russia's pool of prospective recruits, under the current staffing formula, is set to fall by almost two-fifths between 2008 and 2017.

It may also be important to note here that the decline in young males in Russia is not due to gender imbalances at birth, as is the case in China, but rather due to unfavorable male survival schedules—as described in more detail above—that put pressure on family formation and family stability.

If Moscow is to prevent a drop-off of military manpower of this magnitude in the next few years, it has only two choices: induct less qualified conscripts or extend the term of service under the draft. Neither of these are palatable options.[lxxiii]

Figure 30: Males aged 15-24 in Russia, estimated and projected, 2000-2030, UNPD and U.S. Census Bureau



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision and World Urbanization Prospects: The 2007 Revision, http://esa.un.org/unpp, February 26, 2010 and US Census Bureau International Database. Available online at http://www.census.gov/ipc/www/idbnew.html, Accessed on February 26, 2010.

A Continued Demographic Crisis

Russia's demographic crisis, as this study has shown, places unforgiving limits on the country's economic prospects. It is weighing the country heavily toward a prolonged relative decline for the Russian Federation.[lxxiv] Yet for now, the Kremlin still evidently believes that its ambitious long-term socio-economic plans will not only remedy the country's demographic woes but also propel the Russian Federation into the select ranks of the world's economic superpowers. If Russia's demographic and relative economic decline do continue over the next few decades, Moscow's leaders will be in the unpleasant position of awakening from an illusion. They will suddenly realize that their long-term strategy is unworkable and that they face a much more unfavorable international situation than they had imagined.

What can we expect of Russia's external behavior when the Kremlin's lofty ambitions are eventually confronted by inescapable demographic facts, with their attendant consequences for Russian power? Will a suddenly disillusioned Russian leadership conclude that urgent new measures are needed to defend the country from foreign threats? Will the national directorate become more risk-averse in its international policies, or less so? Will it be tempted to embrace a more unfriendly, aggressive international posture? Not least of all, will Russian leaders become more prone to making international miscalculations?

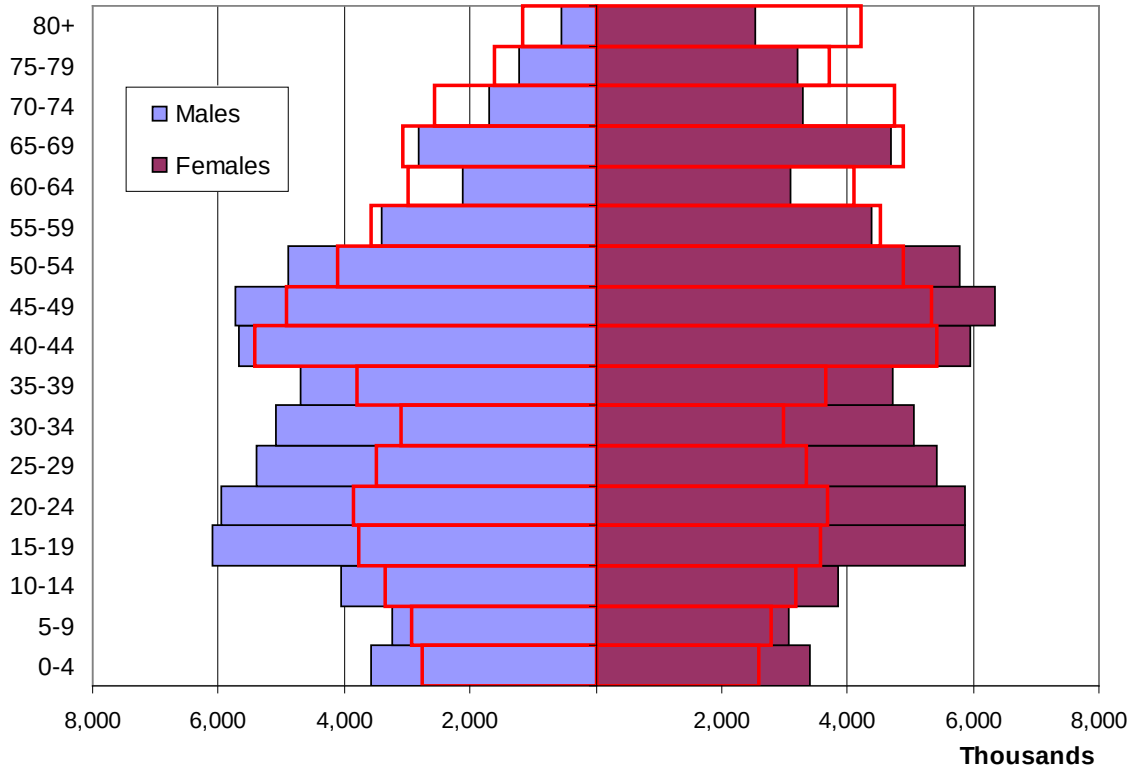
None of these questions, of course, can be answered today. All of these questions, however, point toward a single conclusion, namely, that one of the most worrisome consequences of the Russian demographic crisis might turn out to be its impact on the foreign and security policies of the country's own leadership.

What Is to Be Done?

As we have by now seen, the Russian Federation's present peacetime demographic crisis is a problem monumental in scope and truly historic in nature. This is not the place or time to offer an action plan for its redress. Rather, by way of conclusion, we may emphasize that the manifold woes the crisis imposes on the Russian people today will not be remedied without a commensurately monumental and historical national-wide effort by the Russians themselves to move their society toward a different and much better future. In this sense, the task at hand is nothing less than a fundamental change of mentality.

It is difficult to foresee scenarios where the Russian leadership are willing or even could also take corrective measures to address the series of demographic challenges the country faces. Within the next 20 years, it may be possible to mitigate or moderate some of the biggest challenges, but it is almost impossible to see how the trends could be reversed.

Figure 31: Estimated and Projected Population Structure: Russian Federation, 2005 vs. 2030, U.S. Census Bureau Estimates



Source: US Census Bureau International Database. Available online at http://www.census.gov/ipc/www/idbnew.html, Accessed February 26, 2010.

Alexander Solzhenitsyn—modern Russia's greatest writer and most inspiring champion of the human spirit—once observed:

> Patriotism is an integral and persistent feeling of love for one's homeland, with a willingness to make sacrifices for her, but not to serve her unquestioningly, not to support her unjust claims, rather to frankly assess her faults, her transgressions, and to repent for these….A multinational country must rely in difficult moments of history upon the support of *all* of its citizens. Every one of its peoples must live with the conviction that it, too, desperately needs a singular defense of the interests of the [motherland].[lxxv]

By this definition, the struggle to extricate Russia from its current demographic travails is nothing less than a patriotic task. Indeed, joining in this struggle may be the most pressing of the many challenges facing every Russian patriot today. Just as patriotism has a spiritual as well as a political element, any successful movement for a Russian demographic renaissance will likely be conducted beyond the narrow political sphere alone.

Foreign well-wishers can contribute far less than Russians themselves to the mitigation of this peacetime demographic crisis. That should hardly surprise. Nonetheless, the international community can most assuredly also be of assistance in this hour of need for the Russian people. The humanitarian imperative impels us to try to mitigate modern Russia's suffering, and there are diverse avenues through which international humanitarian assistance (and technical support) could be of help in Russia today.

The outside world's role in restoring Russia to health could and should extend much further than simply changing bandages on wounds. A healthy, robust Russia—one in which human resources are prized and augmented—is not just in the interest of the Russian people. It is in the interest of the world as a whole. Recognition of this critical fact should inform the international community's broader approach to Russia—not only today but in what we may hope will be better times to come.

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[i] This paper draws directly from Nicholas Eberstadt, *Russia's Peacetime Demographic Crisis: Dimensions, Causes, Implications*, (Seattle, WA: National Bureau of Asian Research, 2010). Note that the paper does not take into account results from the Russian Federation 2010 Census, initial summary returns from which were reported at the end of March 2010.

[ii] One statistical measure for gauging this variation is the "coefficient of variation". The calculated coefficient or variation for net natural increase by oblast in Russia in 2006, according to Goskomstat data, was -1.22. This speaks to a fairly high degree of regional differentiation by comparison to other regional demographic differences within Russia, as we shall see in coming chapters.

[iii] Calculations based on the regions' enumerated populations in the 2002 census, per Timothy Heleniak, "The 2002 Census In Russia: Preliminary Results", *Eurasian Geography and Economics*, vol. 44., no. 6 (September 2003), pp. 430-442.

We may note that three additional regions which reported positive natural increase in 2006 were not included in Goskomstat's regional breakdowns for 2007: Taimyr (Dolgano-Nenets) autonomous district; Chukotka autonomous district; and Evenki autonomous district. Their total population as of the 2002 Russian census totaled fewer than 115,000. If these regions had indeed reported positive rates of natural increase, this would have raised the total number of such oblasts and regions within Russia to 22 out of 89—but it would still have been the case that some 90 percent of the population of the Russian Federation then lived in negative natural increase oblasts or regions.

[iv] For 2007, the cutoff for membership in the "high income economies" grouping was a PPP-adjusted per capita GNI of $16,830 (for Lithuania). The Russian Federation's estimated level for that year was $14430—about 15% below the notional "high income economy" threshold. World Bank, *World Development Indicators 2009*. (CD-ROM).

[v] One particularly dramatic post-Communist transformation in health and mortality conditions for a former Soviet Bloc state was the case of the former German Democratic Republic (now Eastern Germany within the reunified Federal Republic of Germany). Life expectancy in Eastern Germany has soared since reunification: in the sixteen years from 1990-2006, overall life expectancy in Eastern Germany is estimated to have

risen by over 8 years—over three and a half days for every passing calendar 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, standing today just a few months of the Western German level. Overall life expectancy at birth in Eastern Germany is now in fact higher than life expectancy in the United States: at the time of reunification, it was nearly three years lower than in America. For more details on this case, see Nicholas Eberstadt and Hans Groth, *Die Demografiefalle: Gusendheit als Ausweg für Deutschland und Europa*, (Stuttgart: Thieme Verlag, 2008).

[vi] Goskomstat, Statistical Yearbook of Russia (2007) Moscow:: FSUE, 2008.

[vii] A. G. Vishnevskii, ed., *Naseleniye Rossii 2005*, (Moscow: MAKS Press, 2007), p. 201.

We should flag a perhaps obvious but nonetheless critical point at this juncture: ethnicity is a somewhat malleable construct. That is to say: one's ethnic identity—and self-identification is by no means a fixed and invariant quantity. To the contrary, it can change, according to context and circumstances. "Ethnic re-identification" is a very real feature of modern life, and not only in Russia. But it certainly needs to be born in mind in all our discussions of ethnic trends within Russia today. We will have more to say about this later in the study.

[viii] WHO Regional Office for Europe, European Health for All Database, http://www.euro.who.int/hfadb

[ix] For details, see WHO Regional Office for Europe, "European Health for All database: User manual", (n.d.), p. 13; available electronically at ftp://ftp.euro.who.int/hfa/hfa-db.pdf; accessed Sept 12, 2009.

[x] The Republic of Ingushetia consistently reports the lowest age-standardized mortality rates in the Russian Republic—but there are reasons to question the reliability of these figures. For one thing, its reported death rates are consistently lower than the corresponding rates in adjoining Chechnya and North Ossetia—in 2006, over 25 percent lower for males and females alike—despite the similar socioeconomic fundamentals of the three regions. For another, reported age-standardized mortality rates in Ingushetia rose markedly (by 13 percent or more) for between 2001 and 2006 for both men and women, whereas the corresponding male and females death rates in practically all the rest of the Russian Federation were reported to have declined over that same period. The simplest plausible explanation for these seeming anomalies would be under-reporting of mortality in Ingushetia.

[xi] We can make this point more precisely to the statistically inclined through calculations on the coefficient of variation by oblast. The coefficient of variation by oblast for TFRs in the Russian Federation as of 2006 was 0.24—but the c.v. for age-standardized mortality rates in 2006, according to Goskomstat data, was just 0.19 for males and 0.18 for females.. Russia's fertility levels, as we will recall from a previous chapter, are low and fairly even from one region to the next; age-standardized mortality, on the other hand, is very high, but still more uniform across regions.

[xii] Irina E. Kalabikhina, "Fertility in Russia," Moscow State University, 2006, Table 1, available at http://www.infostat.sk/vdc/epc2006/papers/epc2006s60535.pdf

[xiii] The coefficient of variation for TFR by oblast in 2005, for example, was 0.233—or barely a fifth of the absolute level for variations in rates of natural increase by oblast that same year.

[xiv] Goskomstat's 2007 TFR figures excluded one region (the Evenki autonomous district) which had reported a total fertility rate of 2.3 in 2006, and likely would have reported above-replacement fertility in 2007 as well. Also not reporting was the Kamchatka region, which had reported a TFR of 1.38 in 2006, and may well still have had a TFR of under 1.5 in 2007. But these omissions do not appreciably alter the table here.

[xv] International Data Base, U.S. Census Bureau; available electronically at http://www.census.gov/ipc/www/idb/informationGateway.php; accessed August 30, 2009.

[xvi] National Center for Health Statistics, Centers for Disease Control

Joyce A. Martin, Brady E. Hamilton, Paul D. Sutton, Stephanie J. Ventura, Fay Menacker, Sharon Kirmeyer, and T.J. Mathews, "Births: Final Data for 2006", *National Vital Statistics Report*, vol. 57, no. 7 (January 7, 2009), available electronically at http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf.

[xviii] Goskomstat, *The Demographic Yearbook of Russia 2007* (Moscow: FSUE, 2007), Table 2.12.

[xix] For background and estimates, see Timothy Heleniak, "Regional Distribution of the Muslim Population of Russia", *Eurasian Geography and Economics*, vol. 47, no. 4 (July-August 2006), pp. 426-448.

[xx] Brady E. Hamilton; Joyce A. Martin; and Stephanie J. Ventura, "Births: Preliminary Data for 2007", *National Vital Statistics Reports*, vol. 57, no. 12 (March 18, 2009), p. 3.

[xxi] *Ibid.*, Tables 1.6, 2.12.

[xxii] *The Demographic Yearbook of Russia 2008*, Tables 1.6 and 2.12.

[xxiii] United Nations, *Statistical Yearbook 2007*, (New York: United Nations, 2008), Table 61, p. 656.

[xxiv] Data from the United Nations *Statistical Yearbook* make the point. In 1976, international tourist entries into the USSR were reported to total under 3.9 million; the number of visitors overseas from the USSR was said just barely to exceed 2 million (and almost all of this to "fraternal" Warsaw Pact countries). These figures, recall, encompassed

international travel to and from all of the Soviet Union—not just Russia. (United Nations, *Statistical Yearbook 1977*, (New York: UN, 1978), Table 164)

By way of comparison: in 2002, over 20 million arrivals and departures from the Russian Federation were being officially processed each year. (Olga Chudinovskikh, Moscow State Lomonosov University, "Migration Statistics in Russian Federation: basic problems and possible solutions," PowerPoint presentation at UNECE/UNFPA/NIDI Workshop on Migration Statistics, January 24-28, 2005, available at www.unece.org/stats/documents/2005/01/migration/5.e.ppt. Accessed October 9, 2009)

[xxv] We say this while noting that our calculations do betray a few curious quirks and anomalies—especially for the extremely elderly age groups (persons in their Eighties and Nineties, and older).Our method suggests that an entirely disproportionate share of Russia's elderly population would be due to net migration including over half of Russia's Centenarians! We discount these results, and attribute them to the technical issues entailed in the accurate count of the extreme-elder population by year of age, and in the accurate estimation of survival schedules for these same groups. In any event, these quirks do not have an appreciable bearing on our overall estimates of net surviving migrant population, insofar as the 80-plus grouping makes up only a little more than 1 percent of this total estimated population.

Our method also suggests that a strikingly high proportion of the Russian Federation's teens (13-18 years of age) would have been comprised of migrants as of New Year's Day 2007. We regard this result as curious, and somewhat suspicious. Working age in Russia is officially designated as 16: thus an influx of would-be laborers in their late teens would not seem *prima facie* outlandish. But there is less of an obvious explanation for why the country's 13-15 age group should seem, in our calculations, to be comprised of youthful immigrants from other countries. It is possible that inconsistencies or inaccuracies in the Goskomstat intercensal estimates of the *residential* population of the Russian Federation may account for some of this seeming overrepresentation of foreign youth in our estimates. Presumably we will have a better basis for estimating 'net surviving migrant' population after the next RF census is completed, and its returns released.

[xxvi] Note in addition that our calculations present an estimated net surviving population by year of age *at the end* of the 18-year period under consideration—a framework that tends to bias the measured age of the indicated population upward, certainly by comparison with the notional *age at immigration*. Despite these inherent methodological biases, median age for our net surviving migrant population as of Jan 1 2007 was under 30 years—as against the U.S. Census Bureau's estimate of 38.5 years for the Russian Federation population at mid-2007.

[xxvii] The Constitution of the Russian Federation (1993), Articles 17-1 and 19-2; available electronically at http://www.constitution.ru/en/10003000-01.htm; accessed May 21, 2009.

[xxviii] Cf. Valery V. Syepanov, "The 2002 Census: Approaches to Measuring Identity", Paper presented at "Association for the Study of Nationalities Convention", Columbia University, New York, USA, April 13, 2002, available electronically at http://www.iea.ras.ru/topic/census/discuss/stepanov_paper2002.doc;
Figures from the RF 2002 Census derived from Tables 4-1 and 4-3 of Goskmostat 2002 Russian Federation Census website , available electronically at http://www.perepis2002.ru/index.html?id=87.

[xxix] Hyon B. Shin and Rosalind Bruno, "Language Use and English-Speaking Ability: 2000", *Census 2000 Brief C2KBR-29*, (Washington, DC: U.S. Bureau of the Census, October 2003), available electronically at http://www.census.gov/prod/2003pubs/c2kbr-29.pdf .

[xxx] Thus Russian Communist Party chieftain Gennady Zuganov in September 2006: "Russia cannot go on subordinating…the interests of 25 million Russians who…have found themselves outside their Motherland." "Time to Change Course", Communist Party of the Russian Federation, September 4, 2006, available electronically at http://www.solidnet.org/cgi-bin/lpr?parties/0640=russia,_communist_party_of_russian_federation/943kkro5sep06.doc .

[xxxi] Timothy Heleniak, "Migration of the Russian Diaspora After the Breakup of the Soviet Union", *Journal of International Affairs*, vol. 57, no. 2 (Spring 2004), pp. 99-117, cite at 107.

[xxxii] Ibid., p. 106.

[xxxiii] By the World Bank's reckoning, PPP-adjusted GDP per capita in 2007 was 17% higher than in Latvia than in Russia; 22% higher in Lithuania; and 39% higher in Estonia. *WDI Online, loc. Cit.*

[xxxiv] Ali Mansoor and Bryce Quillin, eds., *Migration and Remittances: Eastern Europe and The Former Soviet Union*, (Washington, DC: World Bank, 2007), Table 1.1.5, p. 121, available electronically at http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration_FullReport.pdf
Estimates are PPP-adjusted, for the period 2000/02.

[xxxv] "Religion in Russia" (no date), available on the Russian Embassy (USA) website at http://www.russianembassy.org/RUSSIA/religion.htm; accessed May 31, 2009.
[xxxvi]Russian Federation Ministry of Foreign Affairs, "Speech by Russian President Vladimir Putin at Meeting with Spiritual Leaders of the Chechen Republic, the Kremlin, Moscow, March 17, 2003" , March 18, 2003, available electronically at http://www.ln.mid.ru/bl.nsf/900b2c3ac91734634325698f002d9dcf/d3ddcba4868ac61d43256ced005b0d50?OpenDocument .
[xxxvii] Comment by Ravil Gaynutdin, quoted in Jeremy Page, "The rise of Russian Muslims worries Orthodox Church", *The Times of London*, August 5, 2005, available electronically at http://www.timesonline.co.uk/tol/news/world/article551693.ece .
[xxxviii] Henry A. Kissinger, "Finding Common Ground with Russia", *Washington Post*, July 8, 2008; available electronically at http://www.washingtonpost.com/wp-dyn/content/article/2008/07/07/AR2008070702218.html
[xxxix] See, for example, Paul Goble, "Window on Eurasia: What Kind of Muslim Country Will Russia Become?" Window On Eurasia Website, March 26, 2007, available electronically at http://windowoneurasia.blogspot.com/2007/03/window-on-eurasia-what-kind-of-muslim.html ; Daniel Pipes, "Predicting a Majority-Muslim Russia", Daniel Pipes Blog, August 5 2005, updated February 7, 2009; available electronically at http://www.danielpipes.org/blog/2005/08/predicting-a-majority-muslim-russia.html . (Note Goble and Pipes are reporting analyses by others, rather than offering such predictions themselves.)
[xl] Thus Mikhail Alexseev of San Diego State University:

According to surveys I conducted in Russia in 2005-2007, most Muslims do not regularly attend mosque, but the level of attendance varies by ethnic group. Almost 66 percent of Tatar Muslims in Tatarstan, 80 percent of Adyghes in Adyghea, 74 percent of Kazakhs in the Volgograd region, and 74 percent of Azerbaijanis in Dagestan said they did not attend mosque at all in the previous six months. Of the remainder, the majority attended a mosque or house of prayer fewer than three times in that same half-year period. Respondents were asked not to count attendance of predominantly ethnic ceremonies such as weddings, funerals, or baptisms.

Mikhail Alexseev, "Overcounting Russia's Muslims: Implications for Security and Society
PONARS Eurasia Policy Memo No. 27 (Georgetown University, August 2008), available electronically at https://gushare.georgetown.edu/eurasianstrategy/Memos/2008/pepm_027.pdf.
[xli] We should note here that a number of countries of Southeastern Europe do have larger proportional "Muslim" minorities than Russia—or even "Muslim" majorities: characteristics that can be largely understood as a legacy of the region's long Ottoman interlude. So it is well to remember that the historical genesis of the "Muslim" populations in the different regions of Europe are themselves likewise distinctive, with Western Europe's patterns emerging in the wake of the Second World War II (with decolonization and a demand for guest workers in "labor scarce" economies) and Russia's rooted in earlier, in the historical expansion of the Russian state over territories of Muslim cultural heritage.
[xlii] Judyth Twigg, Differential Demographics: Russia's Muslim and Slavic Populations, *PONARS Policy Memo No. 388* (December 2005), available electronically at https://gushare.georgetown.edu/eurasianstrategy/Memos/2005/pm_0388.pdf .
[xliii] Paul Goble, "Window on Eurasia: Moscow Seeks to Reduce Concentrations of Muslim Soldiers in Military Units," April 18, 2011
[xliv] Irina Ivaknyuk, "The Russian Migration Policy and Its Impact on Human Development: The Historical Perspective", *UNDP Human Development Reports Research Paper 2009/14* (April 2009), available electronically at http://hdr.undp.org/en/reports/global/hdr2009/papers/HDRP_2009_14.pdf ; cite at p. 5.
[xlv] *Ibid.*, p. 6.
[xlvi] Some localities—including most notably Moscow—still strictly insist upon the authority of their own local officials to approve or deny permission for newcomers to reside within their administrative jurisdiction. But these locally assumed prerogatives appear to be in contravention of Russia's current federal law.
[xlvii] Russian Federation GDP growth as measured in rubles (constant 1990 domestic prices); derived from UN National Accounts Main Aggregates Database, available electronically at http://unstats.un.org/unsd/snaama/selCountry.asp ; accessed December 13, 2009.
[xlviii] See, for example, Yuri Andrienko and Sergei Guriev, "Determinants of interregional mobility in Russia: Evidence from panel data", *Economics of Transition*, vol. 12, no. 1 (March 2004), pp. 1-27; Ira N. Gang and Robert C. Stuart, "Russian Cities in Transition: The Impact of Market Forces in the 1990s", *William Davidson Institute*

Working Paper no. 697 (University of Michigan Business School, May 2004); Ted Gerber, "Internal Migration Dynamics in Russia, 1985-2001: Determinants, Motivations and Consequences", (Washington, DC: National Council for Eurasian and East European Research, November 2005), available electronically at http://www.ucis.pitt.edu/nceeer/2005_819_07g_Gerber.pdf ; and Anne White, "Internal Migration Trends in Soviet and Post-Soviet European Russia", *Europe-Asia Studies*, vol. 59, no. 6 (September 2007), pp. 887-911.

[xlix] Note, however, that this measure of net migration includes both international and domestic net migration.

[l] An extreme example if this effect was seen the case of Moscow on the eve of the 2002 population count, roughly 13 years after the final Soviet census. As it happened the Goskomstat/Rosstat intercensal estimate of the capital's population for 2002 proved to be 1.8 million persons too low—an underestimate of almost 18 percent. Cf. Timothy Heleniak, "The 2002 Census in Russia: Preliminary Results", *Eurasian Geography and Economics*, vol. 44, no. 6 (September 20003), pp. 430-442; data taken from Table 2, p. 436.

[li] From the standpoint of accuracy, it would be preferable to use two censuses as the endpoints for updated net domestic migration estimates—but since the results of the next Russian population census will not be available for years to come, the best may be the enemy of the good here.

[lii] Cf. Professor Michael Bradshaw, "A New Russian Heartland?" Department of Geography, University of Leicester, October 27, 2006; available electronically at http://www.geog.le.ac.uk/russianheartland/index.html.

[liii] This number, remember, must by definition be far lower than the true total for geographic movement within the country over this period. For one thing, it ignores any and all migration *within* Russia's provinces or administrative regions; for another, it estimates a region's net residual of newcomers or emigrants for the period as a whole, rather than the volume of intra-provincial movement over the interim.

[liv] A discussion dating back to Jean-François Gravier's 1947 treatise, *Paris et le désert français; décentralisation, équipement, population.*

[lv] Gaddy and Hill, *The Siberian Curse*, 23.

[lvi] For the years 2003–2008, the pace of net out-migration from the RFE, as reported in official data, appears to be abating. As already noted, these intercensal estimates of net migration from the RFE have understated the territory's true levels of outmigration in the past.

[lvii] Michael Bradshaw, oral comments at "Russia in Asia-Asia in Russia: Energy, Economics and Regional Relations," Conference co-sponsored by the Kennan Institute and the Asia Program, Woodrow Wilson International Center for Scholars, Washington, D.C., July 22–23, 2004. For conference proceedings, see Joseph F. Dresen, ed., *Russia in Asia—Asia in Russia: Energy, Economics, and Regional Relations*, Kennan Institute Occasional Paper #292 (2005).

[lviii] Vladimir Kontorovich, "Can Russia Resettle the Far East?" *Post-Communist Economies and Transformation* 12, no. 3 (September 2000): 365–84; Vladimir Kontorovich, "The Russian Far East and the Social Sciences," paper presented to the 34th National Convention of the AAASS, Pittsburgh, PA, November 24, 2002, http://www.haverford.edu/economics/oldsiteOct2008/Faculty/Kontorovich/documents/AAASS.pdf .

[lix] Maria Repnikova and Harlay Balzer, *Chinese Migration to Russia: Missed Opportunities* (Washington, D.C.: Woodrow Wilson International Center for Scholars; Kennan Institute and Comparative Urban Studies Eurasian Migration Paper #3, 2009): 9–10.

[lx] For an analysis of Russian attitudes toward China, see Vladimir Shlapentokh, "China in the Russian Mind Today: Ambivalence and Defeatism," *Europe-Asia Studies* 59, no. 1 (January 2007): 1–21. For public opinion survey data on Russian popular impressions about the size of the Chinese population in the Russian Far East, see Mikhail A. Alexseev and C. Richard Hofstetter, "Russia, China and The Immigration Security Dilemma," *Political Science Quarterly* 121, no. 1 (Spring 2006): 1–32.

[lxi] For an informed discussion of the range of estimates and their provenance, see Repnikova and Balzer, *Chinese Migration to Russia*, 13–15.

[lxii] Repnikova and Balzer, *Chinese Migration to Russia*, 13–15.

[lxiii] Repnikova and Balzer, *Chinese Migration to Russia*, 34–35. As in the rest of Russia, current events are less than auspicious for immigration. Repnikova and Balzer point out that the current economic crisis, in conjunction with a rise of popular anti-immigrant sentiment and local administrative measures, is inhibiting demand for Chinese manpower and entrepreneurship in the Russian Far East and likely driving down the number of Chinese immigrants in the region.

[lxiv] "Putin speaks for urgent steps to advance Far East," *Interfax News Agency*, July 21, 2000.

[lxv] Paul Goble, "Window on Eurasia: Chinese Bestseller Has Russian Far East Falling under Beijing's Influence" June 20, 2009, http://windowoneurasia.blogspot.com/2009/06/window-on-eurasia-chinese-bestseller.html.

[lxvi] Mortality schedules derived from the Human Mortality Database.

[lxvii] Calculations derived on data from http://www.census.gov/ipc/www/idb and http://www.mortality.org .

[lxviii] State Committee of the Russian Federation on Statistics (Goskomstat), "Dissemination of the Results of the Population Census", submitted to the UN Economic Commission for Europe, December 2003, available electronically at http://www.unece.org/stats/documents/2003/12/commentary/crp.2.e.pdf., accessed September 14, 2008. (The paper also asserts—quite incorrectly—that a cessation of urbanization is common to "most of the developed countries of the world".)

[lxix] A. G. Vishnevskii, ed., *Naseleniye Rossii 2005*, (Moscow: MAKS Press, 2007), p. 35.

[lxx] "Russian chief auditor calls for urgent measures to halt population decline," *BBC Worldwide Monitoring*, March 10, 2007, cited in Murray Feshbach, "Russian Military: Population and Health Constraints," in *Russian Power Structures: Present and Future Roles in Russian Politics*, eds. Jan Leijonhielm and Fredrik Westerlund (Stockholm: Swedish Defense Research Agency, 2007), 155, http://www2.foi.se/rapp/foir2437.pdf.

[lxxi] International Institute of Strategic Studies, *The Military Balance 2008* (London, IISS, 2008), 212. This figure does not include an additional 418,000 personnel categorized by IISS as paramilitary, mainly special armed units of the Ministry of Internal Affairs (MVD) and the Federal Security Service (FSB).

[lxxii] Birth totals in Russia have recovered appreciably since 1999. In 2008, about 888,000 baby boys were born. That total, however, is still 14% below the 1990 level, and for reasons already outlined in this study, there is good reason to expect birth totals to decline again in the years ahead.

[lxxiii] Extending the duration of service under the draft would likely be unpopular politically and would also force a reduction in the numbers of young Russians in higher education. Reducing the quality of the inductee pool would be problematic for reasons that are self-evident.

[lxxiv] This is not to say that the demographic crisis precludes economic growth in Russia. The Russian Federation may well enjoy a measure of economic growth in the decades ahead. Rather, it is to suggest that in relative terms Russian GDP may lag ever further behind the world's leading economic powers in the decades ahead, due in large part to the multifaceted crisis of human resources besetting the Russian Federation.

[lxxv] Alexander Solzhenitsyn, "Russia in Collapse," in *The Solzhenitsyn Reader: New And Essential Writings, 1947–2008*, eds. Edward E. Ericson, Jr., and Daniel J. Mahoney (Wilmington: ISI Books, 2008): 473–74.