

2050: IMPLICATIONS OF DEMOGRAPHIC TRENDS IN THE OSCE REGION

HEARING BEFORE THE COMMISSION ON SECURITY AND COOPERATION IN EUROPE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION

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JUNE 20, 2011

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2050: IMPLICATIONS OF DEMOGRAPHIC TRENDS IN THE OSCE REGION

June 20, 2011

COMMISSION ON SECURITY AND COOPERATION IN EUROPE
WASHINGTON, DC

The hearing was held at 2 p.m. in room 2247, Rayburn House Office Building, Washington, DC, Hon. Christopher H. Smith, Chairman, Commission on Security and Cooperation in Europe, presiding.

Commissioners present: Hon. Christopher H. Smith, Chairman, Commission on Security and Cooperation in Europe; and Hon. Benjamin L. Cardin, Co-Chairman, Commission on Security and Cooperation in Europe.

Witnesses present: Jack A. Goldstone, Virginia E. and John T. Hazel, Jr. Professor, and Director, Center for Global Policy, George Mason University; Nicholas Eberstadt, Henry Wendt Scholar in Political Economy, American Enterprise Institute; Richard Jackson, Director and Senior Fellow, Global Aging Initiative, Center for Strategic and International Studies; and Steven W. Mosher, President, Population Research Institute.

HON. CHRISTOPHER H. SMITH, CHAIRMAN, COMMISSION ON SECURITY AND COOPERATION IN EUROPE

Mr. SMITH. Good afternoon, everybody, and thank you for being here, and welcome to our witnesses and everyone joining us.

Today, we will examine demographic trends in the OSCE region, which is comprised of the 56 participating States of the OSCE: the countries of Europe and the former Soviet Union as well as the United States and Canada. Dramatic demographic changes are already under way in the region, and there are sure to be dramatic consequences for the security, economic and human dimensions of the OSCE. Lawmakers need to start thinking about how these and other changes will affect policies going forward in this expansive region and their respective countries.

The fact is that most OSCE countries are in some stage of demographic decline, many of them in rapid decline. Only a handful of the OSCE's 56 states are at or above replacement level. In many of them, military planners are asking questions as to how or even whether they will be able to abide for their security in just a few generations, given demographic forecasts. Current birth rates preprogram developments long into the future.

Likewise with the economy, it is far from clear how, in many of the most rapidly declining countries, economic growth can be sus-

tained by a declining population or how numerically smaller younger generations will even begin to provide for the larger, older generations, a very real and pressing issue.

As to the human dimension of the OSCE, it is alarming and sad to see xenophobic and ultra-nationalistic violence fueled by one's nation's perceptions of long-term decline vis-a-vis another group. In countries faced with a shrinking work forces and growing dependence on foreign workers, migrants all too often find themselves discriminated against and targeted, especially in tough economic times. It is particularly ugly when some dominant social groups respond to their own demographic decline by proposing to engineer a corresponding decline in other groups, whether this is proposed overtly by racist demagogues or covertly by groups of international elites adept at hiding their real intentions behind other ideologies, a factor in a number of OSCE countries today.

I do look forward to our witnesses' testimony. This information, I think, will be very helpful as we approach the OSCE Parliamentary Assembly's Annual Session that will be held in Belgrade in just a couple of weeks time. And it'll also, I think, spur a larger discussion that has been largely missing in many of these OSCE countries. Some, yes, have begun to take some actions to reverse this decline. But in other cases, the issue of demographic decline is not even on the radar screen.

So I do thank all of you for being here, and I'd like to now introduce our witnesses. And I understand, Mr. Goldstone, you have to leave at 2:30 or so?

Dr. GOLDSTONE. Around 2:30 [off mic].

Mr. SMITH. We will proceed first with Dr. Goldstone and then I will introduce each other our other witnesses immediately after that.

Dr. Jack A. Goldstone is the Virginia E. and John T. Hazel, Jr. Professor of Public Policy and an Eminent Scholar at the George Mason University's School of Public Policy. Dr. Goldstone specializes in global and comparative history, political conflict, revolutions and social movements, democratization, state building, demographic security and comparative economic development. He serves as Director of the Center for Global Policy at George Mason. Dr. Goldstone is a prolific researcher, author and lecturer. There will be a period for questions immediately following his testimony, but again, I—if the other distinguished panelists wouldn't mind, Dr. Goldstone, if you could proceed.

**JACK A. GOLDSTONE, VIRGINIA E. AND JOHN T. HAZEL, JR.
PROFESSOR, AND DIRECTOR, CENTER FOR GLOBAL POLICY,
GEORGE MASON UNIVERSITY**

Dr. GOLDSTONE. Thank you, Chairman Smith. It's my honor and pleasure to be here. I apologize that I do have to leave for another engagement at 2:30, but I will stay for your questions.

There are many dimensions in which demography affects the interests of the OSCE nations. I'm going to focus in particular on migration issues and leave some of the security issues to my distinguished colleagues who are also testifying here today. Now, with respect to the OSCE, I'm very pleased to be here to discuss because I strongly believe in the values of openness, freedom and protection

of human rights that the OSCE was designed to protect. And indeed, it is a bulwark against the racism, xenophobic nationalism and state abuses that brought us the gulags, World War II and the Holocaust and other horrors of the 20th century. It is unfortunate that at present, we see some resurgence of this xenophobic nationalism, even covert racism, brought on by changes in demography and in particular, issues of migration, and particularly to Western Europe.

The world is changing rapidly. As you noted, Mr. Chairman, the demography of Europe has changed. Let me highlight that drama. For most of the last 500 years, European populations were booming and indeed were countries of outward migration, sending peoples to the Americas and even to colonize parts of sub-Saharan Africa, Asia, the Middle East. Whatever we may think of these colonial and imperial ventures today—and their record is certainly mixed at best—it's much more difficult to conceive of a Europe that would have grown without this massive out migration. We might have seen a Europe that was overrun, impoverished and lacking all of the new ideas, the new products and resources that were brought in by greater communication with the world.

It is now ironic but also difficult for Europeans to grasp that their numbers are now stagnant or in decline and other parts of the world are growing both in numbers and in the wealth and cosmopolitan attitudes that enable outward migration. So Europe finds itself now as the recipient of migrants to a greater degree than it has in its history.

Now, I want to tell you in my comments that I think this is both necessary and beneficial for Europe, but I will point out that because Europeans have not thought of themselves as a country needing immigration, they have treated migrants from abroad as foreigners, visitors, guest workers, without dedicating themselves to the effort needed to integrate and assimilate foreigners.

Now, the United States within the OSCE can, I believe, serve as a model of the type of benefits that accrue to a country that is open to migration. As we'll see, the need for migration is strong in Europe if they reject it. And this will be strong not only in Europe but frankly throughout the OSCE region. Bad things will happen. The economies will struggle to survive.

So the role of the United States and Canada as countries of immigration, built and strengthened by immigration, is critical in the OSCE. But in order to play that leadership role, I believe the United States still needs to overcome some of its own issues and confusions and its own migration policy, which, as you know, is a topic of debate here on the Hill as we speak. But I hope things will move forward there.

Let me simply go to the arithmetic that lies behind my concerns of the need for migration in Europe. If we could see the first slide, please. Thank you. Demographic projections can often be a welter of confusing figures. I've decided to focus on one simple number, and that is the ratio between people in the prime working years from age 15 to 59 and seniors who are 60 and older. In a healthy society, the number of workers is, of course, much larger than the number of seniors. And indeed, in the United States, for example,

during the 1970s, the numbers were about four to one. They've since started to decline.

As you see here in this figure, if we look at the ratio of workers per senior in selected OSCE countries in 2010, there's quite a substantial range. On the low end, Italy and Germany barely have two workers for every senior today. The United Kingdom, France, Spain, and Hungary are somewhat better, closer to three. But these are already dangerous levels. It's very hard to sustain the health care and the pensions for an older population if there are only two workers per senior.

The United States is comfortably above three today, as are Romania, Russia, Poland. Meanwhile, countries like Turkey and Kazakhstan, further East in the OSCE region, have quite a strong surplus of young workers. So it's no surprise that today's migration patterns in the OSCE are dominated by the movement of workers from the East, both Eastern Europe and the Middle East, Central Asia and Turkey to Western Europe. That's the pattern that's been prevailing for the past decade and will probably be strong for the next decade or two as well.

However, in the future, even this flow will not resolve the labor issues, because if we jump ahead to the next slide, we look at these numbers for 2050. And if you'll notice, the left-hand scale has now contracted. Whereas previously I could show numbers from zero to seven or eight, we're now looking from zero to three, because much of the world is coming to look like Europe in terms of its fertility behavior. We're seeing a convergence as countries grow richer and more prosperous and more urban, people have fewer children.

But the trend is dramatic and strong. Italy and Germany will be heading toward only one worker for every senior by the middle of the century. Spain, Romania, and Poland, which had been sources of out migration, will be down below one and a half. The United Kingdom, France, and Hungary are doing better, but will still have between one and a half and two workers per senior. Those are still crisis levels for a government committed to taking care of its elderly population. The United States and Turkey will be at two, not three. And this is still a level that requires policy attention. Two workers per senior means some adjustments need to be made in taxation and benefits if a system is to remain stable, another topic of debate on the Hill these days. Even Kazakhstan will find only half as many workers per senior as it has today.

The obvious response is going to be migration from outside the OSCE region. Countries of North Africa, sub-Saharan Africa, the Middle East and even East Asia will be anxious to supply immigrants to meet the labor needs of Europe. And Europe will desperately need additional workers.

I want to say, this doesn't mean a tidal wave of foreign workers that will overwhelm the domestic populations. Right now, most European countries have a foreign-born population of under 10 percent. Were this to double in the next 20 to 30 years, it would go far toward meeting the needs for more young laborers. And combined with an uptick in fertility and a higher work force-participation rate by those in their late working years and moving into their late 60s and early 70s, Europe should be in good shape. However, it will take advances in all three areas; that is, higher fertility, greater

work force participation and longer working careers and increases in migration to avert a demographic implosion, which is what appears to be on the books now if no action is taken.

Now, let me also say that I know that this will not be an easy step for Europeans to take. There have already been frictions with regard to multiculturalism and immigration, as there are frictions in the United States. But it's important to focus on the gains. Migrants have brought to the United States and Canada outstanding performers in the sciences, in the arts, in business, in politics. We would be a far poorer nation, less diverse, less innovative, less rich in ideas without our migrants. And in those countries where voices are being raised warning that migration means an end to domestic values, the United States and Canada need to gently remind our colleagues that it is possible to combine pluralism and a variety of peoples with dedication to a single set of values. Europe's greatest strength in the core of the OSCE principles is a commitment to protection of basic human rights, openness and freedom. Those values do provide the foundation for people of different cultures and different faiths to work together and create stronger societies.

Let me stop there. I'd be glad to take questions. And thank you again for the opportunity to testify today.

Mr. SMITH. Dr. Goldstone, thank you very much. And I will be brief, I know, because you have to leave. You know, you stop at 2050. Do your projections go beyond that, you know, especially as it relates—like, Turkey goes from seven [workers] to one [senior] to going to joining the United States at about two to one.

Dr. GOLDSTONE. Right.

Mr. SMITH. Does that trend continue to worsen, or is there a turnaround at some point?

Dr. GOLDSTONE. The trend within all OSCE nations as far as we can tell is for a convergence of lower fertility rates. Now, whether or not nations will follow Italy and Germany down to very low sub-replacement rates or whether they will end up closer to replacement is hard to tell today. My guess is that more countries will end up closer to replacement rate than to the population contraction rates that we're seeing in some OSCE countries.

However, the process of moving from a growing population to a stable population inevitably entails a period in which the number of seniors starts to grow more rapidly than the number of workers. And so that problem of making the transition and maintaining equity and government fiscal stability during that transition—that will probably increase for all the OSCE countries.

After 2050, the problem will become less acute because we'll have seen the worst of it coming in the next 40 years. And if we have made the adjustment to providing equity for seniors and balancing migration, then the period from 2050 to 2100 should be a matter of applying lessons learned and continuing to do all right.

Mr. SMITH. Let me ask you just briefly—you point out or you've argued that demographic changes translates into global security concerns, undermining perhaps NATO and other important organizations and obviously what undergirds them, the countries themselves. Would you speak briefly to the security implications—

Dr. GOLDSTONE. Yes, of course.

Mr. SMITH [continuing]. And then the issue of the Islamic populations, which tend not to follow, I would think, the patterns of those of other faiths—in the region. They're not likely to follow the demographic implosion, are they? And what does that mean—

Dr. GOLDSTONE. Not—

Mr. SMITH [continuing]. Implication-wise?

Dr. GOLDSTONE. The good news is yes, even most Muslim and Middle Eastern countries are moving toward lower fertility. In the long run, they are likely to converge with the trends that we see in the more advanced industrial countries. But they're several decades behind in this regard. And it's our lives in the next few decades that we need to be concerned about.

With regard to security, if one looks at the population of the world as a whole—I'm fond of telling people the age distribution is about what it was in the United States in 1970, which was a healthy age distribution that was the foundation for decades of economic growth. The problem is, if you then separate the rich countries from the poor ones, we find the rich countries will have a preponderance of seniors, creating an obstacle to continued economic growth, whereas the poorer nations will have a predominance of very young people, creating challenges of education, productivity and keeping social order intact if the aspirations of those young people are not met. These—

Mr. SMITH. We know for a fact that the Chinese Government is facing a huge demographic implosion, owing to the fact that seniors will soon just overwhelm children and young adults based on the one-child-per-couple policy.

Dr. GOLDSTONE. Yes, the good—the good news for us is that the concerns that China's economy will rapidly overtake that of the United States are unlikely to be realized because of the demographic decline. What this means, though, is that China will start to stabilize. And the globe will kind of break into groups—North America, Europe, China—that are coping with demographic decline facing large regions of the world with still rapid population growth and large numbers of young people that frankly will be facing intermittent turmoil. The Arab revolts were fueled in large part by high rates of unemployment among the young. And we are seeing those high rates of unemployment among the young in many regions of South Asia and sub-Saharan Africa as well as the Middle East.

And as you will hear from my colleagues, the military resources to cope with disorder around the globe will also be strained by the aging and fiscal problems in Western countries.

Mr. SMITH. Just two final very brief questions. Any thoughts on the future of some of the smaller OSCE countries like Georgia, Bulgaria, and Estonia? What do their future look like? Will they go away, you know, over time?

And second, with regard to unfunded liability, we know for a fact Social Security and Medicare are in huge, huge trouble here in the United States. Europe obviously has very similar mechanisms for their older population.

Dr. GOLDSTONE. Yes.

Mr. SMITH. Are they facing a similar catastrophic outcome like we are?

Dr. GOLDSTONE. Right. If you'll forgive me for trying to be nuanced here on this, Europe's problem of pensions and health care is complicated by the fact that they are aging faster than the United States. However, their health care costs are much less and under better control than ours. The United States, because of the large baby boom, is actually facing a larger percentage increase in the elderly. That is, Europeans' old population may grow by 50 percent in the next few decades. Americans' will double by 2050. We'll have more young people to support them, but the sheer number of elderly people will overwhelm our health care system if we do not get costs under control.

So I would say Europe and the United States both have their problems; they're both a little different. For the smaller countries with very low growth rates—will they disappear? I don't think that's likely. I think it's likely that reproduction rates will gradually return to closer to replacement.

However, they will go through a period of decline, and they will lose energy and innovation unless they open themselves up to new influences. We've seen Japan in its lost decade not only lose a decade of economic growth, but young people there have lost energy, they've lost optimism, they've lost faith in the future. And it's an example of what can happen if a country thinks it can face a demographic decline without renewing its energy from outside influences.

Mr. SMITH. Thank you. Dr. Goldstone, thank you so much for your testimony, and—

Dr. GOLDSTONE. It's been my pleasure.

Mr. SMITH [continuing]. I appreciate it. But we've made your deadline.

Dr. GOLDSTONE. Thank you.

Mr. SMITH. I'd like to now introduce Dr. Nicholas Eberstadt, who is the Henry Wendt Scholar in political economy at the American Enterprise Institute. A political economist and a demographer by training, he holds numerous positions, including service as a member of the Global Leadership Council at the World Economic Forum. He researches and writes extensively on economic development, foreign aid, global health, demographics and poverty. Dr. Eberstadt is the author of numerous monographs and articles on North and South Korea, East Asia and countries of the former Soviet Union. A prolific author of one of the most—his most recent books is entitled "Russia's Peacetime Demographic Crisis."

We will then hear from Dr. Richard Jackson, who is a senior fellow at the Center for Strategic and International Studies, where he directs the Global Aging Initiative, a research program that explores the economic, social and geopolitical implications and demographic trends in the United States and around the world. Dr. Jackson is involved in numerous related projects, including demographics and geopolitics in the 21st century, the future of U.S. immigration and, GAI projects, including the Global Aging Preparedness Index and the Global Aging Vulnerability Index. Among his many books is a recent publication, "The Graying of the Great Powers: Demography and Geopolitics in the 21st Century."

And last, we will hear from Steven Mosher, who is President of the Population Research Institute. He is an internationally recog-

nized authority on China and population issues, an acclaimed author and speaker. He has worked tirelessly since 1979 to fight coercive population control programs and helped hundreds of thousands of women and families worldwide over the years. Mr. Mosher has appeared before Congress numerous times as an expert on world population, China and human rights abuses. He has appeared before many TV shows, including “60 Minutes,” “Good Morning America,” “The Today Show,” “20/20”; and his latest book is entitled “Population Control: Real Costs, Illusionary Benefits.”

Dr. Eberstadt, please proceed.

**NICHOLAS EBERSTADT, HENRY WENDT SCHOLAR IN
POLITICAL ECONOMY, AMERICAN ENTERPRISE INSTITUTE**

Dr. EBERSTADT. Mr. Chairman, distinguished co-panelists and guests, it’s a privilege and honor to be here today. Mr. Chairman, with your permission, I would like to submit to the recorder a longer version of my remarks, a study that I prepared with my AEI colleague, Apoorva Shah.

Mr. SMITH. Without objection, so ordered.

Dr. EBERSTADT. Thank you. I’m going to talk in the next few minutes about the demographic circumstances and outlook for the OSCE’s most populous European country, the Russian Federation. Demographers are often chided for seeming to be excessively gloomy for finding the cloud around any sort of silver lining. But when we look at the situation in Russia today, we have to see the makings and prospect for a real demographic crisis, and the most peculiar sort of crisis, because it is a peacetime crisis for an educated and urbanized society. It has humanitarian implications, but I believe it also has economic and security implications.

And with your indulgence, I will run through some slides, which I hope can illustrate what I mean more vividly than my few words. Can we move to the first slide, please? Since the end of the Communist era, Russia has seen 13 million more deaths than births. There have been three deaths for every two births in Russia over the past roughly 20 years. If this is all one knew about that society, one would think this was a place in the midst of a prolonged famine or total war; yet, as I mentioned, this is a peacetime, educated, urbanized society. Next slide, please.

Thanks to net in-migration, Russia’s population decline has been cushioned somewhat, but only somewhat. Russia’s absolute numbers have dropped by at least 6 million over the last two decades, probably the largest peacetime decline in any human population since the catastrophic consequences and aftermath of China’s Great Leap Forward. Next slide, please.

So what exactly is going on? The problem—the driver of this situation in Russia is not in particular a collapse in births, although births have dropped in Russia. Russia’s fertility patterns look quite European when put in a larger context. Russia is a sub-replacement European society, but its fertility levels, absolute levels, do not look so different from other developed societies. Next slide, please.

What we see in Russia is that births have been—childbearing—has been at a below replacement level for a very long time, for per-

haps two generations at least, since—for the women born in the 1930s and since. And next slide, please.

And fertility levels throughout Russia's ethnicities are perhaps surprisingly low. Chechens are seen in Russia as being famously prolific, but even in Chechnya, birth levels are apparently only at about three births per woman per lifetime, somewhat similar to perhaps less than Mexican-Americans in our own society. The dramatic finding, I think, that one sees is that almost all groups within Russia including, quote, "Muslim heritage groups," have below-replacement fertility. And Russian ethnics within Russia have one of the very lowest levels of fertility. Next slide, please.

There's a great deal of interest within Russia and outside Russia about the population of Islamic or Muslim heritage. These numbers are very difficult to specify with any precision. One study which has attempted to do this suggests that maybe 10 percent of Russia's population comes from groups that have traditional Muslim cultural heritages, which does not necessarily mean that all the people are believers or practicing if they are adherents. Next slide, please.

So this means that Russia's population of people with Muslim backgrounds would be somewhat higher than any in Western Europe, but the comparisons are somewhat difficult to make for historical reasons—the, quote, "Muslim population" in Russia, having been there for hundreds and hundreds of years; Europe's—Western Europe's, quote, "Muslim population" being newcomers or second-, third-generation populations. Next slide, please.

It's impossible to make accurate forecasts in the future for a country's population. That being said, there are factors which are pushing fertility prospects down for Russia in the future. One of these is a change in marital patterns. Divorce is coming to Russia with a—with alacrity, let's say. And as in Western Europe—next slide, please—we can see that the proportion of children born outside of marriages is increasing quite vigorously. Both of these factors tend to press down on average childbearing levels, especially in places where welfare states are very poorly developed for child support. Next slide, please.

So in those ways, Russia looks quite European. When one looks at Russia's health situation, one might say there's a big difference. The outlook and prospect is—might be considered Third World. And in some ways, you'll see that that sort of a comparison is unfair to Third-World countries.

Unlike any Western European countries, Russia has had a health catastrophe. There's no other word for it. Russia's life expectancy level is a little bit lower now than it was 50 years ago. And if we look at the actual trends that have evolved per capita—I mean, excuse me, age-standardized death levels are over twice as high as in Western Europe. They're 50 percent higher than in the former Soviet bloc countries of the new E.U., which were similar to Russia only a generation ago.

There are two drivers behind this health catastrophe. Next slide, please.

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There are two drivers behind this health catastrophe. Next slide, please. One is cardiovascular deaths. And Russia's level of death from heart disease is over twice as high as would be predicted by the country's income level—difficult, but apparently not impossible.

The other—next slide, please—is injury from—is deaths from injury and so-called external causes—homicide, suicide, things like that, poisonings. Russia's level is five times as high as Western Europe's in this regard.

Next slide, please.

And if all one knew about Russia were its level of deaths from injury, violence and external deaths, one would presume that Russia was a sub-Saharan conflict or post-conflict state, is a—it is a complete outlier from the rest of the developed world's experience.

Next slide, please.

To make matters even worse, Russia's health disaster is concentrated in its working-age population. For men between their late 20s and late 50s, death rates are typically 100 percent—and I said 100 percent—higher than they were 40 years ago. And for women, death rates for this age group are typically 50 percent higher than they were 40 years ago.

Next slide, please.

One sense one can get of the fragility of the Russian working—workforce's health status is by comparing death rates for Russian men at age 30 with death rates for, let's say, Dutch men at different ages. As of more or less today, a Dutch man who is age 58 has a lower risk of mortality in the coming year than a guy from Russia who is 30 years old. It is an enormously health-challenged population.

Let's look at the next slide, please.

And this is true for older people in Russia as well. Their health levels are much more tenuous than those of their Western European comparators.

Next slide, please.

Russia has a very badly underfunded social security system, makes our Social Security discussions look like a bagatelle, raising the whole question about what is to become of a sick, frail and poor senior population in Russia in the decades immediately ahead.

Next slide, please. In doing my research, I thought that Russia's education would be the redeeming virtue that one would find in this otherwise grim human resource system. Unfortunately, that is not so. If one takes a look at the numbers of patents awarded for inventions generated in different countries, one finds that Russia is orders of magnitudes lower than the G-7, orders of magnitude

lower than most of the BRICs [Brazil, Russia, India, China] and even lower than some of the tiny East Asian tigers.

The place that most closely tracks Russia, year for year, in total patent awards, is the state of West Virginia. And there many redeeming things about the State of West Virginia, but it is not known as the knowledge center in the United States. It has a tiny population in relation to Russia's huge population.

Next slide, please.

If one tries to do more detailed comparisons, one can see that Russia is punching below its weight in knowledge generation in any sort of—any sort of way one tends to make the comparison. And this is not true of all post-communist societies. China, for example, is punching well above its weight. Next slide, please. And we see the same thing from other metrics.

So what does this all mean for the long run? Next slide, please.

All of the prognoses from different demographic authorities—from our Census Bureau, from the United Nations Population Division, even from Russia's Goskomstat—see excess death over birth and population decline more or less as far as a demographer's eye can go. And this is—next slide, please—and pressures for fewer births are going to continue to come as the cohort of women moving into childbearing ages collapses, in echo of previous births in the recent past.

Next slide, please.

Russia's working-age labor force is on the way down. It is on track to shrink by about 20 percent over the next 20 years—next slide, please—and no less dramatically, Russia's urban population is shrinking. Russia is the most prominent place in the world where the total number of people living in cities is on a downward spiral. Cities are the growth engines of a modern global economy. Next slide, please. And in Russia's urban centers health levels are lower than in urban centers in China, in Brazil, in Egypt, in Indonesia, even in India. Thus we have a tremendous challenge for eliciting economic growth.

Next slide, please.

Russia also has immense and unavoidable demographic constraints in mustering military manpower. Russia's manpower of military ages is set to shrink by about 50 percent over the period of 2005 to 2020.

Next slide, please.

And Russia has vast open spaces. Think of the Russian Far East. The Russian Far East has over 6 million square kilometers and fewer than 6 million people inhabiting the area. It is more densely populated than Antarctica. It is more densely populated than the Sahara Desert. It is not more densely populated than the Amazonia or Mongolia.

Next and final slide, please.

And to make matters even more interesting, people are moving out of Siberia. Russian citizens are moving out of Siberia, not in.

How is Russia going to maintain the sovereignty and integrity of this area in the future? Many Russian demographers wonder whether this is possible.

I'll stop right there. Thank you, Mr. Chairman.

Mr. SMITH. Thank you so much, Dr. Eberstadt.

Dr. Jackson.

RICHARD JACKSON, DIRECTOR AND SENIOR FELLOW, GLOBAL AGING INITIATIVE, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES

Dr. JACKSON. Thank you—thank you, Mr. Chairman. It is an honor to have the opportunity to testify on this important topic.

I also have a longer version of my remarks, which, with your permission, I'd like included in the record.

Mr. SMITH. Without objection, so ordered. It will be made part of the record.

Dr. JACKSON. Thank you very much.

The world stands on the threshold of a stunning demographic transformation that's often called global aging and which promises to reshape the geopolitical order in dramatic and profound ways.

By the 2020s, much of the developed world will be entering a new era of hyperaging and population decline—may I have the first—we do have the first slide; very good—hyperaging and population decline. Many countries will experience fiscal crisis, economic stagnation and ugly political battles over old age benefit cuts and immigration.

Meanwhile, the developing world will be rocked, potentially, by its own demographic storms. Mr. Chairman, as you've mentioned, China is a rapidly aging society. It faces its own massive age wave, which it may not be able to afford.

At the other end of the spectrum, many other developing countries, particularly in the Muslim world, will face a new resurgence of youth in the 2020s, whose aspirations they may not be able to meet.

So we're moving toward a future where potentially we have a weakening of the capacity of the United States and its traditional developed-world allies to maintain security, even as we have a series of new demographically driven risks and potential threats on the horizon.

There is of course significant variation in the demographic outlook within the rich world. At the one extreme is the United States. We are the youngest of the rich countries and, despite the retirement of our baby boom, thanks to our relatively high fertility rate and substantial net immigration, we will be the youngest by an even wider margin in 2030 or 2040 or 2050.

At the other extreme is Japan. While the elder share of our population will rise from 13 to 20 percent, Japan's, on current trend, is on track to reach 39 percent.

Europe lies somewhere in between. But within Europe itself, there is a very significant variation, and what I would call your attention to in particular in this slide is that the outlook in France and Northern Europe, including the Low Countries, Scandinavia, and the U.K., though challenging, is not dire.

In the rest of Europe, fertility rates are much lower, the aging trend much more severe, and whereas Northern Europe is looking at population stagnation, the rest of Europe is looking at very steep population decline.

Next slide, please, and if you would bring up all the bullets—thank you.

This demographic shift promises to impose significant constraints on the economic and geopolitical capacity of the rich countries, and there are four in particular that I'd like to focus on briefly.

The first is the prospect of emerging manpower shortages as youth populations stagnate or decline.

The second is the growing fiscal burden of rising retirement and health care costs.

The third is the prospect of slower economic growth.

And finally, the question of how the aging of populations and also growing diversity within populations may affect not just the capacity of societies to maintain security commitments but also their willingness to do so.

Next slide, please.

The manpower issue is an important issue, and it's usually the first that one thinks of when one thinks of countries with aging and declining populations. The [military] service-age population, because population decline is being driven by subreplacement fertility and the hollowing out of the base of the population pyramid, the service-age population will be more slowly growing or more rapidly contracting than the total population. And as you can see, among the G-7 countries, the United States is the only country that will experience any significant growth in the service-age population between now and the middle of the century.

The demographic trends themselves could be exacerbated by growing competition for relatively scarce youth, with tighter civilian labor markets. Some people might object that these manpower shortages don't matter as much today as they did in the past, because we moved toward—further into an era of high tech military—militaries, but I think if—there are many lessons, perhaps, to be drawn from Iraq and Afghanistan, but one is clearly that boots on the ground matter—and in any case, the second challenge, which is the rising fiscal burden of an aging population, will limit the capacity of countries to respond to emerging manpower shortages by substituting military capital for military labor.

Next slide, please.

Here we come back to—if we can back—oh, yes, this is right. Thank you.

If we come back to Professor Goldstone's support ratio of working-age adults to elders, falling fertility and rising longevity translate directly into a falling support ratio of working-age adults to elders, and a falling support ratio translates in turn to a rising cost rate for pay-as-you go social insurance systems, like Social Security or like Medicare.

In a series of projections we've done at CSIS, we calculate that the cost of maintaining the current deal for seniors, given the shift in support ratio, would increase old-age benefits spending by, on average, 10 percent of GDP across the rich countries between now and 2040, and by more—next slide, please—you can see the projected growth in this slide compared with current defense spending as a share of—as a share of GDP.

There are very few developed countries that have much tax room to pay for significant—whatever one's views on the proper size, the optimal size of government or the optimal tax burden, there are literally very few countries that could raise taxes enough to pay for

a significant share of this extra cost growth, and that is particularly true in Europe, where many countries are already at or beyond the efficient taxation threshold, meaning that raising the tax rate would simply drive more workers into a growing gray economy.

Countries will have to reduce benefits, but efforts to do that are likely to meet growing political resistance from aging electorates, who, in most European countries, are much more dependent on these public benefits systems than seniors are in the United States.

So what happens when an economically—when politicians and policymakers face a choice between an economically ruinous tax hike and a politically impossible benefit? Well, all too often, one of other two things happens: You cannibalize the rest of the budget or you let deficits grow that undermine national savings.

Next slide, please.

It's not just a fiscal challenge. It's also a challenge of slower economic growth. And when I confidently state that demographic trends, particularly in Japan and Europe but also in the United States, will lead to slower GDP growth in the future, I'm sometimes accused of pessimism. But this is not pessimism; this is really simple arithmetic. GDP growth is employment growth or, more precisely, the growth in hours worked times the growth in output per hour.

And what this table shows is that the underlying rate of growth in the working-age population is falling rapidly and turning negative. In Europe we are looking, at best, at stagnation in France and the U.K., and in the faster-aging countries, like Germany and Italy, a sharply contracting working-age population. So unless productivity accelerates at least as fast as the rate of growth in employment falls, we're looking at slower economic growth, and in some countries, we are actually looking at the prospect of secular economic stagnation. That is no growth in aggregate GDP across the business cycle.

There is some reason to fear that rather than productivity growing more rapidly, the aging of the population may actually pull productivity down, because, as more of the population enters the harvest years, rates of savings and investment are likely to decline, and also, though it pains me to say this personally—it's not just the world that's aging; I am also—but there is a large literature in the social and behavioral sciences which suggests that productivity generally declines at older ages, particularly in environments of rapid technological and market change. It's simply harder for older workers to adjust.

And this difficulty, the higher adjustment costs of an aging society, may also increase the risk of a protectionist backlash. It—historically, expanding populations and expanding markets have gone hand in hand with free trade, whereas—think of the 1930s—contracting markets have gone hand in hand with beggar-thy-neighbor protectionism.

Next slide, please.

Here we leave entirely the realm of quantifiable social science and become more speculative. But it's at least worth reflecting on how the shift in the age structure of society may affect the overall mood of society. What this somewhat puzzling chart depicts is the

share of the population in each of the G-7 countries with less than 20 years of life remaining, between 1950 and 2050. So if you will, it's a proxy for the share of the population that has most of its life in the past tense and relatively little in the future tense.

We know that behavior changes in certain characteristic ways across the individual life cycle. Yes, you know, perhaps we know a risk-taking 85-year-old entrepreneur, and perhaps we know a risk-averse 25-year-old, but behavior changes in typical ways, on average, and for purely rational reasons. At older ages, we have less time left to enjoy the benefits of risky investments and less time left to recoup the losses.

So the question is, does the overall behavior of societies and of electorates become more risk-averse, more small-c conservative, if you will, more prone to favor current consumption over investments in the future, more prone to make ad hoc settlements instead of face decisive confrontations?

Next slide, please, and I will wrap up quickly.

Although population size alone does not confer geopolitical stature, no one disputes that population and economic size together constitutes the powerful double engine of national power. A larger population allows greater numbers of young adults to serve in war and to occupy and pacify territory. A larger economy allows more spending.

On the hard power of national defense and semihard power of foreign assistance, it can also enhance what political scientist Joseph Nye calls soft power, by promoting business dominance, leverage with NGOs and philanthropies, social envy and emulation, and cultural clout in the global media and popular culture.

The population of the developed world club has been for decades now and will continue to be a steeply declining share of the global total. Note, however, that the United States roughly maintains its global population share over the next half-century.

Next slide, please.

The trend in the developed world's share of global GDP—these are projections we made as a part of our “Graying of the Great Powers” project—the trend in global—developed world's share of global GDP and particularly Europe's and Japan's share—the decline is even steeper. The U.S. share does decline somewhat but not nearly to the same extent as that of our traditional allies does.

Next slide.

So we come to the consequence of what my colleague Nicholas Eberstadt sometimes calls U.S. demographic exceptionalism. The corollary to the demographic—relative demographic and economic decline of the rest of the developed world is that the United States will be a sharply rising share of the overall population and GDP of the developed world. And in fact in our projections, by the 2030s, the relative dominance of the United States in the developed world is back to about where it was in 1950, at the beginning of the Pax Americana.

Yes, the United States faces very significant fiscal and economic challenges. As has already been stressed, we have an extraordinarily expensive health system, which will become a growing handicap as the population ages. We have a very low national savings rates. We are rock bottom in the developed world and, in part

as a consequence of that, a very—a high and growing level of dependence on foreign capital. We also, sadly, have a political economy which sometimes finds it difficult to make resource tradeoffs between competing priorities—the whole question of ruinous tax hikes and politically impossible benefit cuts.

But at the end of the day, if we can overcome these obstacles, the United States will have the youth and the economic resources to play a major geopolitical role, and in fact we will be the only rich country that does, which suggests that far from being in relative decline, we're moving into a future in which the world will need us more, not less.

Thank you, Mr. Chairman.

Mr. SMITH. Dr. Jackson, thank you so much for that very thorough—and you, Dr. Eberstadt as well—very thorough assessment.

And before I turn to Steven Mosher, I'd just remind my colleagues who will read this record, we will disseminate this very, very widely, because I think this is one of those issues that is potentially catastrophic and especially if we pay no attention to it or too little attention. So again, your information, which we will share with our members of parliament and the OSCE Parliamentary Assembly as well as with the OSCE itself, is very, very helpful. So I do thank you so much for it.

Dr. JACKSON. And thank you, Mr. Chairman.

Mr. SMITH. Mr. Mosher, please proceed.

STEVEN W. MOSHER, PRESIDENT, POOPULATION RESEARCH INSTITUTE

Mr. MOSHER. Thank you, Mr. Chairman, distinguished fellow panelists, guests. I have a longer version of my remarks that I would ask be entered into the record, with your permission.

Mr. SMITH. I'm sorry.

Mr. MOSHER. Thank you.

Mr. SMITH. Without objection, it will be made part of the record.

Mr. MOSHER. I'm an anthropologist and a China hand by training, so I'm going to concentrate on the cultural factors at work here. I will not pit anthropology's four spheres against Drs. Eberstadt and Jackson's demographic statistical juggernaut. But I would say that this is the first time I have ever been on a panel discussing the issue of population when the word "overpopulation" has not once arisen, because we're all concerned today about not what may have seemed to have been the case in 1960 and 1970 but what is actually the real situation on the ground today in this decade, in this century. The real population crisis we face today is not a population explosion but a population implosion in country after country around the world.

The old demographic transition charts that I learned back in the 1960s, when I first went to college, showed birth rates leveling off precisely at the replacement rate. Everything was going to be fine. The mortality rate would decline first. Then the fertility rate would follow. Everyone would wind up with a perfect family of a boy for me and a girl for you, and heaven help us if we have three.

That is obviously not the case, since the family of even two children has been scorned by many moderns on their way to extinction,

and the declining number of traditional families have been unable to fill the fertility gap thus created.

Recall Peter Drucker, who was a colleague of mine out at Claremont College, at the Light Management Group, wrote way back in 1997 that, quote, “the dominant factor for business in the next two decades, absent war, pestilence or collision with a comet, is not going to be economics or technology. It will be demographics.”

Now he was concerned with the increasing underpopulation of developed countries, but decades later—a decade and a half later, this reproductive malaise has spread to many countries in the less developed world and is truly a global phenomenon, affecting all OSCE countries and all OSCE partners.

There is a sentiment out there which I think I saw reflected in the 2010 revision of the U.N. Population Division, where in their median variant they felt somehow that fertility rates were going to swing upward again, and their median variant is actually based on the very optimistic—in my view, rosy—projection that the people in countries with low fertility will suddenly raise their total fertility rate back up to replacement. A few years ago the median variant was based on this sentimental rise in fertility rates up to 1.85. Now it's based on a rise in fertility rates up to about 2.1. They give no reason for this optimism, and I can see none. It does, however, make the population projections that they put out somewhat more robust than they would otherwise be.

I believe the real numbers will be lower. They have been lower for the last few decades. The low variant seems to be the best predictor of future population.

I went to Japan for the first time in 1972 as an officer with the U.S. Navy at the tail end of the Vietnam War, and of course the Japanese economic boom was well under way by that time. Industry was flourishing under the guidance of long-range vision plans issued by elite bureaucrats in the Ministry of International Trade and Industry. The salaried men were grinding away at their usual 70-hour work week. Economic growth was consistently running at 4 to 5 percent a year, and Japan's trade surplus with the U.S. was surging toward a hundred billion dollar mark, which seemed a lot at the time.

Later, a decade later, my colleague Ezra Vogel from Harvard wrote a book called *Japan as Number One*, telling Americans that we were falling behind because of our lack of Japanese-style central direction and government and business cooperation. We should, he said, adopt policies more suited to the post-industrial age.

It wasn't long after *Japan as Number One* was published—and of course, it wasn't just Professor Vogel; everyone was looking to Japan to overtake the United States in those years—the Japanese economy ran into a demographic brick wall. Economic growth stalled, averaging an anemic 1 percent growth for most of the '90s. During the Asian economic downturn of 1998, Japan's GNP actually shrank by 2.8 percent. Never No. 1, Japan soon slipped to fourth behind the E.U. and China.

What's going on here, of course, is now, since 1964, the Japanese total fertility rate has been below replacement. The Japanese for over four decades now have been having too few children to replace

the current population. During the 1990s, Japanese journalists invented a term “demographic shock.” In 1993, the demographic shock was that the birthrate was only 1.53 children per woman. It has fallen since then, hovering around 1.3, 1.4 now. The voluntary childlessness of the Japanese exceeds even the forced-pace population reduction in China’s one-child policy. Back in 1996, Yamada Masahiro of Gakugei University said that Japan was entering the world’s first low-birthrate recession.

So here we have a depopulation crisis that has already forced Japan to slash pensions, to raise the retirement age from 60 to 65 to keep pension funds afloat. We’ve also—we’ve had earlier discussion of what’s happening in demographic terms, so I won’t dwell on the numbers. But Japan is suffering today from the four D’s: It is suffering from debt, from deflation and from declining demographics. And the latter two, declining demographics, is ultimately responsible for the first two. It is difficult to see how Japan can pay off its national debt of 2,000—200,000—not 2,000—200 percent of GDP with a declining and aging population.

In reaction to this, the government has been encouraging older people to rejoin the work force and more women to take jobs. They have been focused on the development of industrial robots and, to some extent, encouraging immigration to keep the economy growing. Each of these proposed measures, however, is either a temporary stopgap measure or in some sense self-defeating. The newly rehabilitated elderly, of course, will soon be re-forced to retire again, this time for good. And as for women joining the work force in greater numbers, of course, everyone is in favor of giving women every opportunity, but this will surely drive the birthrate down even more and exacerbate the labor shortage over time even further. It would take an estimated 600,000 immigrants a year to offset the impending decline and labor force, and an influx of such magnitude would shake Japan’s homogenous and insular monoculture to the core.

What can a country like Japan do to reverse the declining birthrate? The Japanese government has been studying this question now for 5 years and has—continues to repeatedly revisit the same—the same old solutions, which I do not believe will at all turn around this demographic collapse that we see.

The crises of the empty cradle has crept upon us quietly. We have not reached a stable equilibrium of a lowered mortality rates and low birth rates. Instead, once people are educated, urbanized and begin to enjoy a certain level of wealth, birth rates plummet. More and more couples live in urban conditions where children provide no economic benefits, but rather are, as the Chinese say, goods on which one loses.

I studied—my dissertation research back in the 1970s was a comparative analysis of a fishing and farming community in Taiwan and a close look at the economic value of children who, because they were not allowed on fishing boats, were of less economic value to the fisherman than to the farmers, who could put them to work in the fields at a relatively early age. And of course, the birth rate in the fishing village was lower.

Education delays marriage even further. For materially minded couples in countries where the state provides old age benefits, the

way to get ahead is to remain perpetually childless. Why give up a second income to bring a child into the world who will never, at least in material terms, repay your investment? Why provide for your future in the most fundamental way by providing the next generation if the government has pledged to keep you out of the poor house in your old age anyway?

So the modern nanny state has created a strange new world in which the most successful individuals in material terms are the most unfit in biological terms. Wealth and children no longer go together. Wealth used to make it possible to marry earlier, to bring more children into the world, and ensure that more of these children survived. But no longer. Cradle-to-grave welfare systems found in developed countries along with a heavy tax burden leaves Japan—have made the care and feeding of children superfluous to wealth. In fact, they have made children wealth's enemy.

I have the example of Korea before me. In Korea, of course, back in 1961, Korea became one of the guinea pigs in the earliest population control campaigns carried out by our government. Along with Taiwan, South Korea was encouraged to embark upon a population stabilization program. The program quickly evolved into a de facto two-child-per-family policy, complete with strong punitive measures against those who dared violate this limit. Civil and military officials with more than two children were denied promotions and even demoted. Third and higher order children were declared ineligible for medical insurance coverage, educational opportunities and other government benefits. Couples who agreed to sterilization were given priority access to scarce public housing.

These did matters stand for three long decades. By the time the government of South Korea began to rethink this policy in the mid '90s, the fertility rate had dropped to an anemic 1.7 children. The population was aging rapidly and a full-blown labor shortage had developed. You also had an epidemic of sex-selective abortions where Confucian-minded parents, anxious for sons, were ending the lives of girl fetuses because of their gender.

In 1996 the South Korean government finally got out of the population control business, announcing on June 4th that all restrictions on childbearing would be lifted. No new pre—no new prenatal measures were enacted, however, until many years later. The Japanese—the South Korean population is now—now has a TFR of 1.2 or thereabouts, and the South Korean population is beginning to shrink in absolute numbers.

Would that we had left well enough alone in South Korea and in Taiwan, which also has a labor shortage, and would that we would now leave the Philippines alone. We are continuing to press through our embassy there for the Philippines to adopt a two-child policy with some of the same measures that we saw earlier enacted in Taiwan and specifically in Korea. This because the Philippine people have the temerity to be averaging almost three children still, and a robust birthrate which provides immigrants to countries like Japan and South Korea and Taiwan to make up for the demographic shortfall there.

The hundreds of millions of dollars that foreign agencies like USAID have poured into Korea's two-child policy, of course, is but a tiny fraction of the \$100 billion or so that has been spent on fer-

tility reduction programs in the world at large. Imagine putting billions of dollars into programs to undo the Industrial Revolution or the Information Revolution, and you will understand how our current approach makes no sense. We're making an old-age tsunami even worse, and causing a flood of human misery and global economic malaise at the same time.

So I believe, Mr. Chairman, the sooner that we end population stabilization programs, fertility reduction programs—whatever you want to call them—family planning programs, the better.

What should countries that are experiencing demographic decline do? Well, the European countries, which are in dire straits, all have child allowances in place. In the Germanic countries it's called Kindergeld. But this relatively small amount of money that's given to parents of one or two or three children every month does not begin to compensate for the exactions of the state. I believe that one of the principal anti-natal factors in the world today, and especially in countries that provide cradle-to-grave welfare systems, are tax rates of—that take over 50, even over 60 percent of a young couple's income.

Now, if you reduce a young couple's income by nearly 60 percent, you leave them with so little disposable income that they postpone marriage, they postpone childbearing, and you ultimately reduce completed family size. So one thing that these countries, I believe, should do is when young couples have children, they should abandon the program of subsidies and instead move to a program where they protect young couples from all taxation.

With one child, perhaps, you would not pay—your taxes would be reduced by $\frac{1}{3}$, with two children, reduced by $\frac{2}{3}$, with three children you would pay no taxes to the state, because you would be in the business of paying the cost of raising future taxpayers, which are vital to the continued existence of retirement and pension programs, vital to the continued existence of the people itself.

Governments can do many things, some well, many poorly. But governments cannot reproduce; only people can do that. And young couples who are willing to provide for the future of countries in the most fundamental way by providing the future generation should be cherished and treasured. That is the message that I will be taking to Moscow next week when I go with Professor Eberstadt for the demographic summit there.

It is a drastic measure, to be sure. It is not revenue neutral. It will pit tax breaks for the young against the increasing demands of the increasingly numerous elderly, for the intergenerational compact to be—that the pledges they were given to be kept. But if these countries are to survive, I believe that such measures are certainly called for.

Thank you very much.

Mr. SMITH. Mr. Mosher, thank you very much for your testimony. And I would note for the record that it was back in the early 1980s that Steven Mosher broke the story, literally broke the story, about the horrific human rights abuse inherent in the one-child-per-couple policy in China. In 1984, I actually offered an amendment to our foreign aid authorization bill, which passed, that conditioned our aid on whether or not the U.N. Population Fund and other—any other non-governmental organization or multilateral organiza-

tion was involved in supporting the forced abortion policy in—the coercive population control policy of China.

That led directly to the Kemp-Kasten language, which passed that same year. After we passed it on the authorizing bill, it then passed on the appropriations bill. Where we lost in conference on my amendment, Jack Kemp and Senator Kasten prevailed, and that language has been the law of the land ever since, although it has not been implemented faithfully during this administration.

But I would say to Steven Mosher that it was his breakthrough research, which cost him a doctorate at Stanford, the U.S.—The Wall Street Journal even did a scathing editorial that called it Stanford morality, where they literally took away his ability to get his doctorate there because it may have put at risk the collaborative agreements between Stanford and the PRC even though he broke a human rights story that nobody else was focusing upon. So I thank him for that past and good work he does present.

Let me ask just a few questions. And I'll ask Mark Milosch, Chief of Staff if he has any questions either that he would like to pose. Let me just ask, first of all, in terms of—Dr. Jackson, you brought up the fact that, relatively speaking, the United States is probably at least a bit better off than our European friends when it comes to this demographic winter. We know that many of our—much of our economy is based on exports. What's it, 1 out of every 8 jobs are contingent on exporting? But as those markets dry up because of lack of people, and consuming people, at that, what would be—I mean, has that been adequately factored into our government's projections?

I know that, for example, the Congressional Budget Office has said that by 2021 our publicly owned debt will rise to \$25.1 trillion—with a T—and their estimates of our unfunded liability over the next 75 years going upwards of \$76 trillion. I mean, these are numbers that are just beyond, I think, anyone's grasp. But if our ability to manufacture and export continues to dwindle, has that been adequately taken into the scenarios, sometimes more rosy than they should be, that OMB and others put out about our future?

Dr. JACKSON. Let me perhaps clarify and add just a little nuance to my rather optimistic take on the long-term economic future of the United States. We do face a very significant challenge, as was pointed out by my colleagues on the panel. We never become as old as Europe. But we will age very rapidly. And this is a result of our unusually large post-war baby boom. So all of the aging in the United States occurs between 2010 and 2030, and there is a big associated—a big fiscal shock associated with that very steep ramp-up in the elder share of the population.

So when the last of the boomers have passed on to that great Woodstock in the sky, we will be about as old as Italy and Japan are today; nonetheless, we're going to grow old very rapidly over the next 20 years. And as I said, there's a big fiscal shock, and there's a big labor market shock. We are a country that is accustomed to having a young and growing population and work force. And we are also a country that is accustomed to limited government and a relatively small public sector.

And the aging trend, particularly exacerbated by the rate of growth—rapid rate of growth in health care spending, calls all of that into question. So if unaddressed, we may at the end of the day end up not much better off than some of our faster aging allies in Europe or Japan; some of which, by the way, are moving more aggressively to reform pension systems and to address the challenge than we are. I think—so yes, if one projects out current fiscal policy, this is a train wreck and a disaster. And that is probably not fully and adequately factored into the projections.

Mr. SMITH. Thank you. Would anyone else like to answer that?

Dr. Eberstadt, let me ask you—or maybe all three of our panelists: Recently Ted Turner, when he was at a global climate change summit in Cancun, Mexico, suggested that we need a world of one-child-per-couple policies that would parallel what the Chinese has done to its own women and children and men.

I would note for the record that I've chaired 29 hearings on human rights abuses in China, in whole or in part focused on the issue of the one-child-per-couple policy and the fact that they are experiencing now gendercide, and have been for years. The missing girls—some put it as high as 100 million missing girls, nobody knows for sure. And as Dr. Eberstadt pointed out recently at a press conference, and another academic leader in population issues, the impact on men looking for wives—they're just not there. They've been systematically eliminated pursuant to the one-child-per-couple policy.

But my question is really focused—and however you want to answer it, of course—Lester Brown from Worldwatch has said that we need a world of one-child-per-couple policies. And I find in talking to people at the United Nations—and I do it all the time, last week had several meetings with U.N. bureaucrats and leaders—you hear constantly this mantra that Steven Mosher mentioned a moment ago. This is the first hearing where he hasn't heard an emphasis on overpopulation. The zeitgeist in the policy world seems to be overpopulation is still a serious problem. The sooner we get down to a two child, one child to two child, or as we say in—as was brought out in the Philippines—a two-child-per-couple policy, the better. And it seems like they're missing all of—or most of these implications to the family, the impact on war and peace—I don't know how many of you have read the Bare Branches book, the thesis of which is that, you know, there could a war in China, simply because they have a restless male population.

So I just—you know, how do we shatter this myth, if it is a myth, of Brown, Ted Turner and others that, you know, children are bad, they need to be gotten rid of, prevented or destroyed?

Dr. EBERSTADT. Well, Mr. Chairman, the—whatever you'd call it—the secular religion, the non-religious deterministic faith and anti-natal population policy is very strongly rooted now in a lot of institutions. It's made a march through the institutions over the past generation or so into a lot of places in the United Nations, into a lot of other international institutions, and its taken root. And if we believe people like Thomas Kuhn, who wrote about the structure of scientific revolutions, people how have that sort of dogmatic faith are very seldom convinced. The big ideas change by having

the people who hold those ideas—what would you say—demographically replaced by time.

The notion that—the notion that a coercive anti-natal population policy can bring great benefit to a country or a society I think is demonstrably incorrect on its face. And there's been an enormous amount of empirical evidence that has gathered about the awful unintended consequences of China's particular program. All of the demographers that I talk to, who are Chinese demographers, all of them are unhappy with the program. And depending upon how outspoken they are they will say either that they believe the program should be reconsidered, which is code language for scrapped, or that it should be scrapped outright. So within the Chinese demographic community at this point there's not much disagreement about this.

I suppose the question which arises is what happens if the ideologues actually achieve the world of their dreams, through policies or through voluntary means? One of the most remarkable phenomena in the modern world has been the plunge, the voluntary plunge, of fertility in East Asia and in parts of Europe to levels that nobody would have thought could be seen apart from times or war and catastrophe—peacetime, prosperous, voluntary, extreme sub-replacement fertility.

In Hong Kong today birthrates, voluntarily, are hovering around one birth per woman per lifetime. They're lower than that in Taiwan today. They're lower than that in northern Italy today. And along with this extraordinary plunge in fertility, one's seeing another phenomenon—the rise of voluntary childlessness. In Germany today, and in German speaking Europe, almost a third of women are heading toward the end of their reproductive lives childless, voluntarily childless.

In Hong Kong almost $\frac{1}{3}$ of the women in their early 40s are childless. And this portends a world in the future which is going to be very different from the one that we know. It's hard to see this as a sort of a "New Jerusalem" of prosperity and robustness for the future. My guess is that as the tidings come in on the consequences of extreme sub-replacement fertility, it'll be impossible even for the most committed ideologues to see that this is a sort of a panacea for the world.

Dr. JACKSON. I agree with Dr. Eberstadt. The notion of a—setting a global one-child policy as a goal is not just disturbing, for a variety of reasons, but I think even in terms of the arithmetic, if one's concern is stabilizing global population, fundamentally misplaced. The fact is that fertility rates decline along with rising affluence, female educational attainment, and the availability of effective contraception—though I think the biggest driver is probably female educational attainment.

The global population will stabilize around—by mid-century and then plateau or gradually begin to decline. The problem is—for particularly for the rich world, is not bringing birthrates down, it's how to bring them back up again in some countries. And I think we need to think long and hard, not about why birthrates have fallen from seven to five to three to two; but why in some countries they've stabilized at two and at others they've fallen all the way to one, because in my view a fertility rate around two, 2.0, particu-

larly if supplemented by net immigration that's well assimilated, is just—is just fine. But extreme sub-replacement fertility leads to dramatic population aging and population implosion. And that creates big economic and social problems.

Mr. SMITH. Dr. Jackson, you mentioned birthrates—the difference between birthrates and pregnancy rates?

Dr. JACKSON. I'm sorry, sir?

Mr. SMITH. There is a difference between pregnancy rates—

Dr. JACKSON. Yes.

Mr. SMITH [continuing]. And birthrates, because birthrates obviously—I mean, it is still an issue of great contention here in the United States and elsewhere, but I take the view that there is a child in the womb. But it would seem that there's a huge number of women who are pregnant who—54 million in the United States alone since '73—who have had abortions.

Dr. JACKSON. Yes. And that makes a very—that has a very significant impact on the population trend.

But one of the big and most important factors that does account for the variation in fertility across the rich world is the extent to which different societies do a good job at allowing women to have both jobs and families.

In fact, the fertility rate and the female labor force participation rate have a relationship in the rich world today which is probably the opposite of what most people think. Fertility is positively correlated with female labor force participation. It's the countries with the most working women who have by and large the most babies and the countries with the fewest working women who have the fewest babies.

And this, I believe, is because the aspirations of women have changed everywhere. But some countries have adapted the family culture and the workplace culture in a way that facilitates women to do both. And other countries haven't. So if a country doesn't it lends—ends up with both of less inputs, which is the case in Italy, Spain, the case in East Asia, in Korea, Taiwan and the other—and the other Tigers.

Mr. SMITH. Thank you.

Dr. JACKSON. Thank you.

Mr. MOSHER. Mr. Chairman, coming back to China briefly, it wasn't so long ago that the head of the U.N. Population Fund was talking openly about exporting China's one-child policy to the rest of the world. And indeed, one can see shadows of China's one-child policy in neighboring countries, like Vietnam. So that was an organized institutional effort to promote the one-child model to other countries, not in a democratic fashion. Not as a result of individual volition, but as a result of foreign funded and imposed efforts.

It is curious to me that the Chinese Government seems so resistant to the notion that its one-child policy needs to be abandoned or at least seriously revised. And I can only attribute it to several factors, one of which is, I think the one-child policy has, in a time of economic reform, been one way the state in China uses to maintain the muscular rigor—the muscular tone of the system, to maintain control in one area while relaxing it in the economic arena, while loosening controls on production and tightening controls on reproduction.

I think they would also be loath to abandon the policy because it would undermine the legitimacy of the regime to admit, even implicitly, that this policy, which has impacted negatively every Chinese person throughout the last few decades, was, in some measure, a mistake or a miscalculation. And so if we do see the policy abandoned, I think it will be gradually eroded away, rather than suddenly announced to have been a failure, a mistake or bad timing.

Of course, it is also difficult to abandon a policy that generates such enormous revenue for local and mid-level and even provincial officials, with the heavy fines that are now posed on people—imposed on people who violate the policy, which are reportedly shared by officials at different levels of government. Those fines, which are equivalent to 3 to 5 years of families' income—the equivalent fine in the United States would be a quarter of a million dollars, \$350,000—provide a generous—generous bonuses, albeit illegal, to Chinese officials who collect them. So that's another reason why the existing bureaucracy would not want to move significantly away from the policy.

The other thing, I think, that we need to address in order to return birth rates to replacement is the idea that people are somehow the enemy of the environment. There is an ideology out there that pits people against the environment, that measures environmental impact in terms of the human footprint, which, in turn, is a simple calculus, in their view, of how many human feet there are walking around on the planet.

We need educational materials in schools that emphasize the value of the human resource. The environment is most under threat from poverty: It is poverty that causes the poor to cut down the last tree for fuel and to pollute the very water they need to drink because they have no resources to build a sewage-treatment plant. The environment is most protected under an open society with a robust economy. It is most under threat from poverty and excessive state planning.

So I do hope that we can—we can change the view of people from consumers and parasites on the planet to producers who, in general, leave the world a better place than they found it. If you do the calculations of present future value of a baby at conception, you find out that in an open society with a growing economy, that that value is always positive. And so every abortion is the death of a small fortune in these countries. Certainly is in China today.

So we need to emphasize that—the value of each human being. I think that Hungary has taken a step in the right direction with its new constitution that defines life as beginning at conception and deserving of protection from that point. One may object that that sounds like a theological statement. It's simply substituting value for the sanctity of life—the value of human life. And you'll see that it's an economic statement, rather than necessarily a theological one. It's also true, of course, in biological terms that human life begins at conception. And when something is true at several different levels, it probably is true in the broadest sense.

Mr. SMITH. Mr. Milosch.

Mr. MILOSCH [Chief of Staff, Commission on Security and Cooperation in Europe]. Thank you, Mr. Chairman. I'd like to ask a

question about the OSCE states and Africa. I'm particularly thinking of Dr. Jackson, but also the other panelists. What is the effect of this graying of the OSCE population on the other countries of the world, on the poorest countries?

I'm getting from your testimony a vision of the OSCE in the future: graying population; drawing workers from other countries, presumably—I got the implication that a lot of these people would come from Africa. So we'd be in a situation where we'd be drawing, probably, Africa's best workers out of Africa. And, you know, what happens then to a place like Africa, South Asia?

We can talk about the damage that Western immigration does to those countries right now—not to any intention, of course, but the best and brightest of those countries tend to come—of those countries tend to come to, very often, OSCE countries.

And I'm wondering, will this be greatly magnified? And then what happens to Africa? I hope I'm wrong, but one could draw out of your testimony a kind of disaster vision for the rest of the world.

Dr. JACKSON. Right. Let me try to answer what are very good questions.

I don't often disagree with Jack Goldstone. But maybe—perhaps this isn't a disagreement, but just a clarification. In the migration literature, a rising age dependency ratio or a falling worker support ratio would not draw in migrants from younger developing countries. It's not—it's not—it doesn't pull in migrants, and the reason is because a rising old age dependency burden is associated with a rising tax rate.

So yes, in terms of emerging labor shortages, aging developed countries—OECD countries—need younger migrants. But they may not necessarily be, in the future, attractive places for migrants to move to. Now, Canada, the United States, and Australia are big exceptions. I'm thinking more of the rapidly aging countries of continental Europe, with their very expansive and expensive welfare states.

So I'm not sure—I'm not sure that that remains a sort of win-win dynamic in the future. I do think that immigration can be a win-win solution, or part of the solution to the aging challenge. But there is an issue there that is often not taken into account by people who look at the issue.

The other point I would make is that as domestic markets—to the extent that the—to the extent that the rich countries are export markets or emerging markets, the contraction of these economies and, as I suggested in my testimony, the risk—the growing risk of protectionist measures does pose a real threat to growth in emerging markets. I sometimes say that, you know, global aging is a global problem and so it requires global solutions.

And I think that the heart of the solution has to be maintaining—renewing and reaffirming a commitment to open markets, both capital markets and labor markets because in a world of diverging demographic trends, where some countries are aging and contracting and others are still young and growing. It's open labor markets that allow us to match jobs and workers and it's open capital markets that allow us to match savers and investment opportunities. So I think that's absolutely fundamental to a—to a happy ending to the story.

Mr. MILOSCH. Thank you. Dr. Eberstadt?

Dr. EBERSTADT. I'd make a distinction between the economic implications of global migration flows and some of the social and political possibilities there. Although I wouldn't want to put an undue gloss on America's problems with integrating immigrants into our society as loyal and productive newcomers, we look pretty good over time, compared to a lot of other places, as is also true of Canada and Australia, some of the overseas offshoots of the English-speaking world.

Other places have more mixed records in integrating newcomers into their societies. And to the extent that receiving societies have problems in integrating and fully including newcomers in their societies, that creates a political and possibly a social problem for the future. And it can be an economic problem as well.

I'm thinking most specifically about Japan, which seems almost to have an allergy against immigration from abroad—counts people who've been living in Japan for four generations as foreigners, in some cases. And in Europe, there is a—I'd say a mixed story. It's probably more successful than one often hears. But I don't think that all of the European states are as effective in integrating newcomers as the United States. And that may pose long-term questions, in some cases.

From an economic standpoint, the economics of immigration, I think, looks pretty positive in a lot of cases because when one has what some would call a brain drain underway to rich countries, those brains who are drained are sending back remittances home. And their remittances home are a tremendously important source of income, poverty alleviation, capital funds for investment and the like.

In the contemporary world, the estimates that I've seen suggest that about \$300 billion a year are being sent by immigrants in countries with—countries that—where they were not born back to their home countries, which is over twice as large a volume as all of the overseas development assistance in the world.

And I'd venture to guess that it's money that's being spent an awful lot more wisely and a lot more effectively than international transfers of aid. To the extent that international remittances are a consequence of this international migration flow, I'd see that as a very positive thing for an open world economy of the sort you describe.

Mr. SMITH. Let me just ask a few final questions. Dr. Eberstadt, let me ask you, with regards to the U.N. estimates, how reliable are they? Certainly, there's a surface appeal argument one could make when you say, oh, we're en route to 10 billion people. And yet if you don't know the stratification of age groups and, in the case of missing girls in places like China, the raw number really does not tell you all that much. How much weight can we give to the credibility of those numbers?

And, second, like Mr. Mosher mentioned earlier, I've heard, for my entire career in Congress—that's three decades; 31 years—this mantra of overpopulation, overpopulation. I heard it before I got here. I hear it at every U.N. conference I ever go to and I've been to many. I was at Cairo, the population conference; I was at the Beijing women's conference, PrepComs, Summit on Children.

There's this thread that nobody seems to challenge or this unexamined truism that we are just exploding with people and—Dr. Jackson, you talked about, after 2050, that we are likely to go into some decline. Maybe you could elaborate on to what that decline actually looks like because I think most Americans and most people around the world would be shocked to contemplate what this means to them in terms of their—of their quality of life, their standard of living. Some people have gotten used to a certain standard—well, that could erode very quickly.

And, second, Dr. Eberstadt, if you could speak to the “white death” in Russia. You mentioned 3 million deaths for every 2 million births. You said there was a 50 percent decline in military manpower by 2050. Surely, Beijing is watching that very closely as well. And with such a large shared border, it would seem to me that the Russians ought to be very concerned about illegal and migration across those borders in huge numbers. Who's going to stop it, particularly in 2025 to 2030 and beyond, when that military capability on the Russians' part has been so degraded?

Dr. EBERSTADT. Yes, sir. Very briefly, I can attest that the technical people who work at the U.N. Population Division are very, very good. They have been trained very well; they do their work very carefully.

The great unanswerable question for the United Nations or the Census Bureau or anyone else is how fertility and childbearing patterns will progress in the generations ahead because, simply put, there's no robust science that allows anybody to accurately forecast future patterns of childbearing. And this means that the figure one puts into the black box or into the computer will generate whatever results you implicitly command it to give you, so that the current—the current projections coming out from the U.N. Population Division and the U.S. Census Bureau and anywhere else is, in effect, a sort of a Rorschach test.

You ask demographers what sounds reasonable to you as a future trajectory, and you put that in and then you get out total numbers. The fact of the matter is that after you look more than 30 years in the future, you're making guesses about how many babies the currently unborn are going to have. And there just isn't any scientific way of doing that reliably.

And so the United Nations Population Division tries to cover a number of different possibilities. Its low variants suggest that the world's population total will start declining around 2050. Its high shows things going up forever. But there's no way that anyone can possibly know. And there is a big uncertainty there that is just worth emphasizing. Unfortunately, it isn't always emphasized.

As to this notion of overpopulation, the real problem with the concept, I think, is that it's impossible to describe, quote, “overpopulated,” unquote country with any consistency or without ambiguity, using demographic variables. I mean, is—what is the—what's the measure of overpopulation? Is it population density? In that case, Monaco looks awfully overpopulated. That doesn't stop people from wanting to go there. If it's rapid population growth, the United States around Ben Franklin's time would have been awfully overpopulated.

You can just go through the list and none of these criteria give you the vision that people seem to have when they start talking about overpopulation because what they really mean is poverty. They're talking about poor places. And this is a fallacy of composition. Yes, you see poverty in populations because you have to have people to have poverty. But you also have to have people to have wealth. So I think the concept of overpopulation is a pretty useless one and economists who deal with population never use it. They really never use it.

As for what's going on with Russia and its security questions, the demographic vacuum that's, if you will, emerging in the Russian Far East, the drop in its military and other young manpower ages and the problems of its shrinking but still very debilitated, sick labor force—the Kremlin does—the Kremlin has some programs for trying to deal with these. I don't think they've been terribly effective so far.

There's a—there's a pro-natalist policy that seems, according to some lights, to have slightly increased Russia's fertility. We'll see if fertility continues to increase. Health has come up slightly but is—but maybe it is still below the levels for adult people in the country of India and I think in Pakistan. Russia is on an almost-irremediable trajectory for decreased relative economic influence in the world, over the next two decades.

And the Kremlin has responded to this prospect with a new security concept, as they call it. And to oversimplify, but I think only a bit, the new security concept talks about lowering the threshold at which the Kremlin would consider use of nuclear weapons. And this is the essence of the new Russian security concept.

It takes into account the likelihood that Russia will be economically weaker in comparison to its competitors, rather than stronger, in the years ahead and tries to deal with this not through outward integration or through economic reforms at home but through the use of Russia's comparative advantage in nuclear weaponry.

Mr. SMITH. Just to—if you'd elaborate on that a little bit further—

Dr. EBERSTADT. Yes, sir.

Mr. SMITH. Are you suggesting that, should the Chinese move—should the Chinese move, that the threshold ends or is going to be lowered, at which time they might use nuclear weapons to prevent such a move militarily by China?

Dr. EBERSTADT. Over the last—over the last almost 20 years, there's been a really dramatic movement of Russian citizens out of the Russian Far East and into warmer, more hospitable areas of the country. The Russian Far East has seen about one in six people leave voluntarily. So many of the people who were there before were there involuntarily, as a result of police force, the gulag and all of the rest.

But Russian Far East population continues to decline and it could be that the economically rational thing would be to see it decline yet further. How many people does one need to man and operate a number of wellheads and energy centers, mines? I don't know.

What is—what's striking to me in looking at the China—at the China-Russia border is how little interaction there is between the

two sides. There are some guesses, no real hard figures, about how many people from China are coming into the Russian Far East. But the number probably is not higher than in the low hundreds of thousands, and most of those are sort of temporary traders, peddlers and the like.

I'm not sure that the Russian Far East is any more attractive as a long-term retirement area or residence area to people from warmer China than it is to people from frozen Russia. It's not clear that people from China wish to live there voluntarily any more than people from Russia do.

The area has very little trade, surprisingly little trade over a very long border, very little integration between the two sides. As I said, my Russian demographer counterparts believe that it is not viable over the long term for this area to be an integral part of a Russian Federation, but they don't have any particular scenarios that I've heard about how a big change like this would come about.

And obviously, that's on their part quite speculative. They're not talking about anything that's a forecast in the next number of decades. It's more like science fiction.

Mr. SMITH. Just two final questions, if I could. First, do any of these projections take into—obviously, one couldn't predict a catastrophic event like we had with HIV/AIDS, the pandemic or perhaps SARS or what we saw happen in Japan or the rise of the super bugs. Is there any wiggle room in demographic projections that say, you know, should an event happen, this could add or decrease our projections?

And second, on Thursday, another hat that I wear is that I'm Chairman on the Africa, Global Health, Global Human Rights Subcommittee. And I'm going to be chairing the first-ever hearing on the global problems that are presented by Alzheimer's disease globally. Europe, the EU has about 9 million currently acknowledged cases, and that's rising. We're at a level of 5 million, and that's expected to triple by 2050 unless there's some cure found or delay of onset which would put the number out a little bit.

But I'm wondering if—what your thoughts are on Alzheimer's. You know, I looked at the projections that you had on—I take it was Dr. Jackson—on expected—life expectancy, and obviously Europe and the United States it's very high, 80, 79. And we know that in America, one out of every two people, once they're at the age of 85, are in some degree of Alzheimer's disease.

So if you could maybe speak to that issue as well, because it seems to be, from a cost point of view, and we'll have better information on Thursday when our witnesses provide that for us, this carries huge implications to Medicare, the European equivalent, and of course to all the caregivers who spend huge amounts of time, family members especially, caring for an Alzheimer's patient.

Dr. JACKSON. Right. Thank you, Mr. Chairman. The need to care for a much larger number of frail and a much larger number of elders with dementia is probably the most explosive dimension of old age dependency. First of all, it's not just that the elderly population as a whole is growing; it's the oldest elderly age brackets that are the fastest growing age brackets, a phenomenon sometimes called the aging of the aged.

There is also, and I think Nicholas Eberstadt may be able to speak more authoritatively to this—but I have seen little evidence to suggest that rates of chronic morbidity, of incidence of chronic conditions among the elderly, including Alzheimer's, are falling. Indeed, they seem to be stable or rising. And so this poses an enormous challenge in the future which will be compounded by the fact that the size and shape of the family is changing, because even in the—even in countries which do have some government-funded support for long-term care, a vast amount of care occurs informally within families.

Yet in a country like Italy, by the time you get out to the 2030s, the extended family is essentially extinct. Half of young adults don't have any brothers or sisters or uncles or aunts or cousins. So this is a huge problem.

Just very briefly on the issue of wild cards, though the projections by the United Nations and others make some attempt to factor in, obviously, existing pandemics, but they don't include or reflect the possibility of unforeseen catastrophes which are not in the pipeline. But I might just conclude by saying that absent a true catastrophe, a global pandemic, you know, or some Hollywood event like an alien invasion or a colliding comet, global aging is going to happen. That is in—that is baked into the cake at this point.

Dr. EBERSTADT. One of the happy facts that has transformed the world over the last generation and more has been the explosion of health that almost all of the human population has enjoyed—Russia, parts of Africa being the sad exceptions.

And this explosion of health has continued not just from infancy through working age but into older ages so that life expectancy has been increasing, as Dr. Jackson indicated, for people in their 70s, their 80s, even into their 90s in the developed world and rates of physical disability have been more or less steadily declining for people in the developed world in their 60s, 70s, 80s and 90s.

The terrible footnote and exception to this is dementia. And as Dr. Jackson indicated, there are no data to suggest that the prevalence or incidence of dementia has been declining over time. We don't have any indication that it's been increasing, but our medical efforts to combat dementia have been, until now, essentially completely unsuccessful. And as far as I can tell, there is nothing in the pipeline that—in the research pipeline that offers any real promise of progress in this area.

Places like Japan are facing a terrible problem in the future. If projections turn out to describe a future reality, which they may or may not, we see a situation only a little more than a generation away in which one out of every 25 Japanese is afflicted with Alzheimer's—one out of 25—and at the same time, in a world in which, as Dr. Jackson indicated, something like 40 percent of all Japanese end up childless. How does a society like that function?

The situation is a little bit less acute for some of the European countries and distinctly less acute for the United States, but the trends don't look very inviting for us either.

Mr. SMITH. Senator Cardin? Co-Chairman Cardin?

**HON. BENJAMIN L. CARDIN, CO-CHAIRMAN, COMMISSION ON
SECURITY AND COOPERATION IN EUROPE**

Mr. CARDIN. Well, I hope the hearing was a more positive than that last response. If it wasn't, then I'm sorry—then I'm not sorry I missed it. If it was, then I look forward to reading the material, as I will. And thank you all for your being here and thank the Chairman for holding this hearing.

Mr. SMITH. Is there anything else any of our distinguished witnesses would like to add before we close?

I do want to thank you. I think this is an issue, especially as it relates to Congress and other parliaments, that has been totally—maybe not totally, but largely, almost totally ignored for far too long. As again, Mr. Mosher mentioned early before, when everyone talked about population, it would be the uninformed view that we are overpopulated and not what portends.

And it's right around the corner with regards to huge economic dislocations, potentials of war attributable to a very, very worsening situation that comes to a disproportionately older versus a younger population. Your information that you provided and the scholarship you've provided to this Commission is brilliant. And I look forward; we look forward to sharing it with our colleagues, because the analysis needs to be gotten out into the public domain and into the policymaking domain much more robustly than it has been.

So thank you so much for your testimony. Your written and your oral statements were, like I said, brilliant and your answers to the questions very incisive. So I do thank you so much. So I thank you and the hearing is adjourned.

[Whereupon, at 4 p.m., the hearing was adjourned.]

APPENDICES

PREPARED STATEMENT OF JACK A. GOLDSTONE, VIRGINIA E. AND JOHN T. HAZEL, JR. PROFESSOR, AND DIRECTOR, CEN- TER FOR GLOBAL POLICY, GEORGE MASON UNIVERSITY

A CHANGING WORLD MAP

The OSCE nations came together to realize the principles of openness, cooperation, and mutual security, grounded in the protection of basic human rights for all of its member nations and their citizens. At the closing of the cold war, it was clear that these principles were necessary to overcome the legacies of racism, nationalism, and abuses of state power that had caused so many deaths and so much suffering over much of the twentieth century.

Unfortunately, the specters of racism, nationalism, and state power trumping human rights are again being raised in regard to immigration issues in the OSCE region. While most countries in the region have been open to immigration to varying degrees, and many have generous asylum policies for refugees from violence elsewhere, we are seeing calls by some politicians that say ‘enough.’ A new wave of demographic changes, with birth rates plummeting while immigration rises, has raised fears that some European nations are committing slow suicide, or that foreign cultures and legal practices will somehow displace core European legal and cultural values.

It is difficult to overstate the degree to which such fears, while understandable—especially in times of economic crisis—are misplaced. Indeed, they are not only based on misunderstandings, they are positively destructive for the future prosperity of Europe as well as for the OSCE region and even the Old World as a whole.

Simple arithmetic, applied to current demographic trends, shows unambiguously that the OSCE nations will need more immigration in the future. While many of the labor needs in the OSCE region are currently being satisfied by migration within and among OSCE countries, mainly from the eastern portion of the region to the west, this will not suffice in the future. Rather, the OSCE region will need immigrants from outside, including not only the adjacent regions of northern Africa, but also parts of Asia and sub-Saharan Africa.

This statement of course raises fears of an imminent “Eurabia” or “Londinistan” that will be foreign to its own historic inhabitants. But these fears should be recognized to be similar to those fears of the “yellow peril” and other xenophobic creeds. These fears are based on racism and the worst form of hostile nationalism, and imply nothing less than the belief that non-European peoples are unable to appreciate and acquire the benefits of freedom, equality, and liberty under the law.

Let us grant two truths that make the absorption of immigrants difficult in Europe. First, for most of the last five hundred years, Europe has been a country that sent immigrants OUT, to the rest of the world. From the 1500s up through the 20th century, Spanish and Portuguese, English, Irish and Scots, Germans and Swedes,

Italians and Poles, even Dutch and French colonists, spread out and established communities in the Americas, Africa, and Asia. However, we may feel today about the mixed results of these imperialist and colonial efforts, it is difficult to imagine what Europe would have looked like—overrun, impoverished, deprived of skills and products gained abroad—if the rest of the world had been able to close its doors and prevent Europeans from leaving their own countries. It has thus been difficult for Europeans to readjust their mental map and realize the world has changed, so that their numbers are stagnating rather than expanding, while the rest of the world has become more numerous, richer, and better able itself to undertake large-scale migration. Some Europeans react to this change, as many people react to any change from past patterns, as a threat, as if reversing the past patterns of global population movement will inevitably bring them harm.

Second, precisely because they have not been able to conceive of foreign immigration as a permanent, long-term shift in their very circumstances, European countries have treated foreign immigrants as temporary guests, often relegated to roles in unskilled labor and housed in neighborhoods separate and often poorly served in regard to social services. Rather than aggressively working to seek integration and assimilation of their migrants, many countries have left them to fend for themselves, so of course they turn inward to their own communities, reinforcing impressions of being closed-off and separate. It is often the very resistance to immigration that breeds the segregation, mutual hostility, and behavioral problems that are blamed on immigration itself.

The best way to overcome the hostility toward migrants within the OSCE region is two-fold. First, the U.S. should lead the way as a country where welcoming and absorption of migrants has been a way of life, and where every economic study shows the benefits of immigration outweighing its costs. Of course, the U.S. still must work on its own misconceptions—for example, the false belief that illegal immigrants ‘pay no taxes.’ This is simply untrue, as anyone in the U.S. who pays rent is indirectly paying property taxes, anyone who purchases products pays sales taxes, and anyone on a legal payroll is paying social security taxes. However, the U.S. can show the way forward as a country where immigrants from every region of the world have made crucial contributions to science, sport, business, the arts, and politics.

Second, the OSCE should strive for standards for the active integration of legal migrants into societies. This includes provisions that make it easier to acquire language training, formal education, job training, health care, and quality housing. These investments, as I shall show in a moment, are simply vital to the self-interest of OSCE countries to sustain their own economies and finances. These must also include legal protections against discrimination and defamation of migrants and their cultures.

At the same time, the OSCE countries must make it clear that immigration is not intended to create enclaves of foreign culture and distinct legal practice—rather all immigrants are expected to follow the existing laws and respect the public practices of the countries to which they have come. Where issues of minority rights and religious practice are concerned, boards of minority and reli-

gious leaders must work with local governments to arrive at clear understandings of the limits of separate and distinct immigrant practices. Just as Mormons cannot claim polygamy as a right in the United States, certain religious practices from abroad that contravene prevailing laws and practices in destination countries will also be denied by host countries. However, the presumption in the OSCE countries should always be that the values of equality, freedom, liberty, and protection of basic human rights will prevail, and forms a foundation that immigrants themselves are eager to accept as a reasonable price for the privilege of immigration.

THE ARITHMETIC OF DEMOGRAPHIC CHANGE

Demographic projections can often seem to produce a wall of numbers, and be subject to a wide range of uncertainty and dispute. But this need not be the case. The number of people who will be over 60 years old in forty years is pretty clear, because all of them are already alive today. The number of people who will be born in the next twenty years is more subject to dispute; but patterns of births have been fairly stable for the last few decades, and so reasonable projections based on recent patterns can be made.

To show why immigration patterns are changing, and will change in the future, let us focus on one simple number—how many people in a country are of prime working age, from 15 to 59, compared to how many who are 60 years and older. In the United States today, that number is just over 3. That is, there are just over 3 people of prime working age for every person 60 and older. That is a reasonable ratio to sustain pension and health care costs for the seniors, by taxing the work of those who are still in the prime working years.

However, the U.S. today faces a fiscal crisis in the future because that number is set to decline to about 2 over the next forty years. At a level of only two workers for every older person who still needs income and health care support, taxation and state debt become a problem. Rising health care costs, and shifts in the population toward a larger number of elderly persons, threaten to overwhelm and bankrupt state pension and health care systems. This is why reforms of the US system are needed to avert problems in the future.

But things can get worse. At levels below 2, as one approaches a situation where there is almost one person over 60 for every person aged 15-59, the relationship indicates a crisis in the shortage of prime workers. And that is precisely where many OSCE countries are headed.

Let me ask you to examine Figure 1. This shows that even today, a few countries in Europe have already dipped well below the US level of 3 workers for every senior—some countries such as Germany and Italy are already approaching the problematic level of only 2 workers per senior. By contrast, countries such as Romania, Russia, Poland, and the US are still at a reasonable 3 workers per senior, and countries further East, such as Turkey and Kazakhstan, have plentiful workers. Their ratio of workers to seniors is 6 to 7 or higher! Thus, it is not surprising that at the present, the major trend of migration within the OSCE nations is from the eastern part of the OSCE region to the west.

However, by 2050, things will change dramatically. Over the next four decades, almost all the countries of Europe will see their senior populations soar while their working age populations remain stable or decline. As a result, their numbers will drop. Italy, Germany, Spain, Romania, and Poland will ALL be coming close to a level of only 1 working age person per senior; even the U.K., France, Hungary, and Russia will drop well below 2. Thus there will be a widespread shortage of workers needed to support the senior population and contribute to keeping economies growing. Even Turkey, alongside the U.S., will drop to around 2 workers per senior, and even Kazakhstan, where birth rates are converging toward those in Europe, will have dropped from labor-rich condition to a reasonable level of 3 workers per senior. Thus by 2050, no regions of the OSCE will be nearly as rich in young workers as they are today. To keep its population growing, and to cope with need to support an older population, OSCE countries, especially those in western Europe, will need to draw on more immigrants from outside the OSCE nations.

Some have pointed to a slight rise in recent births in Russia, France, and the U.K. as evidence that the recent 'birth dearth' is ending. That may be true. But the gains are very small. Moreover, for the next twenty years, any increase in births only results in dependent children who will themselves pose a burden on state and personal finances for health and education, so that they will only begin to contribute to the labor force in significant numbers after 2030.

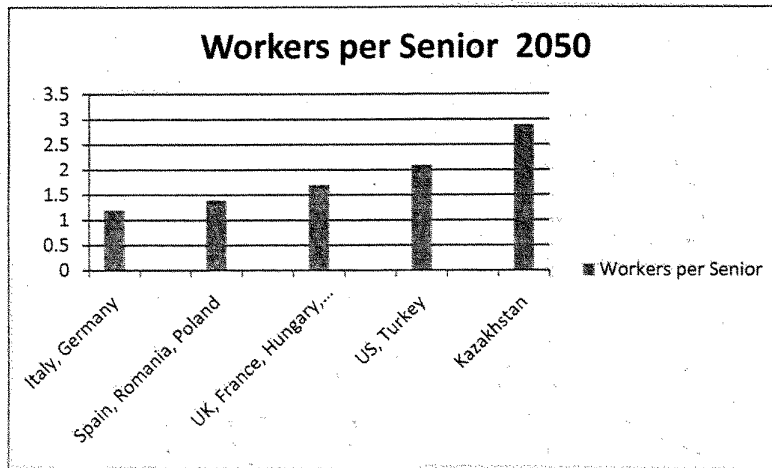
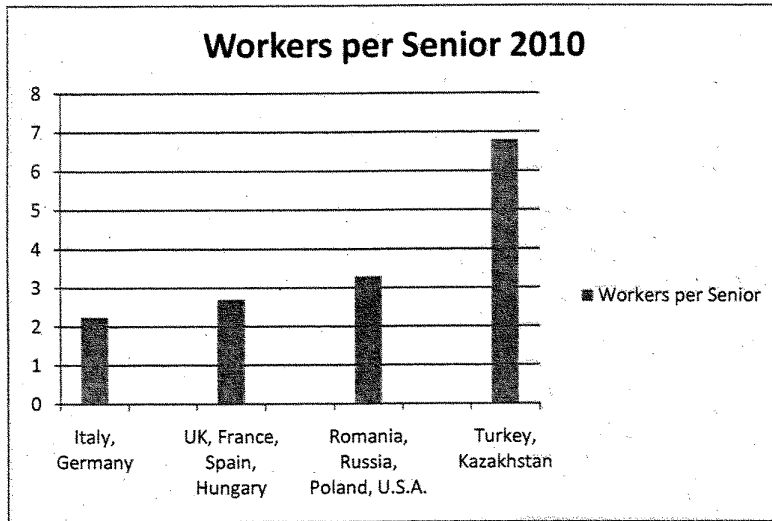
In short, there is no alternative for Europe but to accept that the world has changed, and increased immigration will be part of the mix of policies needed to cope with demographic patterns that will prevail in the future.

But that should be a cause for celebration, not alarm. Throughout history, the most fruitful and innovative societies have been those that mixed peoples from varied culture, and held to pluralist and open societies. This was true of the United States, but also of the periods of greatness in India, the Ottoman Empire, and China. During the Roman Empire—when Europeans were arguably the most powerful nation in the world—the peoples of north Africa and Europe from Scotland to the Danube were united under one set of laws, despite their varied religions and languages. The foundational values of the OSCE, if applied with regard to immigration, can offer an era of continued growth, innovation, variety, and prosperity for Europe and the OSCE nations as a whole. The alternative—nationalist closure, hostility, covert racism—by contrast offers only a return to the horrors of the early 20th century. The choice should be clear.

There should be no illusions that the assimilation and integration of migrants from outside the OSCE to its member nations will be simple or without effort. Many complex issues will need to be addressed with energy and dedication, and much effort will be needed to implement policies designed to manage and smooth immigration. But what projects and gains of great value are achieved without some effort? The gains from a more open and welcoming system of immigration in OSCE countries will be so great, and so

necessary, as to more than justify the efforts required to achieve them.

Figure 1. Workers per Senior in selected OSCE countries 2010 and 2050



PREPARED STATEMENT OF NICHOLAS EBERSTADT, HENRY WENDT SCHOLAR IN POLITICAL ECONOMY, AMERICAN ENTERPRISE INSTITUTE

Russia's Demographic Constraints: Dimensions and Strategic Implications

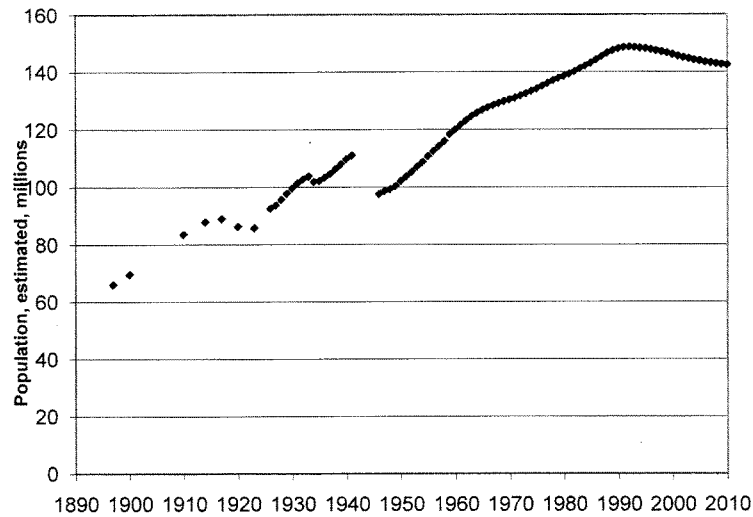
Nicholas Eberstadt and Apoorva Shahⁱ
American Enterprise Institute
[prepared for Conference at Hudson Institute, April 8, 2011]
REVISED May 3, 2011

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

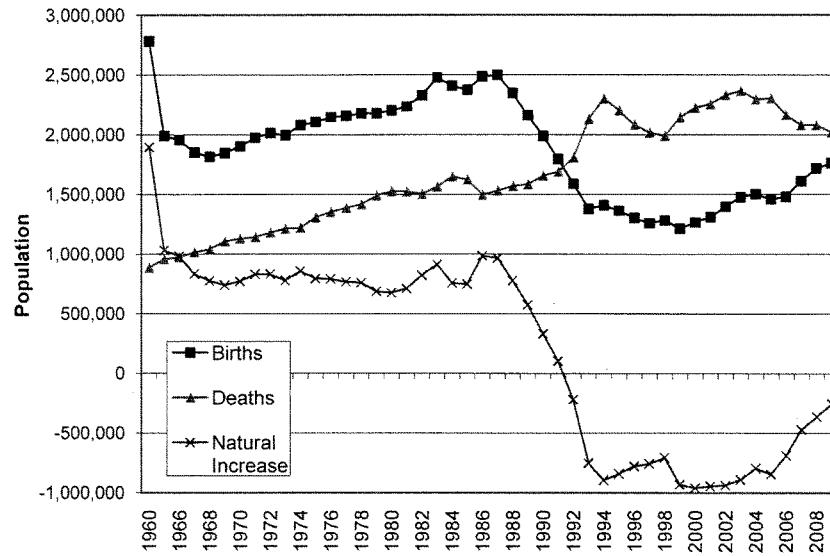


Source: Reproduced from Dalkat Ediev, "Application of the Demographic Potential Concept to Understanding the Russian Population History and Prospects: 1897-2100," Max Planck Institute for Demographic Research, 2001, Figure 1.

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.

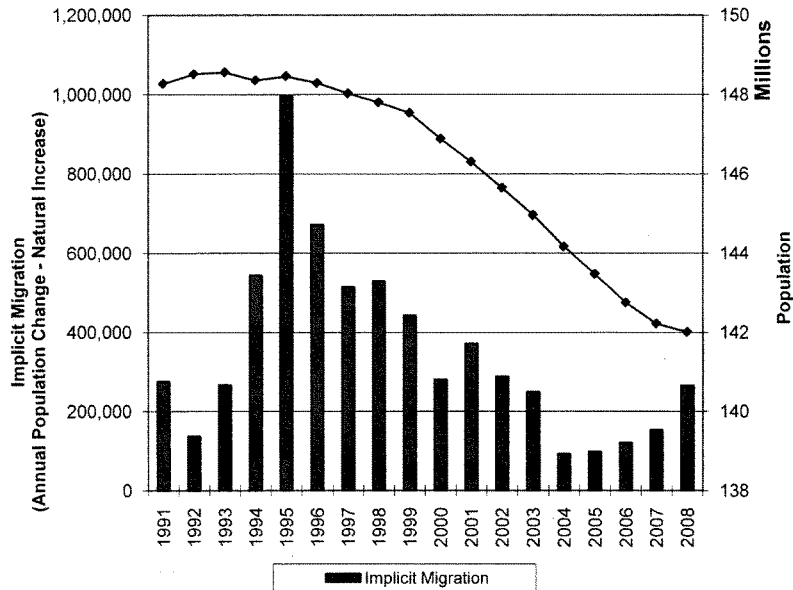
Net immigration partly mitigated the country's population decline over these years, but was by no means sufficient to compensate for it entirely. We can calculate Russia's implicit trends in net migration by subtracting the country's annual net surfeit of deaths over births from its reported annual changes 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 Ejeodnik: 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

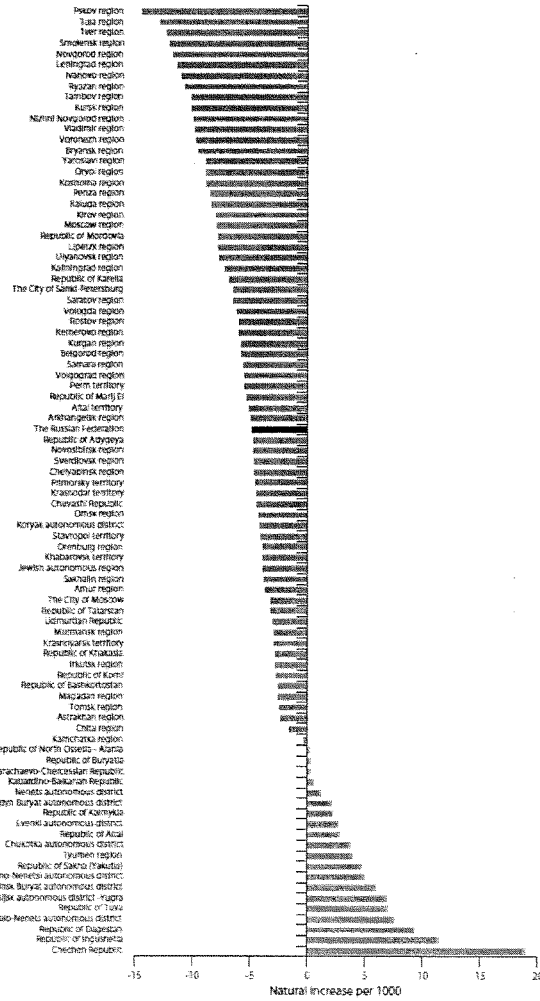


Source: The Russian Federation Ejegodnik: 2004 (State Committee of the Russian Federation on Statistics, Moscow, 2004), Table 2.25, Source for 2004-05 figures: Federal Statistics Service, accessed December 6, 2007, 2:00 PM. Source for 2006-2007 figures: Interfax News Agency, "Russia's Population Shrinks 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 averageⁱⁱ

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.

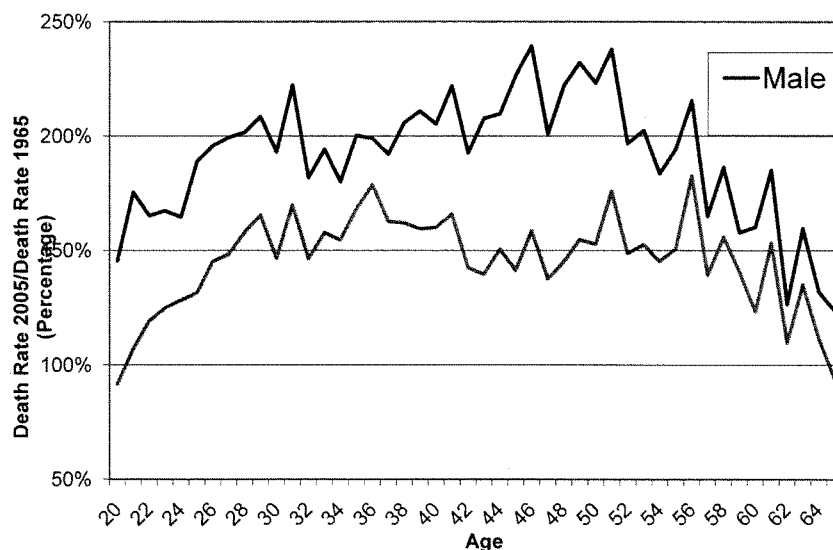
Mortality and Morbidity in the Russian Federation: A Crushing Burden

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.

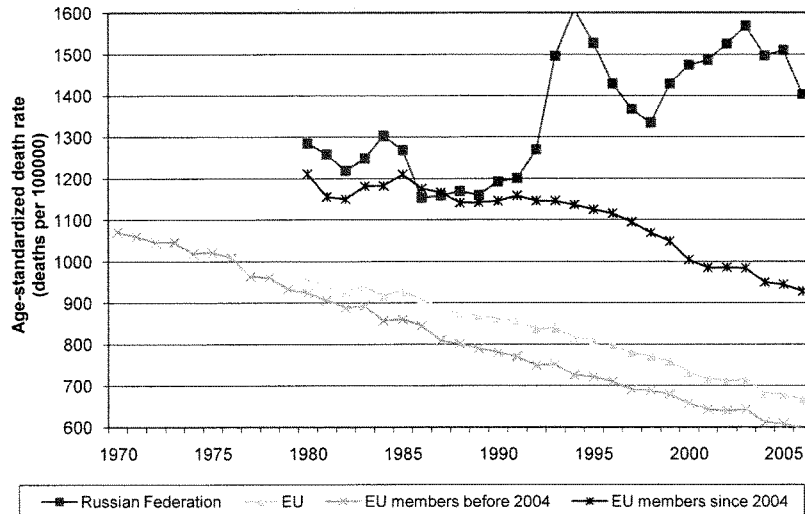
Figure 5: Death Rate Ratio, Ages 20-65: Russia, 2005 vs. 1965



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]

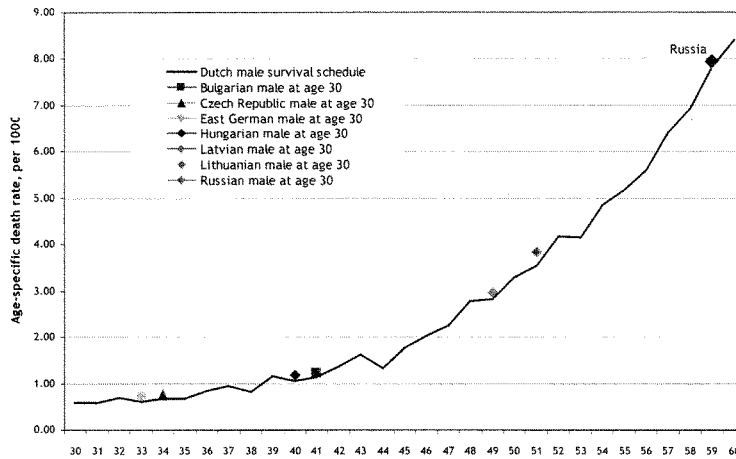
Figure 6: Death rates from all causes, Russia vs. EU, 1970-2006 (males plus females)



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

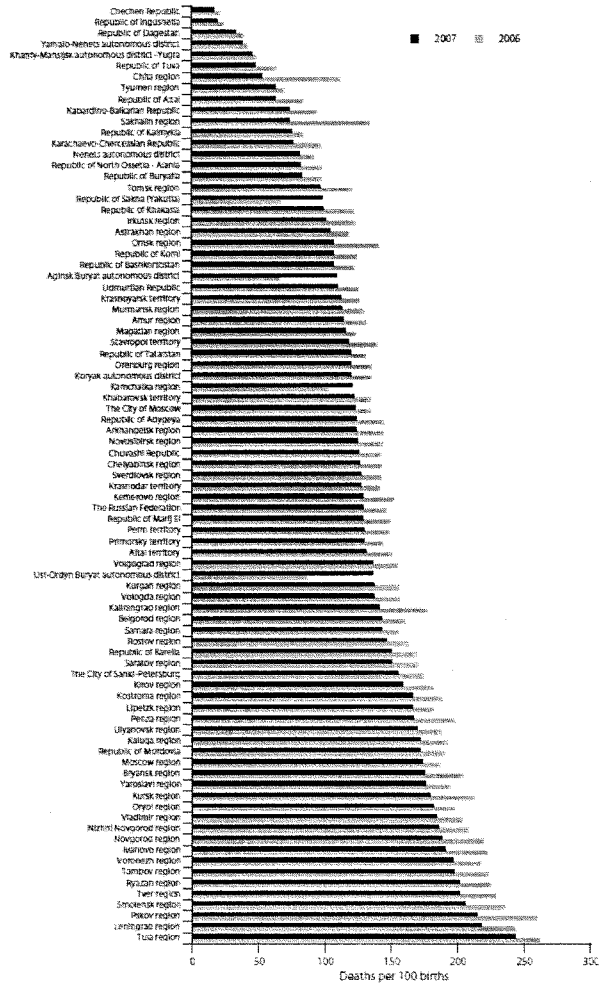


Source: Human Mortality Database. University of California, Berkeley and Max Planck Institute for Demographic Research. <http://www.mortality.org>. Accessed February 26, 2010.

Regional ratios of deaths to births are also a matter of 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

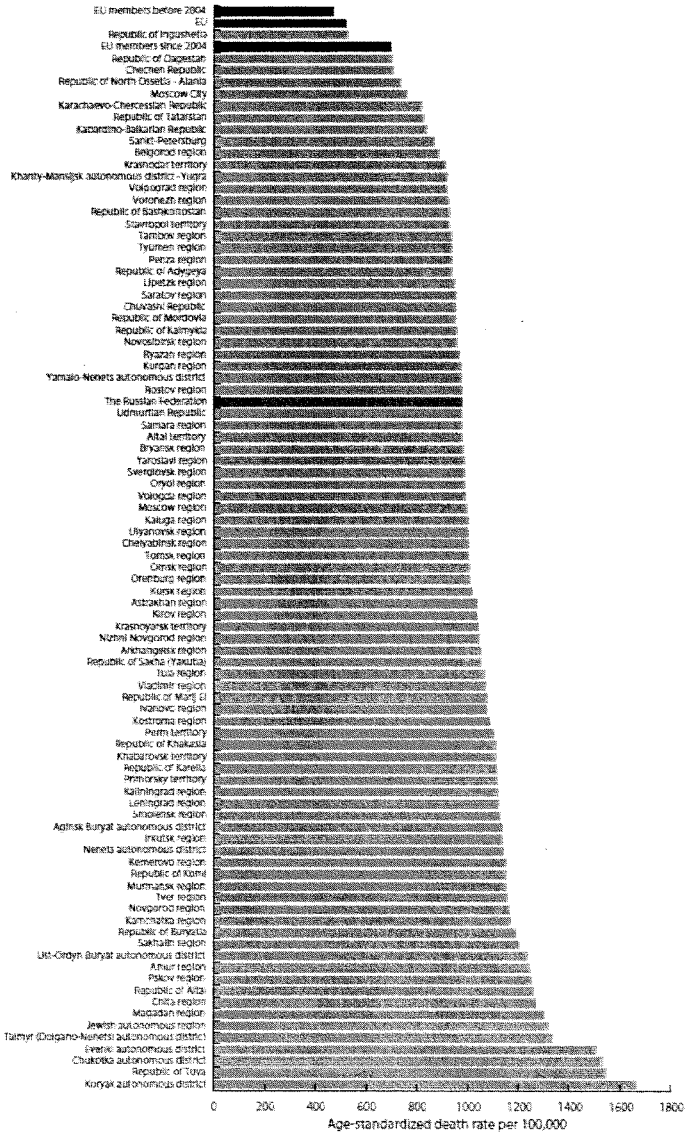
natural increase were almost exclusively regions originally established for indigenous or ethnic non-Russian minorities. Nationality data from the two most recent censuses—the 1989 Soviet census and the 2002 Russian Federation census—seem to corroborate this surmise: they would seem to indicate a disproportionate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

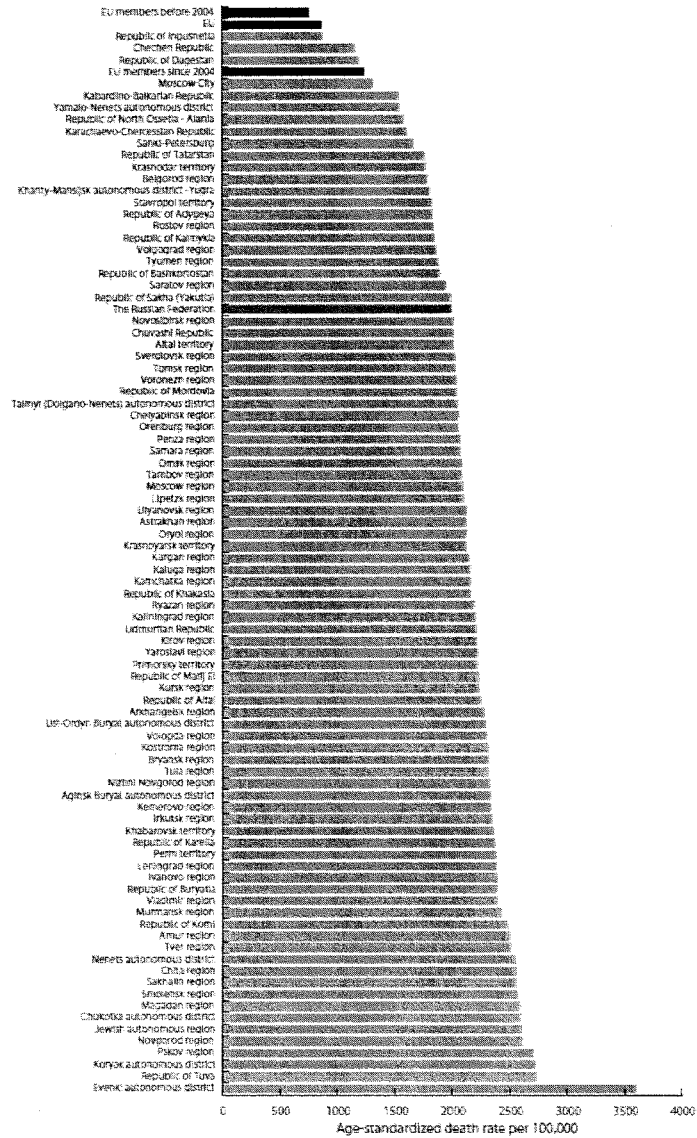
To what extent does excess or premature mortality seem to vary over this vast and diverse country? Data from Goskomstat and the WHO Regional Office for Europe's European Health for All Database (HFA-DB) help us to answer this question.^{viii} These sources offers estimates of age-standardized mortality 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 some 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 be 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).

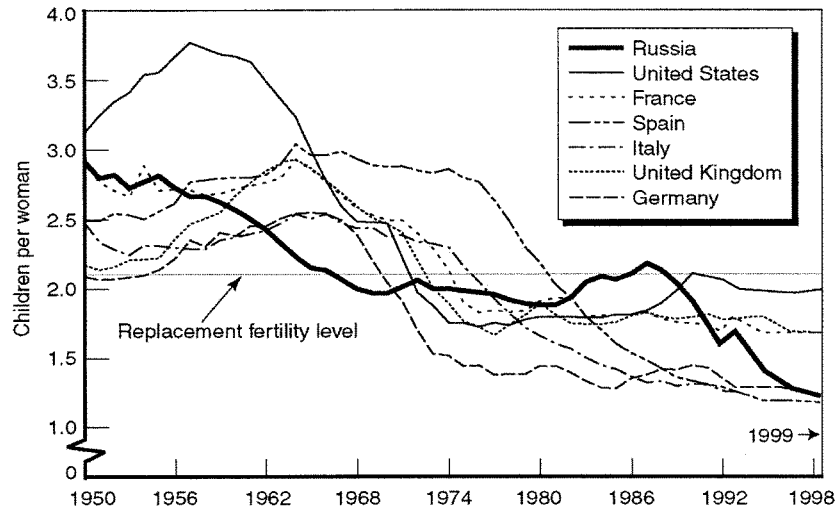
In effect, there was no mortality overlap whatever between Western Europe and Russia, big intra-regional variations in mortality within both of those geographic zones notwithstanding. If we could somehow transport them through space, Western Europe's very worst health region would immediately qualify 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



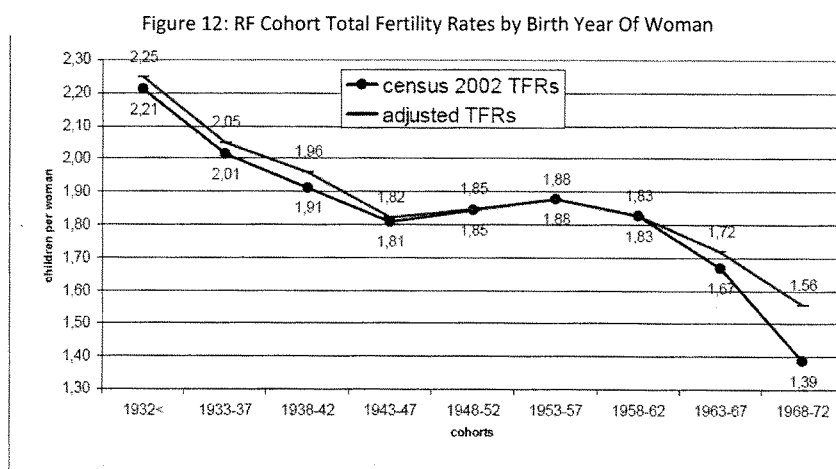
SOURCES: Vishnevsky (1996) for pre-1993 data; U.S. Census Bureau (2000) for post-1992 data.

From Julie DaVanzo and Clifford Grammich, *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

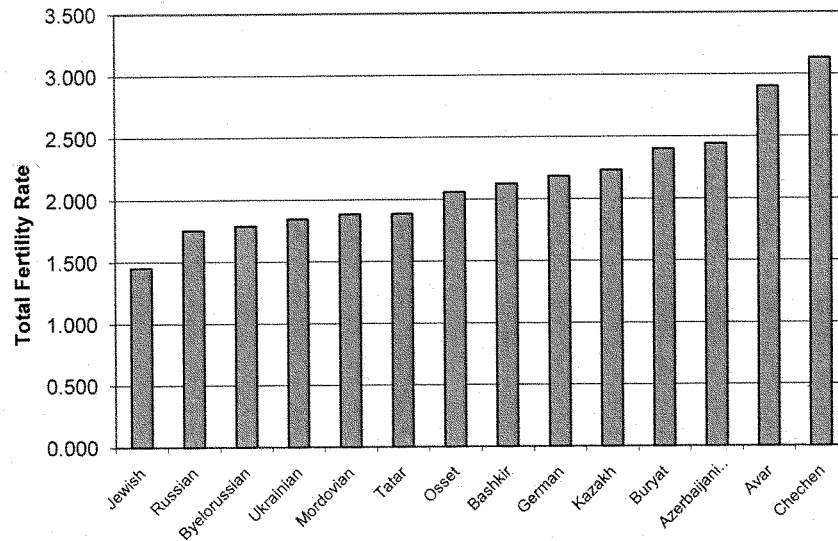
levels for a European country over much of the past half century: that is to say, both under Communism, and after it.



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>

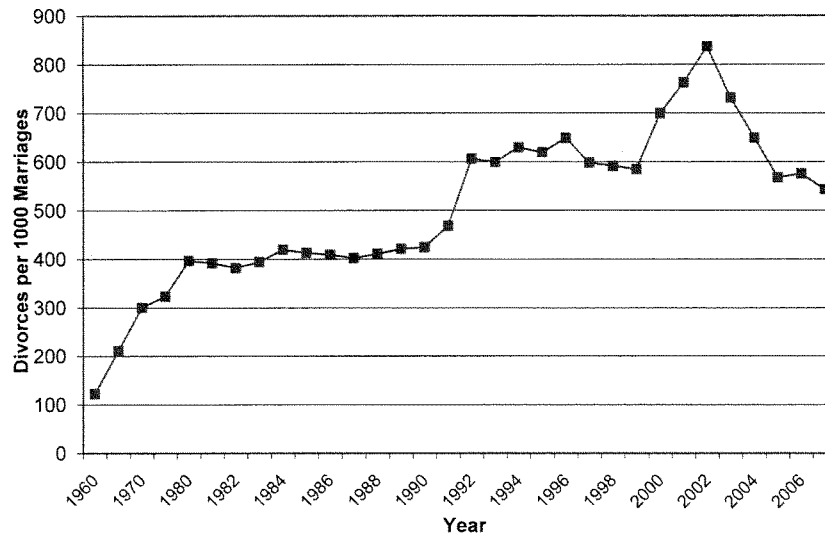
In short: extreme sub-replacement fertility is clearly new to peacetime Russia, but sub-replacement fertility, just as manifestly, is not. This point needs to be kept in mind in any discussion about future fertility prospects for the Russian Federation—not least the Kremlin's bold new "demographic concept"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



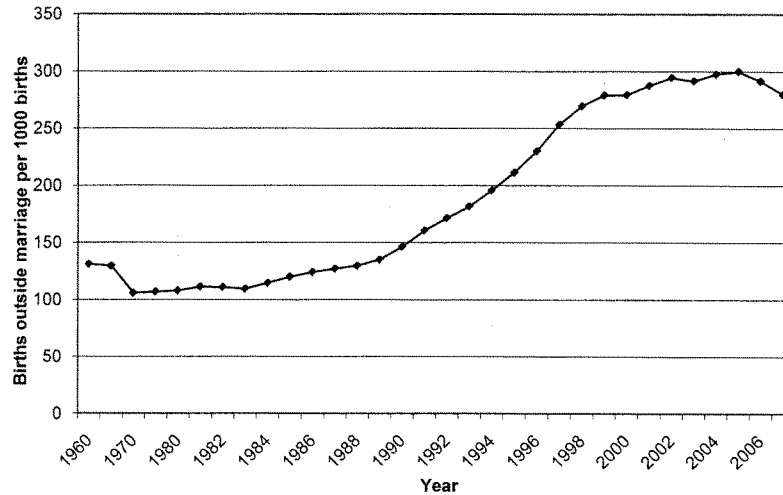
Source: The Demographic Yearbook of Russia: 2008 Statistical Handbook, State Committee of the Russian Federation on Statistics (Goskomstat of Russia), Moscow, 2008, Table 3.1; accessed February 25, 2010.

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 a 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).

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

	<i>Authority</i>	<i>Quality of data and methodology</i>	<i>Availability</i>	
<i>Main migration data systems in Russia</i>				
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	Satisfactory	Available
4	Data on work permits for foreign employees and Russian citizens employed abroad via Russian employment agencies	(Federal migration service- FMS) 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 (FMS)	No information on methodology	Partially available
8	Data on foreign students	(Federal Border Service) 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.)

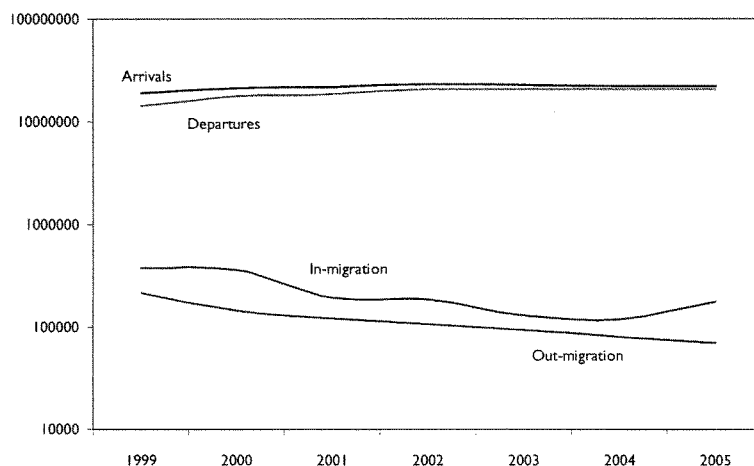
This leaves just three data sources that are both publicly available, and, in Chudinovskikh’s judgment, of satisfactory reliability: data on refugees and asylum-seekers; data on foreign students; and census-based migration data (such as the stock of foreign born-born population living in Russia at the 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



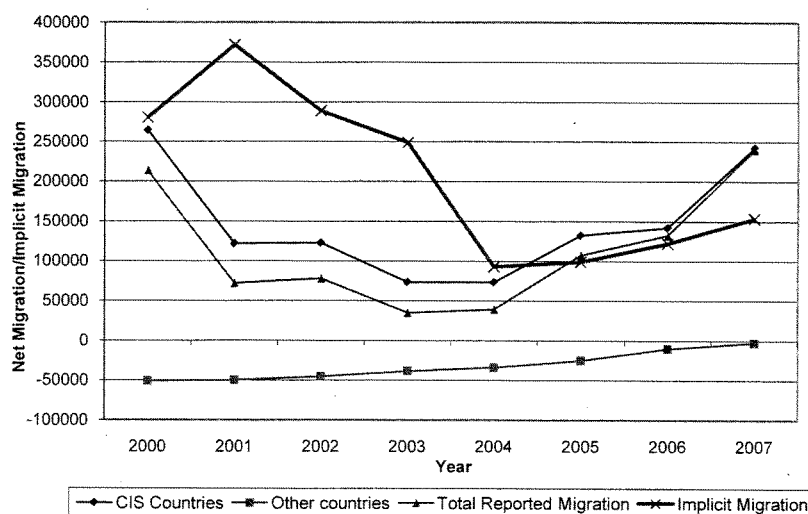
Sources:

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/lssWWW.exe/stg/d01/05-09.htm

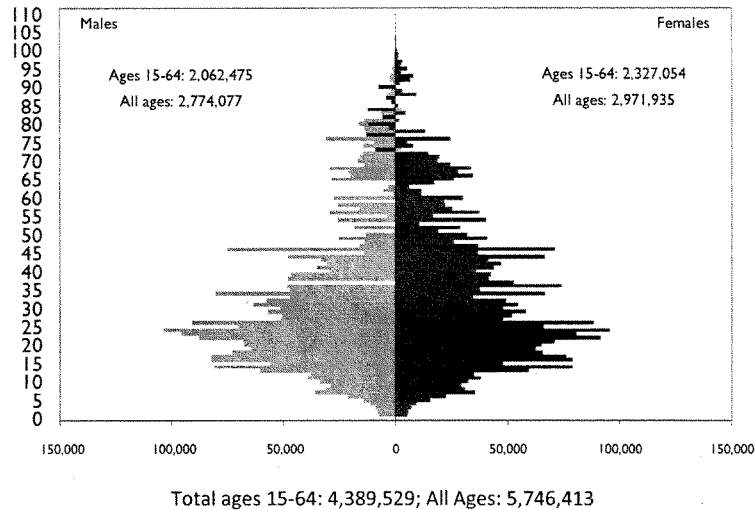
Since we have detailed estimates of Russian population for key dates (the 1989 and 2002 censuses), additional official estimates of population structure for other useful dates (e.g., January 1, 2007, the most recent date for which an officially estimated age-sex breakdown of the Russian population that concurs 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 performed 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.

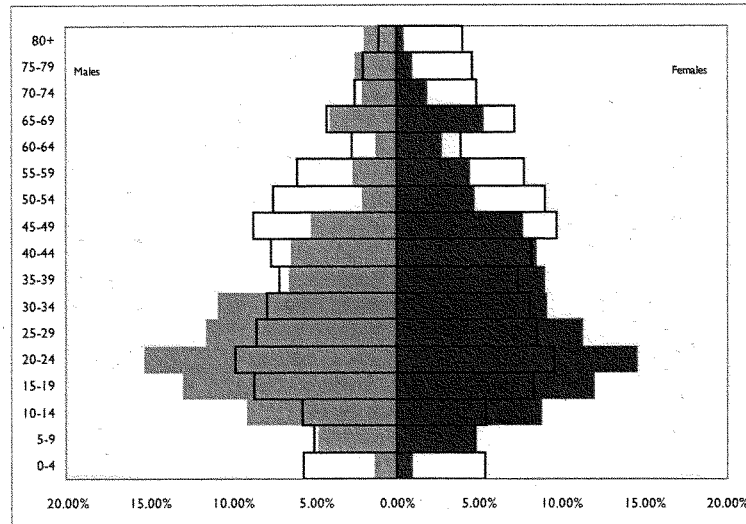
Figure 19: Indicative Net Immigration, by age and sex, Russia, January 1, 2007
 (“Estimated Net Surviving Migrants”)



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 its 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}

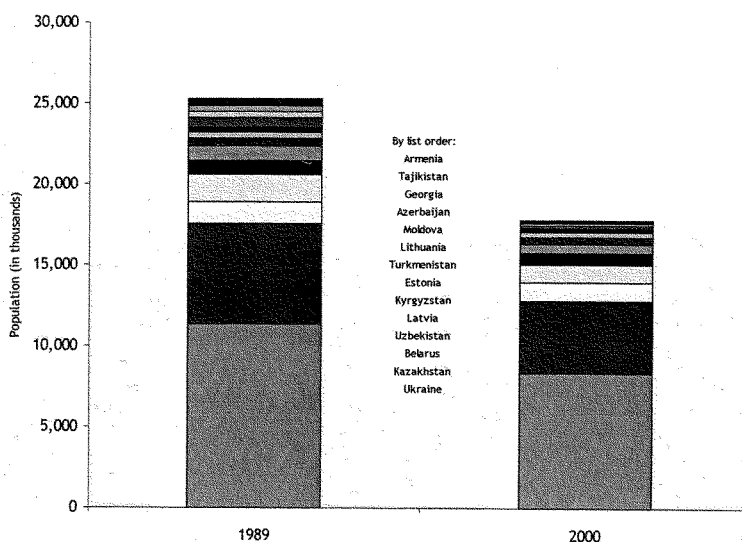
But of course the Russian Federation is also in essence a *Russian* multiethnic state. Its political tradition is decisively Russian. The country’s culture is profoundly (albeit not exclusively) Russian. Its *lingua franca* is most assuredly Russian: the Russian Constitution, in fact, establishes it 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>.

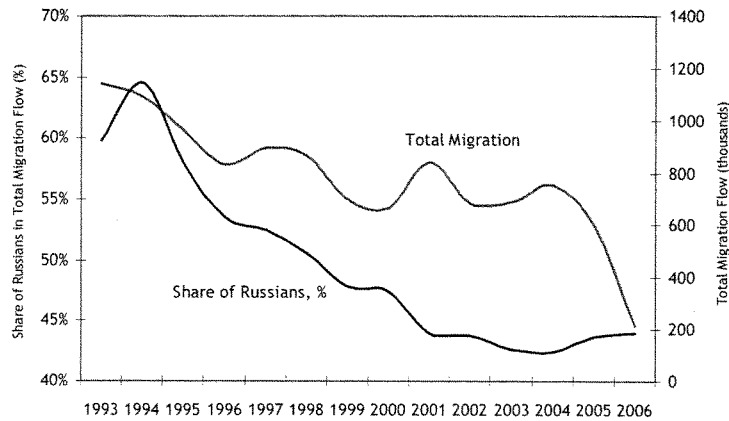
Note: Some data for 2000 is from census closest to year 2000.

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".^{xxxii} 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 migrants 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.^{xxxxx}

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
Lezgins	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. ^b	n.a.
Other known ethnic Muslim groups	0	669,128	669,128
Other ^c	1,926,649	42,980	-1,883,669
Total ethnic Muslim population	11,598,646	14,739,425	3,140,779

^aEthnic Afghans were identified under a number of different ethnic groups (Pushun, Tadjik, Uzbek, etc.) in 2002.

^bEthnicity 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.

^cn.a. = not applicable.

Source: 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 Islam¹¹). 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.^{xi}

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%
<i>Subtotal Southeastern Europe</i>	<i>7,477</i>	<i>27,519</i>	<i>27.2%</i>
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%
<i>Subtotal Western Europe</i>	<i>13,152</i>	<i>377,143</i>	<i>3.5%</i>
<i>Total Europe</i>	<i>20,629</i>	<i>404,661</i>	<i>5.1%</i>
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.^{xliii} 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 decline 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.

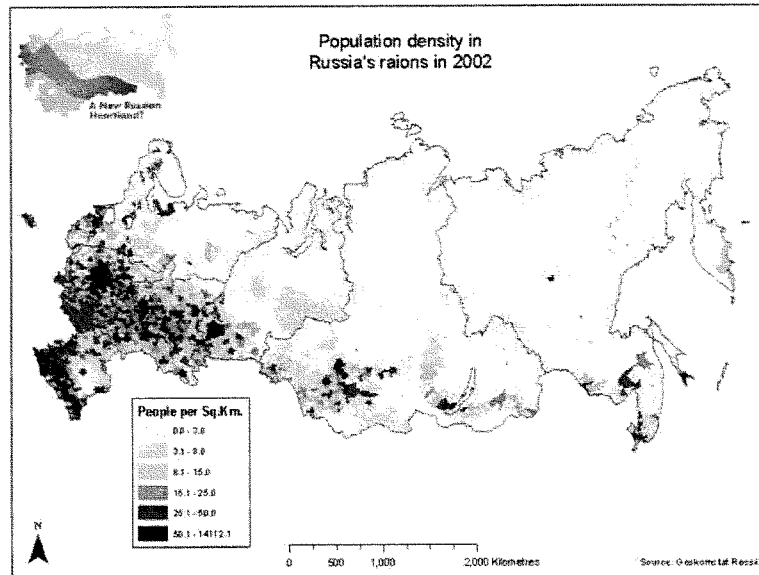
If we were to believe these numbers, we would conclude that the geographic mobility of the Russian population is drastically lower today than it was back in Soviet years. But the modern Russian data on domestic migration are fundamentally flawed. These statistics are based upon the bygone notion that 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”^{xliiv}. 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”^{xliv}—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.^{xlivi} 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!^{xvii} 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.^{xviii} 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.

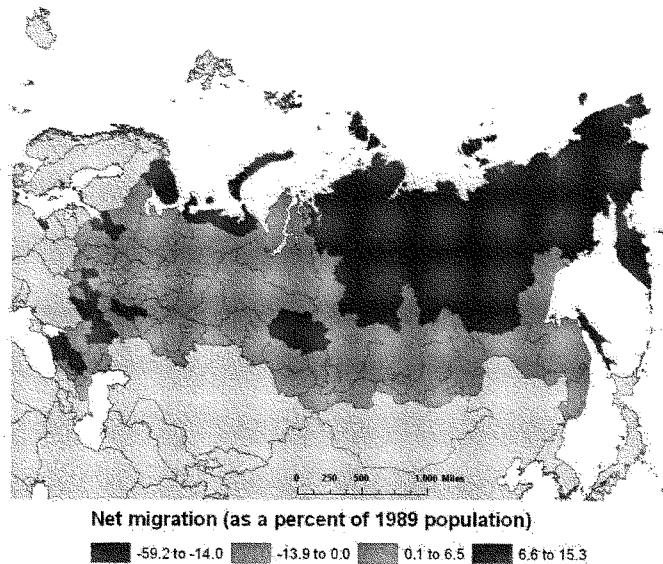
Figure 23: Russian Federation Population Density by Region, 2002



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.^{xix} 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, Norwegian 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.¹ 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 4.¹¹

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 Holmaki, 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”).ⁱⁱⁱ 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.ⁱⁱⁱ 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".^{iv} 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.”^{biv} 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.^{bv}

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

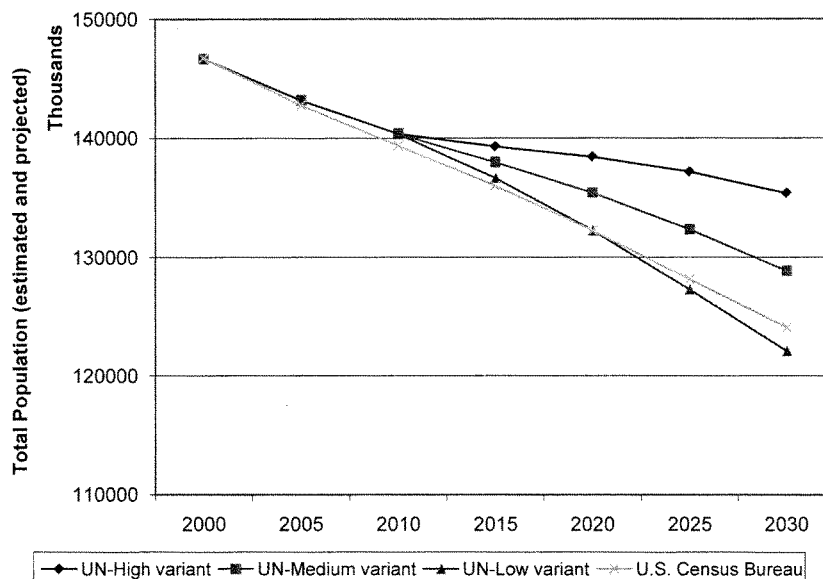
Where is the Russian Federation headed demographically in the years and decades immediately ahead? Obviously, there is no way to answer that question with certainty in advance. We can, however, get a sense of where some of the world's leading demographic institutions *expect* that Russia *could* be heading: 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 unstoping, 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

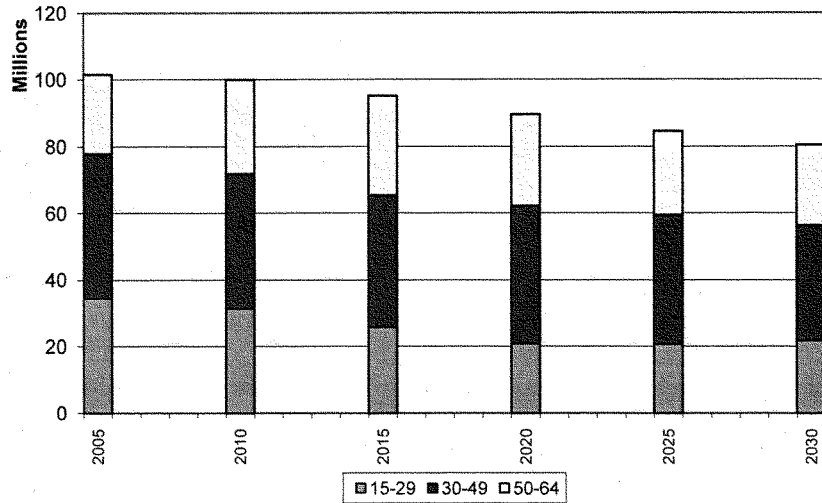
The overall tendency of population aging in the coming decades will be affecting the working age groups in Russian society, too. In 2005, to go by the estimates of the Census Bureau's International Data Base (IDB), the median age of the Russian Federation's 15–64 cohort was 40.2 years. In 2030, according 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.

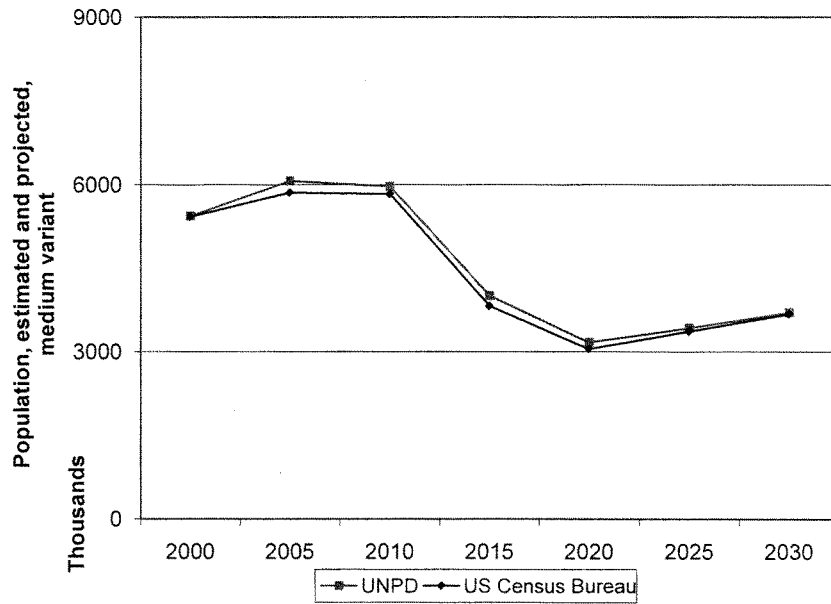
The Kremlin’s own optimistic prognosis for Russia’s population prospects flies in the face of some obvious and irreversible demographic realities. Foremost among these is the brute fact that Russia’s birth slump over the past two decades has left Russia with many fewer potential mothers for the years 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)



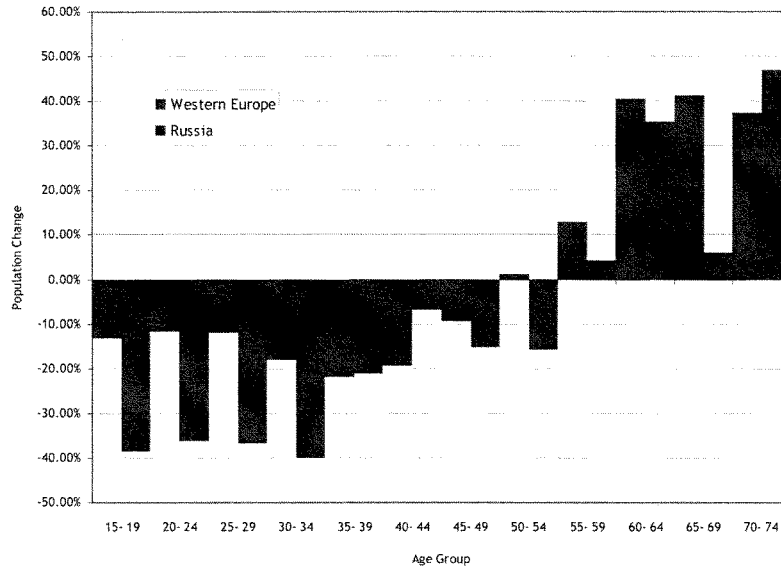
Source: U.S. Bureau of the Census International Database, available online at <http://www.census.gov/ipc/www/idbacc.html>; Accessed February 26, 2010.

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/>.

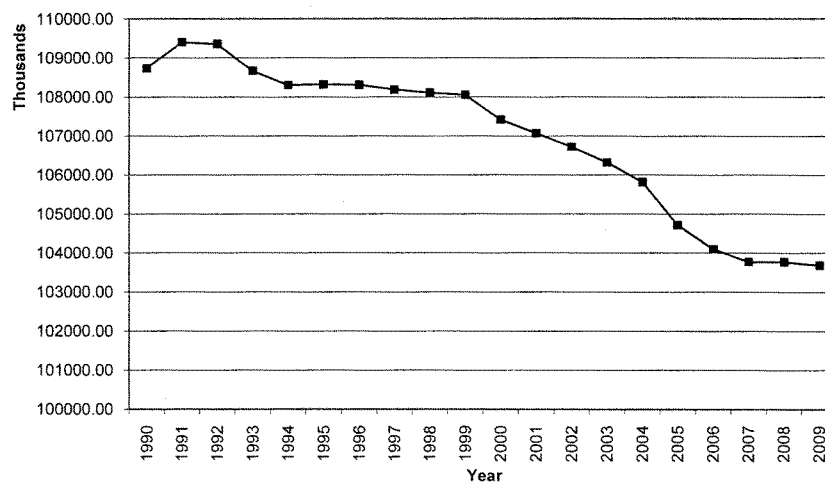
All of these figures do not bode well for Russia's prospects for future prosperity. Indeed, the widespread impact of Russia's demographic decline will have acute effects on the portion of the population responsible for economic production. And one corollary of this will be the marked decline in the population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

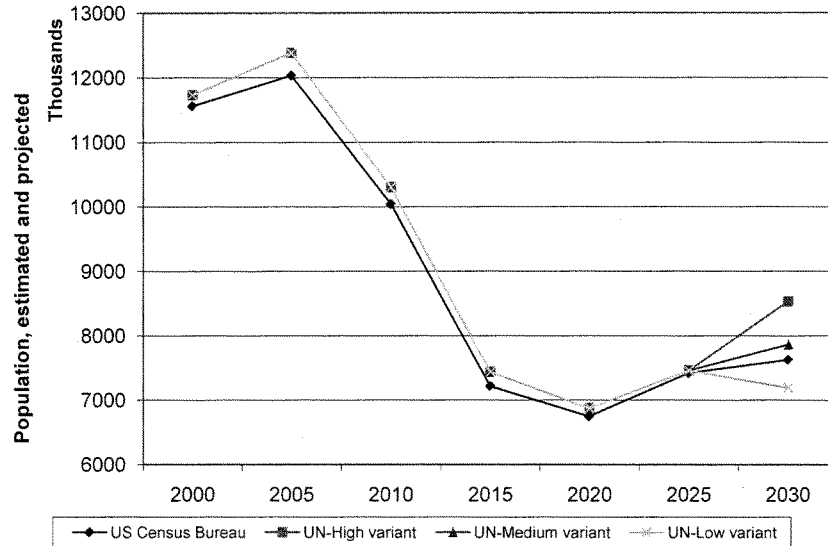
The most obvious constraints imposed by the ongoing demographic crisis concern military manpower. Maintaining the country's current (2008) force structure—a military of 1.027 million, mainly comprised of young conscripts obliged to serve twelve-month term of service^{lxxi}—will not be feasible in the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

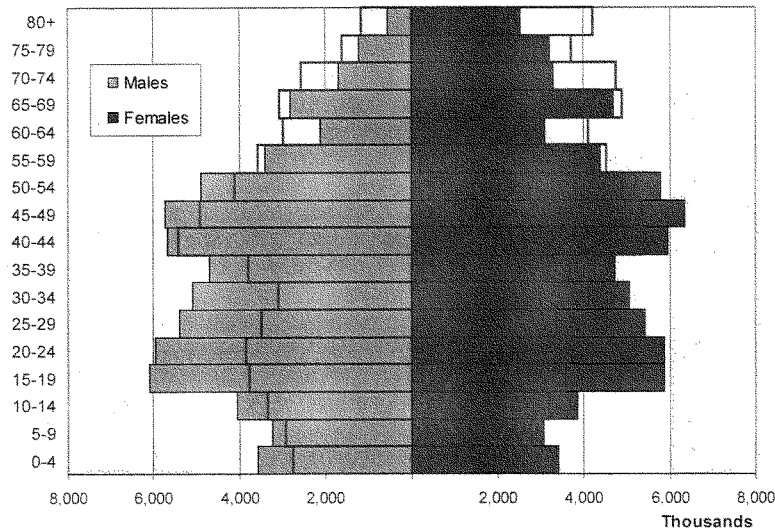
None of these questions, of course, can be answered today. All of these questions, however, point toward a single conclusion, namely, that one of the most worrisome consequences of the Russian demographic crisis might turn out to be its impact on the foreign and security policies of the country's own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

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.

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 \$14,430—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 Demografiefrage: Gesundheit als Ausweg für Deutschland und Europa*. (Stuttgart: Thieme Verlag, 2008).

^{vii} Goskomstat, *Statistical Yearbook of Russia (2007)* Moscow: FSUE, 2008.

^{viii} 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.

^{ix} WHO Regional Office for Europe, European Health for All Database, <http://www.euro.who.int/hfad>

^x 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.

^{xi} 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.

^{xii} 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.

^{xiii} Irina E. Kalabikhina, "Fertility in Russia," Moscow State University, 2006, Table 1, available at <http://www.infostat.sk/vdc/epc2006/papers/epc2006s60535.pdf>

^{xiv} 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.

^{xv} 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.

^{xvi} International Data Base, U.S. Census Bureau: available electronically at <http://www.census.gov/ipc/www/idb/informationGateway.php>; accessed August 30, 2009.

^{xvii} 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)

^{xxxv} 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.

^{xxxvi} 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.

^{xxxvii} 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.

^{xxxviii} 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 Goskomstat 2002 Russian Federation Census website, available electronically at <http://www.perepis2002.ru/index.html?id=87>.

^{xxxix} 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>.

^{xl} 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.

^{xli} 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.

^{xlii} *Ibid.*, p. 106.

^{xliii} 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*

^{xliiii} 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.in.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.)

^{xli} 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 Adyghees 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.

^{xlii} 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.

^{xliii} 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.

^{xliiii} Paul Goble, “Window on Eurasia: Moscow Seeks to Reduce Concentrations of Muslim Soldiers in Military Units,” April 18, 2011

^{xliiii} 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.

^{xliiii} *Ibid.*, p. 6.

^{xliiii} 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.

^{xliiii} 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.

^{xliiii} 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.

^{lxix} Note, however, that this measure of net migration includes both international and domestic net migration.

^{lxx} An extreme example of this effect was seen in 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 2003), pp. 430-442; data taken from Table 2, p. 436.

^{lxxi} 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.

^{lxxii} 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>.

^{lxxiii} 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.

^{lxxiv} A discussion dating back to Jean-François Gravier's 1947 treatise, *Paris et le désert français; décentralisation, équipement, population*.

^{lxxv} Gaddy and Hill, *The Siberian Curse*, 23.

^{lxxvi} 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.

^{lxxvii} 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).

^{lxxviii} Vladimir Kontorovich, "Can Russia Resettle the Far East?" *Post-Communist Economics 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>.

^{lxxix} 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.

^{lxxx} 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.

^{lxxxi} For an informed discussion of the range of estimates and their provenance, see Repnikova and Balzer, *Chinese Migration to Russia*, 13–15.

^{lxxxii} Repnikova and Balzer, *Chinese Migration to Russia*, 13–15.

^{lxxxiii} 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.

^{lxxxiv} "Putin speaks for urgent steps to advance Far East," *Interfax News Agency*, July 21, 2000.

^{lxxxv} Paul Gobie, "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>.

^{lxxxvi} Mortality schedules derived from the Human Mortality Database.

^{lxxxvii} 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.

Russia's Peacetime Demographic Crisis: Humanitarian, Economic and Security Implications

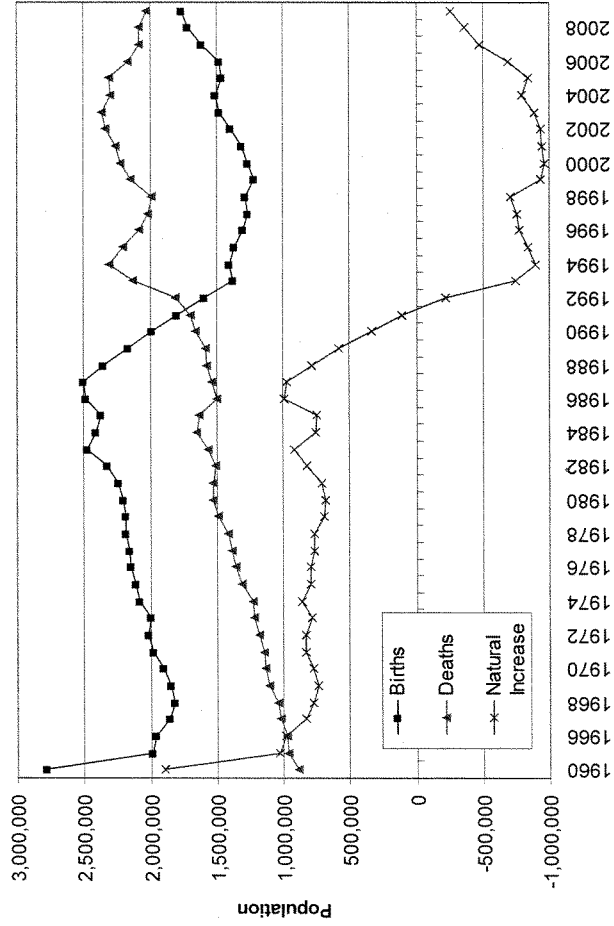
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“2050: Demographic Trends in OSCE Region”
U.S. Helsinki Commission
U.S. House of Representatives
Washington, D.C.
June 20, 2011

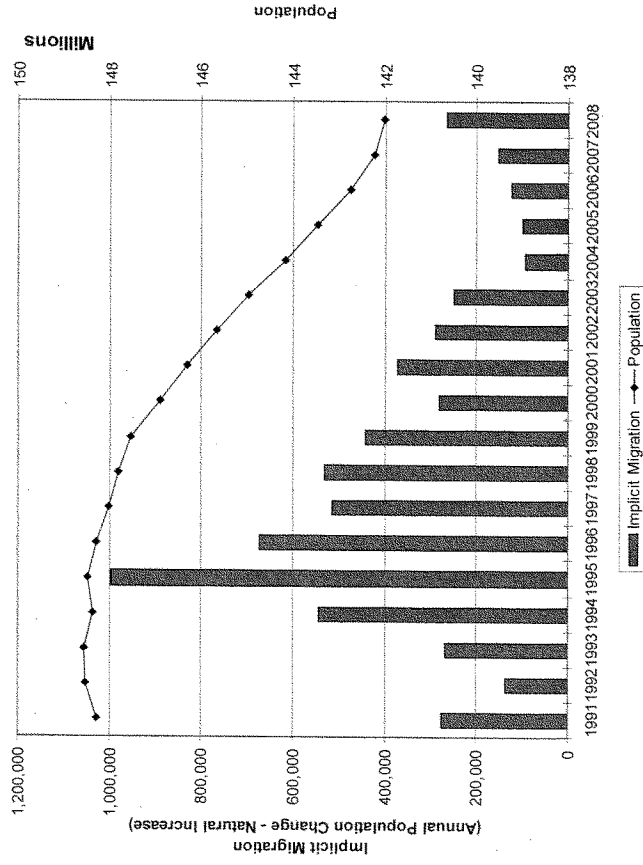
Depopulation With Russian Characteristics

Births, Deaths, and Natural Increase in Population: Russian Federation, 1960-2009



Source: The Russian Federation Ejeodnik: 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/lss/WWW.Lex/sig/d01/05-04.htm, accessed February 25, 2010. Preliminary 2009 data from Interfax, "Average Life Expectancy in Russia Approaches 70 Years," February 17, 2010.

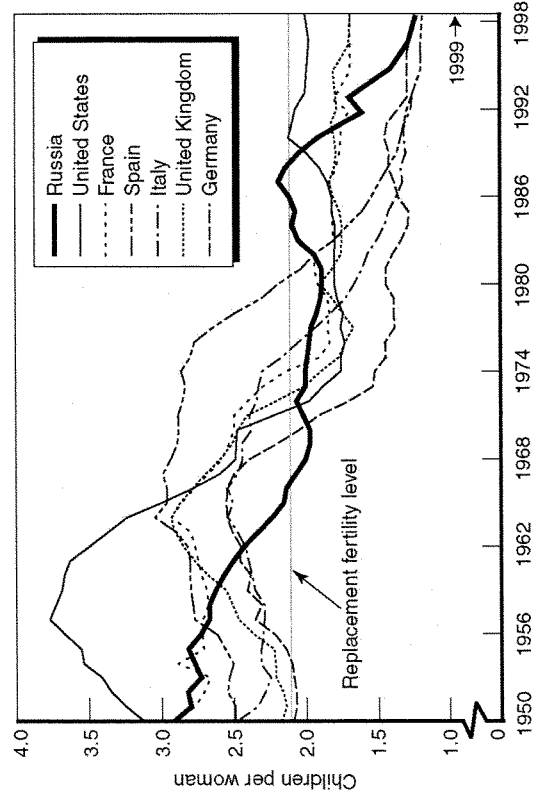
Only Enough To Soften The Fall Russian Population vs. "Implicit Migration": Goskomstat Data, 1991-2008



Source: The Russian Federation Ejevodnik: 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.

Thoroughly European

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

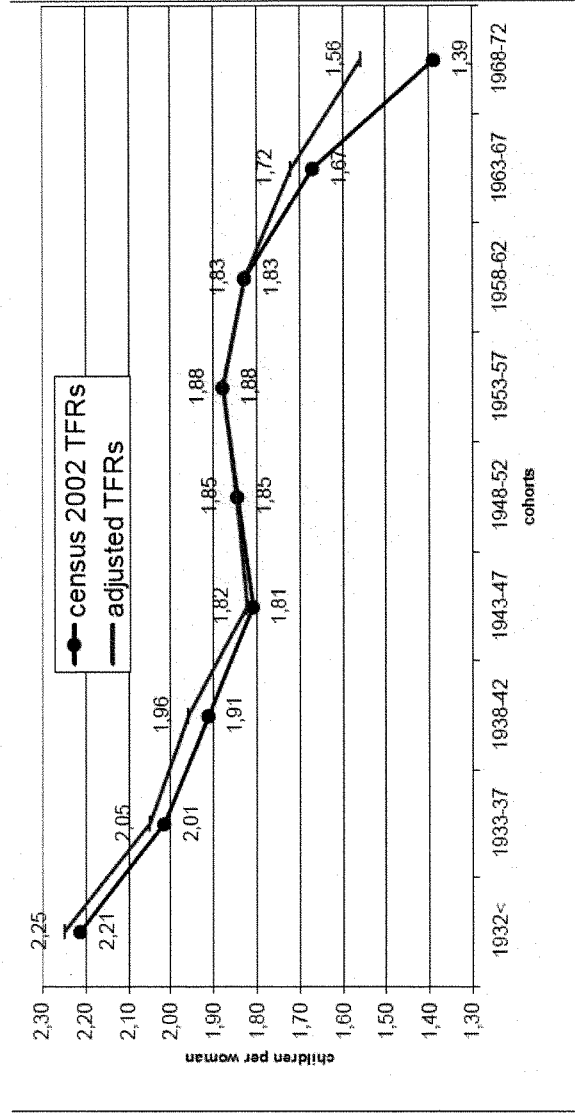


SOURCES: Vishnevsky (1996) for pre-1993 data; U.S. Census Bureau (2000) for post-1992 data.

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

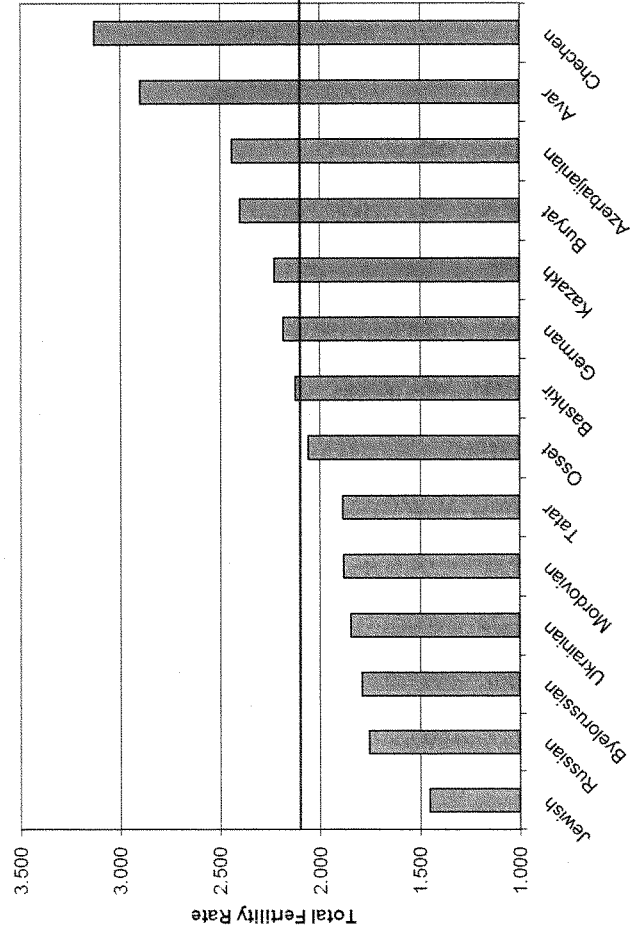
Even Grandma Was Below Replacement

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>

Lower Than You Thought...
 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>

Come On, How Many Muslims Really?

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
Lezgins	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

^aEthnic Afghans were identified under a number of different ethnic groups (Pushim, Tadjik, Uzbek, etc.) in 2002. 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.

^bn.a. = not applicable.

Source: Compiled from Goskomstat SSSR, 1990 and Goskomstat Rossiia, 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

More “Muslim” Than Western Europe

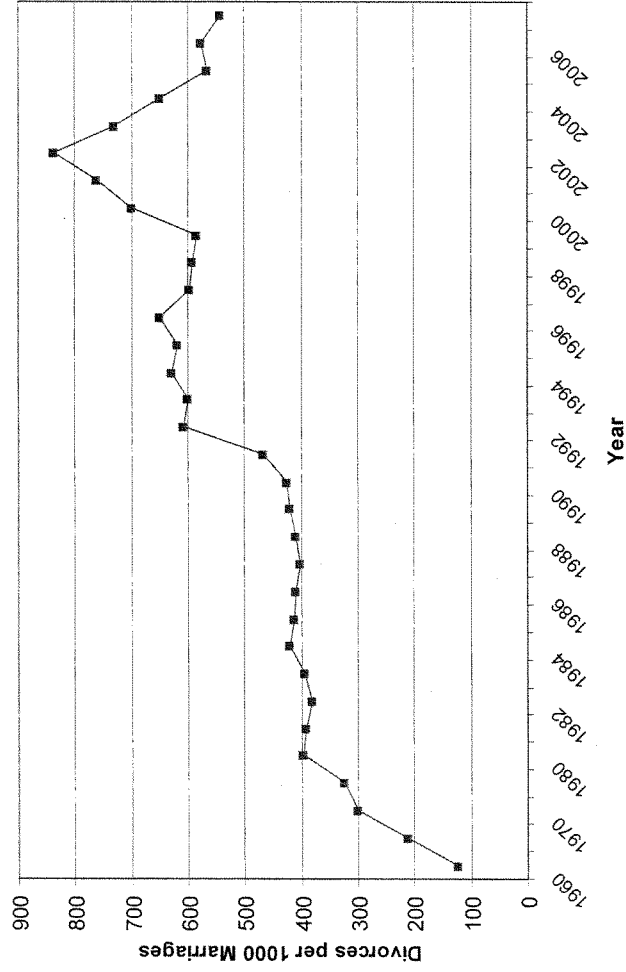
Estimated Muslim Populations of Selected European Countries (Early to Mid-2000s) and Russia (2002), in Thousands

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%
<i>Subtotal Southeastern Europe</i>	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%
<i>Subtotal Western Europe</i>	13,152	377,143	3.5%
<i>Total Western and Southeastern Europe</i>	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," Center for Strategic and International Studies, September 2007, 9; Table 1, Russia from Timothy Heleniak, "Regional Distribution of the Muslim Population of Russia," *Eurasian Geography and Economics* 47, no. 4 (2006): 426-448, Table 3; and Russian Demographic Yearbook (2007), Goskomstat, Table 1.3.

Thoroughly Modern

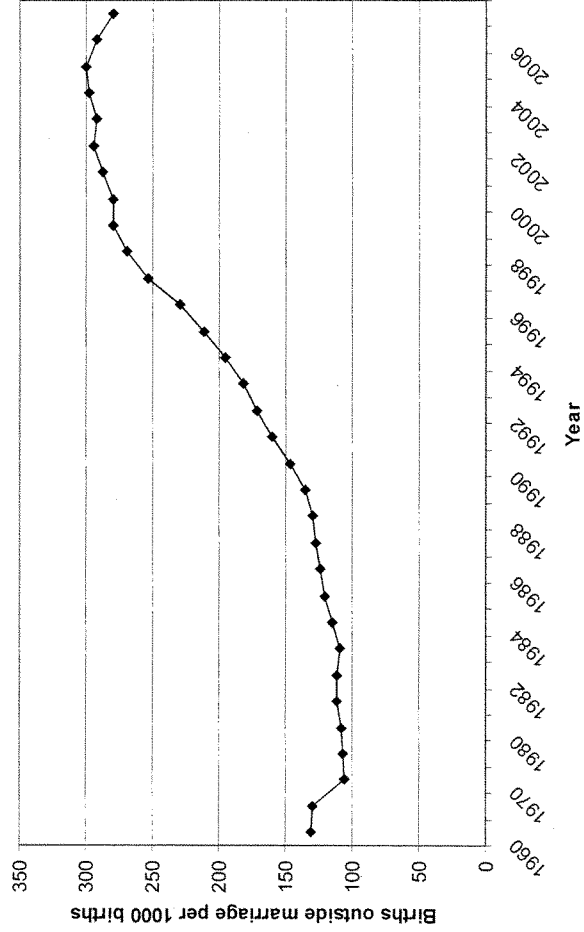
Divorces per 1000 Marriages (1960-2007), Russian Federation



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.

Getting To Look More Like The Rest of Europe

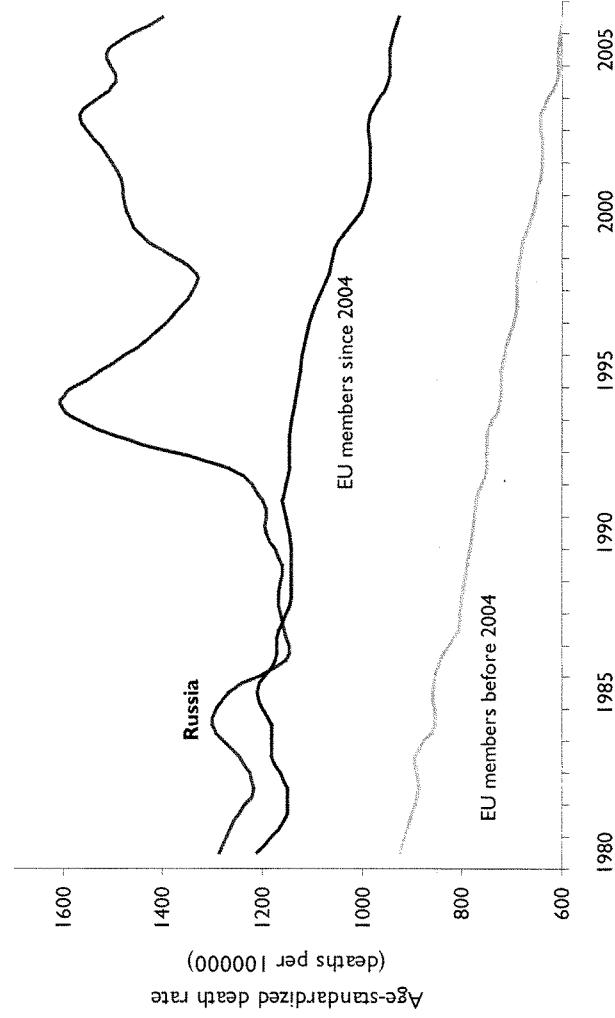
Non-marital births per 1000 births, Russian Federation 1960-2007



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.

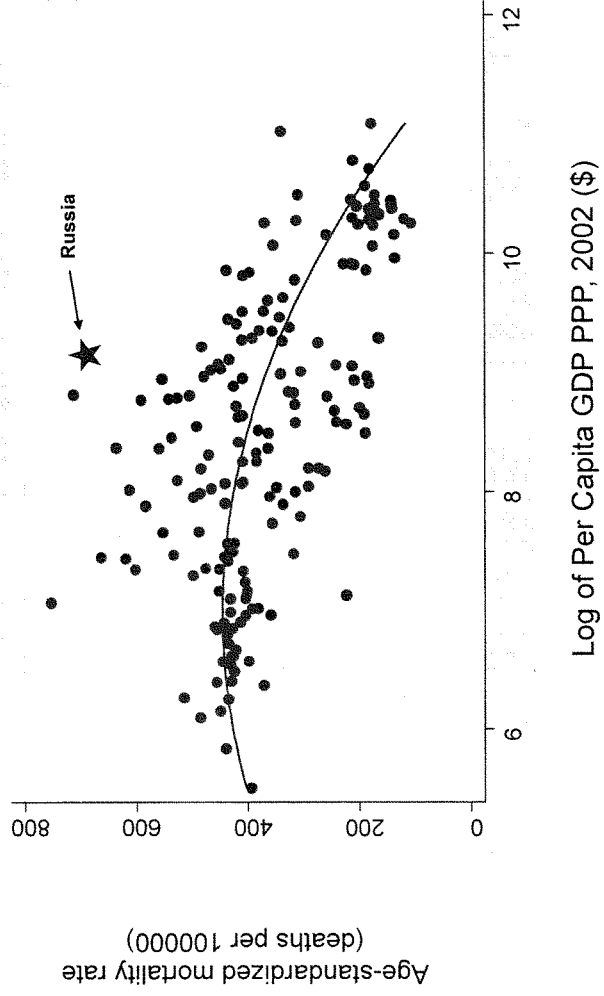
Difficult, But Not Impossible

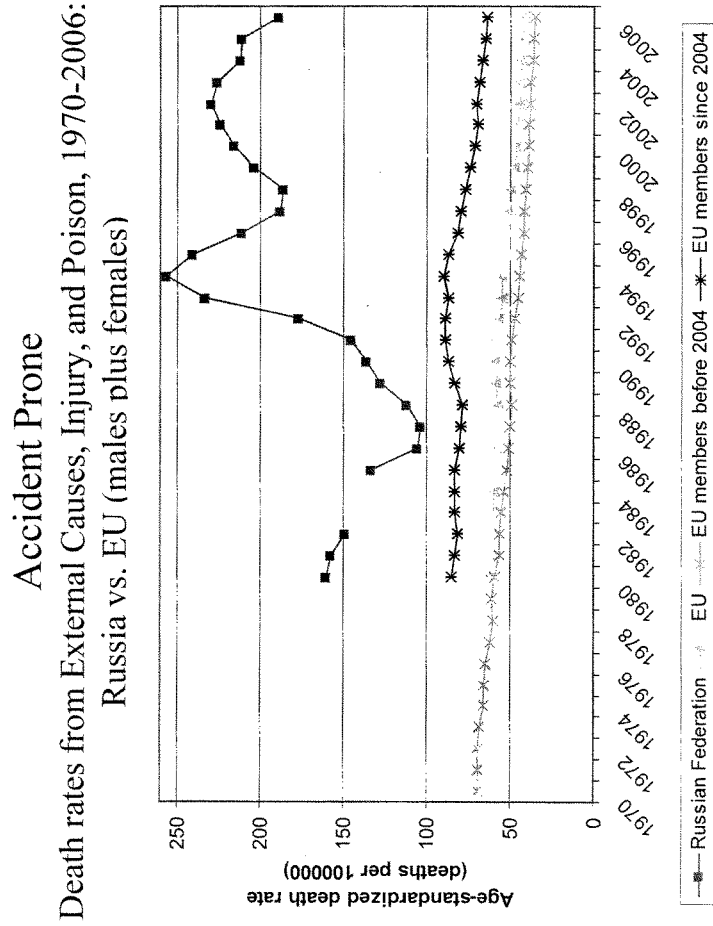
Death rates from all causes, 1980–2006: Russia vs. EU (males plus females)



More Bang Per Buck

Age-standardized mortality rates from Cardiovascular Disease vs. PPP-Adjusted Per Capita GDP for Russia and 174 Other Countries, 2002

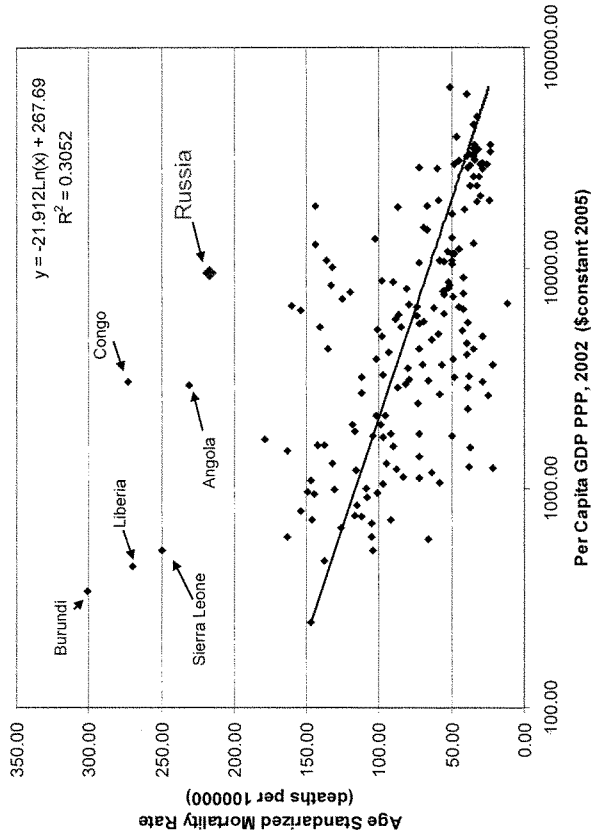




Source: Europe Health For All Database, World Health Organization, July 2008. Accessed February 26, 2010.

Find The “Outlier” That Does Not Belong

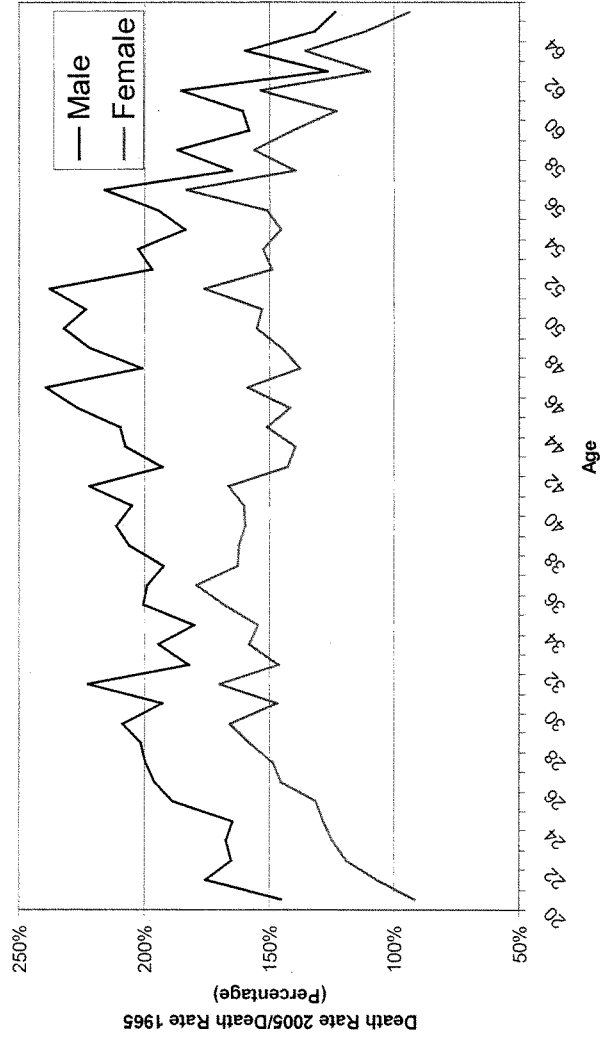
Age-standardized mortality rates from injury/external causes vs. PPP-Adjusted Per Capita GDP for Russia and 174 Other Countries, 2002



Source: World Development Indicators 2008, World Bank; WHOSIS, World Health Organization

Momma and Poppa Were Healthier

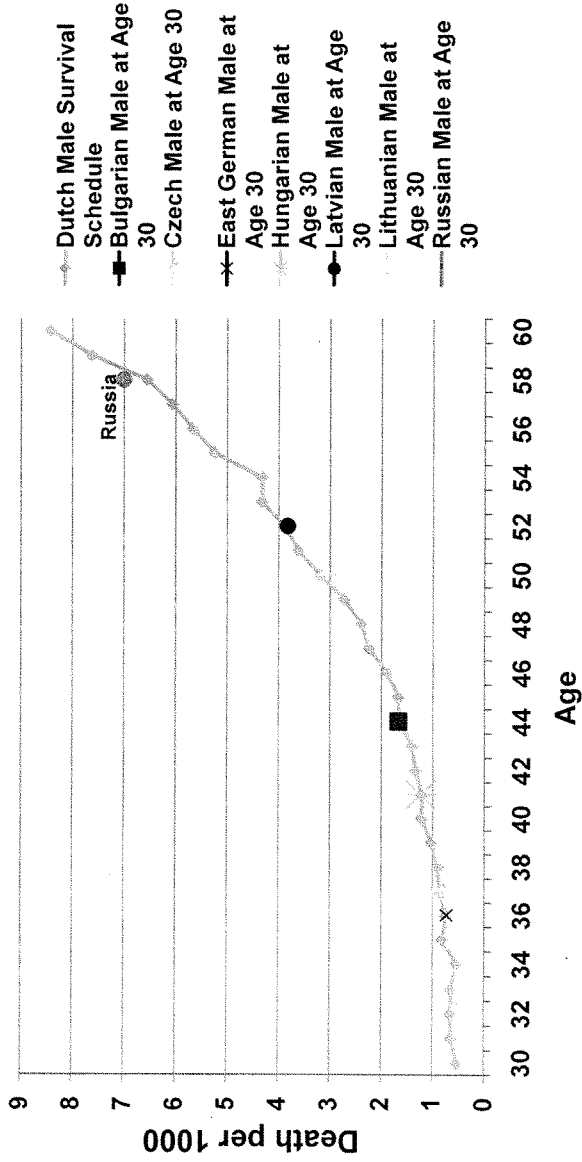
Death Rate Ratio, Ages 20-65:Russia, 2005 vs. 1965



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

30 Is The New 58...In Russia (2008)

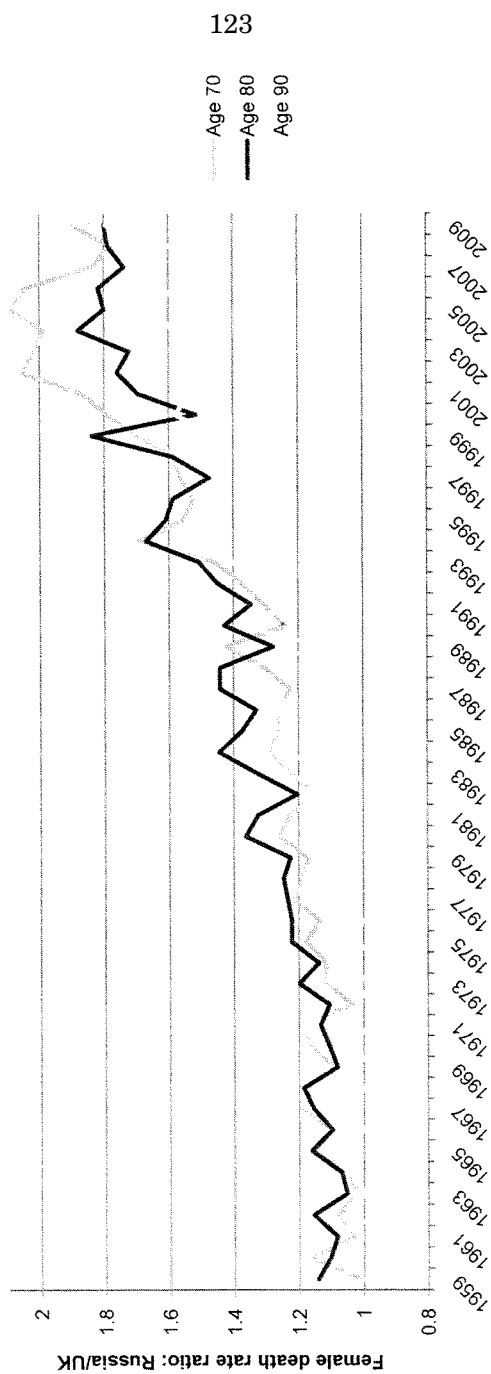
Mortality At Age 30 for Men In Selected Post-Socialist Countries Compared With The Dutch Male Mortality Schedule



Human Mortality Database, University of California, Berkeley (USA), and Max Planck Institute for Demographic Research (Germany). Available at www.mortality.org or www.humanmortality.de (data downloaded on Tuesday, June 7, 2011).

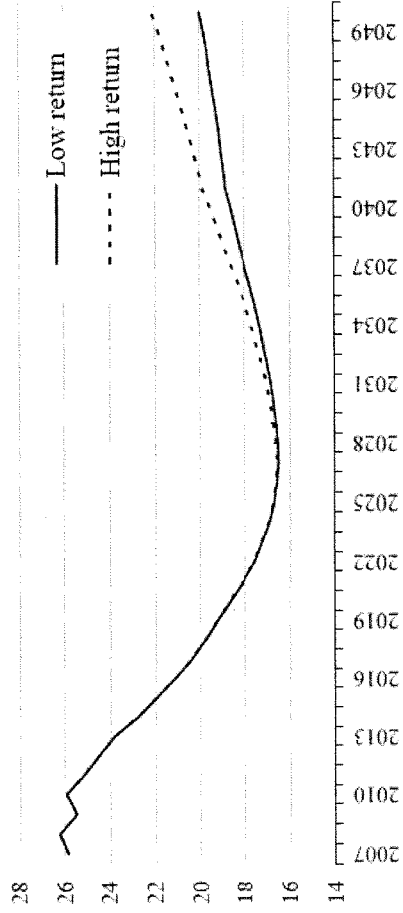
Old, Sick and Poor

Russia vs. UK: Ratio of female death rates for older ages, 1959-2009



Source: Human Mortality Database (mortality.org), accessed 11 May 2011.

Forgotten, But Not Gone
Projected Replacement Rate of Russia's Public Pension System, 2007-2050 (projections as of 2007)

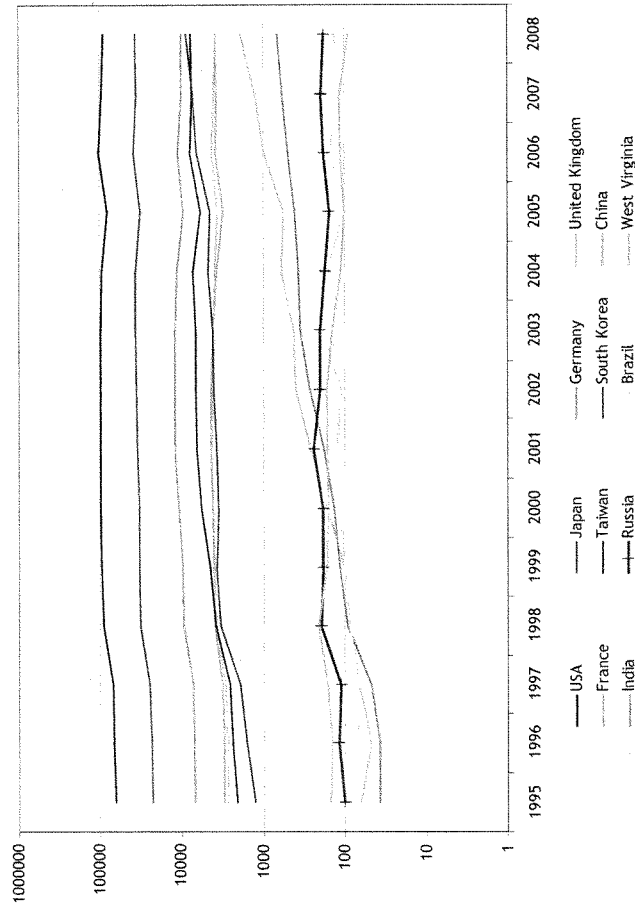


Source: Guryvich (2007).

Source: David Hauner, "Macroeconomic Effects of Pension Reform in Russia," *IMF Working Paper*, International Monetary Fund, August 2008.

Neck and Neck With West Virginia

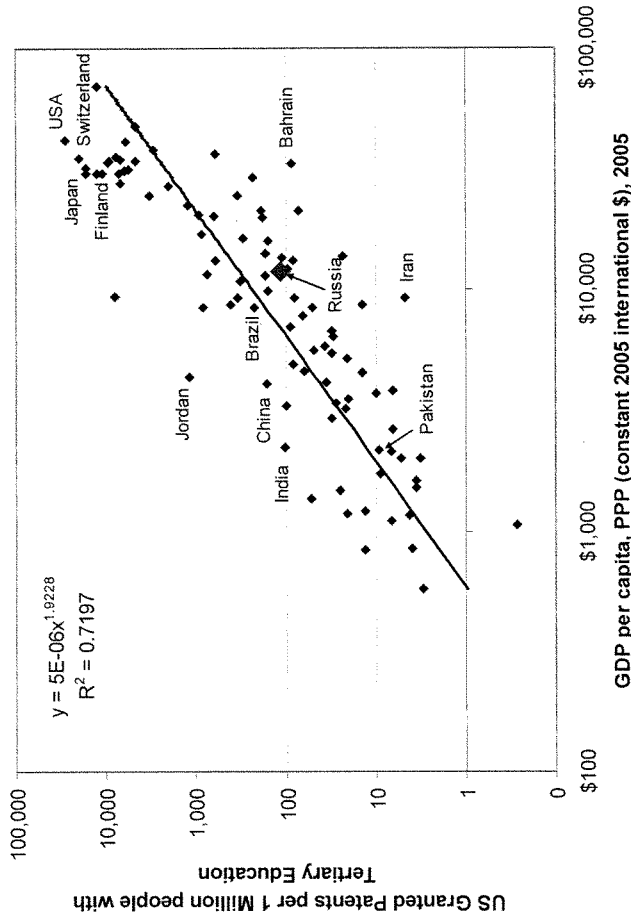
Number of U.S. Patents Granted, 1995–2008: Russian Federation vs. Selected Other Countries and Places



Source: Patents By Country, State, and Year - All Patent Types (December 2008), http://www.uspto.gov/stats/cst_all.htm; accessed February 26, 2010.

6% of the World's College Grads, 0.1% of the World's US Patents

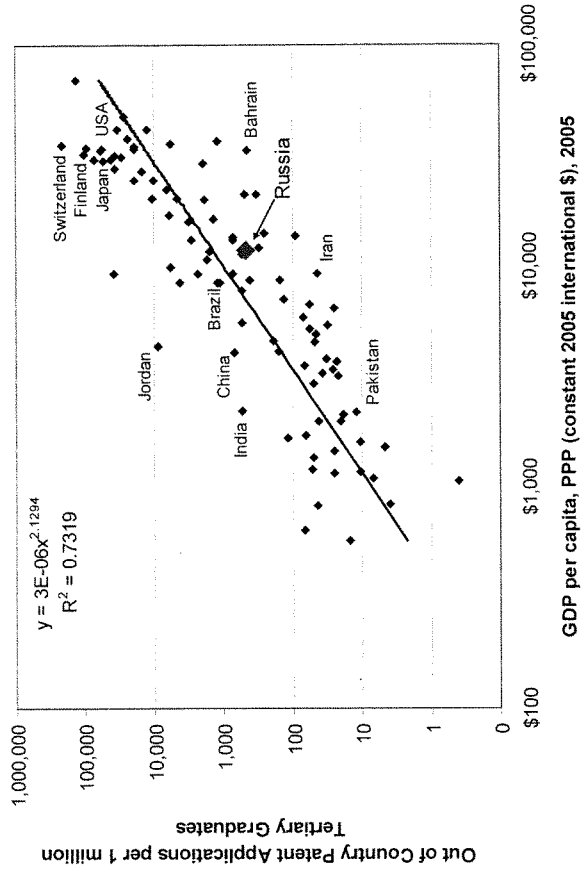
Number of U.S. Patents Granted Worldwide, 1995-2008 per Million People with Tertiary Education, vs. GDP per Capita PPP, 2005



Sources: Patents By Country, State, and Year - All Patent Types (December 2008), http://www.uspto.gov/go/stats/cst_all.htm; World Development Indicators 2008 CD-ROM, World Bank.; W. Lutz, A. Goujon, S.K.C., and W. Sanderson, "Reconstruction of population by age, sex and level of educational attainment of 120 countries for 2000-2030." *Vienna Yearbook of Population Research*, (2007).

Failing Grades In Knowledge Production

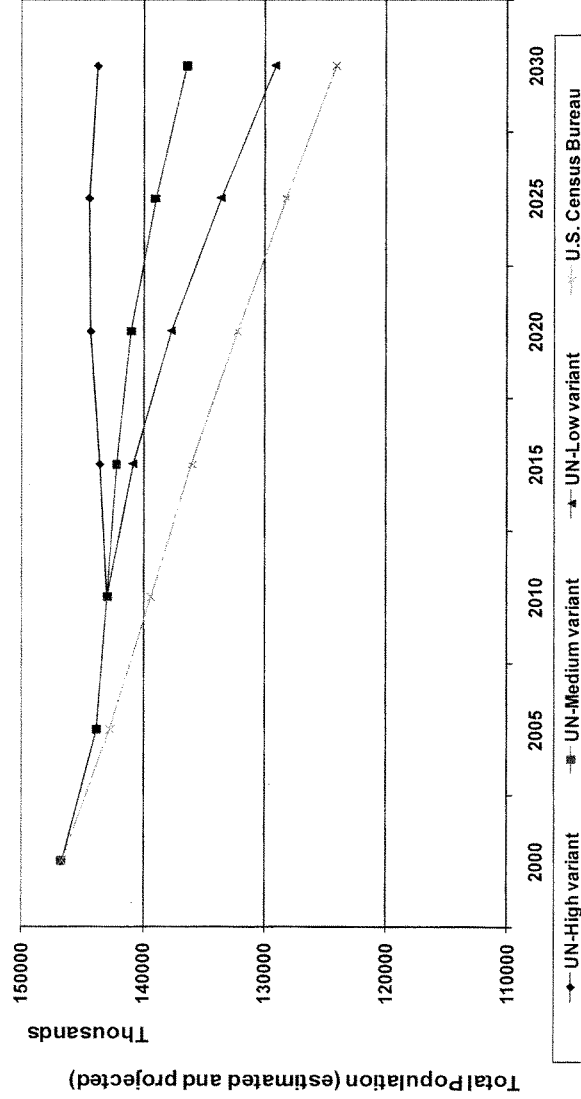
Number of Out of Country Patent Applications, 1995–2007 per Million Tertiary Graduates vs. GDP per Capita PPP, 2005



Sources: World Intellectual Property Organization, World Intellectual Property Indicators 2009, September 2009, <http://www.wipo.int/ipstats/en/statistics/patents/>; World Development Indicators 2008 CD-ROM, World Bank; and W. Lutz, A. Goujon, S.K.C., and W. Sanderson, "Reconstruction of population by age, sex and level of educational attainment of 120 countries for 2000-2030." *Vienna Yearbook of Population Research*, (2007).

Russian Federation: Dwindling Consensus

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

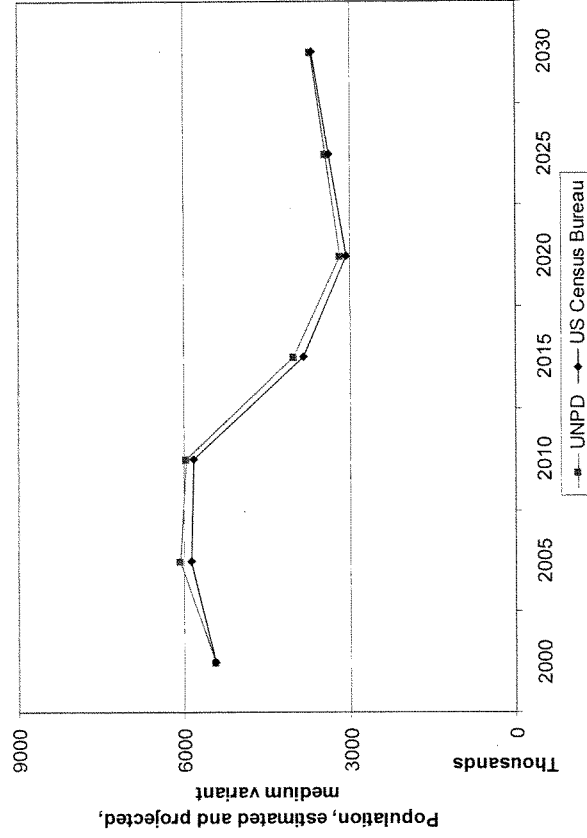


Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2010 Revision, <http://esa.un.org/unpp>, Tuesday, June 7, 2011.

Source: US Census Bureau International Database. Available online at <http://www.census.gov/ipc/www/cibnew.html>. Accessed on June 7, 2011.

Hint: They Are Needed For Babies

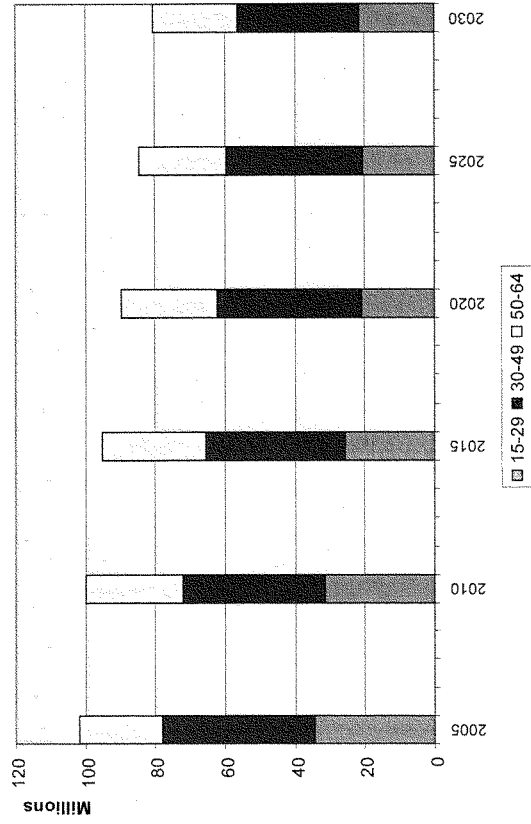
Females aged 20-24 in Russia, estimated and projected, 2000-2030, UNPD and U.S. Census Bureau



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/dbnew.html>. Accessed on February 26, 2010.

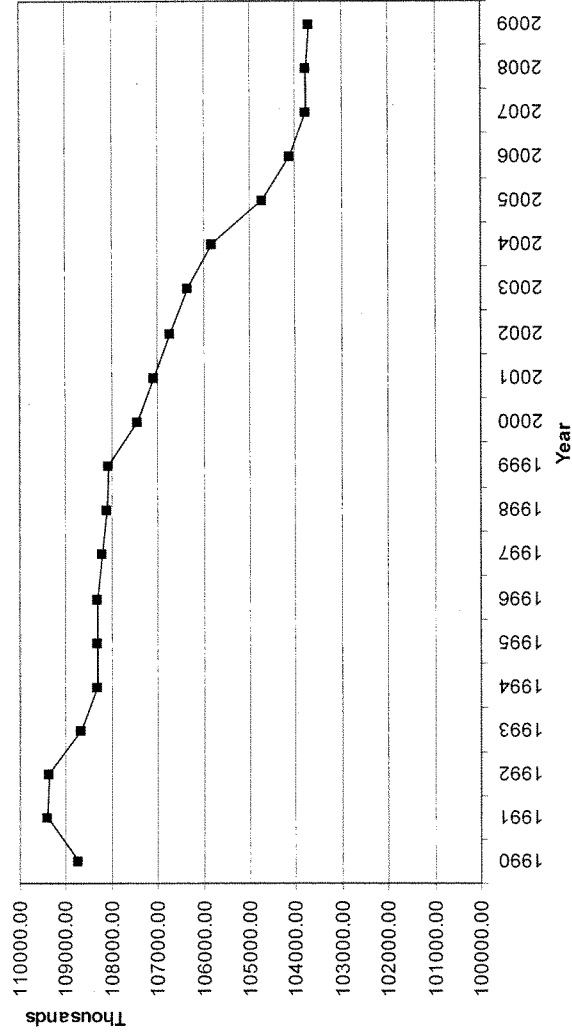
Russian Workers: A Race To The Bottom

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.

Anyone Home? Russian Urban Population, 1990-2009 (estimated)



Urban Life Expectancy in BRIC countries, most recent year available

	Male	Female	Total
Russia (2006)	61.03	73.7	67.29
Moscow (2006)	67.17	76.5	71.81
St. Petersburg (2006)	62.84	74.83	68.9
China (2000)	73.11	77.51	75.21
Shanghai (2000)	77.49	81.19	79.36
Beijing (2000)	76.13	79.92	77.96
India (2002-06)	67.1	70	68.8
Chennai (2004)	77.15	77.56	
New Delhi (2000)	69.5	69.5	69.5
Kolkata (2001)	74	75	
Maharashtra (1998-02)	68.7	72	70.3
Mumbai (2007)			71
Brazil (2006)	66.35	75.93	72.05
São Paulo (1970)			58.5
Rio De Janeiro (1970)			57.1
São Paulo (2005)	69.49	78.03	73.66
Rio De Janeiro (2005)	68.08	77.02	72.44
Brasilia (2005)	71.19	78.74	74.87
Mexico (2004)	71.79	77.21	74.5
Nuevo Leon (2004)	72.69	77.79	75.24
Mexico City (2004)	72.81	78	74.58
Turkey (2002)			
Istanbul (2002)	69	74.2	72.4
Indonesia (2002)	64.2	66.1	66.2
Jakarta (2002)	70.3	74.2	72.3
Egypt (2006)	66.98	73.6	71.3
Cairo (2006)	70.2	74.8	71.4

Sources:

Russia: Russian Demographic Yearbook, 2007, Goskomstat

China: China Human Development Report, 2005

India: Chennai - City Report of Chennai 2005; Kolkata - West Bengal Human Development Report 2004

Urban Maharashtra - Human Development: Strengthening District Level Vital Statistics in India by F. Ram, Chander Shekhar and S.K Mohanty

India Total - ORGI, MHA, GOI (New Delhi), "Life expectancy at birth by sex and residence, India 1970-75 to 2002-06"

Brazil: Indicadores Sociodemograficos, IBGE, 2006 (Note: 2006 Data is total, not urban only)

Brazil 1970 Data (Note: Total LE, not divided by male/female):

"Mortality, Income Distribution, and Rural-Urban Residence in Brazil"

Jose Alberto M. de Carvalho and Charles H. Wood, Population and Development Review, Vol. 4, No. 3 (Sep., 1978), pp. 405-420

Mexico: Conapo (2006a). Indicadores de mortalidad y fecundidad, 1990-2006. Serie histórica basada en la conciliación demográfica a partir del XII Censo General de Población y Vivienda 2000 y el

II Censo de Población y Vivienda 2005. Note: Total Mexico not divided by urban and rural

Indonesia: Human Development Report 2004

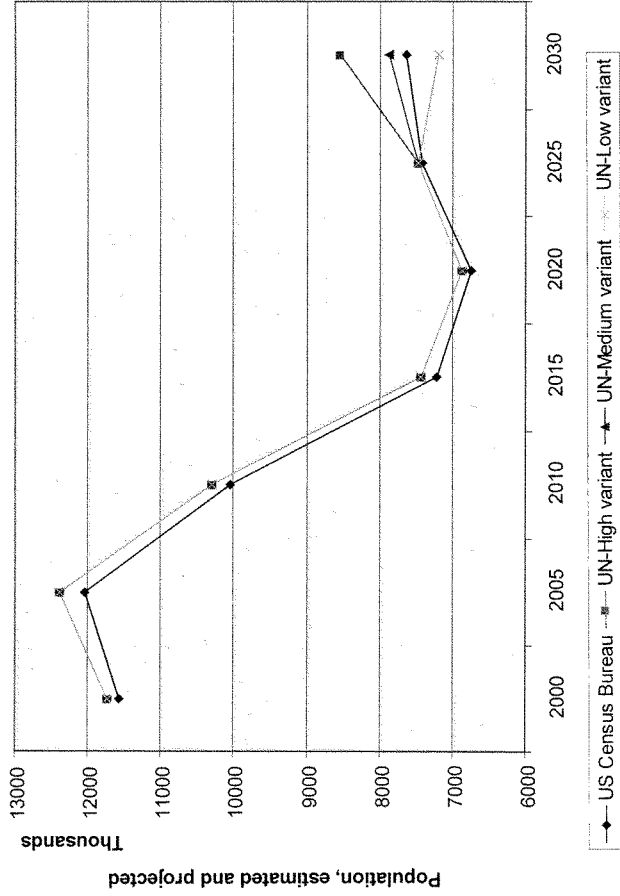
Turkey: Human Development Report 2004

Egypt: Human Development Report 2008

26

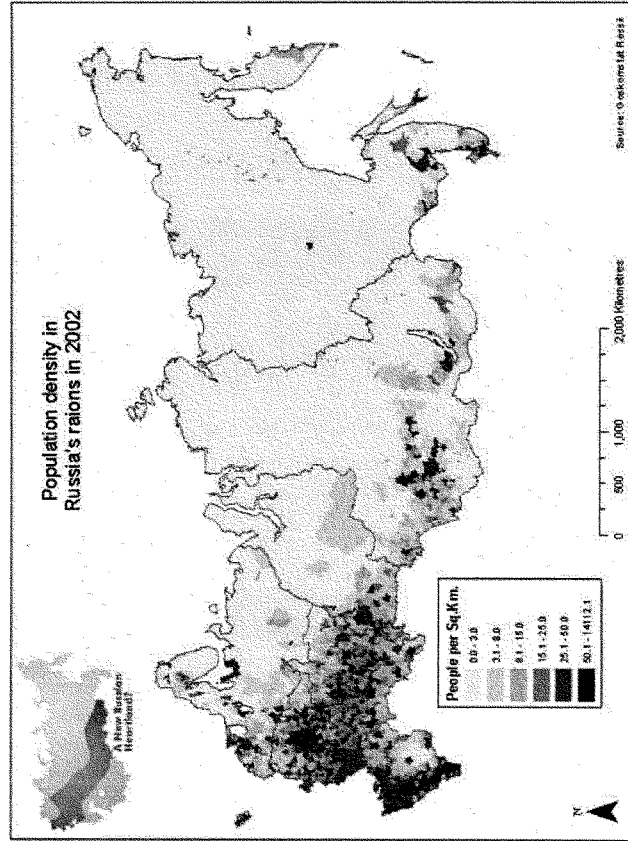
Did You Say Soldiers?

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

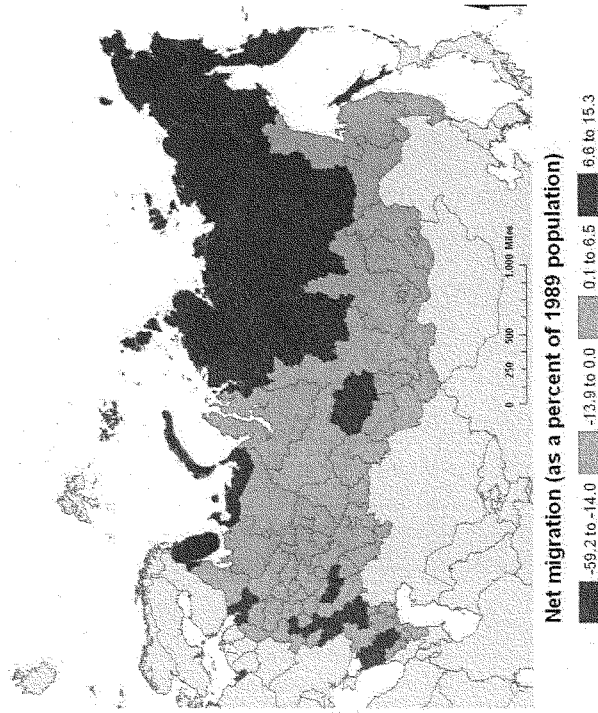


Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision and World Urbanization Prospects: The 2007 Revision, <http://esa.un.org/unpp>, February 26, 2010 and US Census Bureau International Database. Available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

Feeling Lonely? Russian Federation Population Density By Raion, 2002



I'm a Siberian, Get Me Out of Here!
Net Migration in Russia, 1989–2002



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

**PREPARED STATEMENT OF RICHARD JACKSON, DIRECTOR
AND SENIOR FELLOW, GLOBAL AGING INITIATIVE, CENTER
FOR STRATEGIC AND INTERNATIONAL STUDIES**

Mr. Chairman and Commission Members, I am grateful for the opportunity to testify before the Commission on this important topic.

Many have observed that the recent global economic crisis is helping to accelerate the relative decline of today's developed countries and to drive the rise of today's emerging markets. It is less well understood that demography is pushing in the same direction, though over a much longer time horizon. Demographic change shapes economic and geopolitical power like water shapes rock. Up close the force may appear trivial, but given enough time it can move mountains. The long-term prosperity and security of the United States may depend in crucial ways on how effectively it prepares for the demographic transformation now sweeping the world.

THE DEMOGRAPHIC TRANSFORMATION

Most of the developed world finds itself on the cusp of an unprecedented new era of rapid population aging and population decline. The developed countries have of course been aging for decades, due to falling birthrates and rising life expectancy. But during the 2010s and 2020s, this aging will get an extra kick as large postwar baby boom generations move fully into retirement. According to the United Nations Population Division (whose projections are cited throughout this testimony), the median ages of Western Europe and Japan, which were 34 and 33 respectively as recently as 1980, will soar to 47 and 52 by 2030, assuming no increase in fertility. In Italy, Spain and Japan, more than half of all adults will be older than the official retirement age—and there will be more people in their seventies than in their twenties.

Meanwhile, the working-age population has already begun to contract in several large developed countries, including Germany and Japan. By 2030, it will be contracting in nearly all developed countries, the only major exception being the United States. In a growing number of countries, total population will also begin a gathering decline. Unless birthrates or immigration surge, Japan and some European nations are on track to lose nearly one-half of their total current populations by the end of the century.

These trends threaten to undermine the ability of today's developed countries to maintain global security. There is, to begin with, the direct impact on population size and GDP size, and hence the manpower and economic resources that nations can deploy—what RAND scholar Brian Nichiporuk calls “the bucket of capabilities” perspective. But population aging and population decline can also indirectly affect capabilities—or even alter national goals themselves. Rising pension and health-care care costs will place intense pressure on government budgets, potentially crowding out spending on other priorities, including national defense and foreign assistance. Economic performance may suffer as workforces gray and rates of savings and investment decline. As societies and electorates age, growing risk aversion and shorter time horizons may

weaken not just the ability of the developed countries to play a major geopolitical role, but also their will.

The weakening of the developed countries might not be a cause for concern if the world as a whole were becoming increasingly pacific. But this is unlikely to be the case. Over the next few decades, the emerging markets will be buffeted by its own potentially destabilizing demographic storms. China will face a massive age wave that could slow economic growth and precipitate political crisis just as it is overtaking the United States as the world's leading economic power. Russia will be in the midst of the steepest and most protracted population implosion of any major power since the plague-ridden Middle Ages. Meanwhile, many other developing countries, especially in the Muslim world, will experience a sudden new resurgence of youth whose aspirations they may not be able to meet. The risk of social and political upheaval could grow throughout the developing world—even as the developed world's ability to deal with the threats declines.

Yet if the developed world seems destined to see its geopolitical stature diminish, there is one partial but important exception to the trend: the United States. While it is fashionable to observe that U.S. power has peaked, demography suggests that America will play as important a role in shaping the world order in this century as it did in the last.

THE IMPACT ON ECONOMIES

Although population size alone does not confer geopolitical stature, no one disputes that population size and economic size together constitute a powerful double engine of national power. A larger population allows greater numbers of young adults to serve in war and occupy and pacify territory. A larger economy allows more spending on the hard power of national defense and the semi-hard power of foreign assistance. It can also enhance what political scientist Joseph Nye Jr. calls “soft power” by promoting business dominance, leverage with NGOs and philanthropies, social envy and emulation, and cultural clout in the global media and popular culture.

The expectation that the aging of its populations will diminish the geopolitical stature of the developed world is thus based in part on simple arithmetic. By the 2020s and 2030s, the working-age population of Japan and many European countries will be contracting by between roughly 0.5 and 1.5 percent per year. Even at full employment, the growth in real GDP could stagnate or decline, because the number of workers may be falling faster than productivity is rising. Unless economic performance improves, some countries could face a future of secular economic stagnation—in other words, of zero real GDP growth from peak to peak of the business cycle.

Economic performance, in fact, is more likely to deteriorate than improve. Workforces in most developed countries will not only be stagnating or contracting, but also graying. A vast literature in the social and behavioral sciences establishes that worker productivity typically declines at older ages, especially in eras of rapid technological and market change. Economies with graying workforces are also likely to be less entrepreneurial. According to the 2007 Global

Entrepreneurship Monitor, which surveys fifty-three countries, new business start-ups in high-income countries are heavily tilted to the young. Of all “new entrepreneurs” (defined as an owner of a new business founded within the last three and one-half years), 40 percent are under age thirty-five and 69 percent are under age forty-five. Only 9 percent are aged fifty-five or older.

At the same time, savings rates will decline as a larger share of the population moves into the retirement years. If savings falls more than investment demand, as much macroeconomic modeling suggests is likely, either businesses will go starved for investment funds or the dependence of the developed economies on capital from higher-saving emerging markets will grow. In the first case, the penalty will be borne in the form of lower output. In the second, it will be borne in higher debt service costs and loss of political leverage, which history teaches is always ceded to creditor nations.

Even as economic growth slows, the developed countries will have to transfer a rising share of society’s economic resources from working-age adults to nonworking elders. Graying means paying—more for pensions, more for health care, more for nursing homes and social services for the frail elderly. According to CSIS projections, the cost of maintaining the current generosity of today’s public old-age benefit systems would, on average across the developed countries, add an extra 7 percent of GDP to government budgets by 2030. The extra cost in most continental European countries, with their expansive welfare states, would be even greater.

Yet the old-age benefit systems of most developed countries are already pushing the limits of fiscal and economic affordability. By the 2020s, political warfare over deep benefit cuts seems unavoidable. On one side will be young adults who face stagnant or declining after-tax earnings. On the other side will be retirees, who are often wholly dependent on pay-as-you-go public plans. In France, Germany, Italy, and Spain, over 70 percent of the income of the typical elderly person comes in the form of a government check, compared with roughly 40 percent in the United States. In the 2020s, young people will have the future on their side. Elders will have the votes on theirs.

Faced with the choice between economically ruinous tax hikes and politically impossible benefit cuts, many governments will choose a third option: cannibalize other spending on everything from education and the environment to foreign assistance and national defense. As time goes by, the fiscal squeeze will make it progressively more difficult to pursue the obvious response to emerging military manpower shortages—investing massively in military technology, and thereby substituting capital for labor. Secretary Gates recently warned that the hollowing out of the defense budgets of our European allies already renders the long-term outlook for NATO “dim, if no dismal.” Demographic trends threaten to make a bad situation even worse.

To be sure, there is significant variation in the demographic outlook across Europe. In France and northern Europe, including the low countries, Scandinavia, and the UK, the fertility rate now averages a relatively buoyant 1.9, not much less than the U.S. rate of 2.1. In Italy and the rest of Mediterranean Europe, the fertility rate averages 1.4.—and in Germany and Central Europe, it aver-

ages 1.3, on par with Japan. If the demographic outlook for northern Europe is challenging, the outlook for the rest of Europe can only be described as bleak. While Europe's northern high-fertility zone faces a future of zero workforce growth between now and 2050, the working-age population of Italy and Mediterranean Europe is projected to decline by 22 percent; that of Germany and Central Europe is projected to decline by 29 percent.

This variation poses a serious threat to the economic viability of the European Union, and, in particular, the EMU. The monetary union, of course, is already being buffeted by the sovereign debt crisis. Yet this near-term challenge pales before the longer-term challenge posed by the aging of Europe. The viability of the EMU depends crucially on the effective coordination of fiscal policy among member countries. Yet member countries not only have diverging demographics, but welfare states that vary greatly in their generosity. As the fiscal pressures of aging mount at different rates in different countries, coordination will become increasingly problematic. Some governments may rise to the fiscal challenge and rein in spending. But if others do not, they could end up unleashing inflation on the prudent and profligate alike.

THE IMPACT ON SOCIAL MOOD

The impact of population aging on the collective temperament of the developed countries is more difficult to quantify than its impact on their economies, but the consequences could be just as important—or even more important. With the size of domestic markets fixed or shrinking in many countries, businesses and unions may lobby for anticompetitive changes in the economy. We may see growing cartel behavior to protect market share and more restrictive rules on hiring and firing to protect jobs. We may also see increasing pressure on governments to block foreign competition. Historically, eras of stagnant population and market growth—think of the 1930s—have been characterized by rising tariff barriers, autarky, corporatism, and other anticompetitive policies that tend to shut the door on free trade and free markets.

The shift in business psychology could be mirrored by a broader shift in social mood. Psychologically, older societies are likely to become more “small c” conservative in outlook and possibly more risk-averse in electoral and leadership behavior. Elder dominated electorates may lock in current public spending commitments at the expense of new priorities and shun decisive confrontations in favor of ad hoc settlements. Smaller families may be less willing to risk scarce youth in war. We know that extremely youthful societies are in some ways dysfunctional—prone to violence, instability, and state failure. Extremely aged societies may also prove to be dysfunctional in some ways, favoring consumption over investment, the past over the future, and the old over the young.

Meanwhile, the rapid growth in ethnic and religious minority populations, due to ongoing immigration and higher-than-average minority fertility, could strain civic cohesion and foster a new diaspora politics in some countries. With the demand for low-wage labor rising, immigration (assuming no rise over today's rate) is on track to double the percentage of Muslims in France and triple it in Germany by 2030. Some large European cities, including Am-

sterdam, Marseille, Birmingham and Cologne, may be majority Muslim. The problem is not growing diversity itself, but rather the failure of many European countries to assimilate migrants economically and socially. In the United States and the other traditional “immigration countries” like Australia and Canada, migrants constitute an important comparative advantage.

In Europe, the demographic ebb tide may deepen the crisis of confidence reflected in such best-selling books as “France is Falling,” by Nicolas Baverez; “Can Germany Be Saved?” by Hans-Werner Sinn; or “The Last Days of Europe,” by Walter Laqueur. The media in Europe are already rife with dolorous stories about the closing of schools and maternity wards, the abandonment of rural towns, and the lawlessness of immigrant youths in large cities. A recent cover of *Der Spiegel* shows a baby hoisting 16 old Germans on a barbell with the caption: “The Last German—On the Way to an Old People’s Republic.” In Japan, the government half-seriously projects the date at which there will be only one Japanese citizen left alive.

U.S. DEMOGRAPHIC EXCEPTIONALISM

Over the next few decades, the outlook in the United States will increasingly diverge from that in the rest of the developed world. Yes, America is also graying, but to a lesser extent. The United States is the only developed nation with replacement-rate fertility of 2.1 children per couple. By 2030, its median age, now 37, will rise to only 39. Its working-age population, according to both United Nations and U.S. Census Bureau projections, will also continue to grow through the 2020s and beyond, both because of its higher fertility rate and because of substantial net immigration, which America assimilates better than most other developed countries.

None of this is meant to downplay the serious structural challenges facing the United States, which include a bloated health-care sector, a chronically low savings rate, growing dependence on foreign capital, and a political system that finds it difficult to make meaningful resource trade-offs between competing priorities. All of these threaten to become growing handicaps as our population ages—and, if not addressed, will ultimately undermine our national prosperity and national power.

Yet unlike Europe and Japan, the United States will still have the youth and the economic resources to play a major geopolitical role in the decades ahead. In the end, the biggest challenge facing America by the 2020s may not be so much its inability to lead the developed world as the inability of the other developed nations to lend much assistance.

TOMORROW’S GEOPOLITICAL MAP

The demographer Nicholas Eberstadt has warned that demographic change may be “even more menacing to the security prospects of the Western alliance than was the Cold War for the past generation.” Although it would be fair to point out that such change usually poses opportunities as well as dangers, his basic point is incontestable: Planning national strategy for the next sev-

eral decades with no regard for population projections is like setting sail without a map or a compass. In this sense, demography is the geopolitical cartography of the twenty-first century.

Although tomorrow's geopolitical map will be shaped in important ways by political choices yet to be made, the basic contours are already emerging. During the era of the Industrial Revolution, the population of what we now call the developed world grew faster than the rest of the world's population, peaking at 25 percent in 1930. Since then, its share has declined. By 2010, it stood at just 13 percent and it is projected to decline still further in the future to 10 percent by 2050. The collective GDP of the developed countries will also decline as a share of the world total—and much more steeply. According to new projections by the Carnegie Endowment for International Peace, the G-7's share of total G-20 GDP will fall from 72 percent in 2009 to 40 percent in 2050. Driving this decline will be not just the slower growth of the developed world, as workforces in Japan and Europe age and stagnate or contract, but also the surging expansion of large, newly market-oriented economies, especially in East and South Asia.

There is only one large country in the developed world that does not face a future of stunning relative demographic and economic decline: the United States. Thanks to its relatively high fertility rate and substantial net immigration, its current global population share will remain virtually unchanged in the coming decades. According to the Carnegie projections, the U.S. share of total G-20 GDP will drop significantly, from 34 percent in 2009 to 24 percent in 2050. The combined share of Canada, France, Germany, Italy, Japan, and the UK, however, will plunge from 38 percent to 16 percent. By the middle of the twenty-first century, the dominant strength of the U.S. economy within the developed world may have only one historical parallel: the immediate aftermath of World War II, exactly 100 years earlier at the birth of the "Pax Americana."

All told, population trends point inexorably toward a more dominant U.S. role in a world that will need us more, not less. For the past decade or so, the United Nations has published a table ranking the world's twelve most populous countries over time. In 1950, six of the top twelve were developed countries. In 2000, only three were. By 2050, only one developed country will remain—the United States, still in third place. By then, it will be the only country among the top twelve with a long historical commitment to democracy, free markets, and civil liberties.



The Graying of Europe

how population aging will reshape Europe's economy and place in the world order

Testimony before the
Commission on Security and Cooperation in Europe

at the hearing entitled
2050: Implications of Demographic Trends in the OSCE Region

by Richard Jackson
Center for Strategic and International Studies

June 20, 2011

CSIS | CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

European Demographic Indicators by Region

	TFR		Life Expectancy		Elderly Share		Working-Age Pop. Change		Total Pop. Change	
	2005-10	2010	2005-10	2010	2010	2050	2010-50	2010-50	2010-50	2010-50
France & Northern Europe	1.9	17%	80.2	17%	25%	25%	0%	0%	+12%	+12%
Germany & Central Europe	1.3	18%	78.2	18%	32%	32%	-29%	-29%	-16%	-16%
Italy & Southern Europe	1.4	19%	80.7	19%	34%	34%	-22%	-22%	-4%	-4%
The Russian Federation	1.4	13%	66.5	13%	26%	26%	-35%	-35%	-25%	-25%
Ukraine & Rest of Slavic CIS	1.3	15%	68.8	15%	28%	28%	-39%	-39%	-31%	-31%
The Balkans	1.4	15%	73.6	15%	28%	28%	-30%	-30%	-20%	-20%
US	2.1	13%	79.2	13%	21%	21%	-3%	-3%	+34%	+34%
Japan	1.3	23%	82.7	23%	39%	39%	-38%	-38%	-23%	-23%

Source: UN (2009)

Four constraints on geopolitical stature.

□ MANPOWER SHORTAGES

stagnant or declining youth populations

□ GROWING FISCAL BURDEN

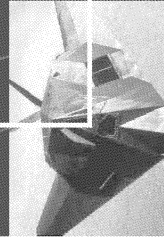
rising retirement and health-care costs

□ SLOWER ECONOMIC GROWTH

low- or zero-growth workforces & GDPs

□ SHIFTS IN SOCIAL MOOD

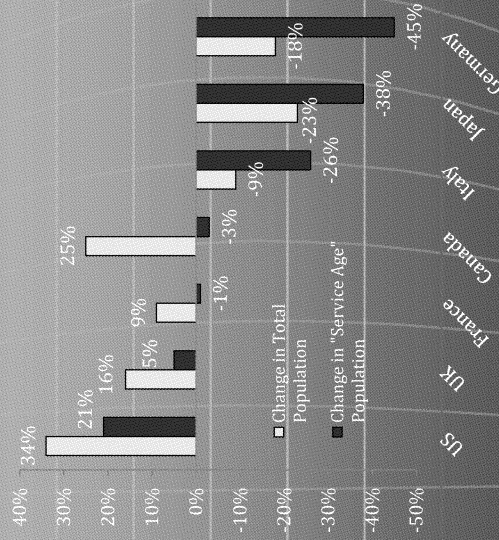
*rising risk of protectionism, aging electorates,
and growing ethnic & religious diversity*



Manpower Shortages

- ❑ The service-age population of most developed countries is on track to decline even faster than the total population.
- ❑ Tighter civilian labor markets may further exacerbate the challenge of recruiting and retaining adequate forces.
- ❑ Although greater reliance on technology can reduce manpower needs for some missions, “boots on the ground” will remain essential for occupying and pacifying territory.
- ❑ In any case, aging will also constrain the fiscal capacity of the developed countries to substitute capital for labor.

Cumulative Percentage Change in the Total and “Service Age” Population (Aged 20-29), 2010-2050

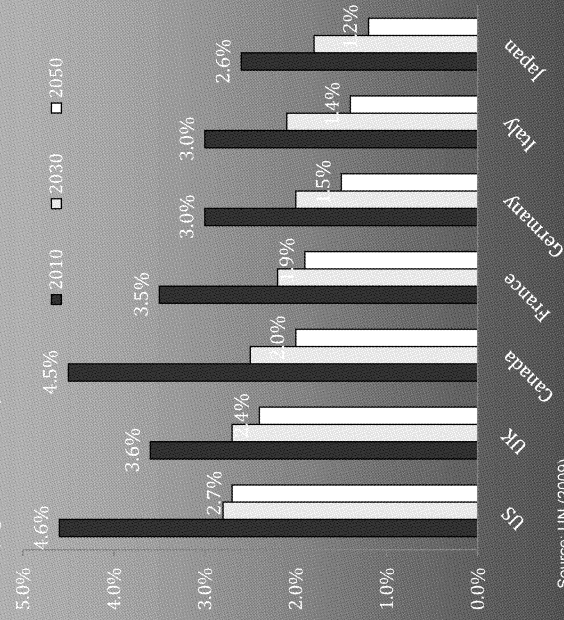


Source: UN (2009)

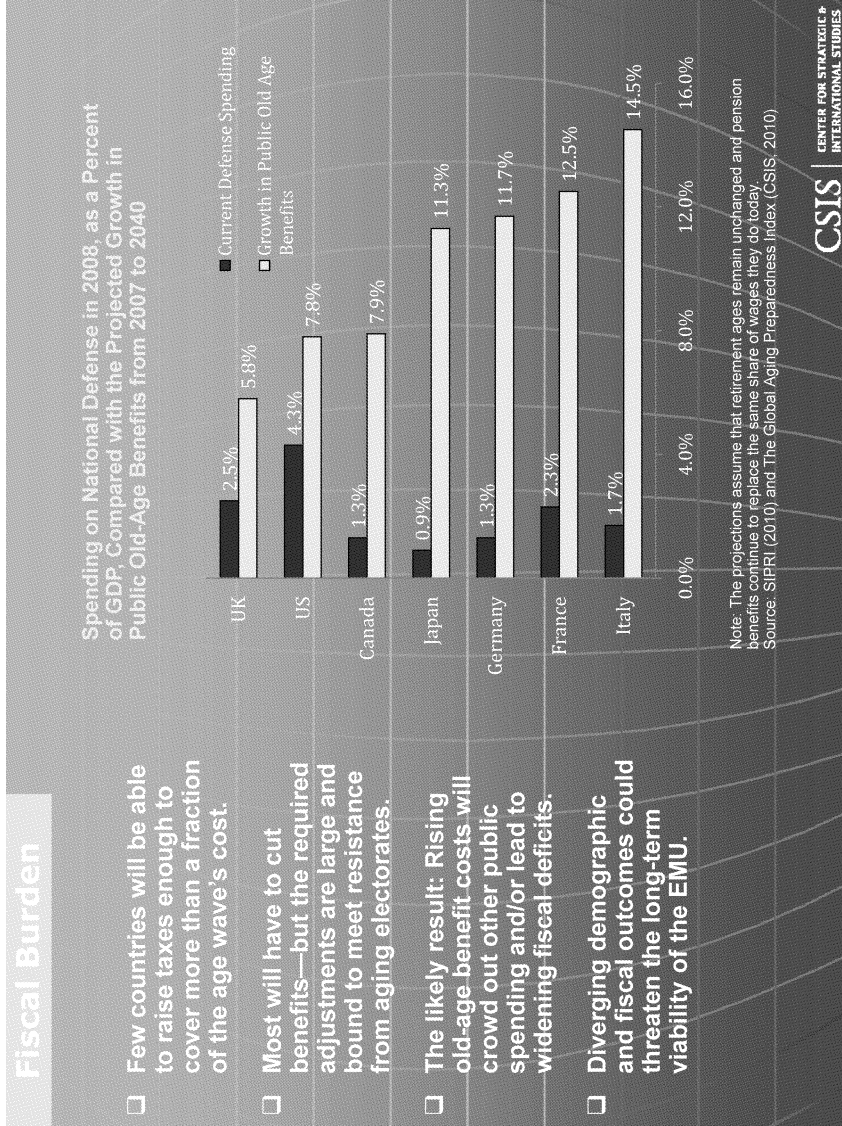
Fiscal Burden

- ❑ Falling fertility and rising longevity translate directly into a falling support ratio of workers to retirees.
- ❑ A falling support ratio in turn translates into a rising cost rate for PAYGO retirement systems.

Number of Working-Age Adults (Aged 20-64) per Elder (Aged 65 & Over) in 2010, 2030, and 2050



Source: UN (2009)



Economic Growth

- ❑ The slowdown in workforce growth in the developed world will translate into slower growth in GDP.
- ❑ Japan and some faster-aging European countries face a future of secular stagnation.
- ❑ Productivity and living standard growth may also slow as rates of investment decline.
- ❑ Aging workforces will be less flexible, less mobile, and less entrepreneurial—putting a further drag on economies.
- ❑ Stagnant or contracting domestic markets may trigger a protectionist backlash.

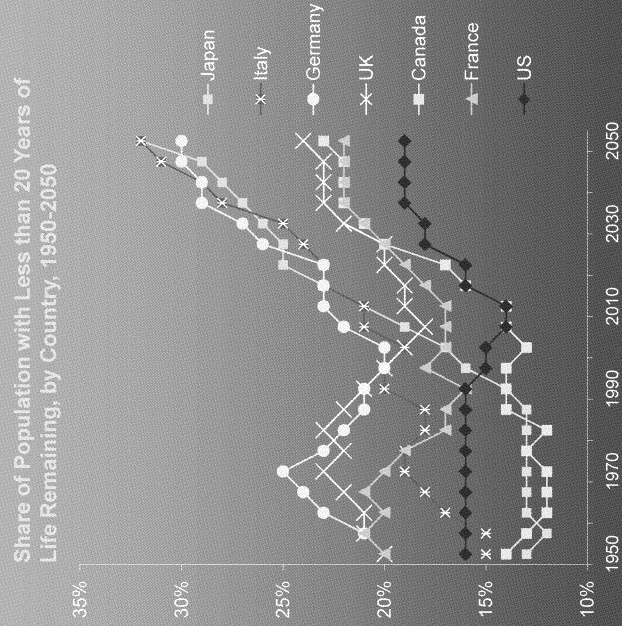
Average Annual Growth Rate in the Working-Age Population (Aged 20-64), by Decade

	1980s	1990s	2000s	2010s	2020s	2030s	2040s
France	1.0%	0.4%	0.6%	-0.2%	-0.1%	-0.2%	0.0%
Germany	1.1%	0.2%	-0.2%	-0.3%	-1.2%	-1.2%	-0.9%
Italy	0.9%	0.2%	0.3%	-0.3%	-0.6%	-1.2%	-0.9%
Netherlands	1.3%	0.7%	0.3%	-0.2%	-0.4%	-0.5%	0.0%
Poland	0.6%	0.5%	0.8%	-0.6%	-0.9%	-0.7%	-1.9%
Spain	1.0%	1.0%	1.4%	0.3%	-0.2%	-0.8%	-1.1%
Sweden	0.4%	0.5%	0.4%	0.1%	0.1%	0.1%	0.3%
UK	0.6%	0.4%	0.6%	0.3%	0.0%	0.1%	0.3%
US	1.4%	1.2%	1.1%	0.6%	0.3%	0.6%	0.6%
Japan	0.7%	0.4%	-0.4%	-1.0%	-0.7%	-1.5%	-1.5%

Source: UN (2009)

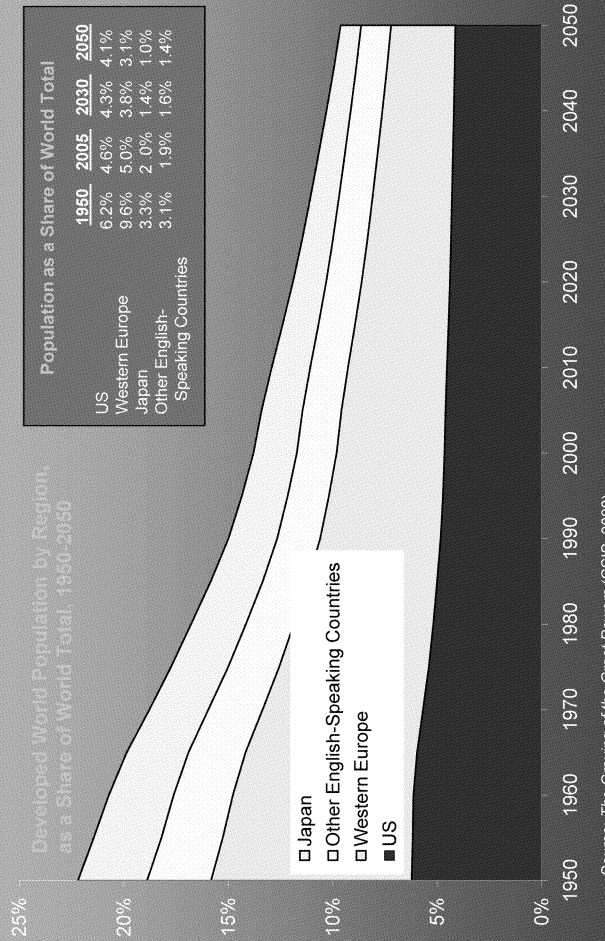
Social Mood

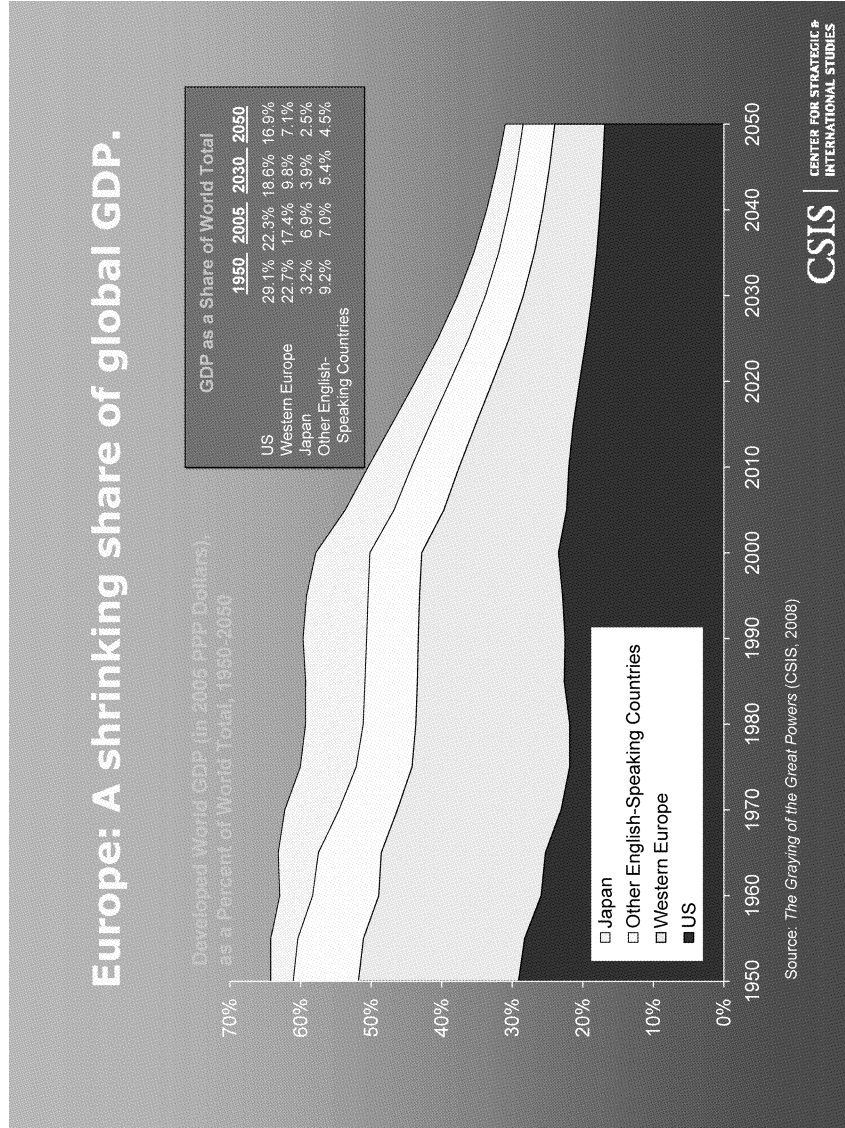
- As European societies age, they may become more risk-averse and more conservative in electoral and leadership behavior.
- Elder-dominated electorates may lock in current spending priorities at the expense of future-oriented investments.
- The disappearance of the extended family may make it more difficult to socialize the young and care for the old.
- Even as European societies age, they will also become more diverse—possibly threatening social cohesion.



Source: CSIS calculations based on UN (2007) and Human Mortality Database, University of California, Berkeley and Max Planck Institute for Demographic Research

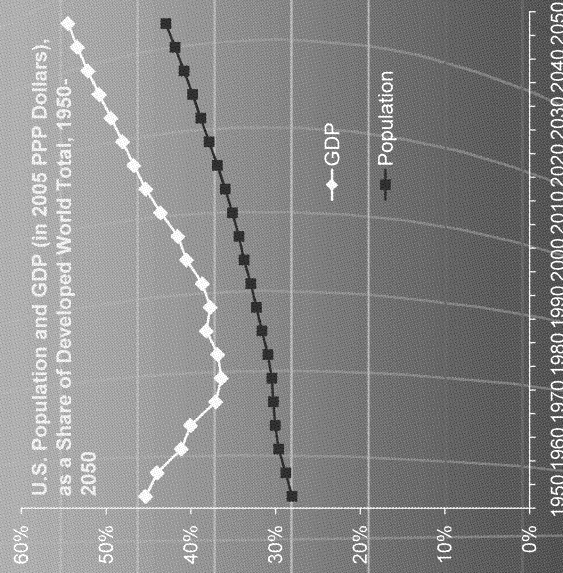
Europe: A shrinking share of global population.





The United States: A partial but important exception to "hyperaging."

- The US will remain the youngest of the developed countries, thanks to its relatively high fertility rate and substantial immigration.
- Its flexible labor markets and entrepreneurial culture will also help it confront the age wave.
- The US has some serious handicaps, including a low savings rate, an expensive health-care system, and a political system that finds it difficult to make trade-offs.
- Yet by the 2020s, it may be the only developed country with the youth and the economic resources to play a major geopolitical role.



Source: *The Graying of the Great Powers* (CSIS, 2008)

**PREPARED STATEMENT OF STEVEN W. MOSHER, PRESIDENT,
POPULATION RESEARCH INSTITUTE**

THE WHITE PESTILENCE: THE IMPLICATIONS OF DECLINING
BIRTHRATES IN THE OSCE COUNTRIES

One remarks nowadays all over Greece such a diminution in natality and in general manner such depopulation that the towns are deserted and the fields lie fallow. Although this country has not been ravaged by wars or epidemics, the cause of the harm is evident: by avarice or cowardice the people, if they marry, will not bring up the children they ought to have. At most they bring up one or two. It is in this way that the scourge before it is noticed is rapidly developed. The remedy is in ourselves; we have but to change our morals.

Polybius (204–122 B.C.)¹

n.b. Rome annexed the Greek states in 146 B.C.

Demography is destiny.

Auguste Comte²

Five centuries after the Black Plague devastated Europe, a White Pestilence is now decimating that same continent. Many nations, especially in Europe, are already in a death spiral, losing a significant number of people each year. Listen closely, and you will hear the muffled sound of populations crashing. I am an anthropologist and East Asian specialist by training, so I am going to concentrate on the cultural factors at work here. I will not pit anthropology's poor spears against demography's statistical juggernaut.

First, let's clear up a central misconception. The old "demographic transition" charts showed birthrates leveling off precisely at the replacement rate. But many of today's young adults in Europe and elsewhere are too enamored of sex, the city, and the single life to think about marriage, much less about replacing themselves. A single Swedish woman may eventually bear one child as her biological clock approaches midnight, of course, but she is un-

[Editor's Note: Some footnote references were missing in the original.]

¹Polybius, *The Histories*, Volume 6. Quoted in Robert de Marcellus, "A Foundering Civilization," *Human Life Review* 28:1–2 (Winter/Spring 2002), pp. 7–18.

²The phrase "Demography is destiny" is generally attributed to Auguste Comte (1798–1857), a 19th century French mathematician and sociologist.

³Paul Ehrlich, *The Population Bomb* (Ballantine Books, 1968; a Sierra Club edition followed in 1969, to which the following page citations refer.) The "battle . . . is over" phrase is from the Prologue. For the denial of food aid, pp. 143, 148.

⁴Al Gore's *Earth in the Balance: Ecology and the Human Spirit* (Boston: Houghton Mifflin, 1992) is filled with such bombast, pp. 177, 40, 78

⁵*Social Problems*, 4th ed., (Addison Wesley Educational Publishers, 1990), Chapter 17, "Population," p. 487.

⁶U.S. Census Bureau, *Global Population Profile 2002*, p. 22.

⁷Table IV.1. "Life Expectancy at Birth by Development Group and Major Area, Estimate and Medium Variant, 1950–1955, 2000–2005, and 2045–2050", United Nations Secretariat, Department of Economic and Social Affairs, Population Division. *World Population Prospects: The 2004 Revision*, Volume III, Analytical Report, p. 55. The increase in life expectancy in the less developed world would have been even more dramatic without the onset of the HIV/AIDS epidemic, and the resurgence of malaria, in Africa. In Chapter 6 we will explore the extent to which population control programs are responsible for rising mortality in Africa.

⁸Joel Cohen, "Human Population: The Next Half Century", *Science* (2003) 302:1172–1175. The U.S. Census Bureau puts the percentage at 2.2 percent and the years at 1963–1964. See the U.S. Census Bureau's *Global Population Profile 2002* (2004, U.S. Government Printing Office), p. 3.

likely to bear a second. What was supposed to be the perfect family—a boy for you and a girl for me and heaven help us if we have three—has been scorned by moderns on their way to extinction. The declining number of traditional families has been unable to fill the fertility gap thus created.

This is the real population crisis. This population implosion, by reducing the amount of human capital available, will have a dramatic impact on every aspect of life. Peter Drucker, the late management guru, wrote back in 1997 that “The dominant factor for business in the next two decades—absent war, pestilence, or collision with a comet—is not going to be economics or technology. It will be demographics.”⁹ Drucker was particularly concerned with the “increasing underpopulation of the developed countries,” but a decade later this reproductive malaise has spread even to the less developed world, and is a truly global phenomenon affecting all OSCE countries and all OSCE partners.¹⁰

By 2004, the U.N. Population Division (UNDP) found that 65 countries, including 22 in the less developed world, had fertility rates that were below the level needed to ensure the long-term survival of the population.¹¹ Most of the rest, the agency warned at the time, were likely to enter this danger zone over the next few decades. In this prediction, the UNDP is certainly correct. In fact, the latest revision of the UNDP numbers, the 2010 revision, shows that 79 countries, including several dozen in the less developed world, have fertility rates that are below the level needed to ensure the long-term survival of the population.

According to the agency’s “low-variant” projection, historically the most accurate, by 2050 three out of every four countries in the less developed regions will be experiencing the same kind of below-replacement fertility that is hollowing out the populations of developed countries today.¹² Such stark drops in fertility, cautioned the UNPD, will result in a rapid aging of the populations of developed and developing countries alike. With the number of people over 65 slated to explode from 475 million in 2000 to 1.46 billion in 2050,

⁹Peter Drucker, “The Future that Has Already Happened,” *Harvard Business Review*, September-October 1997, 20, 22, 24.

¹⁰Some researchers have attempted to make the case, counterintuitive at best, that an aging and shrinking population will not create serious economic and social problems. I have not been generally impressed by these efforts. Economist Phil Mullan, for example, has written *The Imaginary Time Bomb* (I. B. Tauris, New York: 2002), a self-described effort to debunk unfounded anxiety about the consequences of societal aging. Mullan’s conclusion, that “The economic importance of population changes is often grossly exaggerated,” (p. 212) seems remarkably modest in view of his thesis. It is also one that, given the incessant scaremongering over the population bomb, I have no trouble assenting to.

¹¹Very low fertility is not limited to the more developed regions. Of the 148 countries and territories defined by the U.N. Population Division as “less developed regions,” 22 have below replacement fertility. The U.N. has issued two recent reports on this surprising development (2000, 2003), and a number of articles have been dedicated to this topic (Morgan, 2003; Goldstein, Lutz and Testa, 2003; Billari and Kohler, 2004).

¹²The UN Population Division labels its three principal population projections the “high variant,” the “medium variant,” and the “low variant.” Each is calculated using different assumptions about future fertility. The medium variant unrealistically assumes that all countries will approach a “fertility floor” of 1.85 over the next half century. It does not explain how this “fertility floor” was determined, nor does it explain how countries such as Italy will regain the “fertility floor” after spending the last two decades in the “fertility basement.” The high variant is even more unrealistic. It assumes that the fertility rates of all countries will converge on 2.35, a fertility rate that has been achieved by no developed country, even those with strong pro-natal policies. I favor the low variant, which has fertility falling to 1.35. *World Population Prospects: The 2004 Revision*, Volume III, Analytical Report, p. 33.

existing social security systems will be threatened with collapse.¹³ It will prove difficult, if not impossible, to establish new ones. These sobering projections show that the population of the world will continue to creep up until about the year 2040, peaking at around 7.6 billion people.¹⁴ This is only a fraction more—one-sixth or so—than the 6.5 billion that the planet supports at present. Then the global population implosion, slow at first, but accelerating over time, begins. We fall back to current levels by 2082, and then shrink to under 5 billion by the turn of the next century. That population will be much older than we are today.

If this impending population implosion catches you by surprise, you have the UN Population Division (UNPD) to thank. The agency buries its “low-variant” projection deep within its biennial reports, where only demographic bores like me bother to look. Reporters looking for quick stories skim the UNPD’s press releases and the “executive summary”, which highlight the “medium variant” projection of 9 billion plus by mid-century. But the “medium variant”, despite its moderate-sounding name, is anything but middle of the road. All of its numbers hang on a single, unexplained, and incredibly unrealistic assumption—also deeply interred in the UNPD reports—that all countries will approach a “fertility floor” of 1.85 children per woman over the next half century.

How was this “fertility floor” determined? The UNPD report does not say. Why would fertility in countries like Mexico fall to 1.85 and no further? The UNDP report offers no explanation, despite the fact that many countries have already fallen through this supposedly solid “floor.” And what about those countries? How will Italy or Spain, for example, climb back up to the “fertility floor” after spending the last two decades in the “fertility basement?” The UNPD report is silent.

This slight of hand seems even more evident in the latest revisions. The U.N. Population Division apparently decided that its earlier predictions about world population growth were too restrained. So it upped the ante in its 2010 report, revising almost all of its numbers upwards. It now assumes that people in low fertility countries will suddenly become enamored of babies again. They predict, in short, that birthrates will somehow gravitate to replacement levels again.

Building this new assumption into their numbers has produced the predictable result. The medium variant projection now shows that the world’s population will reach 9.3 billion by the time 2050 rolls around—or several hundred million higher than earlier predictions. Not only that, instead of beginning to fall at that point, the UN now claims that the numbers will continue to grow until the end of the century, reaching 10.1 billion in 2100.

The UNDP is supposed to be objective in its predictions, but its latest batch of junk science suggests that it has become anything

¹³United Nations Secretariat, Department of Economic and Social Affairs, Population Division. *World Population Prospects: The 2004 Revision* [working paper]. Volume I, “Comprehensive Tables.”

¹⁴The UN Population Division’s medium variant projection, which assumes that the TFR in low fertility countries will rise to 1.85, is 9.1 billion. Only the Intergovernmental Panel on Climate Change (IPCC), in its *Special Report on Emissions Scenarios*, is still discussing a total population of 15.1 billion by 2100, a number that is supported by no demographic projections that I know of.

but. In fact, after the retirement of Director Joseph Chamie, its prognostications seem more and more driven by politics. At the very least, it has produced numbers that tend to show population growth as far more exuberant than it really is. The reason for this, I fear, is that the UN Population Fund provides part of the UNDP budget—and the UNFPA is first, last, and always a population control group. The UNFPA seems to be using its funding to “leverage” the UNPD into producing numbers that the UNFPA can in turn use to justify the continuation and expansion of population control and abortion.

The “low variant” projection, which has global fertility falling gradually to 1.35, seems preferable for a host of reasons. First and foremost, it has been historically the most accurate. For two decades and more, the low variant has been a better predictor of population growth. Second, the low variant accurately reflects the fertility rates in dozens of developed countries around the globe. Fertility rates between 1.1 and 1.6 are typical of post-modern societies, even those with strong pro-natal policies. In fact, the UN Population Division admits as much, writing “in recent years fertility has fallen well below replacement to reach historically unprecedented low levels (1.3 children per woman and below) in most developed countries as well as in several less developed ones.” The “low variant” makes the intuitively reasonable assumption that, as additional nations modernize, they will behave like modern nations. Finally, the only effective counter to falling fertility, as we will see in later chapters, is strong religious faith, combined with a tax structure that completely shelters young couples from taxes. But religious faith, in Europe and some other developed countries at least, has long been on the wane. And taxes are on the rise—in part to pay for an increasing number of elderly.

What happens to the world’s population after 2050 depends on the fertility decisions of those not yet born. It is impossible to predict accurately. But all of the current trends point downward. Women around the world were averaging 5.0 children in 1970. This had fallen to 2.6 by 2002—not far above replacement rate fertility of 2.3—and it is projected to drop to 1.54 children per woman by the year 2050.¹⁵ But who’s to say that it will stop there? Shaped by powerful, if partially hidden, economic, political and cultural forces, the one-child family appears well on the way to becoming a universal norm in many countries. Pockets of higher fertility, driven by religious motivations and traditional values, will still exist. But, as in present-day Japan or Germany, most families will have no more than one child. The number of the aged will skyrocket, and the world’s population will be in free fall.¹⁶

This is the real population problem.

¹⁵Replacement rate fertility is the level of fertility at which each successive generation of women produces exactly enough offspring so that the same number of women survive to have children themselves. Replacement rate fertility is often said to be 2.1 children per woman over her reproductive lifetime, but this is in fact the replacement rate fertility of a relatively developed country. For the globe as a whole, the replacement rate fertility estimated by the U.S. Census Bureau in 2002 was 2.3. See Global Population Profile, 2002 available at <http://www.census.gov/prod/2004pubs/wp-02.pdf>, especially p. 21.

¹⁶A June 29, 1999 report from the UN Population Division projected that by 2050 1 person out of every 5 will be 60 years or older. By 2150, this figure will be 1 in every 3.

MORE COFFINS THAN CRADLES

This barren world of tomorrow can already be glimpsed in the Europe of today. For all of Europe, from Ireland in the West to Russia in the East, is aging and dying. French historian Pierre Chaunu has coined an apt phrase for the strange infecundity of present-day Europeans and their overseas descendants, who are failing to produce enough children to replace themselves. He calls it the White Pestilence.

The phrase contains a ghostly echo of the Black Death of the Middle Ages, which emptied out the cities and towns of the continent in successive pandemics of Bubonic plague from 1347 to 1352. But unlike the Black Death, Chaunu's White Pestilence does not fill up the graveyards; it empties out the maternity wards. And it is not the result of bacteria that infect our bodies, so much as dark, anti-natal thoughts that invade our minds. These are reinforced by an economic system that puts a premium on expanding the work force at the expense of maternity, and a political system that weakens families, putting those with children at a financial disadvantage that is both unjust and shortsighted.¹⁷ Europe, along with its offspring in North America, Australia, and New Zealand, for some time now has been refusing to pay its debts to those who provide for the future in the most fundamental way—by providing the next generation—and are thus mindlessly committing a form of collective suicide.

Just how bad is the White Pestilence likely to be? Obscured by debates over epiphenomena like exploding immigration and bankrupt pension funds is the brute fact that Europe is already suffering from a devastating, crippling shortage of people. The populations of no fewer than thirteen European countries, including Russia, Poland, and Hungary, have already begun to crash.¹⁸ The total fertility rate for Europe, including the former Soviet Republics, currently averages an anemic 1.4 children per woman, and no increase is in sight.¹⁹ As a result, the current population of 728 million will plunge to only 557 million by the year 2050, a drop similar in magnitude to that occurring during the Black Death.²⁰ At that point, Europe will be losing 3 to 4 million people a year. If the crash continues—and there is no reason to expect it not to—the White Pestilence will over time prove far more lethal than its medieval predecessor. Three out of four Europeans will have disappeared by the end of the 21st century, and the population will number only 207 million. By then the population decline will be irreversible, with the surviving Europeans averaging more than 60 years of age.

Well before this time, the aging of the population will have created unbearable strains on social security and health care systems.

¹⁷For a good discussion of how the liberal welfare state relentlessly suppresses fertility, see Phillip Longman, *The Empty Cradle: How Falling Birthrates Threaten World Prosperity* [And What To Do About It], esp. Chapters 10 and 12.

¹⁸The nations whose populations are currently declining are Russia, Ukraine, Romania, Belarus, Bulgaria, Georgia, Kazakhstan, Hungary, Poland, Moldova, Lithuania, Latvia, Armenia, Czech Republic, Serbia and Montenegro, and Estonia. Were it not for massive immigration from Eastern Europe, the populations of Spain, Italy and Germany would be declining as well.

¹⁹Table 3. "Total Fertility for the World, Major Development Groups and Major Areas, 1970–1975, 2000–2005, 2045–2050, by Projection Variants." In WPP 2004, *Analytical Report*, p. xxi.

²⁰Table 1. "Population of the World, Major Development Groups and Major Areas, 1950, 1975, 2005, 2050, by Projection Variants." WPP 2004, *Analytical Report*, p. xviii.

By mid-century, seven nations—Austria, Bulgaria, the Czech Republic, Greece, Italy, Romania and Spain—will have populations with an average age above 55. At the current time, 1.6 workers support one young or retired dependent. By the middle of the century, each worker will have to support one dependent, placing a huge tax burden on the rapidly declining work force—and further driving down fertility.

Europe is already suffering tremendous economic and social dislocation caused by a rapidly aging population and, in Western Europe, massive in-migration. Baby bonuses and child allowances, such as Poland's 1,000 Zloty bonus (about \$320) to the mothers of newborns, have done little to alleviate the problem. If Europe's problems are bad now, as its population is just beginning to dip, it is frightening to think about how much worse they will become during the coming demographic free-fall.

The plunge has already begun in Russia, Ukraine, and Belarus. The disintegration of the Soviet Union in 1991 triggered a sharp drop in Russian births, which have stayed low in the years following because of the sudden loss of a social system that formerly provided employment and housing for nearly every Russian, the ongoing economic stagnation, and a general lack of confidence in the future. Current Russian birthrates are the lowest in the nation's history, substantially lower than those achieved during the upheavals of World War I and the Russian Revolution, and equaled only by the worst year of World War II when German armies overran the western third of the country. Russia's population is already decreasing by three-quarters of a million people each year; Ukraine's, by a quarter million.

By 2003 the birthrate had been so low for so long that Russian leaders became concerned. Russian President Vladimir Putin warned the Russian parliament that the lack of babies was "a serious crisis threatening Russia's survival."²¹ Three years later, Putin put in place a one-time payment of \$9,000 upon the birth of a second child, along with additional cash and child-care subsidies for additional children.²² But the crisis, apparently, continues. Russia's population is slated to decrease from 143 million in 2005 to 112 million in 2050. This is the UNDP's medium variant projection, which unrealistically assumes that most Russian couples will start having two children again.²³ It is hard to see how a country can lose a quarter of its population and build a modern economy at the same time. Yet the converse is also true: Until the Great Russian Depression ends the birthrate is likely to stay low. The largest coun-

²¹ Wall Street Journal, January 24, 2003.

²² C. J. Chivers, "Putin urges plan to reverse slide in the birth rate," *The New York Times* (May 11, 2006).

²³ United Nations Population Division, "World Population Prospects: The 2004 Revision Population Database," <http://esa.un.org/unpp/p2k0data.asp>. Another UNDP publication, *World Population to 2300*, has Russia's population declining to 101.5 million by 2050, and to 80 million by the end of the century. See *World Population to 2300* (UNDP, 2004, Tables 5, 8, and Figure 39). The Russian decline is alarming because it is fed not only by a declining and well-below replacement level birthrate, but also by an unprecedented rise in the numbers of early deaths of working-age men. The dramatic increase in deaths of Russian men aged 30 to 50 has pulled down male life expectancy from a 1991 average of 63.5 years—which was already well behind most other nations—to an astonishing 57.7 years in 2004. "Russian population declining as births, life expectancy drop," *The Washington Times*, 26 September 2006, p. A12. The World Bank's 2005 report, *Dying Too Young: Addressing Premature Mortality and Ill Health Due to Non Communicable Diseases and Injuries in the Russian Federation*, also pegs male life expectancy at 57.7.

try in the world seems locked into a fatal spiral: a dance of death between demography and depression.

Birthrates are higher—although still running below replacement levels—in Western Europe. What might appear cause for celebration, however, is in fact cause for concern. For birthrates in many Western European countries are being “propped up” by more fertile immigrants. France’s estimated Total Fertility Rate, for instance, is running at 1.86 children per woman.²⁴ This is high by European standards, but much of this fertility is attributable to mostly Muslim immigrants. The French government forbids the collection of statistics by race or religion (“We are one people,” it maintains), but demographers believe that the immigrant population is about 10% of the whole, and that it is out-reproducing the native-born French population by two or three to one. The department of Seine-Saint-Denis has both the highest percentage of immigrants in the country—about one-quarter of the population of the department is foreign, mostly Muslim—and also the highest birthrate. Subtracting the 3 or 4 children of the average immigrant leaves the native population averaging only 1.3 children or so, about the European average.²⁵

In 1987 Antonella Pinnelli, a Rome-based sociologist and demographer, called the continent’s flight from fertility “very worrisome, because when a society loses the will to reproduce, it loses its vitality.”²⁶ Two decades of rock-bottom birthrates later, Italy and other European countries are in danger of losing more than their vitality. Their history, traditions and, indeed, their very existence are at risk. The cross of St. George, the English national flag, has now been banned in British prisons, only the first of what will undoubtedly be many efforts to culturally appease a growing Muslim population. In the end, however, only the numbers matter. Demographers now estimate that France, for example, will be as much as 40% Muslim by 2050.

“In demographic terms, Europe is vanishing,” remarked then-Premier Jacques Chirac in 1984. “[Soon] our countries will be empty.”²⁷ Empty of Gauls, Teutons, Britons, and Slavs perhaps. But other tribes, more fruitful than the modern-day European ones, will certainly come to occupy the pleasant lands north of the

²⁴This is the estimate given in the CIA’s *The World FactBook*, <https://www.cia.gov/cia/publications/factbook/geos/fr.html>. Other estimates are comparable.

²⁵See “France’s End,” by Joseph D’Agostino, for an extended discussion of Muslim immigration and Europe’s new demographic realities. *PRI Review* (November–December 2005) 15 (5):1, 6–7.

²⁶“Falling Population Alarms Europe,” *The Washington Times*, 2 December 1987, pp. 1, 8, at 8.

²⁷*Ibid.*

²⁸Tess Livingstone, George Pell: *Defender of the Faith Down Under* (Ignatius Press, 2002), p. 314.

²⁹Personal communication, November 2005.

³⁰Tom Wonnacott, “Census shows youth will be missing from next generation,” *PRI Review* (May–June 2003) 13(3): 5–6.

³¹Muslim majority countries near or below replacement birthrates include Algeria at 2.5, Azerbaijan at 1.85, Bosnia-Herzegovina at 1.32, Tunisia at 2.0, Iran at 2.12, Kuwait at 2.4, Lebanon at 2.3, and Turkey at 2.5., Indonesia at 2.4., and the United Arab Emirates at 2.5. Egypt and Libya, at 3.3 and 3.0 respectively, are higher, with Saudi Arabia and Iraq, at 4.0 and 4.8 respectively, are higher still. Afghanistan, on the other hand, has a reported TFR of 7.5, one the highest in the world. From the 2004 WPP.

³²The figures come from Table III.5. “Ten Countries and Areas with Largest Per Cent Declines in Total Fertility, by Development Group, 1970–1975 to 2000–2005,” UNDP, WPP, p. 43.

³³Egypt was listed as a country of special concern in “National Security Study Memorandum 200,” Chapter 5.

Mediterranean. And the surviving Europeans will retreat to their retirement homes, as the Neanderthals once retreated across the same terrain before the advance of Cro-Magnon Man. In France, as in most of Western Europe, the successor population is already in place.

To put the point bluntly, many of these nations are committing a kind of collective suicide. The Europeans had better make up their minds about who they want to give their countries to, since they don't seem to want it themselves.

ISLAM CONTRACEPTED

The millions of Muslims flooding into Europe are not being driven out of their homelands by population pressure so much as they are being drawn into a demographic vacuum as Europe empties itself of offspring. There are still pockets of high fertility in the Islamic world—impoverished Afghanistan has one of the highest birthrates in the world—but the trend is towards three- and even two-child families.³¹ Indonesia, at 223 million the largest majority Muslim country, had a 2.4 fertility rate in 2005, according to the UNPD.

In recent years a number of Muslim countries have seen fertility declines that are among the largest ever recorded. The only two majority Muslim countries in Europe, Albania and Bosnia-Herzegovina, dropped their birthrates farther and faster than most of their neighbors. In the less-developed world, Kuwait, Algeria, Iran and Tunisia all saw their fertility rate drop by two-thirds during the last three decades of the Twentieth Century. All were at or below replacement by 2000. The “least developed countries,” UN parlance for the poorest of the poor, generally saw smaller declines. But here, too, the Muslim states of Bangladesh, Sudan, and the Maldives all cut fertility by a third or more, and are currently averaging three or four children.³²

The Koran, like the Torah and the Bible, comes down firmly on the side of natality. But Islam lacks a central religious authority, and any Imam can issue a fatwa—an Islamic religious opinion. Knowing this, the population control movement has sought out and cultivated liberal Muslim clerics, encouraging them to rethink Islam's traditional encouragement of childbearing.

One of the earliest Muslim countries to be targeted for re-education in this way was Egypt. As the Middle Eastern country with the largest population, it was listed as a “country of concern” in a key National Security Council study in the early seventies.³³ The U.N. Population Fund immediately moved in, among other things helping to set up an International Center for Population Studies and Research at Al-Azhar University in Cairo. In the years fol-

³¹ Muslim majority countries near or below replacement birthrates include Algeria at 2.5, Azerbaijan at 1.85, Bosnia-Herzegovina at 1.32, Tunisia at 2.0, Iran at 2.12, Kuwait at 2.4, Lebanon at 2.3, and Turkey at 2.5., Indonesia at 2.4., and the United Arab Emirates at 2.5. Egypt and Libya, at 3.3 and 3.0 respectively, are higher, with Saudi Arabia and Iraq, at 4.0 and 4.8 respectively, are higher still. Afghanistan, on the other hand, has a reported TFR of 7.5, one of the highest in the world. From the 2004 WPP.

³² The figures come from Table III.5. “Ten Countries and Areas with Largest Per Cent Declines in Total Fertility, by Development Group, 1970–1975 to 2000–2005,” UNDP, WPP, p. 43.

³³ Egypt was listed as a country of special concern in “National Security Study Memorandum 200,” Chapter 5.

lowing, it carried out a series of projects on “Population in the Context of Islam” which were consciously designed to shift religious opinion.

Nevertheless, it was 1988 before the Grand Imam of Al-Azhar University could be induced to issue a major fatwa affirming the acceptability of family planning “for personal and national justification.” He decreed that contraceptive use was permissible “in the case of a three-child family who can afford more children physically and financially, but who want no more children because their country has a population problem.”³⁴ Consequently, the Egyptian birthrate has fallen sharply in recent years, and by 2006 women were averaging only 2.74 children.³⁵

Birthrates are also falling in relatively prosperous, Westernized Turkey, despite the exhortations of government leaders to have more children. “Our population which is nearing 65 million is not enough,” warned Turkish Prime Minister Necmettin Erbakan of the Islamist Refah Party in 1995. “Population is the power by which we shall establish right in the world,” he told a cheering crowd. “These would-be westerners [i.e., population control advocates] are trying to reduce our population. We must have at least four children.”³⁸ As the fertility rate fell past 2.5 children per woman in 2002, Recep Tayyip Erdogan, soon to become Turkey’s prime minister, attacked contraception as “straight out treason to the state.” “Have babies,” he urged Turks. “Allah wants it.”³⁹

JAPAN: LAND OF THE SETTING SUN

A decade and a half ago, the Japanese economic boom appeared well nigh unstoppable. Industry was flourishing under the guidance of Long Range Vision plans issued by elite bureaucrats at the Ministry of International Trade and Industry (MITI). The salarimen, as the Japanese middle class are called, were grinding away at their customary 70-hour work week. Economic growth was consistently running at 4 to 5 percent a year, and Japan’s trade surplus with the U.S. was surging toward the \$100 billion dollar mark.

Conceding defeat, Harvard academic Ezra Vogel wrote a book called *Japan as Number One*, admonishing Americans that we were falling behind because of our lack of Japanese-style “central direction” and “government and business cooperation.” We should,

³⁴“Al-Azhar Fatwa Committee’s point of view on birth planning,” PMID: 12343622 [PubMed—indexed for MEDLINE], Population Sciences (Cairo, Egypt), 1988; (8):15–7, <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmedAbstractPlus&term=%22Al%2DAzhar+Islamic+Research+Academy%2E+Fatwa+Committee%22%5BCorporate+Author%5D>. [Editor’s Note: Web address contains no spaces, spaces were added for typesetting purposes only.]

³⁵As I have explained, I have here used the low variant projection of the U.N. Population Division, which shows a TFR for 2005–2010 of 2.74. The earlier numbers for the 2000–2005 period were, of course, higher at 3.3. The 2006 CIA’s *The World FactBook* gives a figure of 2.83.

³⁶“Fewer Means Better,” *The Economist*, 5 August 1995, 41.

³⁷“Iran Promoting Birth Control in Policy Switch,” *The Washington Post*, May 8, 1992.

³⁸Yeni Yuezul, quoted by Youssef Courbage, “Nouveaux horizons démographiques en Méditerranée,” National Institute of Demographic Studies (Paris, February 27, 1995), <http://www.ined.fr/englishversion/publications/collections/courbage/chapter3.pdf> (accessed November 2006).

³⁹“Contraception is Treason, Turkish Islamist Leader Says,” *Agence France Presse*, February 16, 2002.

⁴⁰The WPP gives the TFR for “Occupied Palestinian Territory” as 5.00 (medium variant) or 4.75 (low variant) for 2005–2010. For Israel it reports 2.66 (medium variant) and 2.41 (low variant).

he advised us, “adopt policies more suited to the postindustrial age.”⁴¹ Others feared that if we didn’t join them, they might beat us. The Coming War with Japan had the yellow peril once again leading a “Greater East Asia Co-Prosperity Sphere,” and once again threatening Pearl Harbor.⁴² Both became bestsellers.

It wasn’t long thereafter that the Japanese economy ran into a demographic brick wall. Economic growth stalled, averaging an anemic one percent growth for most of the nineties. During the Asian economic downturn of 1998, Japan’s GNP actually shrank by 2.8 percent. Never number one, the Rising Sun soon slipped to fourth, behind the European Union and China.⁴³

The experts told us that crony capitalism, corruption, and protectionism were to blame. But when has this not been true in post-World War II Japan? The Liberal Democratic Party has been in power since it was formed by a coalition of three conservative parties in 1956. It is bound together less by a political philosophy than by loose alliances between factional leaders who trade favors, give and accept bribes, and are periodically disgraced and forced out of office by scandal. The subterfuges used by Japanese bureaucrats to keep out foreign-made goods in key industrial sectors are legion. Don’t bother looking for American-made cars on Japanese highways; you won’t see any.

What really happened in the 1990s is that the yellow peril turned quietly grey. For over four decades now, the Japanese people have been having too few little Mikis and Yosukus to replace themselves. The Japanese fertility rate first fell below replacement around 1960. After fluctuating around 2.0 for the next 15 years, it began to sink again in 1975. By 1990 it had reached 1.57, leading Japanese journalists to invent the term “1.57 shock.” Further shocks followed at regular intervals: “1.53 shock” in 1992, “1.47 shock” in 1993, and the “1.38 shock” in 1998. Since then the fertility rate has hovered around 1.4 children per woman. The voluntary childlessness of the Japanese exceeds even the forced-pace population reduction in China’s one-child policy.

This prolonged Japanese birth dearth has resulted in what Yamada Masahiro of Gakugei University calls the world’s first “low-birthrate recession.” With ever smaller cohorts of new workers, the salarimen have been getting wrinklier and their ranks thinner, year by year. The depopulation crisis has already forced Japan to slash pensions and raise the retirement age from 60 to 65 to keep pension funds afloat. By 2040, says the Organization for Economic Co-operation and Development (OECD), the rise in the ratio of dependent old to working young may be reducing Japan’s growth in living standards by three-quarters of a percentage point per year, cutting Japan’s GNP by 23 percent by mid-century as a result. Japan is suffering from the four “D”s: Debt, deflation, and declining demographics—and the latter two are ultimately responsible for the first two.

Japan is on the brink of a major demographic meltdown. Japan’s population of 127 million has stopped growing and—if the birthrate

⁴¹ Ezra Vogel, *Japan as Number One*, (Pelanduk Publications, Selangor, Malaysia, 2001).

⁴² George Friedman and Meredith Lebard, *The Coming War with Japan* (St. Martin’s Press, 1991)

⁴³ On a Purchasing Price Parity basis.

continues at this low level—will soon begin to shrink at an alarming pace. According to U.N. estimates, by the year 2050 Japan will have 35 million fewer people than it does now. The 92 million Japanese who remain will have a median age of 54, with those aged 75–80 constituting the largest five-year population cohort. The ratio of workers aged 20–65 to retirees will have fallen to just over one-to-one. By then, barring a striking upturn in fertility, Japan’s complete demographic collapse is virtually assured: Projections show so few women of childbearing age that the population decline will inevitably accelerate. A population bust, like an explosion, proceeds in geometric progression.

Yet there are foreign observers, like Victor Mallet of the *Financial Times*, who are celebrating the decline of the Japanese population as good for the world and for Japan itself. Mallet bases his optimism on the fact that the “the labor force has been rising this year as older people rejoin the workforce and more women take jobs. Robots and immigrants . . . will also help to keep the economy growing.”⁴⁴ Each of his proposed measures, however, is either a temporary stopgap measure, or is self-defeating. The newly rehabilitated elderly will soon be forced to retire again, this time for good. As for women joining the work force in greater numbers, this will surely drive the birthrate down even more, exacerbating the labor shortage over time. Nor is immigration likely to solve Japan’s problems. It would take an estimated 600,000 immigrants a year to offset the impending decline in the labor force, an influx of such magnitude that would shake Japan’s homogenous and insular monoculture to the core.

Staking Japan’s future on the promise of robot manufacture seems an equally dubious proposition. While it is true that more than half of the world’s industrial robots—57 percent to be exact—are located in Japan, few jobs off the assembly line are suited for robots, at least at their present level of sophistication.⁴⁵

Mallet’s *laissez faire* attitude towards Japan’s demographic crisis is emphatically not shared by the Japanese leadership. Reacting to reports that the 2006 total fertility rate had dropped to 1.25, the Japanese Prime Minister, Shinzo Abe, announced on January 26, 2007, that he would “set out a full-scale strategy to reverse the declining birthrate.” A “Strategic Council to Study Measures to Support Children and Families” has been established, with instructions to report on ways to encourage more births that go beyond the current—and largely ineffectual—child allowances. Still, it remains to

⁴⁴Victor Mallet, “Procreation does not result in wealth creation,” *Financial Times* (January 4, 2007).

⁴⁵For a discussion of robots and the Japanese future, see Eamonn Fingleton’s, *In Praise of hard Industries* (Houghton Mifflin, 1999).

be seen whether any post-modern society, including Japan's, can revive a sagging birthrate.⁴⁶

The old age tsunami that is about to hit Japan will not spare other Asian countries. The Four Tigers—Taiwan, Hong Kong, South Korea, and Singapore—are already getting long in the tooth. China and India, the world's two demographic giants, are tottering along not far behind.

THE CRISIS OF THE EMPTY CRADLE

Unlike the endlessly propagandized “crisis caused by our burgeoning numbers,” the crisis of the empty cradle has crept upon us quietly. Classic “demographic transition” theory assumed that parents in pre-modern societies were motivated to have many children to ensure that at least two survived to adulthood. Cradles were kept full because so many newborns departed via coffins so soon after their arrival. Reduce the infant and child mortality rate, the theory went, and parents would adjust their childbearing downward to compensate. A new and stable equilibrium of low mortality and low fertility would result in zero population growth.

No such equilibrium was ever reached. In the developed countries, trends like more education, especially for women, the widespread availability of birth control devices, legalized abortion, the move from farm to city, the decline of religious belief, anti-natal propaganda and the dominance of a radically individualistic, materialistic worldview have caused the birthrate to continue to plummet ever lower. Materialism, in its various forms and guises, is probably the chief culprit, given that it creates an overarching worldview in which children are cast as the enemies of wealth and happiness. I once received a letter from a friend who lives in Florida. A neighbor of his, a young woman who commutes 50 miles one way to work, was bemoaning how little time she had to spend with her four-year-old son. My friend suggested that she sell her \$40,000 SUV and get a job closer to home. Not only would she have more time to spend with her son, he told her, she would probably also be money ahead. She shook her head. “You don't understand,” she said. “My husband and I love this SUV.” Who was it that said that no man can serve two masters? The young woman in Florida apparently believes that she is driving an SUV. But in fact it is driving her.

Of all the factors affecting fertility, all but one works to keep the cradle empty. The sole exception is the raft of advances in human reproductive technology. But helping tens or even hundreds of thousands of infertile couples to conceive a child hardly

⁴⁶“Prime Minister Abe to set up a strategic council to counter the falling birthrate,” *Asahi Shimbun* (January 28, 2007), p. 1. The Minister of Health, Hakuo Yanagisawa, tried to directly encourage women to have more children by saying: “The number of childbearing machines is fixed. Each [women] should do her best.” Needless to say, this clumsy word choice provoked calls for his resignation. See “Prime Minister reprimands health minister for his inappropriate remarks referring to women as “child-bearing machines,” *Tokyo Shimbun* (January 29, 2007), p. 2.

⁴⁷I witnessed the arrival of female infanticide to the Pearl River Delta during my fieldwork there in the early eighties.

⁴⁸Nicholas Eberstadt, “Growing Old the Hard Way: China, Russia, India,” *Policy Review*, Hoover Institution, April, May 2006, <http://www.hoover.org/publications/policyreview/2912391.html>. See also, “Old Age Tsunami,” “Opinion” section, *WSJ*, November 15, 2005.

counterbalances the millions who consciously limit themselves to one or no children.

Those who actually work in the field of reproductive endocrinology have long admitted what the population controllers are loath to admit, that fertility delayed is fertility denied. At a gathering of the American Fertility Society held in San Antonio in the mid-nineties, the speaker, Dorothy Mitchell-Leef, a prominent reproductive endocrinologist, asserted that “modern American women have been sold a bill of goods.” American women have been encouraged by both “doctors and authoritative voices in the culture” to believe that they could start a family just as easily at 38 as at 22—perhaps even more easily, because in their late thirties they would be financially better off. Medical advances—injecting hormones, in vitro fertilization, and screening of genetically damaged fetuses—made the usual biological limits seem old-fashioned. Not only is this picture false, she went on, but the fallacy of this view has been known for decades. A French study, conducted way back in the ’70s, followed women with infertile husbands who were trying to get pregnant through artificial insemination. The results showed that the chances of conception diminished sharply with age, with fertility showing a significant drop after age 30 and a sharp decline after 35. It was time, Mitchell-Leef asserted, for doctors to “begin telling women that if having children was a high priority, they should think of having them earlier in life rather than later.” Her audience of professional American women, many of whom had experienced firsthand the “grief felt by women whose infertility treatments had failed, burst into applause.”⁴⁹

The overall pattern in the developed world seems too evident to ignore. Once people are educated, urbanized, and begin to enjoy a certain level of wealth, birthrates plummet. More and more couples live in urban conditions where children provide no economic benefits, but rather are, as the Chinese say, “goods on which one loses.” Education delays marriage and provides other options for women besides marriage and family. For materially minded couples in countries where the state provides old age benefits, the way to get ahead is to remain perpetually childless. Why give up a second income to bring a child into the world who will never, at least in material terms, repay your investment? Why provide for your future in the most fundamental way, by providing the next generation, if the government has pledged to keep you out of the poorhouse in your dotage anyway.

As Phillip Longman has remarked, the modern nanny state has created a strange new world in which the most “successful” individuals in material terms are the most “unfit” in biological terms. In all previous ages of human history wealth and children went hand-in-hand. Wealth made it possible to marry earlier, to bring more children into the world, and ensured that more of these children survived. Numerous progeny in turn virtually guaranteed continued family prosperity. But no longer. The cradle-to-grave social welfare programs found in developed countries, along with the heavy tax burden these demand, have not merely made the care

⁴⁹Scott McConnell, “Delayed Motherhood: Is it Good for Society?” *New York Post*, 24 May 1995.

and feeding of children superfluous to wealth; they have made children themselves wealth's enemy.⁵⁰

True enough, some may answer. But what is behind the radical declines in fertility that we are now seeing among still poor peoples in Turkey, Egypt, and Albania? Peoples who do not yet dream of SUVs, of education beyond the village primary school, or even employment outside the family field? Why are people in countries where the state does not even provide a bare minimum of support for the elderly also radically downsizing their families? Why, in countries where infant mortality rates are still relatively high, are couples failing to fill empty cradles?

The answer is that the demographic implosion that has occurred "naturally" in the developed world has been in large part imposed by force on the less fortunate, less powerful peoples of the world. The U.S. and other developed countries consciously set out in the sixties to engineer a radical decline in Third World fertility. Weak nations, dependent on the U.S. and Europe for financial aid, military security, or access to markets, were bullied or suborned into mandating anti-natal measures. Paid for by the West, these measures ranged from the free provision of contraceptives to enforced sterilization programs. Hapless villagers worldwide have been subjected to clever marketing schemes, bait-and-switch health ploys, anti-family TV soap operas, and even blunt coercion in an effort to deprive them of the free exercise of their fertility.⁵¹

Their governments, despite having adopted population control programs under duress, are slow to abandon them even after birth-rates begin to plummet. Let's take a look at another OSCE Partner for Cooperation, South Korea. South Korea in 1961 embarked on a family planning program at the insistence of the U.S. government. The program quickly evolved into a de facto two-child-per-family policy, complete with strong punitive measures against those who dared violate this limit. Civil and military officials with more than two children, for example, were denied promotions or even demoted. Third and higher order children were declared ineligible for medical insurance coverage, educational opportunities, and other government benefits. Couples who agreed to sterilization were given priority access to scarce public housing. This did matters stand for three long decades.

By the time the government began to rethink this policy in the mid-nineties, the fertility rate had dropped to an anemic 1.7 children, the population was aging rapidly, and had developed a full-blown labor shortage. Moreover, the country was experiencing an epidemic of sex-selective abortions, in which Confucian-minded parents anxious for sons were ending the lives of girl fetuses because of their gender. With young women in increasingly short supply, the population was poised to drop precipitously.

⁵⁰ See Phillip Longman's *The Empty Cradle*, for an extended discussion of this problem, especially Chapter 7, "The Cost of Children." *The Empty Cradle: How Falling Birthrates Threaten World Prosperity and What to Do About It* (Basic Books, 2004), 240 pp.

⁵¹ In the absence of a general theory of fertility change, it is impossible to offer any reliable, quantitative estimates of the precise impact of these diverse programs. But, as we will see in succeeding chapters, these programs have often been coercive in character and their impact on fertility necessarily dramatic. To put it another way, one doesn't require a general theory of fertility change to interpret or explain the low fertility rate of a woman who has been forcibly sterilized.

It was 1996 before the South Korean government finally got out of the population control business, announcing on June 4th of that year that all restrictions on childbearing would be lifted. No new pro-natal measures were enacted, however, unless one counts the government's promises that public health clinics would soon begin offering infertility treatment (in addition to birth control) and that it would crack down on sex-selective abortions.⁵²

But if the government thought that, left to make their own decisions about family size, the Koreans would begin reproducing themselves, it badly miscalculated. Thirty-five years of anti-natal education and policies, combined with South Korea's rapid modernization, had done its work. With nary a pause, the birthrate continued to drop. It reached an all-time low of 1.2 in 2004, with the South Korean population now poised to shrink in absolute numbers.⁵³

Thailand is another OSCE Partner for Cooperation that, strongly encouraged by the U.S. government, undertook a full-blooded population control program in 1962. Forty-five years later, its demographic profile resembles that of the dying West. Its villages are bereft of children, its schools are closing down for lack of students, and its population is rapidly aging. The average Thai mother today has 1.6 children, well below the replacement rate level of 2.2.

Many in Thailand are now having second thoughts. Tiang Phadthaisong, a researcher from Chiang Mao University in Northern Thailand, is among those who believe that "the family planning program has been too successful." In 1997, when the TFR was passing 1.9, Tiang published a paper called "The collapse of Thai society: the impact of family planning," in which she detailed the demographic disaster awaiting the Thai people. End family planning policies, she urged the government, so that the birthrate can once again rise to replacement levels.⁵⁴ Her pleas have fallen on deaf ears, even as the birthrate continues to fall.⁵⁵

The profound changes in the human condition caused by long-term, below-replacement birthrates can rightly be termed a "Demographic Revolution." But unlike the Industrial Revolution of the nineteenth century, or the Information Revolution of the late twentieth, or the Democratic Revolution that succeeded the fall of the Soviet Union in Eastern Europe (if not in Russia itself), all of which vastly improved the lives of billions, most of the consequences of the ongoing Demographic Revolution will be negative.

Population growth has been an important escalator of consumer demand. Try selling cars, houses, refrigerators, or anything else, for that matter, in a depopulating country. Or try to seek profitable investments in the stock market when millions of elders start liquidating their IRAs and 401Ks to survive. This is not to say that

⁵² "Government to Do Away With Birth Control Policy," Korea Times, June 5, 1996.

⁵³ In 2006, the number of babies born in the city of Seoul increased slightly, but it seems unlikely that this is the beginning of a resurgence in Korean births. "New Babies Rise Again in Seoul," Kang Shin-woh, Korea Times, January 19, 2007.

⁵⁴ "Thailand's Grim Harvest," Population Research Institute Review, January/February 1997, p. 14.

⁵⁵ According to the U.S. Census Bureau's International Data Base, the Total Fertility Rate in 2005 was 1.6. See <http://www.census.gov/cgi-bin/ipc/idbsum.pl?cty=TH> (accessed on March 5, 2007).

⁵⁶ U.N. Population Division, World Population Policies, 2005, http://www.un.org/esa/population/publications/WPP2005/Publication_index.htm.

some few sectors of the economy, such as pharmaceuticals and health care, will not expand. But as Peter Drucker clearly saw, shrinking demand elsewhere will more than offset these gains in a few sectors.

Falling birthrates are also drastically shrinking family circles. Consider China's forced pace fertility reduction program known as the one-child-per-family policy. The first generation of children born under this policy has no brothers or sisters. These only children are now producing a second generation who are missing not only siblings, but uncles, aunts, and cousins as well. Demographer Nicholas Eberstadt of the American Enterprise Institute looks ahead to a world in which "for many people, 'family' would be understood as a unit that does not include any biological contemporaries or peers" and that we may live in "a world in which the only biological relatives for many people—perhaps most people—will be their ancestors."⁵⁷ Lacking close family ties, many seniors will be socially isolated and painfully lonely. As Ben Wattenberg has remarked, "Young DINKs (double income, no kids) may be cute. Old LINKs (low income, no kids) may be tragic. Clergymen say that the saddest funerals are those in which the deceased has no offspring."⁵⁸

Modernity alone would have been sufficient to effect a demographic transition in South Korea and elsewhere, but the population engineers were not content to wait. They artificially induced a precipitous fall in birthrates by strict, nationwide anti-natal policies and, with the assistance of U.S. family planning funds, have produced a full-blown Demographic Revolution.

The hundreds of millions of dollars that foreign agencies like USAID poured into Korea's two-child policy is but a tiny fraction of the \$100 billion or so that has been spent on fertility reduction programs in the world at large. Imagine putting billions of dollars into programs to undo the Industrial and Information Revolutions, and you will understand the insanity of our current approach. We are making the old age tsunami predicted by Peter Drucker and others even worse. And, as we do so, we are causing a flood of human misery and a global economic malaise.



⁵⁷ Nicholas Eberstadt, "World Population Implosion," *The Public Interest*, 1996.

⁵⁸ "The Bomb that Fizzled," Ben Wattenberg, *New York Times Magazine*, 23 April 1997.

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