Demographic Developments

The projected Russian demographic changes are profound. Projections suggest that the size of the population will decline from about 141 million people in 2012 to 131 million in 2050 (figure 1); making the 2050 population about 8 percent smaller than the 2009 population. The demographic decline may have begun to slow in recent years, e.g. the 2010 census showed the population to have risen to 143 million, and 2009 was the first year that the population increased since 1990s (very small and due to falling deaths and immigration). Even though the declining trend could be slowed down by lowering mortality rates, a full reversal is unlikely.

The next decades will see a decline in working age population compared to the combined group of the elderly and children. In the next two decades the dependency ratio – the number of people of working age relative to the number of retired persons – will go from 1 to 5 to 1 to 3.

Russia has large gender and regional differences in life expectancies at birth. Life expectancy differentials show large variations between Federal Districts and also within federal districts; and as expected, between men and women. At current rates of mortality, women in the worst off regions will live on average 20 years less than those in regions with the best life expectancies at birth and about 11 years less than the average national level. For men,
those living in the worst off region have a life expectancy at birth that is 23 years less than the best region.

**Figure 1: Population size is projected to decline from approximately 141 million to 131 million people by 2050**

Population growth rates have been declining for many generations and, as a result, since 1992 the absolute number of people in Russia has been falling. Until 1992, the number of births exceeded the number of deaths, resulting in years of positive though declining population growth rates (figure 2). The reduction in absolute numbers has been the result of both a decline in fertility rates (women want and are having fewer children) and an increase in mortality rates much higher than those in developed economies.

Several elements of Russia’s demographic transition make it unique and call for solutions tailored to the Russian situation:
— First, Russia is projected to lose its working age population at a rate of one million people yearly between 2009 and 2017. This rate of decline is rare.

— Second, Russia has an unusual adult morbidity pattern and hence much shorter longevity due to very high incidence of non-communicable-diseases.

— Third, fertility rates could fall further because women still have children at a comparatively younger age in Russia: any further aging of the fertility pattern to resemble that seen in Western Europe will result in a slower population growth rate, even if rates of fertility stabilize.

Figure 2: Demographic reversal – from a period of more births than deaths to one of more deaths than births
Implications of Demographic Challenge on Social Sectors and Proposed Policy Recommendations: the Need for New Social Policy

Labor Markets and Education

Declining population sizes will reduce the size of the labor force and hence could reduce economic growth. Russia’s working age population is projected to decline by about 25 million people by 2050. The number of working age men and women is expected to fall from 90 million to about 65 million, with most of this decline concentrated in the years to 2017 when those born in the mid- and late 1950s reach retirement age. This period will see a loss of about one million people a year.

Russia’s overall population decline will mean in particular a declining labor force, i.e., population of individuals of working age. Ceteris Paribus, fewer workers means lower output, which in turn would mean lower economic activity. Russia therefore will need to find ways either to increase the number of workers and/or increase the productivity of each worker to enhance economic performance.

The Russian economy of the pre-reform period and 90’s was characterized by considerable labor surplus. In 1998, 36 percent of the surveyed companies were still speaking of a considerable labor surplus. In 1999, the economy began to grow in Russia, which gradually resulted in a shortage of skilled labor in the labor market. During this period, the growth in the labor force came about both through a reduction of the number of unemployed and through recruitment of the previously economically inactive population. In the 1st quarter of 2008, the proportion of enterprises in the Russian industry considering the lack of skilled workers as a hinder to growth of output exceeded 40 percent, and according to the 2008 BEEPS
shortage of skilled labor ranked as one of the top constraints to firms growth/expansion.

Action will be needed on several fronts. In principle, there are at least four areas where action is possible. First, through an increase in the labor force participation rate to bring in currently marginalized populations. However, since LFP is already relatively high, there is not much scope to increase it further. Second, by decreasing the rate of retirements and have people work longer, even past normal or current retirement age. The prospects for decreasing the rate of retirements through improvements in the health status of the working population are uncertain and longer term, and a reduction by legislative changes in the statutory retirement age is politically sensitive. A third option is to make greater use of migrant labor, but the proportion of immigrants in the population is also relatively high, though stagnating. Finally, increasing the productivity of each worker through increases in human capital could offset the demographic shock. This is the most promising policy reform area for the short to medium term.

There is scope for improving the key skills of young Russians before they enter the labor market and for improving the number of students completing secondary education. On international tests, Russia performs on average better than countries at the same income level, but there are important weaknesses in key skills. In secondary education, the gross enrollment rate stood at 84.8 percent in 2008, similar to the rate for the past five years and significantly below OECD countries, where the average gross enrollment rate is 100 percent. Russia needs to reform its educational and training system so that it becomes more responsive to the fast changing labor market needs. This also involves developing the system of life-long learning so that workers can upgrade and adjust their skills in response to technological progress and global competition.
The demographic changes will also require adapting Russia’s network of schools to a changing number of students. Population estimates show that the number of children of various ages has fluctuated but there is a declining trend overall. In Russia, the average class size at the primary/secondary levels of education is 16.9 compared to about 21 in the EU states. Similarly, the average student-teacher ratio in Russia is 9.9 for primary and secondary education compared to 12.6 and 11.7 in old and new EU countries. There is considerable scope for optimization of the school network, while careful planning should accommodate for short term demographic changes in student cohorts.

In addition to skills shortage and labor force shrinking, other problems affecting labor markets (not necessarily associated to demographics) are:

(i) large regional labor market disparities (high unemployment in some regions);

(ii) regional differences in labor market conditions that contribute to a high income inequality (earnings inequality is also very high also within regions). There is a relatively small number of highly-paid jobs and a large number of low-paid jobs. Many of the low-paid workers are poor.

(iii) the enforcement of labor regulations is highly unequal. Labor standards are often violated;

(iv) slow pace of job creation and industrial restructuring. This limits job opportunities and inhibits productivity growth. One major cause of a slow pace of job creation and job reallocation is the high costs of doing business, including non-competitive practices that hinder entry of new firms.
**Pensions**

The change in demographics would also have a large impact on pension programs. With the working age population expected to fall by 31% from today's level by 2050, and the percentage of elderly (those over 65) expected to rise from the current 12.3% of the population to 23% by 2050, there could be a significant impact on both revenues and expenditures on pensions.

On the revenue side, since pension contribution revenue comes mainly from taxing labor income, as number of workers fall, pension revenue will fall also (*ceteris paribus*). Pension expenditures would be rising commensurately. However the pension system in Russia was reformed recently and is based on a Notional Defined Contribution scheme. The system is calibrated in such a way that the pension benefits grow with the contribution revenue collected per pensioner. If contribution revenues fall due to the reduction in the labor force, and the number of pensioners grows, the benefit level is adjusted accordingly. It is estimated that pension benefits could fall from 40% of the average wage to about 25% of the average wage. This would mitigate the fiscal impact of the aging of the population, but would result in pension benefits which are well below what other countries pay and may be inadequate to prevent old age poverty.

Only about 50% of the working age population is actually contributing to the pension system, suggesting that half the future pensioners will have no access to the pension system or will receive even lower pensions, and may require sizable top-ups from the government just to survive. Russian elderly are not only unhealthy, they are also poor, compared to European societies.

Possible recommendations include (i) raising retirement age to 65 for both men and women - legal retirement age is currently 60 for men and 55 for women, but with so many early retirement provisions that the average man retires at 54 and the average woman at 52; (ii)
Introduce additional incentives to limit early retirement; (iii) Improve rate of return and performance of the funded pillar to maintain pension adequacy.

The increase in retirement age is politically VERY sensitive (especially in an electoral year) but still recommended because it (i) increases revenue to the system, (ii) increases benefits to individuals because they accumulate more years of service, and (iii) increases benefits to individuals since the notional interest rate is tied to the contribution revenue which will now go up and inversely tied to the number of pensioners which will now go down. This is a potentially win-win-win.

Health

Russia's aging and shrinking population will also have implications for the health sector. An older population implies a deterioration of overall health status, and thus greater demands will be imposed on the health care system. The leading causes of ill health, premature death, and disability, particularly among adult males, are non-communicable diseases/chronic illness (e.g., heart attacks, strokes, cancer), and road traffic injuries. In Russia today a 15-year old male is about twice as likely to die before the age of 60 as his counterparts in Brazil, India, or China. Life expectancy in Russia today is the same as it was in Western Europe in 1950.

Although aging will put some upward pressure on health spending, the international evidence suggests that non-age-related factors (e.g., adoption of new health technology and higher incomes) are the major drivers of higher health expenditures over time. Some estimates based on global trends suggest that these other determinants of health spending, especially new technologies, are likely to be up to 3 times
more important than aging as causes of potential future health spending growth in Russia.

While concerns about the greater consumption of health care resources due to an aging population may be exaggerated, the investment aspect of health expenditures should figure more prominently. This is because **an older and decreasing population lends greater urgency to the need to improve the health status of the population at all ages, in order to maintain a healthy labor force.** Poor health and premature and excess mortality among the working population has additional economic costs in the form of low productivity, early retirement, and high medical expenditures. **On average, 10 days are lost per employee per year because of chronic illnesses in Russia, as compared to an average of 7.9 days in the EU15 countries, and while a hypothetical Russian male age fifty-five with median income and other average characteristics would normally retire at age fifty-nine, having a chronic illness would lower his expected retirement age by two years.** NCDs are also Russia’s highest-cost conditions. The four most expensive conditions, circulatory system diseases, chronic respiratory diseases, injuries, and digestive system diseases, account for more than 50% of the country’s total health expenditures, well above the level of 38% in the United States.

The reform agenda in health should include addressing risk factors and redesigning health care delivery:

— Given the significant negative impact of alcohol abuse in Russia, a major effort is required targeting supply (e.g., regulation of production, distribution, prices, access, and advertising) and demand (e.g., information, education and communication campaigns). In parallel to the effort to control alcohol abuse, a major push is needed to control tobacco consumption. The decision by the Russian Government in October 2010 to launch a comprehensive tobacco
control strategy in accordance with the provisions of the International Framework Convention on Tobacco Control (IFCT), is a step in the right direction.

— The chronic nature of NCDs, poses a major challenge to health systems worldwide because with the onset of NCDs people often spend substantial parts of their lives in less than perfect health and in need of medical care. This adds greater imperative to shift treatment out of large, inefficient and expensive acute-care hospitals into primary outpatient care and other cost-effective arrangements.

**Spending on social sectors, impact of demographics, and implications for regional versus federal spending**

Russia spends about 50 percent of its total fiscal envelope on social services (health, education, and social protection). In 2010, the health and education sectors accounted for about 4 percent of GDP each, while the rise in pensions increased the size of the social protection envelope to 12 percent of GDP. Health and education spending has been largely maintained at pre-crisis levels, while social protection spending increased substantially (from 8.7 percent of GDP in 2006). The changes in the pensions in 2009 and 2010 resulted in additional expenditures of around 1.5 to 1.7 percent of GDP per year between 2010 and 2012. In response to the crisis, additional spending on social transfer programs was introduced starting in 2009. The total amount of additional spending is estimated to equal 3.3 percent of GDP per annum over 2010-2012.

Russia faces long-term fiscal risks from future healthcare and pension spending needs due to healthcare cost inflation and population aging respectively. In the absence of reforms, estimates are for federal government transfers to the Pension Fund to increase by over 4 or 5 percentage points of GDP. Rough estimates are for public health
spending to increase by between 0.7 and 1.6 percent of GDP over 2010-2030 (IMF, 2010). Most of this increase is forecast to come from rising healthcare costs, with aging projected to be responsible for only a quarter of the overall increase.

Given these significant spending pressures, efficiency reforms become all the more important for freeing up resources to finance improvements in human development indicators and the likely additional resource needs. The system of intergovernmental fiscal transfers will be critical to this agenda as most social spending takes places at the non-federal level of government. Fiscal transfers play an important role in the delivery of social services, and their role has increased considerably in recent years (see Figure 1). These transfers from the federal budget can be classified into two broad groups: transfers to regions (with the aim of equalizing regional differences) and transfers to special funds, including compensation for the shortfall in the Pension Fund. The government has embarked on reforms to fiscal decentralization and related inter-budgetary transfers, but reforms could be deepened and have been implemented unevenly across regions. If the demographic changes affect regions unequally (as described in paragraph 3), Federal Transfers will have to adjust accordingly to offset this impact.

Figure 1. Social sector spending take place largely at non-federal levels of government in Russia

(Federal and non-federal social sector spending over 2006-2010, in percent of GDP)
Russia has a significant scope for spending its existing fiscal resources allocated to education and health more efficiently. The allocation of budget resources can be improved mostly through: (a) generating savings by advancing sector reforms (for example, in the health sector these would include optimization of the hospital network, a greater shift to primary care, co-payments for medicine, and performance-based payments), and (b) strengthening the system of inter-budgetary transfers to better reflect priorities for social services delivery and to support efficiency-enhancing reforms in the regions. The sector reforms and efficiency-enhancing incentives provided through inter-budgetary transfers could be important elements in optimizing service networks and in further reducing physical (and fiscal) inputs in the provision of social services (health and education).

A substantial part of social assistance is spent on privileges, while very little is spent on targeted programs. The spending on privileges (payments to specific categories of the population) accounts for 2.3 percent of GDP, or 90 percent of total social assistance. Privilege payments generally do not reach the poor, and hence achieve little in terms of poverty reduction. Targeted social assistance accounts for only 0.2 percent of GDP. There is a significant scope in Russia for
expanding the means-tested component of social assistance through a gradual substitution of privileges with targeted programs and improving the targeting of programs, and hence for allocating social protection funds with fewer leakages and a higher poverty-reduction impact. The current system of inter-budgetary transfers could incentivize the regional/local governments to better target social assistance spending.

Solutions to growing budget pressures will also have to be found outside the social sector budget. One option is to save part of oil and gas revenues in a sovereign wealth fund to pay for future pension liabilities. A good example is Norway, which saves oil revenues as financial assets in its Government Pension Fund Global (GPFG) for future generations and only uses the yield from the accumulated financial assets for current spending. To build up a similar buffer for future pension needs, Russia could strengthen its National Wealth Fund (NWF), which saves oil and gas revenues with the objective of co-financing the voluntary pension savings of Russians and maintaining a balanced budget for the Pension Fund. The amount of resources in the NWF would need to be considerably increased to pay for future pension liabilities: Resources in the NWF were about US$93 billion or about 5 percent of GDP on August 1, 2011.

**Conclusions**

In conclusion it is important to stress that new challenges caused by demographic developments call for a “New Social Policy”, based on the principle of activation. This is not dissimilar from the old challenge of changing the traditional European welfare model – as good as it may be – to active polices and make each and every citizen responsible for their own lives:

- This means developing an education system that will educate our children for job that does not exist today and provide workers with the opportunities to acquire new skills and get training so new
technologies can be adopted effectively – or as we say “life long learning” ----the days are gone when you had a job for life.

- This also means helping the employed get employed and not just stay on unemployment benefits thus helping the unemployed acquire new skills and increasingly moving jobs from low-skills-low pay sector to higher value-added and high skilled jobs – an ambition of Russia

- This also means helping the destitute and marginalized become part of society, including the increasing number of elderly – not all wish to retire

- And it means helping businesses hire and fire employees while protection these same employees (flexicurity). In Russia today there is an increasing number of unregulated or informal hiring of workers. This is not desirable – for once labor laws are there to protect workers and help business, but high level of informality makes it less likely that the business will invest the training and skills – the skills that is much needed in Russia today to boost productivity and adapt new technologies

- This also means helping young innovators and entrepreneurs with funding and training and effective government services so they can build their businesses and the future of tomorrow

- Most important the re-thinking of social policies is the change from having the government take care of you for life to the government helping you take care of yourself (working, living healthy and safe and saving for retirement). The change has not happened yet.