RUSSIAN FEDERATION
THE DEMOGRAPHIC TRANSITION AND ITS IMPLICATIONS FOR ADULT LEARNING AND LONG-TERM CARE POLICIES
A TECHNICAL NOTE

January 4, 2011

Human Development Sector Unit
Europe and Central Asia Region

Document of the World Bank
CURRENCY EQUIVALENTS
(Exchange Rate Effective November 23, 2010)
Currency Unit = Russian Ruble (RUB)
US$ 1 = RUB 31.44

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECA</td>
<td>Europe and Central Asia</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>ETF</td>
<td>European Training Foundation</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
</tr>
<tr>
<td>LTC</td>
<td>Long-term care</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PIRLS</td>
<td>Progress in International Reading Literacy Study</td>
</tr>
<tr>
<td>RMHSD</td>
<td>Federal Ministry for Healthcare and Social Development of the Russian Federation</td>
</tr>
<tr>
<td>TIMMS</td>
<td>Trends in International Mathematics and Science Study</td>
</tr>
<tr>
<td>TFR</td>
<td>Total Fertility Rate</td>
</tr>
</tbody>
</table>

Vice President: Philippe H. Le Houerou
Country Director: Pedro Alba
Acting Sector Director: Mamta Murthi
Sector Manager: Jesko Hentschel
Task Team Leader: Toby Linden
RUSSIAN FEDERATION
THE DEMOGRAPHIC TRANSITION AND ITS IMPLICATIONS FOR ADULT LEARNING AND LONG-TERM CARE POLICIES

Table of Contents

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>i</td>
</tr>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>II. The Russian Demographic Transition</td>
<td>2</td>
</tr>
<tr>
<td>(i) Demographic Trends</td>
<td>3</td>
</tr>
<tr>
<td>(ii) The Demographic decline in an international perspective</td>
<td>6</td>
</tr>
<tr>
<td>(iii) Two key challenges facing Russia</td>
<td>10</td>
</tr>
<tr>
<td>III. Finance and Provision of Long-Term Care Services for the Elderly</td>
<td>10</td>
</tr>
<tr>
<td>(i) The elderly population</td>
<td>11</td>
</tr>
<tr>
<td>(ii) Provision of long-term care</td>
<td>11</td>
</tr>
<tr>
<td>(iii) International experience</td>
<td>14</td>
</tr>
<tr>
<td>(iv) Long-term care policy options for Russia</td>
<td>18</td>
</tr>
<tr>
<td>IV. The Labor Force, Productivity and Adult Learning</td>
<td>20</td>
</tr>
<tr>
<td>(i) The labor force</td>
<td>20</td>
</tr>
<tr>
<td>(ii) Increasing participation and productivity</td>
<td>22</td>
</tr>
<tr>
<td>(iii) Adult learning</td>
<td>26</td>
</tr>
<tr>
<td>(iv) Policy options for promoting adult learning</td>
<td>27</td>
</tr>
<tr>
<td>V. Concluding Remarks</td>
<td>31</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1: Population size is projected to decline from approximately 141 million to 131 million people by 2050 – this decline could be slowed down by lowering mortality rates. .................................................................4

Figure 2: Demographic reversal – from a period of more births than deaths to one of more deaths than births. .........................................................................................5

Figure 3: The Transition to low fertility begun with 1880s cohorts of women. .......6

Figure 4: Large proportions have not saved or purchased LTC insurance and have no intention of doing so. .................................................................................................................15

Figure 5: Base case projections suggest that between 2000 and 2050 the proportion of GDP spent on LTC might double for some countries .........................17

Figure 6: Working age population will decline by about a million people a year between 2011 and 2017 ..................................................................................................................21

Figure 7: Workers' skills had become a constraint on firm expansion by 2008. ......22

Figure 8: Foreign students as a proportion of the overall number of students in Russia and OECD countries: higher and post-graduate education (MSKO 5/6), 2005 ..............................................................................................................24

Figure 9: Participation in the learning during the last 12 months for those aged 25-64 (percent) .................................................................................................................................26

Figure 10: Financing constraints to training are greater in transition economies.....30

Figure 11: At what time training of adults occurred in the system of continuous education .................................................................................................................................31
List of Tables

Table 1: Aggregate fertility desires and intentions among women below age 30 and period fertility rates in the Russian Federation, 1994 and 2004 .................. 6

Table 2: Russia’s Lag in Life Expectancy at birth at the Beginning of the 20th century and the start of the 21st century ................................................................. 8

Table 3: Examples of LTC Financing, Benefits and Eligibility Models ............... 19

Table 4: Examples of Support to Informal Providers of LTC Services ................. 20

Table 5: In-service training significantly increases firm productivity .................. 29

List of Boxes

Box 1: Are there proven policies that can lower barriers to childbearing (and reverse low fertility and hence slow the negative population growth rates)? ............ 7

Box 2: Several factors might deter the development of the LTC insurance market. 16

Box 3: From the Executive Summary of ‘Implementation and Impact of NQFs’ by the European Training Foundation ................................................................. 28
Acknowledgements

A draft of the Russia Demographics Technical Note and its accompanying background technical papers were prepared by a team led by Anne Bakilana, comprising of Andrei Markov, Patricio Marquez, Sevil Salakhutdinova, Zuhhra Shaabdullaeva, Tigran Shmis, Alexander Klimov, Sergey Gradirovsky, Denis Nikolaev, and Kirill Vasiliev. The final structure, argumentation, and editing of the report was done by Toby Linden. Administrative support was provided by Jennifer Manghinang and Irina Reshetnikova. The background analysis and studies were undertaken in collaboration between the World Bank and a group of researchers from the Institute of Demography at the Moscow Higher School of Economics led by A.G. Vishnevsky and including E.M. Andreev, S.A. Vasin, M.B. Denisenko, S.A. Zakharov, E.A. Kvasha, N.V. Mkrchian, V.I. Sakevich, and T.L. Kharkova. In addition, the Bank also worked with Larry Forgy, Shereen Hussien, A. Comas-Herrera, Naoki Ikegami, Dimitar Philipov, Tomas Sobotka, Elena Andreeva and Irina Bondarenko.

This work was supported and guided throughout its preparation by: Gordon Betcherman and Jesko Hentschel, successive Sector Managers of the Human Development Economics Unit in the Europe and Central Asia Region; Tamar Manuelyan Atinc, then Sector Director and Mamta Murthi, Acting Sector Director of the Human Development Unit of the Europe and Central Asia Region of the World Bank; and Klaus Rohland and Pedro Alba, successive Country Directors for Russia. The team would like to recognize suggestions and comments received from Arup Banerji, Eduard Bos, Mukesh Chawla, Ernesto Cuadra, and Johannes Koettl.
Executive Summary

Russia’s population is projected to decline by 10 million people over the next 40 years and by 2050 almost 15 percent of the population will be aged 70 or over. Between 2009 and 2017 its working age population will decrease by about one million people, a year, while those 60 years old or over are projected to increase by almost 14 million between 2005 and 2050. This Technical Note focuses on two of several policy areas – financing and provision of long-term care and adult learning – in need of further discussion and identifies policy options for how to respond to demographic changes.

The first concern is that aging populations will exert further demands on public resources because the elderly are assumed to have higher health care needs. In addition the elderly will need long-term care as they become frail and unable to care for themselves which will become very costly. The second challenge is that Russia will need to find ways either to increase the number of workers and/or increase the productivity of each worker, in order to respond to declining working age people and the changing skill needs of the economy. This second challenge is sufficiently large that action will be needed on several fronts. First, through an increase in the labor force participation rate, to bring in currently marginalized populations. Second, by decreasing the rate of retirements and have people work longer, even past normal or current retirement age. A third option is to make greater use of migrant labor; and, fourth, by increasing the productivity of each worker, through increases in human capital.

In long-term care, one size does not fit all and so policy responses must be customized. Key policy recommendations include: Russia should look at the way long-term care is financed and the role of private providers; encourage provision of services by not-for-profit organizations; and ensure that non-institutional providers form the backbone of the long-term care system as this is more desirable and affordable than formal care. A number of countries have introduced some kinds of payments for non-institutional providers of care, including for family members providing care.

Governments should exercise caution regarding policies for adult learning because, while there are market failures, there is no conclusive evidence about their size. In these circumstances, it is best if governments focus on areas with large leverage potential. In particular, governments should make better use of financial incentives and on policies to increase the participation of low-skilled adults. Governments need to create the structural preconditions for raising the benefits to adult learning. Since adult training generates considerable private returns (to companies as well as individuals) the bulk of financing should be provided by the private sector. However, there is a role for government in promoting well-designed financing arrangements, especially for the low-skilled who are less able to afford the costs (including opportunity costs) of training and for older workers in whom companies are less likely to invest because there are fewer working years over which to yield the benefits of training. It is important to ensure that the appropriate setting and
pedagogy for adult learning. Finally, governments need to set the regulatory framework for competition amongst the providers of training.

Russia requires coordinated social and economic policies to respond to the demographic challenges over the next 40 years. To provide for a population that will consist of more and more dependents relative to the number of active workers, Russia needs a set of policies that will ensure high economic growth and ensure that the country can finance its social obligations in a sustainable manner. Two policy areas – long-term care and adult learning—have been analyzed in this Technical Note. But these two areas also have important connections. These connections might be positive, for example, reducing the incidence of non-communicable diseases would ensure elderly Russians need care only later in life, while also enabling higher labor force participation rates and productive workers to older ages. Similarly, adult training could improve the quality of long-term care and encourage those out of the labor force to take up health professions. But these connections might reinforce negative trends, for example, if the number of women providing unpaid care at home to elderly relatives increases then this will reduce their labor force participation. These concerns point to the need to balance different policies and to adopt multi-sector approaches.
I. Introduction

1. Russia’s population is projected to decline by 10 million people over the next 40 years and by 2050 almost 15 percent of the population will be aged 70 or over. Between 2009 and 2017 its working age population will decrease by about one million people, a year, while those 60 years old or over are projected to increase by almost 14 million between 2005 and 2050. This demographic picture is unlikely to change in the near future. Russia’s age structure increasingly has fewer young people, that is, fewer potential parents. Combined with low rates of fertility, this will mean a population that will have more deaths than births because there are a larger number of older people in it. The next decades will be one of smaller 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 (Eberstadt, 2010).

2. The social and economic challenges stemming from Russia’s demographic transition are profound, but aging need not stop economic growth if the right policies are adapted. There are risks to economic growth, but many of the challenges that Russia faces are shared by other aging countries that have successfully begun to deal with them. Countries need to adapt to the unfolding demographic reality by analyzing the effects of the transition and enacting policies that will contain the potentially large fiscal effects of the transition. This Technical Note is part of the World Bank’s program of studies on policies that address challenges stemming from the demographic transition. This note focuses on two of several policy areas – financing and provision of long-term care and of adult learning – in need of further discussion and ideas on how to respond to demographic changes. Other areas for policy elaboration for countries in Eastern Europe and the Former Soviet Union were identified in the 2007 World Bank publication From Red to Gray (Chawla, Betcherman, & Banerji, 2009).

3. The first policy area discussed is financing and provision of Long-term Care (LTC) for the elderly and options to address them. Projections show that by 2050, almost 15 percent of the Russian population will be aged 70+, that is, approximately 19 million people in this age group alone. Expected large costs LTC financing and provision has

---

1 This study was prepared at the same time that a study on the same issues was being written independently. While it has not been possible to fully reflect the findings of Nicholas Eberstadt’s report (Eberstadt, 2010), there are very strong coincidence between the findings in the two reports.

2 A study on key issues and challenges facing Ukraine’s health and demographic challenges including the unprecedented demographic decline; premature mortality among its adult population; and weaknesses in dealing with preventable and treatable non communicable diseases; ii) An Economic framework for Financing, Provision and Regulation of Long-term Care Services for Older Persons which lays out policy issues and challenges in LTC for Bulgaria, Croatia, Latvia, Poland and Slovakia; and iii) the series of work under the Flagship Study on the Demographic Transition and the Social Contract between the Generations.

3 The World Health Organization (WHO Centre for Health Development, 2004) uses the following definition of long-term care (LTC) / long-term aged care: A range of health care, personal care and social services
focused the attention of aging economies to find solutions in this critical area. Compared to other areas of policy such as health care, policies related to LTC for the elderly are still in development, partly hindered by lack of necessary data on LTC systems for countries in the region.

4. The second policy area concerns the skills needed to ensure a competitive workforce and options to expand adult learning opportunities as one of the responses to a shrinking working age population. One of the most dramatic results of the ongoing transition in Russia will be the decline in its working age population, of about one million people yearly between 2009 and 2017. Accompanying this demographic decline is an ever increasing need for a labor force with continuously changing skills. Ensuring that workers acquire new skills as they continue to work will be one of the important means of enhancing labor productivity, competitiveness, and economic growth and hence the ability of the country to meet its growing social obligations with a smaller working population.

5. This Policy Note looks mainly at the national picture. The trends and issues described in this document are dramatic when seen in the national perspective. Preliminary investigation of the sub-national level shows that each part of the country will need to address the challenges posed by the demographical trends. In moving to action, however, it will be necessary also to understand the particular situation in different regions of the country.

6. This Policy Note is organized as follows: Following this Introduction, the next section describes Russia’s demographic transition and summarizes why observed demographic trends are a matter of concern. The following section introduces the set of general challenges that aging societies face in providing care to an increasingly aged, and dependent, population and presents specific challenges that Russia is facing. The options for financing and providing LTC based on the experiences of other aging countries are also presented. The final two sections address the challenges in the ensuring that the adult learning system equips workers with renewable skills that will increase labor productivity and boost competitiveness.

II. The Russian Demographic Transition

7. This section first looks at Russia’s demographic transition and then considers this transition along experience of other countries. Finally the section identifies two key challenges this transition presents.

---

provided to individuals who, due to frailty or level of physical or intellectual disability, are no longer able to live independently. Services may be for varying periods of time and may be provided in a person’s home, in the community or in residential facilities (e.g. nursing homes or assisted living facilities). These people have relatively stable medical conditions and are unlikely to greatly improve their level of functioning through medical intervention.
(i) **Demographic Trends**

8. **Projected Russian demographic changes are profound.** Projections suggest that the size of the population will decline from about 141 million people in 2009 to 131 million in 2050 (figure 1); making the 2050 population about 8 percent smaller than the 2009 population. With this decline, and an increase in the population size of other countries, the Russian Federation will move from being the 9th most populous nation in 2007 to the 14th largest population in 2050 (Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2009). These broad demographic trends are not unique to Russia. These trends are part of the 20th century transition that has been experienced by other developed countries (and now developing countries) during which time both fertility and mortality have fallen in a consistent pattern.

9. **Reversal of these trends is unlikely.** Just as previous trends have shaped the current age structure, the manner in which the population is distributed across various age groups will shape future demographic dynamics and structures. Births occurring in a given year will depend on the number of women in child bearing years. Since the birth component plays a large role in determining the size of older age groups in the future, the aging of a population will accordingly reduce the number of women in child bearing ages and hence the number of births in a population. Russia’s current age structure results from decades of complex demographic trends that have created a population structure with increasingly fewer young people and hence an inbuilt momentum for population decline.
Figure 1: Population size is projected to decline from approximately 141 million to 131 million people by 2050 – this decline could be slowed down by lowering mortality rates.


10. 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. Fertility has been declining in Russia since the end of the 19th century. However, until 1992, the number of births exceeded the number of deaths, resulting in years of positive though declining population growth rates (figure 2). Only in 1964 did the Total Fertility Rate (TFR) for the first time reach a level below the level needed to replace a generation. The TFR declined from 2.8 to 1.4 between 1950 and 2010. The total number of people continued to grow until 1992, because there were enough women of child bearing age and these women were having enough children to compensate for population losses through deaths. That is, the population continued to grow because its population structure, i.e. the distribution of the population across the various ages, still supported natural population growth.
Figure 2: Demographic reversal – from a period of more births than deaths to one of more deaths than births.


11. The evidence suggests that there has been a generational shift between the cohorts born in the 1950s, those born in the 1960s and those born in 1970s and later, which to a great extent grew up in the new, post-Soviet Russia. This last generation is in particular significantly different from their parents: they marry later and give birth to children at a more mature age and delay first and second child births (figure 3).

12. Women are having fewer children because they want fewer children. Desired fertility – the number of children desired or intended – ranged from 1.7 children for women aged 20-24 to 1.9 children for women aged 25-29 in 2004 (table 1). The gap between adjusted TFR and the desired level of fertility is therefore quite small, it was 0.23 of a child among women aged 20-24 and 0.36 among women aged 25-29. This further suggests that efforts to reduce the pace of population size decline through increases in fertility through simple pro-natalist policies might not be very effective. While it is projected that Russian fertility rates will rise, this increase is projected to be a small one. By 2050, the level of fertility will remain at about 1.8 children per woman. As other countries have found, reversing this trend in fertility is very difficult (see box 1 below).
Figure 3: The Transition to low fertility begun with 1880s cohorts of women.

Table 1: Aggregate fertility desires and intentions among women below age 30 and period fertility rates in the Russian Federation, 1994 and 2004

<table>
<thead>
<tr>
<th>Age</th>
<th>Year</th>
<th>Mean desired (1994) or intended (2004) family size</th>
<th>Adjusted TFR</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25</td>
<td>1994</td>
<td>1.74</td>
<td>1.51</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>1.78</td>
<td>1.53</td>
<td>0.25</td>
</tr>
<tr>
<td>25-30</td>
<td>1994</td>
<td>1.87</td>
<td>1.51</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>1.89</td>
<td>1.53</td>
<td>0.36</td>
</tr>
</tbody>
</table>


(ii) The Demographic decline in an international perspective

13. Russia’s fertility decline is similar to but much faster than that of other European countries. As in Russia, women across Europe have adopted reproductive behaviors which have shifted childbearing to later years and reduced the total number of children that they have. Compared to most Western countries, however, the Russian transition to lower fertility started from a higher level and the speed of the decline was much faster. When the period TFR fell to 1.9-2.0 in the second half of the 1960s, it was among the lowest in the world. In 1968, of the 40 developed countries only Czech Republic, Latvia, Ukraine, Croatia and Hungary had lower fertility rates than Russia. The fast pace of fertility decline in Russia slowed down in the 1940s and 1960s while that in other countries continued at a faster pace. There was therefore some convergence, such that by 1980, when
TFR in Russia fell to 1.89, the world already had 13 countries with fertility lower than in Russia, including Denmark, Switzerland, Germany, the Netherlands, Finland and Italy all of which had a TFR of around 1.6-1.7 (Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2009).

Box 1: Are there proven policies that can lower barriers to childbearing (and reverse low fertility and hence slow the negative population growth rates)?

The literature suggests that pro-natalist policies elicit mild, if any, effect on life time fertility. This is because fertility decisions depend on a complex mix of factors; complex and far reaching policies would be required to change this decision process. Yes, finances affect fertility decisions, but couples also consider housing, job security, maternity leave; child care options; the opinion of others; etc. For pro-natalist policies to have an effect they will have to be very comprehensive; policies would have to support couples in almost all spheres of their lives; which is usually quite costly. Countries that have such comprehensive policies include France and the Scandinavian countries, but the effects appear to be marginal and, for example in the case of France are still not enough to raise the fertility rate above replacement (Chawla, Betcherman, & Banerji, 2009). There is however a significant amount of evidence that policy may more often affect the timing of births by enabling women to have children sooner than initially expected creating a temporary effect of policies on fertility rates. It is also important to keep in mind that it is possible to mistake an increase in the number of births in a country as an increase in fertility. For example, when a slightly larger cohort of young women enters their reproductive years, even when rates stay the same, this might produce a temporary surge in numbers of births which are likely to reduce to a lower number once a smaller cohort enters their reproductive years.

Some pro-natalist policies are of value because they address significant welfare challenges in society. For examples, programs that increase availability of child care facilities and the introduction or extension of maternity leave could improve the welfare of children and the poor in society. The policies support and encourage women to participate in the labor market while also meeting their reproductive goals. Programs could also play a role in poverty reduction and better welfare for children by providing them with better access to early childhood education and hence a better start for later stages of the education system.

14. Russia’s mortality remains higher than in other developed societies; and its rates have fluctuated significantly. At the beginning of the 1960s, life expectancy at birth in Russia was very close to that of other developed countries. For instance, it was only about 1.7 years lower than that of France, about 1.2 years lower than that of the United States, 4.4 years lower than that of Sweden and 0.9 years higher than that of Japan (table 2). However, from the early 1960s onwards, and for the next 40 years or so, mortality rates rose or stagnated, interspersed with short periods of rapidly declining mortality. The last 40 years have been the period when mortality in Russia significantly diverged from that of the rest of developing nations. At the beginning of the 21st century Russia’s lag behind Western

---

4 Life Expectancy at Birth is the average number of years that a new born is expected to live if mortality conditions at various ages at the time of birth persist throughout the individual’s life.
countries was almost the same as that of Russia at the start of 20th century – for men, the lag was even greater than in 1900. The main drivers were an increase in mortality rates among the adult population and comparatively higher mortality among children. While mortality among adults in developed countries declined, and life expectancy increased through the 1950s onwards, for Russia mortality stagnated and actually worsened.

Table 2: Russia’s Lag in Life Expectancy at birth at the Beginning of the 20th century and the start of the 21st century

<table>
<thead>
<tr>
<th>Year</th>
<th>Behind the US</th>
<th>Behind France</th>
<th>Behind Sweden</th>
<th>Behind Japan</th>
<th>Behind the US</th>
<th>Behind France</th>
<th>Behind Sweden</th>
<th>Behind Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>1900</td>
<td>15.9</td>
<td>12.7</td>
<td>20.3</td>
<td>14.5</td>
<td>16.2</td>
<td>14.1</td>
<td>20.8</td>
<td>13.1</td>
</tr>
<tr>
<td>1965</td>
<td>2.3</td>
<td>3.0</td>
<td>7.2</td>
<td>3.2</td>
<td>0.5</td>
<td>1.4</td>
<td>2.8</td>
<td>-0.5</td>
</tr>
<tr>
<td>2005</td>
<td>16.4</td>
<td>17.9</td>
<td>19.6</td>
<td>19.7</td>
<td>8.0</td>
<td>11.4</td>
<td>10.4</td>
<td>13.1</td>
</tr>
</tbody>
</table>


15. **High mortality in Russia is due to an unusually high incidence of non-communicable diseases (NCDs) and injuries among adult men.** Analyses of the main causes of death, and hence lower life expectancy at birth, show that the highest burden of ill health and of mortality is due to non-communicable diseases (NCDs) and injuries. NCDs and injuries accounted for 68 percent of all deaths in 2002 (Marquez 2006). In 2003, among the adult population, cardio-vascular diseases, cancer and injuries accounted for about 78 percent of deaths. Comparisons of numbers of deaths from various causes of deaths show that for every male 100,000 deaths, there were 14,945 more deaths from diseases of the vascular system than in Western countries in 1990-1995, and that this number was 18,811 deaths in 2005-2006. There were 17,662 more deaths than expected from accidents, poisonings and trauma among men and a significant proportion of these excessive deaths were in the age group 15-69. The number of excessive deaths from the major causes of deaths is slightly lower for women and this explains comparatively higher life expectancy for women.

16. **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. A woman in Moscow, or in the Republics of North Ossetia-Alania, Chechnya, Dagestan, or Ingushetia region (with highest life expectancy at birth of over 76 years, and even as high as 82 in the Republic of Ingushetia) can expected to live much longer than a man in the Autonomous Republics of Koryakskiy, Evenk or Komi-Permyak (where life expectancy is in the early fifties). 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 from the average national level. For men, those living in the worst off region, have a life expectancy at birth that is 23 years than the best region. The difference between life expectancy at birth for men in the worst off region and women in the best region is about 30 years.

17. **Effective, but transient, policies created periods of reduced morbidity and mortality.** Positive response to introduced policy measures have led to fluctuations in life expectancy at birth at
various times. From 1989 to 1994 life expectancy fell, it improved from 1995 to 1999 and declined again from 1999 to 2003 and improved some in 2004-2005, before showing some significant increases in 2006 when it rose by 1.5 years for men and by 0.84 for women. After 1960, there are two periods during which life expectancy grew, in 1986, by 2.05 for men and 0.99 years for women; and in 1996, when male life expectancy rose by 1.50 years and that of women by 0.81 years. In the first instance the improved life expectancy was due to the anti-alcohol campaign. The second episode of improved life expectancy has not yet been strongly linked to any specific factor and happened with the background of a developing economic crisis, regular delays of salaries and social tensions. The increase in life expectancy in 2005-2006 occurred mainly due to a decrease of mortality in the adult population. Before that, in 2003-2005, there was a period during which there were increases in life expectancy at birth, but this was mostly linked to reduction of child and elderly mortality rates; because of this life expectancy of men at age 15 largely remained unchanged. These temporary low mortality periods show that the right policies can be quite effective. These include: i) reducing alcohol consumption; ii) reducing smoking; iii) encouraging healthy diets and physical exercise; and, iv) reducing accidents (World Bank, 2005).

18. 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. Russia was among the top ten countries with the largest negative population growth rate in the period 2005-2010 (Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2009). In addition, Russia has a population age structure that is constantly changing from one period to the next. This is because Russia has had a history of rapid changes in its demographic variables from one period to another whose effects on the age structure can be seen in the constantly changing sizes of age groups from one period to another. This characteristic of the Russian population age structure implies that a lot of flexibility in planning for services such as education, which depend on the sizes of cohorts entering or leaving school at different stages, will be required.

19. Second, Russia has an unusual adult morbidity pattern and hence much shorter longevity due to unusually high incidence of NCDs. At the beginning of the 1960s, life expectancy at birth in Russia was very close to that of other developed countries. The high rate of mortality since then among its adult population is highly unusual and calls for concerned efforts to improve the health of the population. It may be that these higher death rates are due both to higher incidences and worse health care (Eberstadt, 2010).

20. Third, fertility rates could fall further because women still have children at a comparatively younger age in Russia: While Russian fertility rates might be very similar to that of other developed nations, Russian women still have their first birth at a younger age than in other developed countries. This pattern of starting families early had been predominant in Russia up to the early 1990s but might be slowly changing. This means that any further aging of the fertility pattern to resemble that seen in Western Europe will result in further lengthening of a generation, which will mean women have children at much older ages, further slowing population growth rate, even if rates of fertility stabilize.
21. **Russia’s success in slowing down population decline lies in reducing its mortality rates and improving longevity.** Russia passed in 2007 the Concept of Demographic Policy for the Period up to the Year 2025, which among other things aims to raise fertility to 1.95 and life expectancy to 75 years by 2025. Analyses undertaken for this study found that the goal to increase life expectancy to age 75 is probably a realistic one, and its effect in slowing down the high rates of mortality among its male adult population would significantly slow the decline of the work force pool. Increasing fertility rates in this demographically ‘short’ period of time and hence adding to population growth is unlikely to elicit the same result during the same timeframe.

(iii) **Two key challenges facing Russia**

22. **The first challenge is whether public expenditure on pensions and health care become unsustainable as the size of the elderly increases.** The concern that aging populations will exert further demands on public resources is one with which a number of countries with aging populations are dealing. This is because the elderly are assumed to have higher health care needs; and in addition the elderly will need long-term care as they become frail and unable to care for themselves. There are also concerns that pension outlays will increase at a time when the size of working population, which provides tax receipts to pay for these pensions, is declining.

23. **The second challenge is whether declining population sizes will reduce the size of the labor force and hence reduce economic growth.** Russia’s overall population decline will mean in particular a declining labor force, i.e., population of individuals of working age. All other things being equal, fewer workers mean 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, in order to maintain and indeed enhance economic performance.

These two challenges are discussed in the next two sections respectively.

**III. **Finance and Provision of Long-Term Care Services for the Elderly

24. This section looks at the current state of long-term care in Russia, though there is poor availability of good data. The institutional set up for long-term care is discussed. This section then looks at international experience in coping with the costs of long-term care.

25. **Data and research on LTC financing and delivery is scarce.** Unlike other areas of social and economic development in Russia, this area of data collection and analyses is still very underdeveloped. Statistics on the welfare of the elderly are hard to find, and data on how much is spent on the elderly is rare. Any effort to competently handle this challenge will require investments in identifying and meeting these data needs especially in the areas
of financing, projections of numbers of people that might be dependent and in need of care and in the various types of care that might be needed.

(i) The elderly population

26. The elderly will remain one of the largest demographic groups in Russia and a significant majority will be women. Projections show that for most of the next 40 years the size of the population in higher age groups will continue to grow. The population aged above 60 is expected to increase by almost 14 million between 2005 and 2050. By 2050 the proportion of the population aged 70+ is projected to be 14.6 per cent translating into 19 million people; similarly the number of elderly aged 80+ is expected to more than double from 2.9 million people to 6.7 million people, making up about five percent of the total population. A significant proportion of the elderly will be women. For the age group 75-79, the number of women will increase from 2.5 million in 2010 to 3.9 million in 2040 while the number of men will increase from 1.1 million in 2010 to only 1.8 million in 2040. The number of women aged 80+ will also see a large increase from 3.07 million in 2010 to 5.1 million in 2040. It is projected that by 2050, more than 55 percent those aged 60-64 will be women; the proportion of those aged 75-79 that is women will be 67 percent and 73 percent of those aged 80+ will be women (World Bank, 2009).

27. Russia’s high prevalence of debilitating NCDs might mean higher disability and dependency in old age and hence higher spending on LTC. Projections of elderly dependent population suggest that the number of elderly persons with disabilities will increase from about 3.1 million people aged 65+ in 2005 (about 15 percent of the population aged 65+ or about 2.3 percent of the total population) to 4.6 million persons of the same age in 2050 (making up about 4.5 percent of the total population). The health of men at a given age is approximately as bad as women five years older than them. For example, data from the Gender and Generations Programme shows that about 14.6 percent of women aged 55+ reported having a health related limitation or disability and a similar 14.2 percent of men aged 60+ reported the same (Contextual database, 2010).

(ii) Provision of long-term care

28. Russia started addressing the long-term care (LTC) challenge 15 years ago, though its policies are still evolving. Russia passed legislation at the federal level

---

5 These numbers are based on age specific disability rates) number of persons with two or more activities of daily living or ADL for the new EU states. The probability of receiving care is held constant at the 2004 level and the pure aging scenario where the proportion of the older population with disabilities who receive informal care, formal in-home care or institutional care is held constant at the 2004 levels and then this rate is applied to the projected dependent population. The prevalence of ADL dependency is assumed to remain unchanged over the projection period, implying that all gains in life expectancy are spent in bad health or with a disability. When age specific disability rates are allowed to evolve in line with changes in age specific mortality rates, projected increases in the proportion of the population that is dependent is smaller at 3.2 million.
governing care of older persons in 1995. In addition to these laws, regional social service administrations may develop their own legislative and regulatory acts to support provision of services at regional levels. Provision of social services is jointly administered by the Federal Ministry for Healthcare and Social Development of the Russian Federation (RMHSD) and regional counterparts of the ministry. Regional governments are responsible for funding LTC services. Local government authorities are not engaged in provision of social services – they do not directly provide nor do they fund it.

29. **Only a small proportion of social services are provided by non-governmental and private enterprises.** Most social services providers are state-owned social service establishments. The state’s social service system comprises of social service establishments owned by regional authorities reporting to regional social services departments. The government supports and encourages development of non state social service provision but so far very few private providers operate in this field. Examples from other countries show that even when the government is the main funder of LTC services; the role of the non-governmental sector is usually larger than what is seen in the Russian Federation. This is usually because the public sector on its own does not have sufficient capacity to fully meet the demand for services by an aging population.

30. **Women provide the bulk of home-based care and they will form the larger proportion of those in need of care.** Women outlive men in Russia on average by more than 20 years and so a large proportion of the elderly living alone are women who have lost their husbands. Some researchers point out that since the collapse of the Soviet Union, older people are more reliant on informal support, mostly carried out by women and mostly unpaid (Tchernina & Tchernin, 2002); and actually the elderly population still expects support from their children. Data from the 2004 Gender and Generations Programme shows that a large proportion of Russian elderly population considers the financial support of poor elderly as a responsibility mainly for society rather than the family. This view was held by 64 percent of women aged 55+ and men aged 60+. However, nearly 96 percent responded that children should take care of parents when they can no longer look after themselves.

31. **The capacity to accommodate the elderly in need of institutional care is limited.** Data on the number of residential homes show that there are 1,153 state-run residential establishments for the elderly and the disabled, with a capacity to accommodate approximately 247,000 residents. The composition of the state residential homes is made of general-residential homes for the old and disabled and specialized psycho-neurological nursing homes which care for those in need of psycho-neurological care. The majority of these homes (64 percent) are of the general-type nursing homes designed for 102,100 residents which accommodate 95,100 people. Thirty percent are psycho-neurological nursing homes designed for 132,800 residents and accommodating 130,900 people. The rest, making about 5 percent of all residential establishments, are of various kinds including

---


12
rehabilitation centers for the disabled, geriatric centers and charity homes designed for 12,100 residents currently accommodating 14,400 people.

32. A large number of elderly are waiting for LTC services. Regional data show that almost all facilities located in all regions are running at above 95 percent occupancy rates, only five regions are below 95 percent with the lowest occupancy rate at 86 percent in North Ossetia. It is clear that there is considerable demand for social services by the elderly as estimated by the official numbers of elderly persons awaiting services. In 2007, the number of people waiting to receive in-home social/domestic and other services was about 80,500 people; those waiting to receive in-home social and medical services were 11,400 people; and those waiting to receive accommodation in institutional establishments were 21,800 people. Officially, about 131,400 people were queuing to receive one or another of in-home services. The data suggest that waiting time on the queue could be quite lengthy as the length of the queue only slightly shortened from 131,400 as of January 2007 to 91,900 people as of January 2008. In 2007, the queue to be admitted to institutional establishments was only reduced by 1,400. The Russian Government has placed the development of the in-home LTC services as a priority; however, it recognizes that residential homes will continue to be a critical component of the LTC system. Since 2000, the state network of residences has increased by about 503 establishments which have added about 18,000 beds to the supply of beds for various needs.

33. There are large regional variations in resources spent on LTC. It is estimated that about US$447 million was spent on residential care for the elderly. On average approximately RUB 104,244 (US$3,860) of operating costs was spent per person per year, with a significant proportion of this figure being spent on wages and supplies. In addition to expenditure on residential care, regions spent approximately US$4.02 billion on social services including home based care for the elderly, shelters and day care centers for juveniles, and shelters for the homeless. Regrettably, no data on the distribution of these funds across the various recipients of these services was available for analysis and so assumptions about the proportion of these expenditures spent on the elderly would be unreliable. There are large regional variations in availability of beds. When the number of staff is linked to the number of beds available in the region, analyses suggest that there are regions where there is an imbalance in the number of staff per available bed – in regions such as Tyumen Oblast and Dagestan Republic there are less than 0.5 staff per bed compared to Khanti-Mansi and Khamchatka which have more than one staff person per bed available.

---

7 This is likely to under-estimate the real demand since many people will not express an interest because they know the waiting list is so long.
8 It is estimated for this Report that in 2006, regions spent approximately RUB 29.5 billion (US$1.09 billion) on residential LMSA services for elderly and disabled persons. Of this amount, expert opinion estimates that about 16 percent of this sum was spent on disabled children’s homes (this amounts to about US$ 182 million). Collected data on the distribution of institutional beds, about 49 percent of the remaining amount could assumed to have been spent on residential care for the elderly in regular and psycho-neurological homes. Using a simple assumption that the expenditure was equal between beds for the elderly aged 60+ and for those below this age, the same assumption is made between expenditure on regular and psycho-neurological homes.
34. **Shortage of skilled staff is a concern that could be affecting waiting times for services.** Available data show that there are approximately 184,000 staff working in providing services for the elderly and disabled. A large proportion of these are found in the Central Federal District, with Moscow region leading with more than 12,000 workers and Moscow Oblast with more than 7,000. These are also regions which also have a large number of the elderly though as seen above they do not necessarily have a large number of beds meaning that most services must be provided in the home. These services are labor intensive, and hence would require a larger number of workers compared to institutional care. In fact, according to established standards social workers in urban areas are allocated less clients per hour than those working in rural areas. Analyses show that there is shortage of staff in psycho-neurological nursing homes, for which only 87 percent of the current positions are occupied, out of this figure, 72.5 percent are doctor posts and 82.2 percent are paramedical personnel. Expert opinion suggests that queues for services are in some regions and areas exacerbated by the shortage of staff in particular locations in the country.

(iii) **International experience**

35. **The challenge of ensuring adequate LTC services for a dependent elderly population is common to all aging societies.** Governments with aging populations are concerned about financing of care and ways to ensure that LTC systems balance equity, efficiency and costs. In responding to constituents’ preferences, governments are looking for customized care provision models that take into account local conditions, whether services should be formal or informal, home or institutional based, etc. Governments are also grappling with the issue of labor force standards for both professional as well as informal care givers, as well as issues of regulations and standards that ensure that quality services are provided.

36. **The risk of impoverishment from high costs of LTC services is real.** Given that a significant proportion of the elderly will need care during their lives, and that care could be quite costly, there is concern that individuals and families might not be able to afford necessary care in old age without some form of assistance from public resources. A significant proportion of them will not have sufficient savings to cover the cost of care, which can be significant – for example in the US, nursing home care in a semi-private room might cost US$50,000. The risk of individuals needing care at some point in their lives is actually quite high, and that the probability of needing care increases with age as demonstrated by data from the US which show that approximately 70 percent of the elderly admitted into a nursing home are admitted after the age of 75. In addition, at least 25 percent of those that are admitted into a nursing home will stay for more than three years. A large proportion of those who will need care will be women, more likely to be dependent on their husbands’ pensions and therefore unlikely to be able to meet the high cost of care with their own resources.
There is a strong rationale for the public sector to be involved in financing of LTC. Given the high costs of LTC, it is clear that most individuals will not be able to meet the cost of care from their personal resources. Given the high costs of LTC, one would expect that there would be a strong drive for individuals to want to protect themselves against such catastrophic eventuality, by buying insurance, for instance. However, the reality is that LTC insurance, for a variety of reasons, has not become a popular commodity, even in market economy societies with a high proportion of elderly. In fact, a minority of populations in the 2007 Eurobarometer survey had saved money or purchased insurance to cover LTC needs in old age (figure 4 above). In the EU as a whole, only one quarter (24 percent) of people have taken out insurance to pay for future care, and a further 15 percent said they intended to do so. In only five countries – Austria, Belgium, Greece, Malta and Slovakia – do these numbers add up to more than half of the population. Across the EU, more than one-third of people do not intend to take out insurance for long-term care (box 2 sets out some of the reasons why).
Box 2: Several factors might deter the development of the LTC insurance market.

Availability of publicly funded LTC services might crowd out the development of a private LTC insurance market. As suggested by data on the impact of the US Medicaid program, a means tested and a secondary payer after private insurance kicks in. In the absence of private insurance, Medicaid finances LTC and so individuals might opt not to buy private insurance. Another reason is that uncertainty about the future costs of LTC could lead to high markups for LTC insurance premiums. And finally, while individuals might have some information about future LTC needs, this information might not be readily available to LTC insurance firms, a situation that could lead to ‘wrong’ pricing of premiums. It could also lead to a situation where mostly those who consider or know that they are at high risk of needing LTC in the future purchase insurance creating a concentration of high risk individuals and hence high premiums. The rationale for public means for pooling resources and protecting individuals is a sound one. However, it is still important to consider whether public LTC systems will be targeted to those who need but cannot afford services or will be universal; and how sustainable these options would be.

38. The proportion of GDP spent on LTC in OECD countries might double between 2000 and 2050. Analyses of the impact of aging on long-term care expenditure show that important variables that will determine the large proportion of this increase include, not only the proportion of the population that is dependent, but also the type of services provided or as non-institutional care is replaced with more formal forms of care. It has been estimated that the share of the aged in a population actually accounts for slightly more than a half of the variation proportions of GDP spent on LTC. In the OECD, expenditure on LTC ranges from 0.2 percent to 3 percent of GDP, though most countries spend much less than this upper bound. Two countries with high spending and a high proportion of population that is elderly are Norway and Sweden, who spend 2 percent of GDP on LTC, and offer a range of home based and nursing home care. Germany, Spain, Italy and the United Kingdom might see GDP expenditure on LTC double between 2000 and 2050 (Figure 5).

39. The cost of LTC will depend on disability and dependency ratios. For EU25 countries, it is projected that if life expectancy increases are not accompanied by declines in disability and dependency, then the number of people who are dependents could double, from 12.6 million in 2004 to 26.1 million in 2050. However, should life expectancy be accompanied by a reduction in disability, then the increase in absolute numbers would be much less, from 12.6 to 16.5 million dependents, or about 31 percent. Though for most countries the recent decades of increases in longevity have also been accompanied by improvement in the health of the elderly (Howse, 2005), and for the OECD’s disability rates are expected to continue to decline despite the aging of the population, for some there are concerns that as more people survive to even older ages, high costs of managing chronic illnesses as well as mental conditions might significantly affect budgets.
Figure 5: Base case projections suggest that between 2000 and 2050 the proportion of GDP spent on LTC might double for some countries


40. Institutional care for the majority of old people is neither affordable nor desirable. Main care providers are relatives and workers who do not have a formal contractual agreement with those in their care. Estimates suggest that in Austria as much as 80 percent of the elderly who receive care services use non-institutional care; in Spain this is about 82 percent and this is 80 percent in Canada (Organisation for Economic Cooperation and Development, 2005a). This is because providing care in one’s own home is actually preferred by the elderly; this non-institutional care is more affordable and usually there are not enough formal facilities to meet all LTC needs. Some LTC systems – such as Germany’s – favor informal care and its benefit system allows recipients to draw a cash allowance which can be used to pay informal care givers. Not-for-profit organizations are the major providers of long-term care services at home and introduction of long-term care insurance has led to strong growth of home-care services providers, which by law have to be mainly private providers. Costs of providing LTC will increase if more services are provided formally and in institutions of care – a 1 percent yearly shift from non-institutional to formal provision could add 0.6 percent of GDP expenditure at the end of the projection period (Directorate-General for Employment, Social Affairs and Equal Opportunities – Unit E.4, 2008).

41. Health expenditures might also increase – though aging might have a small role to play in that increase. Studies on the impact of aging, on both health care expenditures and long-term care expenditures, have shown that for most countries, aging by itself explains only a small portion of increased health expenditure, ranging from 18 percent of the increase in England and Wales to 68 percent in Australia, Canada and Japan (Seshamani & and Gray, 2003 2(1)). Analyses also show that current and future health expenditure will depend more on social and economic policies that are more based on government decision and also employment policies (Chawla, Betcherman, & Banerji, 2009). Evidence shows that most health expenditures are concentrated in the period closer to death irrespective of age and so aging in itself is not a critical determinant. Since part of LTC services is usually
provided in hospital settings, costs in the health sector is an important variable in the overall cost of providing care.

42. **Most aging European countries have enacted legislation guiding financing, provision and regulation of LTC.** These countries’ legislation define: the kinds of LTC systems to be introduced or implemented depending on the source of revenue; eligibility for benefits (i.e., the level of disability, means testing and level of family support); and, the level and types of benefits to be provided. Most government legislation on LTC defines the rights of its citizens to receive services and where responsibilities for provision of services lie. In the Netherlands, the legislation on Exceptional Medical Expenses Act of 1967 created a tax to cover medical costs for chronic care that could not be met through normal health insurance and in 1994 the Disabled Persons Provisions Act ruled that Municipalities had to provide equipment for disabled people. Sweden passed the Social Services Act in 1982 which articulated that the elderly had a right to public services and help at all stages of life. The 1990s National Health Service and Community Care Act in the United Kingdom devolved responsibility for LTC funding to local authorities and removed a significant proportion of care provision from the National Health Service.

(iv) **Long-term care policy options for Russia**

43. **One size does not fit all and so policy responses must be customized.** The development of LTC systems, in terms of how they are financed, the mix of services provided whether formally or informally has been to a large extent guided by different social contracts between generations. There are some similarities across systems. For example, responsibilities for provision of LTC are usually split between the national and regional or local authorities. Not only is LTC financed largely by public resources, most services are actually provided by regional or municipal public entities.

44. **It is worth investigating the different ways that LTC is financed and the roles of private providers.** There are significant differences across countries regarding financing and the role of private providers and Russia can identify different models which might be adapted. There are large differences in terms of proportions of total public spending that is allocated to LTC; not always based on the proportion of the population that is old. In some cases, federal funds are used mainly to cover certain kinds of LTC services, such as nursing homes in Australia, while home based services are funded only partially by the federal government and the rest paid by local authorities. In Denmark, all funding comes from local authorities while in Sweden, Finland and Norway, where LTC services are operated by local authorities, the federal government provides funding to cover a proportion of the costs. A review of other LTC systems shows that various countries have a mix of public, and to a limited extent, private, means of financing LTC that can be grouped into four financing models as follows: i) general taxation; ii) special social insurance for LTC; iii) combined general taxation and insurance; and iv) special programs for LTC (table 3; see also Chawla 2009, Toulemon 2001 and Priorus 2005). Private insurance for LTC is rare for reasons
discussed above, but is an option that could open alternative ways to access services for those who can afford to pay.

Table 3: Examples of LTC Financing, Benefits and Eligibility Models

<table>
<thead>
<tr>
<th>Financing</th>
<th>Benefit</th>
<th>Eligibility</th>
<th>Private Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Medicaid</td>
<td>General Revenue</td>
<td>Service/ Limited cash</td>
<td>Means tested</td>
</tr>
<tr>
<td>Germany</td>
<td>Payroll tax</td>
<td>Cash or service</td>
<td>Universal</td>
</tr>
<tr>
<td>Japan</td>
<td>Payroll tax/ General revenue/ Income-Related premium</td>
<td>Service only</td>
<td>Universal for 65+</td>
</tr>
<tr>
<td>France</td>
<td>General Revenue</td>
<td>Cash only</td>
<td>Universal/ Steep income-related coinsurance</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>General Revenue</td>
<td>Service or Cash</td>
<td>Means tested</td>
</tr>
</tbody>
</table>

Source: Gleckman, 2010.

45. **Encourage provision of services by not-for-profit organizations.** There is a range of services that the elderly need that could be provided by non government agencies. This could include services such as cleaning, shopping cooking and companionship. Encouraging private enterprise in this area could also lead to growth in a private provision of a myriad of services demanded by the elderly. In Germany, non-profit organizations are the major providers of long-term care services at home, a trend which has been facilitated by the introduction of long-term care insurance. These providers by law have to be mainly private providers (either non-for-profit or for-profit). This is based on the view that a system of private providers will create an environment of competition, leading to better outcomes in terms of cost and quality of care than a system dominated by public sector providers.

46. **Non-institutional providers form the backbone of any LTC system:** A number of countries have introduced some kinds of payments for informal providers of care, including for family members providing care (table 4). As pointed out above, Germany’s LTC system allows recipients of benefits to use their allowances to pay informal care providers while in the UK, those that provide 35 hours of care might be eligible for an allowance. For such policies to be expanded, a set of policies to support non-institutional providers of care need to be elaborated and strengthened, experiences of other countries that provide care giver allowances, such as the UK and Australia, might be drawn upon. Build capacity for designing and organizing various ways that providers could be paid.

47. **The experience of other countries indicates that Russia has options to make its long-term care system affordable and effective.** In particular, Russia should consider diversifying the sources of finance and of providers of both formal and informal care.
### Table 4: Examples of Support to Informal Providers of LTC Services

<table>
<thead>
<tr>
<th>Elements of Assistance To Informal Care Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia</strong></td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
</tr>
<tr>
<td><strong>Germany</strong></td>
</tr>
<tr>
<td><strong>Canada</strong></td>
</tr>
</tbody>
</table>

**Source:** Organisation for Economic Cooperation and Development, 2005c.

### IV. The Labor Force, Productivity and Adult Learning

48. This section looks at changes in the size and characteristics of the working age population. After identifying the main drivers of these changes, the section looks in more detail at the key challenges of improving access to and the quality of adult learning. The section concludes with some policy options.

#### (i) The labor force

49. **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 (figure 6). This period will see a loss of about one million people a year. The second wave of large losses of those of working age will take place in the second half of the 2030s and first half of the 2040s, when a large cohort of children of the Soviet family policy in the 1980s are due to reach pension age. It has to be noted, however, that the depth of this dip in the 2040s will depend on how many of this large cohort survive the next 20-30 years and if policies between now and then are effective in changing mortality patterns.
Figure 6: Working age population will decline by about a million people a year between 2011 and 2017.


50. There is also evidence of skill shortages as the size and skill mix of the Russian labor force has undergone large scale changes. The Russian economy of the pre-reform period and 90’s was characterized by considerable labor surplus. Although in 1998 the number employed in industry accounted for only 60 percent of the level of the year 1991, 36 percent of the surveyed companies were still speaking of a considerable labor surplus (World Bank, 2009). The transformation of the Russian economy after 1990 meant equally big changes for the labor market. The largest transition for workers was the shift away from jobs in industries which produced goods to those providing services. In 1999, the economy began to grow in Russia, which gradually resulted in a shortage of skilled labor in the labor market. A 2003 study indicated that the shortage of skilled workers was mainly attributed to non-competitive and unsuccessful enterprises. 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 (figure 7). During this period, the growth in the labor force came about both through reduction of the number of unemployed, and through recruitment of the previously economically inactive population, mainly senior citizens.
Figure 7: Workers’ skills had become a constraint on firm expansion by 2008.

(percent of firms considering factor a ‘major’ or ‘very severe’ constraint)

Source: Mitra, 2010

51. Another sign of changing skill needs is the rise in wage premia for additional years of schooling, especially those with more general education backgrounds. Between the 1990s and early 2000s, the average difference for one additional year of schooling increased from about 4 percent to about 9 percent (Mitra, 2010). By 2007, the wage premium for general secondary education over primary education was 30 percent compared to 25 percent for those from vocational schools (though this is in itself a significant premium).

(ii) Increasing participation and productivity

52. These challenges are sufficiently large that action will be needed on several fronts. In principle, there are four areas where action is possible. First, through an increase in the labor force participation rate, to bring in currently marginalized populations. Second, by decreasing the rate of retirements and have people work longer, even past normal or current retirement age. A third option is to make greater use of migrant labor; and, fourth, by increasing the productivity of each worker, through increases in human capital.

53. Russian labor force participation rates are already relatively high and the unemployment rate is in line with other countries. The labor force participation rate – the proportion of those people aged 16-64 who are either employed or are looking for work – has, in common with many developed countries, been declining gradually for the past 20 years. However, the current rate of 63 percent in the Russian Federation is slightly above countries of comparable wealth and about the same as the average in OECD countries (World Bank, 2010c). Many OECD countries are looking for ways to increase the labor
force participation rate, especially for older workers, but as yet effective good practice has yet to emerge.

54. The trend in unemployment rates in Russia has also followed that of other transition economies. After very high rates immediately after the start of the transition, the rates have come down significantly. They have halved, from 13.5 percent in 1999 to 6.2 percent in 2008 (World Bank, 2010c). Obviously the rates increased, as the Russian economy felt the effects of the financial crisis, though, according to official figures, by August 2010 they had returned to 6.9 percent.

55. The prospects for decreasing the rate of retirements through improvements in the health status of the working population are uncertain and longer term. As noted elsewhere in this report, government action to improve the health status of Russians is desperately needed, but changing the behavior of individuals with respect to non-communicable diseases is difficult and takes time. Since there is a large number of older workers due to retire between now and 2017, they are very unlikely to improve their health status sufficiently to affect dramatically the rate and ages at which they retire. By 2017, there are expected to be 7 million fewer people of working age.

56. The proportion of immigrants in the population is also relatively high, though stagnating. In the Russian Federation, 8.4 percent of the population was born elsewhere, compared to only 3.3 percent in upper middle income countries. In comparison to OECD countries, where on average 9.8 percent of the population are immigrants, the Russian Federation compares less favorably, especially if one considers that the proportion in Russia has not changed significantly in recent years while the numbers in OECD countries continue to rise (World Bank, 2010c).

57. Educational immigration has become a priority channel of immigration that implies the need of multiple increases in the flow of foreign students and the geographic extensions of applicants markets. Currently, the share of foreign citizens enrolled in higher vocational education in comparison with developed countries is very low (figure 8). Policies to attract students to Russia include developing internationally recognized qualifications, regulations allowing working while studying, an open and simple visa regime, and effective accreditation and quality assurance of institutions. These policies will need to be completed by policies to encourage graduates to stay in Russia.
58. There is therefore an increasing need to improve productivity per worker, given the projected decline in the numbers in the workforce. Different policies will be needed to improve the skills of those entering the labor market and of those already in it.

59. There is some 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 common with many countries in Central and Eastern Europe and Central Asia, the Russian Federation performed above average for middle-income countries in the Trends in International Mathematics and Science Study (TIMSS), both at grade 4 and grade 8 (Mitra, 2010). At the earlier age group, in fact, the Russian Federation was the top performer in the Progress in International Reading Study (PIRLS). The Russian Federation also does a good job of ensuring equitable outcomes. At grade 4 of the TIMSS study, for example, in mathematics the bottom quartile of students in the Russian Federation outperformed the bottom quartile of all European countries, with only East Asian countries performing better on this measure (reference to TIMSS report). The Russian Federation is not quite so impressive at grade 8, where 9 countries perform more equitably and a further 3 have the statistically same performance (though this still places Russia in the top quartile of performers as a total of 50 countries took the assessment) (Mullis, 2008).

60. While these results are impressive, the Russian Federation averages are below the OECD average. Moreover, recent work by the Higher School of Economics in Moscow has argued that the good performance is mainly due to the strength of Russian
students on the curriculum-based elements of the tests; in the areas of the assessments where students have to apply their knowledge to new situations or contexts or where students have to work with original texts, Russian students performed relatively poorly. This is a concern because it is precisely these skills that employers are finding increasingly important. Moreover, it seems that the new centralized university entrance examination which also serves as a school-leaving examination has reinforced the tendencies for teachers to focus more closely on the textbook and exact curriculum requirements (Murthi & Sondergaard, Forthcoming). The required changes in pedagogy will require investment of significant resources in training teachers, as well as revision of the entrance examination.

61. **In secondary education, the gross enrollment rate stood at 84.8 percent in 2008. This is similar to the rate for the past five years.** This stands a little below countries at similar levels of income (where the average is 87.6 percent) but significantly below OECD countries where the average gross enrollment rate is 100 percent. This does not affect the number of young people entering the labor market of course, but it does have a significant impact on the skills that they have when they enter and on the prospects for successful integration into the labor market.

62. **There needs to be a focus on improving the quality and efficiency of intermediate vocational education as it is expected that elementary vocational courses will disappear.** Enrollment in elementary vocational institutions has been falling continuously since 1985, falling 16 percent in the last decade. In contrast, in the past 10 years, the number of students at intermediate vocational educational institutions increased by 30 percent. If, in 1995, the number of graduating qualified blue-collar and white-collar constituted 127 people per 10,000 employed, by 2006 this number dropped to 99.3. Along with the falling number of graduates, employers also note that the existing system of elementary vocational education does not meet the requirements of present-day economy in terms of quality of education. Indeed, the draft of new Federal law "On education" 2010 eliminates elementary vocational education.

63. **In 2006, intermediary vocational institutions had over 2.8 million students, the bulk of whom were full-time.** The number of intermediary vocational institutions has been growing throughout the last ten years. However, the quality of the training provided faces the same problems as in elementary vocational institutions. Students have been treating the intermediary vocational education system mostly as a transitional step on the way to a higher educational institution. In 2006, 25.5 percent of enrolments at higher educational institutions were graduates of intermediary vocational institutions. In the longer run, this is a positive trend since it means that vocational routes in compulsory education provide students with the competencies which given them access to tertiary education – an important trend in other parts of Europe.

---

(iii) Adult learning

64. The biggest area of weakness in Russia, in common with many other countries, is helping those already in the labor market to acquire new skills and knowledge.

65. Evidence on the incidence of training in firms is mixed. Analyses of the share of adults (aged 25 to 64) receiving supplementary education i.e. receiving organized forms of education which are not part of formal educational programs, show that the proportions for the Russian Federation are quite low (figure 9). They are less than half the average for EC-21, and approximately 1/6 or 1/7 of the proportions for Switzerland, Sweden and Denmark. Participation of the adult population in self-learning, i.e. non-formal individual education that is not supported by a diploma or any other document but contributes to knowledge and skills, is also very low in Russia. The difference between the number for Russia and leading European countries is about 2-3-fold, in certain cases even 5-fold. For Russia to be on a par with OECD averages this number would be around 15 million (20-25 percent of employed workforce in the Russian Federation), while reaching the level to qualify as one of the best countries in terms of lifelong learning would require this number to exceed 25 million.

Figure 9: Participation in the learning during the last 12 months for those aged 25-64 (percent)

66. However, there is evidence that the incidence of training in the Russian manufacturing sector, at least, might be relatively high. In 2009, 52 percent of firms said they offered formal training, compared to just below 35 percent for the ECA region as a whole (World Bank, 2010a). This may partly be accounted for by the fact that on average Russian manufacturing companies in the survey were 2.5 times larger in terms of the number of permanent full-time employees, and it is known from multiple other surveys around the world that larger companies tend to offer more training opportunities.

67. Also positive is the fact that Russian organizations and enterprises have invested in training capacity themselves. In an unpublished survey conducted for this Report, about 50 percent of employers consider training in the enterprise as the most effective form of training. Of the 751 firms surveyed, 27.3 percent have a specialized unit for staff training. Among the enterprises employing less than 500 people, this share accounts for only 5 percent; of businesses employing 500-2000 people accounts for nearly 30 percent, and among enterprises employing more than 2000 people 71 percent of companies have their own training centre. This shows that companies are committed to training and that they are prepared to invest their own resources. In addition, the training that companies organize themselves is likely to have a direct link to the skills those companies need.

68. Examples of private, employer based adult education include the first corporate universities in Russia in 1999-2001 in large corporations (Vympelcom, Ingosstrakh, Rostelecom, Severstal, Yukos, and KU etc.). The emerging corporate universities have different organizational and legal forms: i) Sometimes, it is a project within the company (e.g., KU «Wimm-Bill-Dann»); ii) - A separate department (Group «Ilim», RUSAL, SUEK); or iii) Independent legal entities (CG «Nornikel», «Gazprom», «Severstal»). The creation of corporate universities follows three basic patterns. First, the creation of corporate universities on the basis of the existing training center within the company through the integration of the existing training programs upon the unified conceptual basis, the overall physical and information infrastructure. The second model is creating a corporate university «from scratch» by introducing, first of all, high-tech forms of distance learning and developing new training programs for staff (e.g., KU «VimpelCom»). Finally, some companies use outsourcing, i.e. use of external providers and existing educational infrastructure of external training organizations. This is exemplified by the company «Protek», which used possibilities of a regional network of the International Management Institute «Link» as the infrastructure for the creation of its own corporate university.

(iv) Policy options for promoting adult learning

69. Most countries around the world are realizing that adult education and training has historically been neglected by policy makers. A major report from the OECD, Promoting Adult Learning, drew lessons from 17 member countries (Organisation for Economic Cooperation and Development, 2005b). The main findings of the report are: that there are significant inequalities in access to adult learning, with those with tertiary education having participation rates 5-10 times higher than low-skilled employees; younger
workers participate more than older workers; and small and medium-sized companies in general offer less training.

70. **Governments should exercise caution because, while there are market failures, there is no conclusive evidence about their size.** In these circumstances, it is best if governments focus on areas with large leverage potential. In particular, governments should make better use of financial incentives and on policies to increase the participation of low-skilled adults. The focus on the low-skilled is because research shows that an equitable distribution of skills has a strong impact on overall economic performance and the data shows that firms invest less in low-skilled workers.

71. **The first area for government action is creating the structural preconditions for raising the benefits to adult learning.** A large number of countries have introduced or are in the process of introducing national qualification frameworks. These systems recognize learning achievement so as to make learning more transparent to individuals and firms. Recognizing informal learning also reduces the opportunity costs of participation in learning. Certification schemes must, however, be credible and transparent to employers. These systems have many elements, which have to be developed over time. The ongoing work in the Russian Federation on a qualifications framework is noteworthy in this context. However, a recent report from the European Training Foundation found that the impact of national qualification systems was much less than expected (see box 2).

---

**Box 3: From the Executive Summary of ‘Implementation and Impact of NQFs’ by the European Training Foundation**

The research on ‘Implementation and Impact of NQFs’ first reviewed existing research on 5 early starters (Australia, England, New Zealand, Scotland and South Africa) and 11 fresh case studies on other countries (three by ETF and eight by ILO). The country studies reviewed first design and implementation of NQFs and then assessed their use, ownership and impact…

Social dialogue in the implementation of NQFs took place, but the implementation process was very often government-initiated and government-led… [In] many cases, stakeholder involvement was very weak… [and] in all countries researched, concerns and resistance from education and training institutions were considerable…

The impact of NQFs can be seen as improving communication about qualifications systems among stakeholders and improving transparency of individual qualifications through learning outcomes… However, there is evidence of a tendency towards over-specification, very little evidence of reduced mismatches between education and training and the labour market, only little evidence of recognition of prior learning and little evidence of improved access to education and training.

72. High-quality information and guidance helps learners identify their needs and what learning opportunities exist, which ensures a better match between the demands of individuals and the supply of training. Providers also need ways of sharing and exchanging information.

73. Since adult training generates considerable private returns (to companies as well as individuals) the bulk of financing should be provided by the private sector. The international evidence, including from Russia, shows that training improves firm productivity (table 5). However, there is a role for government in promoting well-designed financing arrangements, especially for the low-skilled who are less able to afford the costs (including opportunity costs) of training and for older workers in whom companies are less likely to invest because there are fewer working years over which to yield the benefits of training. Governments may also have a role in financing training in more general skills that benefit the economy as a whole more than an individual firm. The challenge is to find solutions that target those instances when financial constraints are significant barriers to participation in learning and to avoid paying for training that would have taken place in any case (see figure 10). There is some emerging good practice in OECD countries in individual learning accounts and subsidies (vouchers and allowances) to facilitate learning amongst low-skilled adults, especially since these schemes can also facilitate competition amongst private providers of training.

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent increase in value added</th>
</tr>
</thead>
<tbody>
<tr>
<td>China (2001)</td>
<td>32</td>
</tr>
<tr>
<td>Guatemala (1999)</td>
<td>49</td>
</tr>
<tr>
<td>India (2000)</td>
<td>27</td>
</tr>
<tr>
<td>India (2004)</td>
<td>16</td>
</tr>
<tr>
<td>Malaysia (1994)</td>
<td>28</td>
</tr>
<tr>
<td>Mexico (1992)</td>
<td>44</td>
</tr>
<tr>
<td>Morocco (2002)</td>
<td>29</td>
</tr>
<tr>
<td>Nicaragua (2000)</td>
<td>56</td>
</tr>
<tr>
<td>Pakistan (2004)</td>
<td>67</td>
</tr>
<tr>
<td>Russia (2005)</td>
<td>22</td>
</tr>
<tr>
<td>Sri Lanka (2002)</td>
<td>36</td>
</tr>
</tbody>
</table>

Figure 10: Financing constraints to training are greater in transition economies

Source: Murthi & Sondergaard, Forthcoming.

74. **It is important to ensure that the appropriate setting and pedagogy for adult learning.** For many adult learners, lack of time, especially during the working day, is a critical constraint on participation though this is mainly when formal course or those for professional qualifications take place (figure 11). Delivery of learning in the work place – either through apprenticeships and internships for young people or on-the-job training courses for employees – can raise enrollment. Employee associations and trade unions can have a positive role in ensuring employees have access to information, helping shift employers towards more general types of training and creating more equitable participation.

75. **Finally, governments need to set the regulatory framework for competition amongst the providers of training.** The key elements are ensuring that consumers have information about the quality of training and setting quality standards. Governments also need to commission evaluations of what works though the heterogeneity settings for adult education, and the different needs of employers and learners, makes this difficult. Adult learning institutions for policy formulation, whether acting as coordinators, advisory bodies or actual policy-making bodies, have proved a valuable way to bring together the different actors and policy issues.
Figure 11: At what time training of adults occurred in the system of continuous education

Source: Moscow: State University - Higher School of Economics, 2007

V. Concluding Remarks

76. Russia requires coordinated social and economic policies to respond to the demographic challenges over the next 40 years. To provide for a population that will consist of more and more dependents relative to the number of active workers, Russia needs a set of policies that will ensure high economic growth and ensure that the country can finance its social obligations in a sustainable manner. Two policy areas – long-term care and adult learning—have been analyzed in this Technical Note. But these two areas also have important connections. These connections might be positive, for example, reducing the incidence of non-communicable diseases would ensure elderly Russians need care only later in life, while also enabling higher labor force participation rates and productive workers to older ages. Similarly, adult training could improve the quality of long-term care and encourage those out of the labor force to take up health professions. But these connections might reinforce negative trends, for example, if the number of women providing unpaid care at home to elderly relatives increases then this will reduce their labor force participation. These concerns point to the need to balance different policies and to adopt multi-sector approaches.
Bibliography


