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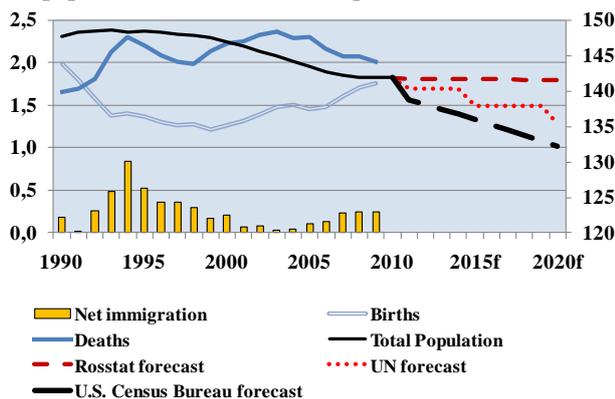
## The challenges of Russia's dwindling population

While Russia possesses the world's ninth-largest population (142 million in January 2010), it has consecutively posted declining population numbers for over 15 years. Moreover, nearly all forecasts point to further declines – especially among people of working age.

### Transition's dismal legacy

Russia's population peaked in 1993 at just under 149 million (Chart 1). Births decreased significantly in the 1990s, and the death rate has overshadowed the birth rate since 1992.

**Chart 1. Russia's population development (million people), total population and forecasts on right axis**



Sources: Rosstat, UN, US Census Bureau.

Heavy consumption of alcohol and tobacco, collapse of the state health care system, increased environmental pollution and dramatic drops in income levels are all partly responsible for Russia's declining population. By 1992, more than a third of Russian population lived below the official minimum subsistence income.

Immigration has partially offset the loss of population. Net immigration peaked immediately after the collapse of the Soviet Union, then slowed significantly thereafter. The figures have edged slightly higher in recent years.

Rosstat figures show that in 2008 the average life expectancy was 62 years for a Russian man and 74 years for a Russian woman. In comparison, the average life expectancy in OECD countries was about ten years higher. Life expectancies in Russia vary by region. The highest average life expectancy in 2008

was 80 years in the Republic of Ingushetia in the Caucasus region. The lowest average life expectancy, 60 years, was found in the Chukotka Autonomous Okrug in the Far East.

Rosstat named cardiovascular disease as the leading cause of death in 2009, estimating that heart disease accounted for 60 % of Russian deaths last year. Alcohol abuse, which exacerbates the effects of cardiovascular disease, as well as alcohol-related death were also common among working-age Russian men (see *BOFIT Weekly 29/2009*). The World Bank reports that in 2006 the adult mortality rate for Russian males was 429 per 1,000.<sup>1</sup> Corresponding rates that same year were e.g. 153 per 1,000 in China and 138 in Finland.

### Further decreases ahead

Rosstat's mid-range scenario projects a decline in Russia's population of just under 400,000 by 2020 (Chart 1). However, after 2020 the population contraction accelerates and by 2030 the population will decline to 139 million.

Among the more severe forecasts, the US Census Bureau, which prepares its own international demographic forecasts, expects Russia's population to shrink by 10 million over the next decade and by a further 8 million by 2030. The UN forecasts that Russia's population will decline by about 7 million by 2020 and by 2030 will be 13 million fewer than today.

Factors underlying Russia's population contraction include low birth rate, high mortality rate and a decreasing number of women of childbearing age. To sustain a stable population in most developed countries, the replacement fertility rate should be about 2.1 children per woman. In the developing world, where child mortality is higher, a slightly higher replacement fertility rate (around 2.33) is needed. Rosstat's mid-range scenario posits a fertility rate over the next twenty years in the range of 1.6 to 1.7. The UN sees the pool of women in the 15–49 cohort contracting from 50 % today to 42 % in 2030.

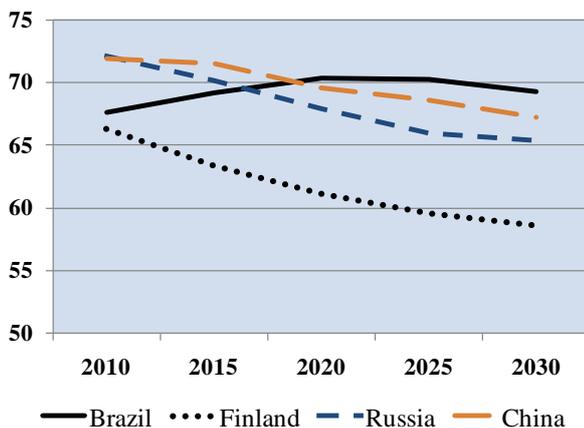
<sup>1</sup> The World Bank defines the adult mortality rate as the likelihood a person will die between the age of 15 and 59. The figure gives the proportion of the population that will die before 60 in light of current mortality rates.

Effects of a contracting population will be somewhat blunted by increases in life expectancy. The UN predicts the life expectancy for the average Russian woman to rise three years by 2030 and five years for men.

### Declining working-age population

Not only is Russia's population getting older, its age structure is also changing. Dependency ratio describes the ratio of the working-age population to total population. In international comparisons the working-age population is typically the 15 to 64-year-old cohort. The UN expects (Chart 2) the proportion of 15 to 64-year-olds in Russia relative to the total population to fall from 72 % this year to 65 % by 2030. If we combine this data with a World Bank projection that Russians will invest on average 14 years of their lives in education, we see there will be further reduction in the share of the working population relative to the population as a whole. If we lift the date of entry into the workforce by five years and decrease the retirement age nearer the actual retirement age in Russia, the proportion of 20 to 59-year-olds decreases from 61 % today to 50 % in 2030.

**Chart 2. Proportion of working age (15–64 cohort) to total population, by country, %**



Source: UN

The UN forecast suggests Russia's working-age population to be only a bit lower than in the other BRIC countries (Brazil, Russia, India and China). In 2030, the proportion of 15 to 64-year-olds will be about four percentage points lower than in Brazil, which has the highest ratio among the BRIC countries. The proportion will rise by 2030 in Brazil and India, but decrease in Russia and China. In any case, Russia still fares rather well compared to many European

countries. For example, the share of 15 to 64-year-olds will dip below 60 % in both Germany and Finland by 2030.

A falling share of working-age population implies an increased burden on the economy. Pension expenditure already puts a heavy strain on Russia's federal budget. Nearly half of the expected 2.4-trillion-ruble (€63 billion) federal budget deficit this year will go to supporting the Pension Fund. Despite the significant increase in pensions over the past year, the average monthly pension payment (in June 2010 about 7,600 rubles or €190) continues to be considerably below the average monthly wage (21,600 rubles or €550) and only slightly above the official minimum subsistence income (5,520 rubles or €140). As such, pressures to increase pensions in the future can hardly be expected to diminish.

### Solutions to population problems

With demographic issues have taken centre stage in the Medvedev administration, quick solutions to population problems are also getting mention; e.g. work-based immigration. Russia's federal immigration agency says the immigration quota for foreign employees will be increased from the present annual 200,000 to 280,000 starting in 2013. In addition, legislative amendments have been made to ease bureaucracy with regard to work-related immigration. These improvements are relatively modest, however, given the scale of the problem.

An increase in the retirement age has also been proposed in acknowledgement of aging population. Russia's official retirement ages (60 for men and 55 for women) are among the lowest in Europe. However, given the diminutive size of Russian pensions, many people do not stop working when they reach retirement age, but continue to work.

Even in the best instances, public measures can only slowly influence population trends. Basically, the cohort that will be ready to enter the working world in 2030 has already been born.

No matter what is done, Russia's dependency ratio is on track to deteriorate, making the gains in labour productivity all the more important. For Russia there is plenty of room for improvement in this sphere. A 2009 study by McKinsey consultants found Russian labour productivity was just 26 % that of the US.

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