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**Population ageing in Russia:
gender dimension**

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Introduction

Population ageing is a triumph and a challenge for development in the 21st century. The population of Russia is rapidly ageing, and with ageing progress the need for thorough analysis of this process increases. Demographic development of Russia is characterized by high mortality difference by sex and significant imbalance between males and females in the age composition.

In the Madrid International Plan of Actions on Ageing it is stated that it is critical to ensure the integration of a gender perspective into all policies, programmes and legislation.

The paper aims at analysing gender differences in ageing development in the Russian Federation since the beginning of the 1990s.

Changes in number and percentage of the elderly (60+) and the number of males per 1000 females in older age groups are considered. Special attention is given to gender gap in life expectancy at older ages. Regional aspect is touched on, and comparisons with developed European countries are made. The situation in regard to population ageing is characterized by both conventional measures and quantitative characteristics that take account of remaining years of life (prospective measures), and measures of both types are considered from the gender perspective.

The paper is based on censuses (including the last 2010 census) and data on vital events given by national statistical bodies, and on data from Human Mortality Database (University of California, Berkeley, USA, and Max Plank Institute for Demographic Research, Germany).

Dynamics of number and proportion of the elderly

Fig. 1, 2 show the number and proportion of males and females aged 60 years or over (60+) in the Russian Federation in 1990 – 2010. In Russia the number of females outnumbers that of males both in the total population and the population aged 60+. Thus in 2010 the number of females aged 60+ was 16.6 million and that of males was almost twice smaller - 8.5 million. In 1990 the number of females 60+ was 118% greater than that of males 60+ while in 2010 it was greater by 95% (relative to male population aged 60+). The same is true for proportions of the elderly (**Prop. 60+**) - the proportion of the elderly for the male population has been much lower than that for the female population. Thus, in 2010 Prop.60+ for males was 13.0% while for females it was 68% higher, i.e. 21.8%.

Fig. 3 demonstrates the number of males per 1000 females in the whole population and in the population 60+ in Russia in 1990 – 2010, revealing a significant gender imbalance. The number of males per 1000 females is computed for all age groups of the elderly, i.e. 60 – 64, 65 – 69, 70 – 74, 75 – 79, 80 – 84 and 85+ years old. For all age groups of the elderly, over the period 1990 – 2010 the number of males per 1000 females has increased (e.g. for the age group 60 – 64, from 673 in 1990 to 697 in 2010; for the population 85+, from 195 in 1990 to 234 in 2010).

The number of males per 1000 females in Russia is compared with that for selected European countries, representing different European regions, i.e. Western Europe, Eastern Europe, Southern Europe and Northern Europe. It is found that the gender differences are more marked in Russia. Thus, in 2010 the number of males per 1000 females for the population 60+ was 515 for Russia, 772 for France, 780 for Spain, 857 for Sweden and 668 for Poland.

As an integral characteristic of population age structure average age may be used. Its increase reflects population ageing. It is shown that average age for female population has been higher than for male population.

Gender gap in life expectancy

Gender differences in life expectancy at birth and at older ages in Russia expressed as the ratio LE_{fem}/LE_{mal} age given on Table 1 and Fig. 4.

Table 1. Gender differences in life expectancy at birth and at older ages, Russia, 2009

LE at the age	LE males	LE females	LE difference, years (LE females - LE males)	LE difference, % (LE females - LE males)/ LE males
60	14.4	20.1	5.7	40.0
65	12.0	16.4	4.4	36.9
70	9.6	12.8	3.2	32.6
75	7.7	9.6	1.9	24.6
80	6.2	7.0	0.8	13.5

Since 2005 some increase in LE at birth and at older ages both for males and for females has been observed, besides, for males this increase has been more rapid than for females.

It is remarkable that gender gap in LE is decreasing with age (see Table 1 and Fig.4). Thus, LE60 for females was 40% higher than that for males, while LE 80 was only 13.5% higher.

Gender differences in life expectancy at birth and at older ages in Russia have been greatest in Europe.

Prospective ageing measures

Conventional ageing indicators (like the considered proportion of the elderly) are based on chronological age and in many instances consider people as being old when they reach age 60 (or 65). As stated in [3 - 6], with advances in health and life expectancy,... the meaning of the number of years lived has changed. The authors suggested new ageing measures that take account of remaining life expectancies (RLE), so called prospective measures.

When analyzing gender gap, we consider two prospective measures - **Prop. RLE 15** – proportion of persons in age groups with RLE = 15 years or less, and **PARYL** - population average remaining years of life. It should be mentioned that **Prop. RLE 15** corresponds to traditional **Prop. 60 +** and **PARYL** – to average age. A major point in studying prospective measures is the age for which RLE = 15 (**age: RLE = 15**). Thus differences in **age: RLE = 15** for males and females have been analyzed. Prospective measures **Prop. RLE 15** and **PARYL** are computed for male and female populations of Russia, and their differences are studied too.

Extended description of results is going to be given in the full paper

Conclusions

It is shown that ageing process in Russia is characterized by significant imbalance between males and females in population age structure (the number of females at older age groups is higher than the number of males; the proportion of population 60+ for females is higher than that for males). Male life expectancies are lower than female ones, leading to high prevalence of widowhood, the latter increasing with age.

Gender imbalance has multiple consequences. Thus, in general women have lower pensions than men (at present their pensions are approximately 90-94 % of those for men) because they usually occupy lower positions (and thus have lower wages) and have shorter working periods than men have (due to the maternity leave). It is acknowledged that elderly women more often become victims of cruel treatment in families.

Old women more often than men face the problem of loneliness, especially in rural areas. In turn, old men have serious problem as well. Lonely men have lower abilities to take care of themselves than women have, they require more help than women. Thus, men die at hospitals more often than women.

Gender imbalance in Russia has been more marked than in developed European countries.

Population ageing is developing. This process will certainly be the source of many challenges in the coming decades. Measures to adapt economy and social infrastructure of Russia to the ageing society should be elaborated. Without taking account of gender differences, they are doomed to be ineffective.

Main references

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Fig.1. Number of males and females aged 60+, Russia, 1990 - 2010

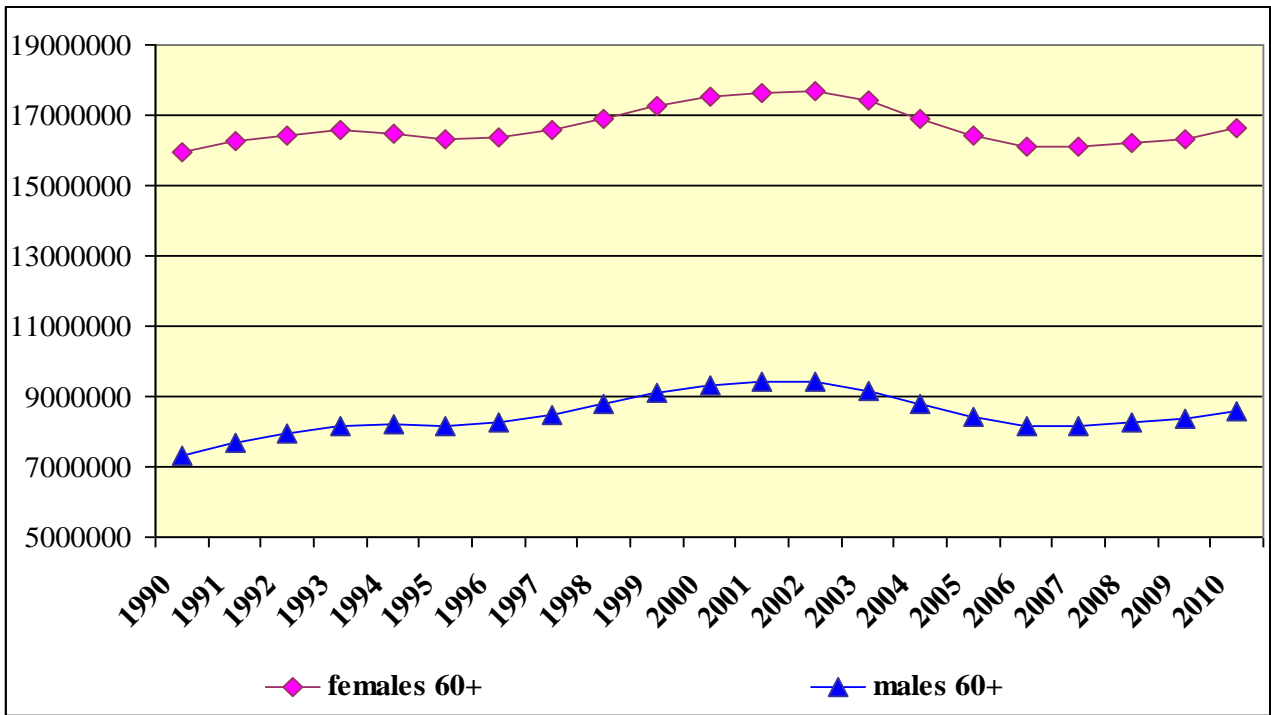


Fig. 2. Proportion of population aged 60+ for male and female populations, Russia (%),1959 2010

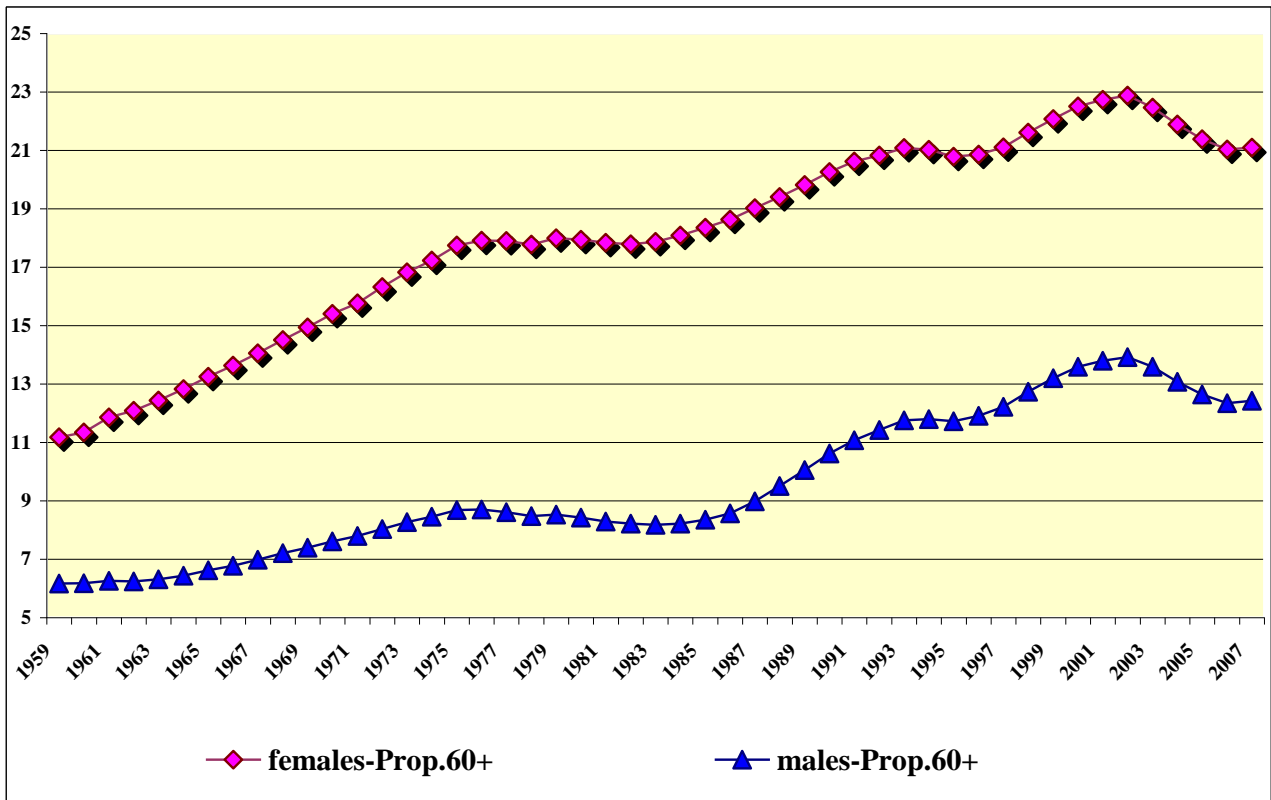


Fig.3. Number of males per 1000 females in the whole population and in the population 60+, Russia, 1990 – 2010

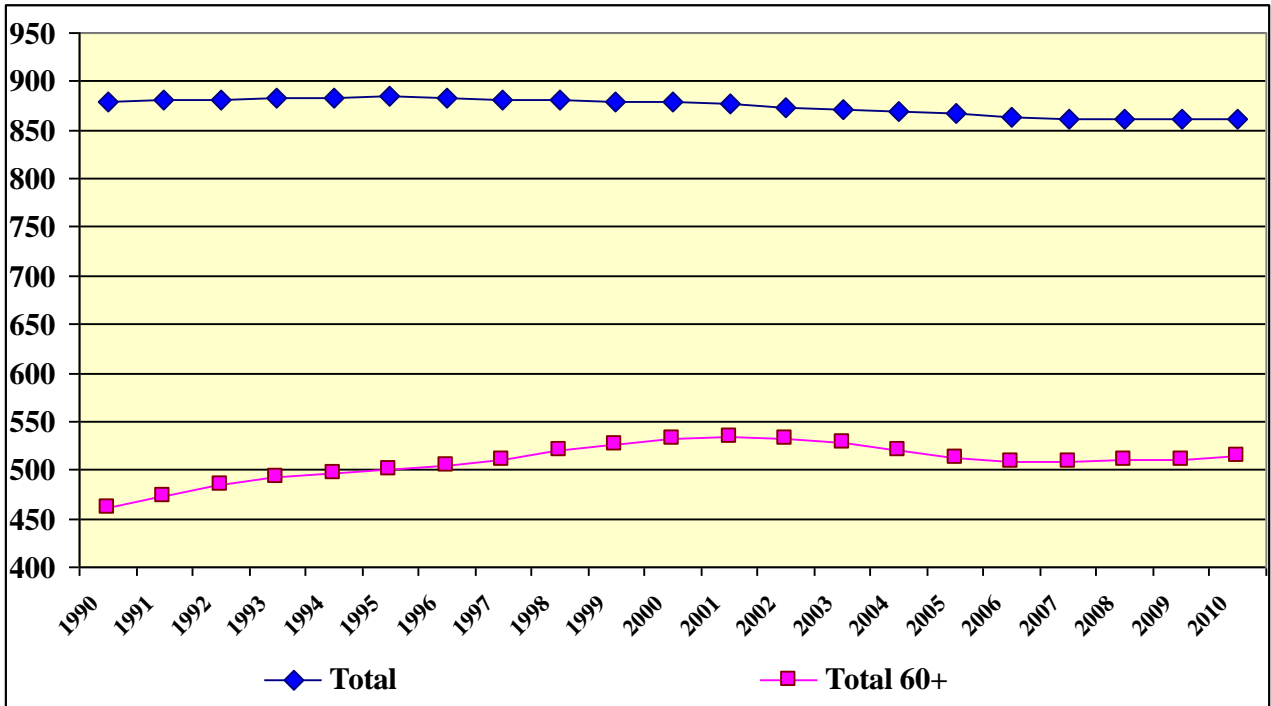


Fig.4. Gender differences in life expectancy at birth and at older ages in Russia (LE_{fem}/LE_{mal})

