Salavat Abylkalikov

Arts Design and Social Sciences, Northumbria University

salavat.abylkalikov@northumbria.ac.uk

Does the 2020 Population Census Conceal Russia's Demographic Challenges?

Researchers had high hopes for the most recent all-Russian population census when studying various socio-demographic processes, especially focusing on changes in the age and sex composition of the country's population over the last inter-census period. However, during the 2020 (2021) census, it became evident that in certain regions, the census was conducted with severe violations and falsifications, significantly compromising the quality of the statistics. A survey by the Levada Center revealed that approximately 42% of Russians did not participate in the census or were not counted by their family members, in stark contrast to previous post-Soviet censuses, where this figure was only 6-7%.

The notably poor quality of the latest census in Russia will have a significant impact. It will hinder our ability to assess the effects of the coronavirus pandemic and the Putin's criminal war against Ukraine on mortality, distort the relative birth rates, render migration statistics highly unreliable, and obscure impending challenges associated with a substantial shift in the age structure of Russia's population over the next decade.

Drawing from data from the Russian population census, contemporary records of demographic events, and estimates of the age and sex structure of the Russian population, along with various demographic forecasts provided by Rosstat and the UN, I propose to evaluate the extent to which the 2020 census has introduced distortions and adjustments in our understanding of the age-sex structure and demographic indicators. In the preparation of the report, I plan to use demographic analysis methods, the demographic balance approach, and demographic forecasting using the cohort-component method.

Researchers had high hopes for the most recent All-Russian Population Census (Census-2020) when studying various socio-demographic processes. This included assessing changes in the age and sex composition of the country's population over the last intercensal period. However, during the 2020 (2021) census, it became evident that in certain regions, the census was conducted with significant violations and falsifications[1]. This, in turn, had a detrimental impact on the accuracy of the statistics. A survey conducted by the Levada Center revealed that approximately 42 percent of Russians either did not participate in the census or were not included in the count by their family members. This figure is significantly higher compared to the 6-7 percent reported in previous post-Soviet censuses[2].

The composition of Russia's population in terms of age and sex has evolved under the influence of two main factors: natural changes associated with demographic shifts and the disruptive effects resulting from social and economic upheavals in the country's history. In the

[1] Demographer Salavat Abylkalikov: When Census Organizers Are Involved in Evasion of the Census, It's a Nightmare URL: https://poisknews.ru/demografiya/demograf-kogda-v-uklonenii-ot-perepis/

[2] Participation of Russians in the census URL: https://www.levada.ru/2021/12/21/uchastie-rossiyan-v-perepisi/

absence of these disruptive factors, the population's age pyramid would have gradually changed to reflect the aging of the population. However, Russia's age-sex pyramid has been distorted with uneven edges and an imbalance between the male and female sections due to various disruptions in the country's history. Thus, having an accurate understanding of the characteristics and ongoing changes in the age structure of the Russian population is of utmost importance.

Population statistics in Russia relies on censuses. This means that information about the country's residents, its regions, cities, and municipalities is based on census data or subsequent calculations derived from it, which also include assessments of the age composition. Consequently, many aspects of public administration in the social sphere, including decision-making in areas such as demography, pensions, budget allocation, the construction of social facilities, and infrastructure development, as well as the determination of healthcare and education capacity for the next decade, hinge on the accuracy of these statistics, which is currently in question.

In recent years, the demographic crisis has posed a significant challenge to Russian society and its government. Factors such as the pandemic, Putin's criminal war against Ukraine, and emigration, particularly among the younger population, have further worsened the situation. From 1992 to 2019, covering the period from the dissolution of the USSR to the onset of the pandemic, natural population decline amounted to 13.8 million people, while net migration contributed 9.6 million people. Consequently, international migration compensated for 70% of Russia's natural decline. Migration's role in population dynamics and demographic development, especially over the next decade, is expected to be crucial, given that migrants tend to be of working age, including the younger segment. According to pre-pandemic forecasts from Rosstat for 2019[3] and the UN's projections for 2022[4], significant shifts in the age composition are anticipated. For instance, Rosstat's estimates indicate that between January 1, 2020, and January 1, 2030, Russia's population is projected to decrease by approximately 2.47 million people, from 146.75 million to 144.27 million. Simultaneously, there will be notable changes in the age distribution, with the 65+ age group expected to increase by 5.84 million people, while the number of young individuals aged 20-35 is predicted to decline by 6.54 million.

Young individuals constitute a crucial demographic group with a significant role in driving economic development. They bring fresh knowledge and innovative ideas, often as recent graduates from universities. Young people typically have fewer family responsibilities, making them more adaptable and willing to take risks. In case of business setbacks, they can often rely on parental support.

Since 2014, following the imposition of sanctions against Russia, authorities have engaged in numerous discussions regarding the necessity of import substitution, the advancement of

[3] Demographic forecast until 2035. Rosstat. URL: https://rosstat.gov.ru/folder/12781
[4] The 2022 Revision of World Population Prospects URL: https://population.un.org/wpp/

cutting-edge technologies, and the formation of a new technological economy. However, even under relatively lenient sanctions until February 2024, progress remained modest. Considering that the number of prospective young workers in certain age groups is expected to decrease by approximately a third or more over the next decade, and with the current, considerably more stringent sanctions, the situation has become considerably challenging. Moreover, the invasion to Ukraine has exacerbated Russia's problems by driving emigration among the most dynamic and sought-after potential innovators.

Figure 1 illustrates two demographic pyramids: one is based on the population census conducted from October 15 to November 14, 2021 (with data collection timed to 00:00 on October 1, 2021), and the other corresponds to the closest date of publication of the latest Rosstat estimates, which is January 1, 2022. There are noticeable disparities in the two assessments of the age and sex composition. Notably, the undercount in some age groups in the Census-2020 exceeds 5%. For instance, at the age of 1 year, it's 9.1%, and at the age of 0 years, it's as high as 12.9% compared to the current data. Conversely, there is an overcount in the 18-26 age group, reaching 13-14% at the age of 21-22. Substantial differences also exist in older age groups, particularly among those aged 90 and above. Census age-strucure estimates indicate a pronounced age clustering ("needles") for individuals born in years ending in 0, further suggesting the data's poor quality.

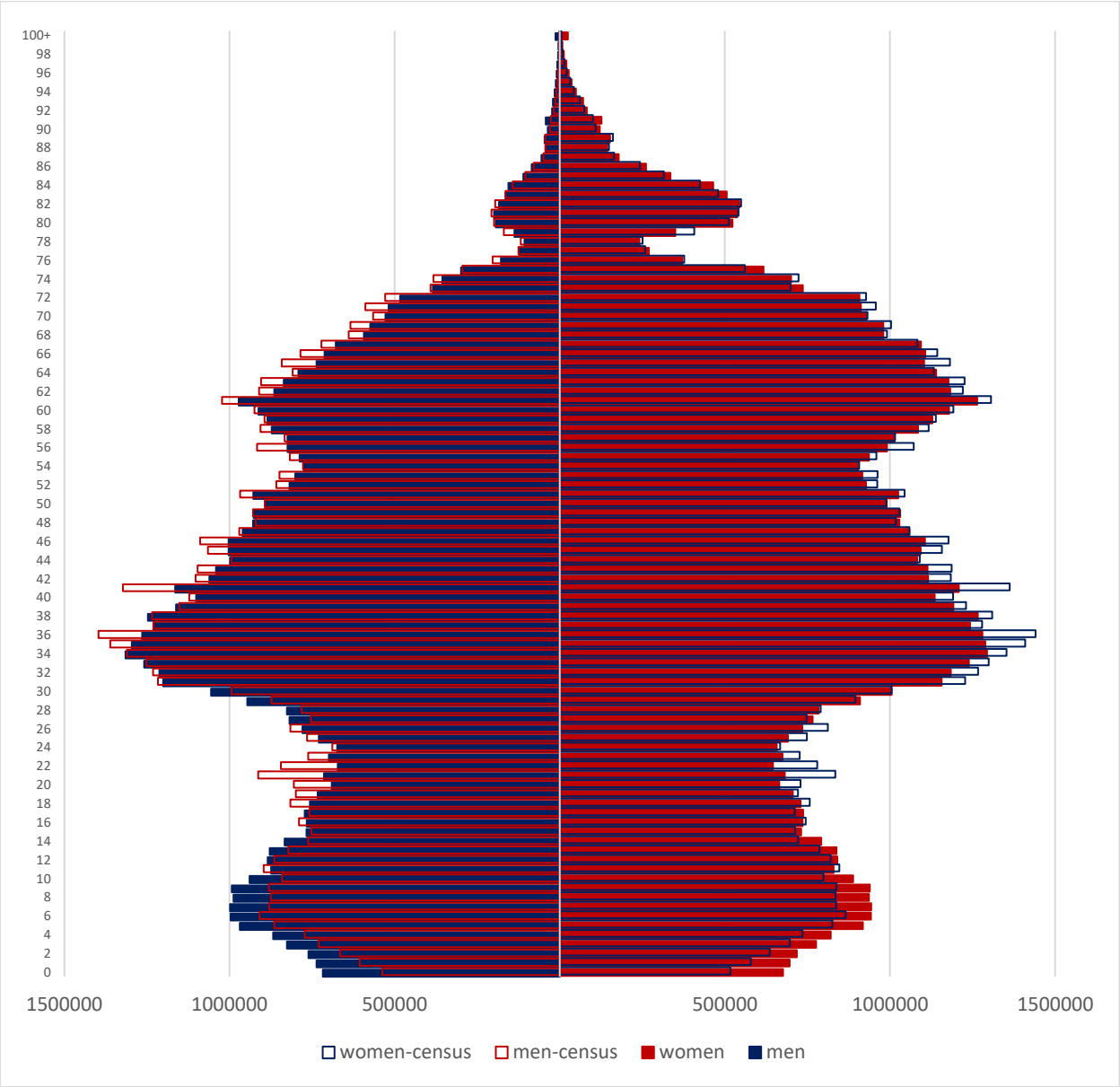

Figure 1: Age and sex distribution of the Russian population according to current data and CENSUS-2020

Compiled by the author using EMISS[5] and Census-2020 data[6]

The primary distinction between the current census and census data lies in the assessment of population migration. While the natural population change (births and deaths) is fully taken into account, migration statistics only consider those individuals who are legally registered, either at their place of residence or at a location where they have stayed for a period of 9 months or more. Census data, based on the registration of the resident population, should also encompass the portion of migration that genuinely occurred but remained undocumented.

[5] Unified Interdepartmental Information and Statistical System (EMISS) URL: https://www.fedstat.ru/
[6] All-Russian Population Census 2020 URL: https://rosstat.gov.ru/vpn_popul

The published table from Census-2020, titled "Population by Place of Birth and Place of Residence in the Russian Federation by Federal Subjects," lacks data on the lifetime migration, namely, place of birth, for out of the 147,182,123 enumerated residents of the country. This omission constitutes approximately 16.1% of the total population. To put this into context, in the 2010 census, this figure stood at 3.2%, and in the 2002 census, it was merely 1.1%.

Evident visual disparities in age distributions, substantial inconsistencies with current population registration estimates, and a significant number of missing data points, including non-responses to "migration" inquiries, involving tens of millions of individuals, all point to the subpar quality of this statistical information. The notably poor quality of the most recent Russian population census significantly hampers our ability to assess the impact of the coronavirus pandemic and the conflict in Ukraine on mortality rates, distorts the accuracy of birth rate calculations, renders migration statistics unreliable, and conceals impending challenges linked to a substantial alteration in the age composition of the Russian population over the next decade.

Drawing upon data from the Russian population census, current demographic records, and assessments of the age and sex makeup of the Russian populace, as well as various scenarios presented by Rosstat and the UN, I aim to gauge the extent to which the 2020 census has influenced distortions and adjustments in our understanding of the demographic structure and associated indicators. In the course of preparing this report, I intend to employ demographic analysis methods, the demographic balance approach, and demographic forecasting utilizing the cohort-component method.