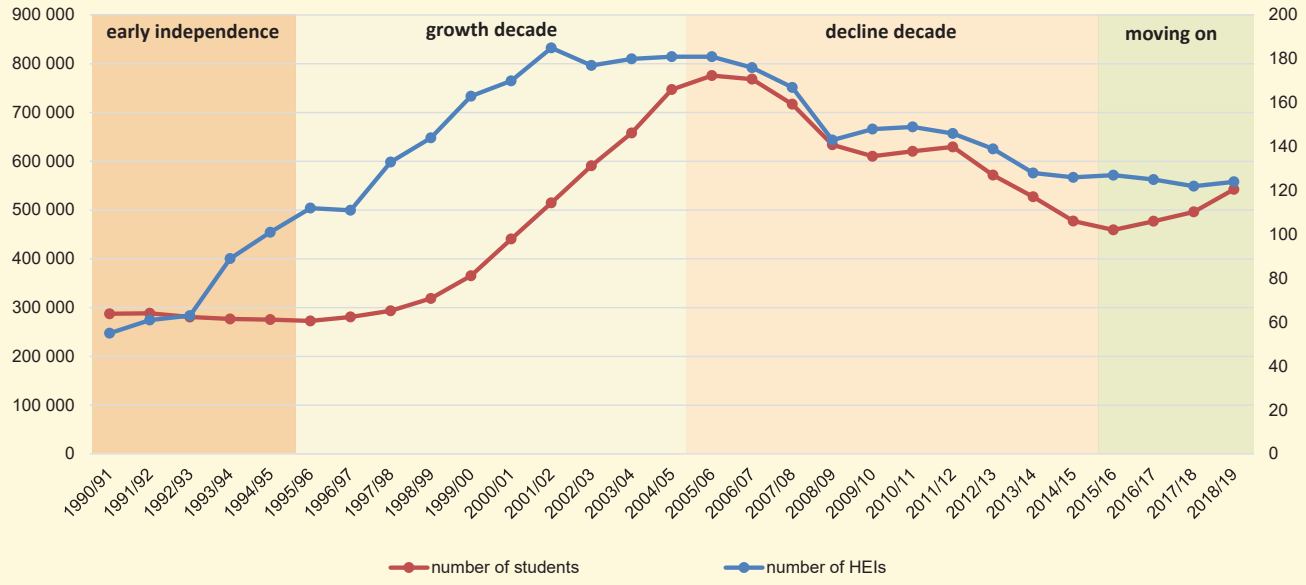
Dynamics since independence: student enrollment and number of institutions



Moving forward (2016-2026)

Currently, there are 125 HEIs in Kazakhstan, 41 of them are public and 84are private, together enrolling 604,345 students (an 11.4% increase from last year). About 30% of students receive a full government scholarship. The numbers of scholarships are growing, including special need-based grants, while other conditions for students are improving (e.g., a 20% increase in student stipend across the board since January 1, 2020).

We can expect the growth in enrollment rates in the near and medium term. Birth rates are comparatively high (the average birth rate coefficient for 17 year-olds who will enter universities this year and for the next ten years is 20.8. This, along with the fact that the country's population is quite young (the average age is 31.7), suggests a steady influx of students to Kazakh universities.

However, there are also considerable challenges ahead. While the favourable demographics show a steady increase of the college-aged population, education attainment needs to increase considerably for the country to be competitive and realize its goals of becoming one of the thirty most developed nations in the world. Kazakhstan is far from this goal, according to the Global Comptetitiveness Index 2018, Kazakhstan is 61st in college attendance rates since only 46% of the college age population (18-22 year olds) enrolled in HE.

Another growing concern is youth emigration and the brain drain. In the first half of 2019, more than 20,000 citizens emigrated from Kazakhstan; most of these departed to Russia. The negative saldo has increased since 2011. Immigration to Russia among high school graduates and youth is not a new phenomenon. Russian universities have traditionally challenged Kazakh institutions in regions that share a border with Russia offering earlier admissions, free education, and a way to avoid Kazakhstan's national college entrance examination, the Unified National Test which is similar to Russian Unified State Exam.

To conclude, Kazakhstan has the potential to benefit from its favourable demographic situation, which will likely result in increased HE enrollment in the next decade. However, growing youth mobility and internationalization, coupled with increased educational opportunities in neighboring countries to the East and North, will challenge the ability of Kazakh universities and society to attract and retain local talent.

Demographic Trends and the Accessibility of Higher Education in Russia

Niyaz Gabdrakhmanov

Research Fellow: Institute of Education, Laboratory for University Development, HSE University (Moscow, Russia)

ngabdrahmanov@hse.ru

Oleg Leshukov

Deputy Head: Institute of Education, Laboratory for University Development, HSE University (Moscow, Russia)

oleshukov@hse.ru

Fertility, mortality and migration are constantly changing the population dynamics in Russia. Various historical events (economic crises, the collapse of the USSR, etc.) had a huge impact on the age and sex pyramid of the population. The consequences of the demographic crisis also influenced the number of potential university enrollments. An analysis of demographic trends in the Russian higher education (HE) system made it possible to identify several patterns.

1) Overcoming demographic falls will lead to a sharp increase in the number of applicants

An increase in the cohort of young people will lead to an increase in the number of students. The dynamics of Russian population aged from 17 to 21 shows that, after 2019, the Russian HE system will be subject to an increase in the number of applicants. This is caused by overcoming the demographic fall of the 1990s. From this point of view, 2019 is a turning point in terms of the number of potential enrolments in Russian universities. By 2024, the size of the 17-21 age cohort is expected to increase by 15% and by 45% by 2034. It is expected that such dynamics will have an impact on the demand for HE and will increase competition among applicants. This causes particular concern as the number of universities has decreased significantly in recent years.

2) The unified state exam strengthened the educational migration of youth

The demographic situation is dynamic, but it usually develops gradually, however, demographic trends can be less predictable if caused by external factors – political action or technological development [1]. In particular, the introduction of the unified state exam (USE) in 2009 increased the horizontal mobility of youth [2]. As evidenced by official statistics and the results of opinion polls, in this regard, USE can be considered a mechanism for realizing the desires of young people to leave home at an earlier age. In particular, this is confirmed by the data of the Federal State Statistics Service, which show that changes in the place of residence started being made much earlier. While in the past, they were made at 20-24 years, now they are made at 15–19 years. Educational migration has led to the fact that the majority of Russian regions (75%) experienced an outflow of young people. As a result, most of the students are concentrated in the regions most attractive for studying and living – the Central Federal District, Moscow and St. Petersburg [3].

3) Growth in the number of applicants and increasing migration enhance territorial heterogeneity in the accessibility of higher education in the Russian regions

According to the Federal State Statistics Service (Rosstat), education remains one of the leading reasons for changing place of residence. All demographic processes, despite their apparent independence, are ultimately socially predetermined, and their intensity is caused by socio-economic conditions. Young people consider life and education in the capital or large cities to be the best and associate these with greater career opportunities [4]. This situation would not cause serious concern if it were not exacerbated by the fact that young people do not return to their native regions and settlements. As a result, only a third of Russian regions are characterized by growth in the number of youth. According to our studies, this trend will only intensify, since the predicted values of the age cohort of potential university entrants will differ in Russian regions. It is associated with the attractiveness of regional HE and with demand for applicants. The most attractive regions [5] (we estimate that there are 8 regions) will face an intensive influx of young people who will create competition with local school graduates; the infrastructure issue will become even more acute. On the other hand, an overwhelming majority of regions will be less attractive. They increasingly face the loss of human capital; therefore they will have to pursue an active policy to retain or attract youth.

4) The current policy of admission quotas forces unequal access to education for various age groups

The current policy of ensuring state guarantees in HE is aimed at the age group of 17-30 year-olds and provides for the allocation of funds from the federal budget for the education of 800 people per 10,000. The14 age groups that fall within the cohort of 17-30 years are demographically very heterogeneous.

Three Rosstat options for forecasting the population [6] indicate a reduction in the size of the 17-30 age group. Consequently, the realization of state guarantees related to this age group will lead to a reduction by 13% of state-funded places in universities in the next five years, that is, about 242,00 people will lose the opportunity to study free of charge. In the next five years there will be higher competition for admission to university, since most applicants are young people aged 17-21 years (the approximate average age of students admitted in 2017 is 18 years). This age group, on the contrary, will increase in absolute numbers, which may lead to a decrease in the availability of state-funded places in universities. 2019 was a turning point in terms of the number of potential applicants for Russian universities. At the end of the peak, the number of applicants will increase the demand of HE. Without an increase in admission quotes, the proportion of school graduates entering universities will decrease, posing risks of educational inequality and social tension.

The problem is even more acute in the regions [7]. In a number of cities and regions, this growth will be offset by the low demand for regional HE systems, and in the most attractive territories it will be aggravated by an influx of applicants from other regions. This could lead to differentiated access to HE for school graduates in "home" regions and to mounting pressure on HE systems in the capitals, in which the opportunities of graduates of local schools to study at universities will be reduced even further.

We see that education policy must take into account the demographic trends and migration intentions of youth

in such a large and heterogeneous country as the Russian Federation. We can assume that number of students aged from 17 to 21 will increase whereas the intensification of educational migration will increase the pressure on social infrastructure. The HE system can be considered one of the key elements of the government's demographic policy, including overcoming the centripetal migration of youth.

References and notes:

[1] Le Bras, H. (2008). Are long-term demographic forecasts possible? Turning points and trends in Higher education up to 2030. Vol. 1: Demography. Paris: OECD Publishing.

[2] Francesconi, M, Slonimczyk, F. and Yurko A. (2019). Democratizing access to higher education in Russia: The consequences of the unified state exam reform. European Economic Review, 117(C), 56–82.

[3] Gabdrakhmanov N.K. (2019). The concentration of students in higher education on the map of the Russian Federation. Bulletin of the Peoples' Friendship University of Russia. Series: Economics, 27(1), 7–17.

[4] Mkrtchyan N.V. and Florinskaya Yu.F. (2019). Residents of small and medium-sized cities of Russia: labor migration as an alternative to non-returnable departure. Journal of the New Economic Association, 3(43), 78–94.

[5] Gabdrakhmanov N.K., Nikiforova N.Yu., & Leshukov O.V. "From the Volga to the Yenisei...": educational migration of Russian youth. Modern Education Analytics, 5(26), 4–42.

[6] Demographic forecast until 2035. Official statistics of the Federal Service for Statistics. Retrieved from http: // www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/demography/#

[7] Gabdrakhmanov N.K., Leshukov O.V. and Platonova D.P. (2019). Provision of regional higher education systems with state-funded places taking into account demographic trends. University Management: Practice and Analysis, 23(4), 32–45.

Universities in the face of demographic changes: the case of National Research Tomsk State University

Olga Kalachikova

Associate Professor: Department of Economics and Management, Tomsk State University (Tomsk, Russia)
olga_kalach@mail.ru

Elena Drugova

Head: Head of Institute of Advanced Learning Technologies, Tomsk State University (Tomsk, Russia)
e.a.drugova@gmail.com

The connection between education and demographics is deep and diverse. This article investigates the case of Tomsk State University (TSU) given the demographic changes in Russia and especially in Western Siberian. The influence of demographic factors on the priorities of educational policy, the activities of teachers, university positioning, and strategic enrollments are also monitored.

Tomsk State University in a context of demographic situation: a historical perspective

National Research Tomsk State University (TSU) was founded in 1880, during the development of Western Siberia and as a result of increased migration. TSU was at the center of the industrial development of the region. The growth of Siberian cities and the exploration and development of natural resources were the main drivers of the University's research, development and teaching. TSU became the foundation for the creation of scientific and educational centers throughout the region, including universities in Barnaul, Gorno-Altaisk, Omsk, Tyumen, as well as other higher educational institutions in Tomsk (TPU, SibGMU, TUSUR). The development of the university in the initial period coincided with the second demographic transition, societal and population development, a characteristic increase in urbanization, changes in life expectancy, and types of labor activity. These contributed to the growth of the educational needs of the population. The demographic transformation in the region included social and economic factors: revolution, war and large-scale economic projects for the development of Siberia in the Soviet period. By the beginning of the 1990s, the region was completely industrial with a substantial decrease in the birth rate. The demographic situation in the region was influenced by factors typical for the entire country: socio-economic crisis, the collapse of the USSR, and a large-scale reduction in the economy. Russian historical demography terms this period "the demographic pit".

Current substantial demographic factors for TSU

A number of factors influence the demographics of the university at the beginning of the 21st century. Firstly, migration, which began at the end of the 20th century, is intensifying. Migration flows are increasing in the direction south-north, east-west. The region is actively replenished with migrants from the territories of the former Soviet republics and regions of the Far East, while migration from Western Siberia to the central regions of Russia and abroad is also intensifying. The university is a participant in the migration process, which leads to an increase in the cost of human capital: migrants actively use the capabilities of a strong scientific and educational center.