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DEMOGRAPHIC AND MIGRATION PROCESSES OF LARGE CITIES OF KAZAKHSTAN: MAIN TRENDS AND DYNAMIC

Natural and migration movement of the population are indicators of all social, economic, geopolitical and other changes occurring in society. In the last decades, one of the tendencies of the development of population in the Republic of Kazakhstan has been the rapid growth of large urban agglomerations of the country due to concentration of a substantial number of the population in them. The spatial concentration of a large population provides both a number of advantages and also has negative challenges and threats. This article provides a comparative analysis of the development of demographic processes in Kazakhstan's three large cities (Astana, Almaty and Shymkent) for the period from 2000 to 2022. An assessment of the migration processes occurring in three cities was carried out, trends in external and internal migration of cities and the reasons behind them were identified. Understanding the essence of demographic and migration processes allows us to evaluate and predict economic trends and trends in the development of social infrastructure of regions. Analysis of the population structure is an important condition for developing the fundamental directions of the country's socio-economic and demographic policy. The analysis was based on the statistical data from the Bureau of National Statistics of the Republic of Kazakhstan.

Key words: demographic processes, fertility, mortality, population migration, large cities of Kazakhstan.

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Қазақстанның ірі қалаларының демографиялық және көші-қон үдерістері: негізгі тренденциялар мен динамика

Халықтың табиғи және миграциялық қозғалыстары, қоғамда болып жатқан барлық әлеуметтік, экономикалық, геосаяси және басқа да өзгерістерді айқындайды. Соңғы онжылдықтарда Қазақстан Республикасындағы халықтың даму үдерістерінің бірі қала агломерациялардың қарқынды өсуі және халықтың көп бөлігінің соларда шоғырлануы болды. Көп мөлшерде халықтың кеңістікте шоғырлануы бірқатар артықшылықтарды қамтамасыз етеді, сонымен қатар теріс қиындықтар мен қауіптерге әкеліп соғады. Бұл мақалада Қазақстанның үш ірі қаласында (Астана, Алматы және Шымкент) 2000-2022 жылдар аралығындағы демографиялық үдерістердің дамуының салыстырмалы талдауы берілген. Үш қалада болып жатқан миграциялық үдерістеріне баға беріліп, қалалардың сыртқы және ішкі көші-қон үрдістері және олардың туындау себептері анықталды. Демографиялық және көші-қон үдерістерінің мәнін түсіну аймақтардағы әлеуметтік инфрақұрылымды дамытудың экономикалық үрдістері мен бағыттарын болжауға және бағалауға мүмкіндік береді. Халық құрылымын талдау елдің әлеуметтік-экономикалық және демографиялық саясатының іргелі бағыттарын әзірлеудің маңызды шарты болып табылады. Зерттеу Қазақстан Республикасы Ұлттық статистика бюросының статистикалық мәліметтерін талдау негізінде жүргізілді.

Түйін сөздер: демографиялық үдеріс, туу, өлім, халықтың көші-қоны, Қазақстанның ірі қалалары.

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Демографические и миграционные процессы крупных городов Казахстана: основные тренды и динамика

Естественное и миграционное движение населения являются индикаторами всех геополитических, социально-экономических, экологических и других изменений происходящих в обществе. Одной из тенденций развития населения Республики Казахстан в последние десятилетия стал ускоренный рост городских агломераций республики за счет концентрации большого количества населения в них. Пространственная концентрация большого количества населения обеспечивает как ряд преимуществ, так и имеет негативные вызовы и угрозы. В данной статье проводится сравнительный анализ развития демографических процессов трех крупных городов Казахстана (Астана, Алматы и Шымкент) за период с 2000 по 2022 гг. Проведена оценка миграционных процессов, происходящих в трех городах, выявлены тенденции внешней и внутренней миграции городов и причины их обуславливающих. Понимание сущности демографических и миграционных процессов позволяет спрогнозировать и оценить экономические тенденции и тенденции развития социальной инфраструктуры регионов. Анализ структуры населения является важным условием для разработки основополагающих направлений социально-экономической и демографической политики страны. Работа была проведена на основе анализа статистических данных Бюро национальной статистики Республики Казахстан.

Ключевые слова: демографические процессы, рождаемость, смертность, миграция населения, крупные города Казахстана.

Introduction

One of the main characteristic features of Kazakhstan's population is its growing unevenness of its distribution across the territory of the republic. Nowadays we can already talk about the formation of certain trends, the designation of the place and role of the regions in the general direction of the country's demographic development.

Increasing demographic imbalances, increasing intensity of migration processes and regional characteristics of migration form a complex picture of the socio-economic situation of the regions of Kazakhstan. This creates the need to research parameters and directions of the development of demographic and migration processes, as well as the factors motivating the population's adoption of corresponding decisions (Aubakirova Zh.S. et al., 2022).

An important demographic phenomenon in recent years is urbanization. According to the latest statistics, as of June 1, 2024, the urban population was 12552.6 thousand people (62.3%), the rural population was 7587.3 thousand people (37.6%). In the last 25 years the urban population has increased by 33% or 4,175.8 million people, and the rural population only by 13% or 1 million people. The increase of urban population caused changes in gender-age structure of population, structure of labor force and employment, and, consequently, demographic behaviour. Thus, a process of urbanization influenced all aspects of the social, ethnical, geopolitical and

socio-economical life of the country (Makhanov K., 2020).

The three Kazakh agglomerations of the republic: Astana, Almaty and Shymkent represent a separate urbanized model of demographic development. An analysis of the demographic growth of these cities revealed that they account for more than half of the urban population growth over the past decade. Compared to 1991, it can be noted that they account for almost 80% of the country's total population growth over the past 30 years of Kazakhstan's independence (<https://stat.gov.kz/>).

Currently, the total population of million-plus cities of Kazakhstan is approaching 5 million people. Over the past decade, this number has increased by 50%, adding 1.29 million people, and since 2000 it has more than doubled, reaching 4.91 million by 2024. The accelerated demographic expansion of these urban centers can be attributed primarily to internal migration of the population from other rural and urban areas (these cities are, in fact, the sole regions in the Republic of Kazakhstan exhibiting a positive migration balance), rather than solely to natural growth, given that the natural rates of demographic growth are typically considerably lower in large cities.

All these factors lead to a large regional imbalance and increasing disproportions in the structure of the distribution of the country's population. Despite the annual increase in the population in the country, the uneven distribution of the population

across the territory of the Republic of Kazakhstan, coupled with the low population density throughout the territory of the country, is one of the geopolitical challenges of Kazakhstan.

Materials and methods

Studying population has deep roots and is connected to realization of the importance of the demographic factors in the development of the society. Staging and real content of this problem on different stages of history mirrored main goals of societal development and changed during the historical process.

The processes of natural growth and migration of the population are highly intricate and exert a profound influence on the qualitative and quantitative composition of the population, as well as on the total population as a whole. Furthermore, migration affects population growth by influencing birth rates, marriage rates, health outcomes and mortality rates among migrants. Consequently, it represents a crucial factor in the reproductive process (Kultanova A. et al., 2023).

Ptuha M.V., Korchak-Cherpukovsky U.A., Yastremsky B.S., Kvitkin O.A., Boyarsky A.Y., Uralnis B.C. significantly contributed to the development of the methodology and methods of demographical research in the soviet period. Valentei D.I., Kvasha A.Y., Volkov A.G., Vishnevsky A.G. dedicated many works to the theories and methodology of population. Questions of mortality and life expectancy were widely discussed in the research by Andreeva E.M., Vishnevsky A.G., Yermakov S.P., Kozlova V.I. etc. The works of Zaionchkovsky Zh., Brooke S.I., Vorobiev O.D., Denisenko M.B., Iontzev V.A. and others were dedicated to modern methodological and methodical questions in research of migration of population. A theory of three steps of migration process was developed by Rybakovsky L.L.

One of the works on demography is the monography of Asylbekov M.H. and Galiyev A.B. "Socio-demographical processes in Kazakhstan (1917-1980)" in which Kazakhstan's socio-demographical development through a long period is viewed as a holistic and multifaceted process in the background of global socio-economic and political changes in the country (Asylbekov M.H., Galiev A.B., 1991).

Demographical processes in Kazakhstan in the 80's and the first half of 90's as well as ecological situation and some healthcare problems are viewed in the monography of Asylbekov M.H. and Kozi-

na V.V. (Asylbekov M.H., Kozina V.V., 2001), The works of Zhumasultanov T.Z. and Tatimova M.B. are of significant methodological importance due to their revelation of the global socio-historical regularities of population evolution and their regional specificity.

Kazakhstan's scientists that have scientific works on demography: U.M. Iskakova (cities and agglomerations), Nuysupova G.N. (socio-demographical processes). Interconnection of demographic and migration processes, and economical development of the regions are viewed in the works of Alzhanova Z. and Serikova S., Kenzhegaliyeva A.

In the course of the study, primary statistical material was collected, data were grouped and statistical information was subsequently analyzed using such methods as the method of generalized indicators, tabular and graphical methods, methods of variance assessment, and the balance method. Mathematical analysis methods and statistical methods were used to calculate demographic and migration indicators, describe and analyze demographic processes and phenomena and their patterns, summarize characteristics and calculate summary indicators of population reproduction. Population maps were created using the GIS mapping method. The materials of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, statistical digests, yearbooks, the "Taldau" information and analytical system, monographs, scientific articles, materials of local executive bodies (Akimats) and Departments of the regions of the republic were used to analyze and form the statistical database.

Results and discussion

The accelerated growth of cities and the development of urbanization are explained by demographic factors, namely the rapid increase in the inner urban population due to high natural population growth in cities, driven by lower urban mortality compared to rural areas, where higher mortality is compensated by the birth rate. In addition, standard urbanization patterns are represented by high migration from rural to urban areas, which is facilitated by rural push factors (agricultural modernization and rural poverty) and urban pull factors (industrialization and urban-oriented policies) (Jedwab R. et al., 2017; Haddad M., Pailhé A., 2024; Soto Nishimura A., Czaika M., 2024).

In general, in the three large cities, there has been a trend of increasing birth rates over the past

decades. In the cities of Almaty, Shymkent and Astana, the number of births is higher than in other regions of Kazakhstan. As can be seen in Figure 1, the birth rate surge occurred in 2006-2008. In comparison to 2000, absolute value of birth rate in the

three cities increased by 3 times by 2023, and the birth rate averaged 13.6 and 25.8‰, respectively. In regard to cities, the highest birth rate in 2023 was in Shymkent (25.7‰), in Astana – 21.1‰, in Almaty – 16.7‰ (Figure 1).

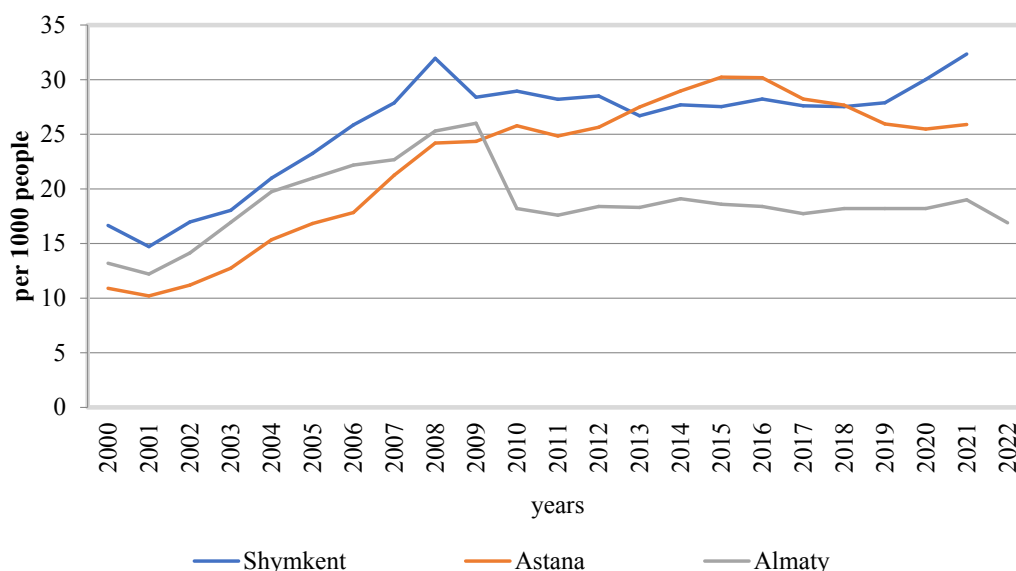


Figure 1 – Birth rates dynamics in Shymkent, Almaty and Astana for 2000-2021 (per 1000 people)

Urban settlements are generally characterized by bigger birth rates than rural areas. This can be explained by the structure of the population in cities, which is younger due to the influx of young people from rural areas to cities and, consequently, a higher reproductive potential of the population, as well as the acceptance and registration of births in urban maternity hospitals.

Mortality of the population is the second most important demographic process after birth rate, the course of which depends on many factors: socio-economic, natural and climatic, environmental, welfare of the population, social infrastructure's level, etc. (Nyusupova G.N., 2018)

As can be seen in Figure 2, the mortality rates per 1000 people in Astana, Almaty and Shymkent show a decrease in rates for the research period. In 2022, they amounted to 4.0, 5.7, and 4.3‰, respectively, which is almost half as much as in 2000. The exception was the 2020-2021 pandemic period. Then there was a sharp increase in mortality everywhere, including from 3.9‰ in 2019 to 5.8‰ in 2021 in Astana, from 6.5‰ in 2019 to 9.1‰ in 2021 in Almaty, and from 4.7‰ in 2019 to 6.8‰ in 2021 in Shymkent.

Of the total number of deaths, there is a significant preponderance of males. For example, in 2022, in Astana, the mortality rate for men was 4.55‰, and for women 3.49‰, in Almaty – 6.24 and 5.29‰, in Shymkent – 4.77‰ and 3.82‰.

The structure of mortality rates by causes of mortality looks the following way: the first place for many years with the highest percentage has been occupied by mortality from diseases of the circulatory system (56%), as well as from cancer (15%). The next are diseases of the respiratory and digestive organs, that are indicators reflecting the influence of the environment on human health, because the respiratory and digestive organs are directly exposed to environmental factors through drinking water, food and air.

One of the indicators of the population's quality of life is the infant mortality rate. Almaty has one of the lowest rates of infant mortality in the country. Per 1,000 born in 2022, there were 5.03 deaths, while the average in the republic is 6.8. In the same year, this indicator in Astana is 5.29, and is in the 4th place of infant mortality in the republic. In the city of Shymkent, the infant mortality rate is 0.6 higher than the national average (Figure 3).

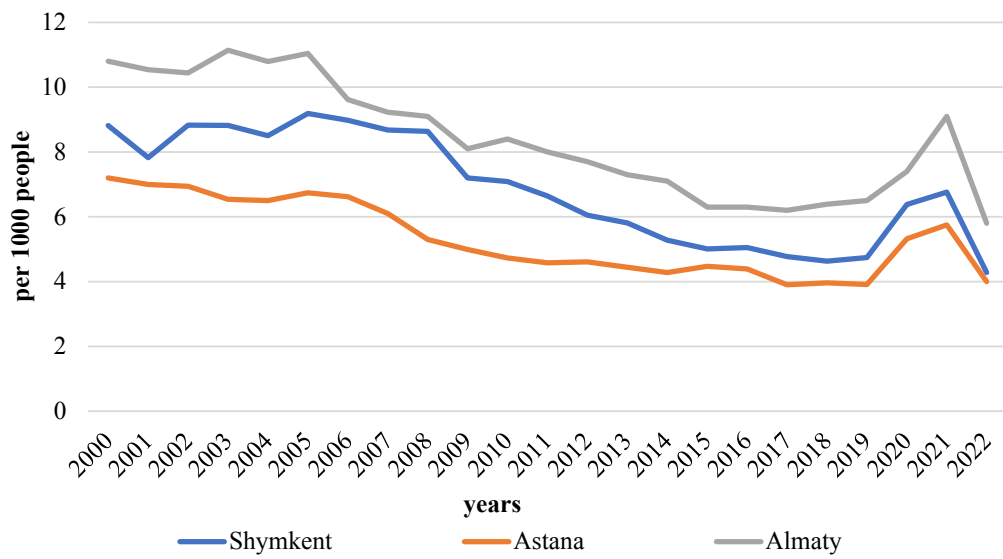


Figure 2 – Dynamics of mortality rates in the cities of Shymkent, Almaty, Astana for 2000-2022 (per 1000 people)

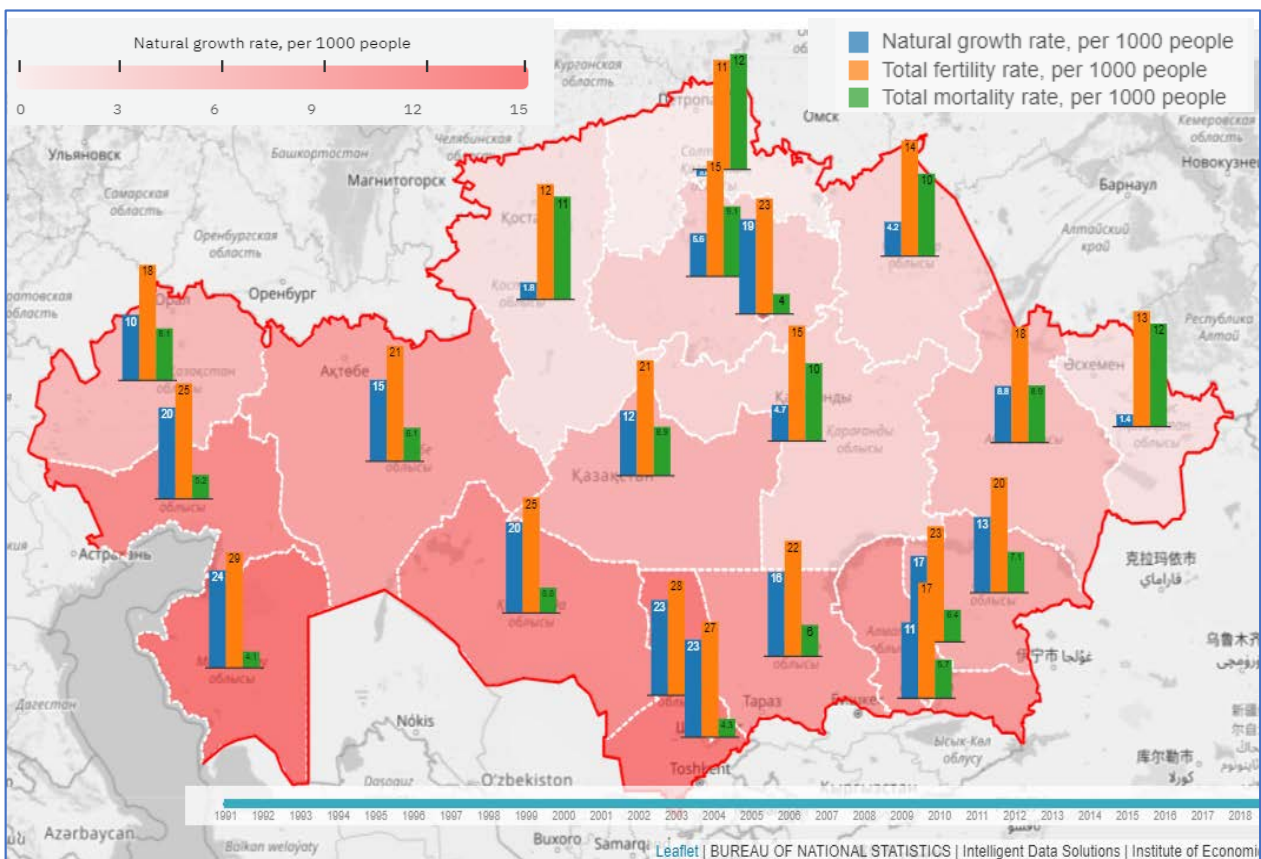


Figure 3 – Natural population growth in the regions of the Republic of Kazakhstan for 2022 (per 1000 population) (map created on the site <https://maps.indata.kz/>)

It's important to notice that in the last decades there are positive changes in the infant mortality rates in these cities: it tends to decrease. If in 2000 this indicator in the cities of Astana and Almaty was 13.35 and 15.0 people per 1000 births, then by 2022 it had decreased almost threefold, by 5.29 and 5.03, respectively. Data for Shymkent are given for 2018-2022, the infant mortality rate also tends to decrease over this period from 8.37‰ in 2018 to 7.36‰ in 2022. Moreover, the pandemic period is also characterized by a slight increase in infant mortality rates, along with overall mortality. This indicator is especially high among boys; more boys are born and die than girls.

The main source of population growth remains the factor of natural population growth (Canudas-Romo V. et al., 2024). The level of natural population growth across the republic and its regions demonstrates a positive dynamic due to the increase of the birth rate of the population in recent years, combined with a decrease in mortality rates. The only exception is the North-Kazakhstan region (Nyussupova G. et al., 2020, Nyussupova G. et al., 2022). Over the period from 2000 to 2022, its relative values in the cities of Astana, Almaty increased significantly by more than 4 times; and in Shymkent by 3 times.

The natural population growth of Astana, Almaty and Shymkent accounts for 28,5% of the total natural population growth of the republic. This indicator in 2023 in absolute values was 24,022 people in Astana, 23,565 people in Almaty and 25,942 people in Shymkent, while in 2000 this indicator was 1,513, 2,717 and 3,412 people, respectively. The relative indicator in 2022 is higher than the national average (13.8‰) in the cities of Astana (18.9‰) and Shymkent (22.9‰), and below the national average in the city of Almaty (11.2‰). Shymkent has the highest natural population growth (Figure 3).

An important factor influencing the dynamics of the population, its demographic characteristics, age, gender and ethnic composition is population migration. (Sato Y., Yamamoto K., 2005) Over time, the intensity of the direction of the migration flow, the level of professional education and health, as well as the socio-cultural development of migrant's change.

The cities under study show high migration activity of the population. Figure 4 shows that these cities show a positive trend, in contrast to the national average, which has had negative indicators over the past decade. Three cities are centers of attraction for the population, mainly of working age. The remaining regions of the Republic of Kazakhstan, except for Almaty and Mangystau, have a negative migration balance (<https://www.gov.kz>).

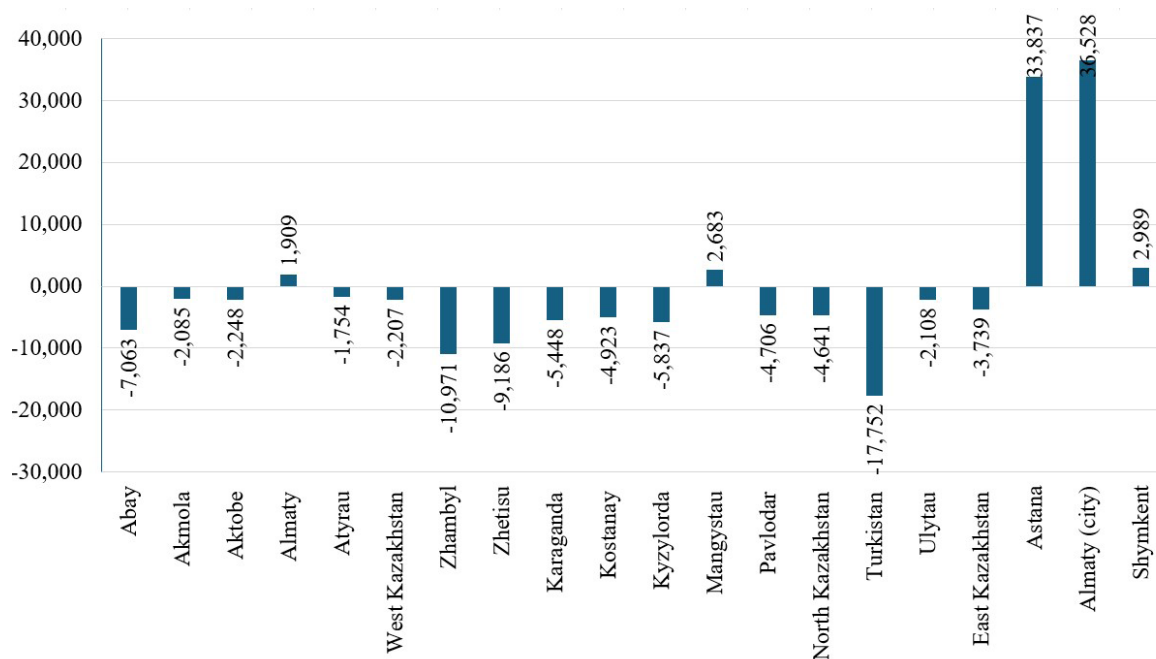


Figure 4 – Indicators of the balance of general migration of the population of the regions of the Republic of Kazakhstan in 2022, people

The analysis of the data on migration of the population of Astana for 2000-2022 revealed the dominance of arrivals to the number of departures. In 2022, compared to the same period in 2002, the migration balance in Astana increased 5 times. The highest migration balance was in 2016. Over the past few years, there has been an increase in the emigration rate of the population. (Kelinbaeva R.Zh., Orazbaeva T.Zh., 2023). The change of external migration indicators of Astana for 2000-2022 is presented in Figure 5.

In the external migration of Astana in recent years since 2016 there has been active outflow of population abroad, the largest outflow of the population is characteristic of 2018 (1955 people), in the same year the highest value of the negative external migration balance was noted – 1276. The largest number of people that arrived in Astana was in 2013 – 1865 people. As a rule, the reasons for external migration are the return to historical homeland, as well as the search for work and education.

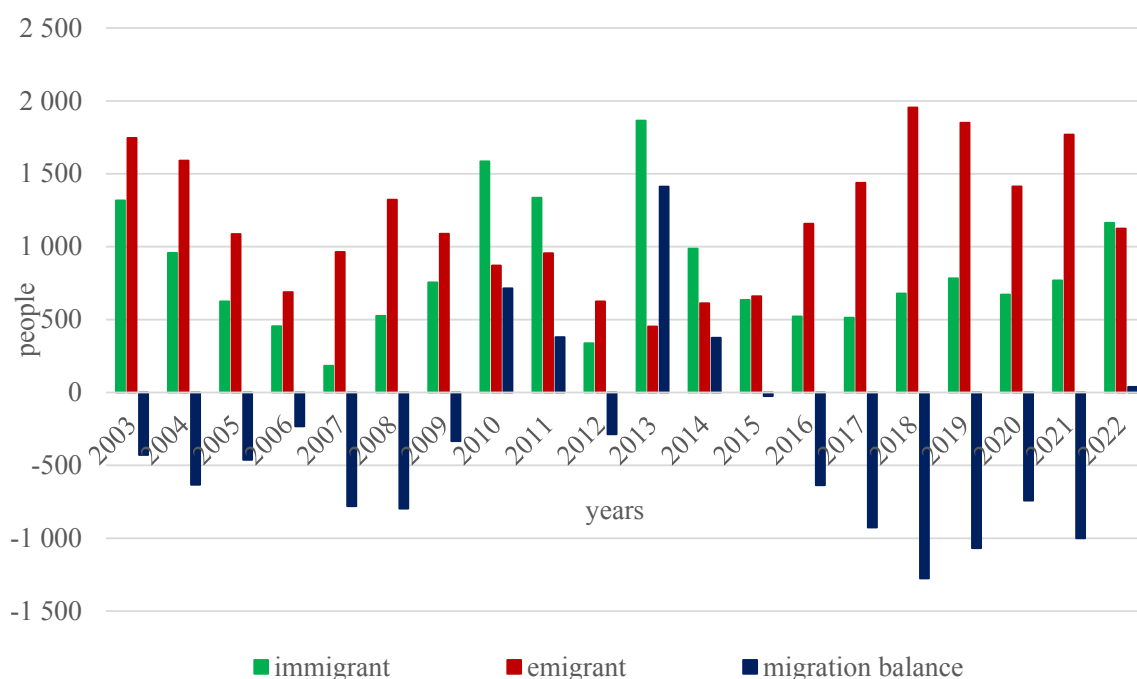


Figure 5 – Dynamics of external migration indicators of the population of Astana from 2003 to 2022, people

According to statistics for 2021, the main outflow of the population occurred to the Russian Federation (RF) (1,131 people), Germany (388 people), Poland (45 people), Belarus (23), Ukraine (12), the USA (52), Turkey (11), Canada (23), Mongolia (93) and other countries. 272 people arrived in the city of Astana from Russia, 32 people from Azerbaijan, 61 people from Kyrgyzstan, 157 people from Uzbekistan, 15 people from Ukraine, 9 people from the USA, 23 people from Germany, 54 people from China, 47 people from Mongolia, 22 people from Turkey and from other countries.

The main outflow of population outside the country falls on the CIS countries. Due to the fact that in 2020 in the Russian Federation it was simplified for foreigners to obtain citizenship, it can be assumed

that this figure will increase. Economic motives and ethnic migration, which is aimed at returning to the historical homeland, belong to the paramount factors influencing emigration of population.

One of the distinctive features of external migration is a large number of able-bodied people aged 15 to 64 years. In general, throughout the entire period, the city of Astana has seen active emigration of European peoples, including Germans, Russians, Poles, Ukrainians, and Belarusians.

The dynamics of internal migration of Astana for 2000-2022 is characterized by a positive migration balance. Thus, in 2021, the migration balance was 31,906, in 2020 – 25,607, in 2019 – 34,434 and in 2016 – 76,950 people. The mass arrival of the working age population creates unbalanced excess

labour market, which strengthens surplus of the supply of workers, and, consequently, increases the level of unemployment in the capital region. The existing migration trends increase the labour surplus, and, consequently, increase the unemployment rate in this region. The trend of internal interregional migration movement is that in all regions there are donors for the capital Astana, the cities of republican significance Almaty and Shymkent, where the balance of interregional migration movement is positive. Thus, in these areas, the internal migration trend significantly affects demographic development. The largest number of arrivals to Astana came from Akmola region (15,131 people), Zhambyl region (4,413 people), Turkestan region (6,522 people), East-Kazakhstan region (6,306 people), the cities of Karaganda, Kostanay, Pavlodar, Shymkent and Almaty. The largest number of departures from Astana came to: Akmola region (9,699 people), Turkestan region (3,529 people) and Almaty city (5,687 people).

Almaty remains the most attractive city in terms of migration. It maintains the highest migration balance in the republic. In 2022, compared to the same period in 2002, the migration balance in Almaty increased 3 times.

As we can see in Figure 6, from 2004 to 2011 there was a prevail of the number of immigrants over emigrants in the external migration of Almaty. Starting from 2012, the prevalence of the outflow of population of Almaty abroad is outlined, which forms a negative balance of external migration of the population. The highest indicator of the negative balance in the city of Almaty is noted in 2019 – 2219 people. From 2019 the negative migration balance is declining. As a rule, the reasons for external migration of Almaty are the departures of young people abroad for the purpose of study and work, which creates a loss of human capital – «brain drain». In 2022 there was a positive balance of external migration, which was partly facilitated by the mobilization of the population carried out in the Russian Federation.

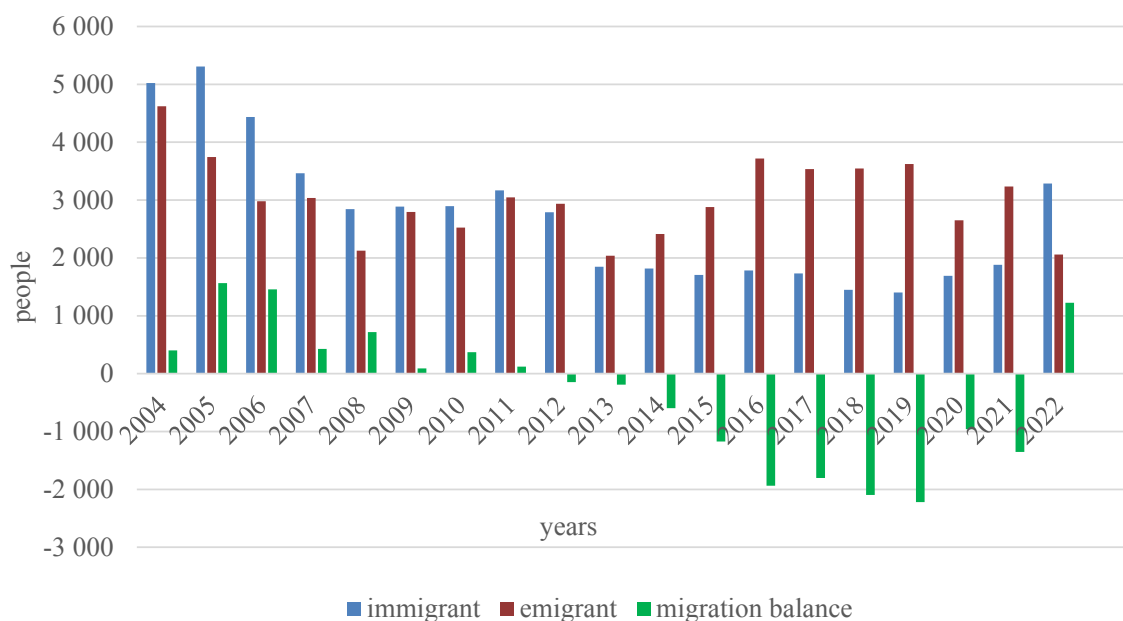


Figure 6 – Dynamics of external migration indicators of the population of Almaty from 2003 to 2022, people

According to Table 1 below, the Russian Federation, Uzbekistan, Kyrgyzstan and China dominate in the external outflow of population. The negative balance remains with Canada, Germany and the USA. With other countries, the positive

balance of population migration remains. The flow of population from Ukraine, Korea, Georgia and Tajikistan has increased. In the overall flow of migrants, the most active movements are with the CIS countries.

Table 1 – Dynamics of the balance of external migration of the population of Almaty by country from 2005 to 2023, people

| Countries | Year | | | | |
|-------------|--------|--------|--------|--------|-------|
| | 2005 | 2010 | 2015 | 2020 | 2023 |
| Azerbaijan | 16 | 43 | 19 | 23 | 80 |
| Belarus | -17 | -33 | -21 | -17 | 65 |
| Kyrgyzstan | 601 | 376 | 140 | 123 | 498 |
| Uzbekistan | 1 169 | 665 | 403 | 171 | 537 |
| Russia | -1 375 | -1 448 | -1 893 | -1 745 | 2 491 |
| Tajikistan | 23 | 140 | 87 | 61 | 292 |
| Ukraine | 3 | -3 | 41 | 6 | 186 |
| USA | -106 | -41 | -99 | -71 | -81 |
| Germany | -241 | -30 | -123 | -134 | -84 |
| Georgia | 45 | 63 | 29 | 44 | 140 |
| Canada | -212 | -90 | -37 | -39 | -27 |
| South Korea | 0 | 30 | 81 | 30 | 88 |
| China | 1 195 | 271 | 24 | 447 | 388 |
| Turkey | 202 | 190 | 132 | 63 | 185 |
| Other | 166 | 189 | 70 | 99 | 294 |

In the internal migration of Almaty for a period from 2000, a positive balance is observed. Thus, in 2017, the migration balance was 32 thousand, and in 2022 – 29 thousand people. Almaty as a core city is a key part of the Almaty agglomeration – it is the centre of commuting, transit passenger and cargo flows from different regions of the republic, mostly from the adjoined areas of the Almaty region. Today, the city of Almaty and the Almaty region are closely connected in many processes and areas of life.

The dynamics of the general migration balance of Shymkent for 2000-2022 underwent several migration waves. The first stage of 2000-2001 is characterized by a high number of population arrivals, mainly from other regions of the republic and from the region. Thus, out of 50,223 people who arrived in 2000, 80% or 35,623 people were internal immigrants. The ten-year period from 2002 to 2011 is characterized by low migration activity, even in 2005, 2007 and 2008 the migration balance was negative. Starting from 2012 to the current time, the internal migration balance increases and becomes positive, and the peak of the positive migration balance falls in 2018 with a value of 34,456 people.

In the external immigration of the population to Shymkent in 2021, Kazakhs predominate (588 people or 64%) and a small number of Russians (60 people) and Uzbeks (90 people). Among the emigrants, there is a noticeable predominance of Russians (72%). Among the migrants, there is a noticeable predominance of women. In the age composition, the working-age population aged 16-62 years prevails. Among the countries, the main share of immigrants in 2021 comes from Uzbekistan (84%), among emigrants – Russia (94%), Uzbekistan and Germany account for 4% of emigrants each. This picture suggests that the main reason for migration to Shymkent is the ethnic factor.

According to Figure 7, the period from 2003 to 2012 in the external migration of Shymkent city active population movements are noticeable, while a positive balance is maintained, the predominance of those arriving over those leaving. Starting from 2013, the activity in external migration has been decreasing, the number of arrivals does not exceed 1100 people per year, but the balance remains positive to this day. The highest indicator of arrivals was in 2006 with a number of 3257 people.

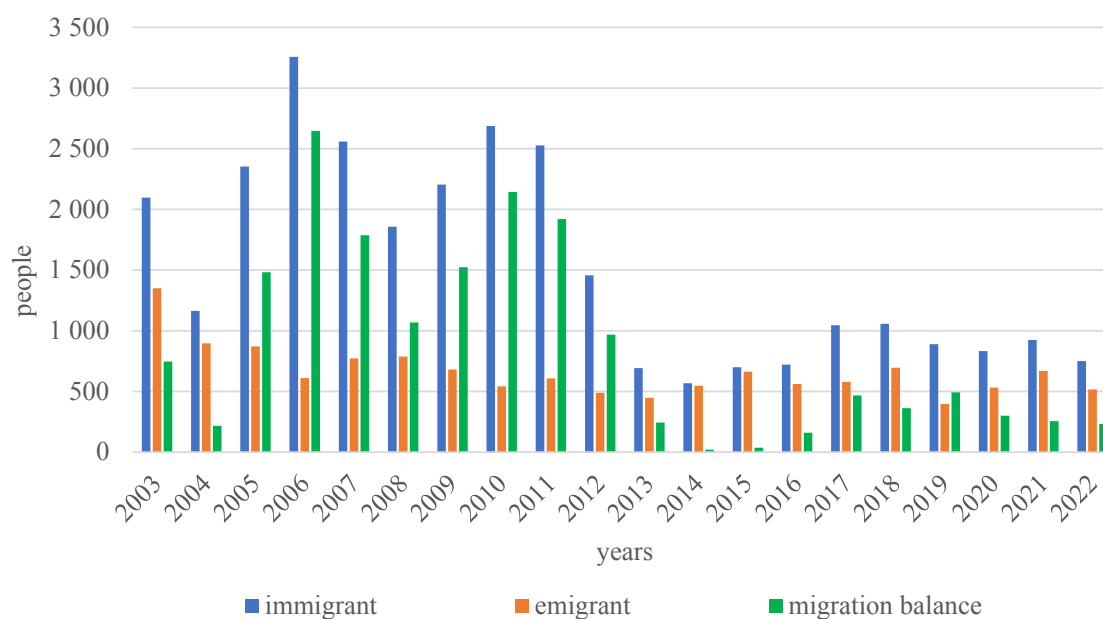


Figure 7 – Dynamics of external migration indicators of the population of Shymkent from 2000 to 2022, people

The main share of migrants is internal migration, which amounted to 98% of total migration in 2021. However, its values are declining and the migration balance has decreased almost by half from 2017 to 2021. The peak of the general and internal migration balance of the last decade occurred in 2018, which is associated with the decision on granting Shymkent the status of a city of republican significance.

The main reasons for population migration include the following: family factors, social reasons, the level of development of medicine, and job cuts. The increasing influx of population to the largest cities of the republic – Astana, Almaty and Shymkent is happening because of the developed infrastructure of the cities, availability of highly paid vacancies and career prospects, development of educational sphere, favourable economic and socio-cultural environment. The reasons for the outflow of population are reunification with family members in the historical homeland, shortage of vacancies or lack of demand for certain specialists – graduates of foreign universities, problems with housing, environmental conditions, and other personal motives.

Conclusion

As a result of the conducted research, the following conclusions can be formulated.

For the period 2000-2022, in the largest cities of Kazakhstan (Astana, Almaty and Shymkent) a

positive demographic tendency is observed, which is expressed in an increase of birth rate, a decrease in mortality in cities and, consequently, in an increase in the rates of natural population growth and the best, compared to other regions of the country, rates of infant mortality. The reasons for the mentioned trends are higher levels of healthcare development in cities, working conditions and employment opportunities, which entails an influx of migrants of working and childbearing age from other regions and rural areas. An important factor is the increase in the number of people of Kazakh nationality who maintain ethnic traditions of having many children. Another factor is the incorporation of adjacent rural areas into these cities, in which their population is taken into account. Shymkent demonstrates the highest rates of natural population growth.

Three megalopolises are characterized by high intensity of migration and the largest migration growth of the population in the republic. Since 2002, the migration balance in Astana has increased 5 times, in Almaty – 3 times, and in Shymkent – 2 times since 2003. The city with the greatest capacity to attract migrants is Almaty, which has consistently demonstrated the highest migration balance over an extended period. Internal migration has a decisive influence on migration processes in all flows – the main part of migration flows of the population is formed by internal migration – the influx of mainly the working-age population to these cities from the

regions. In the external migration of Astana and Almaty, there is a negative balance.

However, the city of Shymkent is significantly inferior not only to Almaty and Astana, but also to other less urbanized regions in terms of contribution to GDP. This indicates quite serious socio-economic problems in its development, the quality of urbanization, and a weak connection between the growth of the city and the growth of its economic potential. Suffice it to say that the share of self-employed in Shymkent is critically high and amounts to 30%. This level is typical in Kazakhstan mainly for rural areas.

The existing trends of concentration of population in the same growth points, primarily in the three megacities of the republic with limited resources for people to live, are fraught with negative socio-economic consequences: increased social instability

in cities, most affected by the migration processes, an increase in the crime rate, loss of work skills, narrowing access to housing and social services, a decrease in labor resources in agriculture, the desolation of villages, a serious burden on urban infrastructure, irrational use of qualification potential, decreased motivation to work, an increase in poverty of the population, an exacerbation of housing problems, etc. The noted problems can become a serious threat to the sustainable economical and social development of the region.

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References

- Asylbekov M.H., Galiev A.B. (1991). Social’no-demograficheskie processy v Kazahstane 1917-1980 [Socio-demographic processes in Kazakhstan]. Alma-Ata: Gylym, 187p.
- Asylbekov M.H., Kozina V.V. (2001). Demograficheskoe razvitie Kazahstana v uslovijah suvereniteta [Demographic development of Kazakhstan under conditions of sovereignty]. Almaty: Orkniet, 112 p.
- Aubakirova Zh.S., Alekseenko A.N., Stolyarova E.O., Krasnobaeva N.L., Omirzak T.E. (2022). Demograficheskaja bezopasnost’ Kazahstana: potencial, riski i perspektivy [Demographic security of Kazakhstan: potential, risks and prospects]. Oskemen, 515p
- Canudas-Romo V., Shen T., Payne C.F. (2024). National Population Growth Rate, Its Components, and Subnational Contributions: A Research Note. *Demography*, 61(3), 615-626.
- Haddad M., Pailhé A. (2024). Return Migration and Fertility: French Overseas Emigrants, Returnees, and Nonmigrants at Origin and Destination. *Demography*, 61(2), 569-593.
- Jedwab R., Christiaensen L., Gindelsky M. (2017). Demography, urbanization and development: Rural push, urban pull and... urban push?. *Journal of Urban Economics*, 98, 6-16.
- Kelinbayeva R.Zh., Orazbaeva T.Zh. (2023). Kazahstan Respublikasyndagy syrtyky enbek koshi-kony urdisteri [Processes of external labor migration in the Republic of Kazakhstan]. International Scientific and Practical Conference “Geographical foundations of sustainable development”. Almaty: Kazakh University, November 23-24, p. 43-48
- Kultanova A., Kusainov H., Zhakupova B., Kalyuzhnaya N., Rakhmanova A. (2023). Improving the effectiveness of migration policy as a factor in the sustainable development of Kazakhstan. *Bulletin of NAS RK*, 406(6), 444-461.
- Njusupova G.N. (2018). Social’no-demograficheskie processy v Respublike Kazahstan: regional’nye aspekty: monografija [Socio-demographic processes in the Republic of Kazakhstan: regional aspects: monograph]. Almaty: Kazakh university, 306 p.
- Nyussupova G., Aidarkhanova G., Kenespayeva L., Kelinbayeva R. (2022). Analysis of human capital in the Republic of Kazakhstan through GIS: regional aspect. *International Journal of Geoinformatics*, 18(1), 15-25.
- Nyussupova G., Kelinbayeva R., Makhrova A., Kairanbayeva G. (2020). The research of demographical indicators of the population’s quality of life for sustainable development of Almaty region. In *E3S Web of Conferences* (Vol. 159, p. 05010). EDP Sciences.
- Sato Y., Yamamoto K. (2005). Population concentration, urbanization, and demographic transition. *Journal of Urban Economics*, 58(1), 45-61.
- Soto Nishimura A., Czaika M. (2024). Exploring Migration Determinants: a Meta-Analysis of Migration Drivers and Estimates. *Journal of International Migration and Integration*, 25(2), 621-643.

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