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POPULATION DEVELOPMENT OF KAZAKHSTAN: GEOGRAPHIC, ECONOMIC AND GEOPOLITICAL ASPECTS

PhD dissertation

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Dedicated to my family

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Population development of Kazakhstan: geographic, economic and geopolitical aspects

Abstract

Present research based on analysis of the main trends in demographic development of Kazakhstan at the national and regional level. Demographic changes are quite important factor affecting the problems of territorial, economic and geopolitical development of the country. Relatively small population quite clearly reflects the changes of economic and geopolitical conditions. The result of it is the changes in population size, structure, and geographical pattern. Over the past decade in Kazakhstan observed population growth and change of ethnic structure. Against this background, distribution of the population within the country becomes one of the key problems in Kazakhstan. The main reason is growing disproportions in economic development of regions. Quite significant role here plays the ethnic heterogeneity of the regions, which also determines the nature of population development. Under such conditions, the demographic development acquires strategic importance.

Keywords: Kazakhstan, population development, regional demography, geopolitics

Демографическое развитие Казахстана: географический, экономический, геополитический аспекты

Абстракт

Представленная работа основана на анализе основных тенденций демографического развития Казахстана на национальном и региональном уровне. Изменение демографической ситуации представляется достаточно важным фактором затрагивающим проблемы территориального, экономического и геополитического развития страны. Относительно небольшое по численности население достатчно четко отражает изменение экономических, геополитических условий. Результатом этого является изменения численности, структуры населения и географии распределения. За последнее десятилетие в Казахстане отмечается тенденция увеличения численности населения и изменения его этнической структуры. На этом фоне проблема распределения населения по регионам приобретает ключевое значение. Основной причиной является растущая диспропорция экономического развития регионов. Значительную роль в усилении демографических диспропорции также играет этническая неоднородность регионов, влияющая на характер демографических процессов. В таких условиях демографическое развитие приобретает стратегическое значение.

Ключевые слова: Казахстан, демографическое развитие, региональная демография, геополитика

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF MAPS

Introduction

The Republic of Kazakhstan showed itself as one of the most dynamically developed states of post-Soviet Central Asia, for today, pretending to the role of a regional leader. Economic potential, mostly determined by availability of raw material resources, first of all oil and gas, allowing the country to rather effectively adapt the economy to the new realities related to obtaining of independence, is an objective base for this fact. Besides, Kazakhstan holds a rather favorable geographical position in the center of the strategic triangle: Russia–China–Islam world. It allows positioning the country as a bridge between Europe and Asia, which ultimately is increasing its strategic importance of Kazakhstan in regional and global context.

At the same time, the role of no small importance is played by a demographic factor in the perspectives of the development of the country. A special characteristic of Kazakhstan is a small population which is heterogeneous by ethnic groups, and its distribution within the country polarizes the country (mainly by ethnic groups) by the North-South axis. By objective reasons Kazakhstan cannot sufficiently change many demographic characteristics in its favor, and it actualizes the problem of demographic development in the context of the development of the territory of the country and economic, geopolitical perspectives.

Actualization of the demographic problem for Kazakhstan began from the moment of obtaining independence in 1991. Under the new conditions, the demographic factor took on a strategic significance, ultimately determining national safety of the country.

By the moment of obtaining independence, ethnic Kazakhs, as an indigenous ethnic group, hardly were 50 % of the total population of the country. The other half of the population was mostly represented by European (Slavic) population, first of all by the ethnic Russian group. European population made the base of the urban population of the country and was employed in the industrial sector. Besides, geographically, European population made an absolute majority in Northern, Eastern and Central Kazakhstan. Against this background, main demographic indicators in the country reflected crisis trends of the transition period of the early 1990s. The population of Kazakhstan closely approached the depopulation process. Sharp decrease of fertility, increase of mortality and emigration of the population contributed to this situation.

Thus, solving of demographic problem became the most important condition of sovereignty consolidation for Kazakhstan from the very first days of independency. The main goals were: overcoming of negative trends of demographic development and increasing of the proportion of indigenous population.

The other significant condition of sovereignty was diversification of economic relations, inherited from the USSR and integration into the world's economy.

For today, the country has succeeded to some extent in solving the above mentioned problems. The trends of demographic development acquired a positive dynamics; in the last years the decrease of population took shape, the population became more homogeneous by ethnics. However, positive natural growth of the population and attracting of ethnic repatriates were not able to compensate in full measure emigration losses of the country. Moreover, the loss of qualified specialists and decrease of population in Russian-populated regions of the country still remains an irresistible consequence.

Diversification of economic relations and integration into the world's economy resulted in the change in the economy structure, connected with domination of oil-gas sector. As its consequence, there was a significant change in the trends of economic development of the regions. The West of Kazakhstan is the main region of oil-gas industry. Laborious and profitable oil-gas sector gives priority to the region of Western Kazakhstan regarding to the other regions of the country, the only exceptions are the cities with a capital status – Almaty and Astana, which have rather high social-economic indicators. Thus, disproportions in economic development of the regions inevitably results in the change of geographical pattern of the population in the country.

Under the conditions of limited population, it threatens the development of less attractive regions, first of all, Northern, Central and Eastern Kazakhstan, where the population decreased due to emigration of European population. The problem of distribution of the population within the country becomes one of the key problems in Kazakhstan. Thus, the demographic problem also becomes important at the regional level.

Thus, the problem of research is defined on the basis of the existing tendency. The main question is related to the last trends of population development of the country on the change of geographical pattern of the population. The research sets as a main objective the answer to the question, how the availability of rich natural resources influences the trends of demographic development of the country, migration processes and redistribution of the population within the country.

Based upon the designated problem of the research, the objective of the research is the population of Kazakhstan. The subject of the research is the study of trends of demographic development at the national, regional level in the context of geographical, economic and geopolitical aspects. This approach seems to allow ensuring more exact perception and explanation of many trends of demographic development of Kazakhstan. Chronological limits of the research are the years from 1999 to 2009. The selection of this period is related to the beginning of post-crisis (after the collapse of the USSR) recovery of the economy of the country, arranging its new structure. Stabilization of the trends of population development also took place in this period. Thus, these trends seem to be possible to take into consideration during the discussion of the foreseeable perspectives of the development of the country and the regions.

This research is an attempt of multidisciplinary approach to perception of the problems of demographic development of Kazakhstan, which in many respects determines a scientific novelty of the research. The work is also an attempt of practical substantiation of strategic significance of the demographic factor in the problem of the perspectives of development of Kazakhstan as a sovereign state. The outcomes of the research can be taken into consideration in the issues of strategic planning at national and regional levels.

The structure of the research is presented in two parts. The first part deals with the analysis of main trends of demographic development of Kazakhstan for the last 10 years. The main objective is considering the perspectives of population growth and changing of its structure, especially the ethnic one.

The second part deals with the analysis of the trends of population development at the regional level taking into consideration social-economic and ethnic differentiation of the regions. The main objective here is identification of correlations between demographic and economic development of the regions.

Both of these parts include the analysis and evaluation of the state policy in the sphere of population and regional development. The main objective is the attempt of a critical analysis of the goals and outcomes of the state policy, aimed at the regulation of the processes of demographic and regional development. In addition, a special chapter devoted to the problem of foreign policy of Kazakhstan.

The study also contains introduction, overview of literature, theoretical framework and conclusion, where main results and assessments are stated.

Chapter 1

Overview of literature

Population development of Kazakhstan is a rather actual direction of study which attracts the attention of many Kazakhstan and foreign researchers. Main demographic processes are considered, as usual, in the light of the problem of the population change in Kazakhstan. Therefore, the problem of fertility growth and migration policy of the country are the most actual for discussing. Analyzing fertility dynamics, leading researchers agree in opinions that improvement of the economic situation in the country, favorable age structure of the population and increase of the proportion of indigenous population (ethnic Kazakhs) having more traditional reproductive behavior are the principal determinants of positive changes observed in the country for the last decade.

1.1 Population development of Kazakhstan: actual problems and perspectives

The opinion of inevitable transformation of reproductive behavior of ethnic Kazakhs under the impact of modernization trends dominates, as a rule, in the issues of the perspectives of fertility increasing (preservation of positive trends). The reasons of possessing many children are conditioned by a historic transformation of the family function, the role of children and the change of value orientation of young females (Agybayeva 2006). Urbanization of ethnic Kazakhs seems to be one of the main factors. An intensive migration inflow of Kazakhs into cities, which inevitably results in the transformation of traditional reproductive behavior and values, is an important process speeding up modernization (Alexeenko 2004, Agybayeva 2006, Morozova 2007). Transformation of traditional reproductive behavior is also considered as an important factor in the studies by Agadjanian (2008) who is a leading foreign specialist in the sphere of fertility research in Kazakhstan.

The other problem of no small importance, determining the perspectives of changes in population size of Kazakhstan in the most decisive way is a problem of external migration. The main attention is paid to the problem of emigration of Russian-speaking population and the efficiency of the policy of attracting ethnic repatriates.

By Alexeenko's (2008) opinion, emigration reflects social-economic and social-political processes in the Republic of Kazakhstan the most adequately. The main reasons of emigration decrease by the early 2000s were social-economic stabilization, loyal national-linguistic policy of the state and decrease of migration potential of the representatives of European ethnic groups.

Immigration processes are developed by some different scenario. Immigration dynamics to nearly a full measure depends on the governmental decisions. The main role of repatriation of ethnic Kazakhs lies in restoration of historic justice, liquidation of the disproportion of ethnic-demographic development and stabilization of demographic situation in Kazakhstan as a whole (Alexeenko 2008). At the same time, the efforts of the Government do not allow solving the problem of 'qualitative losses' related to the outflow of qualified specialists. Lack of highly-qualified labor resources becomes more obvious. Labor market is renewed by semi-skilled labor forces.

The problem of the quality of repatriates is also touched upon by Sadovskaya (2001), who pays attention to the economic damage owing to the loss of highly-qualified population.

Estimation of migration problem by the Russian researcher Grigorichev (2008) deserves a definite interest. He considers emigration stabilization in the late 1990s-early 2000s as a result of the existing social-political balance in the country, related to the decrease of ethnic tension in this period of time. In the researcher's opinion, this balance is under the threat due to the change of the line of the national policy in the mid 2000s. Its main directions are: the sphere of mandatory use of the official (Kazakh) language is enlarged – it should be without fail possessed not only by government employees, but also by employees in different spheres of jurisprudence, education, etc.; the bills of accelerated "introduction" of the official language are developed and discussed at a rather high level; in science and education the designing of the "new history" of the state and of the Kazakh ethnos was intensified, related to negative historic assessments of interrelation of Russia and Kazakhstan; a new onomastic campaign was initiated, related to mass and often unmotivated renaming of settlements, streets etc.

Besides, the situation is aggravated by the world economic crisis broken out in the end of the 2000s, which affected Kazakhstan as well. In Grigorichev's opinion, in Kazakhstan a process of destruction of the existing social-political balance began. It forms the conditions not only for preservation but also for decrease of the Russian-speaking population outflow from the country. Under such conditions, the perspective of the outflow of the Russian-speaking population from the country is rather real (Grigorichev 2008).

To the presented above it may be added that regional specificity is quite an important aspect of the population development of Kazakhstan. The main emphasis is usually placed on the ethno-demographic characteristics of the population of the regions (Alexeenko 2002, Aubakirova 2009). In other words, the characteristics of the ethnic structure of the population are considered as the main determinants of the demographic characteristics of this or that region.

For example, in the opinion of Aubakirova (2009), the regional differences are so significant that it is not always appropriate to analysis the socio-demographic development at the national (republican) level. The regions of Kazakhstan, in the opinion of the author, can be grouped into

ethno-demographic zones representing areas with relatively homogeneous demographic and ethnic characteristics.

A somewhat different approach to the problem of fertility is presented by Sultanbekova (2010). By means of correlation and regression analysis, the author tried to identify the main factors affecting the intensity of fertility in the Republic. The regression model presented by the author includes nine demographic and socio-economic variables. In the opinion of the author, improvement of socio-economic conditions of the population and quality of healthcare should be mandatory measures aimed at increasing the birth rate.

Turning to the issue of regional differentiation, it can be noted that urgency of the problem is high not only among demographers. In this sense, researches which are not limited by description of the problem, but also address the causes of problems and suggest options for solving them are of great interest.

For one of these works the monograph by Khrapunov (1999) can be referred. The author criticizes regional policy, drawing attention to its shortcomings, mainly expressed in the shift of the accents from long-term priorities to solving short-term objectives.

The problem of territorial development is also researched in the works by Ibraeva (2008, 2009). Ibraeva (2008) comes to the conclusion on impossibility of complete overcoming of the existing socio-economic differences of regions in the near term. In addition, Ibraeva (2009) addresses the issue of regionalization as a natural result of diffusion of power “down” from the center to the regions. By the author’s opinion, the development of border regions in Kazakhstan is a particularly important problem.

The problem of economic and demographic development of the regions is considered in the researches by Sultanbekova (2010). According to the author's opinion, qualitative characteristics of the population are the most important condition for socio-economic development. Sultanbekova also connects the problem of internal migration to the restructuring of the economy. In Kazakhstan one of the solutions to the problem of regional development can be stimulating of the processes of sintering, tightening the economic potential into the poles of growth.

1.2 Problem of economic and geopolitical perspectives of the country development

Main economic and geopolitical priorities of the country are presented in the works of the President of Kazakhstan N.Nazarbayev. Resuming the content of the principal works, the priority of Kazakhstan is building a strong, independent state with market economy and developed democratic institutes. One of the main factors is modernization of the economy of the country. By Nazarbayev’s (2006) opinion, one of the conditions of integration of Kazakhstan into the world’s economy is an access of large international companies to natural resources of the country. Thus, the role of Kazakhstan as a supplier of raw materials to the world market is defined. At the same time, a modern economic model of Kazakhstan “transit economy” is

considered as the first stage of the development of the country. At the next stage Kazakhstan will aim at building the economy with highly-developed technologies and innovations.

N.Nazarbayev (2006) considers in detail also the problem of the change of the capital as an important step touching the problems of regional and geopolitical development of the country. By the opinion of the author of the project, the President, the main objectives of the foundation of the capital became: strengthening of Kazakhstan in geopolitical respect, military safety, rehabilitation of the economy of the regions, strengthening of economic stability. Unfortunately, the critics of the project practically is not reflected in the literature. As, the main accent is made on the advantages of the project.

At the same time, a problem of geopolitical development of the country and significance of demographic factor attained a great topicality in Kazakhstan and foreign literature.

Urgency of demographic problem, its strategic importance in the questions of geopolitics and safety issues is mentioned in the research works of Kazakhstan Center of Strategic Research under the President of the Republic of Kazakhstan (KCSR). The latest studies "Factors of external impact on interethnic relations in the Republic of Kazakhstan" (edited by B.Sultanov 2010), "Central Asia in foreign political science and world geo-policy" (Laumulin 2010) can be considered as an example.

The research work of KCSR "Factors of external impact on interethnic relations in the Republic of Kazakhstan" (2010) deals with the significance of ethnic factor mainly in the economy and international relations (ed. Sultanov 2010). By the authors' opinion, "in the years of independence [in Kazakhstan], an own unique model was realized which ensured harmonic interethnic relations in poly-ethnic and poly-confessional society by means of conservation of originality of the nationalities and their unity" (Sultanov 2010:5).

Evaluating potential risks of migration factor on the change of ethnic structure of the population, the authors note that repatriation from the countries with complicated social-economic (Mongolia), ecological (Karakalpakiya) and military-political (Tajikistan) situation, while from China and Russia where the largest in number Kazakh diasporas live, the outflow of migrants was insignificant. By education level and professional qualification, immigrants significantly yield to the Russian and European population emigrated from Kazakhstan. Since the outflow of skilled workers from the Republic continues, the authors evaluate emigration as one of the serious threats for modern Kazakhstan, whose main priority is increasing the competitiveness of the economy of the country and creating the conditions for steady development in the post-crisis period. The improvement of social-economic conditions in the country for restraining the population outflow is suggested as a variant of solving the problem.

Considering the problem of ethnic factor in the economy of Kazakhstan, the authors came to the conclusion that main threat comes from irregularity of economic development of the regions. Under the condition of conservation and intensification of the problems of differentiation of regional development – development of rural areas, the possibility of conflicts arising with using ethno-political motives, involving the population of depressive regions, districts and micro-districts into political processes.

Considering the role of ethnic factor in the relations of Kazakhstan and other countries, it was noted that this factor does not have a noticeable impact on the relations of Kazakhstan with other countries; the exception is China, where the problem of ethnic separatism is urgent in Xinjiang Uyghur Autonomous Region (XUAR). Besides, the policy of foreign states in relation to Kazakhstan is determined mostly by geopolitical and economic interests. The authors also noted that ethnic factor most noticeably manifests itself in the sphere of humanitarian cooperation among countries. The statements of single politicians, containing critics of ethno-national policy carried out in Kazakhstan, are an instrument of obtaining own political capital, both at domestic and at intra-ethnic levels. The question of referring this or that ethnic group living in the territory of Kazakhstan to diaspora or irredenta remains open. It is explained by peculiarities of development of the territory of Central Asia in historical context. Mixture of different nomadic tribes in the territory of Central Asia, in aggregate with lack of practice of establishment of stable national states, prejudice the appropriateness of supporting discourse of diasporas and irredentas in Kazakhstan. According to this discourse, Koreans, Germans and Turks are diasporas and Uzbeks and Russians can be referred to irredentas.

In the assessments of political perspectives of Kazakhstan, M. Laumulin pays attention to the existing demographic problem: taking into consideration the trends of development and interaction of demographic factors, Kazakhstan can find itself in "a demographic trap". It means that: "On the one hand, Kazakhstan, spending a lot of funds for education and training of national intellectual elite, will become a source of emigration of the representatives of these elite into more developed countries. On the other hand, taking into account relatively small population, rich resources and continuing economic growth, Kazakhstan can become an object of mass legal and uncontrolled immigration of labor forces, unskilled and uneducated, as a rule. Thus, in the course of time, national and social composition of the population in Kazakhstan can radically change" (Laumulin 2010:335).

Among foreign researchers on Kazakhstan geopolitics a classic of modern American geopolitics Brzezinski can be mentioned, who in his study "Chessboard" devoted to geopolitics of Central Asia also adverts to demographic factor. The author compares the region with "Eurasian Balkany". One of the main problems of the region, by Brzezinski's opinion, is an internal instability, expressed first of all in ethnic and religious heterogeneity of population of the states and existing historic territorial pretentions. The author called the region "The Ethnic Cauldron". "Five new states of Central Asia are at the stage of nation establishment, the attitudes in them, connected to tribal and ethnic belonging, are still strong, and therefore, internal contradictions become the main problem. In the state of any kind these vulnerable moments can be used by stronger and having imperial ambitions neighbors" – Brzezinski stated (Brzezinski 1998:152). Applying to Kazakhstan, the author points out the existence of the threats of separatism, first of all, of Russian population.

Jen-Kun Fu (1999) also pays attention to a demographic factor in geopolitics of Kazakhstan. In his work "Geopolitics of Kazakhstan between past and future" the author considers Kazakhstan as a phenomenon of the state with the population of less than 16 million and a vast territory, taking the 9th place in the world. The first place of the four geopolitical problems of

research, the author gives to the problem (Fu 1999:4): "1. What can explain an independent existence of the Republic of Kazakhstan in the international scene – a young state possessing such a vast territory and rich natural resources, but population, small by the world measure?"

For explaining the phenomenon of existence of independent Kazakhstan in modern conditions the author suggests to rely on the theory of new structural functionalism, the essence of which is in the balance of all the elements of the system, which is in the basis of a new geopolitical concept. The author relates the existing geopolitical realities of Kazakhstan to natural evolutional process of changes in social structure in Central Asia, by the example of a deep historic analysis of the formation of Kazakhstan state. The author comes to the conclusion that territorial factor, named as "Geographic conditions" is the most vulnerable function in the social structure of Kazakhstan, in the view of the new structural functionalism (Fu 1999).

The researches of the American political scientist Martha Brill Olcott (Olcott 2003, 2005) in this respect express a more critical approach to the comprehension of the specific character and perspectives of development of a new state Kazakhstan. So, in the work "Kazakhstan: Unfulfilled Promise" the author notes that natural resources of Kazakhstan is not the only condition of its successful development. Kazakhstan, in Olcott's terms, "is blessed by resources but damned by geography". A popular thesis on strategic importance of Kazakhstan as a bridge between Asia and Europe, by the author's opinion, is apprehended as an action from the sphere of public relations, aimed at attaching strategic significance to demographic and geographic position of Kazakhstan. In reality: "one of the most obvious changes in Kazakhstan from the time of obtaining independence was fast and noticeable differentiation of the citizens' interests by ethnic, by place of residence, age and position in the one-sided economy of the country" (Olcott 2003:82). Under such conditions, Kazakhstan has to solve a whole number of problems, the most important of which is formation of state ideology, consolidating a heterogeneous society. To the most significant factors dividing Kazakhstan society, the author refers: demographic changes, language problem, interethnic relations, regional differentiation, standard of living of the population, health care and life interval, education, social protection, the questions of religious character, etc. All these factors are naturally in the process of development. Ethnic structure of population is changing dramatically. The author comes to the conclusion that Kazakhstan will remain a heterogeneous society in perspective, even if it is more homogeneous in ethnic respect (Olcott 2003:270). Thus, the author gives a significant role to the demographic factor, but a thorough analysis of demographic processes in the country is not presented.

The research by Bhavna Dave has something in common with Olcott's ideas: "Kazakhstan: Ethnicity, Language and Power" (2007). A central role is given to the problem of identification of Kazakhstan population. The author notes that building national state system in fact has a symbolic character, under the conditions of absence of a well-defined national idea able to unite an ethnically and socially heterogeneous society: "Akin to its Soviet predecessor, the Kazakhstani state sees ethnic minorities primarily as a security threat and the grant of cultural or territorial rights to minorities as inimical to its territorial integrity. Within the existing Soviet-defined ideological frame there is no way of reconceptualizing its 'nationalities' as social

communities with their own history, patterns of self-organization and with an agency that predates state authority. Nor is the state able to conceive of individuals first as citizens and only second as bearers of a particular ethno-national identity" (Dave 2007:165).

In geopolitical concept by Russian geopolitician A.Dugin, the population of Kazakhstan is considered through the prism of Eurasian concept. According to the concept, Eurasian area represents a political whole. The author determines a special mission which was historically laid on the Russians; its geopolitical projection consists in the deep comprehension of the necessity of uniting the vast territories of Eurasian continent (Dugin 2000). At the same time the author opposes ethnocentrism to over-ethnic civilized geopolitical scale: "in Eurasian project, the top-priority is over-ethnic civilized geopolitical scale. Ethnic groups are vital vivid components of a large civilized whole, which is Eurasia itself, as a complicated unity. The authorities of ethnos and ethnicity finish where we approach geopolitics. Ethnos delegates its best representatives, its most universal elite part to the more general, over-ethnic instance – to the center of geopolitical power, where global Eurasian civilized strategy is developed and realized" (Dugin 2004:239).

With reference to Kazakhstan, Dugin considers Eurasian concept as a possible national idea able to unite multinational population of the country. As a result, Dugin sees the establishment of Eurasian Union, with elimination of internal boundaries and appropriate recognition of Russians and Kazakhs as full Eurasian ethnic groups – political subjects of united Eurasia. The concern of Eurasian center should be conservation of autonomies and language cultures of numerous nations living in the Union (Dugin 2004).

Thus, geopolitical aspect of demographic development is identified as usually with ethno-demographic peculiarities of Kazakhstan, since it is the ethnic question which determines one of the most realistic threats for stable development of Kazakhstan from the moment of obtaining independency.

Thus, the literature review presented above testifies that the problem of population development of Kazakhstan is rather urgent; for its understanding it is quite important to take into consideration the whole number of factors, the most significant of which are regional differences, character of economic and political development. However, despite the importance of taking into account a fairly wide range of factors, the problem of population development in Kazakhstan is generally considered in a fairly limited way. The need for more complex analysis, therefore, is fairly obvious. This can help systematization of the problem, its better understanding.

Chapter 2

Theoretical and empirical framework

The problem of the research aimed at the study of population development in Kazakhstan in the context of strategic aspects of the development of the country prompts us the choice of such theoretical justification, which could serve as a connecting base for the phenomenon under research. The above presented review of the literature on the urgent problems of demographic and political development of the country pushes us against the problem of conceptual generalization of the changes occurring in Kazakhstan. The most suitable theoretical framework in this plan can be the theory of modernization (global revolution), which combines the aspects of social-demographic, economic and political development of the society. This theory distinguishes by a sufficient universality and, besides, allows estimating of separate aspects of the development of the state (society) as components of the general trend of development of national or global character.

2.1 The theory of modernization

Modernization is not only a universal, but also a rather complicated by its matter process, covering a wide spectrum of the problems of development of the economy, society and the state. In general, this process first of all reflects the transition from the traditional society to the modern one, from agrarian to industrial production. Naturally, this process has its unique features in spite of the universal features in the context of the particular states. For the present time, different models of modernization can be distinguished, which are differed by the selection of the tools and the intensity of the processes. Initially, the process of modernization was developed in European states and was a result of the evolutional development of the society, economy and the state. Thus, the achievements of western civilization are an acknowledged standard of modernization, expressed in the individual rights and freedoms, capitalistic (market) economic model.

The success of western civilization stimulated the traditional societies to the search of an adequate development model. One of the most successful variant was the so-called “overtaking” modernization based upon borrowing single (advanced) technologies and forms of organization of production and society. Japan, which in a rather short period of time transformed from an

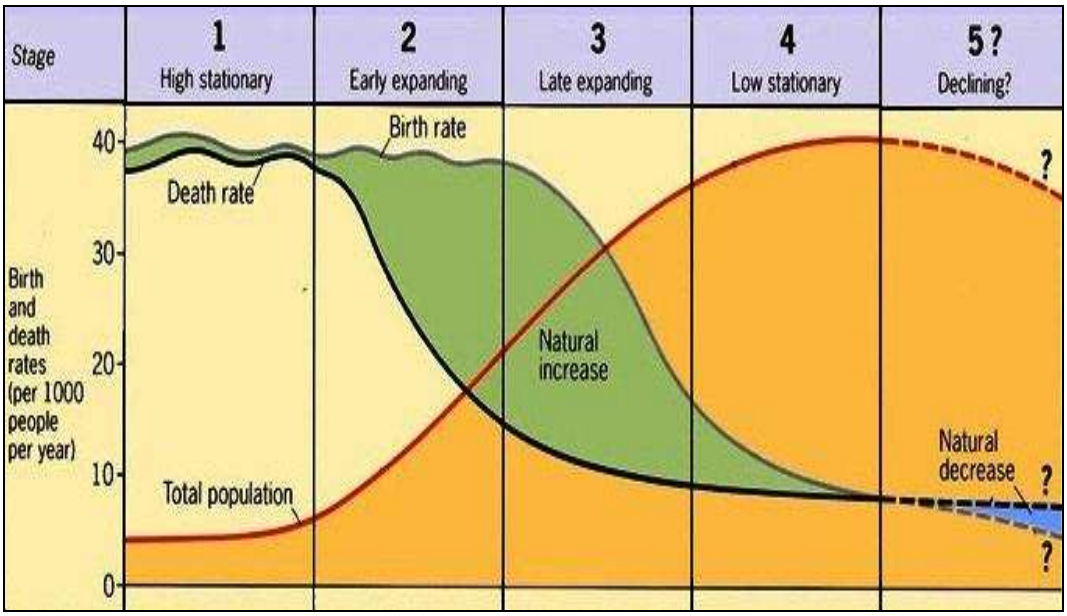
isolationist, traditional model of development into a modern one, is a pertinent example of the successfulness of this model.

One of the forms of an "overtaking" modernization is a "conservative" modernization, distinguished by the Russian demographer Vishnevskiy (1998). This project was realized in the scale of the Russian Empire, later the Soviet Union. We are viewing this theory in detail because Kazakhstan was for a long time in the sphere of influence of these processes when it was a part of the Russian Empire and the USSR. By Vishnevskiy's opinion, preservation of the fundamental elements of the traditional social structure of the society, used for achieving economic modernization (industrialization), was a peculiar feature of the Soviet conservative revolution (modernization). Soviet modernization was constricted to the level of economic modernization. Industrial development was considered as something separate from western social grounds; modernization was not realized in all its complexity and was simplified to the level of industrial-technological progress, which can be combined with preservation of archaic social forms. As a consequence, technological achievements had no natural mechanisms of self-regulation and development. They functioned within the centralized command-administrative system. Such restricted, implanted from above, character of modernization ultimately predetermined the collapse of the Soviet system. The growing contradictions of the development of the economy, society and the state, requiring the modernization completion, were the driving force here.

Thus, economic modernization (revolution) in the soviet situation laid material and social foundation of the society as a whole and determined a whole number of revolutionary changes. One of such changes was the process of urbanization, transformation of the rural society into the urban one, which became a central element of modernization, and later on a motive power of social-political transformations. Conversion of the agrarian society into the industrial one, rural into urban became a background, a precondition and a result of the whole number of changes related to demographic modernization. Urban population is a qualitatively new condition of the society, with new values of freedom, individualism, etc. characteristic for it.

Demographic modernization becomes an organic part of these processes. One of the main meanings of demographic modernization is the transition of the focus in the problems of control of demographic and marital behavior by the state, the church, the community to the individual level. Demographic modernization keeps within the logic of development presented by the theory of demographic revolution (demographic transition) related to the transition from the traditional method of population reproduction to the modern one. The demographic revolution itself keeps within the 2 and 3 stages presented in the Figure 1. Several stages, as a rule, followed by the increase of natural population growth and stabilization of the population increase are distinguished within the frames of this process.

Fig. 1 – Stages of demographic changes before, during and after demographic transition



Source:www.geographylwc.org.uk

On the whole, processes of modernization were not an exception for the Kazakh society, but it is important to single out some specific features.

2.2 Specific features of modernization in Kazakhstan

Modernization also started in Kazakhstan and the change of the economic system of the country, its peak fell at the Soviet period. By the beginning of modernization, Kazakhstan represented an agrarian state; the indigenous population had a nomadic style of life. Under such conditions the industrial development of Kazakhstan was going on without active participation of the indigenous population. The main driving force of industrialization was the European (mostly Slavic) population which immigrated into the country alongside with every new winding of industrial development. As a result, Kazakhstan turned into a multinational state.

At some moment Kazakhs began to make an ethnic minority living predominantly in rural areas. European population made a basis of Kazakh cities. Such situation favored the conservation of traditional values in the environment of ethnic Kazakhs, who did not take active part in urbanization processes for a long period of time. It is also very important to note here that indigenous population also suffered from a rather serious cultural shock connected with the policy of the 1930s of a forced transition to a settled lifestyle, which, in spite of its forced character, can be also evaluated as one of the manifestations of modernization.

Thus, the main disadvantage of a Soviet model of modernization in Kazakhstan was hypertrophied if it is viewed in respect to modernization of indigenous population. Indigenous population turned out mostly a passive participant of the process. The exception is a forced transition to a settled style of life. At the same time, industrialization of the country, followed by the increase of the level of life of the total population, made the standards of social services

conforming to the level of development of an industrial society available for the indigenous population.

This period coincided with the period of population explosion, and it ensured leading positions for indigenous population in the rates of natural population growth. An important characteristic feature of the demographic development of Kazakhs is a rapid demographic transition. Its first stage, characterized by mortality reorganization (decrease of exogenous mortality, transition of mortality from children to older age groups, etc.) occurred among Kazakhs in late 1950s–1960s. At that time crude mortality rate significantly decreased, fertility rate increased a little and the rate of natural growth reaches its maximum value, as a result, a rapid population growth is observed.

In the period of 1959–1989 the Kazakh population more than twice increased from 2.8 million of people up to 6.5 million; at the same time the proportion in the total size of the population increased from 30 % to 40 %. However, in the 1970s–1980s the Kazakhs had a process of the change of the reproductive behavior itself – from a traditional to a modern one. The rates of fertility decrease for Kazakhs are rather noticeable: if in the late 1950s TFR of Kazakh females was equal to 7.4, in late 1970s it was 4.8, and in 1989 – 3.6 live births per women. Urbanization of Kazakh population picked up speed gradually and by 1989 it was about 40 % out of total Kazakh population. Thus, demographic future of Kazakhs is formed in the determinants not assuming wide-spread traditional families with many children. The rapid replacement of a traditional fertility type by a modern industrial one is an irreversible process (Alexeenko 2004).

Under such conditions, the Kazakh society met the collapse of the USSR and began building of the independent state. The fact of obtaining independence itself became an unexpected gift of the history for Kazakhstan; its content had a revolutionary character and was provoked by external reasons, by the collapse of the USSR “from above”. It is regular that Kazakhstan was the last among the republics of the former USSR which adopted the declaration on the state sovereignty, practically before the official collapse of the Soviet Union in December 1991. It is a revolutionary character of changes that characterizes the main contradiction existing for the moment of independence between objective reality and the chance of building a sovereign state. The logic of politic sovereignty assumes the establishment of the Kazakh state where the base is restoration of national state lost in the years of colonization. The indigenous population objectively considered independence as a chance of restoration of historic equity, of revival of national state.

Ethnic and demographic situation of that period was the unhealthiest problem warmed up by the rumors about separatism of the Russian population which made an absolute majority in the northern regions of the country.

From the position of modernization the logic of building (restoration) of national state system is a rather unusual phenomenon, first of all owing to the fact that demographic characteristics of indigenous population approach to the characteristics peculiar to the society with completed modernization. In other words, the population growth of ethnic Kazakhs

objectively enters the period of stabilization. At the same time, political development only picks up speed; the main resource of independence is the idea of revival of the national state.

The trends of economic development do not quite correlate to the objective demographic abilities of the country. Strengthening of the significance of the economic sector of raw materials and the course of industrialization are certainly the constituents of modernization, but extensive development of the economy (development of the raw material sector has no other scenario) by the example of other countries was always supported by corresponding demographic potential.

As a consequence, economic model, caused by an objective necessity of Kazakhstan in taking a niche in the international market, predetermined the dynamics of population distribution inside the country, which took shape in the years of independence. Strengthening of the role of oil-producing sector against the background of the crisis of the Soviet industry attached a privileged significance to a number of the regions. The Russian-populated north of Kazakhstan began to look unpromising under the new conditions. In many respects it caused a mass outflow of the Russian-speaking population from the country in the first half of the 1990s. The decrease of the population size and share of some regions became an urgent problem, but its background lies in objective trends of returning to natural regulation of the processes of geographical population distribution. This problem is typical for post-social countries, which return to natural development (Hampl et. al 1999). It is rather problematic in a free market state to withstand these processes using administrative resources. Thus, economic and political modernization of the country is many respects unbalanced with objective trends of demographic development of Kazakhstan, which causes a number of serious problems in the way to a stable development of the country.

Imbalance of demographic abilities and the specified vector of the development are also actually in geopolitical respect. Being an independent subject of international relations, Kazakhstan met a problem of integration into the system of international relations; population became one of the main vulnerable characteristics of the country as population is also one of the characteristics of geopolitical structure, which the Republic of Kazakhstan is.

The theory of international relations defines population (people) as one of the characteristics of power. Population in this case is classified as tangible assets or physical characteristics and alongside with such factors as geographical position, natural resources, economic development, etc. At the same time, some immeasurable characteristics, such as moral, national cohesion, ideological motivation, etc. are also typical for population (Kousoulas 1985). The approach to geopolitical structure in respect of its development assumes its progressive motion from atomization/indifferentiation to differentiation, specialization, and specialized integration. In some cases revolutionary changes and cataclysms can favor the cycle destruction and beginning a new structure development, or reaching a higher level (Cohen 2003). Thus, hierarchy of the development can represent movement at three levels: microlevel (national states, quasi-states, and territorial subdivisions), mesolevel (geopolitical region), and macrolevel (geostrategic realm). Hence, geopolitical development of the state can be understood as a combination of practical actions of this or that state on changing its geopolitical position (status), based on

scientific knowledge on space-time configuration of available resources of development. Changing geopolitical position, a state changes its geopolitical role, constructing a new system of relations with other geopolitical players (Barishpolec et. al 2002).

In respect of demographic characteristics, the main available resource of geopolitical development of Kazakhstan is a change of ethnic structure of the population, through which strengthening of sovereignty can be obtained. At the same time, this process contradicts with objective needs of economic development, which are also an important constituent of strengthening the sovereignty. Independence of the state is impossible without effective economic model of development. Emigration of qualified population brings a serious damage to the economic potential of Kazakhstan.

Thus, development of geopolitical structure occurs in the modernization trends. However, existing contradictions significantly block the opportunities of the progressive development of the country.

Chapter 3

Research questions and hypotheses

The problem of the study focuses us on the analysis of the trends of demographic development in Kazakhstan in a quite wide context. Since the Republic of Kazakhstan is considered as the geopolitical structure in the focus of interests are not only its external characteristics, but also above all the internal processes reflecting its development.

In this regard, it is important to analyze the main trends of demographic development in Kazakhstan in terms of two levels: national and regional. The first level allows us to estimate the population of Kazakhstan as an important characteristic of the country – the subject of international relations. In this sense, a particular interest presents the changes in external characteristics of the geopolitical structure of the sovereign Kazakhstan – population size and its structure. The second level involves an analysis of the internal characteristics of the geopolitical structure. Through regional analysis, we can assess the nature of the changes reflecting the consequences of independence and integration into the international system. In addition, the regional level can to some extent judge the viability of the system as a whole, or at least reveal its vulnerable features.

Thus, the main research questions of this study were:

1.What is the dynamics of change in population size and its structure?

Ethnic structure and age structure of the population as a characteristic of Kazakhstan as a subject of international relations is of interest here.

2.What is the dynamics of fertility?

Potential for further increase in fertility, as well as ethnic differences in the dynamics of fertility, in terms of changing the ethnic structure of population, present interest here.

3.What changes occurred in the dynamics of international migration?

Of interest here are the directions of migration, ethnic and educational composition of migrants. How does this process reflect the interests of the country at the national level?

4.What changes took place in population distribution?

Change in the number and proportion of the population by regions is of interest.

5.What role is played by migration in the change of population size in the regions?

Nature of external and interregional migration is of interest. To what extent do these processes reflect the changes in economic structure of the country?

6.Do the objectives of regional and demographic policy correspond to its outcomes?

Of interest is the analysis of strategic plans and practical arrangements for their implementation in terms of corresponding to real problems and challenges.

The presented research questions were reflected in the following hypotheses:

1.Kazakhstan can not count on a much larger population in the foreseeable future.

The main reason is the trend in fertility, which develops in line with modernization. In this regard, long-term population growth cannot be expected. We consider the incipient increase of fertility in recent years in Kazakhstan as a result of the improved economic situation in the country after the crisis of the 1990s. However, with long-term perspective, fertility develops in the direction of decreasing. The theory of demographic transition is an evidence of this fact. In such circumstances, sharp changes in population over the long term cannot be expected. Moreover, we should expect increasing rates of population ageing and the associated problems of social and economic development.

2.The plans of the state on development of Northern and Central regions are unable to influence the change of natural migration flows in the direction of more attractive regions of southern Kazakhstan and capital cities.

We assume that the current regional policy is not effective enough to influence the situation in the regions.

3.The spatial configuration of Kazakhstan population reflects the changes in the geopolitical status of the country.

We assume that the main cause of intensification of disproportions in population distribution is an objective consequence of the changed geopolitical status of the country, which was reflected in the structure of the economy and thus affected the spatial configuration of the population.

4.Only high wages and salaries in oil-producing regions can stimulate a rather high population growth even in adverse weather conditions unfavorable for life.

We suppose that one of the most effective mechanisms to encourage inter-regional migration is the economic development of the regions. Only economic incentives can attract migrants to the depressed regions. Thus, basing on the presented questions and hypotheses the structure of our research is built.

Chapter 4

Data and methods

The main source of statistic data used in the research is the materials published by the Agency of Statistics of the Republic of Kazakhstan. This department, having its branches in all the regions of the country, officially presents a wide spectrum of statistic data, including demographic and economic data of national and regional level.

The main source of demographic data in this research is demographic and ethno-demographic yearbooks, statistics digests, materials published by the Agency of Statistics of the Republic of Kazakhstan.

The Agency of the Statistics of the Republic of Kazakhstan publishes vital statistical data in the yearbooks on population changes, age-sex structure of the population, its ethnic composition, the data on fertility, mortality and migration rates of the population. The most part of the data is presented at national and regional levels. Some yearbooks contain also mortality tables calculated for single calendar years. But at the district level, it is rather difficult to find detailed information even in regional statistic yearbooks. Most of them duplicate the data published in the republican digests restricted by general information.

Another problem is the lack of demographic data published by ethnic groups. The last ethno-demographic yearbook was published in 2006. Therefore, many calculations of demographic indicators reflecting the ethnic specificity, are limited to the period from 1999 to 2005 (2006) years. In general, the systematic publication of demographic yearbooks of Kazakhstan covers the period from 1999 to the present. Working with demographic data till 1999 is problematic due to unavailability of the data or their unsystematic basis. In this case, the basis is the data of the last Soviet census of 1989.

Calculations of regional demographic indicators, beside the above mentioned problems, are also hampered by the changes of administrative-territorial division which took place in 1990.

The resource base of this research also includes:

– Acts of legislation, international agreements; official speeches, articles of statesmen and politicians;

– Informational, analytical materials of periodical press; data from official internet web-sites of different departments and organizations;

The peculiar features of the research and the resources involved determined the methodology.

Since the study poses assessment of demographic changes as its main objective, the main tool of the research is demographic analysis, by means of which the most part of statistic data is processed.

Methods of demographic analysis used in the research were aimed at calculation and analysis of main demographic indicators (including standardized ones), characterizing the population structure, natural change, migration, etc.

Methods of descriptive statistics, including correlation and cluster analysis of the regions were used in the research. In this case, processing of the data was realized with application of statistical procedures of SAS program. Pearson's correlation coefficient was used for correlation analysis between variables characterizing demographic and economic development of the regions. Hierarchical cluster analysis was used as a classification method for grouping the regions according to the characteristics reflecting demographic and economic development of the regions.

Common traditional scientific research methods were also used in the research: analysis, synthesis, comparison, generalization.

Chapter 5

Main trends of recent population development of Kazakhstan

A characteristic feature of demographic development of Kazakhstan in the period of 1999–2009 is overcoming the negative trends of the 1990s which provoked the collapse of the Soviet Union and subsequent economic crisis. In the last years an increase of the population, fertility growth and positive balance of external migration are observed in Kazakhstan. Against this background, a change of ethnic structure of the population takes place, which is connected to the increase of the share of indigenous (Kazakh) ethnos. As a consequence, Kazakh ethnos began to play a determining role in the population development of the country.

5.1 Change in size and structure of the population

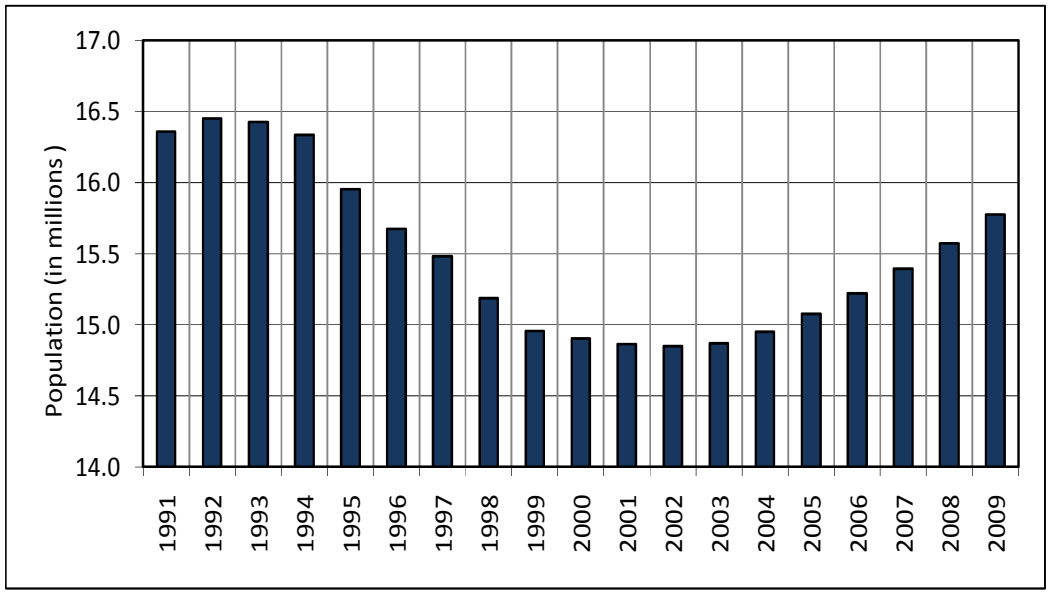
A stable growth of the population in Kazakhstan is observed for a rather small period of time beginning from 2003 (Fig. 2). A positive meaning of this trend is difficult to estimate at its true value, without taking into account the preceding period of the 1990s when the population of the country had a tendency towards decreasing. As it is seen from the Fig. 2, the decrease of population size in the 1990s had a dramatic character. Against this background, the dynamics of the 2000s looks rather optimistic, in spite of the fact that the population of Kazakhstan in 2009 does not reach the size of 1991. According to the data of the Agency of Statistics of the Republic of Kazakhstan, the population of the country made 15.8 million people by the beginning of 2009. For the 10-year period from 1999 to 2009 the population increased by more than 800 thousand people (5.5 %).

The main reason for such a rapid change of population size in the country was a negative balance of external migration, which determined the specific character of population development of Kazakhstan over the period of the 1990s–beginning of the 2000s. A scaled emigration was mostly stimulated by the economic crisis which broke out in the country in the first years of independence, connected with construction of market relations in economy. A stabilization of the economy and a steady growth took shape only by the beginning of the 2000s. The balance of external migration became positive only by the mid of the 2000s, which against the background of relatively favorable dynamics of natural growth determined the rates of the

population increase. In spite of the fact that natural growth for the 20-year period always remained positive, its dynamics had periods of long decrease and increase (Fig. 3).

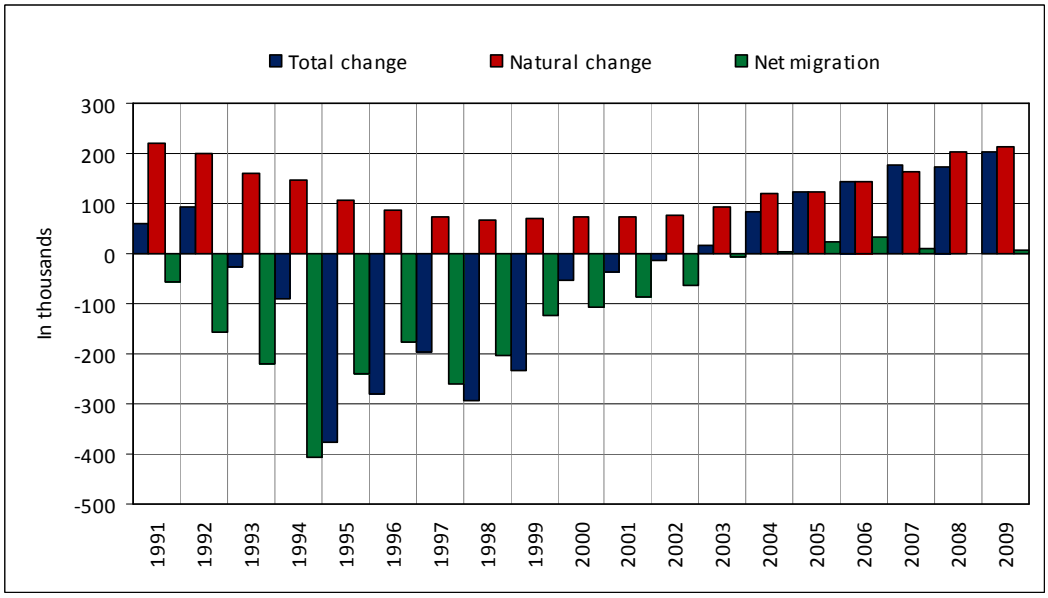
The decrease of natural growth typical for the 1990s also obtained a positive dynamics only at the beginning of the 2000s.

Fig. 2 – Population size of Kazakhstan in 1991–2009



Source: Agency of Statistics of the Republic of Kazakhstan

Fig. 3 – Population change, 1991–2009

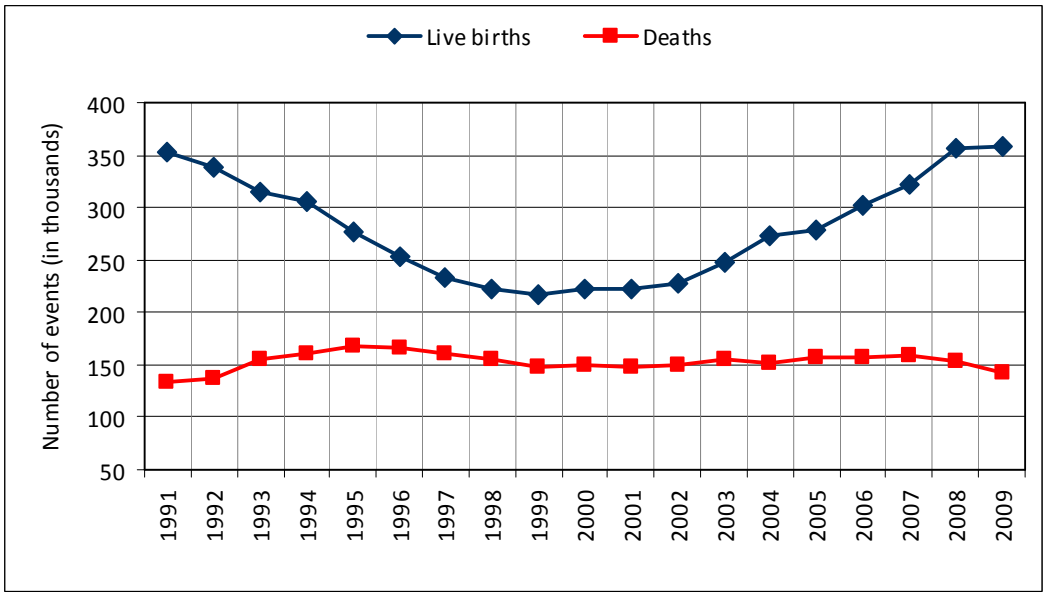


Source: Agency of Statistics of the Republic of Kazakhstan

The change of the dynamics of natural growth was followed by the change in fertility and mortality. In absolute numbers for the same period of time we can see some increase in mortality in the 1990s with the consequent stabilization in the 2000s (Fig. 4). Viewing the number of births, we can note a more significant decrease of live births for the period of the

1990s and a noticeable increase of the number of live births, which determined the dynamics of the 2000s. No doubt, that fertility in this case has a rather expressed correlation with the economic situation in the country. The period of decreasing falls at the economic crisis of the transition period of the 1990s. Positive changes to a definite degree are favoured by economic success of the country and the improvement of the quality of life. At the same time, the economic situation is not the only factor, which ensured a positive fertility dynamics. A favorable age structure of the population, formed by the beginning of the 2000s, played a significant role here.

Fig. 4 – Natural change of the population, 1991–2009

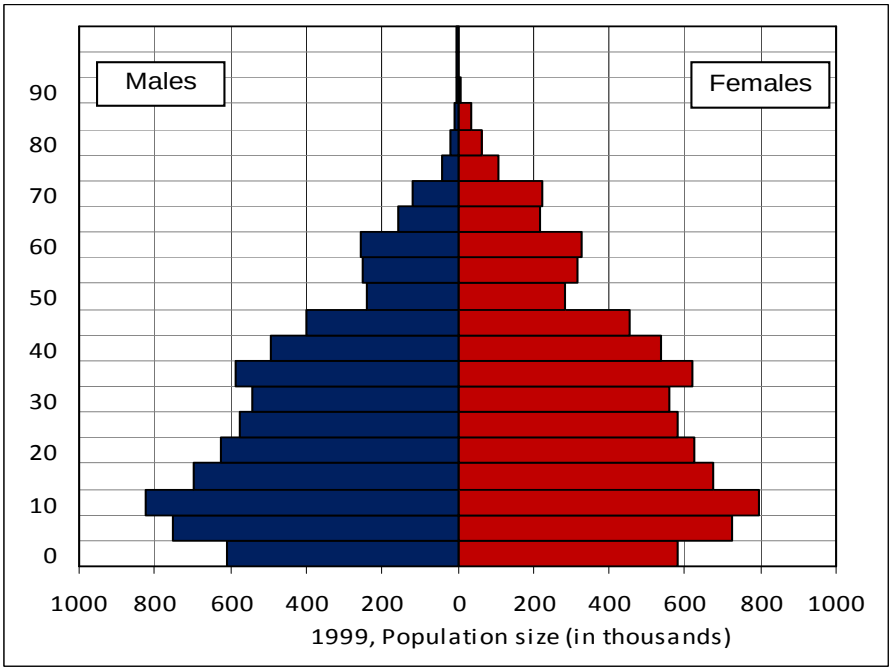


Source: Agency of Statistics of the Republic of Kazakhstan

A demographic wave of the people born in the 1980s entered a reproductive age, and it in quantitative relation influenced fertility dynamics. Besides, viewing age pyramids of 1999 and 2009 we can note that a favorable age structure will be soon exchanged by the generation of the 1990s, the number of which significantly yields in quantitative relation (Fig. 5–6).

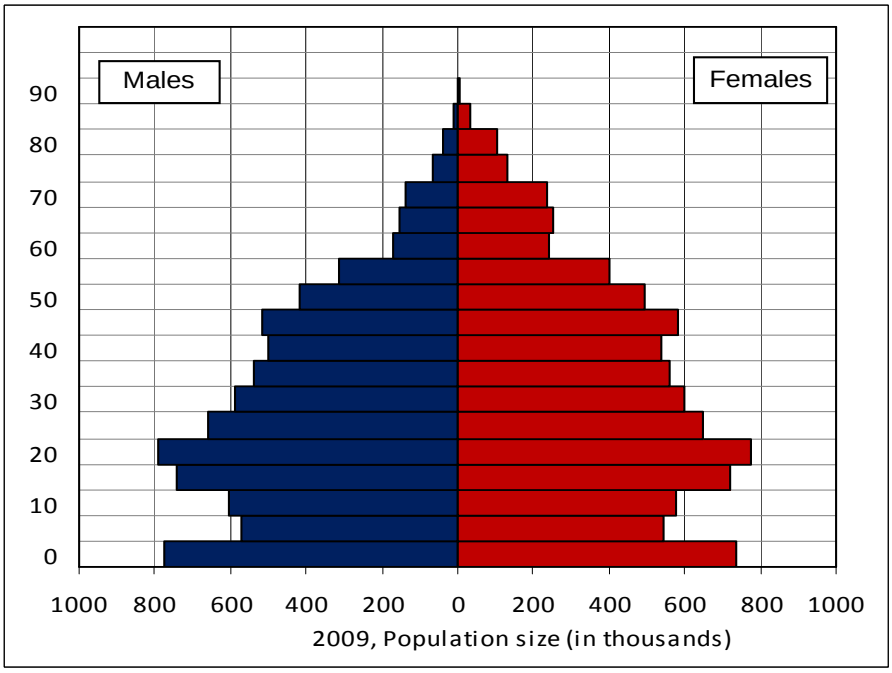
As a consequence, in the foreseeable perspective a decrease of the number of births can be expected, which in its turn will influence the rates of natural growth and make an impact on the age structure of the country.

Fig. 5 – Population composition by sex and age, 1999



Source: Agency of Statistics of the Republic of Kazakhstan

Fig. 6 – Population composition by sex and age, 2009



Source: Agency of Statistics of the Republic of Kazakhstan

Viewing the changes in age structure of the population, a trend of population ageing can be observed, which is first of all expressed in a steady decrease of the number and share of young population at the age of 0–14 years old of 4.6 % (– 485.6 thou.) over the period of 1999–2009 (Tab. 1). Against this background, a trend of increasing the number and share of the population at the age of 15–64 and over the age of 65 obtained its development. The population at the

productive age of 15–64 years old increased by 3.9 % (1137.9 thou.). It is a rather favorable factor for the dynamically developed economy of the country. At the same time, over the period of 1999–2009 an increase of the share of people older than age 60 by 0.7 % (169.1 thou.) is observed. This trend also underlines the process of population ageing.

Tab. 1 – Development of population structure by major age groups

	1999	2001	2003	2005	2007	2009	2009–1999
Age group	Population size (in thou.)						
0–14	4295.7	4056.4	3822.2	3700.5	3691.7	3810.1	– 485.6
15–64	9652.5	9800.3	9959.4	10210.9	10497.3	10790.4	1137.9
65+	1006.9	1009.0	1085.2	1163.3	1207.9	1176.0	169.1
Total	14955.1	14865.6	14866.8	15074.8	15396.9	15776.5	821.4
Age group	Share out of the total population (in %)						
0–14	28.7	27.3	25.7	24.5	24.0	24.2	– 4.6
15–64	64.5	65.9	67.0	67.7	68.2	68.4	3.9
65+	6.7	6.8	7.3	7.7	7.8	7.5	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	0.0
	Characteristics of population structure						
Average age	30.3	30.8	31.2	31.5	31.7	31.7	1.4
Median age	27.4	27.8	28.3	28.6	28.8	29.0	1.6

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

An indicator of no small importance of the process of population ageing is the increase of average age of the population. Over the 10-year period an average age of population in Kazakhstan increased form 30.3 years up to 31.7 years.

The median age is also quite important indicator reflecting the correlation of "young" and "old" component of the population. It is accepted to consider that the population at a median age of less than 20 years old is "young", and more than 30 years old is more "old" (Hobbs 2004). The population, whose median age is between 20 and 30 can be called an "intermediate age". Correspondingly, with the change of median age an "ageing" or a "rejuvenation" of the population takes place.

In Kazakhstan, a median age made 29 years old; over the period of 1999–2009, there was an increase of this indicator by 1.6 years, which characterizes the process of population ageing and the decrease of the share of young age groups. The index of ageing also confirms this fact. Over the period of 1999–2009 it had an increase of 7.5 % from 23.4 % to 30.9 % (Tab. 2). The population ageing supplements the decrease of a young-age-dependency ratio and increasing index of old-age-dependency ratio.

Over the 10-year period, there was a significant decrease of the young-age-dependency ratio from 44.5 % to 35.3 %. At the same time, the old-age-dependency ratio increased from 10.4 % to 10.9 %.

Tab. 2 – Dependency ratios, 1999–2009

	1999	2001	2003	2005	2007	2009	2009–1999
Index of ageing (65+/0-14)	23.4	24.9	28.4	31.4	32.7	30.9	7.5
Age of dependency ratio	54.9	51.7	49.3	47.6	46.7	46.2	– 8.7
Young-age-dependency ratio	44.5	41.4	38.4	36.2	35.2	35.3	– 9.2
Old-age-dependency ratio	10.4	10.3	10.9	11.4	11.5	10.9	0.5

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Against this background the age of dependency ratio decreased, reducing the economic burden on the population of productive age, which to some extent can be called a positive trend for this period of time (though it cannot be evaluated as a long-term one).

5.1.1 Change of ethnic structure

The change in population size was also reflected in the ethnic structure of the population. Over the period of 1989–2009, quite significant increase of the share of indigenous (Kazakh) ethnos was observed from 40.1 % up to 63.1 % in the total population size of the country (Tab. 3). Thus, Kazakhs became an absolute majority in the country. Against this background, a decrease of the share of European ethnics, especially Russians, Ukrainians, Germans and Tatars took place.

Tab. 3 – Change of ethnic structure, 1989–2009

	1989	1999	2009	2009–1989	1989	1999	2009
	Population size (in thou.)				Share (in %)		
Total	16199.2	14981.3	16009.6	– 189.6	100.0	100.0	100.0
Kazakhs	6496.9	8011.5	10096.8	3599.9	40.1	53.5	63.1
Russians	6062.0	4480.7	3793.8	– 2268.2	37.4	29.9	23.7
Uzbeks	331.0	370.8	457.0	126.0	2.0	2.5	2.9
Ukrainians	875.7	547.1	333.0	– 542.7	5.4	3.7	2.1
Uyghurs	181.5	210.4	224.7	43.2	1.1	1.4	1.4
Tatars	320.7	249.1	204.2	– 116.5	2.0	1.7	1.3
Germans	946.9	353.5	178.4	– 768.5	5.8	2.4	1.1
Other	984.5	758.4	721.7	– 262.8	6.1	5.1	4.5

Source: Agency of Statistics of the Republic of Kazakhstan

Such a significant change of the ethnic structure is conditioned by two important factors: emigration of European population and significant changes in the rates of natural growth among the ethnics. In absolute numbers, an increase of the size of Kazakh population by 19.7 % is observed over the period of 1999–2009. Over the same period, an increase of Uzbek and Uyghur population by 25.3 % and 15.2 % correspondingly took place. At the same time, the size of European ethnics noticeably decreased: Germans (– 38.0 %), Ukrainians (– 23.1 %),

Russians (– 13.8 %), Tatars (– 9.0 %). The decrease of European population in many respects is a result of an unfavorable dynamics of a natural growth.

Nevertheless, Kazakhstan still remains a polyethnic country. Large ethnic groups in 2009 are: Russians (23.7 %), Uzbeks (2.9 %), Ukrainians (2.1 %), Uyghurs (1.4 %), Tatars (1.3 %), and Germans (1.1 %).

Tab. 4 – Development of population size of major ethnic groups, 1999–2009

	1999	2001	2003	2005	2007	2009	2009–1999
	Development index, 1999 = 100 %						
Kazakhs	100.0	102.5	105.4	109.5	114.3	119.7	19.7
Russians	100.0	95.6	91.8	89.6	87.9	86.2	– 13.8
Uzbeks	100.0	104.3	108.5	113.4	118.9	125.3	25.3
Ukrainians	100.0	93.1	87.4	83.5	80.2	76.9	– 23.1
Uyghurs	100.0	102.4	104.7	107.8	111.0	115.2	15.2
Tatars	100.0	96.8	94.1	92.7	91.7	91.0	– 9.0
Germans	100.0	84.0	70.4	64.0	62.4	62.0	– 38.0

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Viewing a natural growth by single ethnic groups over the period of 1999–2008, we can note that European ethnics have a negative natural growth (depopulation). In 2008 a negative natural growth is observed among Russians (– 2.7 ‰), Ukrainians (– 12.7 ‰) and Tatars (– 0.3 ‰). The only exception is Germans who have a growth only of 9.9 ‰. The highest natural growth is observed for Uzbeks, in 2008 it made 26.7 ‰. For Kazakhs this indicator was 20.4 ‰, Uyghurs have a growth of 9.9 ‰ (Tab. 5).

Tab. 5 – Natural increase/decrease of population (per 1000) by major ethnic groups, 1999–2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Kazakhs	11.2	11.7	11.6	11.8	13.1	15.1	15.1	16.9	17.9	20.4
Russians	– 5.4	– 6.1	– 6.1	– 5.9	– 6.0	– 5.2	– 5.5	– 5.2	– 4.4	– 2.7
Uzbeks	19.5	17.7	17.8	17.3	19.1	22.0	20.9	22.4	24.3	26.7
Ukrainians	– 12.0	– 13.0	– 13.4	– 14.4	– 14.7	– 14.2	– 14.9	– 14.4	– 15.0	– 12.7
Uyghurs	11.0	12.2	11.0	11.1	13.0	14.8	13.9	14.5	17.1	19.0
Tatars	– 4.2	– 5.5	– 5.7	– 5.7	– 5.1	– 3.9	– 4.4	– 3.8	– 2.8	– 0.3
Germans	3.5	3.1	3.8	4.7	5.1	6.0	6.3	6.6	7.2	9.9

Source: Agency of Statistics of the Republic of Kazakhstan

In addition, it is necessary to mention that ethnic groups have quite different age structures (Tab. 6–7). In 1999, the highest share of the population at the age of 0–14 was observed for Uzbeks (37.8 %), Kazakhs (34.2 %) and Uyghurs (32.3 %). The smallest share of the age group 0–14 was observed for Ukrainians (14.6 %), Tatars (20.4 %), and Russians (21.0%). At the same time the share of the population in age group of 65 and over made 15.2 % for Ukrainians, 11.2 % for Tatars and 11.0 % for Russians. The minimum share of the population at the age of 65 and over is typical for Uzbeks (3.8 %), Kazakhs (3.6 %) and Uyghurs (4.4 %).

Against this background the highest median age (in 1999) is characteristic for Ukrainians 41.8 years while the average age is 41.6 years. Russians and Tatars also have relatively high median and average age of population. At the same time, Uzbeks have the lowest median age

21.3 years, while the average age is 25.1 years. Kazakhs have a relatively young population structure. The median age is 23.3 years, the average age is 26.3 years.

Tab. 6 – Population structure by major ethnic groups, 1999

	Kazakhs	Russians	Ukrainians	Uzbeks	Uyghurs	Tatars	Germans
Age group	Population size (in thou.)						
0–14	2726.6	943.9	80.1	140.0	67.8	51.0	90.4
15–64	4955.1	3051.2	386.0	215.9	132.9	170.5	239.2
65+	290.0	494.6	83.3	14.0	9.3	27.9	26.8
Total	7971.6	4489.7	549.5	369.8	210.1	249.4	356.4
Age group	Share out of the total population (in %)						
0–14	34.2	21.0	14.6	37.8	32.3	20.4	25.4
15–64	62.2	68	70.3	58.4	63.3	68.4	67.1
65+	3.6	11.0	15.2	3.8	4.4	11.2	7.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Characteristics of population structure						
Average age	26.3	35.9	41.6	25.1	27.7	36.3	31.3
Median age	23.3	35.3	41.8	21.3	25.1	35.9	26.6

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 7 – Population structure by major ethnic groups, 2006

	Kazakhs	Russians	Ukrainians	Uzbeks	Uyghurs	Tatars	Germans
Age group	Population size (in thou.)						
0–14	2518.5	631.9	62.5	145.9	61.6	37.2	47.7
15–64	5991.9	2799.0	299.3	264.6	155.1	159.8	155.5
65 +	402.9	548.4	87.1	18.5	13.1	32.7	19.6
Total	8913.3	3979.3	448.8	428.9	229.8	229.6	222.7
Age group	Share out of the total population (in %)						
0–14	28.3	15.9	13.9	34.0	26.8	16.2	21.4
15–64	67.2	70.3	66.7	61.7	67.5	69.6	69.8
65 +	4.5	13.8	19.4	4.3	5.7	14.2	8.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Characteristics of population structure						
Average age	28.3	37.6	41.7	26.3	29.6	37.8	33.0
Median age	25.4	35.8	42.8	22.8	26.8	37.3	29.5

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

By 2006 there was an increase of median age and average age of population for above mentioned ethnic groups. Median age and average age of population changed the most noticeably among Kazakhs, Uyghurs and Germans. At the same time, the higher median age is characteristic for Ukrainians (42.8 years) while the average age is 41.7 years. Uzbeks have lowest median age (22.8 years), while the average age is 26.3 years. Kazakhs have the median age equal to 25.4 while the average age is 28.3. Median age and average age for Uyghurs are 26.8 and 29.6 years correspondingly. Germans have the median age equal to 29.5 years, the average age is 33.0 years.

In comparison with 1999, the share of the population at the age of 0–14 years old decreased most noticeably for Kazakhs, Uyghurs and Russians. At the same time the maximum share of

the population at the age of 0–14 falls at Uzbeks (34.0 %), Kazakhs (28.3 %) and Uyghurs (26.8 %). The population at the age of 65 and over has a large proportion among Ukrainians (19.4 %), Tatars (14.2 %) and Russians (13.8 %).

Thus, the general situation in the period of 1999–2006 practically did not change, while there were some changes in the age structures of single ethnic groups. Ethnic groups are rather distinctly divided into 2 categories: Eastern "young population" and western "old population". Kazakhs, Uzbeks and Uyghurs whose median age is less than 30 years are referred to the first category. The second category is represented by Russians, Ukrainians and Tatars whose median age is more than 30 years. Germans, who are more drawn towards the second category, make an exception, though their median age in 2006 was 29.5 years.

Dependency ratios rather clearly denote the ethnic differentiation by groups "Eastern" and "European". Therefore, in 1999 and 2006 the highest indexes of ageing were characteristic for Ukrainians, Tatars and Russians (Tab. 8–9). Besides, they significantly increased over the 5-year period.

Tab. 8 – Dependency ratios by major ethnic groups, 1999

Age group	Kazakhs	Russians	Ukrainians	Uzbeks	Uyghurs	Tatars	Germans
Index of ageing (65+/0–14)	10.6	52.4	104.0	10.0	13.8	54.7	29.7
Age of dependency ratio	60.9	47.1	42.3	71.3	58.1	46.3	49.0
Young-age dependency ratio	55.0	30.9	20.8	64.8	51.0	29.9	37.8
Old-age-dependency ratio	5.9	16.2	21.6	6.5	7.0	16.4	11.2

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 9 – Dependency ratios by major ethnic groups, 2006

Age group	Kazakhs	Russians	Ukrainians	Uzbeks	Uyghurs	Tatars	Germans
Index of ageing (65+/0–14)	16.0	86.8	139.4	12.7	21.2	88.0	41.1
Age of dependency ratio	48.8	42.2	50.0	62.1	48.2	43.7	43.3
Young-age dependency ratio	42.0	22.6	20.9	55.1	39.7	23.3	30.7
Old-age-dependency ratio	6.7	19.6	29.1	7.0	8.4	20.5	12.6

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Uzbeks had the lowest index of ageing equal to 10.0 % in 1999 and 12.7 % in 2006. It is significant that in 1999 Kazakhs had the index of ageing of 10.6 % practically equal to the same

indicator of Uzbeks. However, in 2006 this index noticeably rose and made 16.0 %. It significantly increased the gap from the minimal value. The same indicator for Uyghurs increased more noticeably from 13.8 % in 1999 up to 21.2 % in 2006.

Such a dynamic "ageing" of European and Eastern ethnics is in many respects connected with the decrease of the share of young population at the age of 0–14 years.

On the whole the highest young-age-dependency ratio is observed among Uzbeks, it was 64.8 % in 1999 and 55.1 % in 2006. The lowest young-age-dependency ratio was observed among Ukrainians, 20.8 % in 1999 and 20.9 % in 2006.

Against this background old-age-dependency ratio varies from maximum 21.6 % in 1999 and 29.1 % in 2006 observed among Ukrainians to minimal 5.9 % in 1999 and 6.7 % in 2006 observed among Kazakhs. Over the period 1999–2006, this ratio increased the most significantly for Ukrainians by 7.5 %, Tatars by 4.1 % and made 29.1 % and 20.5 % correspondingly. Old-age-dependency ratio also increased by 3.4 % for Russians and was 19.6 %. A comparatively small increase of this ratio is observed for Germans, Uyghurs and Uzbeks. Old-age-dependency ratio in 2006 for these ethnic groups made 12.6 %, 8.4 % and 7.0 % correspondingly.

Taking into account the said above, the maximum age of dependency ratio equal to 62.1 % in 2006 was observed for Uzbeks. This ratio is in many respects conditioned by a young age structure of Uzbek population. A rather high index of age of dependency ratio equal to 50.0 % was observed also for Ukrainians. However, a considerable group of the population at the age 60 and over played a great role in this case.

For other ethnic groups this index fluctuates within 40 %. The minimal index in 2006 was observed for Russians – 42.2 %. The age of dependency ratio for Germans made 43.3 %, for Tatars 43.7 %, for Uyghurs 48.2 %, 48.8 % for Kazakhs.

On the whole, over the period from 1999 till 2006 the decrease of the age of dependency ratio was characteristic practically for all ethnic groups excluding Ukrainians. It is in many respects conditioned by the peculiarities of age structures of this period, mentioned above, and the dynamics of the population reproduction.

Thus, the conducted analysis allows making a conclusion on quite serious changes in the population structure of Kazakhstan, which influenced age and ethnic components. The dynamics of age structure of the population of the Republic is an evidence of the beginning of the population ageing process, which will have an irreversible character in future. Ageing "at the top" and "at the bottom" of the population pyramid conditions the increase of the share of older age groups against the background of the decrease of "young" population. As a result of population ageing (especially in the case of Kazakhstan, when the share of young population decreases), the chances of population increasing owing to natural growth are limited. Against this background, ethnic specific is very pronounced; it is expressed in the differences of age structures of single ethnic groups. The younger age structure of Eastern ethnics, to whom Kazakhs, Uzbeks and Uyghurs are referred to, objectively favours to the increase of the share of these ethnic groups in the total size of the population of Kazakhstan. Taking into account the said above, it is important to evaluate the change in population size taking into consideration the

ethnic composition, which is a characteristic feature of Kazakhstan from point of view of demographic as well as geopolitical prospects.

5.2 Fertility patterns

Adverting to fertility trends, it is quite important for us to evaluate the perspectives of the population growth and changes in the ethnic composition of the country. From lately, some positive trends have been observed in Kazakhstan, connected to the increase of the number of births and fertility intensity.

Over the period of 1999–2008 a steady increase of the number of births is observed. A positive fertility dynamics in absolute numbers is expressed in the main fertility indicators. In the period of 1999–2008 quite significant increase of crude birth rate (CBR) from 14.6 ‰ up to 22.8 ‰ took place (Tab. 10). At the same time a general fertility rate (GFR) increased from 53.5 ‰ up to 80.7 ‰. An important indicator of the increase of fertility intensity of women is the growth of total fertility rate (TFR). In 1999, TFR in Kazakhstan was below the level of simple reproduction and made 1.8 live births per women. In 2004, TFR was already 2.2 and increased up to 2.7 in 2008. Such trend looks rather optimistic, especially against the background of the increase of fertility intensity by birth order.

Tab. 10 – Fertility indicators, 1999–2008

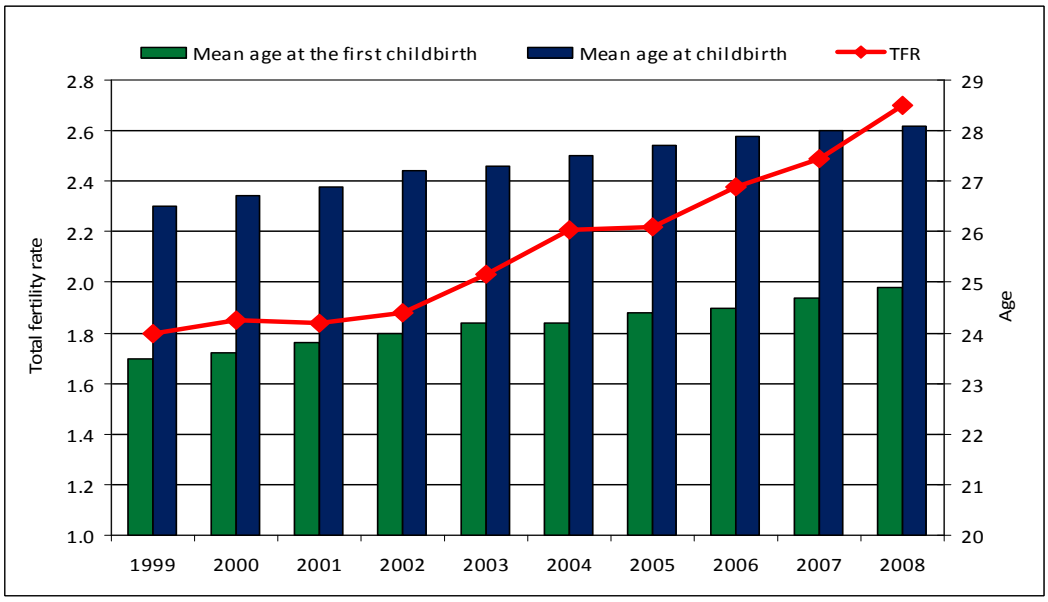
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
CBR ‰	14.6	14.9	14.9	15.3	16.6	18.2	18.4	19.7	20.8	22.8
GFR ‰	53.5	54.3	53.8	54.7	58.9	64.1	64.7	69.2	73.2	80.7
ASABR ‰	14.6	14.9	14.8	15.1	16.3	17.7	17.8	18.9	19.8	21.6
TFR	1.8	1.8	1.8	1.9	2.0	2.2	2.2	2.4	2.5	2.7
	TFR by birth order									
1	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.1
2	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7
3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5
4+	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4
	Mean age of women at childbirth									
1st order	23.5	23.7	23.9	24.0	24.2	24.3	24.4	24.5	24.7	24.9
2nd order	26.6	26.8	27.0	27.2	27.4	27.6	27.8	27.8	27.9	27.9
3rd order	29.6	29.9	30.2	30.4	30.6	30.8	31.1	31.1	31.2	31.2
4th order	32.0	32.1	32.3	32.4	32.5	32.7	33.0	33.1	33.1	33.1
Total	26.5	26.8	27.0	27.2	27.3	27.6	27.7	27.9	28.0	28.1

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: ASABR-Age-sex adjusted birth rate. The calculation of ASBR using total population of Kazakhstan 1999 (both sexes) and number of women of this population in reproductive ages as a standard.

As it can be seen from the Table 10 the TFR by birth order increased by 2008 in every birth order. Such trend can be characterized as positive. However, taking into account the dynamics of the change of the age of women at childbirth makes us think of the long-time character of such positive changes.

Over the period of 1999–2008, there was a noticeable increase of mean age of women at childbirth from 26.5 up to 28.1 years old. At the same time, mean age of women at first-order birth increased from 23.5 to 24.9 years old, mean age of women at second-order birth increased from 26.6 to 27.9 years old. Mean age of women at third-order and fourth and posterior births made by 2008 31.2 and 33.1 years old correspondingly.

Fig. 7 – Trends in TFR and mean age at childbirth, 1999–2008



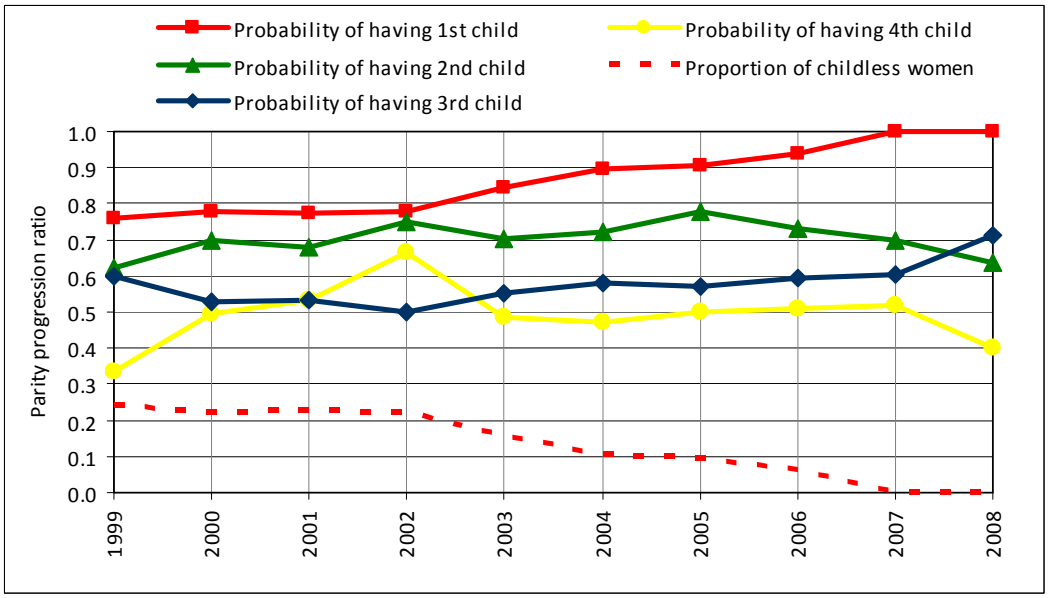
Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Thus, mean age of women at first childbirth increased by 1.4 years, by second order – by 1.3 years over the period of 1999–2008. The increase of mean age of women at childbirth by third-order fourth and posterior births was by 1.6 and 1.1 years correspondingly. Such changes are quite objective evidence of a change in reproductive behavior of females. Postponing of childbirth for a later time is an evidence of some change in life priorities and adjustment to a new social-economic reality. The increase of fertility intensity outlined against this background can be rather confidently related to the improvement of economic situation in the country, though its perspective should not be overestimated.

The Figure 8 emphasizes the ambiguity of the situation. As it can be seen, there was a significant increase of probability of the first-order birth, practically up to 100 %, over the period of 1999–2008. Owing to a rather high TFR for the first-order childbirth, there was a decrease of a hypothetical share of childless women. At the same time, the probability of second-, third-, and fourth-order births does not reflect a well-defined tendency towards increasing. These indicators increased by 2008, though due to fluctuations in 2002 and 2005 it is rather difficult to speak of well-defined tendencies. Therefore, for instance, a probability of the second-order birth in 2005 had a tendency towards increasing, but in 2008 it fell nearly to the ratio of 1999. The probability of the third-order birth relative to 1999 decreased in 2002, then by 2008 began to increase. The probability of the fourth-order birth, quite the opposite, noticeably increased by 2002, then became stabilized from 2003 to 2007, having some insignificant

fluctuations, and in 2008 got a tendency towards decreasing. Evidently, such fluctuations are in many respects connected to the postponed childbirths of the crisis period of 1990s, which were realized in the first half of the 2000s, ensuring a significant increase of fertility intensity in general and by birth order. In addition to this, a favorable age structure of population was formed, which was mentioned in the previous chapter.

Fig. 8 – Trends in parity progression ratio, 1999–2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Decomposition of TFR over the period of 1999–2008 into the components (Tab. 11) rather clearly shows that the difference between GFR of 1999 (53.5 ‰) and GFR of 2008 (80.7 ‰) by 27.2 ‰ is ensured mainly owing to an increase of fertility intensity (25.7), and favorable, in comparison with 1999, age structure (1.9).

Tab. 11– Decomposition of difference between general fertility rates in Kazakhstan in 1999 and 2009

Age	ASFR (in ‰)		Share of females 15–49		GFR difference factors (in ‰)			
					Effect of age structure	Effect of ASFR	Effect of interaction	Total effect
	1999	2008	1999	2008				
15–19	33.8	31.1	0.17	0.17	– 0.1	– 0.5	0.0	– 0.5
20–24	133.3	158.2	0.15	0.17	2.6	3.8	0.5	6.9
25–29	100.0	160.5	0.14	0.15	0.2	8.7	0.1	9.0
30–34	59.6	112.0	0.14	0.13	– 0.1	7.2	– 0.1	7.0
35–39	26.1	60.7	0.15	0.13	– 0.6	5.2	– 0.8	3.8
40–44	5.9	14.9	0.13	0.12	– 0.1	1.2	– 0.1	1.1
45–49	0.6	0.7	0.11	0.13	0.0	0.0	0.0	0.0
Total			1.00	1.00	1.9	25.7	– 0.4	27.2

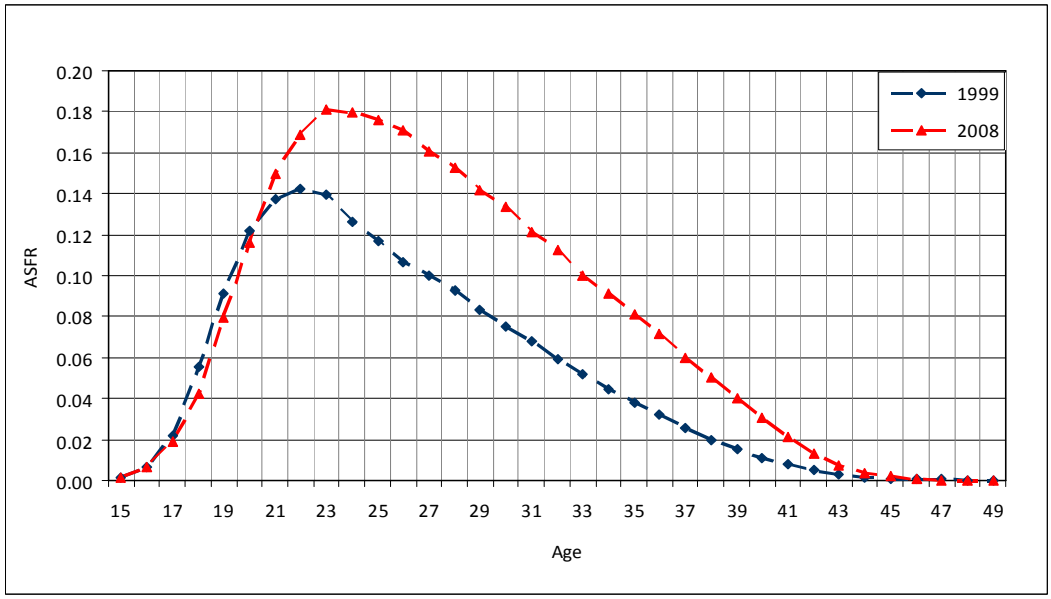
Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

At the same time, the interrelation between fertility intensity and age structure is negative (– 0.4). Besides, a more detailed analysis of fertility intensity shows that maximum

intensity of fertility in 2008 fell at the age group of 25–34 years old. At the same time, fertility intensity decreased in the age group of 15–19 years old. Such situation is an evidence of the change in reproductive behavior of the young generation, which is expressed in postponing childbirths till the older ages, which results in the increase of average age of women by childbirth, and prejudices the perspectives of possession of many children as a mass trend.

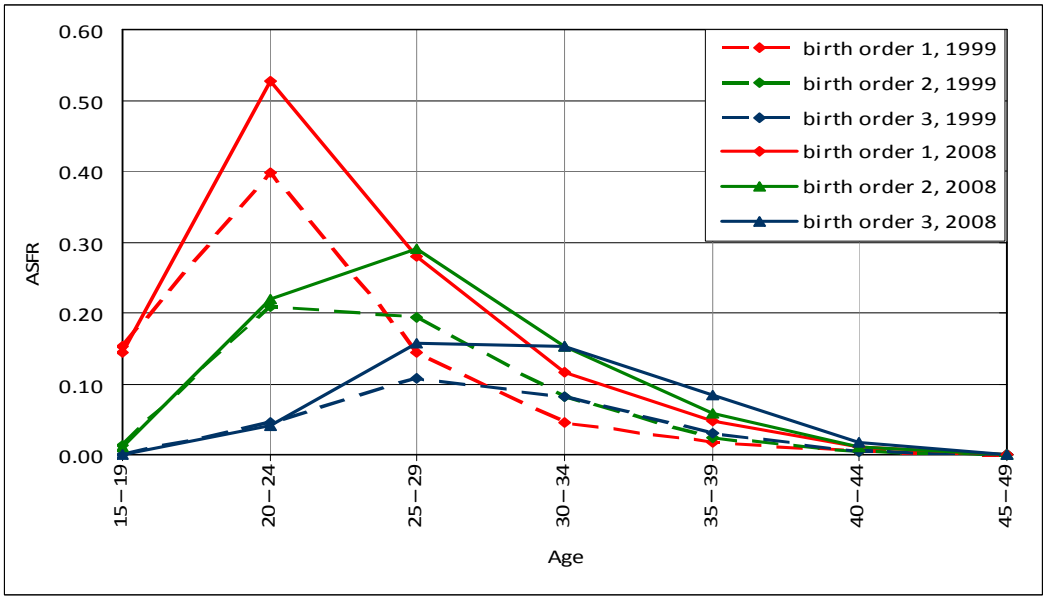
Changes in age specific fertility rates (Fig. 9) is an evidence in support of this assumption; this figure quite clearly demonstrates that the peak of fertility shifted to older age groups.

Fig. 9 – Changes in age specific fertility rates between 1999 and 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Fig.10 – Changes in age and birth order specific fertility rates between 1999 and 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

This assumption is also confirmed by changes in age and birth order specific fertility rates between 1999 and 2008. The Figure 10 demonstrates that increase of fertility intensity at first-order birth occurs in many respects due to the older age groups. This is the consequence of the increase of average age of women at first-order birth, which is closely correlates with posterior births, the intensity of which also increases owing to older age groups.

Thus, the increase of fertility in absolute numbers is conditioned mainly by the increase of fertility intensity, which was formed under the impact of favorable social-economic situation. At the same time, taking into account a specific character of Kazakhstan, expressed in ethnic heterogeneity, especially the change in the ethnic structure of the country, which are mentioned in the previous chapter, it is appropriate to pay attention to ethnic differentiation of fertility, which is also an important factor, determining fertility general trends for the country.

5.2.1 Ethnic features of fertility

Comparison of the proportions of main ethnic groups in the total number of live births can become a key point of ethnic specificity in the processes of population reproduction in Kazakhstan. As it can be seen from the Tab. 12, the dynamics of distribution of live births in absolute numbers is correlated with the changes in ethnic structure of the country from 1999 to 2008.

In percentage, Kazakhs made 65.4 % out of the total number of live births in 1999 and 71.3 % in 2008, thus forming an absolute majority. Against this background, a noticeable decrease of the shares of other ethnic groups, especially Russians, whose share decreased by 4.2 %, and made in 2008 13.8 % out of the total number of live births. On the whole, by 2008 only Uyghurs slightly increased their share in the total number of live births by 0.1 %.

Tab. 12 – Distribution of live births by major ethnic groups in Kazakhstan, 1999–2008

	1999	2002	2005	2008	1999	2002	2005	2008
	Live births (in thou.)				Share (in %)			
Total	217.6	227.2	279.0	356.6	100.0	100.0	100.0	100.0
Kazakhs	142.4	152.5	192.4	254.4	65.4	67.1	69.0	71.3
Russians	39.2	38.9	43.9	49.1	18.0	17.1	15.7	13.8
Uzbeks	9.5	9.3	11.5	15.0	4.4	4.1	4.1	4.2
Ukrainians	5.2	4.6	4.8	5.3	2.4	2.0	1.7	1.5
Uyghurs	3.5	3.7	4.7	6.1	1.6	1.6	1.7	1.7
Tatars	2.4	2.4	2.7	3.4	1.1	1.0	1.0	0.9
Germans	4.8	4.0	4.1	4.8	2.2	1.8	1.5	1.3
Other	10.6	11.9	14.8	18.5	4.9	5.2	5.3	5.2

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Such changes became the result of influence of a number of factors, the most important of which are the differences in age structure of single ethnic groups and fertility intensity. As it was mentioned in the previous chapter, Russians, Ukrainians and Tatars have a relatively old population structure. At the same time, Kazakhs, Uzbeks and Uyghurs have a younger population structure, which in a definite way influences CBR.

It can be seen from the Tab. 13, that highest CBR is observed for Uzbeks, Kazakhs and Uyghurs in 1999–2008. At the same time, Russians, Ukrainians and Tatars have the lowest CBR. The dynamics of CBR demonstrates that the increase of this rate occurs for all main ethnic groups, especially Kazakhs, Uyghurs, Tatars and Germans.

From 1999 to 2008 CBR increased for these ethnic groups by more than 50 %. Such a positive dynamics of CBR is an evidence of the increase of fertility intensity in all ethnic groups, which is correlated with the trends within the country mentioned above.

Tab. 13 – Changes in CBR by major ethnic groups, 1999–2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Kazakhs	17.8	18.2	18.1	18.3	19.8	21.6	21.9	23.6	24.7	27.1
Russians	8.8	8.9	8.9	9.4	10.3	10.9	11.0	11.4	11.9	12.7
Uzbeks	25.5	23.6	23.7	23.4	25.3	27.7	27.2	28.3	30.2	33.0
Ukrainians	9.6	9.4	9.4	9.5	10.2	10.6	10.5	11.1	11.4	12.4
Uyghurs	16.7	18.2	16.8	17.2	19.3	20.8	20.6	20.8	23.2	25.3
Tatars	9.7	9.3	9.0	10.0	10.7	12.0	11.9	12.8	13.9	14.9
Germans	14.0	14.0	14.6	15.4	16.5	18.1	18.4	18.9	19.3	21.8

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

The indicator of GFR, represented in the Tab. 14 also has a tendency towards increasing for all ethnic groups. Fertility intensity most significantly changed from 1999 to 2006 for Germans, Russians and Tatars. In comparison with former ethnic groups, Uzbeks and Ukrainians had not such a significant change of fertility rate.

Thus, maximum general fertility rate by 2006 was characteristic for Uzbeks (106.0 ‰), Kazakhs (80.3 ‰) and Uyghurs (72.6 ‰). Minimum GFR is characteristic for Russians (40.9 ‰), Tatars (46.0 ‰) and Ukrainians (45.9 ‰).

Tab. 14 – Changes in GFR by major ethnic groups, 1999–2006

	1999	2000	2001	2002	2003	2004	2005	2006
Kazakhs	64.4	65.4	64.1	64.2	68.5	74.4	74.8	80.3
Russians	32.4	32.5	32.4	33.8	36.8	39.1	39.4	40.9
Uzbeks	101.1	92.7	91.9	89.7	95.9	104.6	102.3	106.0
Ukrainians	40.2	39.7	39.5	39.7	42.8	44.2	43.7	45.9
Uyghurs	61.5	66.2	60.3	61.0	67.9	72.7	71.6	72.6
Tatars	35.7	34.0	32.9	36.2	38.5	43.0	42.9	46.0
Germans	47.7	47.6	49.7	52.9	56.8	63.2	65.2	67.3

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Standardization of fertility rates also shows ethnic differentiation (Tab. 15). The maximum age-sex adjusted birth rate (ASABR) is characteristic for Uzbeks, Kazakhs and Uyghurs.

In 2005 this rates for the above-mentioned ethnic groups were 26.7 ‰, 20.3 ‰ and 19.8 ‰ correspondingly. At the same time, rather low ASABR were observed in 2005 for Russians (11.0 ‰), Tatars (13.1 ‰), Ukrainians (14.0 ‰) and Germans (16.4 ‰). Thus, the difference in fertility trends between Eastern and European ethnic groups is quite evident.

Tab. 15 – Age-sex adjusted birth rate for selected ethnic groups, 1999–2005

	1999	2000	2001	2002	2003	2004	2005	2005–1999
Kazakhs	16.6	17.0	16.9	17.1	18.4	20.1	20.3	3.7
Russians	9.7	9.6	9.5	9.9	10.6	11.1	11.0	1.4
Ukrainians	13.1	13.0	12.9	13.0	13.9	14.3	14.0	1.0
Uzbeks	25.1	23.4	23.5	23.2	25.0	27.3	26.7	1.6
Uyghurs	15.9	17.4	16.1	16.6	18.7	20.0	19.8	3.9
Tatars	11.2	10.7	10.3	11.3	12.0	13.3	13.1	1.8
Germans	12.9	12.6	13.0	13.7	14.4	16.0	16.4	3.6

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: ASABR-Age-sex adjusted birth rate. The calculation of ASABR using total population of Kazakhstan 1999 (both sexes) and number of women of this population in reproductive ages as a standard

The situation with TFR looks the same. An increase of TFR can be observed over the period of 1999–2006 for all ethnic groups (Tab. 16–17). At the same time, by 2006 single ethnic groups have the TFR below the replacement level. Russians with the minimum TFR equal to 1.4, Tatars with TFR equal to 1.7 and Ukrainians with TFR of 1.8 can be referred to such groups.

The maximum indexes of TFR are characteristic for Uzbeks (3.4), Kazakhs (2.7) and Uyghurs (2.5). Thus, the differentiation between Eastern and European ethnic groups is rather well-defined. Young (Eastern) ethnic groups have higher fertility intensity, and as a consequence, a younger age structure. An old age structure of European ethnic groups was in many respects formed as a result of low fertility intensity.

Tab. 16 – Ethnic groups with highest TFR in Kazakhstan

	1999	2000	2001	2002	2003	2004	2005	2006
Kazakhs	2.0	2.1	2.1	2.1	2.3	2.5	2.5	2.7
Uzbeks	3.1	2.9	2.9	2.9	3.1	3.4	3.3	3.4
Uyghurs	1.9	2.2	2.0	2.0	2.3	2.5	2.5	2.5

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 17 – Ethnic groups with TFR below replacement level in Kazakhstan

	1999	2000	2001	2002	2003	2004	2005	2006
Russians	1.2	1.2	1.2	1.2	1.3	1.4	1.4	1.4
Ukrainians	1.6	1.6	1.6	1.6	1.7	1.8	1.7	1.8
Tatars	1.4	1.3	1.3	1.4	1.5	1.6	1.6	1.7
Germans	1.5	1.5	1.6	1.7	1.7	1.9	2.0	2.0

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

On the whole, comparing the indexes of GFR by single ethnic groups for 1999 and 2006, we can for decompose them into the components. As it is seen from the Table 18, main factors had different impact on the increase of fertility intensity for different ethnic groups. So, for instance, the increase of GFR by 15.8 ‰ for Kazakhs over the period of 1999–2006 was formed owing to the growth of fertility intensity (20.1 ‰). The effect of age structure was negative (– 2.4). A similar situation is characteristic for Uyghurs and Uzbeks, for whom the man role was played

by the growth of fertility against the background of a negative effect of age structure. The growth of GFR for Russians, Tatars, Ukrainians and Germans is provided by a combination of a favorable age structure and higher fertility intensity.

Tab. 18 – Decomposition of difference between general fertility rates, selected ethnic groups in 1999 and 2005

	Kazakhs	Russians	Ukrainians	Uzbeks	Uyghurs	Tatars	Germans
GFR, 1999	64.4	32.3	40.2	101.1	61.4	35.7	47.6
GFR, 2005	80.3	40.9	45.9	106.0	72.6	46.0	67.3
	GFR difference factors (in ‰)						
Effect of age distribution	– 2.4	2.9	0.5	– 3.5	– 3.2	1.8	3.7
Effect of ASFR	20.1	5.2	6.4	9.5	15.8	9.1	13.0
Effect of interaction	– 1.9	0.3	– 1.2	– 1.1	– 1.5	– 0.7	2.9
Total effect	15.8	8.5	5.7	4.9	11.1	10.2	19.7

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Against the background of fertility intensity shift of fertility peak to older age groups, characteristic for the country as a whole, can be noted. The dynamics of increasing of the mean age of women at childbirth confirms these tendencies. Over the period of 1999–2006 mean age of women at childbirth for Kazakhs increased from 27.2 to 28.4 years old, and was the maximum in comparison with other ethnic groups (Tab. 19). Uzbeks and Uyghurs go next, the mean age of women at childbirth for them increased from 26.7 and 26.3 in 1999 up to 27.9 and 27.2 in 2006 correspondingly. Minimum mean age of women at childbirth is characteristic for Germans; in 1999 it made 24.8 years old, and increased up to 25.5 in 2006. The same indicator for Russians and Ukrainians (in 2006) made 26.4 and 26.5 years old correspondingly.

Tab. 19 – Mean age at childbirth, selected ethnic groups, 1999–2006

	1999	2000	2001	2002	2003	2004	2005	2006
Kazakhs	27.2	27.4	27.5	27.7	27.9	28.1	28.2	28.4
Uyghurs	26.7	26.9	27.0	27.3	27.7	27.7	27.8	27.9
Uzbeks	26.3	26.6	26.8	26.8	26.8	26.9	27.2	27.2
Tatars	26.0	26.1	26.4	26.6	26.8	27.0	27.0	27.0
Russians	25.1	25.4	25.6	25.8	26.0	26.2	26.4	26.4
Ukrainians	25.2	25.3	25.5	25.8	26.1	26.2	26.3	26.5
Germans	24.8	24.8	24.9	25.2	25.1	25.3	25.4	25.5

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Comparing the indexes of mean age of women at childbirth by birth order, we can also note the difference of this index for single ethnic groups (Tab. 20). So, for instance, mean age of women at first-order birth increased for Russians, Ukrainians, Germans and Kazakhs. Maximum mean age at first-order birth in 2006 is characteristic for Kazakhs (24.8 years old), Uyghurs (24.3 years old) and Tatars (24.2 years old). Minimum mean age of women at first-order birth is observed for Germans (22.7 years old). The same index for other ethnics varies within the age of 23 years old.

Thus, the mean age of women at first-order birth over the period of 1999–2006 had the most dynamic increase for Ukrainians, Russians, Kazakhs and Tatars. The increase was by 1 year and more.

Tab.20 – Mean age at first childbirth, selected ethnic groups, 1999–2006

	1999	2000	2001	2002	2003	2004	2005	2006
Kazakhs	24.0	24.2	24.3	24.5	24.7	24.7	24.8	24.8
Uyghurs	23.7	23.8	24.0	24.0	24.5	24.1	24.3	24.3
Uzbeks	22.9	23.1	23.4	23.1	23.7	23.5	23.6	23.5
Tatars	23.5	23.6	23.8	24.1	24.2	24.4	24.4	24.2
Russians	22.8	23.0	23.2	23.4	23.5	23.6	23.7	23.8
Ukrainians	22.7	22.8	22.9	23.1	23.4	23.4	23.5	23.7
Germans	21.7	21.9	22.1	22.3	22.1	22.5	22.5	22.7

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Thus, a general trend for all ethnic groups is the increase of mean age of women at childbirth. In spite of the differences in fertility intensity for single ethnic groups, this process is an evidence of the change in reproductive behavior of all the ethnic groups mentioned above. The vector of changes is formed under the influence of modernization. Kazakhs, being an ethnic majority, excite a special interest. Being the representatives of Eastern ethnics in their group, Kazakhs demonstrate the most dynamic changes.

The trends, presented above, emphasize ethnic differentiation of fertility in Kazakhstan between Eastern and European ethnic groups. The differentiation is in many respects conditioned by orientation towards possession of many children for Eastern ethnic groups and families with few children wide spread for European ethnic groups. In spite of the existing contrast, it is rather difficult to contend that this situation is stable, to overestimate the role of possession of many children as a factor capable of maintaining a rather high level of TFR.

The presented analysis of fertility trends is far from exhaustive. It undoubtedly lacks of the description of the whole number of important indicators characterizing fertility dynamics for women by marriage, educational level, etc. However, the statements given in this chapter allows to judge rather objectively on fertility dynamics in Kazakhstan, to differ ethnic specificity. As it is seen from the analysis, the fertility trends in Kazakhstan, in spite of the ethnic belonging, develop under the conditions of perception of modernization values, where a great role is played by individualism, gender equality, career growth and material well-being. Under such conditions, fertility cannot be evaluated as a factor capable of cardinal changing (towards rapid increase) of the population size. At the same time, ethnic aspect of fertility deserves special attention due to a significant influence on the ethnic structure of the population.

5.3 Mortality dynamics

As it was mentioned earlier, natural growth of population in Kazakhstan for the last decade (1999–2009) was formed mostly owing to the increase of number of live births; mortality

dynamics changed less noticeably. Nevertheless, such circumstance does not diminishes the role of mortality as a factor determining dynamics of population growth.

Analysis of basic indicators allows judging on the recent mortality patterns. Over the period of 1999–2008 crude mortality rate (CMR) changed from 9.9 ‰ to 9.7 ‰ (Tab. 21). At the same time, crude mortality rate had a dynamics towards increasing and grew from 9.9 ‰ to 10.4 ‰ over the period from 1999 to 2006. Standardization of crude mortality rate allows evaluating the character of the changes more objectively. Taking age structure of 1999 as a standard, we can point out the decrease of age-standardized mortality rate (ASMR) in 2008 to 9.0 ‰. Such comparison characterizes the changes in population structure and in mortality intensity over the compared period. As it is seen, such changes in mortality intensity within the given period are difficult to evaluate as significant.

Tab. 21– Mortality in 1999–2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Number of deaths (in thou.)	147.4	149.8	147.9	149.4	155.3	152.3	157.1	157.2	158.3	152.7
Crude mortality rate (in ‰)	9.9	10.1	10.0	10.1	10.4	10.1	10.4	10.3	10.2	9.7
ASMR (in ‰)	9.9	10.0	9.8	9.8	10.1	9.8	9.9	9.7	9.6	9.0
Life expect. at birth, total pop.	65.7	65.5	65.8	66.0	65.9	66.2	65.9	66.2	66.3	67.1
Males	60.6	60.2	60.5	60.7	60.5	60.6	60.3	60.7	60.7	61.9
Females	70.9	71.2	71.3	71.6	71.5	72.0	71.8	72.2	72.6	72.4
Difference	10.3	11.0	10.8	10.8	11.0	11.4	11.5	11.5	11.9	10.5

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: ASMR – Age-standardized mortality rate. Standard – age structure 1999

The indicators of life expectancy at birth look a little more indicative. These indicators for total population over the same period changed on the whole by 1.4 years and increased from 65.7 years in 1999 up to 67.1 years in 2008. At the same time in Kazakhstan, more than a 10-year difference is preserved between life expectancy at birth for males and females. In 1999, life expectancy at birth was 60.6 years for males and 70.9 years for females. Thus, the difference between males and females in 1999 was 10.3 years and it increased by 2007 up to 11.9 years (maximum value for the period of 1999–2008). Life expectancy at birth in 2008 was 61.9 years for males and 72.4 for females with difference by 10.5 years. Thus, life expectancy at birth over the period 1999–2008 increased for males by 1.3 years and for females – by 1.5 years.

5.3.1 Mortality by ethnic groups

Mortality has rather significant differentiations by major ethnic groups. Analysis of absolute numbers demonstrates that the maximum crude mortality rate was observed for Russians in 2008, it made 15.4 ‰, which is more than twice exceeds the same rate for Kazakhs, which is 6.6 ‰. On the whole, the minimum CMR over the period of 1999–2008 is observed for Eastern

ethnic groups: Kazakhs, Uzbeks and Uyghurs. The highest CMR is observed for Ukrainians, Tatars and Russians (Tab. 22).

Tab. 22 – Changes in crude mortality rates by major ethnic groups, 1999–2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Kazakhs	6.6	6.6	6.5	6.6	6.7	6.5	6.7	6.7	6.8	6.6
Russians	14.3	15.0	15.1	15.3	16.3	16.1	16.5	16.6	16.3	15.4
Ukrainians	21.6	22.5	22.7	23.9	24.9	24.8	25.4	25.5	26.3	25.1
Uzbeks	6.0	5.9	5.9	6.1	6.2	5.7	6.3	5.9	5.9	6.3
Uyghurs	5.7	6.0	5.8	6.1	6.3	6.0	6.7	6.3	6.1	6.4
Tatars	13.9	14.8	14.8	15.8	15.8	15.9	16.3	16.6	16.6	15.2
Germans	10.5	10.9	10.8	10.7	11.3	12.2	12.1	12.3	12.1	11.9

Source: Agency of Statistics of the Republic of Kazakhstan

Such differentiation is in many respects conditioned by the characteristic features of age structures of major ethnic groups. However, standardized calculations of mortality dynamics demonstrate also significant differences in mortality intensity among ethnic groups independent of age structure. Age structure of Kazakhstan in 1999 was used as a standard for calculation of age-standardized mortality rate (ASMR).

As it can be seen from the Table 23, the differentiations in mortality rates are the most significant for Eastern and European ethnic groups. A relatively high ASMR within the period of 1999–2005 is observed for Ukrainians, Russians, Tatars and Germans. In 2005 ASMR for Ukrainians made 13.9 ‰, Russians 10.7 ‰, Tatars 10.5 ‰, Germans 10.4 ‰. At the same time, minimum ASMR was observed for Uyghurs 7.9 ‰, Kazakhs 8.6 ‰ and Uzbeks 8.9 ‰.

The dynamics of these rates for the ethnic groups is also different. The decrease of mortality over the period of 1999–2005 is observed for Kazakhs (– 0.6 ‰). Some increase of ASMR is observed for other ethnic groups: Ukrainians (2.7 ‰), Tatars (0.7 ‰), Russians (0.6 ‰), Germans (0.5 ‰), Uyghurs (0.4 ‰), and Uzbeks (0.2 ‰).

Tab. 23 – Changes in age-standardized mortality rate (per 1000) for selected ethnic groups, 1999–2005

	1999	2000	2001	2002	2003	2004	2005	2005–1999
Kazakhs	9.2	9.0	8.7	8.8	8.8	8.4	8.6	– 0.6
Russians	10.1	10.4	10.3	10.1	10.4	10.5	10.7	0.6
Ukrainians	11.3	11.8	11.8	12.3	12.7	13.1	13.9	2.7
Uzbeks	8.7	8.6	8.5	8.8	9.0	8.2	8.9	0.2
Uyghurs	7.5	7.8	7.3	7.6	7.6	7.1	7.9	0.4
Tatars	9.9	10.3	10.0	10.3	10.1	10.3	10.5	0.7
Germans	9.9	10.2	9.8	9.5	9.7	10.5	10.4	0.5

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: Standard – age structure of Kazakhstan, 1999

The calculations demonstrate that the differences in mortality intensity between Kazakhs and selected ethnic groups are also conditioned by characteristic features of age structure. The table, given below (Tab 24), is based on the comparison of CMR for Kazakhs and major ethnic groups in 2005.

Tab. 24 – Decomposition of difference between crude mortality rates of Kazakhs and selected ethnic groups in 2005

	Russians	Ukrainians	Uzbeks	Uyghurs	Tatars	Germans
	CMR difference factors (in ‰)					
Effect of age distributions	– 17.2	– 12.1	0.4	– 0.8	– 7.1	– 3.5
Effect of ASDR	– 2.2	– 6.0	0.0	0.8	– 2.1	– 1.7
Total effect	– 9.8	– 18.1	0.4	0.0	– 9.2	– 5.2
	CMR difference factors (in %)					
Effect of age distributions	76.5	66.8	– 94.6	0.0	77.2	66.4
Effect of ASDR	23.5	33.2	– 5.4	0.0	22.8	33.6
Total effect	100.0	100.0	100.0	0.0	100.0	100.0

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

So, for instance, the difference between CMRs for Kazakhs and Russians by 76.5 % is conditioned by age structure distribution, 23.5 % is the difference between intensity of mortality. The same indicators for Ukrainians made 66.8 % and 33.2 % correspondingly.

The difference of CMRs for Kazakhs and Tatars is conditioned by age structure distribution by 77.2 %, the rest 22.8 % is made by mortality intensity. CMR for Germans exceeds the same rate for Kazakhs due to unfavorable age structure, which makes the difference of 66.4 % and the higher rate of mortality intensity of 33.6 %. Against this background, mortality intensity for Kazakhs and Uyghurs is practically equal in 2005. Uzbeks, in comparison with Kazakhs, have a higher mortality intensity, which is also conditioned by a more favorable age structure; its effect was 94.6 % of the difference between CMRs of the two ethnic groups.

Thus, the importance of age structure in determining the ethnic differentiation of mortality is difficult to overestimate. The differences in the rates of mortality intensity, influence, in their turn, the indicators of life expectancy of ethnic groups (Tab. 25). The indicators of life expectancy at birth are inhomogeneous by ethnic groups.

Tab. 25 – Change in life expectancy at birth by ethnicity, 1999–2005

	1999	2000	2001	2002	2003	2004	2005
Kazakhs	66.6	66.9	67.3	67.4	67.5	68.2	67.8
Russians	64.7	64.2	64.3	64.6	63.9	63.8	63.4
Uzbeks	68.0	68.3	68.8	68.2	68.3	69.6	68.4
Ukrainians	64.5	63.3	63.6	63.6	63.4	63.5	64.0
Uyghurs	70.4	69.8	70.5	70.3	69.9	70.9	69.8
Tatars	65.4	64.2	65.1	64.8	65.1	64.7	64.3
Germans	66.0	65.1	65.8	66.4	66.0	64.1	64.6

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

So, the highest life expectancy at birth of 2005 is observed for Eastern ethnic groups, especially for Uzbeks (68.4 years) and Uyghurs (69.8 years). The lowest life expectancy is observed for Russians (63.4 years) and Ukrainians (64.0 years). The life expectancy at birth for Kazakhs makes 67.8 years, it has a dynamics towards increasing over the period of 1999–2005, and grows by 1.2 years. For comparison, life expectancy at birth for Uzbeks made 0.4 year,

Uyghurs 0.6 year. The decrease of life expectancy is also observed for Germans (– 1.4 years), Russians (– 1.3 years), Tatars (– 1.1 years) and Ukrainians (– 0.5 year). Such differentiation makes its contribution into all-Kazakhstan situation with life expectancy rates.

Thus, the characteristic features of mortality in Kazakhstan underwent some changes within the period of 1999–2009, under the impact of some reasons related to the change of age structure of population, change of social situation.

5.4 External migration

Processes of external migration are one of the factors influencing the change of population size and structure. The scope and character of such changes is directly connected to intensity and size of migration exchange. Some positive changes in the trends of external migration were developed in Kazakhstan over the last decade from 1999 to 2009. First of all, migration balance was radically changed over the 10-year period from negative value of (– 123.6) thousand to the positive value of 7.5 thousand (Tab. 26). A simultaneous decrease of the size of gross migration occurred. The size of gross migration decreased over this period by more than 100 thousand and made 75 thousand people in 2009. At the same time, the value of effectiveness index, expressing the relation of migration balance to gross migration also changed from (– 59.9 %) to 0.1 %. Such changes are in many respects an evidence of a significant exhaustion of emigration potential of the country, which was for a long time formed mostly owing to the outflow of European ethnic groups from the country.

Tab. 26 – Trends in external migration, 1999–2009

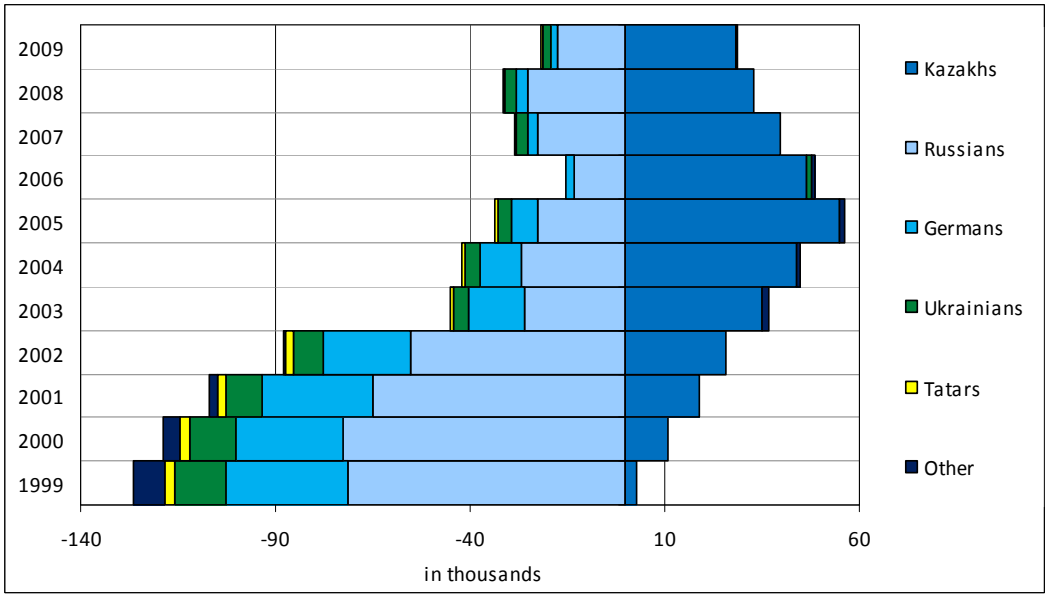
	1999	2001	2002	2003	2004	2005	2006	2007	2008	2009
Immigrants (in thou.)	41.3	53.5	58.2	65.6	68.3	74.8	66.7	53.4	46.4	41.5
Emigrants	164.9	141.7	120.2	73.9	65.5	52.1	33.7	42.4	45.3	34.0
Gross migration	206.3	195.3	178.4	139.5	133.8	126.9	100.4	95.8	91.7	75.5
Net migration	–123.6	– 88.2	– 62.0	– 8.3	2.8	22.7	33.0	11.0	1.1	7.5
Effectiveness index	– 59.9	– 45.2	– 34.8	– 6.0	2.1	17.9	32.9	11.4	1.2	0.1
Immigrants (in ‰)	2.8	3.6	3.9	4.4	4.6	4.9	4.4	3.4	3.0	2.6
Emigrants	11.1	9.5	8.1	5.0	4.4	3.4	2.2	2.7	2.9	2.1
Net migration	– 8.3	– 5.9	– 4.2	– 0.6	0.2	1.5	2.2	0.7	0.1	0.5

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

As it can be seen from the Figure 11, in the period of 1999–2009 European ethnic groups, especially Russians, Germans and Ukrainians made the basis of emigration wave, which gradually weakened. At the same time, ethnic Kazakhs represent an overwhelming majority. Immigration of ethnic Kazakhs is in many respects a result of the Government program on repatriation of compatriots and makes one of the priorities of migration policy of the country in

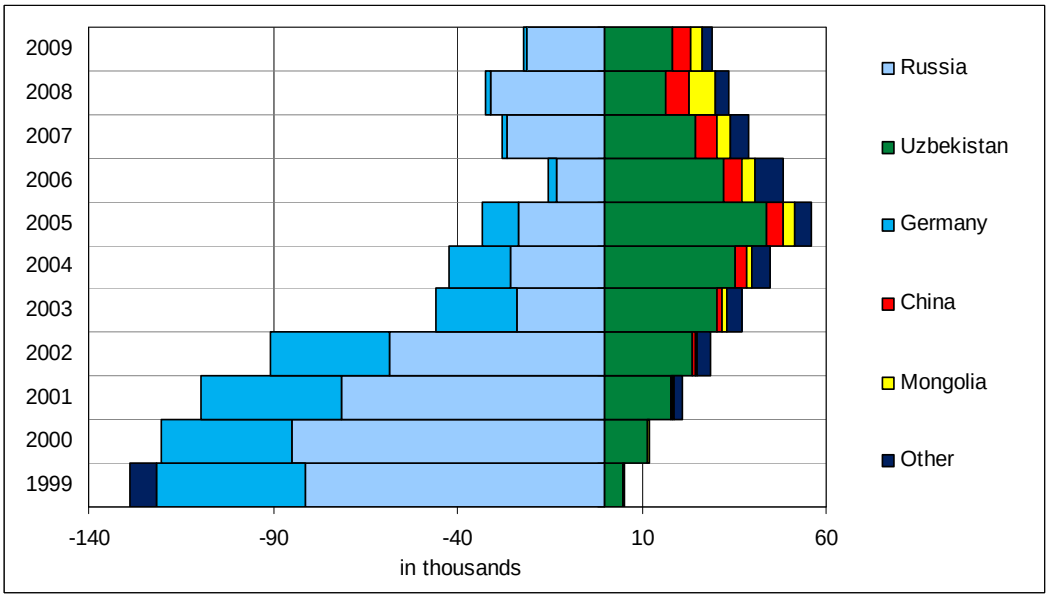
the period of independence. Beginning from 1993, immigration of ethnic migrants is regulated by fixing the immigration quote. In the last years, from 2005 to 2008, it was 15 thousand families per year. From 2009 the quote was increased up to 20 thousand families per year, according to the order of the President of Kazakhstan. From 1991 to 2008, 700 thousand people immigrated in the Republic of Kazakhstan by this quote (Tashimov 2009). In many respects owing to this policy, the negative trend of external migration could be broken from 2004; the Republic is forming a positive balance of external migration. Thus, immigration of the ethnic Kazakhs is playing the decisive role herein.

Fig. 11 – Net international migration by major ethnic groups, 1999–2009



Source: Agency of Statistics of the Republic of Kazakhstan

Fig. 12 – Net international migration by countries, 1999–2009



Source: Agency of Statistics of the Republic of Kazakhstan

The balance of external migration of Kazakhstan by countries demonstrates that the maximum number of immigrants falls at Uzbekistan, China and Mongolia (Fig. 12). Thus, the net migration from far abroad significantly increased for the last years.

The main flow of emigrants from Kazakhstan is directed to Russia, Germany and other countries of Commonwealth of Independent States (CIS), which is determined by the ethnic composition of migrants.

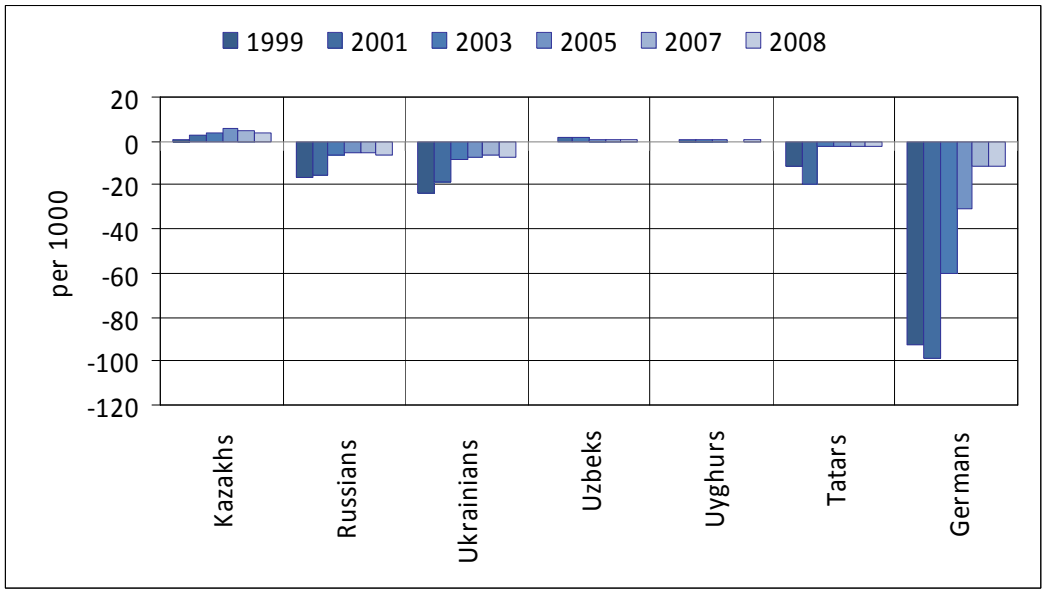
The ratios of net migration by ethnicity are also quite correlated with absolute numbers. So, in 2008 the highest indicator of net migration is observed for Kazakhs (3.5 ‰). Uzbeks (0.7 ‰) and Uyghurs (0.3 ‰) have a slight growth (Tab. 27). Some of ethnic groups have negative net migration, which significantly decreased in comparison with 1999, and made in 2008 for Germans 11.8 ‰, Ukrainians 7.1 ‰, Russians 6.5 ‰, Tatars 2.7 ‰.

Tab. 27 – International migration by ethnicity, 1999–2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	Immigrants (in ‰)									
Kazakhs	1.4	2.2	3.0	3.8	4.7	5.5	6.6	5.4	4.5	3.7
Russians	4.5	4.3	4.0	3.6	3.7	3.1	2.5	2.3	1.7	1.6
Ukrainians	4.7	4.2	4.5	3.9	3.8	3.0	2.1	7.8	1.3	1.5
Uzbeks	2.8	5.7	3.2	3.2	2.7	2.0	1.5	2.7	1.0	1.0
Uyghurs	0.5	0.7	0.7	0.7	1.1	1.0	0.7	0.4	0.4	0.5
Tatars	4.6	4.6	4.8	4.3	4.3	3.6	2.6	2.7	2.1	1.9
Germans	4.2	3.8	4.1	4.0	4.5	3.8	3.2	2.7	2.3	2.4
	Emigrants (in ‰)									
Kazakhs	1.0	0.9	0.7	0.7	0.5	0.4	0.3	0.2	0.2	0.2
Russians	20.6	21.0	19.3	16.9	10.0	9.7	8.1	5.7	7.5	8.1
Ukrainians	28.4	26.3	23.3	20.2	12.1	11.1	9.6	24.8	7.7	8.6
Uzbeks	2.6	1.5	1.3	1.2	0.8	0.5	0.4	0.3	0.2	0.3
Uyghurs	0.5	0.6	0.5	0.4	0.2	0.3	0.2	0.1	0.2	0.2
Tatars	16.1	16.0	13.9	12.3	6.9	6.1	5.2	3.5	4.4	4.6
Germans	96.5	92.0	103.0	90.0	64.2	50.6	33.6	11.1	13.5	14.2
	Net migration (in ‰)									
Kazakhs	0.3	1.3	2.3	3.1	4.1	5.1	6.2	5.2	4.3	3.5
Russians	– 16.1	– 16.8	– 15.3	– 13.2	– 6.3	– 6.6	– 5.7	– 3.4	– 5.8	– 6.5
Ukrainians	– 23.7	– 22.2	– 18.7	– 16.3	– 8.2	– 8.1	– 7.5	–17.0	– 6.4	– 7.1
Uzbeks	0.2	4.2	1.9	2.0	2.0	1.5	1.2	2.4	0.8	0.7
Uyghurs	0.0	0.1	0.2	0.3	0.9	0.7	0.5	0.3	0.2	0.3
Tatars	– 11.5	– 11.4	– 9.2	– 8.0	– 2.6	– 2.6	– 2.6	– 0.8	– 2.3	– 2.7
Germans	– 92.3	– 88.2	– 98.9	– 86.0	– 59.7	– 46.7	– 30.4	– 8.4	– 11.2	– 11.8

Source: Agency of Statistics of the Republic of Kazakhstan

Fig.13 – Net international migration (per 1000) by ethnicity, 1999–2008



Source: Agency of Statistics of the Republic of Kazakhstan

With no doubt the tendency of net migration of Kazakhs is correlated with the potential of donating countries. According to the data of World Kazakh Association (WKA) more than 5 million or 30–35 % of the total number of Kazakhs live outside Kazakhstan in 43 countries of the world. 80 % of them live in Uzbekistan, Chinese People's Republic and Russia: more than 2 million of Kazakhs live in Uzbekistan, about 2 million – in China, about 1 million – in Russia, 83 thousand in Mongolia, 74 thousand in Turkmenistan, 12 thousand in Turkey, 10 thousand in Kyrgyzstan, 5 thousand in Iran. In European countries the situation is the following: 180 families of Kazakhs live in France, 160 families – in Germany, 51 families – in Sweden, 20 families – in Austria, 14 families – in the USA, 150 families – in Afghanistan, 15 families – in Saudi Arabia and 5 families – in Australia (Seydin 2003).

According to the data of WKA, the size of Kazakh diaspora is underestimated, it is the result of many different circumstances. According to the official sources, about 1 million 350 thousand Kazakhs live in China; in actual fact their number is about 2 million; in Russia – up to 800 thousand Kazakhs, in fact their number is up to 1 million; in Uzbekistan – 1.5 million, one more million of Uzbek Kazakhs are recorded as Uzbeks, Karakalpaks, etc. In accordance with the data of WKA, about 2 million Kazakhs would like to come back in Kazakhstan from abroad (Seydin 2003).

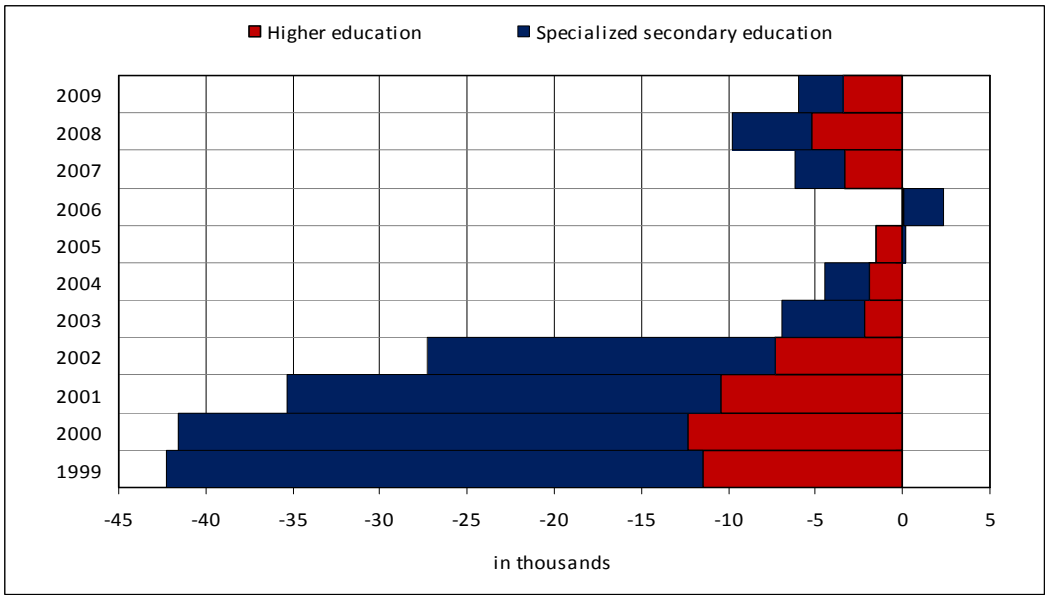
Despite the positive changes in external migration observed in recent years, the dynamics of external migration in accordance with education level illustrates that Kazakhstan is loosing well-educated population with specialized secondary and higher education. The characteristics of migration exchange by education is an evidence of the fact that migration balance remains negative even for the period of 2004–2008 (Tab. 28). The exception is the year of 2006 for migrants with higher education, 2005–2006 for migrants with specialized secondary education. Such situation is an evidence of the negative trends, related to the loss of qualified specialists.

Tab. 28 – External migration by educational level (age 15 +), 1999–2008

	1999	2001	2002	2003	2004	2005	2006	2007	2008	2009
(in thou.)	Higher education									
Immigrants	4.7	6.0	6.7	7.0	6.9	6.3	5.9	4.5	4.3	4.2
Emigrants	16.2	16.5	14.0	9.2	8.9	7.8	5.8	7.8	9.5	7.6
Net migration	11.5	– 10.5	– 7.3	– 2.2	– 1.9	– 1.5	0.1	– 3.3	– 5.3	– 3.4
	Specialized secondary education									
Immigrants	9.5	11.9	12.6	13.9	13.8	13.2	10.7	8.1	7.2	6.1
Emigrants	40.2	36.8	32.6	18.6	16.4	13.0	8.4	11.0	11.7	8.7
Net migration	– 30.8	– 24.8	– 20.0	– 4.8	– 2.6	0.2	2.2	– 2.8	– 4.5	– 2.6

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

Fig. 14 – Net international migration by educational level (age 15 +), 1999–2009



Source: Agency of Statistics of the Republic of Kazakhstan

Analyzing the age and sex structure of migrants (Tab. 29) it can be noted that a positive external migration balance in age groups of 0–14, 15–59 years old, characteristic for both males and females, is observed in the period of 2004–2008. The exception is the year of 2008, when a negative balance at the age of 15–59 years old is observed. On the whole, migration exchange over the period of 2004–2008 favoured the increase of the young population size at the age of 0–14 years old, and economically active population at the age of 15–59.

Tab. 29 – International migration by age and sex, 2004–2008

		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
	Age	Males (in thou.)					Females (in thou.)				
Immigrants	0–14	6.5	8.2	6.5	5.4	5.8	6.4	7.8	6.6	5.7	6.5
	15–59	25.1	26.8	25.6	19.7	15.6	26.0	27.7	24.3	19.7	16.2
	60 +	1.7	1.8	1.5	1.2	0.9	2.5	2.5	2.3	1.7	1.3
Emigrants	0–14	4.7	3.6	2.2	3.2	3.7	4.6	3.6	2.2	3.1	3.5
	15–59	22.2	17.7	11.0	14.1	16.4	25.7	20.7	13.1	16.5	17.6
	60 +	2.9	2.2	1.7	1.8	1.3	5.5	4.4	3.6	3.6	2.7
Net migration	0–14	1.8	4.6	4.3	2.2	2.1	1.8	4.2	4.4	2.6	3.0
	15–59	3.0	9.2	14.6	5.5	– 0.8	0.3	7.0	11.2	3.2	– 1.4
	60 +	– 1.1	– 0.4	– 0.1	– 0.6	– 0.5	– 3.0	– 1.9	– 1.3	– 2.0	– 1.4

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

On the whole, external migration of Kazakhstan for the last 10 years favoured the increase of the share of indigenous ethnos in the ethnic composition of the country, which was followed by a significant emigration outflow of European ethnic groups. A rather well-defined trend of the negative sequences of migration exchange was one of the negative trends of the loss of qualified specialists by level of education.

Thus, the determining trends of demographics development of Kazakhstan over the last 10 years were fertility growth, positive balance of external migration, which to a great degree determined the population growth for the above-mentioned period. The positive trends were in many respects conditioned by favorable age structure of the population, the change in ethnic structure of the population and positive balance of external migration. At the same time, the perspectives of the population growth cannot be overestimated. The main obstacles in the way of this are the irreversible trends of changes in reproductive behavior, including the indigenous population, and the trends of population ageing. In the foreseeable perspective, we can expect the fertility stabilization as a consequence of the decrease of the rates of population growth.

The main trends of demographical development were reflected on the regional level, though in case of Kazakhstan the regional peculiarities are rather pronounced and require a special attention. It will be discussed later.

Chapter 6

Population development prospects and priorities of Kazakhstan in population policy

The analysis of the trends of demographic development, presented above, quite clearly shows that a perceptible increase in population size in the foreseeable future can not be expected. Demographic forecasts and projections of Kazakhstan leading scientists and international organizations are also an evidence of this fact. However, one of the strategic priorities of modern Kazakhstan is an increase in population size. The state pays much attention to the problem of population development, but its effectiveness often has sceptical assessment.

6.1 Overview of possible scenarios of population development

In spite of a rather great interest in the problem of demographic development of Kazakhstan for today, it is rather difficult to find a rather fundamental study (by a Kazakhstan author) devoted to the demographic forecast of the country. Use of the data of international organizations, such as for instance, UN, seems more convenient to the people interested in demographic perspectives of Kazakhstan.

Nevertheless, there are scientists in Kazakhstan, who make efforts different by nature of making assessment of the demographic development of the country. In this chapter, we shall limit ourselves by reviewing several sources of forecasts, which seem rather competent from our point of view.

With reference to Kazakhstan sources, one of the patriarchy of Kazakhstan demography M.Tatimov can be noted, who gives a regular assessment to the trends of demographic development of the country and makes forecasts. Relying on the data of 2009 census in Kazakhstan, M.Tatimov assumed that the population growth in Kazakhstan by 2020 would make 15 % of the population size of 2009. The reason for this would be the continuation of baby-boom wave, the peak of which has not been reached yet. At the same time, in 20 years, the ethnic structure of Kazakhstan would be noticeably changed; Kazakh-speaking population would reach 90 % of the total population size. Taking into account this fact, Kazakhs would make 80 % of the population, Turkic population (Uzbeks, Uyghurs, Turks, Azerbaijanians, etc) would make 10 %, Russian-speaking population would make 10 % of the total

population (Tatimov 2010). Such significant changes will be caused mainly by different rates of natural growth among the ethnic groups. Such assessment deserves a serious attention, though unclear methodological base causes many questions, the most important of which is the degree of reliability of the forecast.

M.Tatimov's assumptions regarding the natural growth till 2020 to some extent correlate to the calculations by Y.K.Shokamanov, who is a representative of the Agency of Statistics of the Republic of Kazakhstan. The forecast of population development of Kazakhstan was presented in three variations: by preservation of the indicators of demographic development of 2005; by ensuring outcome to the specific values of total fertility rate (TFR), life expectancy and preservation of the balance of international migration at the level of 2005; by ensuring outcome to TFR, life expectancy and balance of international migration (Shokamanov 2009).

The results of the calculations by the medium variant of the forecast of population size demonstrate that the population size in the Republic would increase about by 14 % by 2020 and would reach 18.3 millions people. The population growth would continue, making 20.2 million people by 2030.

According to the forecast by Y.K. Shokamanov (Tab. 30), the crude birth rate (CBR) would grow only by 2012, making 21.2 ‰, then it would gradually decrease to 17.7 ‰ in 2020; 15.3 ‰ in 2030. Against this background, crude mortality rate (CMR) would decrease from 8.1 ‰ in 2015 to 7.2 ‰ in 2030. The balance of external migration (NMR) is evaluated as 1.3 ‰ in 2015 and 1.1 ‰ in 2030.

Tab. 30 – Projection parameters (medium variant), Shokamanov 2006

	2010	2015	2020	2025	2030
CBR (in ‰)	20.7	20.3	17.7	15.3	15.3
CMR (in ‰)	9.3	8.1	7.5	7.2	7.2
NMR (in ‰)	1.4	1.3	1.2	1.1	1.1

Source: Shokamanov 2006

The calculations of UN noticeably differ from the above presented Kazakhstan forecasts and assessments of demographic development of the country for the same period of time. According to the data published in World Population Prospects (WPP), the 2008 Revision, the population of Kazakhstan (medium variant, data for the 1st of July) by 2020 would reach 16.7 million people, in 2030 the population would be 17.2 million people, and in 2050 the population would increase up to 17.9 million people.

The following data were used in the calculations of this projection:

Total population estimated to be consistent with the 1999 census and with estimates of the subsequent trends in fertility, mortality and international migration. Total fertility based on official estimates of total fertility available through 2006, and maternity-history data from the 1995 and 1999, Kazakhstan DHS. Life expectancy at birth based on official estimates of life expectancy available through 2006 adjusted to take into account underreporting of infant and child mortality. International migration based on estimates of net international migration derived as the difference between overall population growth and natural increase through 2006.

The scenarios of the projection were built taking into consideration the parameters of fertility, mortality and migration. One of the conditions for the projection was the assumption on fertility decrease below the replacement level by 2050 (Fertility assumption converge total fertility below replacement level). Kazakhstan was referred to the category of medium-fertility countries, where fertility has been declining but whose level was still above 2.1 children per woman in 2005–2010. Mortality is projected on the basis of models of change of life expectancy produced by the United Nations Population Division. These models produce smaller gains the higher the life expectancy already reached. Under the normal migration assumption, the future path of international migration is set on the basis of past international migration estimates and consideration of the policy stance of each country with regard to future international migration flows. Projected levels of net migration are generally kept constant over most of the projection period.

The following outcomes were obtained for the medium variant (Tab. 31) for the forecasted period, taking into consideration the above mentioned conditions:

The calculations show that having TFR equal to 1.9 in 2045–2050 the same rates for 2015–2020 and 2025–2030 must make 2.1 and 2.0 correspondingly. At that, CBR would make 12.5 ‰ in 2045–2050, 16.8 ‰ and 13.5 ‰ correspondingly for the periods of 2015–2020 and 2025–2030.

Crude mortality rate would decrease in the period of 2015–2020 (10.3 ‰) till 2025–2030 (9.8 ‰). By 2045–2050, this rate would increase and make 10.8 ‰. Against this background, an increase of life expectancy is expected from 67.6 years in 2015–2020 up to 75.3 years by 2045–2050.

Population growth rate would also decrease from 0.7 % in 2010–2015 to 0.1 % in 2045–2050.

Tab. 31 – Projection parameters (medium variant), UN 2008

	2010–15	2015–20	2020–25	2025–30	2030–35	2035–40	2040–45	2045–50
TFR	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9
CBR (in ‰)	18.7	16.8	14.7	13.5	13.4	13.6	13.4	12.5
CMR (in ‰)	10.8	10.3	9.9	9.8	9.9	10.2	10.5	10.8
Life expectancy at birth	66.0	67.6	69.1	70.7	72.1	73.3	74.4	75.3
NMR (in ‰)	– 1.2	– 1.2	– 1.2	– 1.2	– 1.2	– 1.1	– 1.1	– 1.1
Pop. growth rate (in %)	0.7	0.5	0.4	0.3	0.2	0.2	0.2	0.1

Source: UN WPP The 2008 Revision

The latest Revision of World Population Prospects (2010) based on different approach to the fertility assumptions. In this Revision a new probabilistic method for projecting TFR was applied. The result of new modeling approach is country-specific projection of TFR, which takes into account past empirical trends of the particular country. The 2010 Revision uses a long-term stabilization level of TFR equals 2.1 children per women. The projection horisont is extended up to 2100. Total population estimated to be consisted with the previous Kazakhstan population censuses since 1959 including recent 2009 population census.

The 2010 Revision (medium variant) evaluates the population of Kazakhstan by 2100 as 24.9 million people. The projection expects declining of TFR by 2095–2100 up to 2.1 children per woman (Tab. 32). CBR would decrease from 16.9 ‰ in 2020–2025 to 13.2 ‰ in 2095–100. At the same period, CMR would increase from 9.1 ‰ to 10.9 ‰. Life expectancy at birth would reach 80.0 years by 2095–2100.

Against this background, population growth rate would be reach 0.2 % in 2095–2100.

Tab. 32 – Projection parameters (medium variant), UN 2010

	2020–25	2030–35	2040–45	2050–55	2060–65	2070–75	2080–85	2095–00
TFR	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.1
CBR (in ‰)	16.9	15.7	16.6	14.7	14.2	14.4	13.4	13.2
CMR (in ‰)	9.1	9.4	10.0	10.2	10.4	10.6	10.4	10.9
Life expectancy at birth	70.1	72.2	73.9	75.3	76.5	77.6	78.6	80.0
NMR (in ‰)	– 0.6	– 0.5	– 0.5	– 0.4	– 0.3	– 0.2	– 0.1	0.0
Pop. growth rate (in %)	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.2

Source: UN WPP The 2010 Revision

International Data Base (IDB) of U.S. Census Bureau also presents population projection of population development trends in Kazakhstan by 2050. The following data were used in the calculation of the population projection:

Base population, census 1989 (smoothed and moved to midyear). Population census 2009 used to evaluate the estimates and projections. The data on fertility, mortality obtained from vital registration 2009. The data on migration based on official estimates.

The projection is made on the assumption of the decrease of mortality and fertility owing to the positive perspectives of social-economic development of the country. Assessment of the trends of fertility and mortality is based on extrapolation of past trends in indicators, coupled with validation checks against published estimates of determinants and correlates in preparing assumptions about future fertility trends. At the same time, logistic functions are used to model the transition from relatively high fertility, mortality to relatively low fertility or mortality (U.S. Census Bureau 2010).

It is also assumed that if migration is known to have a negible impact on a country's current growth rate, future migration is often assumed to be nil. If a country's migration is known to be significant, the estimated number of migrants during the past is frequently held constant in projecting to the near future (U.S. Census Bureau 2011).

Thus, U.S. Census Bureau evaluates the population of Kazakhstan by 2050 as 22.2 million people (the data on the 1st of July). It is assumed that in 2020 and 2030 the population of Kazakhstan would reach 19.1 and 20.4 million people correspondingly.

TFR by 2050 would make 1.7 children per woman (Tab. 33). CBR would also decrease from 19.0 ‰ in 2015 to 13.0 ‰ in 2030 and 12.0 ‰ in 2050.

Life expectancy at birth would increase from 71.0 years in 2015 to 79.0 years in 2050. Against this background, the increase of CMR is expected from 8.0 ‰ in 2015 up to 13.0 ‰ in 2030 and 12 ‰ in 2050.

Population growth rate would be decrease from 1.0 % in 2015 to 0.3 % in 2050.

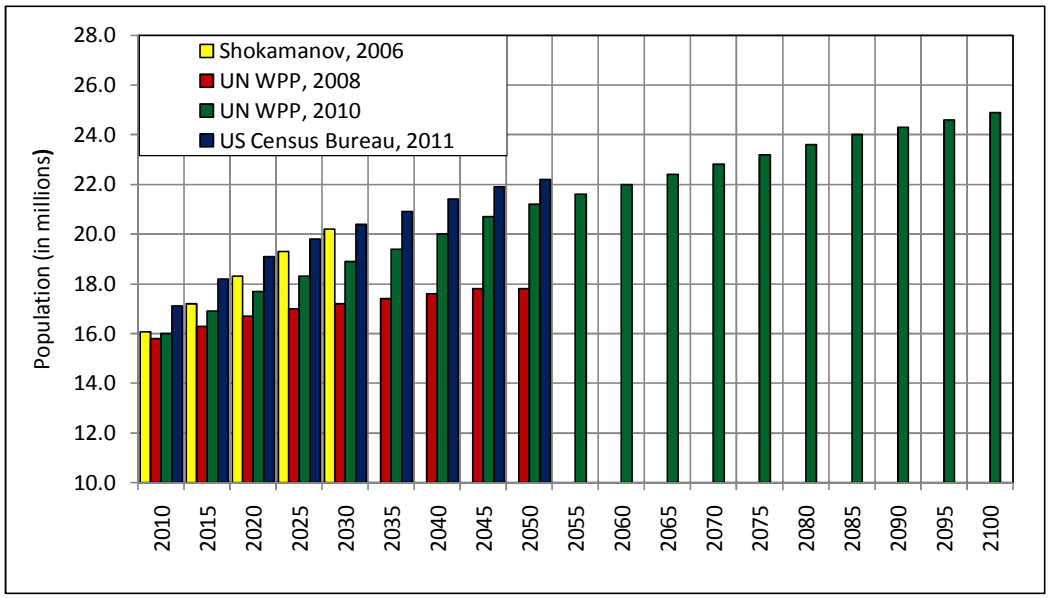
Tab. 33 – Projection parameters (medium variant), U.S. Census Bureau 2011

	2015	2020	2025	2030	2035	2040	2045	2050
TFR	2.3	2.2	2.0	1.9	1.8	1.8	1.7	1.7
CBR (in ‰)	19.0	16.0	14.0	13.0	13.0	14.0	13.0	12.0
CMR (in ‰)	8.0	8.0	8.0	8.0	9.0	9.0	9.0	10.0
Life expectancy at birth	71.0	72.0	73.0	75.0	76.0	77.0	78.0	79.0
NMR (in ‰)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pop. growth rate (in %)	1.0	0.9	0.6	0.5	0.5	0.5	0.4	0.3

Source: U.S. Census bureau International Data Base, 2011

The above mentioned projections give a rather ambiguous picture of the trends of development of the population of Kazakhstan, as there are different assumptions to the assessments of the dynamics fertility, mortality and migration. Despite the differences in estimations, the projections do not imply a significant increase in population size (Fig. 15). The dynamics of population growth in presented projections tends to decline.

Fig. 15 – Projected population growth in Kazakhstan (medium variant)



Source: Shokamanov 2006; UN WPP 2008, 2010; U.S. Census Bureau, IDB 2011

It is quite difficult to give an absolute preference to the favor of one of them. The trends of demographic development of the country at the current stage are rather ambiguous, for the last 10 years there was a rather stable representation that Kazakhstan is out of the demographic crisis. The economic successes of the country played a very significant role in it. The change of ethnic structure of the country also played a noticeable role. A significant increase of the proportion of indigenous population with more traditional in comparison with European population demographic behavior also had a significant effect on the population development of the country. It can be said with confidence that this factor obtained a proper in estimation in the

assessments of Kazakhstan researchers. Such a large difference in the assessments of Kazakh sources concerning the perspectives of population development of Kazakhstan can in many respects be explained by this fact. At the same time, the regularity of the decrease of mortality and fertility in the long-time perspective is of no doubt. The question of the dynamics of the development of these processes remains quite important. The population forecast is not a main objective of this research; therefore, we will allow estimating of the above suggested variants of the forecasts as possible scenarios of the future development.

6.2 Population policy

Considering the prospects of population development, it is also quite important to have an idea of the attitude of the state to this problem. Demographic processes in Kazakhstan are traditionally an object of special attention from the direction of the Government. The whole number of state programs, strategies and laws where a central part is given to demography is an evidence of this fact, beginning from the Law of the Republic of Kazakhstan "On national safety of the Republic of Kazakhstan" (1998) and finishing with specific programs of population development.

However, interrelation of positive changes in recent population development with the effect of a specific state program quite often arouses sceptical estimates. The reason for this is a declarative character of most demographic programs and laws adopted in the last years, not able to suggest real mechanisms of stimulation of these of those processes.

As an example, we can advert to the Concept of state demographic policy of the Republic of Kazakhstan, adopted in 2000, which became one of the most important steps towards the formation of demographic policy. The Concept determined the objective of demographic policy as "overcoming of negative trends in demographic processes, prevention of depopulation, ensuring of qualitative and quantitative population increase in accordance with the long-term strategy of the development of the country" (Par. 2).

Practical realization of the regulations of the Concept was reflected in 2001, when the Program of demographic development of the Republic of Kazakhstan for 2001–2005 was adopted. The Program was aimed at the regulation of main processes of the population development: fertility, mortality and migration by means of taking measures on improvement of the level of reproductive health, stimulation of birth increase, decrease of mortality and migration control. These priorities are rather universal and they still have not lost their urgency for Kazakhstan for today.

The same can be said on the objectives and on the mechanisms of the Program realization. The following objectives can be referred to the main objectives of the Program:

1.Fertility stabilization and its increase in the long term up to the level, ensuring an extended reproduction;

2.Mortality decrease, increase of life expectancy of population, improvement of population health;

3.Strengthening of family institution;

4.Decrease of negative migration balance;

5.Increase of quality of life of population.

The mechanisms of implementation of the Program provided: formation of the normative legal base on the problems of the population; improvement of financial-economic mechanisms of stimulation and support of population development; development of the system of education and training in the sphere of demography.

For problem solving a complex of measures was proposed, aimed at protection of reproductive behavior of men and women. In strengthening the family institution the main accent was made on propaganda of the values of a traditional family, revival of traditions, gender policy. The measures on mortality decreasing also assumed preventive health care, propaganda of healthy life-style. In legislative sphere the following measures were provided: adoption of the laws on industrial regulation, insurance, support of emigration from unfavorable regions, etc.

Creation of conditions for satisfaction of social-economic needs provided organization of labor potential reproduction (personnel retraining, carrier guidance, solving of unemployment problem, etc.), micro-crediting of many children families, increasing accessibility of higher education, including organization of training for demographers.

Concerning migration, the following measures were proposed:

1.Annual increase of immigration quota;

2.Creation of favorable conditions for reception and arrangement of oralmans, their rapid integration into the social sphere;

3.Support and development of constructive interrelations with Kazakh diaspora abroad;

4.Creation of the conditions for voluntary migration of the population living in depressive regions into the other more favorable regions;

5.Ensuring of the support in solving social problems of re-emigrants;

6.Studying of migratory spirits of the population.

As a result of the Program implementation, it was assumed to provide the basis for further increase of quantitative and qualitative population growth. The Program supposed that the total population of the Republic of Kazakhstan by 2005 would reach 15.0 million people, in 2010 – 16.0 million and in 2030 – up to 20.0 million people due to increase of TFR (up to 2.5), life expectancy and decrease of negative migration balance. Having a favorable combination of circumstances, population increase up to 22 million people would be possible in 2030.

Evidently, short-term outcomes of the population increase justified themselves. The Program in general preserved its urgency till present time, which is an evidence of the fact that the objectives formulated in the Program and mechanisms of its realization have a higher level than that of short-term programs. Their conceptual character more suits the long-term strategic objectives. In this case the Program duplicates the concept functions. As a result, it strongly complicates the evaluation of the effectiveness of such kind of the program. In the framework of the short-term (five-year) program, it is more important to concentrate attention on the narrower, practical directions. Then the Program output will be oriented on the concrete terms;

and in case of unsuccessful realization it will be easier to define the reasons more exactly and to develop a new, more effective mechanism.

It can be added to all the said above that a new draft Concept of demographic policy and family consolidation (2009) is at the discussion stage now. Maintaining the fertility level, decrease of population mortality and increase of healthy life expectancy remain to be the main priorities of the demographic policy of Kazakhstan for 2010–2020. "Quantity and quality of human resources are the basic factors, determining the future of any country. Human capital is a main engine of innovations and increase of the economy efficiency" – is noted in the Strategic plan of development of the Republic of Kazakhstan till 2020 (Par. 3).

6.2.1 Maternity leave benefits

Against the background of the concepts and programs, the change of the legislative base, especially in the sphere of monetary allowance, has a large practical significance. So, with a view to support motherhood, the Resolution of the Government of the Republic of Kazakhstan (2003) was adopted "On ratification of the regulations of payment of one-time governmental grant in view of child-birth".

According to the Resolution, a one-time payment of the governmental grant is made in view of child-birth in the sum of 15 monthly calculated indexes independent on the family income. According to the Law "On republican budget for 2010–2012" (2009) since 1st of January 2010 one monthly calculated index equals to 1413 KZT / 9.5 USD (according to the official exchange rate of the National Bank of Kazakhstan, 01.01.2010).

A special governmental grant is also provided for mothers having many children, who were awarded with golden and silver pendants "Altyn Alka", "Kumys Alka" and having a title of "Mother-Heroine".

In accordance with the Law of the Republic of Kazakhstan "On special governmental grant in the Republic of Kazakhstan" (1999) to the category of citizens having rights to receive the grant, the following categories can be referred (Art. 4):

1.Mothers having many children awarded with pendants "Altyn Alka", "Kumys Alka" or having a title of "Mother-Heroine", and awarded with orders "Mother's fame" of the I and II degree;

2.Families possessing four and more children under age living together, including internal students at the institutions of secondary, technical, vocational and post-secondary education, institutes of higher education, after coming of age till graduation from the educational institutions (but not later than coming of 24-year-old age).

From the 1st of January 2010, mothers who gave birth to and brought up seven children are awarded with a pendant "Altyn Alka", and six children – with "Kumys Alka". The Law also defines the size of cash grants (Art. 7) for:

1.Mothers awarded with pendants "Altyn Alka", "Kumys Alka" or who received a title of "Mother-Heroine", awarded with the orders "Mother's fame" of the I and II degree – 6 monthly calculated indexes;

2.Families possessing 4 or more children living together; including internal students at the institutions of secondary, technical, vocational and post-secondary education, institutes of higher education, after coming of age till graduation from the educational institutions (but not later than coming of 24-year-old age) – 3.9 monthly calculated indexes.

According to this Law, people having the right to receive simultaneously special governmental grants by several grounds, the grant is paid only by one ground by their choice (Art. 3).

In 2005 was adopted the Law of the Republic of Kazakhstan "On governmental grants to the families having children". According to this Law which came into force in 2006, monthly grants are introduced for children at the age of 1–18 years old in the sum of 1 monthly calculated index. The Law also provides payment of the grant for children under 18 years old, which will be paid to the families having average income per capita less than basket of goods. Introduction of monthly attendance allowance in the sum of 3 monthly calculated indexes is provided at the first child birth. This allowance will be received by all families independent on the level of income. Besides, the size of this grant will be increased by 0.5 monthly calculated index with every new child.

Particularly, after the birth of the second child the family will be able to receive the grant of 3.5 monthly calculated indexes for one child, after the birth of the third child – 4 monthly calculated indexes, of the forth and next child – 4.5 monthly calculated indexes.

It is evident that the sums of the grants are small, especially for city-dwellers. For comparison, in 2011 the average price for the services of public kindergarten in Kazakhstan amounted to approximately 9000 KZT / 60 USD per month. The highest prices are observed in Almaty, 15–20 thou. KZT / 103–137 USD (tengrinews.kz 2011).

That is why it is difficult to say that material incentive has a significant impact on the increase of fertility. The more significant role is played by the positive changes of economic situation in the country.

Another field of the state support of motherhood is the adoption of the legislation for working mothers. In 2004 the amendments to the Law "On labor" (1999) were also made, concerning inadmissibility of denunciation of labor contract by an employer's initiative with pregnant women having children at the age under 1.5 years old. According to the amendments, working women having children under 1.5 years old, are given the right of additional time for feeding children. Besides, in accordance with the Law "On provision of pensions in the Republic of Kazakhstan" (1997), the right of pension provision at the age of 53 have women who gave birth to 5 and more children and who brought them up till the age of 8 years old.

These regulations were added to the Law and entered the Labor Code of the Republic of Kazakhstan adopted in 2007. According to Article 185 of Labor Code of the Republic of Kazakhstan, it is not allowed to "Denunciate a labor contract by an employer's initiative with pregnant women, women having children at the age under 3 years old, single mothers bringing up children at the age under 14 years old, (a child-invalid at the age under 18 years old), other people bringing up this category of children without mothers". The Article 185 also says: "In case of a woman's provision of a medical certificate on her pregnancy of twelve and more

weeks for the date of termination of the contract period, an employer is obliged by her written statement to prolong the period of the labor contract till the date of child rearing leave on reaching by a child the age of three years old".

According to the Code "It is forbidden to employ the women's labor force at laborious works, works with harmful (especially harmful) and (or) dangerous conditions of work" (Art. 186). The Code provides for the possibilities of temporary transfer to other working places of pregnant women excluding the impact of harmful and (or) dangerous industrial factors, with conservation of an average wage; establishment of part-time working hours for women and other persons with family responsibilities (Art. 189, 191).

The Code also provides the breaks for feeding a child (Art. 188): "to women having children at the age of 1.5 years old, fathers (adoptive fathers), bringing up children at the age of 1.5 years old without mothers, the additional breaks are provided for feeding a child (children) not rarer than every three hours of work, of the following length: for a person having one child – every break not shorter than 30 minutes; for a person having two and more children – every break not shorter than one hour. The breaks for feeding a child (children) are included in working time. During the breaks average wage is preserved to the women, fathers, adoptive fathers".

Women are also provided for maternity leaves of seventy calendar days before childbirth and fifty six days after childbirth (in case of abnormal labor or birth of two or more children – seventy days), if some different period is not established by the laws of the Republic of Kazakhstan. The leaves are calculated totally and are provided for women entirely independent on the number of days used in fact before childbirth and on the time of work for the employer. (Art. 193).

The employees (one of the parents) who adopted a newborn child (children) are provided a leave for the period from the date of adopting a child till the expiration of the period of fifty six days from the date of the birth (Art. 194). The employer is also obliged to provide a child rearing leave without preservation of pay for an employee till the child's reaching the age of three years old (Art. 195): at the parents' option – for a child's mother or father; for a parent – on his/her own bringing up a child; for a grandmother, a grandfather, or other relative or a guardian bringing up a child in fact; for an employee who adopted a newborn child (children). During the time of the child rearing leave, the position of the employee is preserved for him/her till the child's reaching the age of three years old. The time of the child rearing leave without preservation of pay for an employee till the child's reaching the age of three years old is included in the total time record, in the time record by profession, if something different is not established by the laws of the Republic of Kazakhstan.

Thus, the regulations of the Labor Code guarantee the protection of women in labor sphere. An attempt of equalizing the rights on child rearing of mothers and fathers is clearly tracked in the document. Later this approach was also realized in the Law of the Republic of Kazakhstan "On governmental guarantee of equal rights and equal abilities of men and women", which came into force in 2009. The Law regulates social relations in the sphere of governmental guarantee of equal rights and equal abilities of men and women and establishes main principles

and norms, concerning the creation of conditions for gender equality in all spheres of state and social life.

Thus, the Government support of the motherhood is quite evident. Despite the availability of rather modern mechanisms of social support we have to ascertain their formal nature, not always corresponding to the real conditions. International comparisons shows, that the status of a mother in Kazakhstan is the most favorable in comparison with other post-Soviet Central-Asian countries. However, Kazakhstan was included to the list of the less developed countries.

Independent international humanitarian organization "Save the Children" appraises the mothers' status in the world. According to the data of the report State of the World's Mothers (2010) Kazakhstan holds the 8th line in the list of the less developed countries by Mother Index Rank. This indicator is formed subject to 2 indexes: Women's Index and Children's Index. For calculation of the first index the data on women's health status, educational status, economic status, political status are used. Children's Index is calculated taking into consideration the data on under 5 mortality rate, gross pre-primary enrollment ratio, gross secondary enrollment ratio. In the group of less developed countries Kazakhstan holds the 9th line for Women's Index and the 21st line for Children's Index. Ultimately, it gives the 8th line for Mother Index Rank.

For comparison, in the region the neighboring countries of Kazakhstan have rather low indicators: Uzbekistan – the 23rd place, Kyrgyzstan – the 25th place, Tajikistan – the 55th. Russia takes the 38th place in the group of developed countries.

6.2.2 Young family support

Another direction of the state social policy is supporting of young family. In 2004 the Law "On state youth policy in the Republic of Kazakhstan" was adopted. The Law gives a definition of the notion "young family": this is "a family where both spouses have not reached the age of 29 years old, or an incomplete family, where the children (the child) is brought up by one of the parents, who has not come of the age of 29 years old, including divorced or widowed parents" (Art. 1).

One of the directions of the youth policy according to the Law "On state youth policy in the Republic of Kazakhstan" is support of young families. With adoption of the State program of house construction for 2008–2010 (2007), a separate quote for provision of young families with hosing appeared, and it is registered in the Law "On youth policy".

Main types of housing, existing for today, are: rental, (communal), credit, commercial and individual. Rental housing can be pretended to only by definite population categories, to which the state has liabilities, and which are referred to poor, socially protected population categories, and state employees, employees of budgetary organizations, military personnel and state elective office. This type of housing is assigned by akimats (local administration) by waiting lists.

The second type is credit housing. Within the frames of working State program of house construction for 2009, the credit housing is offered at the price of not more than 56.5 thousand KZT (about 380 USD) per square meter. One of the variants of acquiring such housing

is to execute a mortgage credit. By the assessment of the Director of Agency of Construction, Housing and Utilities of the Republic of Kazakhstan K. Mynbayev, credit and rented housing is constructed at the expense of republican budget in all the regions. However, the proportion of such housing in the total construction amount is insignificant and for today makes about 8 % (Mynbayev 2009). In accordance with the President's message to the people of Kazakhstan, the Agency together with JSC "House-building savings bank" developed the schemes of building and realization of housing by means of local executive boards and private investors. In contrast to the State program, which provides housing only for priority category of the population, this project is meant for a wide circle of population. In this case the price will be higher, approximately 90 thousand KZT (about 600 USD), except Astana and Aktau where the price per square meter will be 112.5 thousand (about 750 USD), and Almaty – 142.5 thousand KZT (about 950 USD).

Evidently, the housing problem in Kazakhstan remains unsolved. The number of people willing to buy a flat according to the State program of house construction exceeds the proposition. So, by the data of the Agency of Construction, Housing and Utilities of the Republic of Kazakhstan 26 609 flats were built according to the Program in 2005–2007, at the same time the number of the applications for buying flats made 100 777. Thus, the ratio was 0.3 flats per buyer. The situation did not change in 2008–2010, when 9 970 flats and 80 744 applications were made. The ratio was 0.1 flats per buyer (www.ads.gov.kz). Thus, the Program did not favor the cardinal solving of the housing problem, including that of the youth.

Beside housing problem, young families in Kazakhstan experience difficulties in placing a child in kindergartens. Despite the quite dynamic development of pre-school education in last decade (Tab. 29) the fertility increase in Kazakhstan caused a lack of kindergartens.

Tab. 34 – Development of pre-school education, 1999–2009

	1999	2001	2003	2005	2007	2009	2009–1999
Number of permanent infant schools	1102	1103	1106	1179	1500	1852	750
Number of children attending inf. school (in thou.)	124.4	140.4	156.5	185.3	232.9	274.9	150.5
Out of them: urban	112.8	128.0	141.7	164.1	188.6	211.9	99.1
rural	11.6	12.4	14.8	21.2	44.3	63.0	51.4

Source: Agency of Statistic of the Republic of Kazakhstan

According to the Ministry of Education and Science, for the 1st of January, 2010 in Kazakhstan only 41.6 % of children at the age of 1–6 years old were covered by preschool education (Tab. 30). The situation is quite different in a regional context. The lowest (17.7 %) share of children attained the infant schools observed in South-Kazakhstan region. The maximum (90.8 %) observed in Kostanay region.

Besides, there is a large gap between urban and rural areas in pre-school education system. In 2010, only 20.1 % out of the total number of children between the age of 1 and 6 attended the infant schools. There certainly always was an objective difference between urban and rural areas, nevertheless, such a big gap is an evidence of the problem.

Tab. 35 – Pre-school enrollment, 01.01.2010

	Total		Urban		Rural	
	Number of children attending inf. school (in thou.)	% out of total number of children, age 1–6	Number of children attending inf. school (in thou.)	% out of total number of children, age 1–6	Number of children attending inf. school (in thou.)	% out of total number of children, age 1–6
Kazakhstan	446.5	41.6	275.3	47.5	171.2	20.1
Akmola	18.7	39.6	10.0	40.9	8.7	38.2
Aktobe	33.9	85.3	18.8	82.3	15.1	89.4
Almaty	28.2	25.1	9.3	33.7	18.9	22.3
Atyrau	21.0	45.5	11.6	51.9	9.4	39.4
West-Kaz	25.1	59.9	11.2	58.2	13.8	61.3
Zhambyl	24.9	42.1	12.5	52.3	12.4	35.2
Karagandy	44.0	81.1	32.0	78.8	12.1	88.0
Kostanay	29.3	90.8	14.7	88.9	14.6	92.8
Kyzylorda	18.6	29.8	7.4	28.4	11.2	30.9
Mangistau	16.8	30.1	12.2	37.2	4.6	19.9
South-Kaz	37.0	17.7	24.0	28.9	13.1	10.3
Pavlodar	30.7	63.4	21.7	62.4	8.9	65.8
North-Kaz	17.9	46.9	6.9	42.4	11.0	50.2
East-Kaz	40.8	54.2	23.4	62.3	17.4	46.1
Astana city	19.8	59.8	19.8	59.8	0.0	0.0
Almaty city	39.8	33.7	39.8	33.7	0.0	0.0

Source: Ministry of Education and Science of the Republic of Kazakhstan

The Program “Balapan” on provision of pre-school upbringing and education for 2010–2014 is aimed at solving of this problem.

The Program is directed at opening additional 300.6 thousand places in the system of pre-school education; coverage of children at pre-school age with pre-school education (up to 70 %); coverage of 5–6 year-old children with pre-school training (up to 100 %). The plan of implementation of the “Balapan” includes building of pre-school education objects, including: in 2010 beginning of building 39 objects of 10.9 thousand places; in 2011–2014 – (121) objects of 29.3 thousand places. It is evidently, that the development of pre-school education system will be rather dynamic.

However, even with complete realization of the plans, the shortage of places in infant schools will more likely remain the same. It is obvious that the current Program does not meet the situation in full measure. According to the information with reference to the Ministry of Education and Science of the Republic of Kazakhstan (tengrinews.kz 2011), in 2011 the largest waiting lists in kindergartens were registered in South-Kazakhstan region (45.8 thousand people), Astana (46.8 thousand people), Almaty (45.8 thousand people).

6.2.3 Health care

Within the framework of the Strategic plan of development the Republic of Kazakhstan till 2020, the primary objective of health protection system is the increase of accessibility and quality of medical services. With this objective in view it is planned to review the approaches to

management in state medical organizations and implementation of investment policy in health protection system, outcome-oriented system of financing and payment for medical services is introduced, an effective system of pharmaceutical provision is created.

Healthy life-style and the principle of joint responsibility for health will be an essential part of both: governmental policy in the sphere of health protection and everyday life of the population. It will allow decreasing diseases due to smoking, alcohol abuse, stresses, low physical activity and improper feeding. Development of mass physical culture and sport movement in the country will be one of the effective instruments of struggle with pernicious habits.

According to the Plan, by 2015 Kazakhstan will come out to have the following indicators: increase of life expectancy up to 69.0 years old, decrease of maternal and infant mortality by 1.5 times, decrease of infant mortality by 1.5 times, decrease of total mortality by 15 %. By 2020 increase of life expectancy is planned up to 72.0 years old, decrease of maternal and infant mortality 2 times less, decrease of total mortality rate by 30 %.

The State program of health protection development of the Republic of Kazakhstan "Salamatty Kazakhstan" (2010) is working at the present moment. This Program was adopted for 2011–2015 and it slightly specifies the initial plans, presented in the Strategy. The objective of the Program is improvement of health of the population of Kazakhstan for ensuring stable social-demographic development of the country. Special indicator of the Program implementation are: increase of life expectancy by 2013 up to 69.5 years old, by 2015 – up to 70.0 years old; decrease of maternal mortality by 2013 to 28.1 ‰, by 2015 – to 24.5 per 100 thousand of live births; decrease of infant mortality by 2013 to 14.1, by 2015 – to 12.3 per 1000 live births; decrease of crude mortality rate by 2013 to 8.1 ‰, by 2015 – to 7.6 ‰.

Thus, the Government carried out quite significant work aimed at changing of the situation in the sphere of support of maternity, family, gender equality and population health.

6.2.4 Migration policy

In the sphere of migration policy the Government achieved the most significant results. Support of immigration of ethnic Kazakhs played a key role here. In this direction the Government prepared a corresponding legislative basis, which determined the order of returning of compatriots. According to the Law "On population migration" (1997) one of the main principles of the regulation of population migration is a comprehensive assistance of migration of Kazakhs into the Republic of Kazakhstan, organization of their settling, job creation, social welfare and public assistance for oralmans (Art. 3).

According to the Law on migration, oralmans are foreigners or persons without citizenship (ethnic Kazakhs), permanently living outside the Republic of Kazakhstan for the moment of obtaining its sovereignty and coming to Kazakhstan with the purpose of permanent residence (Art. 1). The Law also provides adaptation services – a complex of services provided for oralmans and the members of their families in the centers of adaptation and integration of oralmans, including legal consultation, official language acquisition, and, by request, Russian language acquisition, vocational training, retraining and advanced training. The immigration

quote of oralmans is a number of oralman families, identified by the President of the Republic of Kazakhstan, which are provided by benefits, compensations and one-time grants (Art. 1).

The Concept of migration policy of the Republic of Kazakhstan for 2007–2015 was adopted in 2007. The Concept dwells on the development of migration situation in the following aspects: Kazakhstan will suffer serious problems related to such negative factors as: loss of qualified personnel; increase of illegal migration; increase of tension due to heterogeneous distribution of immigrants within the territory of the country; economic safety of Kazakhstan will depend not only on the scale of migration but also on its structure and territorial distribution; within labor migration the immigration from the countries with tense migration potential will increase; the flow of different categories of immigrants from Central-Asian and other states will increase; migration from rural regions into the cities will be the predominant form of inter-regional territorial distribution, which is an evidence of increasing urbanization process.

According to the Concept, main principles of migration policy of the Republic of Kazakhstan are: non-admission of discrimination on the basis of race, language, religion, sex, ethnic and social belongings, views, political belonging, property status or any other reason, preservation and conservation of national identity of the country assuming systematic and sequential carrying out of the policy oriented, first of all, at the stimulation of the repatriation of the compatriots living abroad; selectivity based on the selective approach to immigrants, taking into accounts their education, profession, investment and financial potential.

The Concept also determines the main priorities of internal migration: creation of economic conditions (ensuring of proportional development of housing market and labor market) for increasing of territorial mobility of labor force; development of mechanisms of stimulation of territorial redistribution of economically active population for ensuring of the equilibrium of regional labor markets; monitoring of ecological situation in the regions, in particular, availability of clean drinking water, pollution of the environment and social and economic depression.

In the questions of regulation of labor migration, according to the Concept, migration policy involves attraction of highly qualified foreign specialists for working in the spheres strategically determined by the Government as priority (nanotechnologies, biotechnologies, information systems, transport and communications and other industrial-innovation spheres). At the same time unqualified labor migrants will be attracted to the secondary labor market and employment sphere in the Republic under the conditions of entering international labor market. The main objective of realization of this direction will be strengthening of competitive advantages of Kazakhstan owing to labor migrants.

It is evident that the Concept reflects main problems met by the Government but the mechanisms remain indefinite, except “Nurly Kosh” Program for 2009–2011, which pays much attention to solving the problems of oralmans’ arrangement. The objective of the Program is rational settling and assistance in arrangement of ethnic immigrants; former citizens of Kazakhstan who arrived for labor activity in the territory of the Republic, citizens of Kazakhstan living in unfavorable regions of the country. It can be seen that main provisions of the Program are also reflected in the Law “On migration of the population” of 1998.

The expected outcomes of the Program realization:

it will regulate the processes of ethnic, internal and external migration and subject them to the interests of social-economic development of the regions;

it will result in the increase of the quality of life of the major part of ethnic immigrants and internal migrants;

it will stimulate the return of the citizens of different nationalities migrated from Kazakhstan to the country;

it will prevent possible arising of social risks related to the difficulties of adaptation and integration of migrants, unemployment and spontaneous migration;

it will ensure further development of the processes of national consolidation, strengthening of social stability and concord, improvement of demographic situation.

For achieving the objective of the Program it is assumed to solve the following problems: stimulation of the settling the participants in accordance with the needs of the economy in labor resources and for realization of state projects;

development and realization of new mechanisms of social support for the Program participants;

provision of the Program participants with housing by means of crediting of house building and purchasing of housing; assurance of stable employment of the Program participants; Improvement of normative legal basis of the regulation of migration processes.

The Program also defines the main zones of settling:

1.Around the cities – leaders and basic cities of national and regional level. It is supposed to form the net of small satellite towns with economic specialization and developed local labor markets characteristic for them.

2.In the settlements near to border for stabilization of the population number; increase of administrative significance of large regions near to border and prevention of demographic pressure (spontaneous external migration) from the direction of labor-excess regions of neighboring countries;

3.In rural settlements with high and middle potential.

As it can be seen, the main instrument can be redistribution of oralmans' flows by regions, which in principle existed before adoption of the Program on the basis of the old legislation. Low quality of immigrants observed till the present time, regardless of the declared objectives of attraction of qualified immigrants, can become a large obstacle in the way of the successful Program realization. If we dwell on potential immigrants of other nationalities, the status of oralmans and corresponding benefits are not referred to them, therefore, it will be more difficult to regulate the flows of this category of migrants.

About 197.5 milliard KZT is planned for implementation of the Program. It is assumed that all the Program participants will be provided with housing. For the period of 2009–2011 23.2 thousand families – the Program participants are supposed to be provided with housing. According to the calculations, 150 thousand people will be provided with jobs during the Program implementation, two thirds of them will be employed in the real economy sector – in industry, construction and agriculture.

As it can be seen, the Government gives a required social support and assistance to oralmans. By the situation of 2009 taking into account the money for housing, one time grant, money for reimbursement of expenses for moving and baggage transportation for every family, in average consisting of 5 people, the Government allots about 833 thousand KZT (5.6 thousand USD). Nowadays, 14 centers of temporary allocation of oralmans are functioning in the country.

In general, as practice showed, oralmans' repatriation was not able till present time compensate the losses of the Government related to the outflow of qualified specialists. The main positive outcome of repatriation is increase of the proportion of ethnic Kazakhs in the country. Migration policy also did not result in significant changes of the regional distribution of the population.

6.2.5 Support of interethnic concord

Ethnic structure of the population in Kazakhstan actualizes the interest in the problem of national policy. In such conditions, the relation of demographic and national policies has a rather definite character. The Government has a rather wide set of instruments for influencing the situation. After obtaining sovereignty Kazakhstan faced the problem of mass emigration of the Russian-speaking population. However, it is difficult to refer the intensification of the ethnic problem to the main reasons of emigration. From the very first days of independence the most important priority of the internal policy of Kazakhstan was preservation of inter-ethnic and inter-confessional peace and stability. Consolidation of Kazakhstan society based on the principles of civic and political community became an important priority of internal policy.

One of the significant demonstrations of the balanced national policy is the Law "On languages in the Republic of Kazakhstan" (1997). According to this Law, the Kazakh language is an official language in the Republic of Kazakhstan (Art. 4). The Law reads that the State is concerned about creation of the conditions for learning and development of the languages of Kazakhstan people (Art. 6). In state organizations and institutions of local governing the Russian language is officially used equally with the Kazakh language (Art. 5). The compromise in the language policy managed to smooth the most critical problem of the transition period.

One of the mechanisms of cultural and interethnic dialogue is the Assembly of people of Kazakhstan (APK) headed by the President. The Assembly, established in 1995, unites numerous ethnic groups living in Kazakhstan into cultural centers. In 2007 the Assembly obtained the right within the frames of the constitutional reform to elect 9 deputies of the Parliament Mazhilis. Thus, a constitutional mechanism of ethnic groups' interest intermediation in the state authorities was introduced (Art. 51 of the Constitution of the Republic of Kazakhstan 1995, with amendments made by the Law of the RK dated on the 21st of May 2007 N 254). "The objective of the Assembly is assurance of interethnic concord in the Republic of Kazakhstan during the process of formation of Kazakhstan civil identification and competitive nation on the basis of Kazakhstan patriotism, civil and spiritual-cultural community of the People of Kazakhstan with consolidating role of Kazakh people" (Art. 3 The Law of APK 2008).

The main objectives of the Assembly are:

1.Assurance of effective interaction of state authorities and institutions of civil society in the sphere of interethnic relations, creation of favorable conditions for consolidation of interethnic concord and tolerance in the society;

2.Consolidation of unity of the people, support and development of social consensus on fundamental values of Kazakhstan society;

3.Rendering of assistance to state authorities in opposition to the manifestations of extremism and radicalism in the society and the tendencies aimed at infringement of human and civil rights and freedoms;

4.Formation of political-legal culture of the people, based on democratic norms;

5.Revival, preservation and development of national cultures, languages and traditions of Kazakhstan people.

Beside the representative office in the Parliament, the Assembly has its branch offices in all the regions of Kazakhstan – Small assemblies of people. On the basis of the Assembly national cultural centers of the peoples of Kazakhstan are functioning, where there is an opportunity of learning languages and carrying out cultural activities.

In 2009 the Assembly took an active part in the discussion of the Doctrine of national unity of Kazakhstan, which is a very important strategic document, since stability in the society and unity of people is an initial and key ideological-conceptual constituent of state formation and national policy in Kazakhstan. It is a main value aim of the policy which is realized by the state from the moment of independence. The Doctrine of national unity (2010) can be realized as an ideological basis, on which Kazakhstan people will create their national identity.

The discussion of the Doctrine had a wide public resonance among Kazakhstan people, first of all, among national-patriotic intelligentsia, beware of infringement of the interests of Kazakh nation. As a result, the decision was made to prepare the text taking into account all the complaints and wishes. The completed variant was submitted for consideration of the public committee, which consisted of public leaders, and after co-ordination it was approved.

The Doctrine declared 3 fundamental principles of national unity of Kazakhstan:

1.“One country – one fate” (Awareness of the common fate of every citizen and the Motherland – the Republic of Kazakhstan). The doctrine says: “national unity is based on a high degree of correlating oneself, independently on ethnic origin, with Kazakhstan and its future”.

2.“Different origin – equal abilities” (equal abilities for all people independently on ethnic and social position). The doctrine notes: “equality of abilities means that everyone independently on ethnic origin and religion has a right to develop his/her culture, traditions and language, to be represented in all spheres of social and state life”.

3.“Development of national spirit” (Consolidation and development of the national spirit as uniting and consolidating basis). The Doctrine notes that for raising the national spirit the main priorities must be the spirit of traditions and patriotism, the spirit of renewal, competition and victory”.

The official language (Kazak language) is defined in the Doctrine as a main factor of spiritual and national unity. The Doctrine also says that the Government must be concerned

about satisfaction of spiritual-cultural and lingual needs of all ethnic groups living in Kazakhstan. Relying on traditional values (respect of the language and culture, morality, family, relation of generations, patriotism and tolerance), is considered as spiritual basis of the society, consolidation of unity and originality in the modern world.

Orientation on competitiveness must become an important part of national spirit: "We need an intellectual break through, which will allow awakening of the national potential. It is essential to change the relation to knowledge, science and innovations. In the 21st century only an intellectual nation is able to count on success" (Par. 3).

It is early for the present time to evaluate the impact of the Doctrine on social-political life. At the same time its significance and possible perspectives inspire definite optimism. Reasoning from the presented documents it is evident that Kazakhstan perceives poly-ethnicity and poly-confessionalism as an objective reality of the country and directs the efforts to the unity of the society by civil principles.

In general, the policy of Kazakhstan in the sphere of inter-ethnic relations is aimed at consolidation of international and inter-confessional concord. Kazakhstan model can be fairly evaluated as one of the most successful projects in all the post-Soviet space. Under such conditions the problem of emigration of the Russian-speaking population was mostly the result of the social-economic development of the country.

Thus, the analysis of the basic directions of demographic policy is an evidence of the fact that the Government tries to regulate demographic processes. The attention of the Government is spread at a rather wide spectrum of the problems, the most important of which are increase of fertility, support of maternity and family and regulation of migration. At the same time, not all acting mechanisms of regulation are effective. The existing system of support of maternity and young families requires modification. It is difficult to count on the long-term increase of fertility, decrease of mortality and increase of life expectancy without effective social protection.

Kazakhstan was able to achieve significant changes mainly in the sphere of migration policy. Repatriation of ethnic Kazakhs made it possible for Kazakhstan to rather successfully solve the problem of compensation of emigrational losses, raise the proportion of the indigenous ethnic group in the country. Financial support and repatriation of ethnic Kazakhs became the main instruments of demographic policy.

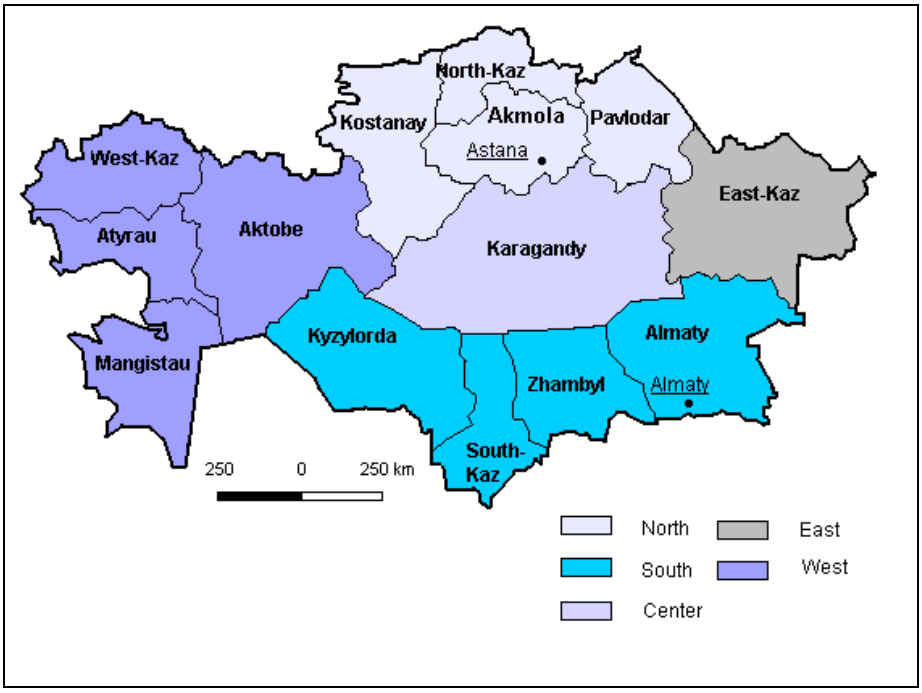
However, the measures taken turned out to be inefficient in solving the problem of the loss of qualified specialists, though one of the objectives of migration policy is attraction of the specialists demanded by the country including labor migrants. Under such conditions the main and unsolved contradiction of migration policy is the problem of achievement of positive qualitative and quantitative results. Ultimately, this thesis can be applied to the demographic policy in general.

Chapter 7

Regional aspect of population development in Kazakhstan

Regional differences in population development of Kazakhstan are expressed mainly in heterogenious distribution of the population within the territory of the country, and in rates of population growth. In administrative respect the territory of Kazakhstan is divided into 14 regions made up of districts and settlements. Besides, the two cities – Almaty and Astana – have republican significance. Taking into consideration geographic position and social-economic peculiarities, the regions of Kazakhstan are traditionally referred to 5 macro regions: North (Akmola, Kostanay, Pavlodar, North-Kazakhstan); Center (Karagandy); East (East-Kazakhstan); West (Aktobe, Atyrau, Mangistau, West-Kazakhstan); South (Almaty, Zhambyl, South-Kazakhstan, Kyzylorda).

Map 1 – Regions of Kazakhstan, 2009



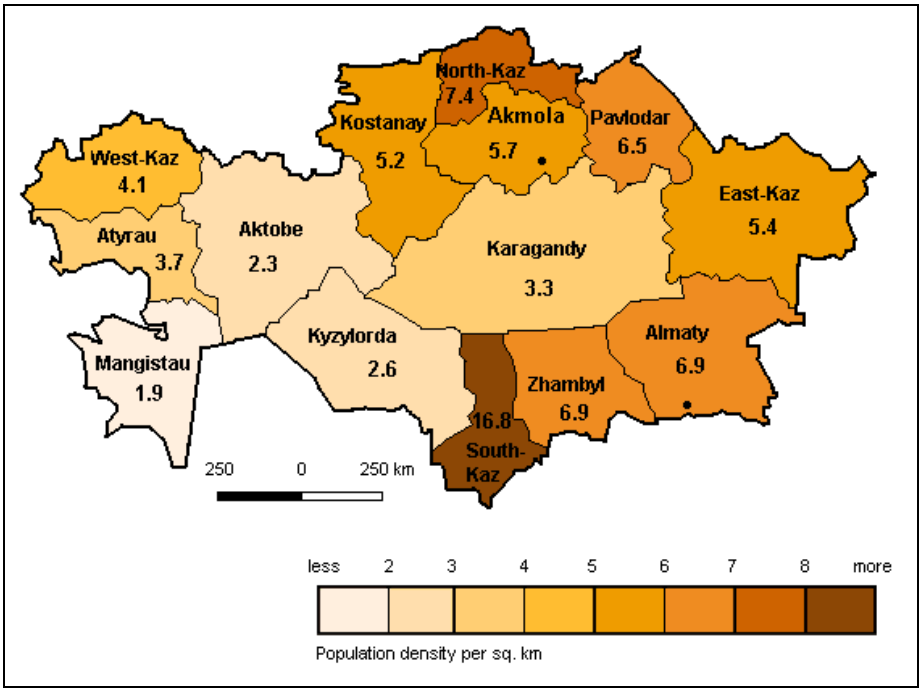
7.1 Population change and distribution

For many countries inhomogenious distribution of population is a problem, which, usually, has an objective conditionality (geographic factor, economic and historical peculiarities of the development of the country and the regions). Kazakhstan is not an exception in this respect. The territory of the country, holding the 9th position in the world by area (2.7 million sq. km.) is populated rather inhomogeniously; the data on population density by regions are an evidence of this fact (Map. 2–3). The highest population density is observed in the regions of Southern Kazakhstan (South-Kaz, Zhambyl, Almaty regions); the lowest population density is characteristic for the regions of Western, Central Kazakhstan (Mangistau, Aktobe and Karagandy regions). In Kazakhstan in 2009 the population density made up 5.8 people per square kilometer; the highest population density was 20.3 people per square kilometer (South-Kaz. region), the lowest population density was 2.4 people per square kilometer (Aktobe region).

Thus, the difference between maximum and minimum rates is practically tenfold. In many respects the inhomogeneous distribution of the population is historically conditioned and has a close connection with natural-climatic conditions of the regions. In Kazakhstan more than a half of the territory is occupied with deserts and semi-deserts (see Appendix 1–4). About 20 % of the territory is good for agriculturing. A significant part of the territory of Mangistau, Aktobe, Kyzylorda and Karagandy regions is not suitable or of little use for habitation. A drought climate and lack of water resources in many respects determined the geography of population distribution. The South of Kazakhstan also turned out preferable owing to its milder climate. For comparison, the average temperature in January in North-Kazakhstan makes up – 16; – 19°C, in July + 36; + 40°C. In South-Kazakhstan in the North of the region the average temperature in January makes up – 12°C, in the South of the region – 2; – 4°C. In July the average temperature makes + 36; + 40°C (Agency of Statistics of the Republic of Kazkhstan 2010 c). Thus, natural-climatic conditions historically laid the basis for inhomogeneous distribution of population within the territory of the country.

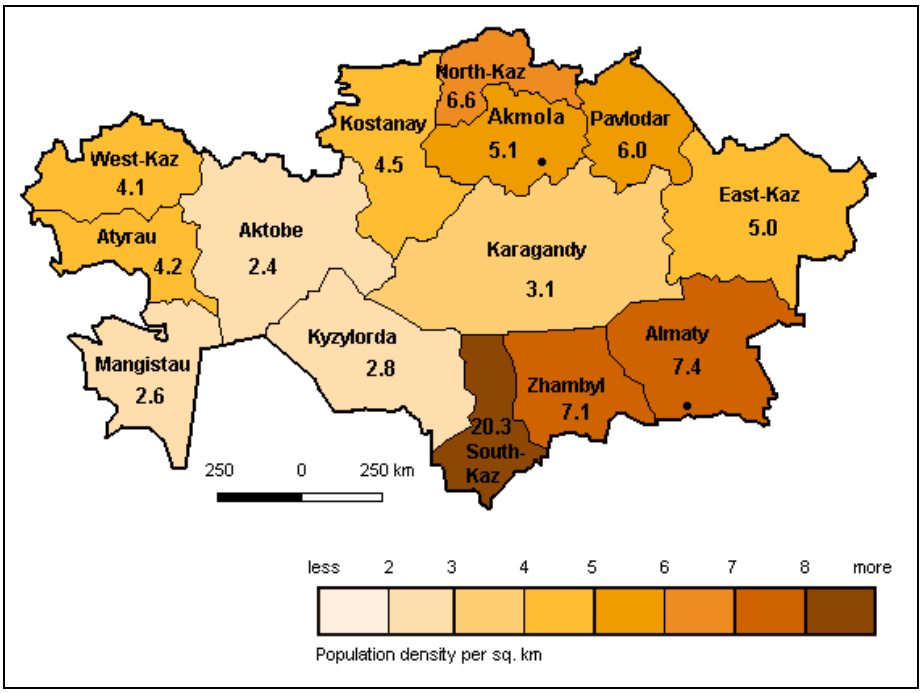
However, in current conditions the unfavorable natural-climatic situation in many cases is compensated by economic factors. The most important of them is availability of rich fields of mineral resources in the regions (oil, gas, metals, coal, etc.), the development of these fields in its turn attracts population. Practically all the regions of Kazakhstan possess the reserves of these or those raw material resources, but in the last decade the most dynamic development was made by oil-gas industry the main part of which is concentrated in the West of Kazakhstan and partially in Kyzylorda region. To some extent this fact can explain some increase of population density observed in the period from 1999 to 2009 in Atyrau, Mangistau, Aktobe and Kyzylorda regions. At the same time, within the same period, there was an increase of population density in South Kazakhstan, Zhambyl, Almaty regions, the economy of which is to a great degree represented by agricultural sector. The population density of predominantly agrarian North and industrially developed Center and East of Kazakhstan decreased.

Map 2 – Population density in regions of Kazakhstan, 1999



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 3 – Population density in regions of Kazakhstan, 2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

The change of population density and number also determined the change of specific weight of the regions in the total population of the country. Significant changes can be also observed in population distribution within the regions of Kazakhstan in the period of 1999–2009.

The most important change was the further decrease of population and share of the regions of Northern Kazakhstan (Akmola, Kostanay, Pavlodar) and Southern Kazakhstan regions. A similar trend is characteristic for the Center (Karagandy region) and East of Kazakhstan (East-Kazakhstan region). Correspondingly, there was a growth of population, and in most cases, share of population of the regions of Southern and Western Kazakhstan, and the cities of Astana and Almaty.

In the period of 1999–2009 the largest share of Kazakhstani population has fallen within East-Kazakhstan and Almaty regions. In 1999, these regions had the share of population of 10 % from the total population: South-Kazakhstan region 13.2 % (1975.6 thousand people), Almaty region 10.4 % (1556.5 thousand people), East-Kazakhstan 10.3 % (1532.9 thousand people).

In 2009 there was an increase of the share of population in South-Kazakhstan up to 15.1 % (2381.5 thousand people), Almaty region – up to 10.6 % (1667.1 thousand people). At the same time the share of population of East-Kazakhstan decreased to 9.0 %, over the 10-year period the population of the region had a decrease of 115.1 thousand people. The decrease of the shares of population is also observed in the regions of Northern and Central Kazakhstan and in West-Kazakhstan region. In the period of 1999–2009, the minimal share of population among the regions makes less than 3 % from the total population of Kazakhstan, it can be observed in Mangistau region: 2.1 % in 1999, 2.7 % in 2009.

Over the same period the share of population in the regions of Southern Kazakhstan (including Almaty) increased from 41.8 % up to 45 %, of Western Kazakhstan – from 13.7 % to 14.3 %. The share of population of Northern, Central and Eastern Kazakhstan, including Astana, decreased correspondingly from 44.5 % to 40.8 %. Thus, the foundation of the capital to the North of the country, even taking into account practically twofold increase of the share of population of Astana, did not contribute to serious changes in population distribution.

On the whole, the changes of distribution of population number and proportion within the regions, taking into consideration the size of the territory, can be statistically evaluated in such index as Gini concentration ratio. From 1999 to 2009 Gini concentration ratio increased from 0.36 up to 0.39 (Tab. 36–37). Thus, the problem of population distribution became quite important aspect of population development in Kazakhstan.

Tab. 36 – Distribution of population living in Kazakhstani regions in 1999

	Pop. (in thou.)	Area (in sq. km.)	Pop. density	Proportion		Cumulative proportion		Effect of interaction	
				Pop.	Area	Pop.	Area	(7)*(8)	(8)*(7)
	(1)	(2)	(3)	(4)	(5)	(7)	(8)	(9)	(10)
Almaty city	1129.0	0.3	3763.3	0.08	0.00	0.08	0.00	0.00	0.00
Astana city	326.9	0.7	467.1	0.02	0.00	0.10	0.00	0.00	0.00
South-Kaz	1975.6	117.3	16.8	0.13	0.04	0.23	0.04	0.02	0.01
North-Kaz	727.0	98.0	7.4	0.05	0.04	0.28	0.08	0.04	0.03
Almaty	1556.5	224.0	6.9	0.10	0.08	0.38	0.16	0.08	0.07
Zhambyl	988.9	144.3	6.9	0.07	0.05	0.45	0.21	0.12	0.11
Pavlodar	808.4	124.8	6.5	0.05	0.05	0.50	0.26	0.16	0.15
Akmola	829.2	146.2	5.7	0.06	0.05	0.56	0.31	0.23	0.21
East-Kaz	1532.9	283.2	5.4	0.10	0.10	0.66	0.42	0.32	0.30
Kostanay	1020.5	196.0	5.2	0.07	0.07	0.73	0.49	0.40	0.38
West-Kaz	617.4	151.3	4.1	0.04	0.06	0.77	0.55	0.45	0.44
Atyrau	439.4	118.6	3.7	0.03	0.04	0.80	0.59	0.60	0.53
Karagandy	1411.4	428.0	3.3	0.09	0.16	0.89	0.75	0.74	0.70
Kyzylorda	595.5	226.0	2.6	0.04	0.08	0.93	0.83	0.88	0.81
Aktobe	682.5	300.6	2.3	0.05	0.11	0.98	0.94	0.98	0.94
Mangistau	314.0	165.6	1.9	0.02	0.06	1.00	1.00	–	–
Total	14955.1	2724.9	5.5	1.00	1.00	–	–	5.02	4.67
	Gini concentration ratio							**0.36**	

Tab. 37 – Distribution of population living in Kazakhstani regions in 2009

	Pop. (in thou.)	Area (in sq. km.)	Pop. density	Proportion		Cumulative proportion		Effect of interaction	
				Pop.	Area	Pop.	Area	(7)*(8)	(8)*(7)
	(1)	(2)	(3)	(4)	(5)	(7)	(8)	(9)	(10)
Almaty city	1365.1	0.3	4550.4	0.09	0.00	0.09	0.00	0.00	0.00
Astana city	639.3	0.7	913.3	0.04	0.00	0.13	0.00	0.01	0.00
South-Kaz	2381.5	117.3	20.3	0.15	0.04	0.28	0.04	0.03	0.02
North-Kaz	1667.1	224.0	7.4	0.11	0.08	0.38	0.13	0.07	0.06
Almaty	1031.1	144.3	7.1	0.07	0.05	0.45	0.18	0.10	0.09
Zhambyl	648.2	98.0	6.6	0.04	0.04	0.49	0.21	0.13	0.12
Pavlodar	748.8	124.8	6.0	0.05	0.05	0.54	0.26	0.17	0.15
Akmola	741.9	146.2	5.1	0.05	0.05	0.58	0.31	0.24	0.21
East-Kaz	1417.8	283.2	5.0	0.09	0.10	0.67	0.42	0.33	0.31
Kostanay	889.4	196.0	4.5	0.06	0.07	0.73	0.49	0.39	0.37
West-Kaz	501.6	118.6	4.2	0.03	0.04	0.76	0.53	0.45	0.43
Atyrau	618.8	151.3	4.1	0.04	0.06	0.80	0.59	0.60	0.52
Karagandy	1346.4	428.0	3.1	0.09	0.16	0.89	0.75	0.74	0.69
Kyzylorda	641.6	226.0	2.8	0.04	0.08	0.93	0.83	0.83	0.79
Aktobe	425.7	165.6	2.6	0.03	0.06	0.95	0.89	0.95	0.89
Mangistau	712.1	300.6	2.4	0.05	0.11	1.00	1.00	–	–
Total	15776.5	2724.9	5.8	1.00	1.00	–	–	5.03	4.64
	Gini concentration ratio							**0.39**	

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

One of the consequences of re-distribution of population within the territory of the country became the change of the proportion of urban population in the regions of the country. Over the period of 1999–2009 in most regions the proportion of the urban population decreased. The proportion of the urban population in the Republic of Kazakhstan in the whole decreased from 56.3 % in 1999 to 53.2 % in 2009. The main role here was played by the change of the legislation regarding the definition of urban population adopted in 2007. According to the Law "On administrative-territorial structure of the Republic of Kazakhstan", urban settlements located out of the territory subordinate to administrations of the cities of republican, municipal and regional significance were transformed into rural areas.

Thus, there was a change of the status of some settlements, which de-facto lost their industrial specialization in the years of the crisis, their population had in fact a rural way of life. Taking into consideration the old definition, from 1999 the proportion of the urban population of the Republic had a trend towards increasing, and made up 57.4 % by 2006; in 2007 it was already 53.1 %.

Thus, over the period of 1999–2009 the most significant decrease (of more than 5 %) was observed for the urban population of Almaty, Kyzylorda, Atyrau, Mangistau and East-Kazakhstan regions. At the same time, the change of the definition did not influence urban settlements, having republican significance; their population proportion did not change.

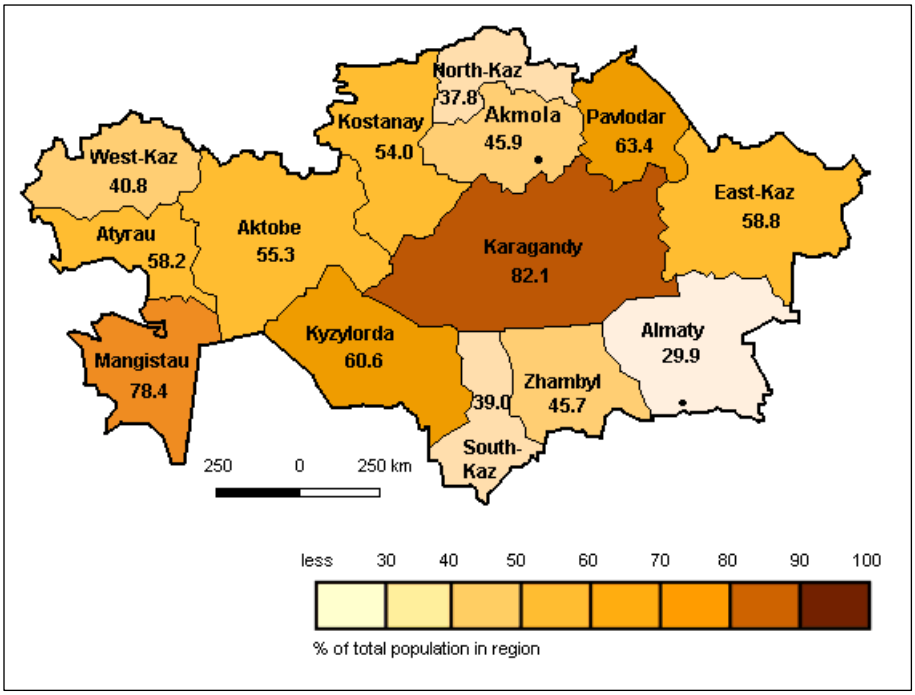
In 1999–2009 86 settlements in Kazakhstan have status of cities, of republican and regional significance. The status is conferred depending on administrative-economic functions and requirements to minimal population size (The Law "on administrative-territorial structure in the Republic of Kazakhstan"). Population distribution within the cities having administrative status also slightly changed. Applying Gini concentration ratio, we can determine inequality of the population distribution according to the number of localities (Tab. 38–39).

In 1999 Gini concentration ratio was 0.63, this ratio a little increased in 2009 and made 0.66. The increase of the ratio in many respects is reasoned by the increase of the population concentration in large cities. So, in 1999 there were 57 % of the urban population per 11 cities with the population more than 200 thousand; in 2009 the proportion of these cities increased up to 61 %. It takes place against a background of population decrease (in absolute numbers) in the cities with the population of 5–99 thousand and 200–499 thousand people.

In 2009 Almaty (1365.1 thousand people), Astana (639.3 thousand) and Shymkent (566.9 thousand) became large cities with population of more than 500 thousand people. From 1999 to 2009 the population of Almaty had an increase of 236.1 thousand people, of Astana 312.4 thousand people, of Shymkent 147.4 thousand people.

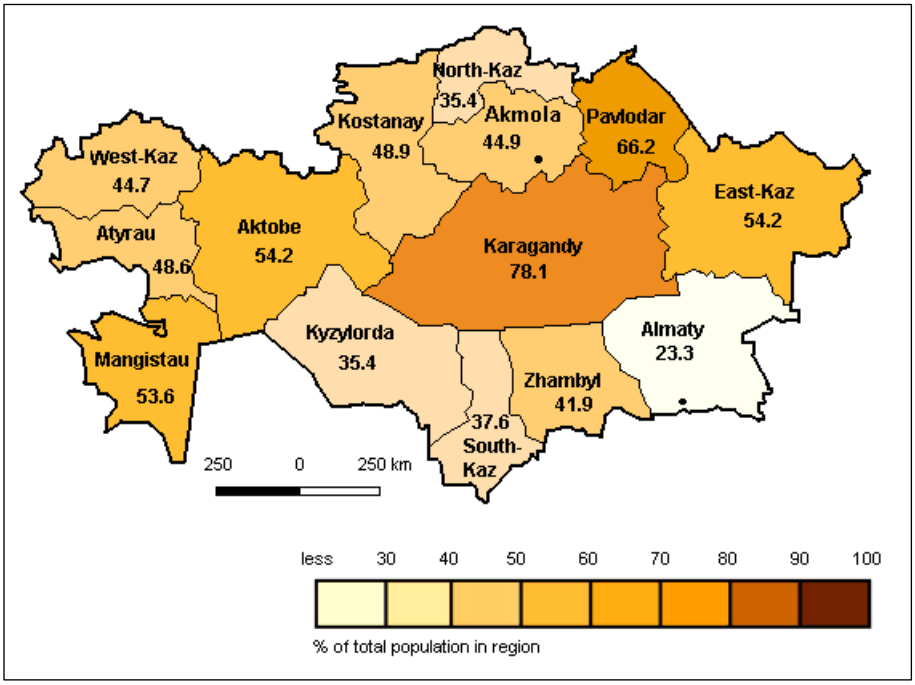
Thus, the foundation of the new capital played its role in the change of the urban population distribution. However, it can be hardly evaluated as a positive factor, as the population concentration in large cities, even taking into consideration such diversification of capital centers, continues to increase.

Map 4– Urban population by regions, 1999



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 5 – Urban population by regions, 2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 38 – Distribution of population living in cities in Kazakhstan in 1999

	Pop. (in thou.)	Number of localities	Proportion		Cumulative proportion		Effect of interaction	
			Localities	Pop.	Localities	Pop.	(6)*(5)	(5)*(6)
Size of locality	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
500 +	1129.0	1	0.01	0.15	0.01	0.15	0.02	0.01
200–499.9	3071.8	10	0.12	0.42	0.13	0.57	0.13	0.09
100–199.9	1169.1	8	0.09	0.16	0.22	0.73	0.22	0.18
50–99.9	509.2	7	0.08	0.07	0.30	0.80	0.56	0.29
20–49.9	1155.4	34	0.40	0.16	0.70	0.96	0.83	0.69
10–19.9	205.5	14	0.16	0.03	0.86	0.99	0.95	0.86
5–9.9	76.1	9	0.10	0.01	0.97	1.00	1.00	0.97
less than 5	7.1	3	0.03	0.00	1.00	1.00	–	–
Total	7323.2	86	1.00	1.00	–	–	3.71	3.08
Gini concentration ratio							**0.63**	

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 39 – Distribution of population living in cities in Kazakhstan in 2009

	Pop. (in thou.)	Number of localities	Proportion		Cumulative proportion		Effect of interaction	
			Localities	Pop.	Localities	Pop.	(6)*(5)	(5)*(6)
Size of locality	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
500 +	2571.4	3	0.03	0.31	0.03	0.31	0.04	0.02
200–499.9	2390.9	8	0.09	0.29	0.13	0.61	0.15	0.10
100–199.9	1449.1	10	0.12	0.18	0.24	0.78	0.25	0.20
50–99.9	401.1	6	0.07	0.05	0.31	0.83	0.59	0.30
20–49.9	1122.2	34	0.40	0.14	0.71	0.97	0.82	0.70
10–19.9	161.0	12	0.14	0.02	0.85	0.99	0.93	0.85
5–9.9	63.9	8	0.09	0.01	0.94	1.00	1.00	0.94
less than 5	15.4	5	0.06	0.00	1.00	1.00	–	–
Total	8175.1	86	1.00	1.00	–	–	3.78	3.12
Gini concentration ratio							**0.66**	

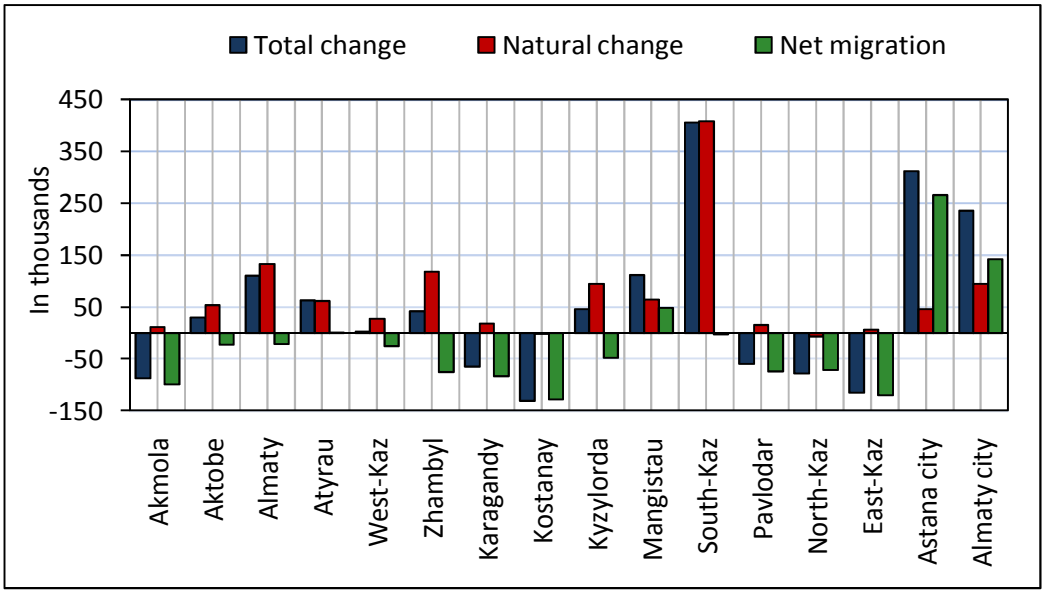
Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Can we under such conditions speak on the determining role of the economic factor in the problem of population distribution in Kazakhstan? Partly, we can, since over the period of 1999–2009 a positive migration growth of the population is observed only in Mangistau and Atyrau regions, the cities of Almaty and Astana, which are attractive for immigrants because of their capital status.

Thus, the most part of the regions looks depressive with relation to immigrational attractiveness, as they have negative migration balance (Fig. 16). At the same time, immigrational growth or population loss have different degree of impact on the population growth in the regions. So, for the regions of Northern, Central and Eastern Kazakhstan,

emigration is a determining factor in population growth, its extent considerably exceeds the natural population growth.

Fig. 16 – Population change by regions 1999–2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

On the other hand, the negative migration balance in the regions of Southern and Western Kazakhstan is compensated by relatively high natural population growth. Thus, in order to understand the trends of population distribution, it is rather important to take into consideration regional peculiarities of population development.

7.2 Natural change of population by regions

Differences of natural increase within the regions of Kazakhstan, as it was mentioned above, emphasize the differences between the North, Center and East on the one hand and West and South on the other hand. First of all, the regions of Southern and Western Kazakhstan can be referred to the regions with relatively high natural increase: Atyrau, Zhambyl, Kyzylorda, Mangistau, and South-Kazakhstan. Kostanay and North-Kazakhstan region are referred to the regions with stable tendency towards depopulation; up to 2003 depopulation was observed in East-Kazakhstan region (Tab. 40).

It is significant, that in 1999 the highest natural increase was observed in South-Kazakstan (16.0 ‰), in 2009 the highest ratio of natural increase made 26.4 ‰, it was observed in Mangistau region. That is, in comparison with 1999, Mangistau region came up from the 3rd place in 1999 to the 1st place in 2009 by the rates of natural growth. Minimal positive natural growth was observed in North-Kazakhstan and made 1.2 ‰. On the whole, over the period of 1999–2009 the indicator of natural population growth sufficiently increased for all the regions. However, the most noticeable increase of natural growth per 1000 people (more than 10 times) is observed in Akmola, Karagandy, Pavlodar regions and in Almaty (Map 6–7).

Tab. 40 – Natural increase/decrease of population (per 1000) by regions, 1999–2009

Regions	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Akmola	0.4	1.0	0.8	1.2	0.6	1.9	1.0	2.0	2.3	4.5	5.7
Aktobe	5.1	4.5	4.4	4.7	5.9	8.3	9.5	10.1	11.1	13.7	14.6
Almaty	5.9	6.2	6.2	6.4	7.2	8.4	7.7	9.4	11.3	14.3	13.2
Atyrau	9.5	9.7	10.0	10.1	12.1	12.8	14.8	15.9	16.6	19.4	20.0
West-Kaz	1.8	2.3	2.4	2.2	3.6	5.9	5.2	5.9	6.3	8.6	9.3
Zhambyl	7.9	8.2	9.0	7.7	9.7	12.3	12.9	14.9	16.4	18.8	18.2
Karagandy	0.4	– 0.4	– 0.1	0.3	0.8	1.4	1.8	2.5	2.9	4.2	6.1
Kostanay	– 0.6	– 0.8	– 0.2	0.0	– 0.2	0.2	– 0.7	– 0.5	– 0.6	1.0	2.4
Kyzylorda	14.3	13.8	13.0	12.6	13.1	15.8	15.0	16.7	18.5	20.5	20.7
Mangistau	12.2	11.9	12.6	14.5	15.9	19.0	19.3	22.0	23.5	25.1	26.4
South-Kaz	16.0	16.0	16.1	15.6	16.8	19.8	19.0	20.9	22.5	25.0	23.9
Pavlodar	0.5	0.6	0.4	1.1	1.5	2.6	2.0	2.8	3.4	5.8	6.1
North-Kaz	– 1.0	– 1.3	– 1.5	– 1.6	– 1.5	– 1.0	– 0.7	– 1.4	– 1.3	0.6	1.2
East-Kaz	– 1.1	– 1.2	– 1.2	– 0.8	– 0.2	0.7	0.4	1.6	2.0	4.0	5.0
Astana city	2.3	3.7	3.2	4.4	6.3	8.9	10.1	11.2	15.2	18.9	19.4
Almaty city	1.1	2.4	1.7	3.7	5.8	8.9	9.9	12.6	13.5	16.2	17.9

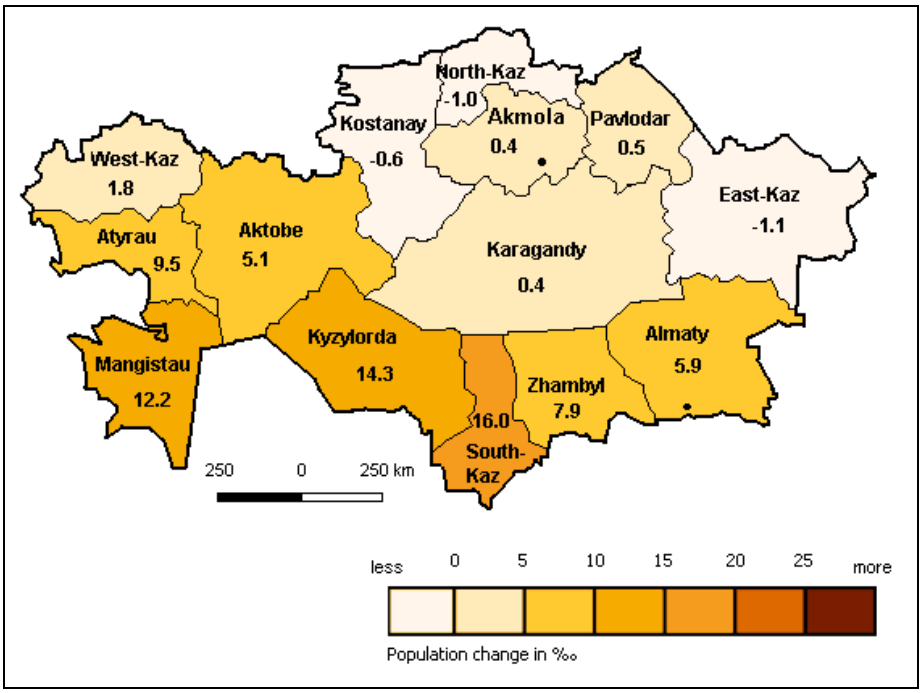
Source: Agency of Statistics of the Republic of Kazakhstan

The reasons of such differences of natural change within the regions are the differences mainly in fertility, partly in mortality; and the differences in age and ethnic structure in their turn are imposed on them.

Standardization of fertility rates shows that the highest fertility (Tab. 41) is observed in South-Kazakhstan (33.2 ‰), the lowest – in Pavlodar region (17.1 ‰). On the whole, the differences between the regions are rather great. The decomposition of general fertility rate (GFR) into components (Tab. 42) shows that the increase of fertility, observed over the period of 1999–2009 practically in all the regions, is conditioned mainly by the increase of fertility intensity.

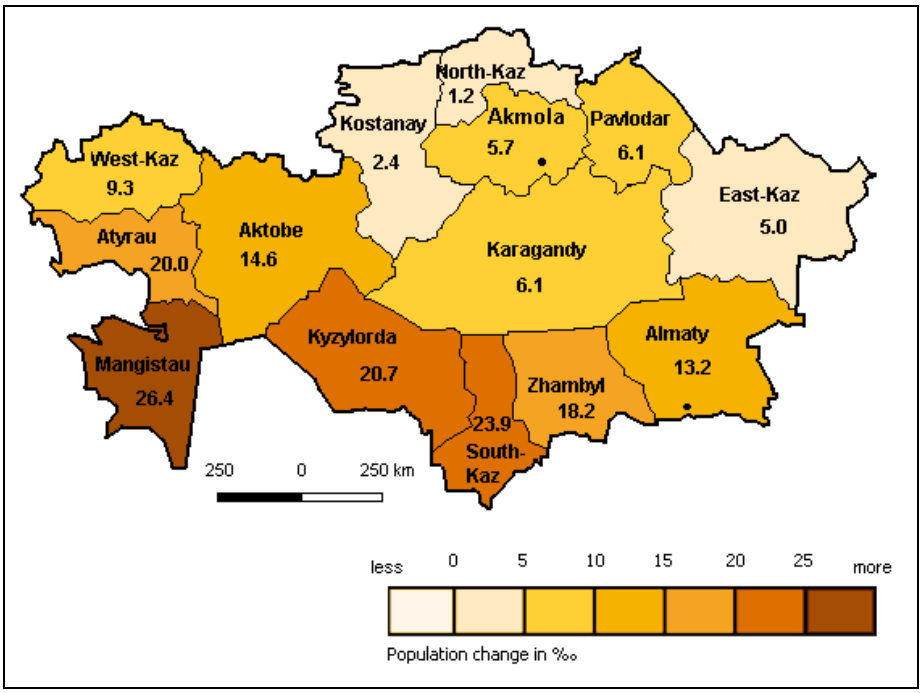
At the same time, the characteristic feature is a positive effect of age structure, observed in the most depressive regions of Northern, Central and Eastern Kazakhstan, while for most regions of Southern and Western Kazakhstan the effect of age structure is negative. This tendency is conditioned by the peculiarities of the ethnic composition of population in the regions, and, as a consequence, by the differences in age structure. The regions of Northern, Central and Eastern Kazakhstan are to a considerable degree represented by European population. Republic-wide trends show that the increase of fertility among the European population of the country to a large degree is conditioned by a favorable age structure.

Map 6 – Natural change by regions, 1999



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 7 – Natural change by regions, 2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 41 – Fertility indicators by regions in 1999 and 2008

	Crude birth rate (in ‰)		Index	Age-sex adjusted birth rate (in ‰)	Total fertility rate		Index
Regions	1999	2008	1999 = 100	2008	1999	2008	1999 = 100
Akmola	11.9	16.8	141.2	17.9	1.6	2.1	131.3
Aktobe	14.5	22.4	154.5	22.1	1.8	2.6	144.4
Almaty	14.8	23.5	158.8	24.0	1.9	2.9	152.6
Atyrau	18.7	27.4	146.5	27.6	2.3	3.3	143.5
West-Kaz	12.3	18.8	152.8	19.4	1.6	2.3	143.8
Zhambyl	16.3	27.4	168.1	28.3	1.9	3.3	173.7
Karagandy	12.3	16.8	136.6	16.9	1.5	2.0	133.3
Kostanay	10.9	13.9	127.5	14.5	1.4	1.7	121.4
Kyzylorda	21.7	27.7	127.6	29.1	2.7	3.5	129.6
Mangistau	19.6	32.0	163.3	31.4	2.3	3.7	160.9
South-Kaz	22.8	32.0	140.4	33.2	2.8	3.9	139.3
Pavlodar	11.0	17.1	155.5	17.1	1.3	2.0	153.8
North-Kaz	11.1	14.0	126.1	15.2	1.5	1.8	120.0
East-Kaz	11.1	16.7	150.5	17.3	1.4	2.1	150.0
Astana city	10.6	24.2	228.3	20.6	1.1	2.4	218.2
Almaty city	11.6	25.3	218.1	21.6	1.3	2.6	200.0

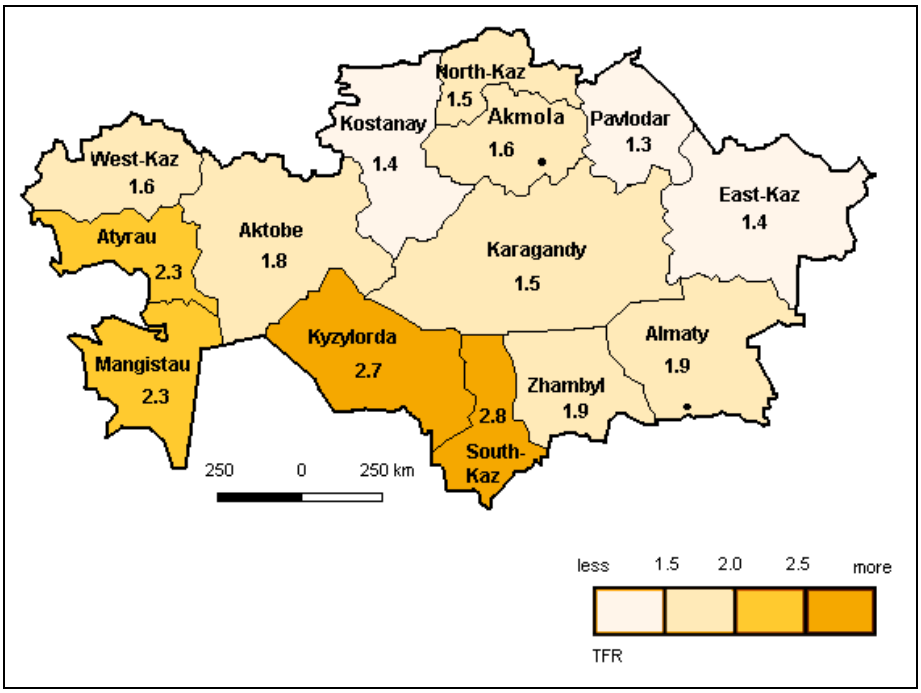
Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: Standard – age structure of Kazakhstan, 2008

Tab. 42 – Decomposition of difference between general fertility rates in 1999 and 2008

	General fertility rate (in ‰)		Effect of age distribution (in ‰)	Effect of ASFR (in ‰)	Effect of interaction (in ‰)	Total effect (in ‰)
Regions	1999	2008				
Akmola	45.2	61.0	1.2	12.5	2.1	15.8
Aktobe	52.6	77.3	– 0.5	23.5	1.7	24.7
Almaty	55.2	84.2	0.2	26.7	2.0	28.9
Atyrau	70.6	97.6	– 1.2	26.7	1.5	27.0
West-Kaz	46.1	66.5	– 0.1	18.7	1.8	20.4
Zhambyl	60.4	99.7	– 2.3	40.0	1.6	39.3
Karagandy	44.4	59.4	2.1	12.6	0.2	14.9
Kostanay	40.0	49.5	1.2	7.1	1.2	9.5
Kyzylorda	83.6	103.5	– 3.2	21.7	1.5	19.9
Mangistau	71.6	114.3	0.9	41.2	0.6	42.7
South-Kaz	89.1	119.8	– 1.2	30.5	1.4	30.7
Pavlodar	39.0	58.8	0.7	18.5	0.6	19.8
North-Kaz	42.2	51.7	2.5	6.1	0.9	9.5
East-Kaz	40.7	60.0	1.7	17.3	0.3	19.3
Astana city	33.7	75.8	– 0.3	42.2	0.2	42.1
Almaty city	37.5	81.5	5.4	41.2	– 2.6	44.0

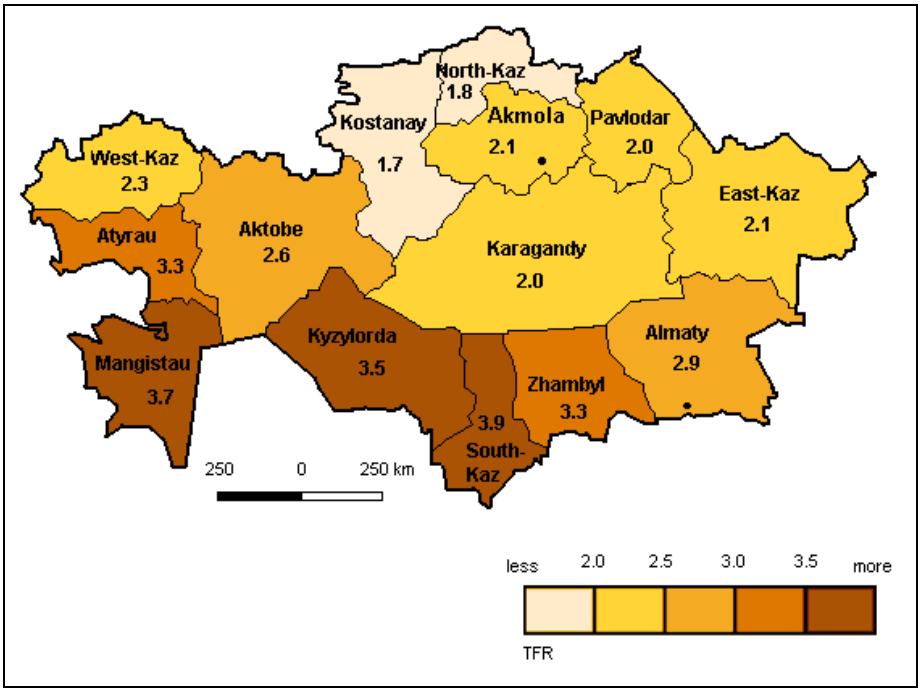
Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 8 – Regional differentiation of TFR, 1999



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 9 – Regional differentiation of TFR, 2008



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

The TFR also is an evidence of regional differences. As it can be seen from the Map 8–9, in 1999 and 2008 the highest TFR is also observed in Southern and Western regions. In 1999 TFR

higher than 2.0 was observed in Atyrau (2.3), Mangistau (2.4), Kyzylorda (2.7), South-Kazakhstan (2.8) regions.

By 2009 TFR had a tendency towards increasing practically in all the regions, which corresponds with republic-wide trends. The majority of the regions have TFR more than 2.0; the exceptions are: Kostanay region (1.7), North-Kazakshtan (1.8). The regions where TFR is higher than 3.0 are: Atyrau (3.3), Zhambyl (3.3), Kyzylorda (3.5), Mangistau (3.7), South-Kazakstan (3.9) regions.

An increase of mean age of mothers at childbirth is also a republican-wide tendency (Tab. 43). In the regions such tendency also takes place. The mean age of mothers increased most noticeably (increase of more than 2 years), in comparison with 1999, in Akmola region (+ 2.1 years), Almaty region (+ 2.1 years), Kostanay region (+ 2.1 years), East-Kazakhstan (+ 2.2 years). In 1999 the highest mean age of a mother at childbirth was observed in Kyzylorda (27.6 years old), the lowest age was observed in Kostanay region. In 2009 such regions are also Kyzylorda (29.0 years old) and Astana. (27.2 years old). Relatively high age of mothers in the regions of Southern and Western Kazakhstan is explained by traditional possession of many children, characteristic for the families of a traditional type. The reason is the domination of indigenous (Kazakh) population.

Against this background, practically in all regions a significant increase of mean age of a mother at the first childbirth is observed. If in 1999 the maximum age of a mother at the first child birth made 25.1 years old (Almaty), in 2008 this index was already 25.9 years old (Almaty). At the same time the minimum age increased from 22.7 in 1999 (North-Kazakhstan) up to 24.4 years old (Atyrau region). This trend is an evidence of serious changes in reproductive behavior for females.

Tab. 43 – Mean age of women at childbirth by regions in 1999 and 2008

	Mean age of women at childbirth		Difference	Mean age of women at the first childbirth		Difference
Regions	1999	2008	2008–1999	1999	2008	2008–1999
Akmola	25.7	27.8	2.1	22.9	25.6	2.7
Aktobe	26.8	28.3	1.5	23.6	25.1	1.5
Almaty	26.3	28.4	2.1	23.4	24.9	1.5
Atyrau	27.3	28.2	0.9	23.9	24.4	0.4
West-Kaz	26.3	28.0	1.7	23.2	24.7	1.5
Zhambyl	26.9	28.2	1.3	24.0	24.7	0.8
Karagandy	26.0	27.7	1.7	23.1	24.9	1.8
Kostanay	25.4	27.5	2.1	22.7	24.5	1.8
Kyzylorda	27.6	29.0	1.4	23.7	25.4	1.7
Mangistau	27.2	28.1	0.9	23.4	24.8	1.3
South-Kaz	27.0	28.2	1.2	23.5	24.5	1.0
Pavlodar	25.7	27.6	1.9	23.2	24.6	1.4
North-Kaz	25.4	27.3	1.9	22.7	24.6	1.9
East-Kaz	25.8	28.0	2.2	23.2	25.0	1.8
Astana city	26.7	27.2	0.5	24.4	24.7	0.3
Almaty city	27.2	28.4	1.2	25.1	25.9	0.8

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Thus, the trends in fertility explain in many respects the established differences in the natural increase of the population within the regions.

The other important characteristics of the natural population increase are the trends towards mortality. As it can be seen from the Table 44, there are regional differences in mortality. The standardized mortality rate for 2008 shows that the highest mortality rate is characteristic for Karagandy (11.2 ‰) and Akmola region (11.1 ‰). The lowest rate is observed in the cities of Almaty (7.9 ‰) and Astana (5.9 ‰). Decomposition of crude death rates into components shows that decrease of mortality intensity played the main role in decreasing of mortality rate observed for the period from 1999 to 2008.

Tab. 44 – Mortality indicators by regions in 1999 and 2008

	Crude mortality rate (in ‰)		Effect of age distr. (in ‰)	Effect of ASDR (in ‰)	Total effect (in ‰)	Age-standardized mortality rate (in ‰)
Regions	1999	2008				2008
Akmola	11.6	12.3	1.3	– 0.5	0.8	11.1
Aktobe	9.4	8.8	0.7	– 1.3	– 0.6	9.7
Almaty	8.9	9.1	0.7	– 0.5	0.2	9.5
Atyrau	9.2	8.0	0.4	– 1.6	– 1.2	9.8
West-Kaz	10.5	10.2	0.9	– 1.2	– 0.3	9.7
Zhambyl	8.4	8.5	0.5	– 0.4	0.2	9.5
Karagandy	11.9	12.7	1.4	– 0.6	0.8	11.2
Kostanay	11.5	12.9	2.0	– 0.6	1.4	10.5
Kyzylorda	7.4	7.2	0.5	– 0.7	– 0.2	10.2
Mangistau	7.4	7.0	0.4	– 0.9	– 0.5	10.4
South-Kaz	6.8	7.0	0.3	– 0.1	0.2	9.3
Pavlodar	10.5	11.3	1.7	– 0.9	0.8	10.1
North-Kaz	12.1	13.4	1.5	– 0.2	1.3	10.8
East-Kaz	12.2	12.7	1.4	– 0.9	0.5	10.4
Astana city	8.3	5.3	0.2	– 3.2	– 3.0	5.9
Almaty city	10.5	9.1	0.2	– 1.6	– 1.4	7.9

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: Standard – age structure of Kazakhstan, 2008

Mortality decrease determined the increase of life expectancy at birth practically for all regions (Tab. 45). If in 1999 the maximum life expectancy at birth by regions made 68.0 years (Almaty), in 2008 this rate made already 73.8 years (Astana). At the same time (Map. 10–11) the minimum indicator for the same period changed from 63.9 years (Atyrau) to 64.6 years (Karagandy region).

On the whole, over the period of 1999–2008 life expectancy at birth increased the most noticeably (more than of 2 years) in the following regions: Astana (6.2 years), Atyrau (3.6 years), Almaty (3.4 years), Mangistau (2.4 years), Aktobe (2.4 years), West-Kazakhstan (2.1 years), Kyzylorda (2.1 years).

It is significant that these regions are perspective centers of economic growth; it emphasizes the importance of the economic factor as an indispensable condition of increasing the quality of life of the population. However, this is not the only factor. Ethnic structure of the population

also plays a great role. This is the very factor which explains the differences in the rates of life expectancy among the regions and especially between the north and the south.

In 1999 the highest life expectancy at birth (more than 60 years) for males was observed in Southern regions of Kazakhstan: Kyzylorda region (62.0 years), Zhambyl region (62.3 years), Almaty region (62.4 years), South-Kazakhstan (63.4 years), and in the cities of Almaty (62.0 years) and Astana (62.9 years). At the same time minimum was recorded in Atyrau (58.3 years).

For females, whose life expectancy made more than 70 years, the highest value is characteristic for Zhambyl region (71.0 years), Almaty region (71.1 years), South-Kazakhstan (71.4 years), North-Kazakhstan (71.1 years), the cities of Almaty (73.6 years) and Astana (72.8 years). Minimum life expectancy for females is recorded in Kyzylorda (69.0 years).

In 2008 in the majority of the regions life expectancy at birth for males made more than 60 years, the exceptions are: Karagandy (58.7 years), Akmola (59.2 years), Kostanay (59.6 years), North-Kazakhstan (59.7 years), partly East-Kazakhstan (60.2 years), and Pavlodar (60.8 years) regions. At the same time, maximum life expectancy at birth for males is observed in the city of Astana (70.8 years).

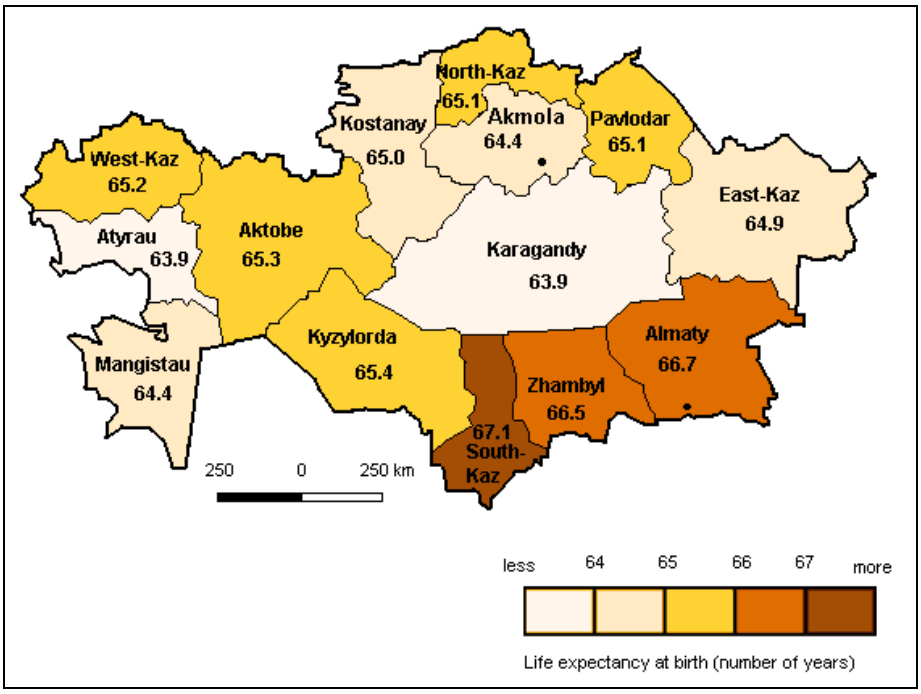
More similar indicators of life expectancy are recorded for females by regions in 2008. Maximum is recorded in the cities of Almaty (75.2 years) and Astana (78.2 years), minimum – in Karagandy region (70.8 years). At the same time, life expectancy in other regions fluctuates within the range of 71–73 years; regional specific character is practically not expressed.

Tab. 45 – Life expectancy at birth in 1999 and 2008

	Total		Males		Females	
Regions	1999	2008	1999	2008	1999	2008
Akmola	64.4	65.0	59.5	59.2	69.7	71.3
Aktobe	65.3	67.6	60.3	62.3	70.6	73.1
Almaty	66.7	67.5	62.4	63.0	71.1	72.3
Atyrau	63.9	67.4	58.3	62.3	69.7	72.5
West-Kaz	65.2	67.3	59.9	62.1	70.8	73.2
Zhambyl	66.5	67.4	62.3	62.4	71.0	72.7
Karagandy	63.9	64.6	58.3	58.7	70.0	70.8
Kostanay	65.0	65.6	59.6	59.6	70.8	71.9
Kyzylorda	65.4	67.5	62.0	63.2	69.0	71.8
Mangistau	64.4	66.8	59.4	61.9	70.1	72.0
South-Kaz	67.1	67.9	63.4	63.8	71.4	72.2
Pavlodar	65.1	66.5	59.8	60.8	70.6	72.3
North-Kaz	65.1	65.4	59.7	59.7	71.1	72.0
East-Kaz	64.9	65.8	59.6	60.2	70.7	71.7
Astana city	67.6	73.8	62.9	70.8	72.8	78.2
Almaty city	68.0	70.4	62.0	64.8	73.6	75.2

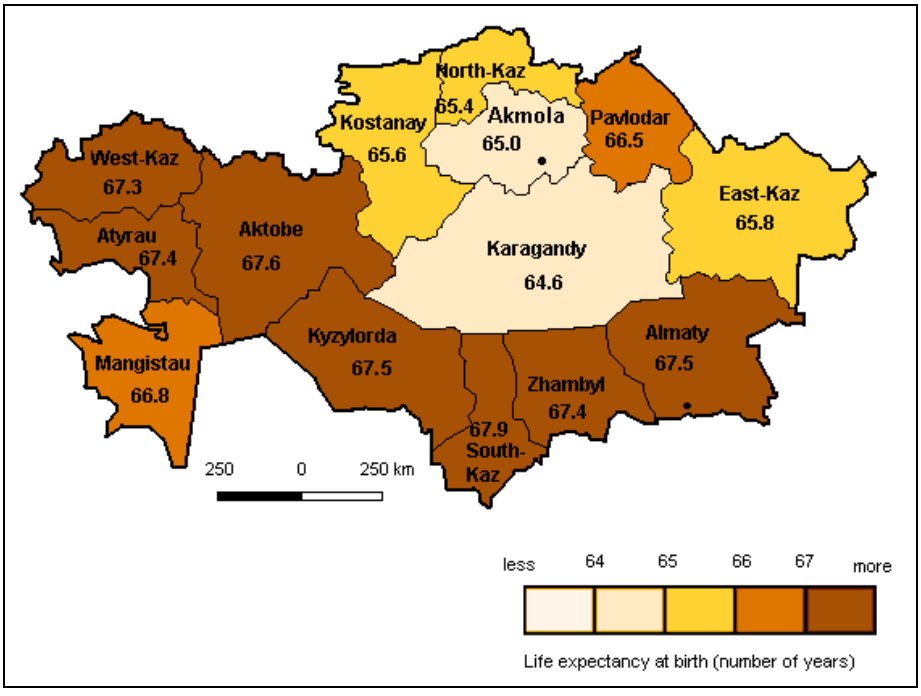
Source: Agency of Statistics of the Republic of Kazakhstan

Map 10 – Regional differentiation of life expectancy at birth in 1999 (total pop.)



Source: Agency of Statistics of the Republic of Kazakhstan

Map 11 – Regional differentiation of life expectancy at birth in 2008 (total pop.)



Source: Agency of Statistics of the Republic of Kazakhstan

On the whole, in 1999 the difference between life expectance at birth of females and males fluctuated in the regions from 11.7 years in Karagandy region to 7 years in Kyzylorda region. Besides, the difference is also observed, less than in other regions, in South-Kazakhstan

(8.0 years), Almaty region (8.7 years), Zhambyl region (8.7 years), and the city of Astana (9.9 years). In other regions the difference makes 10–11 years.

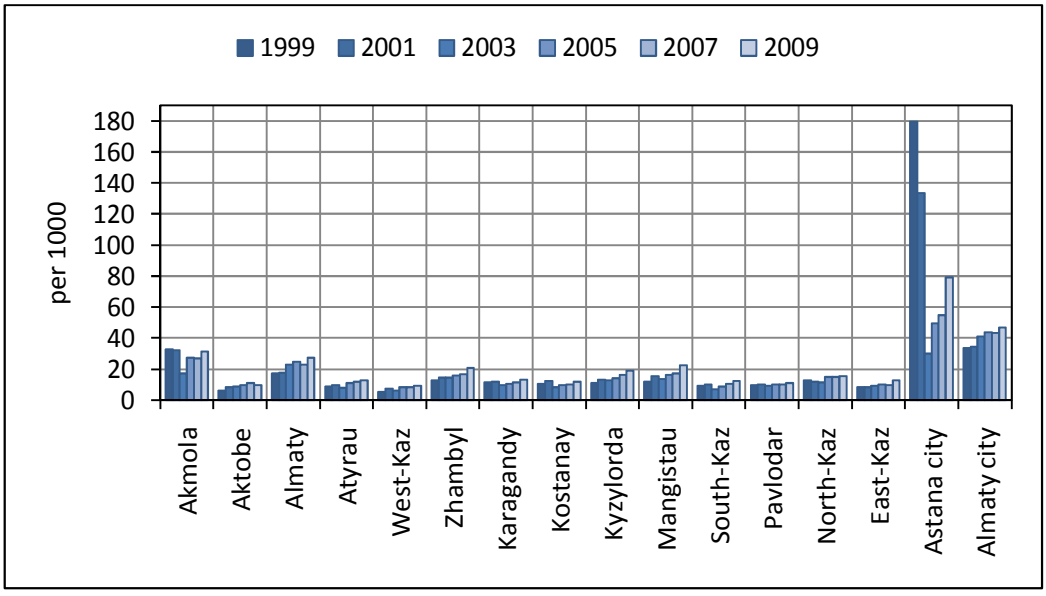
The difference between life expectancy for males and females was from 7.0 to 12.0 years in 2008, dependent on the region. The largest difference is observed in Akmola region (12.1 years), Karagandy region (12.1 years), and Kostanay region (12.3 years), North-Kazakhstan (12.4 years). Minimal difference is recorded in the city of Astana (7.4 years), South-Kazakhstan (8.4 years), Kyzylorda region (8.6 years), and Almaty region (9.3 years). In other regions the difference fluctuates within the range of 10–11 years.

Thus, the differences in mortality rates by regions are also noticeably expressed. Differentiation in many respects depends on the population structure and social factors. We shall dwell on it in greater detail in the next chapters.

7.3 Interregional and international migration

Considering migrational growth of the population by regions, it is important to mention the strengthening of the role of interregional migration which had a stable tendency towards increasing over the period of 1999–2009 practically for all the regions. Migration activity of the population is also differentiated by regions (Fig. 17), the highest average rate of gross migration over the period of 1999–2009 is characteristic for the cities of Almaty (40.4 ‰) and Astana (81.9 ‰). For the regions relatively high average rate of gross migration over the period of 1999–2009 is characteristic for Akmola (27.9 ‰), Almaty (22.4 ‰), Zhambyl (15.6 ‰), Kyzylorda (14.4 ‰) and Mangistau (16.1 ‰) regions. Minimum average rate over the same period made 7.5 ‰ (West-Kazakhstan). Thus, the difference between maximum and minimum rates is rather significant.

Fig. 17 – Gross interregional migration (per 1000), 1999–2009



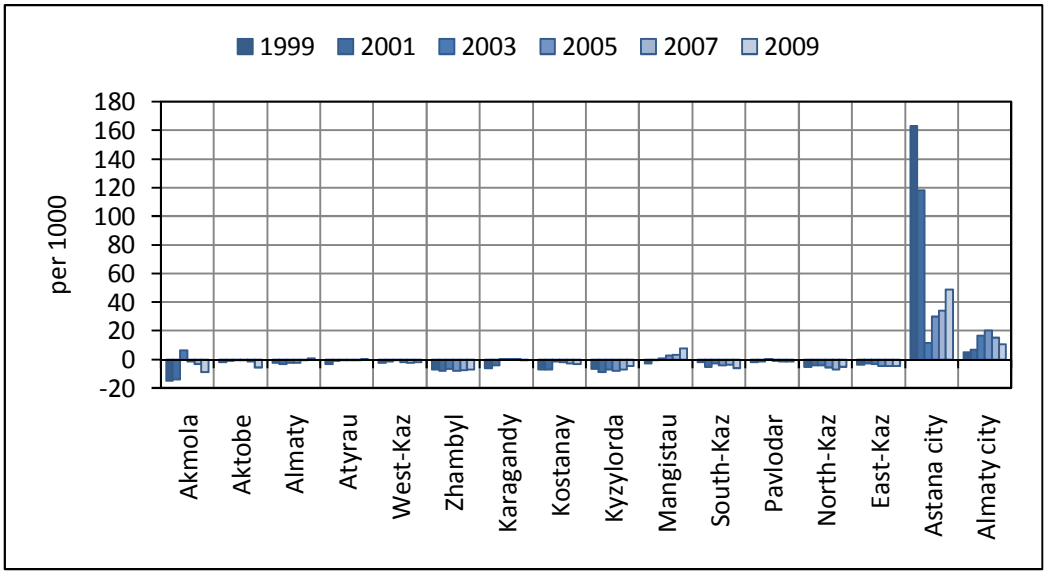
Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

In 2009 gross migration in the city of Almaty made 46.8 ‰ (64.8 thousand people), Astana 78.9 ‰ (52.2 thousand people). For the regions the highest rate 27.4 ‰ (46.1 thousand people) was recorded in Almaty region, minimum rate, 9.2 ‰ (5.7 thousand people) – in West-Kazakhstan.

Thus, the difference between maximum and minimum rates among the regions is practically triple. A stable positive balance of interregional migration over the period of 1999–2009 is observed in the cities of Almaty, Astana and in Mangistau and partly in Karagandy regions.

In 2009 the maximum net migration for the regions made 3.3 thousand people (Mangistau region), 1.2 thousand people (Almaty region). For comparison, the population growth in Astana in 2009 made 32.3 thousand people, Almaty – 14.4 thousand people. In 2009 the greatest losses according to the results of interregional migration made 14.3 thousand people (South-Kaz), 7.2 thousand (Zhambyl region.), 6.6 thousand (Akmola region), 6.6 thousand (East-Kazakhstan).

Fig. 18 – Net interregional migration (per 1000), 1999–2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

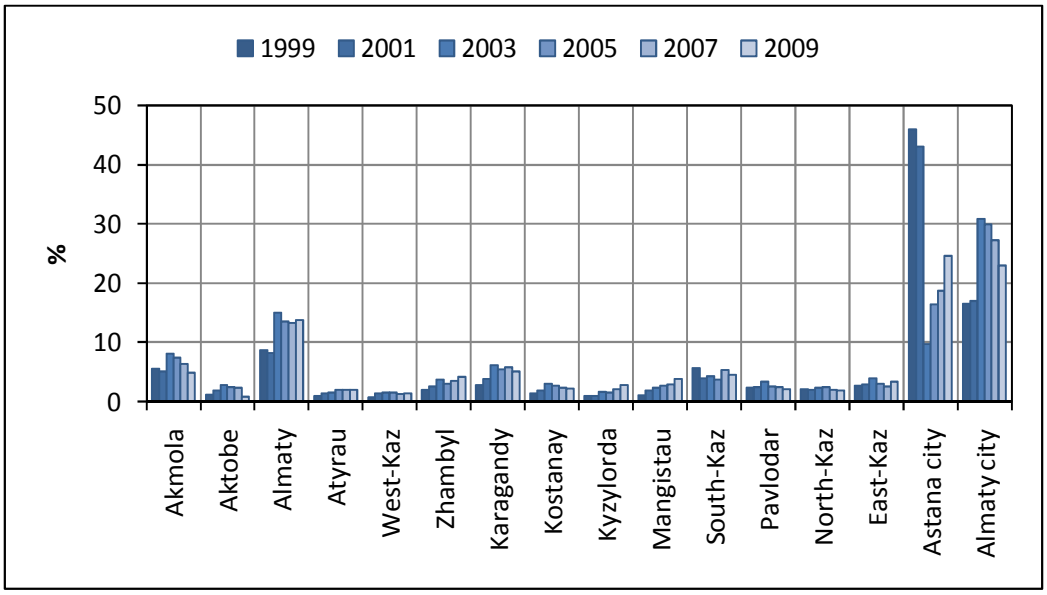
If we advert to the analysis of immigrational processes at an interregional level, we can see that the most significant number of immigrants in the period of 1999–2009 falls at the cities of Almaty and Astana. In 2009 these cities had 47.6 % from the total number of interregional immigrants: Almaty region – (13.8 %), the city of Astana – (24.6 %), the city of Almaty – (23.0 %). For comparison, in 1999 Astana and Almaty attracted 62.4 % of all interregional immigrants: Astana 45.9 % , Almaty 16.5 %.

Such redistribution was influenced by decrease of an immigration wave into the city of Astana, connected with the foundation of the new capital and moving of officials and their families from Almaty to Astana. Accordingly, the number of immigrants and the net migration of Astana sharply decreased by 2003. At the same time, the status of the capital and the development of the city made it an attractive center of immigration. As a result, from 2003 to 2009 a stable growth of immigrants' number (and ratio), which increased from 9.8 % (10.5 thousand immigrants) in 2003 up to 24.6 % (42.2 thousand immigrants) in 2009, can be

observed. Provided that this trend remains, Astana can become a main center of attraction for interregional immigrants. For today only Almaty, which in 2003–2007 left Astana behind by the number of immigrants, can be the center comparable with Astana. In 2003 the difference was triple, by 2005 this difference decreased to double, in 2009 Astana excelled Almaty by the number of immigrants. The dynamics of growth of the immigrants' number in Almaty, in spite of practically twofold increase relative to 1999 (21.7 thousand immigrants) significantly yields to Astana; moreover, from 2005 stabilization of immigrants number (38–39 thousand people) begins to show. Thus, weakening of Almaty positions is fairly related to strengthening of Astana role.

Against the background the capital cities, having such significant differences, the regional indicators become incomparably low. At the same time, the share of the regions out of the total number of interregional immigrants is also rather inhomogeneous (Fig. 19). In the period of 1999–2009 the maximum number of immigrants fell at Almaty region. Its attractiveness is to a great degree is conditioned by a geographical factor, its nearness to Almaty, transit-commercial potential and, chiefly, the cheapest accommodation. Almaty region is also often considered by immigrants as a potential base, or a transfer point for further moving to Astana. The share of the region over the period of 1999–2009 increased from 8.7 % (11.4 thousand people) up to 13.8 % (23.6 thousand people).

Fig. 19 – Share of regions of total number of interregional immigrants



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

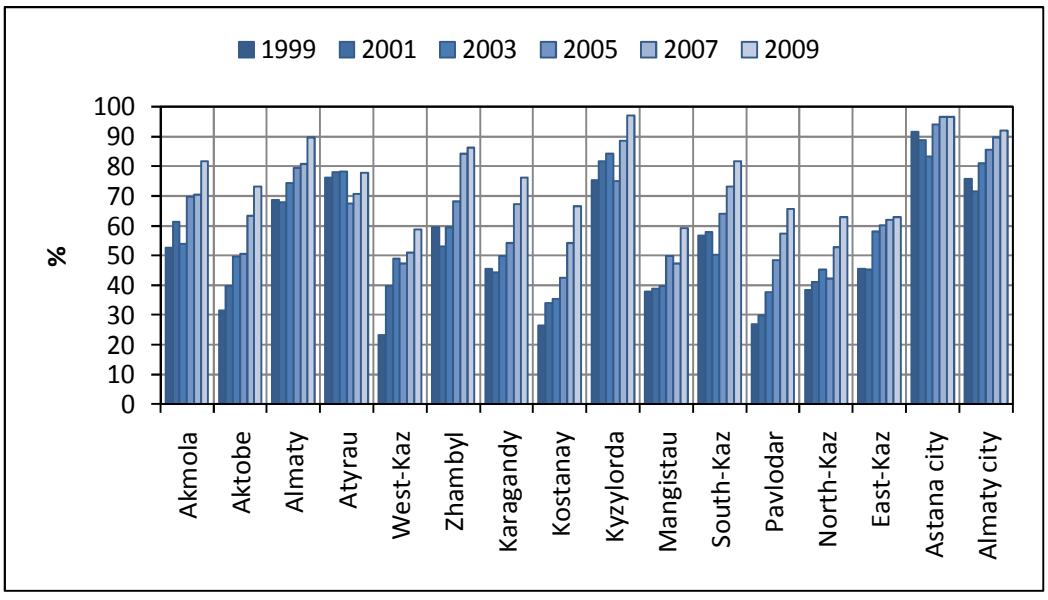
A similar trend can be observed in Akmola and Karagandy regions, neighboring to Astana, whose share is also rather high. The regions also attract immigrants owing to their geographical position near to Astana and cheaper accommodation. At the same time, there are some differences between Akmola and Karagandy regions in the dynamics of immigrational flows. Karagandy region, different from Akmola, had a stable dynamics towards growth of immigrants. In 1999 the number of immigrants to Akmola region practically twice exceeded the

same indicator for Karagandy region, however, by 2009 Karagandy region was able to equal and even exceed Akmola region by the number of immigrants. One of the explanations of this fact can be the more expressed advantages of Karagandy city as a regional center, and a convenient system of communications. The shortest time by train from Karagandy to Astana takes 2 hours 19 minutes, by bus this journey will take about 4 hours (www.bilets.org). To Kazakhstan measure of distances, Karagandy can be evaluated as a suburb of Astana. In addition, the difference in prices for accommodation is rather significant. Ultimately, Karagandy city and Karagandy region are serious rivals to Akmola region by attracting interregional immigrants.

On the whole, over the period of 1999–2009 an increase of the indicators of Southern and Western Kazakhstan began to show. However, only Mangistau region has positive balance of interregional migration. The percentage of Mangistau region from the total number of interregional immigrants increased for the last 10 years practically fourfold from 1.0 % (1.4 thousand people) up to 3.8 % (6.5 thousand people).

As a result, the significance of interregional migration in determining the increase/decrease of the population in the period of 1999–2009 rather increased practically for all the regions. In 1999 the average share of interregional migration (including Almaty and Astana) in percent from total gross regional migration made 51.9 %, while minimum was 23.3 % (West-Kazakhstan) and maximum indicator was 91.5 % (Astana). In 2009 interregional migration rather increased and made in average 76.7 % out of total migration by regions, while minimum was 58.8 % (West-Kazakhstan) and maximum rate 97.1 % (Kyzylorda region).

Fig. 20 – Share of interregional migrants out of total gross regional migration, 1999–2009



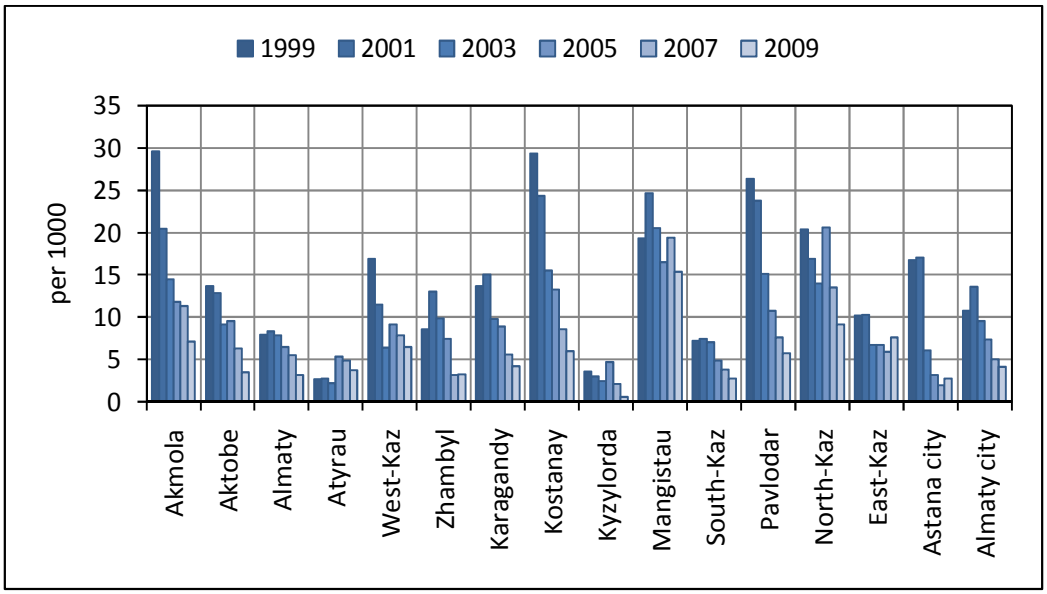
Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

At the same time the share of interregional migration in some regions over the whole period of time (1999–2009) remains rather low. Such regions are West-Kazakhstan, Mangistau, Kostanay, North-Kazakhstan, Pavlodar and East-Kazakhstan regions. The share of interregional

migration in these regions by 2009 made 50–60 %. It is an evidence of the fact, that these regions take a more active part in international migration exchange (Fig. 20).

Gross international migration as a whole confirms this assumption (Fig. 21). Among the regions maximum average gross international migration per 1000 people for the period of 1999–2009 is observed in Mangistau (19.3 ‰), North-Kazakhstan (16.0 ‰), Kostanay (15.9 ‰), Akmola and Pavlodar (15.3 ‰) regions. With minimal of 2.7 % (Kyzylorda) the difference is rather significant.

Fig. 21 – Gross international migration (per 1000), 1999–2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

In 2009 maximum of gross international migration made 15.4 ‰ in Mangistau region, minimum made 0.6 ‰ in Kyzylorda region. As it can be seen, the difference is essential.

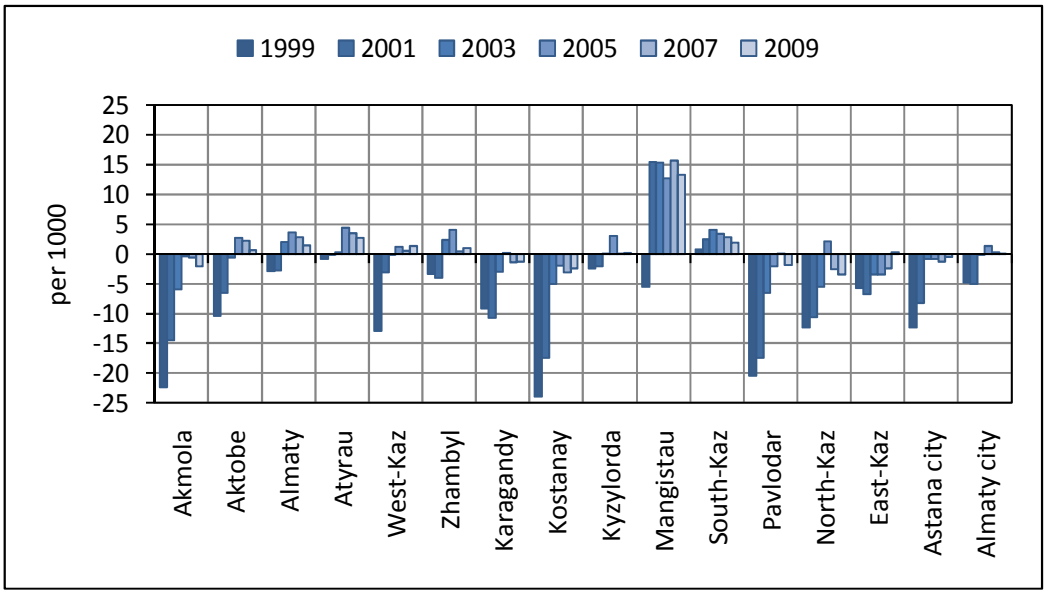
However, the above mentioned regions radically differ by the character of migration exchange. Over the period of 1999–2009 only Mangistau region had positive balance of international migration (Fig. 22). North-Kazakhstan, Kostanay, Akmola and Pavlodar regions over the mentioned period of time had negative balance of international migration, though migration losses had a tendency towards decreasing.

The reason of negative migration balance for the above-mentioned regions is emigration of European population, concentrated mainly in the regions of Northern, Central and Eastern Kazakhstan. Exactly in this connection, positive balance of gross international migration is observed in Southern and Western regions of the country: Almaty, Zhambyl, Kyzylorda, South-Kazakhstan, Aktobe, Atyrau and West-Kazakhstan regions.

In absolute numbers, in 2009 maximum migration growth owing to international migration was observed in Mangistau (5.8 thousand people), South-Kazakhstan (4.4 thousand people), Almaty (2.3 thousand people), and Atyrau (1.3 thousand people) regions. In other regions the growth made up less than 1 thousand people.

At the same time maximum emigration losses owing to international migration in 2009 occurred in Kostanay (– 2.6 thousand people), Karagandy (– 1.8 thousand people), North-Kazakhstan (– 2.2 thousand people), Akmola (–1.5 thousand people) and Pavlodar (– 1.4 thousand people) regions.

Fig. 22 – Net international migration (per 1000), 1999–2009

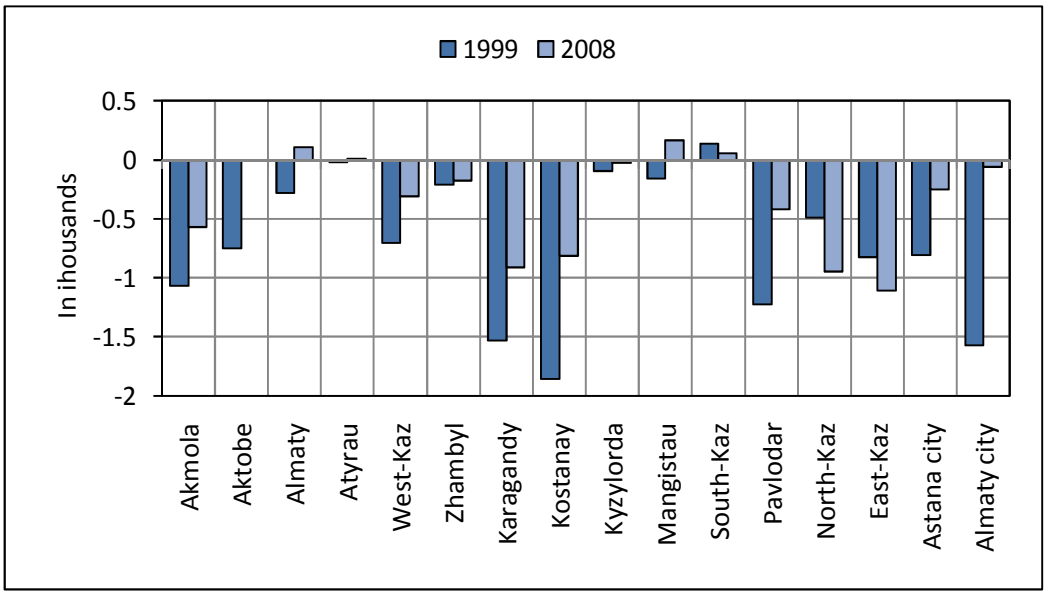


Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Thus, distribution of oralmans within the regions in the way it was for the last 10 years did not allow compensating emigration losses at a regional level, even taking into account weakening emigration. It is significant that even Astana, being very attractive for internal migrants, loses its population owing to international emigration; partly it refers to Almaty, where a positive balance was formed only in the last years. Karagandy region, attractive for internal migrants, also loses its population due to international migration.

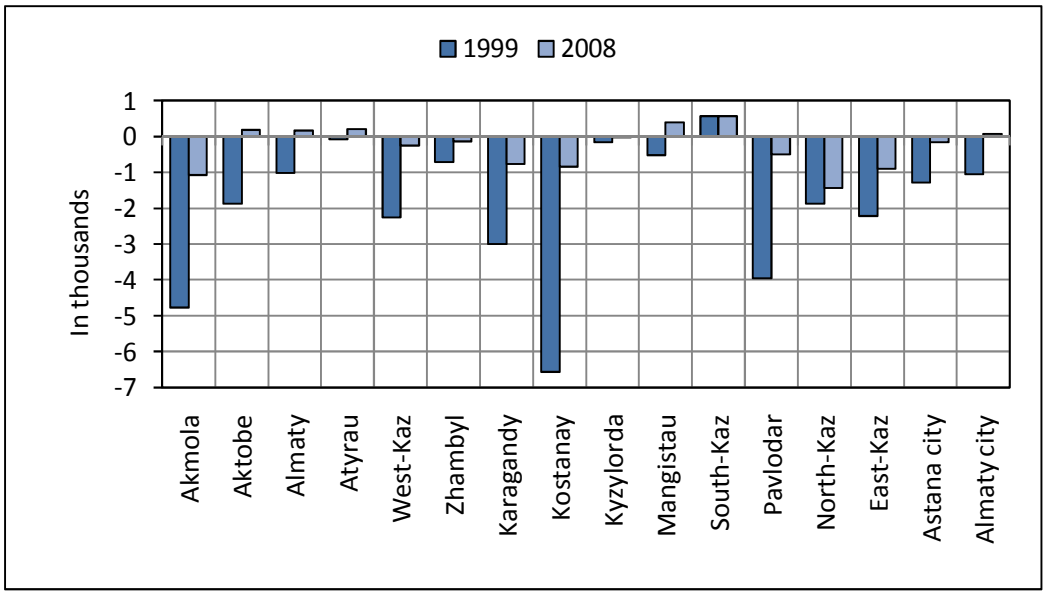
The question of not such a small importance is the quality of migrants. In this sense, the data on the educational potential of migrants also mean the existence of serious problems. Unfortunately, Kazakhstani statistics gives no data on the educational level of interregional migrants, though the data on international migration, characterizing all-republican trend towards loss of specialists, show that the majority of the regions experience serious losses, the exceptions are only several regions of Southern and Western Kazakhstan (Fig. 23–24).

Fig. 23 – Net international migration by educational level, higher education (age 15 +)



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Fig. 24 – Net international migration by educational level, specialized secondary education (age 15 +)



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

By the example of Mangistau region and the city of Astana we can follow the structure of international migrants in more detail.

As it was said above, Mangistau region is one of the regions of Kazakhstan attractive for migrants. An industrially developed region, with oil-gas specialization, requires qualified specialists, the need for whom is increasing alongside with the growth of the economy. The trends of international migration show that the region over the period of 1999–2009 has a positive balance of international migration for specialists having higher and specialized secondary education (Tab. 46).

However, the dynamics of migration balance for specialists with higher and specialized secondary education can hardly be evaluated as positive. On the whole, over the period of 1999–2009 the increase of the immigrants' number can be observed, while the number of emigrants decreased. At the same time, the share of immigrants having higher and specialized secondary education for the same period has a trend towards decreasing.

In 1999, 26.0 % of the total number of international immigrants fell at the share of immigrants of these categories; by 2008 this number decreased to 17.1 %. Against this background a trend towards increasing the share of specialists with higher and specialized secondary education among immigrants began to show: in 1999 it was 32.0 %, in 2008 – 48.8 %. That is beside the extent of migration increase, for the last 10 years there was a change of the qualitative composition of migrants, and not in favour of the region. Thus, the problem of the quality of migrants is rather actual, even under the conditions of relatively favourable dynamics.

Tab. 46 – International migration by educational level (age 15 +), Mangistau

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	Immigrants									
Total	2175	3326	6493	6106	6178	6422	5369	7915	6986	5244
Higher education	151	199	371	313	316	203	189	257	199	338
Secondary education	414	624	1448	1358	1512	1364	650	485	314	561
	Emigrants									
Total	3896	2163	1484	1236	900	733	690	644	742	705
Higher education	310	212	167	152	122	110	126	110	153	173
Secondary education	937	593	496	389	316	217	188	195	190	171
	Immigrants Share (in %)									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Higher education	6.9	6.0	5.7	5.1	5.1	3.2	3.5	3.2	2.8	6.4
Secondary education	19.0	18.8	22.3	22.2	24.5	21.2	12.1	6.1	4.5	10.7
	Emigrants share (in %)									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Higher education	8.0	9.8	11.3	12.3	13.6	15.0	18.3	17.1	20.6	24.5
Secondary education	24.1	27.4	33.4	31.5	35.1	29.6	27.2	30.3	25.6	24.3
	Net migration									
Higher education	– 159	– 13	204	161	194	93	63	147	46	165
Secondary education	– 523	31	952	969	1196	1147	462	290	124	390

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

In comparison with Mangistau the educational level of migrants in Astana is slightly higher (Tab. 47). Among the immigrants the share of specialists having higher and specialized secondary education over the period of 1999–2008 makes more than 50 %: in 1999 it was 55.7 %, in 2008 – (52.8 %). For the emigrants the same percentage also fluctuates within the range of 50 %: in 1999 – (49.0 %), in 2008 – (50.1 %).

Tab. 47 – International migration by educational level, (age 15 +) Astana

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	Immigrants									
Total	775	604	2055	705	1317	958	625	455	184	487
Higher education	148	135	437	172	353	278	189	126	53	141
Secondary education	284	158	551	200	343	251	149	93	40	116
	Emigrants									
Total	5142	7010	5888	3326	1746	1591	1087	688	964	1323
Higher education	958	1194	1068	595	367	352	259	158	249	392
Secondary education	1564	2244	1839	1111	548	497	304	195	271	271
	Immigrants Share in %									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Higher education	19.1	22.4	21.3	24.4	26.8	29.0	30.2	27.7	28.8	29.0
Secondary education	36.7	26.2	26.8	28.4	26.0	26.2	23.8	20.4	21.7	23.8
	Emigrants Share in %									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Higher education	18.6	17.0	18.1	17.9	21.0	22.1	23.8	23.0	25.8	29.6
Secondary education	30.4	32.0	31.2	33.4	31.4	31.2	28.0	28.3	28.1	20.5
	Net migration									
Higher education	– 810	– 1059	– 631	– 423	– 14	– 74	– 70	– 32	– 196	– 251
Secondary education	–1280	– 2086	– 1288	– 911	– 205	– 246	– 155	– 102	– 231	– 155

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Thus, the regions of Kazakhstan are demographically rather inhomogeneous, and it has a rather distinct geographical expression. A conditional line of division into demographically favourable regions can, on the one hand, define favourable regions of the South and West of Kazakhstan, and, on the other hand, the North, East and Center, looking depressive by the most important demographic indexes. That is, about a half of the regions and of the population of the country lives in the conditions of depopulation, or close to it, with significant emigration losses. The problem of unequal development is also intensified by cultural and social-economic differentiation of the regions. This problem will be dealt with in the next chapters.

7.4 Social-economic and ethnic peculiarities of the regions and their impact on demographic processes

The dynamics of demographic processes is determined to a significant extent by the characteristic features of the population structure and the level of social-economic development of the region. The most important characteristic feature of the regions regarding ethnic-cultural aspects is the concentration of European population in Northern, Eastern, and Central regions.

A characteristic feature of economic development of Kazakhstan for the last decade is a tendency towards changing economic significance of single regions. Traditionally industrially developed regions of Northern-East and Central Kazakhstan have lost their leading positions for today, yielding to perspective oil-gas Western Kazakhstan, which is a locomotive of economic development in the country as a whole for today. A similar change was followed by a change in social-economic conditions in the regions, which in many respects determined the trends of interregional and international migration.

7.4.1 Ethno-cultural characteristic of the regions

The changes of the demographic indicators of the regions such as age structure and the fertility trends have a certain relation to the characteristic features of the ethnic structure of the regions. Taking into account ethnic distribution, Kazakhstan can be presented in the form of 5 macro regions (Alexeenko 2002): North, Center, East, West and South (they are the same as abovementioned).

It was historically established that economic development of Kazakhstan was accompanied by attracting labor resources from European regions of the former USSR. That is why industrial (and virgin lands) regions of Northern, Eastern and Central Kazakhstan became the concentration of European population (see Appendix 5). Indigenous population is greatly concentrated in the regions of Southern and Western Kazakhstan.

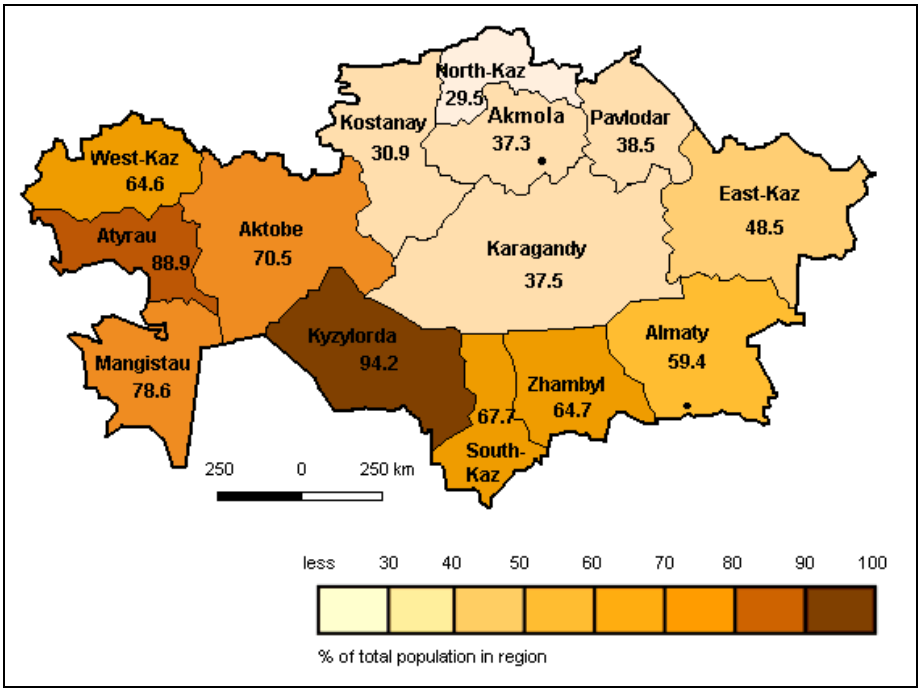
In 1999 the Kazakhs made up 94.2 % from the population of Kyzylorda region, 88.9 % – Atyrau, 78.6 % – Mangistau, 70.6 % – Aktobe, 67.7 % – South-Kazakhstan regions, while the European population mostly lives in Northern, Central and Eastern Kazakhstan (Map 12–13). In 1999 the proportion of Kazakhs was less than 50 % in Akmola (37.4 %), Karagandy (37.5 %), Kostanay (30.9 %), Pavlodar (38.5 %), and North-Kazakhstan (29.5 %), East-Kazakhstan (48.5 %) regions.

As it can be seen from the maps in the period of 1999–2009 the proportion of indigenous population increased practically in all the regions, which is in many respects the result of emigration of Russian-speaking population. Nevertheless, there are regions in Kazakhstan, where the proportion of indigenous population does not exceed 50 %: Akmola (44.6 %), Karagandy (44.1 %), Kostanay (35.6 %), Pavlodar (45.7 %), and North-Kazakhstan (33.7 %) regions. A significant part of ethnic Russian and other European ethnics also falls at these regions.

In 2009 the maximum proportion of Russian is observed in North-Kazakhstan (48.4 %), East-Kazakhstan (41.0 %), Kostanay (40.9 %), Karagandy (39.6 %), Pavlodar (38.6 %), and

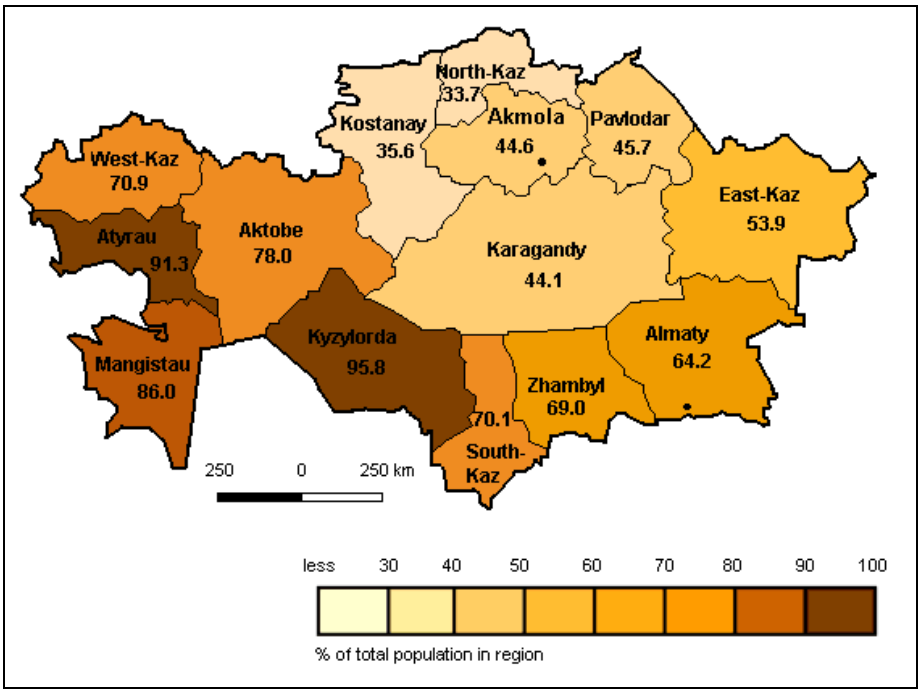
Akmola (35.8 %) regions. It is the ethnic factor that in many respects determines the differences in the rates of natural population growth, especially the fertility rates.

Map 12 – Proportion of ethnic Kazakhs in regions, 1999



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 13 – Proportion of ethnic Kazakhs in regions, 2009



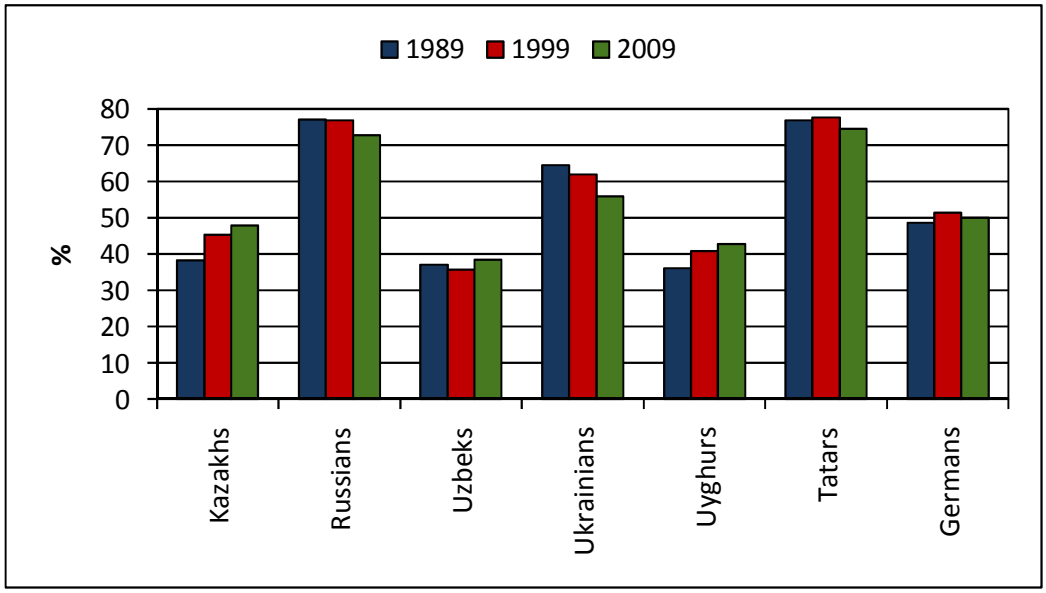
Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Considering ethnic peculiarities of population distribution within the country, it is important to mention the differences in the level of urbanization of main ethnics of the Republic. Russians

remain the most urbanized ethnos, whose proportion of urban population in 2009 made up 72.8 %. A comparatively high proportion of urban population in 2009 is also observed for Tatars (74.6 %) and Ukrainians (55.9 %). Kazakhs, Uzbeks and Uyghurs traditionally had a rural way of life. Against this background, these ethnics still have a relatively low proportion of urban population, making less than 50 %: in 2009 Uzbeks (38.4 %), Uyghurs (42.7 %) and Kazakhs (47.9 %). Germans with 50.1 % of urban population take an intermediate position (Fig. 25).

In many respects it favoured the rapid growth rates of Kazakhs, Uzbeks and Uyghurs and preservation of traditional values. At the same time, urbanization of separate ethnics has an unequal dynamics. The proportion of urban population from 1989 to 2009 has a tendency towards increasing among Kazakhs, Uyghurs and partly Uzbeks, while Russians, Ukrainians, Tatars and Germans have an opposite tendency. In many respects such tendencies are the result of emigration from the country of the most active urban population of these ethnic groups.

Fig. 25 – Urbanization level of selected ethnic groups of Kazakhstan, 1989–2009



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

One of the results of emigration and economic crisis, when a part of industrial settlements lost the status of the cities, became the decrease of urban population. Over the period of 1989–2009 the urban population had a decrease of 520 thousand people (Tab. 48). Against this background there was a change of the proportion of ethnic groups in the total urban population of the country. If in 1989 Kazakhs made 27.1 % out of the total urban population of the country, in 2009 the proportion of Kazakhs increased up to 55.9 %. At the same time the proportion of Russians decreased from 50.8 % to 31.9 % from the total urban population of the Republic. The proportion of other large ethnic groups excluding Uzbeks and Uyghurs also decreased.

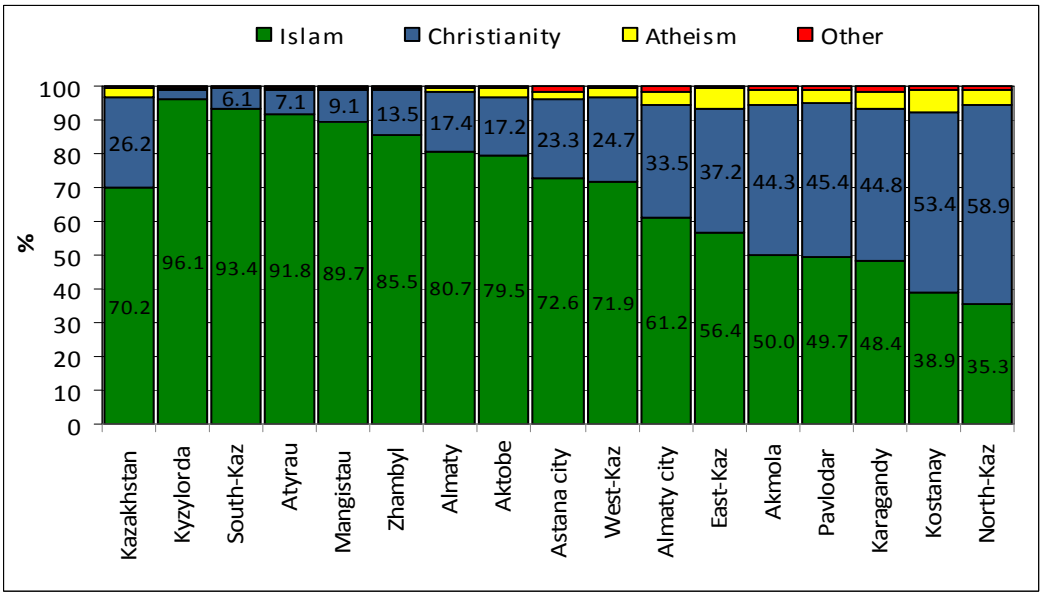
Tab. 48 – Urban population, selected ethnic groups in Kazakhstan, 1989–2009

	1989		1999		2009		Difference 2009–1989	
	Pop. size (in thou.)	Share (in %)	Pop. size (in thou.)	Share (in %)	Pop. size (in thou.)	Share (in %)	Pop. size (in thou.)	Share (in %)
Total	9182.7	100	8414.5	100	8662.4	100	– 520	0.0
Kazakhs	2488.9	27.1	3616.3	43.0	4841.1	55.9	2352	29.0
Russians	4669.0	50.8	3454.0	41.0	2763.0	31.9	– 1906	– 19.0
Uzbeks	122.9	1.3	132.3	1.6	175.5	2.0	53	1.0
Ukrainians	565.0	6.2	340.7	4.0	186.0	2.1	– 379	– 4.0
Uyghurs	65.7	0.7	85.8	1.0	96.0	1.1	30	0.0
Tatars	246.2	2.7	193.9	2.3	152.4	1.8	– 94	– 1.0
Germans	461.6	5.0	183.0	2.2	89.3	1.0	– 372	– 4.0
Other	563.4	6.1	408.4	4.9	359.1	4.1	– 204	– 2.0

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan

One of the aspects of social-cultural differentiation of the regions is also a religion of the population (Fig. 26). As applied to Kazakhstan, ethnic aspect as a rule is a determinating factor in the religion of the population. According to the data of census of 2009, 70.2 % of the population in the Republic practice Islam, 26.2 % Christianity, 2.8 % is atheists. The remaining 1.8 % falls at the other religions.

Fig. 26 – Religious grouping of population in regions



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Thus, the population of Kazakhstan is distributed inhomogeniously from the point of view of religion. In some regions more than 90 % of the population practices Islam: Kyzylorda, South-Kazakhstan, and Atyrau regions. At the same time there are regions where Christian population is concentrated. In North-Kazakhstan and Kostanay regions Christians make more than 50 % of the population. The proportion of Christian population is also significant in Karagandy, Pavlodar, and Akmola regions.

The heterogeneous character of the population distribution within the regions of the Republic is also observed while considering the age structure of the regional population. It can be seen from the Tables 49–50 that single regions have a comparatively high proportion of population at the age of 0–14 years old.

Tab. 49 – Age structure of regions by major age groups, 1999

Age group	0–14	15–64	65 +	Total	Average age	Median age
Region	Share of the total population (in %)					
Akmola	26.9	65.8	7.2	100.0	31.8	29.6
Aktobe	30.3	63.8	5.9	100.0	29.2	26.2
Almaty	30.7	63.0	6.3	100.0	29.4	26.0
Atyrau	33.4	61.1	5.5	100.0	27.6	24.3
West-Kaz	28.4	64.5	7.1	100.0	30.9	28.3
Zhambyl	32.1	62.1	5.8	100.0	28.3	24.8
Karagandy	25.2	67.4	7.4	100.0	32.4	30.1
Kostanay	25.1	67.0	7.9	100.0	32.7	30.7
Kyzylorda	35.5	60.5	3.9	100.0	26.0	22.2
Mangistau	34.1	62.4	3.5	100.0	26.6	24.0
South-Kaz	37.0	58.4	4.5	100.0	25.8	21.5
Pavlodar	25.3	67.9	6.8	100.0	32.0	29.9
North-Kaz	25.0	66.3	8.7	100.0	33.2	31.3
East-Kaz	25.0	66.3	8.7	100.0	32.8	30.5
Astana city	24.0	69.8	6.2	100.0	31.3	28.9
Almaty city	21.1	69.9	9.0	100.0	33.7	31.3

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 50 – Age structure of regions by major age groups, 2009

Age group	0–14	15–64	65 +	Total	Average age	Median age
Region	Share of the total population (in %)					
Akmola	21.4	69.5	9.1	100.0	33.7	31.0
Aktobe	24.5	69.0	6.5	100.0	30.9	28.1
Almaty	24.5	68.7	6.8	100.0	31.2	28.2
Atyrau	28.5	66.1	5.4	100.0	28.9	25.5
West-Kaz	22.1	69.5	8.4	100.0	32.9	30.2
Zhambyl	28.3	65.6	6.1	100.0	29.6	25.9
Karagandy	20.5	70.3	9.3	100.0	34.1	31.6
Kostanay	18.6	70.6	10.8	100.0	35.4	33.4
Kyzylorda	31.0	64.4	4.7	100.0	27.8	24.3
Mangistau	30.4	66.0	3.5	100.0	27.5	24.9
South-Kaz	33.0	62.4	4.7	100.0	27.0	23.3
Pavlodar	19.4	71.6	9.0	100.0	34.4	32.6
North-Kaz	19.2	70.3	10.6	100.0	35.4	33.4
East-Kaz	19.5	70.5	10.0	100.0	35.0	32.9
Astana city	19.2	75.1	5.7	100.0	32.8	31.6
Almaty city	20.1	71.5	8.4	100.0	33.6	31.2

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

In 1999 maximum proportion of the population at the age of 0–14 years old is recorded in South-Kazakhstan region (37.0 %). At the same time minimal 25.0 % is recorded in North-

Kazakhstan and East-Kazakhstan regions; it is comparable to Astana where the proportion of the population at the age of 0–14 years old is 24.0 %. The same indicators of the other regions are distributed within this interval.

The maximum proportion of the population at the age of 0–14 years old is typical for Southern and Western Kazakhstan (Kyzylorda, Mangistau, Atyrau, Zhambyl and other regions), while North, East and Center have a relatively low proportion of the population at the age of 0–14 (Kostanay, Karagandy, Pavlodar and other regions).

Such situation is characterized by age structures of the regions in 2009, though the proportion of the population at the age of 0–14 years old decreased in all the regions. The proportion of the population at the age of 0–14 years old by regions is distributed in the interval from the maximum value of 33.0 % (South-Kazakhstan) to minimum value of 18.6 % (Kostanay).

Against this background there is an increase of the proportion of population at the age of 65 + years old. In 1999 the maximum proportion of the population at the age of 65 + by regions makes 8.7 % (East-Kaz, North-Kaz). At the same time the minimum is 3.5 % (Mangistau). In 2009 the minimum 3.5 % (Mangistau) did not change, though the maximum increased up to 10.8 % (Kostanay region).

Thus, the maximum proportion of the population at the age of 65 + years old is typical for Northern, Eastern and Central Kazakhstan, while a relatively low proportion of the population at the age of 65 + is observed in the South and in the West of the country.

It is significant that over the period of 1999–2009 practically in all the regions of Kazakhstan the proportion of population at the age of 15–64 years old increased. In 1999 the maximum proportion of the population at the age of 15–64 years old by regions makes 67.9 % (Pavlodar region), the minimum is 58.4 % (South-Kazakhstan). In 2009 the maximum made 71.6 % (Pavlodar), minimum made 62.4 % (South-Kazakhstan).

The increase of the share of older age groups characterizes the process of the population's ageing. Over the period of 1999–2009 practically in all the regions the average and median age the population increased (Tab. 49–50).

The highest values of average age of the population in 1999 are recorded in Northern, Central and Eastern Kazakhstan: 33.7 years old is a maximum (North-Kazakhstan). The minimum value is 25.8 years old (South-Kazakhstan). In 2009, the average age increased practically in all the regions. The most noticeable increase of the average age (of 2 and more years) was in Kostanay (+ 2.7 years), Pavlodar (+ 2.4 years), North-Kazakhstan (+ 2.2 years), East-Kazakhstan (2.2 years), West-Kazakhstan (+2.0 years) regions. Thus, the highest average age of the population among the regions in 2009 made 35.4 years old (Kostanay and North-Kazakhstan regions). The minimum made 27 years old (South-Kazakhstan).

The indicators of median age of the population changed in a similar way. In 1999, the maximum median age among regions made 31.3 years (North-Kazakhstan). In 1999 North-Kazakhstan region was the only region with a median age of more than 30 years (excluding Almaty), that is with "old" population. The minimum median age among the regions in 1999 made 21.5 years (South-Kazakhstan). In 2009, the maximum median age made 33.4 years

(Kostanay), the minimum made 23.3 years (South-Kazakhstan). At the same time the list of the regions where the median age is of more than 30 years significantly increased, it was supplemented by Astana (31.6 years) and Almaty (31.2 years), and also: North-Kazakhstan (33.4 years), East-Kazakhstan (32.9 years), Pavlodar (32.6 years), Karagandy (31.6 years), and Akmola (31.0 years) regions.

The peculiarities of the age structure of the population in the regions were correspondingly reflected in the indicators such as: index of ageing, dependency ratio (See Tab. 51, Map 14–15). Index of ageing shows that over the period of 1999–2009 the share of the population at the age of 65 + years old in single regions reached more than 50 % of the population at the age of 0–14 years old. In 2009, the following regions are referred to them: Kostanay (57.7 %), North-Kazakhstan (55.3 %), East-Kazakhstan (51.4 %) regions. The minimum indicator, below 15 % is observed in Mangistau (11.7 %), South-Kazakhstan (14.1 %), and Kyzylorda (15.0 %) regions.

Tab. 51 – Dependency ratios by regions in 1999 and 2009

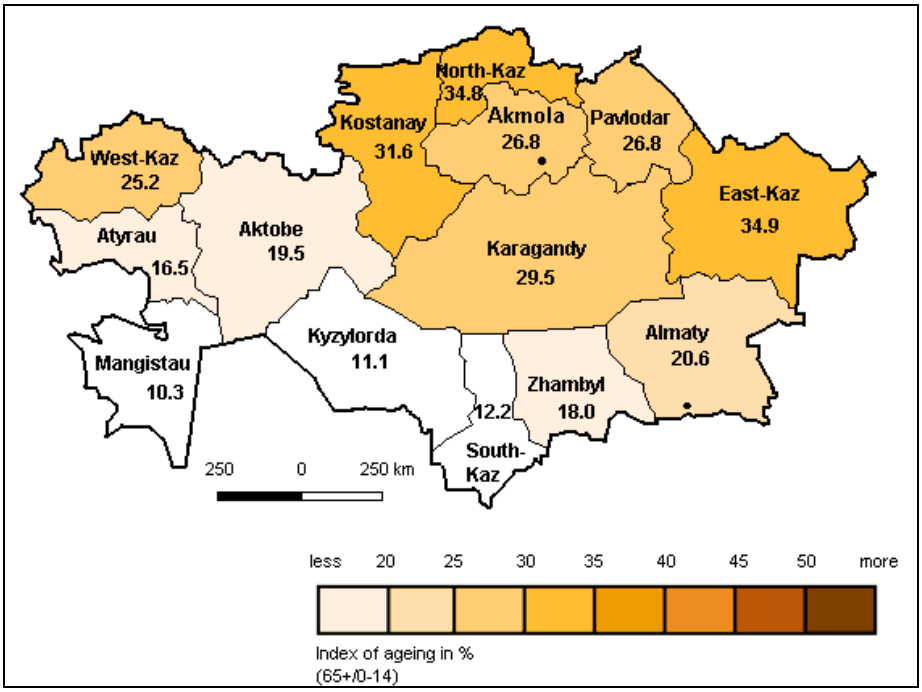
Region	Index of ageing (65 +/0–14)		Age of dependency ratio (0–14 + 65 +)/15–64		Young-age-dependency ratio (0–14/15–64)		Old-age-dependency ratio (65 +/15–64)	
	1999	2009	1999	2009	1999	2009	1999	2009
Akmola	26.8	42.6	51.9	43.9	40.9	30.8	11.0	13.1
Aktobe	19.5	26.6	56.8	45.0	47.5	35.5	9.3	9.5
Almaty	20.6	27.9	58.8	45.6	48.8	35.6	10.0	10.0
Atyrau	16.5	18.9	63.7	51.3	54.7	43.1	9.0	8.2
West-Kaz	25.2	38.2	55.1	43.9	44.0	31.8	11.1	12.1
Zhambyl	18.0	21.6	61.0	52.4	51.7	43.1	9.3	9.3
Karagandy	29.5	45.2	48.4	42.3	37.4	29.1	11.0	13.2
Kostanay	31.6	57.7	49.2	41.6	37.4	26.4	11.8	15.2
Kyzylorda	11.1	15.0	65.2	55.4	58.6	48.1	6.5	7.2
Mangistau	10.3	11.7	60.2	51.4	54.6	46.0	5.6	5.4
South-Kaz	12.2	14.1	71.1	60.3	63.4	52.9	7.7	7.5
Pavlodar	26.8	46.4	47.3	39.7	37.3	27.1	10.0	12.6
North-Kaz	34.8	55.3	50.9	42.3	37.8	27.3	13.1	15.1
East-Kaz	34.9	51.4	50.8	41.8	37.7	27.6	13.1	14.2
Astana city	25.8	29.7	43.2	33.2	34.3	25.6	8.8	7.6
Almaty city	42.5	42.0	43.0	39.9	30.2	28.1	12.8	11.8

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Against this background, the maximum value of young-age-dependency ratio over the period of 1999–2009 decreased practically in all the regions. In 1999, the share of the population at the age of 0–14 years old made more than 50 % in relation to the age group of 15–64 years old in the following regions: South-Kazakhstan (63.4 %), Kyzylorda (58.6 %), Atyrau (54.7 %), Mangistau (54.6 %), and Zhambyl (51.7 %) regions. Against this background, the minimum young-age-dependency ratio was 37.3 % (Pavlodar). In 2009 the young-age-dependency ratio of more than 50 % was observed only in South-Kazakhstan (52.9 %). The minimum value also changed and made 26.4 % (Kostanay). The decrease of young-age-

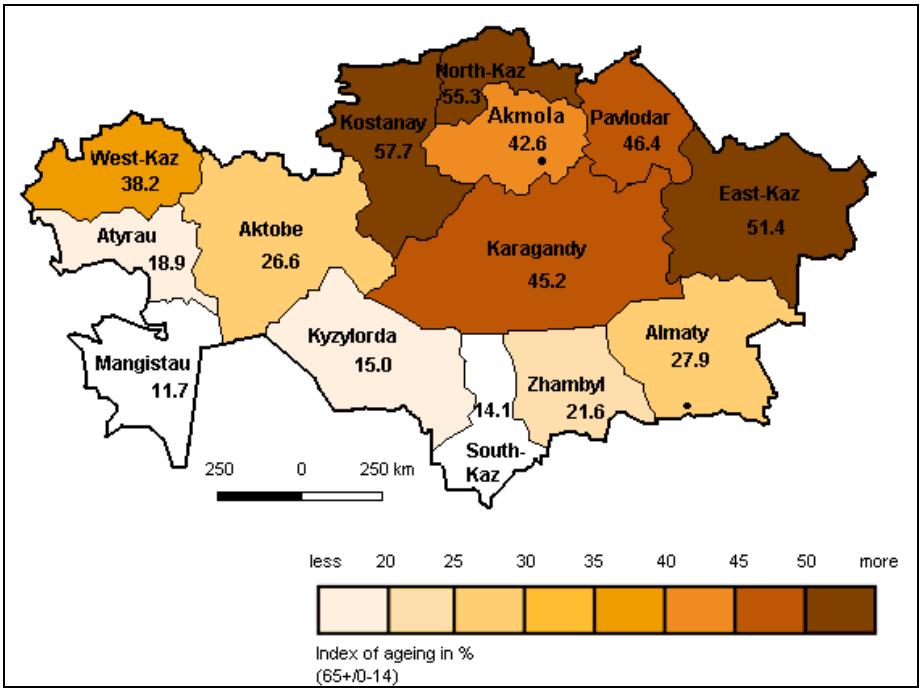
dependency ratio to a great degree influenced the decrease of the demographic burden in the regions.

Map 14 – Ageing in regions, 1999



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 15 – Ageing in regions, 2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

The age of dependency ratio over the period of 1999–2009 decreased practically in all the regions. It decreased more than on 10 % in Almaty (– 13.2 %), Atyrau (– 12.4 %), Aktobe (– 11.8 %), West-Kazakhstan (– 11.2 %), South-Kazakhstan (– 10.8 %) regions.

The highest age of dependency ratio of the share of the population at age (0–14, 65 +) in relation to the population at age 15–64 made in 1999 65.2 % in Kyzylorda region. At the same time, this ratio made more than 50 % in South-Kazakhstan (71.1 %), Kyzylorda (65.2 %), Atyrau (63.7 %), Zhambyl (61.0 %), Mangistau (60.2 %), Almaty (58.8 %), Aktobe (56.8 %), West-Kazakhstan (55.1 %), Akmola (51.9 %), North-Kazakhstan (50.9 %), and East-Kazakhstan (50.8 %) regions. In 2009 only South-Kazakhstan (60.3 %), Kyzylorda (55.4 %), Zhambyl (52.4 %), Mangistau (51.4 %), Atyrau (51.3 %) regions gave the age of dependency ratio more than 50 %. Minimum age of dependency ratio makes 39.7 % (Pavlodar).

7.4.2 Economic geography of Kazakhstan

Economic development of modern Kazakhstan to a great extent is determined by the development of the economic sector of raw materials, first of all of oil-gas complex. In 2009, the sale of oil, gas and metals made about 80 % of all Kazakhstan export, which was 43.2 milliard USD; only 12.5 % fell at the share of metals. A similar situation impartially makes the economy of the country rather vulnerable. The other objective consequence of a raw character of the economy is a problem of regional development, especially if the country has a vast, weakly populated territory.

In Kazakhstan the problem of inhomogeneous development of the regions is rather critical. In 2009, of the total amount of oil, mined in Kazakhstan, 85.3 % fell at the regions of Western Kazakhstan (Aktobe, Atyrau, West-Kazakhstan and Mangistau regions). The other 14.7 % are mined in Kyzylorda region (Tab. 52).

Tab. 52 – Selected industrial production by regions in 2009 (share in %)

	Oil, incl. Gas condens.	Natural gas	Coal	Iron ore	Copper ore	Copper-Zink ore	Man-ganeze ore	Chrom ore
Kazakhstan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Akmola	–	–	0.2	3.8	–	–	–	–
Aktobe	10.2	9.7	–	–	6.9	–	–	100.0
Atyrau	34.7	33.0	–	–	–	–	–	–
West-Kaz	16.0	43.6	–	–	–	–	–	–
Zhambyl	–	1.0	0.4	–	–	–	–	–
Karagandy	–	–	30.5	13.2	89.6	–	100.0	–
Kostanay	–	–	–	83.0	2.4	–	–	–
Kyzylorda	14.7	4.1	–	–	–	–	–	–
Mangistau	24.4	8.5	–	–	–	–	–	–
Pavlodar	–	–	63.6	–	–	4.5	–	–
East-Kaz	–	–	5.3	–	1.1	95.5	–	–

Source: Agency of Statistic of the Republic of Kazakhstan

A similar situation is established with respect to natural gas. 94.8 % of all the production in the Republic falls at the region of Western Kazakhstan.

The situation with the production of the whole number of other products, such as coal, metals, etc., the production of which is concentrated in separate regions. The inevitable consequence in such cases is disproportion of economic development of the regions, which influences the level of life of the population in the region, and, ultimately, affects demographic development, for instance, determines migration attractiveness of this or that region.

One of the indicators of the level of economic growth of the regions can be the index of gross regional product (GRP) per capita. By this index differentiation into economically favourable and depressive regions is observed in Kazakhstan. To the former we can refer Atyrau, Mangistau regions, the cities of Almaty and Astana, where GRP per capita twice or more exceeds the republican index (Tab. 53).

For instance, in 2009 GRP per capita in Kazakhstan made 1068 thousand KZT. At the same time maximum GRP observed in Atyrau made 3882 thousand KZT. GRP per capita in Mangistau made 2543 thousand KZT, Almaty 2293 thousand KZT, Astana 2075 thousand KZT. At the same time minimum value made 336 (Zhambyl).

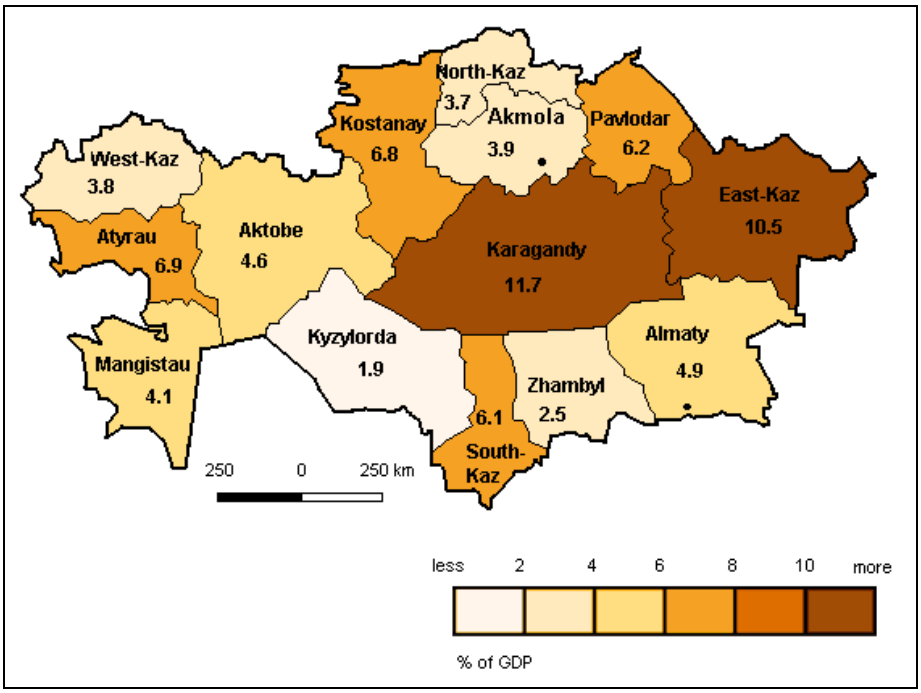
On the whole, the highest GRP in 2009 made 18.7 % (Almaty), 11.6 % (Atyrau), and 8.9 % (Karagandy) out of total size of GRP. Minimum value was observed in Zhambyl (2.0 %), North-Kazakhstan (2.4 %), and Akmola (3.1 %) regions. It is significant that in comparison with 1999 the most regions decreased their proportion in the total size of GRP (Map 16–17).

Tab. 53 – Gross regional product by regions in 1999 and 2009

	GRP (in millions KZT)		Share (in %)		GRP per capita (in thou. KZT)		Index Kazakhstan=100%	
	1999	2009	1999	2009	1999	2009	1999	2009
Kazakhstan	2 016 456	17 007 647	100	100	135	1068	100.0	100.0
Akmola	78 276	524 837	3.9	3.1	96	709	71.1	66.4
Aktobe	92 938	853 646	4.6	5.0	137	1193	101.2	111.7
Almaty	99 257	773 228	4.9	4.5	64	460	47.2	43.1
Atyrau	138 608	1 969 924	6.9	11.6	315	3882	232.9	363.4
West-Kaz	76 284	822 978	3.8	4.8	124	1324	92.1	124.0
Zhambyl	49 677	348 916	2.5	2.0	50	336	37.2	31.5
Karagandy	235 372	1 515 792	11.7	8.9	168	1124	124.4	105.2
Kostanay	136 401	723 860	6.8	4.3	136	815	100.5	76.3
Kyzylorda	38 471	641 576	1.9	3.8	64	937	47.7	87.8
Mangistau	82 790	1 108 521	4.1	6.5	263	2543	194.8	238.1
South-Kaz	123 415	925 499	6.1	5.4	62	385	45.9	36.0
Pavlodar	124 814	862 841	6.2	5.1	156	1151	115.5	107.8
North-Kaz	74 091	403 921	3.7	2.4	103	626	76.2	58.6
East-Kaz	211 965	983 664	10.5	5.8	139	694	102.9	64.9
Astana city	92 836	1 373 187	4.6	8.1	262	2075	194.1	194.3
Almaty city	361 262	3 175 259	17.9	18.7	320	2293	236.7	214.7

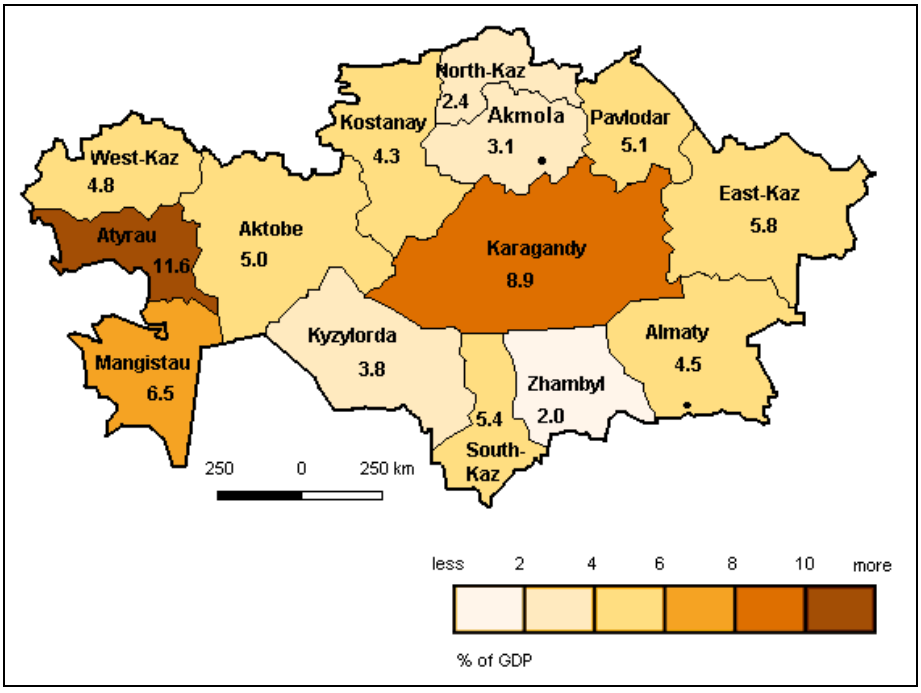
Source: Agency of Statistic of the Republic of Kazakhstan

Map 16 – Contribution of regions to the GDP, 1999



Source: Agency of Statistic of the Republic of Kazakhstan

Map 17 – Contribution of regions to the GDP, 1999

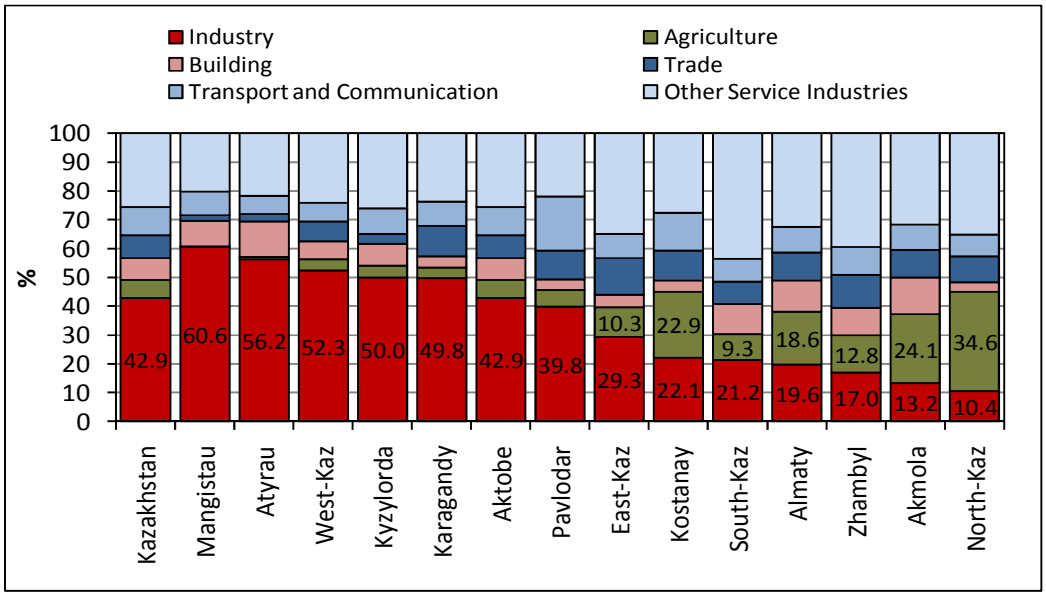


Source: Agency of Statistic of the Republic of Kazakhstan

On the whole, GRP per capita reflects disproportions in the economic development of the regions. Industrially developed regions represent the centers of oil, mineral resource and metallurgical industries. Western, Central and partly Northern and Eastern Kazakhstan can be

referred to these regions. The South of Kazakhstan and some Northern regions have agricultural character of the economy (Fig. 27).

Fig. 27 – Structure of GRP, 2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Tab. 54 – Unemployment rate in 1999 and 2009

	Economic. active pop. (in thou.)		Employed pop. (in thou.)		Unemployed pop. (in thou.)		Unemployment rate		
	1999	2009	1999	2009	1999	2009	1999	2009	2009–1999
Kazakhstan	7055.4	8457.9	6105.4	7903.4	950.0	554.5	13.5	6.6	– 6.9
Akmola	394.6	435.5	336.4	405.6	58.2	29.9	14.7	6.9	– 7.8
Aktobe	323.0	397.3	278.9	373.3	44.1	24.0	13.7	6.0	– 7.7
Almaty	659.9	863.4	565.9	807.0	94.0	56.3	14.2	6.5	– 7.7
Atyrau	196.9	257.9	167.2	242.1	29.7	15.8	15.1	6.1	– 9.0
West-Kaz	292.3	333.9	269.6	313.0	22.7	20.9	7.8	6.3	– 1.5
Zhambyl	434.3	577.0	371.1	539.2	63.2	37.7	14.6	6.5	– 8.1
Karagandy	699.9	740.5	599.8	695.2	100.1	45.3	14.3	6.1	– 8.2
Kostanay	4784	545.0	402.6	510.5	75.8	34.5	15.8	6.3	– 9.5
Kyzylorda	254.7	307.4	213.7	287.0	41.0	20.4	16.1	6.6	– 9.5
Mangistau	148.9	209.0	129.2	194.1	19.7	14.9	13.2	7.1	– 6.1
South-Kaz	844.5	1132.7	725.7	1057.6	118.8	75.0	14.1	6.6	– 7.5
Pavlodar	410.9	433.5	355.9	405.9	55.0	27.6	13.4	6.4	– 7.0
North-Kaz	353.9	382.4	302.4	358.4	51.5	24.1	14.6	6.3	– 8.3
East-Kaz	740.9	764.0	677.9	715.1	63.0	48.9	8.5	6.4	– 2.1
Astana city	171.2	371.5	148.9	347.2	22.3	24.4	13.0	6.6	– 6.4
Almaty city	651.1	706.9	560.2	652.2	90.9	54.6	14.0	7.7	– 6.3

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

One more significant index of social-economic development of the regions is the level of employment of the population (Tab. 54). In this sense the official statistics of 2009 shows that the level of unemployment in the regions of Kazakhstan in comparison with 1999 rather

decreased. Moreover, regional differences decreased. If in 1999 the difference between maximum level of unemployment (16.1 %, Kyzylorda) and minimal (7.8 %, West-Kaz) was practically twofold, in 2009 the difference makes 1.7 % (minimum – Aktobe, 6.0 %, maximum – Almaty, 7.7 %). It should be noted here that official statistics includes a rather wide spectrum of population into the category of the employed people, including the category of self-employed, which is rather ambiguous. Ultimately, such self-employed population falls under the category of the people engaged in the sphere of agriculture (predominantly villagers), or in services.

In this sense the social-economic situation is more objectively reflected by the ratios of the population employment by the sectors of the economy. Here the economic specialization of the regions with prevalent agricultural and industrial production can be rather distinctly reflected. So, in the structure of the employed population in 2009 the following regions have the highest share in the industrial sector and construction: Mangistau (31.8 %), Atyrau (31.8 %), Karagandy (30.8 %) regions (Tab. 55).

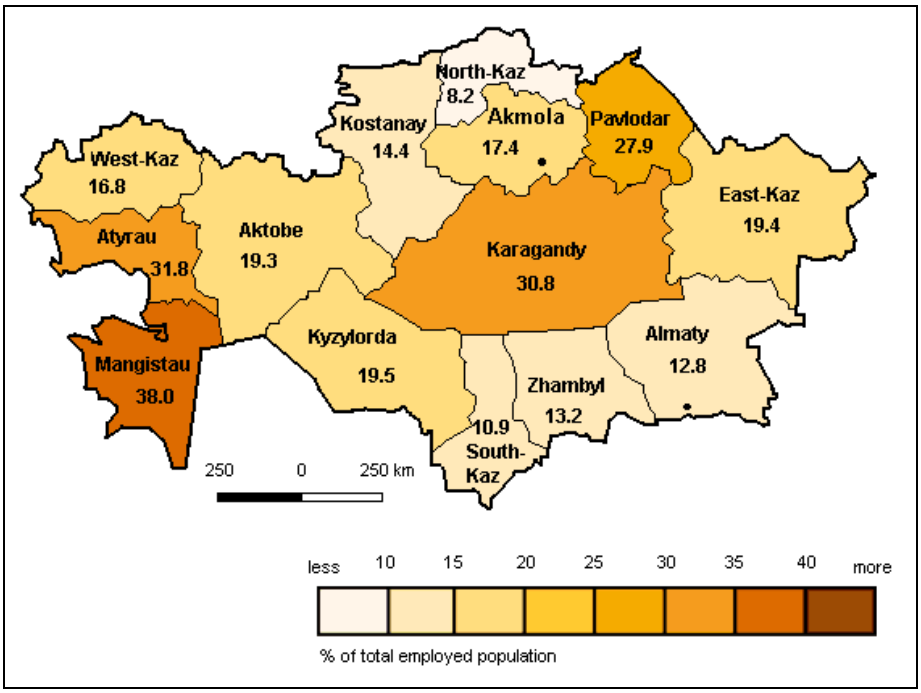
Tab. 55 – The structure of employment, 2009

	Employed population (in thou.)			Share of total employed pop. (in %)			
	Industry incl. building	Agricult.	Service industries	Industry incl. building	Agricult.	Service industries	Total
Kazakhstan	1491.0	2326.4	4086.0	18.9	29.4	51.7	100.0
Akmola	70.5	155.5	179.6	17.4	38.3	44.3	100.0
Aktobe	72.0	115.1	186.1	19.3	30.8	49.9	100.0
Almaty	103.5	391.1	312.4	12.8	48.5	38.7	100.0
Atyrau	76.9	20.8	144.4	31.8	8.6	59.6	100.0
West-Kaz	52.5	110.5	149.9	16.8	35.3	47.9	100.0
Zhambyl	71.0	186.3	281.9	13.2	34.6	52.3	100.0
Karagandy	214.2	112.4	368.6	30.8	16.2	53.0	100.0
Kostanay	73.5	195.4	241.5	14.4	38.3	47.3	100.0
Kyzylorda	55.9	66.0	165.1	19.5	23.0	57.5	100.0
Mangistau	73.8	8.2	112.1	38.0	4.2	57.8	100.0
South-Kaz	115.8	462.4	479.4	10.9	43.7	45.3	100.0
Pavlodar	113.1	101.1	191.7	27.9	24.9	47.2	100.0
North-Kaz	29.5	177.3	151.7	8.2	49.5	42.3	100.0
East-Kaz	138.8	217.5	358.7	19.4	30.4	50.2	100.0
Astana city	70.4	3.2	273.5	20.3	0.9	78.8	100.0
Almaty city	159.7	3.5	489.1	24.5	0.5	75.0	100.0

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

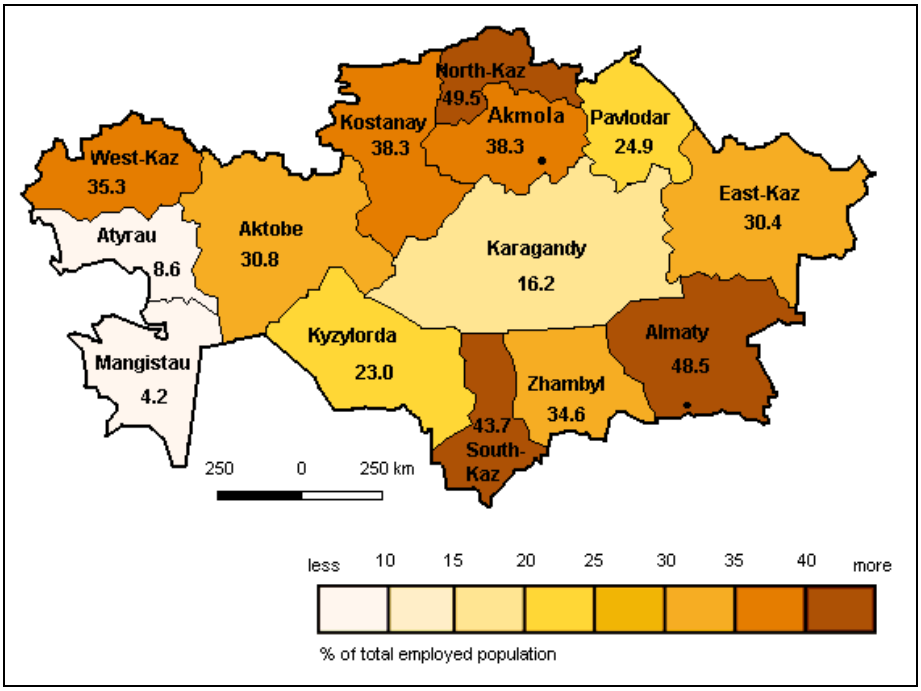
In other regions the share of the population employed in the industrial sector makes less than 30 % from the total number of the employed population. The minimum makes 8.2 % (North-Kazakhstan). More than 40 % of the employed population works in the agricultural sector in North-Kazakhstan (49.5 %), Almaty (48.5 %), and South-Kazakhstan (43.7 %) regions. In most regions the share of the population employed in agriculture makes from 30 % up to 40 % The minimum proportion of the population employed in agriculture falls at: Mangistau (4.2 %), Atyrau (8.6 %), Karagandy (16.2 %) regions.

Map 18 – Proportion of industrial and building sector in the total number of employed, 1999



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Map 19 – Proportion of industrial and building sector in the total number of employed, 2009



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

The employment in the sphere of services also differs by regions; it fluctuates within the maximum of 59.6 % (Atyrau) to 38.7 % (Almaty region). As it can be seen, the differences are relatively insignificant, though their presence is also an evidence of rather noticeable social-economic differentiation of the regions.

The characteristics of the employment by the economic sectors can be supplemented by the indicators of average nominal wage by regions, especially since the difference in wages by economic sectors are rather significant. So, on the whole within the Republic in 2009 an average monthly nominal wage of one worker in agriculture made 41 % of the same indicator for a worker in industrial sphere or construction. For the sphere of services this ratio makes 76 %. Ultimately, the structure of employment determines average wage indicators in the regions. In 1999 the average nominal wage per month in the Republic made 11.3 thousand KZT (average official 1999 exchange rate – 119.52 KZT per US dollar, www.natonalbank.kz). Indexed ratio by regions demonstrates rather significant differences (Tab. 56, Map 20–21). In single regions an average monthly nominal wage exceeds the republican ratio very noticeably: Atyrau region (84.1 %), Mangistau region (69.9 %), the cities of Almaty and Astana (35.4 %).

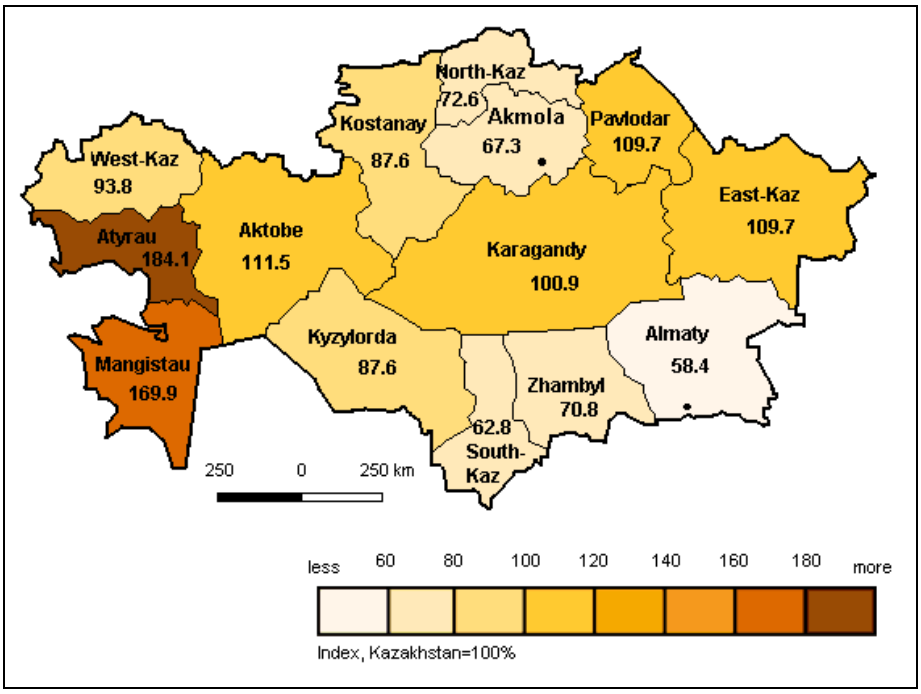
These regions are the centers of oil-gas industry, the cities of Almaty and Astana have a capital status. At the same time, several regions have a wage noticeably lower than an average republican level: Almaty (– 41.6 %), South-Kazakhstan (– 37.2 %), Akmola (– 32.7 %), Zhambyl (– 29.2 %), North-Kazakhstan (– 27.4 %) regions. As it can be seen, these are the regions with predominant agricultural sector of the economy.

Tab. 56 – Average wages and incomes in 1999 and 2009

	Average monthly nominal wage per employed person (in thou. KZT)		Index (Kazakhstan= 100 %)		Average monthly cash income per capita (in thou. KZT)		Index (Kazakhstan= 100 %)	
	1999	2009	1999	2009	1999	2009	1999	2009
Kazakhstan	11.3	67.4	100.0	100.0	3.4	33.9	100.0	100.0
Akmola	7.6	47.8	67.3	70.9	2.2	29.2	64.7	86.1
Aktobe	12.6	60.4	111.5	89.6	2.8	32.1	82.4	94.7
Almaty	6.6	49.7	58.4	73.7	2.0	27.5	58.8	81.1
Atyrau	20.8	129.0	184.1	191.4	3.8	75.2	111.8	221.8
West-Kaz	10.6	69.5	93.8	103.1	3.0	37.9	88.2	111.8
Zhambyl	8.0	44.0	70.8	65.3	2.6	25.9	76.5	76.4
Karagandy	11.4	57.6	100.9	85.5	4.7	34.2	138.2	100.9
Kostanay	9.9	49.1	87.6	72.8	3.4	27.6	100.0	81.4
Kyzylorda	9.9	60.2	87.6	89.3	3.7	31.6	108.8	93.2
Mangistau	19.2	112.9	169.9	167.5	4.1	61.5	120.6	181.4
South-Kaz	7.1	48.6	62.8	72.1	2.1	20.2	61.8	59.6
Pavlodar	12.4	56.1	109.7	83.2	3.7	34.2	108.8	100.9
North-Kaz	8.2	45.8	72.6	68.0	2.7	27.4	79.4	80.8
East-Kaz	12.4	53.5	109.7	79.4	4.0	29.4	117.6	86.7
Astana city	15.3	98.9	135.4	146.7	5.6	63.4	164.7	187.0
Almaty city	15.3	95.1	135.4	141.1	6.1	59.4	179.4	175.2

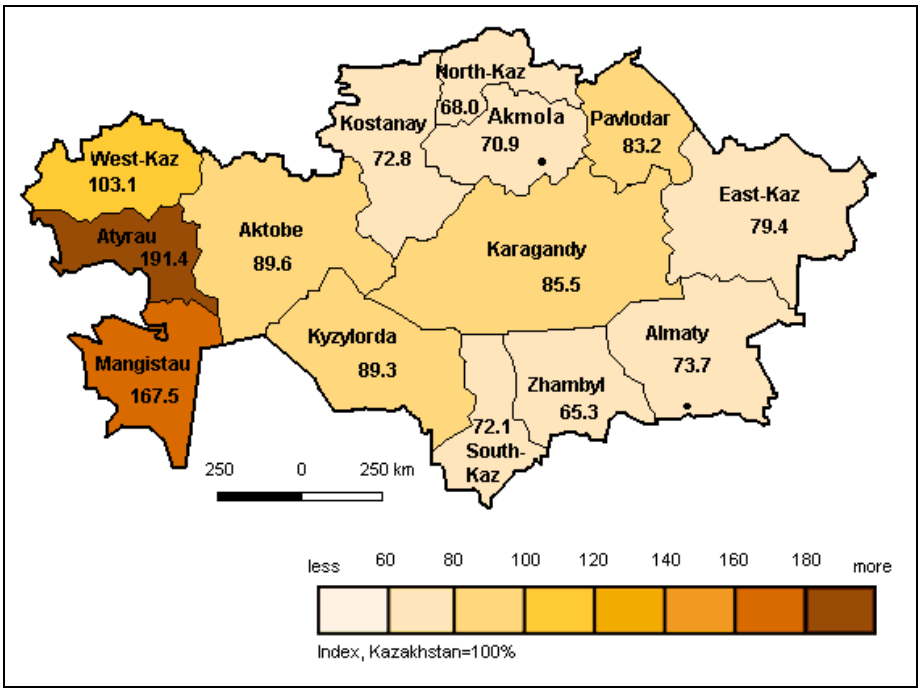
Source: Agency of Statistics of the Republic of Kazakhstan

Map 20 – Regional differentiation of average monthly wage, 1999



Source: Agency of Statistics of the Republic of Kazakhstan

Map 21 – Regional differentiation of average monthly wage, 2009



Source: Agency of Statistics of the Republic of Kazakhstan

By 2009, the situation changed insignificantly. The average nominal wage of one worker per month made 67.4 thousand KZT in the Republic (official average annual exchange rate in 2009 was 147.50 KZT per US dollar, www.natonalbank.kz). In many respects, the wage growth

is a result of a rapid economic increase and to a less degree – of inflation. Wage growth increased to this or that extent in all the regions of the Republic.

However, the wage sizes significantly differ by regions. The index shows that Atyrau (91.4 %), Mangistau (67.5 %), Almaty city (46.7 %), Astana (41.1 %) continue to be the regions with the highest wages. At the same time, the gap from the average republican even increased (excluding Mangistau). The same can be said of the majority of unfavorable regions. Average monthly wage continues to remain behind in the following regions: Zhambyl (– 34.7 %), North-Kazakhstan (– 32.0 %), Akmola (– 29.1 %), South-Kazakhstan (– 27.9 %), Kostanay (– 27.2 %), Almaty (– 26.3 %), East-Kazakhstan (– 20.6 %).

Thus, over the period of 1999–2009 the maximum value of average monthly nominal wage per one worker by regions increased from 20.8 thousand KZT (Atyrau) up to 112.9 thousand KZT (Mangistau). The minimum made 6.6 thousand KZT in 1999 (Almaty region), in 2009 it made 44.0 thousand KZT (Zhambyl region).

Against this background, an average monthly income per capita has a corresponding dynamics. In 1999, an average monthly income per capita was 3.4 thousand KZT in the Republic. The index shows that the largest incomes per capita in 1999 were in the cities of Almaty (79.4 %) and Astana (64.7 %), and in Karagandy (38.2 %) and Mangistau (20.6 %) regions. At the same time, the regions which the most noticeably stay behind the average republican value are Almaty (– 41.2 %), South-Kazakhstan (– 38.2 %), Akmola (– 35.3 %), Zhambyl (– 23.5 %), North-Kazakhstan (– 20.6 %) regions.

In 2009, the average republican value of an average monthly income per capita made 33.9 thousand KZT. At the same time, the differentiation among the regions in comparison with 1999 became more noticeable. Atyrau (121.8 %), Mangistau (81.4 %) regions, the city of Almaty (87.0 %), and Astana (75.2 %) are referred to the regions where the value of an average monthly income per capita is significantly higher than average in the Republic. The regions, where an average monthly income is significantly lower than a republican value in 2009 were: South-Kazakhstan (– 40.4 %), Zhambyl (– 23.6 %), Almaty (– 18.9 %), Kostanay (–18.6 %), North-Kazakhstan (– 19.2 %) regions.

Thus, social-economic differentiation of the regions remains one of the serious problems for Kazakhstan. The efforts of the Government, taken in this direction look insufficient. Population distribution is a strategically important characteristic for Kazakhstan. This process has a rather pronounced interrelation with economic peculiarities of the regions of Kazakhstan, natural-climatic conditions, historical factors.

The inhomogeneity of population distribution is expressed in such characteristics as density, number, sex-age structure, ethnic composition, level of urbanization, language of communication, religion. Many of the parameters mentioned above are subject to noticeable changes. Migration processes often play a determining role in redistribution of population. In Kazakhstan three main poles of attraction for migrants: Astana, Almaty, and the region of Western Kazakhstan.

Such situation causes a problem of the development of the regions, since the majority of the regions look depressive with relation to population distribution. The flow-out of qualified

specialists takes place, the proportion of city-dwellers decreases and the share of male population diminishes. Such development of the situation cannot favour a long-term stability.

7.5 Demoeconomic polarization of the regions

The above presented differentiation of the regions by the number of demographic and social-economic characteristics determines the necessity of the assessment of correlation between single parameters of regional development. In particular, it seems rather useful to consider the correlation of the indicators of economic and demographic development of the regions. Taking these parameters into account is also useful in the classification of regions basing on current demographic and economic situation.

7.5.1 Migrational attractiveness of the regions

For the beginning, we can advert to the correlation of the indicators of net interregional migration and economic indicators of the regions, such as: GRP per capita, average monthly nominal wage and income, unemployment rate, which rather objectively reflect the level of social-economic development of the regions. We proceed from the assumption that favorable social-economic conditions are the most important factor of attracting migrants to the regions. The classical theory of migration suggests that the most significant driving force, determining the direction of migration, is economic differentiation of the regions, reflected primarily in differences in wages and the availability of jobs. As it is seen from the Table 57, this assumption is quite justified.

Pearson's indicator of correlation, calculated for interregional migration balance and some economic indicators demonstrates that migration increase/decrease in particular regions rather defined correlates to economic indicators. We can see that a correlation indicator for the indicators of GRP and average monthly nominal wage/income is significant for dynamically economic favorable regions: Almaty, Atyrau, Karagandy, Kyzylorda, and Mangistau.

That is, change of economic indicators is directly connected to the change of migration balance; the exception is Southern Kazakhstan, where correlation has a negative character owing to relatively weak economy. Correlation can be also observed in the assessment of the unemployment rates by regions. As it is seen, correlation has a significant character in the regions: Almaty, Atyrau, Karagandy, Kostanay, Mangistau, South-Kazakhstan, and the cities of Almaty and Astana. Negative character of correlation is an evidence of unemployment decrease, which is quite logical, as the most part of these regions refers to economically favorable regions. Positive correlation in Astana looks rather strange against this background. However, the decrease of migration rates relative to the early 2000s plays a great role here. In that period immigration peak was observed in Astana due to the transition of the capital. The same situation is in Southern Kazakhstan: in spite of unemployment decrease, migration balance has a negative character. Thus, migration increase of population in the regions (interregional migration) has a rather defined connection with the trends of economic development of the regions in the last decade.

Tab. 57 – Correlation between net interregional migration and economic indicators for regions, 1999–2009

Regions	GRP per capita (in thou. KZT)	Average monthly nom. wage per empl. person (in thou. KZT)	Unemployment rate (in %)
Akmola	0.0619	0.1274	– 0.5487
Aktobe	– 0.5510	– 0.5404	0.3335
Almaty	0.7278*	0.7446**	– 0.7052*
Atyrau	0.7019*	0.7250*	– 0.8808**
West-Kaz	– 0.2116	– 0.0421	0.5135
Zhambyl	– 0.0590	– 0.0608	0.0790
Karagandy	0.6038*	0.6122*	– 0.9394**
Kostanay	0.4347	0.4738	– 0.7567**
Kyzylorda	0.6575*	0.6632*	– 0.5392
Mangistau	0.9112**	0.9093**	– 0.9266**
South-Kaz	– 0.6993*	– 0.6920*	0.7228*
Pavlodar	– 0.0408	– 0.0220	– 0.5095
North-Kaz	– 0.5700	– 0.5799	0.2948
East-Kaz	– 0.5746	– 0.5786	0.4375
Astana city	– 0.5260	– 0.5127	0.8483**
Almaty city	0.3868	0.3484	– 0.7403**

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: correlation over time taking into account single calendar years for the period 1999–2009
Calculation based on Pearson's method:
* correlation is significant at the level 0.05 (value more than 0.6021)
**correlation is significant at the level 0.01 (value more than 0.7348)

In addition to the above presented indicators of correlation, we can also consider correlation matrix including a larger number of demographic characteristics of the regions: life expectancy at birth (LE), TFR, natural change, net migration. As it can be observed, economic indicators of the regions in 1999 practically did not correlate to the demographic ones (Tab. 58).

Tab. 58 – Correlation between demographic and economic indicators for regions in 1999 and 2008

		LE	TFR	Natural change	Net migration	GRP	Wage
LE	1999	–	–	–	–	–	–
	2008	–	–	0.5659*	0.84154**	–	–
TFR	1999	–	–	0.9400**	–	–	–
	2008	–	–	0.9388**	–	–	–
Natural change	1999	–	0.9400**	–	–	–	–
	2008	0.5659*	0.9388**	–	–	–	0.5103*
Net migration	1999	–	–	–	–	–	–
	2008	0.8415**	–	–	–	0.4992*	0.5817*
GDP	1999	–	–	–	–	–	0.9067**
	2008	–	–	–	0.4992*	–	0.9785**
Wage	1999	–	–	–	–	0.9067**	–
	2008	–	–	0.5103*	0.5817*	0.9785**	–

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan
Calculation based on Pearson's method:
Note: * correlation is significant at the level 0.05 (value more than 0.4973)
** correlation is significant at the level 0.01 (value more than 0.6226)

However, in 2008 beside GRP and migration balance, correlation between the indicators of wages and natural growth of the population in the regions, and between the indicators of wage/income and migration increase of population can be observed, which confirms the interrelation of economic development of the regions and demographic trends.

We can add to the said above that in 1999 and 2008 correlation between migration balance and life expectancy, and between natural population growth and indicators of TFR is observed. These indicators can be also related to the level of economic development of the regions. In 2008 correlation between life expectancy at birth and natural increase of population in the regions is observed. Accordingly, correlation between economic indicators of the regions can be seen: GRP and incomes in 1999 and 2008. Thus, the level of regional economic development for today is quite an important factor, in many respects determining the development of the demographic situation in the regions.

7.5.2 Demoeconomic typology of the regions

In advance, we can make the classification of the regions, basing on demographic and economic indicators by the method of cluster analysis.

For clusterization of the regions we can take analogous indicators presented in the Table 58, besides, we include unemployment rate and data on average monthly cash income per capita (total 8 variables). For standardization and more compact grouping of variables we used the method of factor analysis. Principal component analysis which was used as a method for factor extraction allowed us obtaining (Tab. 59–60) Eigenvalues of the correlation matrix (according to Kaiser-Guttmann rule). Based on the presented values we distinguished four factors, which explain 99 % of the data variability.

Tab. 59 – Eigenvalues of the correlation matrix

	Eigenvalue	Difference	Proportion	Cumulative
1	**4.314**	2.695	0.539	**0.539**
2	**1.619**	0.552	0.202	0.742
3	**1.067**	0.174	0.133	0.875
4	**0.892**	0.807	0.112	**0.987**
5	0.086	0.071	0.011	0.997
6	0.014	0.009	0.002	0.999
7	0.005	0.003	0.001	1.000
8	0.002	–	0.000	1.000

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan
Note: four factors will be retained by the NFACTOR criterion

The first factor (component) has large positive loadings for three variables (items) such as GRP, wage and cash income, explains 54 % of total variability. Thus, the factor reflects economic development of the regions. The second and the third factors reflect demographic characteristics. The second factor has large positive loadings for the variables of TFR and natural change, explains 20 % of total variability. The third factor explains 13 % of total variability. This factor has large positive loadings for the variables of life expectancy and net

migration. The last, the fourth factor is defined by a significant positive loading for the variable of unemployment, explains 11 % of total variability. Thus, distinguishing of the fourth factor emphasizes the peculiarities of the official data on unemployment in the regions when the unemployment rate varies not so noticeably.

Tab. 60 – Rotated factor pattern (Varimax rotation method)

Variables	Factor 1	Factor 2	Factor 3	Factor 4
GRP	**0.974**	0.148	0.133	0.019
Wage	**0.933**	0.216	0.277	0.057
Cash income	**0.923**	0.074	0.360	0.067
TFR	**0.096**	**0.993**	– 0.029	0.034
Natural change	0.226	**0.930**	0.281	0.060
LE	0.208	0.283	**0.907**	0.124
Net migration	0.409	– 0.046	**0.889**	0.021
Unemployment	0.061	0.061	0.088	**0.992**

Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

The Table 61 shows factor scores related to the regions. The regions that have a positive factor score are in a better position in terms of their demographic or economic characteristics. The highest positive values for factor 1 are observed in Atyrau, Mangistau and Almaty city. These regions have better economic situation.

Tab. 61 – Factor scores related to the regions

Regions	Factor 1	Factor 2	Factor 3	Factor 4
Akmola	– 0.413	– **0.808**	– **0.837**	**1.502**
Aktobe	– 0.176	0.170	0.021	– **0.786**
Almaty	– **0.957**	0.434	0.284	– **0.704**
Atyrau	**2.539**	**0.677**	– **0.879**	– **1.111**
West-Kaz	– 0.007	– 0.487	– 0.206	**1.312**
Zhambyl	– **1.150**	**1.124**	– 0.063	– 0.290
Karagandy	0.132	– 0.952	– 0.496	– **1.215**
Kostanay	– 0.320	– **1.329**	– 0.399	**0.744**
Kyzylorda	– **0.503**	**1.215**	– 0.354	**0.869**
Mangistau	**1.561**	**1.261**	– **0.535**	0.392
South-Kaz	– **1.325**	**1.914**	0.081	– 0.115
Pavlodar	– 0.035	– **0.790**	– 0.143	– **0.743**
North-Kaz	– 0.451	– **1.175**	– 0.412	– **0.844**
East-Kaz	– 0.364	– **0.806**	– 0.337	– **0.563**
Astana city	0.472	– 0.304	3.390	– 0.418
Almaty city	**0.995**	– 0.144	**0.883**	**1.971**

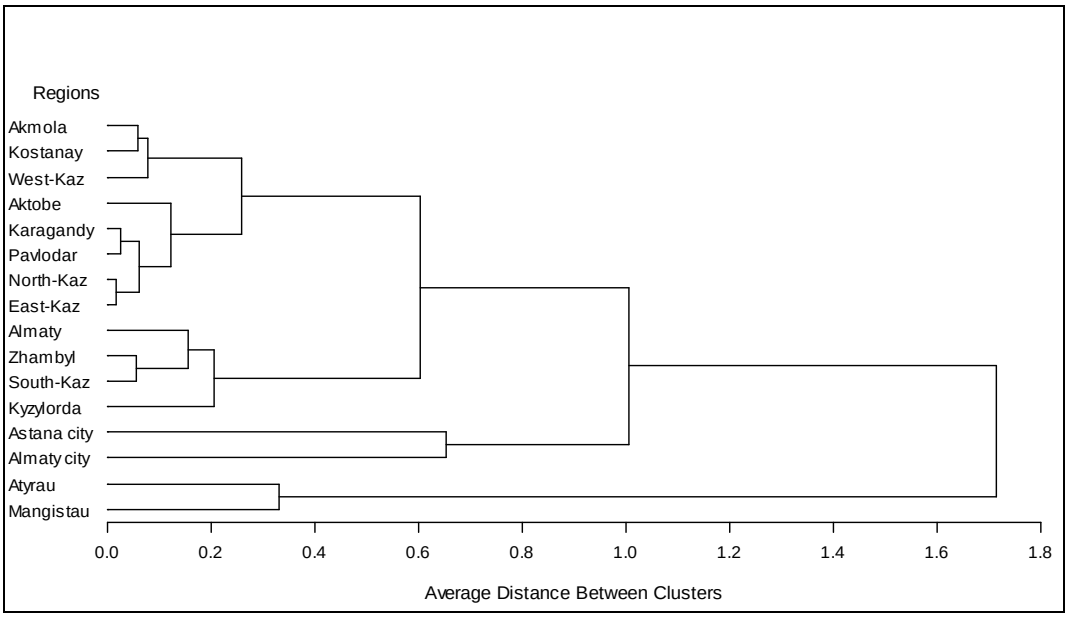
Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

The second factor has the highest positive values for Atyrau, Zhambyl, Kyzylorda, Mangistau and South-Kazakhstan. In these regions we can observe a positive natural change and high TFR. The third factor presented by Almaty city, which shows a positive situation with life expectancy and net migration. The fourth factor, which presented variable

"unemployment", has a significant positive values for Akmola, West-Kazakhstan, Kostanay, Kyzylorda and Almaty city. In these regions observed the highest level of the official unemployment.

Thus, by means of factor analysis we managed to decrease the number of variables to the four factors, which was used for clusterization of the regions. Based on factor scores (Tab. 61) we performed the cluster analysis of the regions on squared Euclidean distance data. The main output of hierarchical cluster analysis is represented by dendogram (tree diagram) reflecting average distance between clusters. Visual analysis of this diagram let us distinguish three clusters which reflect demo-economic diversity of the regions (Fig. 28, Map 22).

Fig. 28 – Tree diagram of clusters (dendrogram) based on factor scores



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

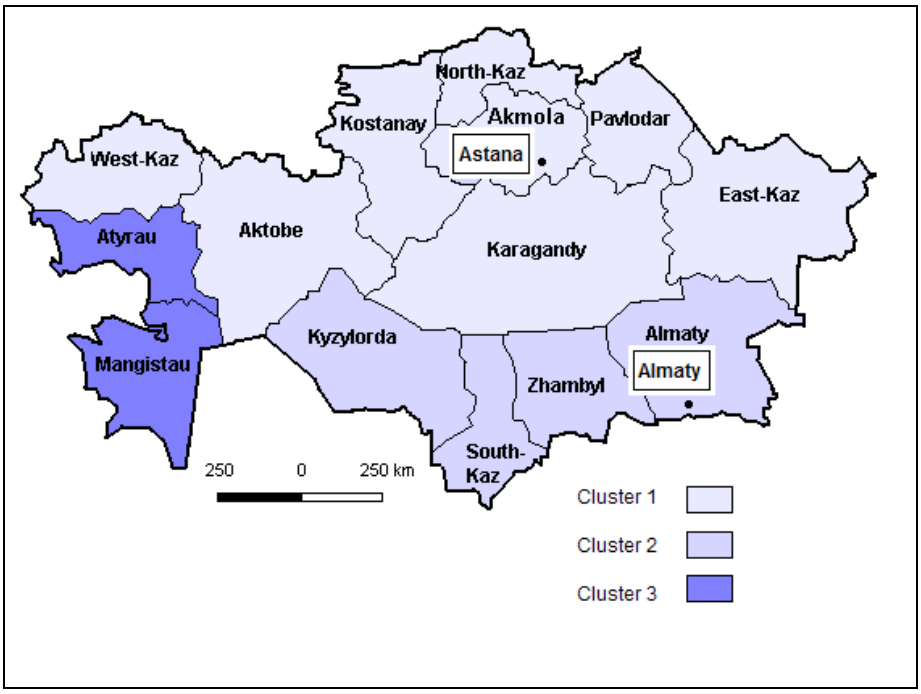
The first cluster unites 8 regions presenting North, Center, East and a part of Western Kazakhstan. These regions are united by depressive trends of demographic development and relatively favorable economic situation.

The second cluster is represented by the regions of Southern Kazakhstan (4 regions) distinguished by a favorable demographic situation and relatively low level of economic development.

The third cluster unites the most favorable in economic respect regions of Western Kazakhstan (Atyrau and Mangistau regions). These regions are also distinguished by a favorable economic situation.

The capital cities of Astana and Almaty are presented separately; they were not included in the above mentioned clusters owing to their uniqueness. But at a more distance these cities have common features. The differences mainly point at the peculiarities of migration growth of population and life expectancy, by which Astana (in comparison with Almaty) has a definite advantage.

Map 22 – Demoeconomic typology of the regions in 2008 based on cluster analysis



Source: Author's calculation based on the data from the Agency of Statistics of the Republic of Kazakhstan

Thus, grouping of the regions into clusters reflects demographic and economic situation of the regions. This grouping let us confirm the assumption on the specific character of economically favorable regions, which in many respects determines the dynamics of population change due to natural and migration increase. Besides, clusterization allowed emphasizing the specific nature of Southern regions of the country conditioned by the peculiarities of ethnic structure. As a result, in spite of a relatively low level of economic development, the regions demonstrate a steady population increase, which is the result of conservation of more traditional values among the population. As a result, we confirm the hypothesis of the decisive importance of the economic factor, explaining the population increase in the regions unfavorable for life. On the other hand, ethnic structure of the population which can significantly influence the trends of demographic development of the regions plays a significant role in the conditions of Kazakhstan.

Chapter 8

Regional policy

The administrative reform concerning the decrease of the number of the regions and transition of the capital became the most noticeable measures of the state in the sphere of the regional policy. The state also adopted a number of program documents on the regional development. However, the efforts of the state did not allow solving in full measure the problems of disproportional development of the regions, especially the demographic ones. The policy in the sphere of regional development can be evaluated as of low effectiveness. The priorities of the regional policy of Kazakhstan not rarely conflict with objective abilities of the country and demographic, economic and geopolitical realities.

8.1 Development of the regional policy

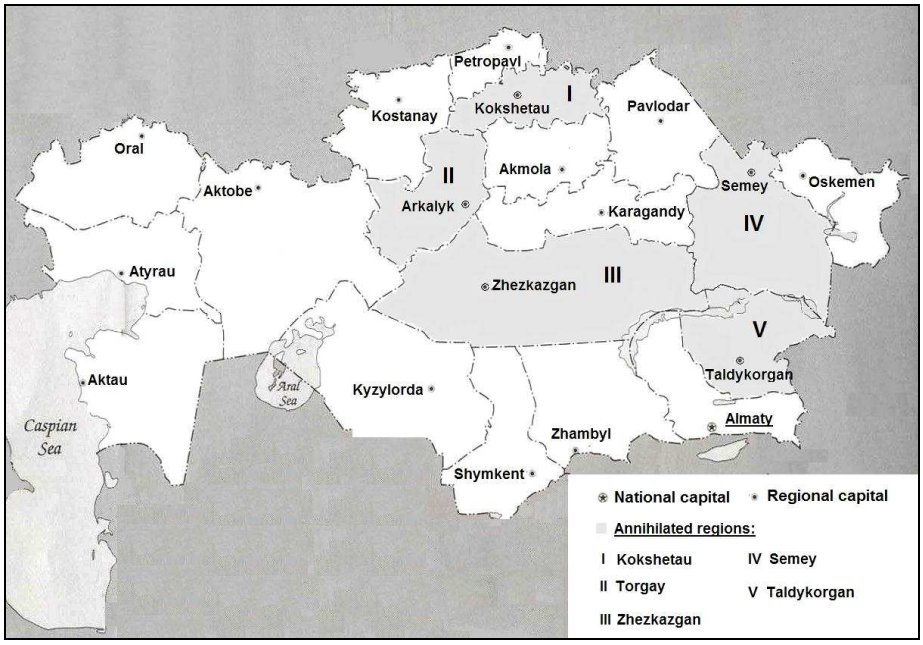
Making relations between the center and the regions is the basis of regional policy of any state. Kazakhstan model is a model of a unitary, centralized state. According to the Constitution (1995) the local territorial executive powers of Kazakhstan are included into a uniform system of executive powers of the Republic, guaranteeing of pursuing the public policy of executive powers in combination with the interests and needs of the development of the corresponding territory (Art. 87).

Local executive powers are headed by akims (heads of administration) of a corresponding administrative-territorial unit, who are the representatives of the President and the Government of the Republic of Kazakhstan. The President of the Republic of Kazakhstan is also authorized to appoint and dismiss the akims of the regions. Maslikhats (local parliament) are the bodies of representative power, whose members are elected by the population by means of elections. The objective of Maslikhats is control of executive powers, taking into consideration the requirements and will of the population. Such scheme is similar to the Soviet system of administration and provides the center with practically unlimited authorities. A strict power vertical is to some extent a justified and inevitable variant, due to the existing disproportion of the regional development.

In the framework of the improvement of the administration system, the state realized an administrative-territorial reform of 1997 (Map. 23, Appendix 6), when 5 regions were

annihilated: Taldykorgan region (was included into Almaty region), Zhezkazgan (was included into Karagandy region), Torgay (was divided by Kostanay and Akmola regions), Kokshetau (was divided by Akmola and North-Kazakhstan regions) and Semey (was included into East-Kazakhstan region). Most of the annihilated regions were economically depressive. The unification was made for the purpose of optimization of administration structure and saving money.

Map 23 – Administrative-territorial reform, 1997



Source: www.lib.utexas.edu, Map: Kazakhstan: administrative divisions, 1996, adopted by author

The transition of the capital from the city of Almaty to the city of Astana (1997) was the second important step. Strengthening of the power centralization, increase of the proportion of indigenous population in the North of the country became the main purpose of the capital transition to the North of the country.

The transition of the capital made possible an equal distance of the center and the periphery, increasing the system functionality and providing a closer contact with the regions. The new capital has a more favorable location in the view of military safety. Astana is also considered as a perspective political, commercial and economic and financial center of all the post-Soviet Central Asian region, which very organically fits in the Kazakhstan concept of Eurasia as a bridge between Europe and Asia. By the opinion of expert, representing Kazakhstan Center of Strategic Research: "Astana gave a multiplicative effect for all the economy of the country and began to set pace for the development of all the country. The time showed that the transition of the capital became an important constituent of system reforms on modernization of Kazakhstan as a whole. Relocation of the capital into Astana finished the first stage of reformation of political-economic system of the country, aimed at creation and consolidation of the mechanisms of efficient strengthening of the state under the conditions of population development" (Morozov 2005:51).

Such statement is difficult to dispute, at the same time positive consequences of the capital transition should not be overestimated, since the transition of the capital did not allow solving the main problems of the regional development. It seems not very suitable to project the success in the development of a single city to the situation on the whole.

Thus, the predominant trend of the regional policy is consolidation of the power vertical of center-region. At the same time, the state recognizes reforms as necessary, and as the first step in this direction suggests a gradual transition to the appointment of akims of the regions, villages by election. In accordance with the Decree of the President of the Republic of Kazakhstan "On tentative holding of election of akims of separate regions in the Republic of Kazakhstan" (2004), the election of the akims of the regions were held (totally 4 akims) in Almaty, East-Kazakhstan, West-Kazakhstan and North-Kazakhstan regions.

According to the regulations of tentative holding of election of akims of the regions of the Republic of Kazakhstan, the candidates for the position of an akim of the region were elected by means of indirect voting right (secret vote) by the deputies of Maslikhats of the corresponding administrative-territorial units.

At the same time, such measures are not able in full measure to solve the problem of local government, as the superior akim of the region kept for him/herself the right of dismissing the akim of the district.

Thus, the power vertical practically did not lose its positions. Provision of the regions with a real right for self-government is possible only under the condition of holding of election of akims of the regions. However, in this case the problem of local self-government brings up the question of distribution of budgetary funds, formation of the regional budget independent on the center. As the electoral regional power is not able to realize own projects for lack of own financial resources.

On the other hand, sharp disproportions of the economic potential of the regions objectively assume state interference in the distribution of financial resources. A centralized approach was reflected in the principles of the regional policy. In the 2000s the most important principle of regional policy was rather distinctly defined, consisting in the priority of the republican interests to the regional ones. The official reflection was found in the Concept of the regional policy of the Republic of Kazakhstan for 2002–2006 (2001).

In this Concept the defects of the previous concept (the Concept of 1996) are criticized, when the regional policy was considered as all the reforms in the regions, independent on the power level. According to the Concept of 2001 the regional policy is understood as a complex of economic, legal, social and other measures applied by the state for effective and harmonious development of the regions, provision of the possibilities to the problem regions equal to the other regions for achievement of equal living conditions, employment, etc.

The objective of the regional policy is decease of the existing differences between the regions at the level of social-economic development by means of realization of important investment projects, promoting consolidation of the infrastructure, economical activity and improvement of the population's life level in the combination with the policy of elective support of the problematic regions.

The following goals were placed among the objectives of the regional policy:

1.Ensuring progressive and balanced social-economic development of the regions;

2.Governmental support to problematic small towns and depressive distant rural regions;

3.Development and carrying out public policy on consolidation of economic potential of bordering regions, especially Southern ones, for ensuring the national safety;

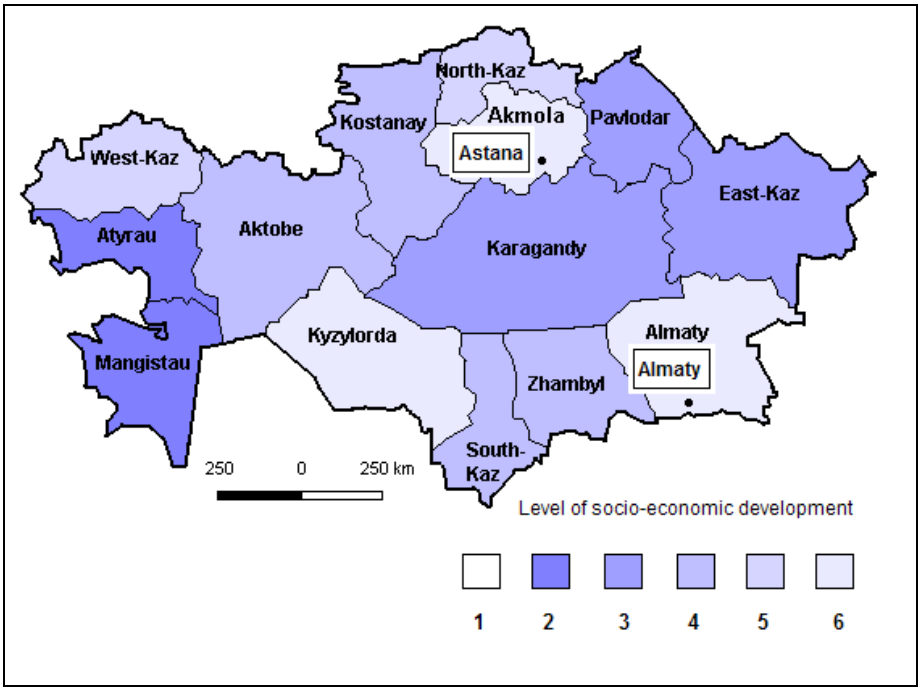
4.Further improvement of the relations between central and local authorities;

5.Rational distribution of the population in the territory of Kazakhstan.

It is quite significant that these objectives did not lose their urgency even in 10 years, and the same can be referred to the classification of the regions by the level of development, presented in this Concept. Analysis of social-economic situation including the evaluation of demographic changes in the regions, territorial division of labor, structure of industry and agriculture, development of infrastructure, unemployment level, etc. are laid into the foundation of the Concept.

Ultimately, the regions were divided into 6 groups, based on the analysis (Map 24). The cities of Astana and Almaty with the highest indicators of average per capita income were referred to the first group.

Map 24 – Classification of regions according to level of socio-economic development, 2001



Source: the Concept of the regional policy of the Republic of Kazakhstan for 2002–2006

Atyrau and Mangistau regions were referred to the second group. Raw material trend and industrial specialization mainly in oil production, almost undiversified industry and undeveloped agriculture were referred to the main problems of these regions. In the rural regions the problems are low incomes, high unemployment, outdated infrastructure, remoteness of regional centers, great loading at environment, etc. are referred to the problems of rural areas.

East-Kazakhstan, Karagandy and Pavlodar regions, which have a developed industry and rich raw material resources, are referred to the third group. The main problems of these regions are raw material direction, undiversified industry and a high degree of the worked raw material base.

The fourth group is Aktobe, Kostanay, Zhambyl and South-Kazakhstan regions. The regions have rich raw material resources and dispose of significant agricultural grounds. The main problem for the development of these regions was the temporal complexity of overcoming of the critical situation in the number of the largest industrial companies, insufficient development of the industries of agriculture.

The fifth group includes West-Kazakhstan and North-Kazakhstan regions. This group has a preferential development of mechanical engineering including defense engineering and large agricultural lands, determining their industrial-agrarian direction. In West-Kazakhstan region gas-and-oil producing industry is developed, taking more than 80 % in the structure of industrial production. The main problems here are: complex situation at machine-building plants, at defense engineering plants above all; necessity of utilization of accompanying gases; risk agriculture; acute deficiency of drinking water; environmental consequences of the development of gas-and-oil producing industry and activity of military polygons.

The sixth group includes Akmola, Almaty and Kyzylorda regions, where agriculture is the basis of economic activity, excluding oil producing industry in Kyzylorda region. The main problems here are: low standard of life, large share of employment in agriculture, weak infrastructure, large territory, weak relations of settlements with market, necessity of utilization of accompanying gases, remoteness of many regions from centers, great loading at environment, Aral problem, acute deficiency of drinking water.

As it can be seen , the classification of the groups of the regions also did not lose its urgency in 10 years; this fact is an evidence of low effectiveness of the concept, due to the insufficient working over of the mechanisms and ways of practical realization. In other words, the Strategy has diagnosed rather exactly, but could not suggest an efficient method of recovery. The same can be said on the accompanying programs.

One of the important projects, aimed at the elimination of the disbalances of the regional development was the State program on development of rural areas of the Republic of Kazakhstan for 2004–2010 which was approved by the Decree of the President of the Republic of Kazakhstan (2003). It was planned that the Program would help the more rational distribution of the population. Rural population is really can be considered as an effective instrument. The main objective of the State program was stated as creation of normal conditions for life-support of an aul (village) on the basis of optimization of rural distribution.

By the opinions of the developers of the State program, the agrarian sector is a high-risk and low-benefit sector of Kazakhstani economy. The efforts of the state on the intensification of agrarian economy should result in deliverance of the employed resources which will intensify the problem of rural overpopulation. Taking into consideration the peculiarities of development of agro-product sector and the growth of incomes from agricultural activity, the excess of rural population is one of the reasons of control of the increase of living standard and becomes a

serious problem at planning of stable development of the country. The problem is intensified by irrational schemes of settling, preserved since the time of administrative economy.

The idea of reforming agrarian production and its transition to the market lies in the conceptual basis of the Program. Applying of marketing strategies for assessment of the growth of agricultural potential revealed the problem of the excess of agricultural population. The capacity of the internal market is insufficient for balanced consumption of agricultural products produced in the country. The incomings received from the production do not ensure minimal standards of life support for villagers.

According to the calculations, given in the Program by the moment of its presentation, in order to reach the average income per capita equal to the size of living wage (4.6 thousand KZT), the number of rural population should make up 5.6 million people, that is, it is necessary to release about 900 thousand people, and with the level of average cash income per capita within the Republic of Kazakhstan equal to 7.7 thousand KZT the number of rural population should decrease twofold and make about 3.5 million people.

As it is known, these plans were not realized in full measure, in spite of the fact that the average income per capita in Kazakhstan considerably exceeded 7.7 thousand KZT. However, the proportion of rural population even increased, and it happened mainly due to the adoption of this Program, however paradoxical it is. The necessity of changing the definition of rural population was stated in the Program: "From 7660 rural settlements officially introduced by regional akimats … there are many stations and sidings, villages included in territorial boundaries of the cities where the population is engaged in agricultural activities. The number of population living in them makes 579 540 people, and they consider themselves rural and hope for the attention of the Government to the problems of villages" (Par. 1).

The main outcomes of the Program were connected with improvement of the system of water-supply, communications, health protection and education in villages. As a result, by the outcomes of the Program, the number of villages where schools do not meet the norms of education net decreased by 185 units. For today the majority of rural settlements according to state norms have the objects of health service. The proportion of rural settlements having centralized water-supply increased from 29 % up to 41 %. The number of rural settlements supplied with gas increased by 306 units, all the villages are provided with telephone communication.

According to the Government monitoring of social-economic development of rural settlements for 2009, for the 1st of January 2010 there are 7002 rural settlements including those with a high potential of development (2610), with medium potential of development (4258), with low potential of development (102).

At the same time, there are still many unsolved problems existing in rural areas. Thus, according to monitoring of social-economic development, in 177 villages schools are in dangerous accommodations, in 38 schools the lessons are conducted in 3–4 sessions, in 1513 villages the educational objects are situated in the 40-years-old buildings. The net of infant schools is underdeveloped (Government of the Republic of Kazakhstan 2010).

For the 1st of January 2010, the number of rural settlements where according to the norm must be, but there are no objects of health protection, makes 69 units, besides, in 4800 rural settlements (77.7 %) the objects of health protection are situated in inappropriate buildings, and this does not allow increasing the quality of medical service for villagers in full measure.

At present time in the Republic 80 rural settlements are not connected with power grid, though their number in comparison with 2004 decreased by 145 units, and in 1673 villages the deterioration of electric main and equipment is more than 85 %.

In general, in the Republic a dynamics of increasing number of rural settlements supplied with gas can be observed. The number of the villages supplied with gas in 2009 increased in comparison with 2008 by 78 units. According to the results of monitoring, the total length of roads of local significance is 70.4 thousand kilometers, 17.8 thousand kilometers of which require thorough repair, 24.1 thousand kilometers – medium repair. For making all the types of repair work 721.5 milliard KZT is required, though in fact not more than 40 milliard KZT is assigned from the republican and local budgets for the repair of roads of local significance (Government of the Republic of Kazakhstan 2010).

Thus, the adopted Program allowed obtaining some improvement, though the problem of the village still requires an intensive governmental support. There is no doubt that the agrarian sector cannot compete with oil-gas sector, here the stake on urbanization looks as a positive decision. At the same time, a scaling resettlement in short-time period is practically impracticable which is proved by this Program. Besides, the problem of adaptation of villagers to the urban conditions is still urgent. Villagers often have no qualified specialty, that is why their demand in the labor market in the city is still under the question. The 1990s in this sense are rather demonstrative. The provoked intensive immigration of villagers into the cities resulted in many cases in marginal environment which noticeably deformed social-cultural appearance of many cities of Kazakhstan.

The Strategy of territorial development of the Republic of Kazakhstan till 2015 adopted in 2006 became a new stage of the regional policy. The principal difference of new Strategy is first of all in the fact that the concept of regular development is substituted for the concept of polarized development. The main initiative of development here is entrusted to the regions. According to the Strategy of territorial development of the Republic of Kazakhstan till 2015: the regions and large cities must begin developing a competitive strategy and searching the position not only in the national system of labor division but also in the regional and world systems.

The Strategy determines the objective of the state in stimulation of the concentration of economic and labor resources in the economically perspective regions and natural-climatic zones favorable for living, creation of the conditions for the growth of economic activity of the market subjects and formation of the common free market zone, harmoniously integrated with the world's economy system.

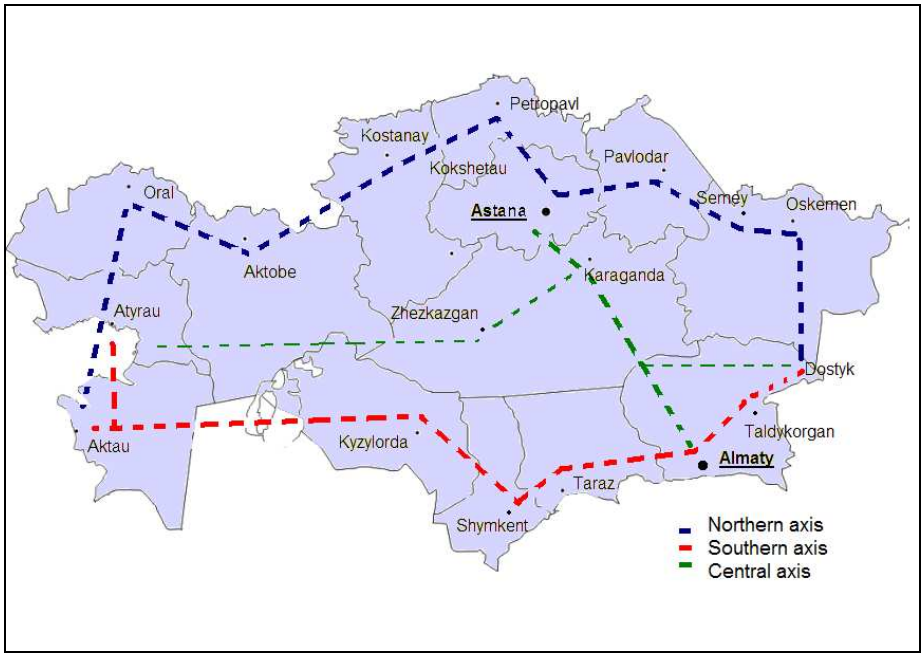
The realization of the above mentioned objectives, according to the Strategy, should take into consideration geo-economic and geo-political factors of the national development. Globalization and strengthening of international competition require developing of effective strategy of positioning of the country in the world's markets.

The position of Kazakhstan in the world market is defined as a large manufacturer and supplier of mineral raw materials, grain-crops, the products of their processing, as a transcontinental economic bridge of interaction of European, Asian-Pacific and Southern-Asian economic systems. It is assumed that at the regional market Kazakhstan is able to realize its potential as a large supplier of industrial and agricultural products, a modern service and innovation center of the region.

On the basis of identifying the position of the country in the world and regional economy, analysis and assessment of economic, natural and labor potential and the system of settling, it is assumed to realize the transition to the axial approach to the formation of territorial space of the country, the framework basis of which will be transport-communicational corridors ensuring the entrance to the foreign markets and integration of the country with regional and world economy, and the large cities-leaders integrated with regional and global markets will be the most significant centers.

According to Strategy, strategic axes of territorial development – Northern, Southern and Central will connect both the existing and the created regional and sub-regional territorial-economic systems and isolated economic centers and territories between them, and it, together with formation of local axle nets, will ensure the unity of internal economic area of the country (Map. 25). The axes will be formed in the direction of trans-Eurasian commercial-economic and transport-communication corridors which will ensure additional benefits from geo-economic position of the country in the context of formation of common Eurasian economic area.

Map 25 –The axes of regional development, 2006



Source: The Strategy of territorial development of the Republic of Kazakhstan till 2015

The Northern axis of strategic development is defined in the direction of Oskemen – Semey – Pavlodar – Astana – Kostanay (Kokshetau, Petropavl) – Aktobe – Oral with entrance to

Caspian (Atyrau, Aktau) and Almaty (Taldykorgan, Dostyk) territorial-economic systems and within all the perimeter of the axis – to the regions bordering on Russian Federation.

This axis, in the opinion of the developers of the Program, must connect the territories of total development in the North and West of the country favorable for habitation and economic activity, (grain zone), with developed commercial-economic and transport-communication connections with Russian Federation, with main entrances to European, Middle Eastern and East-Asian (through the Central axis) economic area. Ultimately, the axis forms Northern Kazakhstan trans-Eurasian commercial-economic corridor

Southern axis of development is defined in the direction of the border with China (Dostyk, Khorgos), through the cities Taldykorgan – Almaty – Taraz – Shymkent – Kyzylorda – Atyrau, Aktau with entrance within all the perimeter into to the bordering regions of Central Asian states. The axis will connect the territories of total development favorable for habitation and economic activity in the South of the country with developed commercial-economic and transport-communication connections with the states of Central Asia and also the isolated economic centers of Kyzylorda, Aktobe (Southern part), Atyrau and Mangistau regions with main entrances to European, Middle Eastern, East-Asian economic area, forms Southern-Kazakhstan trans-Eurasian commercial-economic corridor.

Central axis connecting the Southern and the Northern axes of development in the central part of the country should become a framework basis of the economic area of the country. Central axis of development will be defined in the direction of Astana – Karagandy – Almaty with branches to Balkhash, Dostyk and entrance to China, and to Zhezkazgan with the perspective entrance in the direction of sea ports of Western Kazakhstan.

The dynamically developed cities-leaders and basic cities – large economic centers of territorial-economic systems, competitive in global, regional and national labor distribution will become the most important centers of the formed axes of development. A priority development is assumed of 2–3 large cities-leaders of national, and in perspective, of Central Asian level, which will become the most important centers in Eurasian system of commercial, financial, technological and cultural exchanges.

The cities-leaders should become the centers of the growth poles, integrated with global, regional and national markets, and come forward in the role of “locomotives” for the rest regions of the country; basic cities of national and regional levels, concentrated in them economic activity in their regions and becoming the catalysts of formation of competitive regional clusters and ensuring the entrance of the regions to the national and foreign markets.

Thus, strategic axes of development should become the basis of the settling system. The main direction of the further improvement of the settling system will become formation of agglomerations around the leader cities and basic cities from the gravitating towards them settlements with changing them into the settling systems provided in full measure with all the necessary conditions for favorable life activity of the population.

The Strategy figures on the further concentration of the population in these basic settling areas, first of all in the territories with the most favorable complex of natural conditions for habitation and economic activity, with transition to the intensive stage of urbanization process.

Construction of new settlements will be planned only in view of development of new mineral deposits or a necessity of servicing newly established transport-communication objects (along the formed local axes of development), and in special cases with a view to optimize the systems of settled locations including depressive settlements (towns and villages).

The Strategy assumes that such approach must favor the establishment of the zones with highly-organized urbanized environment, at the expense of the economy of the scope of costs for creation and development of life-supporting infrastructure.

Thus, the agglomerations formed around the basic cities will become the centers of attraction of the population, first of all from depressive villages and small towns, which will favor a stage-by-stage decrease of the population living in unfavorable territories.

The efforts of the regional authorities, according to the Strategy, must be concentrated on the development of the development strategies (competitive strategies) of their regions and basic cities, on their inclusion in the common strategy of positioning the country at the regional and global markets, on solving of concrete problems of development of regional clusters.

Regional strategies will be oriented not at obtaining competitive preferences in relation to the other regions of the country, but at realization of the principle "from the competition of the regions – to cooperation" and through it – at gaining competitiveness at the regional level.

For the present time, a draft Program of development of Kazakhstan regions is developed as a practical annex. It is known that the new Program will identify in the regions the "points of increase, the settlements with a high potential of development", and will offer the mechanisms of improvement of inter-budget relations aimed at providing to the population of public services of equal quality and scope independent of their place of residence.

While developing the forecasting scheme of territorial-spatial development of the country till 2020, "a detailed analysis of the economy of the regions was held for the purpose of determining the reserves for establishment of new jobs and new businesses", according to which the most perspective agglomeration centers are Almaty, Astana, Aktobe and Shymkent. On this basis, the working out the Program of development of the four agglomerations is planned: Astana, Almaty, Shymkent and Akobe. The inventory of all the settlements will be carried out for the purpose of their perspective development (Newskaz.ru 2011).

Besides, new flexible instruments of economic stimulation of lagging regions will be developed: governmental grants, regional tax remissions, special economic regions. "The problem of internal migration should be considered as a means of perspective changing of territorial structure of the economy and formation of the more efficient settling system", as Zh. Bopiyeva, one of the developers of the Program considers (Newskaz.ru 2011).

Thus, the idea of going away from the regular development is a strong aspect of the Strategy, which is objectively impossible under the conditions of restricted human resources. At the same time, the proposed basic points of development in its majority represent administrative centers of the regions. In this sense, rejection of regular development can be evaluated as a conditional one, since the new model organically inherits the old system of relations.

The main object of the policy of regular development of the regions always was administrative centers of the regions, direct support of single villages and small towns was

never practiced. That is, administrative units for a long time already have functioned as basic centers including the problem of population concentration. The result of such development is quite well-known.

The ability of the regions to compete also causes some scepticism, including the interregional level. If the terms of competition are fairly followed, the problem occurs in development of the regions with low competitive benefits. The development of competitive benefits requires definite investments, which seems rather difficult to realize in the conditions of a depressive region. Under the conditions of availability in the regions of equal potential (raw material resources, geographic position, etc.), the competition would be educed to the problem of distribution of investments, and its solving will be laid on the center. The existing for the present time centralized management system can be added to all this, in which the initiative of the regions is rather limited. Taking into account all this, the Strategy does not solve cardinal problems, their regulations mostly have a declarative character, and practical realization depends on the efforts of the center.

Thus, the development of regional policy, especially towards strengthening of local self-government, is in many respects limited to objective factors, the most important of which is the prevailing imbalance of regional economic development.

8.2. Modernization of the economy

The main practical instrument aimed at the realization of the regulations of the Strategy of territorial development suggested by the center is the Program on further industrialization of the country. The expected output of the Program is the decrease of economic disproportions in the development of the regions due to the development of manufacturing industry. Taking this into consideration, the Map of industrialization of the country was developed. The plans of development of the economy are rather detailed presented in the Strategic plan of development of the Republic of Kazakhstan till 2020. In the economic plan the Strategy aims Kazakhstan at the including in the list of 50 the most competitive countries of the world by 2020.

By 2020, the country is assumed to possess human resources required for development of diversified economy and to have an infrastructure necessary for servicing the domestic manufacturers and exporters. Uninterrupted relation with the rest of the world will be ensured owing to intensive development of transport infrastructure and telephone communications. Manufacturing industry, agriculture and human services will occupy a more significant position in the structure of economy, parallel with mineral resource industry.

The main instrument of diversification of the economy will be a forced industrialization. Industrialization of the country will be realized in the following directions: development of traditional industries (oil-and-gas sector, mining complex, nuclear and chemical industries with the further transition of raw material industries to the higher levels); development of the sectors based on the demand of subsurface users, national companies and state (mechanical engineering, construction industry, defense industry, pharmaceutics); development of industries not related with raw material sector and mostly oriented at export (agroindusrial complex, light

industry, tourism); development of the sectors of "the economy of the future" (information and communication technologies, biotechnologies, alternative power engineering).

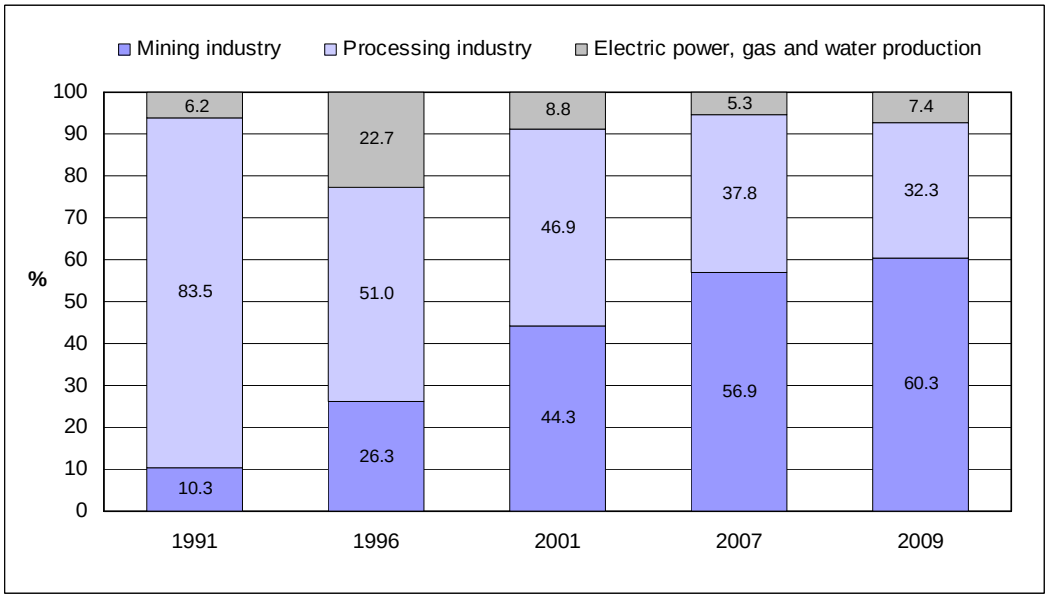
Ultimately, by 2015 Kazakhstan plans to come out to the following strategic indicators of the economy development: the proportion of processing industry in the GDP structure will make up not less than 12.5 %, the proportion of non-raw material export in the total export volume will make not less than 40.0 %, labor productivity in manufacturing industry will increase not less than by 1.5 times.

By 2015 it is planned to double the manufacture and export of metallurgical products. Besides, by 2015 the export potential of agrarian sphere will increase till 8 % in the total export amount, labor productivity in agroindusrial complex will increase not less than twice.

In 2020 it is planned to come out to a new outcome: the increase of the proportion of processing industry in the GDP structure up to 13 %, increase of the proportion of non-raw material export in the total export amount will make up to 45 %. It is also planned to increase the labor productivity not less than twice in processing industry, in agroindustrial complex it will be increased not less than by 4 times.

Oil-and-gas sector also has a perspective plan of development. Within the State program on the development of Kazakhstan sector of the Caspian sea, by 2015 it is planned to increase the oil production up to 100 million tons a year, natural gas up to 63 milliard cubic meters.

Fig. 29 – The structure of industrial production of Kazakhstan, 1991–2009



Source: Agency of Statistics of the Republic of Kazakhstan

Thus, Kazakhstan has a rather ambitious plan of modernization, assuming significant changes in the economy. These priorities are adequate to the real problems characteristic for modern Kazakhstan economy, though it is difficult to share the optimism of the Program developers taking into consideration real trends of development of Kazakhstan economy. As it can be seen from the Figure 28, the period from 1991 to 2009 the proportion of mining industry in the structure of industrial production of the country has a trend towards increasing. At the

same time the proportion of processing industry accordingly decreases. If in 1991 the proportion of processing industry was 83.5 %, in 2009 this indicator made 32.0 %. The proportion of mining industry increased from 10.3 % up to 60.3 % correspondingly.

A problem of no small importance for Kazakhstan is also diversification of commercial-economic relations, which is complicated by both, the geographic position of the country and the structure of export, the base of which is made by oil and gas. By the moment of obtaining sovereignty the main economic partners of Kazakhstan were Russia and the countries of the CIS. However, the dynamics of export shows that the positions of these countries have considerably changed for the last time, which in some extent can be evaluated as a positive result related with the promotion of Kazakhstan products to the global markets. As it can be seen from the Tab. 62–63, the proportion of Russia and the countries of the CIS in Kazakhstan export has a tendency towards decreasing from 1999 to 2009.

The foreign trade turnover of Kazakhstan with the countries of the CIS in 2009 made up 26.3 % (18.8 milliards USD). For the period from 1999 to 2009 the turnover increased from 3.1 milliard USD practically six fold, though the proportion of the CIS in the total turnover of Kazakhstan decreased , and in 1999 it made up 27.0 %, in 2009 – (26.3 %).

Tab. 62 – Annual goods turnover of Kazakhstan, 1999

	Total	CIS	Russia	Asia	China	Europe	Other
	In millions USD						
Goods turnover	11306.7	597.6	2458.2	779.5	554.5	3061.2	3855.7
Export	5755.3	353.8	1107.6	402.0	473.1	1908.8	1510.0
Import	5551.4	243.8	1350.6	377.5	81.4	1152.4	2345.7
	Share in %						
Goods turnover	100.0	5.3	21.7	6.9	4.9	27.1	34.1
Export	100.0	6.1	19.2	7.0	8.2	33.2	26.2
Import	100.0	4.4	24.3	6.8	1.5	20.8	42.3

Source: Agency of Statistics of the Republic of Kazakhstan

The basis of Kazakhstan export, for the present time, is made by export to the global market. The turnover of Kazakhstan with foreign countries significantly increased in the period from 1999 (6.5 milliard USD) till 2009 (52.7 milliard USD). One of the most important trade partner of Kazakhstan is the European countries. In 2009 the proportion of the European countries in the turnover of Kazakhstan was 44.8 % (32.0 milliard USD). At the same time, the export of Kazakhstan into the European counties in 2009 made up 23.8 milliard USD, which makes 55.1 % of the total Kazakhstan export.

An important economic partner of Kazakhstan is the countries of Asia. The proportion of the turnover of Kazakhstan with the countries of Asia makes 22.5 % (16.1 milliard USD) of the total turnover of Kazakhstan in 2009. The most important partner of Kazakhstan is China, its proportion in foreign trade turnover of Kazakhstan makes 13.2 % (9.5 milliard USD). In general, the proportion of Asian countries makes up 23.6 % (10.2 milliard USD) of the total Kazakhstan export. The proportion of China is 13.6 % (5.9 milliard USD).

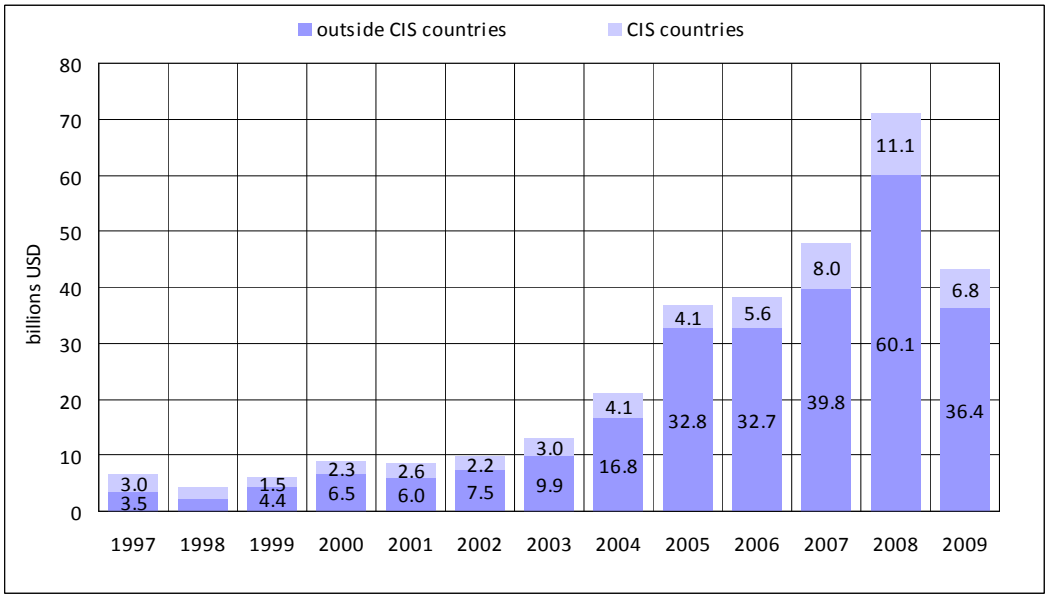
Tab. 63 – Annual goods turnover of Kazakhstan, 2009

	Total	CIS	Russia	Asia	China	Europe	Other
	In millions USD						
Goods turnover	71604.4	6405.4	12443.5	6679.9	9458.1	32066.1	4551.4
Export	43195.7	3234.1	3547.0	4326.7	5888.6	23822.1	2377.2
Import	28408.7	3171.3	8896.5	2353.2	3569.5	8244.0	2174.2
	Share in %						
Goods turnover	100.0	8.9	17.4	9.3	13.2	44.8	6.4
Export	100.0	7.5	8.2	10.0	13.6	55.1	5.5
Import	100.0	11.2	31.3	8.3	12.6	29.0	7.7

Source: Agency of Statistics of the Republic of Kazakhstan

For today, the growing economy of China is a very perspective, but what is essential, an available market, where Kazakhstan is able to realize its raw material resources. The realization of the project of oil pipeline from Atasu to Xinjiang is the most important stage of energy cooperation of the two countries.

Fig. 30 – Dynamics of export of Kazakhstan, 1999–2009



Source: Agency of Statistic of the Republic of Kazakhstan

Thus, the orientation of Kazakhstan export to the global market favors the diversification of the economic relations of the country. At the same time, export trends in some way contradict the declared plan of consolidation of Kazakhstan positions at the regional market (the CIS). In particular, it contradicts the interests of Southern and Northern regions, the development of which is planned in the context of the consolidation of the positions at the regional market, represented by Russia and the countries of post-Soviet Central Asia. In 2009 the proportion of the regions of Western Kazakhstan was 50.0 % from the total export of the Republic (53.2 %). Together with Astana and Almaty this proportion was 71.0 % (Tab. 64). The difference in turnover per capita can be added to this, with maximum 30.0 thousand USD (Atyrau region) and minimum 0.4 thousand USD (Zhambyl region). Such statistics is an evidence of the fact that it

is practically impossible to withstand the competition with oil sector. Even favorable in economic respect conditions of Almaty and Astana, on which the role of the leader cities of republican significance is laid, do not meet the competition.

It can be added here that real diversification of economic relations of Kazakhstan seems to be rather difficult, especially if we discuss only the economic sector, owing to the peculiarities of its geographic position, which makes the delivery of goods dependent on the neighboring countries. Under these conditions the problem of diversification of the routs of delivery of goods to the international markets, is still urgent, first of all the net of oil and gas products. Kazakhstan obtained much lower results in this direction. The main existing export routs of Kazakhstan oil go through the territory of Russia. Against this background, integration initiatives of Kazakhstan related to the cooperation within the framework of Eurasian Economic Community (EurAsEc), signed agreements on the customs union with Russia, Belarus seem to be an important stage in organization of a transport corridor into Europe.

Tab. 64 – Annual goods turnover by regions, 2009

	Export in millions USD	Share in %	Import in millions USD	Share in %	Goods turnover in millions USD	Goods turnover (thou. USD) per capita
Kazakhstan	43195.8	100.0	28408.7	100.0	71604.4	4.5
Akmola	368.6	0.9	466.2	1.6	834.8	1.1
Aktobe	4057.2	9.4	1473.6	5.2	5530.8	7.7
Almaty	185.3	0.4	1022.6	3.6	1208.0	0.7
Atyrau	13869.0	32.1	1340.7	4.7	15209.7	30.0
West-Kaz	822.6	1.9	1004.0	3.5	1826.6	2.9
Zhambyl	197.3	0.5	258.6	0.9	455.9	0.4
Karagandy	3572.7	8.3	1454.8	5.1	5027.6	3.7
Kostanay	1416.0	3.3	731.7	2.6	2147.7	2.4
Kyzylorda	2574.9	6.0	277.6	1.0	2852.5	4.3
Mangistau	4254.0	9.8	2939.5	10.3	7193.5	16.5
South-Kaz	1537.7	3.6	956.2	3.4	2493.9	1.0
Pavlodar	966.8	2.2	1181.2	4.2	2148.0	2.9
North-Kaz	136.8	0.3	602.6	2.1	739.4	1.1
East-Kaz	1521.4	3.5	1178.4	4.1	2699.8	1.9
Astana city	3202.6	7.4	2248.1	7.9	5450.7	8.2
Almaty city	4512.8	10.4	11273.0	39.7	15785.8	11.4

Source: Agency of Statistics of the Republic of Kazakhstan

For the present time, Kazakhstan exports the most part of oil by means of pipelines of Atyrau–Samara, CPC and Atasu–Alashankou, the port of Aktau. The pipeline Atyrau–Samara is one of the largest existing export routs, by means of which Kazakhstan oil is transported through the “Transoil” system into the ports of Odessa, Primorsk, Novorossiysk and by “Druzhba” system to the markets of Northern-Western, Central and Eastern Europe. Caspian

Pipeline Consortium (CPC) represents a pipeline connecting Kazakhstan oilfield “Tengiz” and oil terminal in the Black Sea near the port of Novorossiysk (Map. 26, Appendix 7).

Since lately Kazakhstan has activated the cooperation with China. NC “KazMunayGas” JSC together with Chinese National Corporation work out the project of construction of oil-pipeline Kazakhstan–China, which realization allowed ensuring the delivery of hydrocarbon raw materials to the perspective market of China.

In the first turn, the project of construction of oil-pipeline Kazakhstan–China is aimed at diversification of the directions of oil transportation within the framework of the realization of the policy of creation of poly-vector system of hydrocarbon transportation in sovereign Kazakhstan. The construction of oil-pipeline Kazakhstan–China provides two stages. The first stage is realization of the project of Atasu–Alashankou oil-pipeline. The length of Atasu–Alashankou oil-pipeline is 962.9 kilometers. The rout of the pipeline goes through the territories of the three regions: Karagandy, East-Kazakhstan and Almaty regions to the terminal point of Alashankou in the territory of China.

Map 26 – Pipeline system of Kazakhstan

Source: www.neonomad.kz, Map:Pipeline system of Central Asia

The realization of the project of Kenkiyak–Kumkol pipeline construction with the capacity of 10 million tons of oil per a year is the first turn of the second stage of the project of Kazakhstan–China pipeline construction. Kenkiyak–Kumkol pipeline, 794 kilometers long, goes through the territories of Karagandy, Kyzylorda and Aktobe regions of the Republic of Kazakhstan. On the 24th of October 2009 the Act of Acceptance of the first oil-pipeline complex was signed by the state committee. China also had a proposal on the construction of the second stage of Kazakhstan–China pipeline, for increasing of the capacity of the existing pipelines

Kenkiyak–Atyrau, Kenkiyak–Kumkol, Kumkol–Atasu, Atasu–Alashankou up to 20 megaton in the point of Alashankou.

Thus, from 68.1 million ton (89 % from the total production) of oil and gas condensate exported by Kazakhstan in 2009 the largest volume was transported through the pipelines of CPC – (27.5) million ton (40.4 %) and Atyrau–Samara – (17.5) million ton (25.7 %). In the Chinese direction 6.2 million ton (9.1 %) of Kazakhstan oil was transported. The sea export made up – 11.1 million ton (16.3 %), the railway export – (4) million ton (5.9 %), to Orenburg GTP 1.8 million ton (2.6 %) of gas condensate was delivered (KazMunayGas 2010).

In these conditions real diversification of export is possible only in the conditions of diversification of the economy, aimed at the decrease of oil dependence. At the same time, the development of non-raw material industrial sectors is turned on the problem of the lack of labor resources, especially at the regional level.

For today, the problem of the lack of labor resources in Kazakhstan is compensated owing to labor migrants from the neighboring countries. The concentration of such kind of migrants is the cities of Astana, Almaty, Atyrau and Almaty regions. According to some assessments, up to 70 % of foreign labor resources are attracted into the sphere of construction, and also into processing and mining industries and agriculture of the Republic.

According to the data of the Ministry of labor and social protection of the Republic of Kazakhstan, 12 thousand of foreign specialists were involved in 2002, in 2006 – (40.9) , in 2007 – (58.8) , in 2008 – (61.4) thousand people. At the same time, major part of labor migration in Kazakhstan mostly has an illegal character (in Borangaliev 2010).

According to the assessments of the specialists, total number of labor migrants in Kazakhstan in 2009 made approximately 400–450 thousand people, or 5–5.5 % from the employed population of the country. At the same time, the overwhelming majority of labor migrants by the countries of origin are the citizens of the CIS – 93 % and the emigrants from the foreign countries – 7 % (in Borangaliev 2010).

Among the labor migrants the majority of people is from the countries of Central Asia. It is expected that in the future the needs of Kazakhstan in foreign labor force will increase. According to the calculations of the Agency of Statistics of the Republic of Kazakhstan, by 2015 in the economy of Kazakhstan 1–1.2 million of labor migrants will be employed (in Borangaliev 2010). As a rule, only high-qualified specialists have legal jobs in Kazakhstan, those who are engaged in high-paid sectors of the economy. They have no competition in labor market, besides, it is a small group in a quantitative respect.

In case of dynamic development of regional industries, the problem of lack of labor resources will only increase, it will be impulsive to rely on the villagers.

Moreover, the problem of unused agricultural lands of Kazakhstan is still urgent, which attracts the interest of the neighboring countries for investments in agriculture. According to the data of the Agency of the Republic of Kazakhstan on Land Management, in 2010 land inspections revealed the unused lands at the square of 3 million of hectares; 1.1 million hectare of agricultural lands was returned to the state ownership (kursiv.kz 2011).

In 2009, the Government of Kazakhstan considered the issue of the collateral with China production of rape, corn and soybean. Beside investments, China suggested buying the products by exchange price for 25 years. For the project it was required to have 1 million hectares of agricultural lands. The suggestions of Chinese Republic had a resonance in the public opinion and of the opposition, it was anxious of the Chinese threat and the perspectives of the loss of sovereignty.

An important argument of the opponents of the project was the problem of cultivating the land. An important argument of the opponents was the problem of who would cultivate the land. According to some calculations, cultivating of 1 million hectares will require up to 5 million people (Asanbaev, Mamiraimov 2009). In this case, Kazakhstan will not be able to manage with its own resources.

Under such conditions the perspectives of the project remained under the question. At the same time, it should be assumed that Kazakhstan will return to the problem of discussion of waste agricultural lands earlier or later. Even Uzbekistan can act as an interested landholder. The lack of land resources becomes more pointed in the republic year by year.

Thus, Kazakhstan is a hostage of a limited demographic potential which is in many cases a serious obstacle in the way of realization of state initiatives in the sphere of the regional policy, since the development of the regions in the first turn depend on the availability of human resources. It is a great problem for a sparsely populated country.

Chapter 9

The problem of geopolitical development

In the context of changing political situation related to obtaining independence, the problem of population development of Kazakhstan gained the status of a strategic priority, affecting the interests of national security. Obtaining independence intensified the problem of relatively small population of the country, its qualitative characteristics (ethnicity, available skilled labor). In the conditions of changing economic structure, demographic problem particularly acute manifested itself at the regional level, aggravating the already difficult situation related to heterogeneous distribution of population within the territory of the country.

Thus, demographic factor becomes one of the vulnerable components of the geopolitical structure of independent Kazakhstan. In many ways, it is the problem of human resources (quantity and quality) that may become a threat to sustained economic, and as a consequence, to geopolitical development of the country.

In such circumstances, the national foreign policy is mainly aimed at smoothing out of the demographic problem. One of such mechanisms is the principle of multi-vector policy, owing to which it is possible to balance at the intersection of the interests of influential geopolitical players.

9.1 Multi-vector principle as a main mechanism of foreign policy

The basis of Kazakhstan's foreign policy since the early days of independence was based on the multi-vector principle. Multi-vector foreign policy in Kazakhstan is considered as a real opportunity to preserve the national sovereignty in the foreign policy. “The Future of Kazakhstan – both in Asia, Europe in the East and the West. By means of this policy, we can eliminate any manifestation of threats to the security of Kazakhstan”, said N. Nazarbayev (cited in Sultanov 2009:139–140).

According to the Strategic Development Plan of the RK till 2020, Kazakhstan's foreign policy is aimed at strengthening the country's role as a bridge between the East and the West, the North and the South, Muslim and Christian worlds, and strengthening inter-civilization and inter-confession dialogue. Kazakhstan will continue the policy of strengthening the variegated and multi-level integration in Central Asia, in Eurasia. It is assumed that these priorities should

contribute to the outcome of Kazakhstan to a new international level, appropriate to its potential and strengthen of the position of a regional leader.

The most important areas of foreign policy, therefore, were the development of partnership with neighboring countries and major world centers of power such as the USA and the EU. Kazakhstan is an active participant in international projects in the sphere of economy and security, demonstrating commitment to the principles of mutually beneficial and equal partnership.

9.1.1 Strategic partnership of Kazakhstan and Russian Federation

One of the key partners of Kazakhstan today is Russia. Strategic character of the relations between the two countries is confirmed by the Treaty of friendship, cooperation and mutual assistance signed in 1992. The Treaty states that Kazakhstan and Russia, based on historically strong ties between the two countries are building their friendly relations on the basis of mutual respect for state sovereignty, territorial integrity and inviolability of existing frontiers. Subsequently, the Treaty was supplemented by the Declaration of eternal friendship and alliance, oriented into the XXI century, signed in 1998. Between the two countries the frontier problem was completely solved, the treaty of the Russian-Kazakh state frontier was signed in 2005.

Thus, Kazakh-Russian partnership covers a wide spectrum of the most important directions the most significant of which are economy and safety.

In economic terms, Kazakhstan and Russia implement energy partnership. Kazakhstan was the first of the Caspian countries which managed to solve all conflicts with Russia in the matters relating to the status and section of the Caspian Sea ground. Kazakhstan is interested in using transport corridors of Russia as an opportunity to access world markets. Kazakhstan owns 19 % of the shares in Caspian Pipeline Consortium (CPC). Currently, the priority is given to the construction of the Caspian gas pipeline, intensification of transition of trade goods between Western Europe and Western China. The cooperation between Kazakhstan and Russia on development of automobile roads linking Western Europe and Western Kazakhstan through Russia has strategic significance.

The most important result of economic cooperation between the two countries was the development of integration processes. The main result of integration initiatives is the execution of the Customs Union. “The Customs Union with Russia and Belarus, which came into force on the 1st of January 2010, is a breakthrough for all integration initiatives of Kazakhstan. The next stage of integration of the three countries will be the formation from January 1, 2012 of the Common Economic Space”, said N.Nazarbayev (2010: Par. 3.2). It is assumed that this mechanism will facilitate the outcome of Kazakhstan to European markets. Another side of the problem is the growing dependence on Russia.

Kazakhstan and Russia are also cooperating well enough in the sphere of regional security. The first step in this direction was made by signing the Collective Security Treaty (CST) by the countries – members of CIS on May 15, 1992.

Kazakhstan initially supported this initiative. The Republic was guided by practical interests of creating conditions for its safe development for the nearest and the medium-term period. Owing to the subsequent efforts of the participants the work on detailed elaboration of mechanisms of the agreement, clarifying and specifying of its provisions was made. The most important event in this regard was signing of the Agreement on the Collective Security Treaty Organization (2002), which significantly strengthened the institutional component of the contract. The organization has also reached an agreement regarding the establishment of a Collective Rapid Reaction Force (KSOR). KSOR will be used to "reflect military aggression, conduct special operations to struggle international terrorism, transnational organized crime, drug traffic, and disaster liquidation" (Charter of KSTO 2002). This tool became an important factor in Russian military-political presence in Kazakhstan and the region as a whole.

As it can be seen from the abovementioned, cooperation between the two countries is the result of historical relationships and a deliberate policy the objective basis of which is mainly determined by economic and security issues.

9.1.2 Kazakhstan-China relationships

One of the counterweight to Russian influence is the partnership of Kazakhstan with China. After obtaining independence by Kazakhstan, both countries were interested in building stable and good neighbor relations at a new level. The Declaration on principles of friendly relations between Kazakhstan and China (1993) is an evidence of this. On the basis of the signed document, the parties built an equitable dialogue aimed at resolving bilateral issues.

As well as Russia, China presents interest to Kazakhstan as an economic partner. Active participation of Chinese companies in the oil and gas sector of Kazakhstan began with the acquisition in 1997 by China National Petroleum Corporation (CNPC) of 60 % of Kazakhstan enterprise, "Aktobemunaigas".

In 2003, on the basis of intergovernmental agreements in the oil and gas sphere, signed between the Kazakhstan and China in 1997, the Kazakh-Chinese companies have launched a major project to build an oil pipeline Kazakhstan – China. China is also interested in the formation of reliable transport corridors for access to the markets of CIS and Europe. One of the most promising projects in this direction is the construction of the highway "Western China – Western Europe", which is interesting for China, Kazakhstan and Russia. In this sense, the significance and prospects of cooperation with the Republic of Kazakhstan for the development of transport channel can not be overestimated.

China is interested in the investments in agricultural projects in cooperation with Kazakhstan.

Along with the economy, Kazakhstan and China are cooperating in regional security. The platform for this was Shanghai Cooperation Organization (SCO) founded in 2001 on the basis of "Shanghai Five". Its members, in addition to Kazakhstan, China and Russia, were Kyrgyzstan, Tajikistan and Uzbekistan. The organization helped to smooth out a number of internal problems in the region, the frontier problem among the chief ones. The leaders of the SCO agreed that the organization will be closely engaged in the struggle against extremism,

terrorism and global drug trade. It should be noted that the organization does not claim to have a leading position in solving key international issues, limited by opposition and prevention of possible conflicts in the region (Charter of SCO 2002).

Shanghai Cooperation Organization implicitly acknowledges the leadership of the United Nations in solving all international problems. In general, at this stage, SCO equally satisfies Astana, Beijing and Moscow. The main result of the activity of SCO in Kazakhstan was the final resolution of frontier disputes and legal registration of frontiers with China. No less important is normalization of military-political situation and reducing tension in the region. In addition, membership in such organization is an evidence of the country's outcome to the level of equal relations with major world powers. Joint efforts to combat religious extremism and international terrorism invariably meet the national interests of Kazakhstan.

In general, Chinese vector of the foreign policy of Kazakhstan is important in maintaining the power balance in the region, particularly in strengthening of Russia and the United States. However, this trend is objectively limited for Kazakhstan for security reasons. In contrast to Russian or Central Asian vector, here it is difficult to hope for big Kazakhstan initiatives, particularly in the field of economic integration.

9.1.3 Kazakhstan and countries of the Central Asian Region

Central Asian vector takes a certain place in Kazakhstan's foreign policy. Since obtaining its independence, Kazakhstan is a proponent of active integration in the post-Soviet Central Asia. Such initiatives are motivated by objective factors associated with geographic factor, economic and energetic interconnectedness of the region, once representing a single space.

In 2005, Kazakhstan applied to its Southern neighbors with a proposal for regional integration within the Union of Central Asian States (UCAS). As the basis for this initiative, the treaty of eternal friendship existing among Kazakhstan, Uzbekistan and Kyrgyzstan was proposed. On September 1–2, 2006 at the informal summit held in Astana with participation of the leaders of Uzbekistan, Kyrgyzstan and Tajikistan, Kazakhstan expressed a desire to become a regional trade and economic, investment locomotive.

As a possible variant of the development, Kazakhstan proposed creation of sectoral consortiums: water and energy, transport and food; and special border zones and joint investment institutions. Development of coordinated approaches to water and energy problems existing in the region is an important issue. Kazakhstan, along with Turkmenistan and Uzbekistan is a country with strong fresh water deficit, the main reserves of which are concentrated in Tajikistan and Kyrgyzstan.

For deepening the regional cooperation, this factor becomes increasingly important. However, despite the fact that Central Asian countries agreed to establish an expert group for developing the form of water use, affordable for all the countries, it has not led to signing of a mutually acceptable comprehensive agreement on this issue. Kazakhstan's initiatives found no support of all the participants and, first of all, of the main competitor for leadership in the region, Uzbekistan. In 2008, Uzbekistan refused to support the initiative of Kazakhstan in the regional integration.

Nevertheless, the countries of post-Soviet Central Asia remain strategically important (desired) partners for Kazakhstan in terms of strengthening its regional and national security. Effective opposition to international terrorism, drug traffic and illegal migration is possible only on the condition of integration of all participants. Politics of Kazakhstan in the region with all the successes and failures in many ways reflects the real geo-political potential of the country.

9.1.4 The USA as a strategic partner of Kazakhstan

The USA is also one of the most important partners of Kazakhstan in spite of geographic distance. Foundation for the cooperation was laid in 1994 when the "Charter on Democratic Partnership" was signed. This document demonstrates the importance which the USA gives to Kazakhstan in Central Asia.

The main significance of Kazakhstan for the United States is political and economic stability and predictability of the course. Economically, the United States are interested in the struggle for the spheres of influence in the Caspian region. Importance of Kazakhstan, in this sense can not be overestimated.

The United States made a number of steps to strengthen the economic partnership with Kazakhstan. "Contract of the Century" signed in 1993 between the Government of Kazakhstan and the US company "Chevron" gives the right to oil corporations of the USA to mine oil in the region of Tengiz oil field for about 40 years.

Owing to the active participation of American capital, Kazakhstan was able to become one of the leading exporters of energy resources. With the participation of "Chevron" and "Mobil" the oil pipeline of Caspian Pipeline Consortium was built and implemented in 2001. In June 2006, Kazakhstan joined the trans-Caucasus oil pipeline roundabout Russia: Baku – Tbilissi – Geyhan oil pipeline, the construction of which was possible mainly owing to political support of the United States.

Taking into consideration the key role of oil export in strengthening of Kazakhstan's state and growing role of Kazakhstan in ensuring global energy security, mutually beneficial cooperation with the USA in this sphere remains one of the main priorities and long-term factors in bilateral relationships. The objective of the economic policy of the United States is assisting in obtaining the economic independence by Kazakhstan, primarily by means of development of oil and gas industry, which must be provided with appropriate diversified and reliable transport system – the key to political sovereignty in the conditions of a special geopolitical position of Central Asian region. In the military-political respect Kazakhstan considers the USA as a partner for maintaining security in the region.

Thus, for Kazakhstan strategic partnership with the USA is an important tool for real diversification of foreign policy which contributes to the development of multi-polar geopolitical relations throughout the region. The USA is the only force able to hold the initiative of Russia and China in the region. One of the conditions is absence of coordinated anti-American policy of Moscow and Beijing. Otherwise, it is difficult to assume the developments and the ability of the USA to influence the situation in the region.

9.1.5 Strategic partnership with the European Union

Development of relationships with EU countries has significance similar to the United States for Kazakhstan. Kazakhstan and the EU have quite substantial experience of cooperation. Partnership and Cooperation Agreement dated by 1995 (PCA) is a major bilateral document aimed at developing political, economic and cultural ties between Kazakhstan and the EU. The document laid the basis for a constructive political dialogue and formed an open trade and investment regime between the parties.

A special role in the relations of the Republic of Kazakhstan and the European Union is given to investment co-operation. The EU is investing much in the raw material sector. Cooperation in the oil-gas and energy fields is dynamically developing. Kazakhstan in the mid 1990s joined the treaty on the European Power Charter, which strengthened mutual understanding with the EU in the matters of energy supply. Energy policy of the EU countries consists in both, use of existing pipelines, in which hydrocarbons are delivered to processing plants in Europe, and active participation in the process of oil production in shelf deposits of the Caspian Sea. Kazakhstan and the EU have mutual interests in diversification of oil pipeline system. In this sense, pipeline projects roundabout Russia: Baku – Tbilissi – Geyhan and Odessa – Brody – Polotsk have definite prospects.

The State program “Road to Europe” (2008) timed for 2009–2011 confirmed the continuity of the course for strengthening the strategic relations between Kazakhstan and the EU. The Program is aimed at entry of the Republic of Kazakhstan to the level of strategic partnership with leading European countries in political, economic and cultural fields.

One of the most noticeable successes consolidating the state image in the international arena became the OSCE chairmanship of Kazakhstan in 2010.

Thus, the European vector is an integral part of the multi-vector policy of Kazakhstan. The EU as a historical partner of the USA can rather be seen as allies in the region, since the interests of the EU and the USA are practically identical.

Thus, the multi-vector policy pursued by Kazakhstan achieved some success in diversifying foreign relationships of the country. The reverse side of the problem is inevitable competition between the main partners for strengthening the position in the region. The problem is sharpened by the fact that the interests of partner countries, in most cases meet. The main spheres of intersection of these interests are: the economy (the competition for raw materials and delivery routes), regional and international policies (non-coincidence of objectives and interests). The geographic closeness can become a decisive argument in the struggle for strengthening the position of a country (group of countries) in the region. In this sense, Russia and China are beyond comparison.

However, the multi-vector foreign policy enabled Kazakhstan to smooth the demographic problem. Regional and world leader states have equal dialogue with Kazakhstan. However, integration into the global system pushes Kazakhstan toward the potential sharpening of the demographic problem, because to a greater extent Kazakhstan is interesting to the partners as a source of raw materials.

Certainly, at this stage, Kazakhstan managed to extract obvious advantages of this situation. However, we must recognize that the influence of Kazakhstan is limited, there is even a risk of loss of control over the situation. In this regard, long-term conservation of the existing balance of interests is difficult to consider as the most likely scenario of geopolitical development of Kazakhstan.

Conclusion

Analysis of trends in demographic development of Kazakhstan over the past decade suggests a number of significant changes having strategic importance for the development of Kazakhstan: stabilization of population size and population growth, changing ethnic structure owing to the increase in the proportion of indigenous people. Increase of the share of Kazakhs was accompanied by a decline of the share of other ethnic groups, especially Russians. European ethnic groups in Kazakhstan for the most part have a negative natural increase, due to the relatively low fertility. This is due to the fact that ethnic groups are at different stages of demographic transition. In addition, the change the ethnic structure of the population was also contributed by the dynamics of external migration, accompanied by the outflow of Russian-speaking population.

Positive migration balance of Kazakhstan, having quite a stable trend in recent years is achieved by attraction into the country of ethnic immigrants. Ethnic Kazakhs are attracted in Kazakhstan mostly from Uzbekistan, China and Mongolia. At the same time, attraction of ethnic immigrants allows Kazakhstan to compensate the emigration losses associated with the outflow of Russian-speaking population. However, attraction of ethnic immigrants did not contribute to solving the problem of loss of skilled professionals. Balance of migration on educational level shows that Kazakhstan is losing specialists with higher and special secondary education. A similar trend is happening at a time when Kazakhstan is staking on socio-economic modernization, building of competitive society and competitive economy. Thus, the trends of out-migration actualize the problem of the relationship of quantity and quality.

In general, the dynamics of the major trends of population development, observed in the past 10 years can be assessed as favorable. However, the value of these changes should not be overestimated. In particular, long-term nature of the favorable trends in fertility should not be relied upon and a significant increase in population should not be expected.

Analysis of the main directions of population policy indicates that the state covers a wide range of issues, the most important of which are increase of fertility, support of motherhood and family, regulation of migration. However, not all existing regulatory mechanisms are effective in the view of the declarative character of the programs and documents. The existing system of support for mothers and young families needs revision. Without effective social protection it is difficult to count on long-term growth in fertility, decrease of mortality, increase of life expectancy. Kazakhstan was able to achieve significant changes mainly in the field of migration

policy. However, the principal and the unresolved contradiction of migration policy is the problem of achieving positive qualitative and quantitative results. Ultimately, this thesis can be applied to demographic policy in general.

Thus, the trends in demographic development of the country are an important factor that is significant to be considered when determining the priorities of the regional policy and economic development. However, in Kazakhstan, demographic factor till the present day is regarded (if we consider the results of the policy) for the most part in terms of nationwide interest. The state made significant changes in the ethnic structure of the population in favor of strengthening the integrity and independence. However, at the level of regional and economic policy, demographic factor is clearly underestimated. Economic development priorities presented by the state are at variance with the real demographic features of the country.

Heterogeneous regional development is an important problem for Kazakhstan. In demographic respect, clear polarization of the regions to prosperous and depressive was outlined. In the first case, the regions have a positive natural growth, provided by a relatively high intensity of fertility. In the second case, there is depopulation observed. Similarly, differentiation by age and ethnic structure of population is observed. Prosperous in demographic respect regions of Southern and Western Kazakhstan have a younger age structure, since ethnic Kazakhs and Eastern ethnicities dominate there.

The North, Center and East of Kazakhstan are the regions with a relatively high proportion of Russian-speaking population. During the period from 1999 to 2008 there was a decline in population density in most depressive regions, as well as decrease of their share in total population of the country. The decisive role in this change of economic structure was played by the changing economic structure of Kazakhstan, resulting in the crisis phenomena in the regions. Emigration of Russian-speaking population, which in most cases, at the regional level, could not be compensated at the expense of ethnic immigrants also played an important role. Interregional migration processes also sharpen the problem. Heterogeneous regional economic development is the main driving force here.

In the last decade the most dynamic economic development was observed for the oil fields in Western Kazakhstan, and the cities of Almaty and Astana, with a capital status, which became the centers of attraction of internal migrants.

The problem of regional development in Kazakhstan is a special concern of the state. However, despite the adoption of a range of programs and strategies for the development of the regions, significant changes were not achieved. Transition of the capital from Almaty to Astana was unable to reverse the situation. The positive effect of transition of the capital was made by a new development center in the North of the country, as well as by increase of the share of indigenous population in the region. One of the problems of regional development is the raw material character of the economy. In Kazakhstan, the increase in the proportion of raw material sector in the economy, the prospects for dramatic changes in the foreseeable future are objectively uncertain.

The problem lies mainly in the fact that Kazakhstan has rather limited human resources, both in terms of quantity and quality. Even for the maintenance of oil development Kazakhstan

has to attract foreign experts, not mentioning a large number of low-skilled labor migrant working in the construction sector.

Thus, one of the main challenges to the development of Kazakhstan's economy and, ultimately, depressed regions, expressed in huge potential and limited opportunities for its development is fairly obvious. A major step forward in this sense is rejection of the idea of heterogeneous development of the regions designated by the state. However, the model proposed for today, contradicts in some way to the indicated the idea.

With a favorable scenario, demographic factor may contribute to the development of an unlimited economic potential, otherwise the population of Kazakhstan may become one of the major factors limiting economic development. The trends in the population development of Kazakhstan indicate that the major positive changes in perspective should not be expected even in terms of population increase. This means that demographic factor would constrain economic development. Many countries, especially with an ageing population faced a similar problem. However, the distinct feature of Kazakhstan is that the country has enormous reserves of strategic resources and the demand for them is constantly increasing in the world. Constraining economic development in such circumstances can be difficult. At the same time, extensive development of the economy will inevitably require solving the problem of labor resources shortage.

In such circumstances, it is important to focus the priorities of the state primarily on the economic development of the regions depressed in demographic respect. The choice should be made in favor of the centers, perspective in industrial respect such as Eastern or Central Kazakhstan. It would balance the East/Center and the West.

In addition, it is very important to formulate an immigration policy focusing on the real needs of the regions in these or those qualified specialists. In this vein, it is important to distribute the immigrants (repatriates) with agricultural specialization in the regions where economies are specialized in agriculture. Especially as Northern Kazakhstan, being an agricultural region, has a lack of resources. In addition, it is important to develop more effective instruments of social support for young people and young families to maintain the favorable dynamics of fertility.

In general, the above mentioned demographic trends are mainly a reflection of the geopolitical changes that occurred in Kazakhstan since obtaining independence. Therefore, we can assume that the main trends of population development would progress in the determinants of the new geopolitical reality, the main features of which are strengthening of state sovereignty and modernization and integration into the global system.

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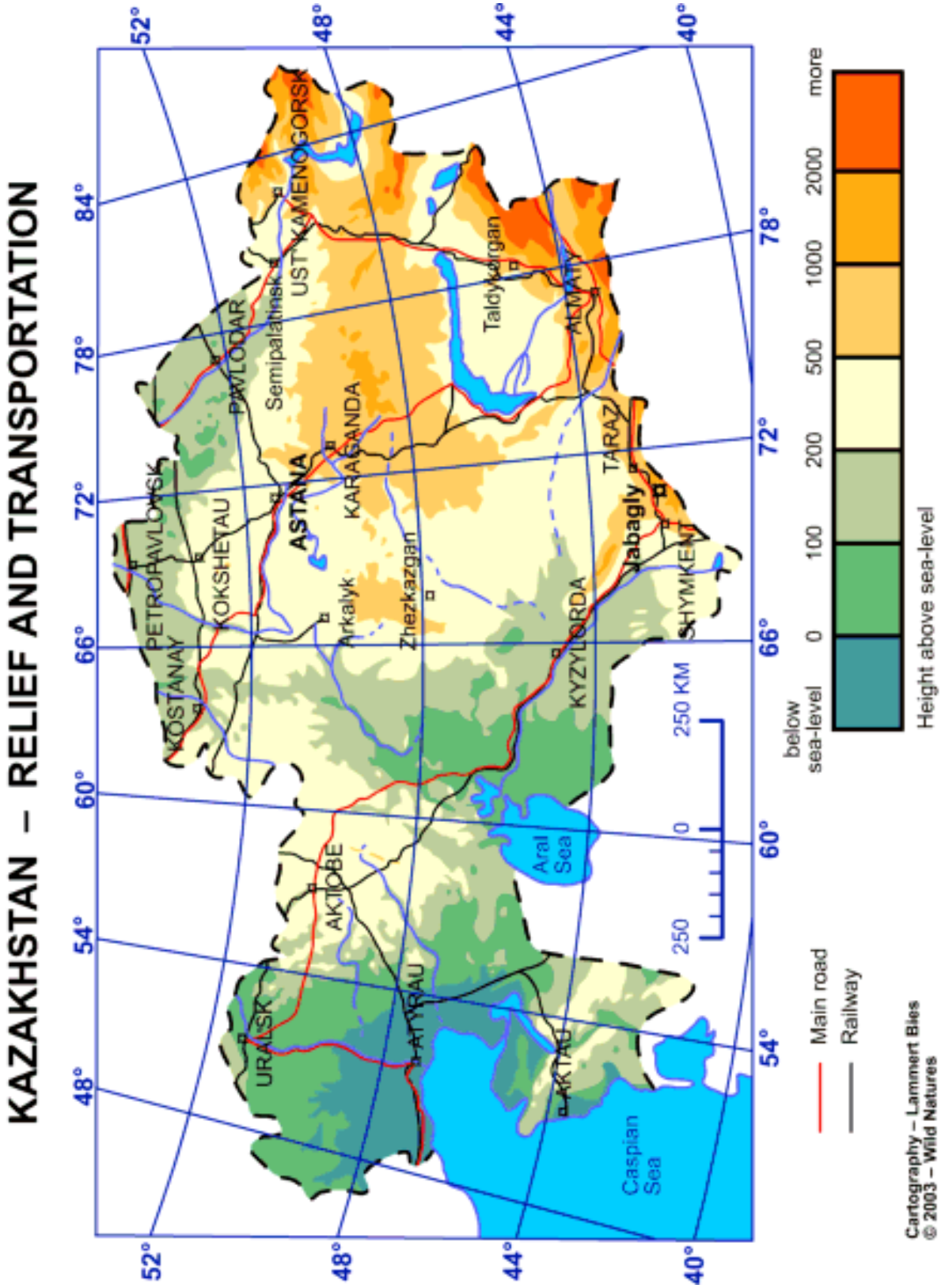
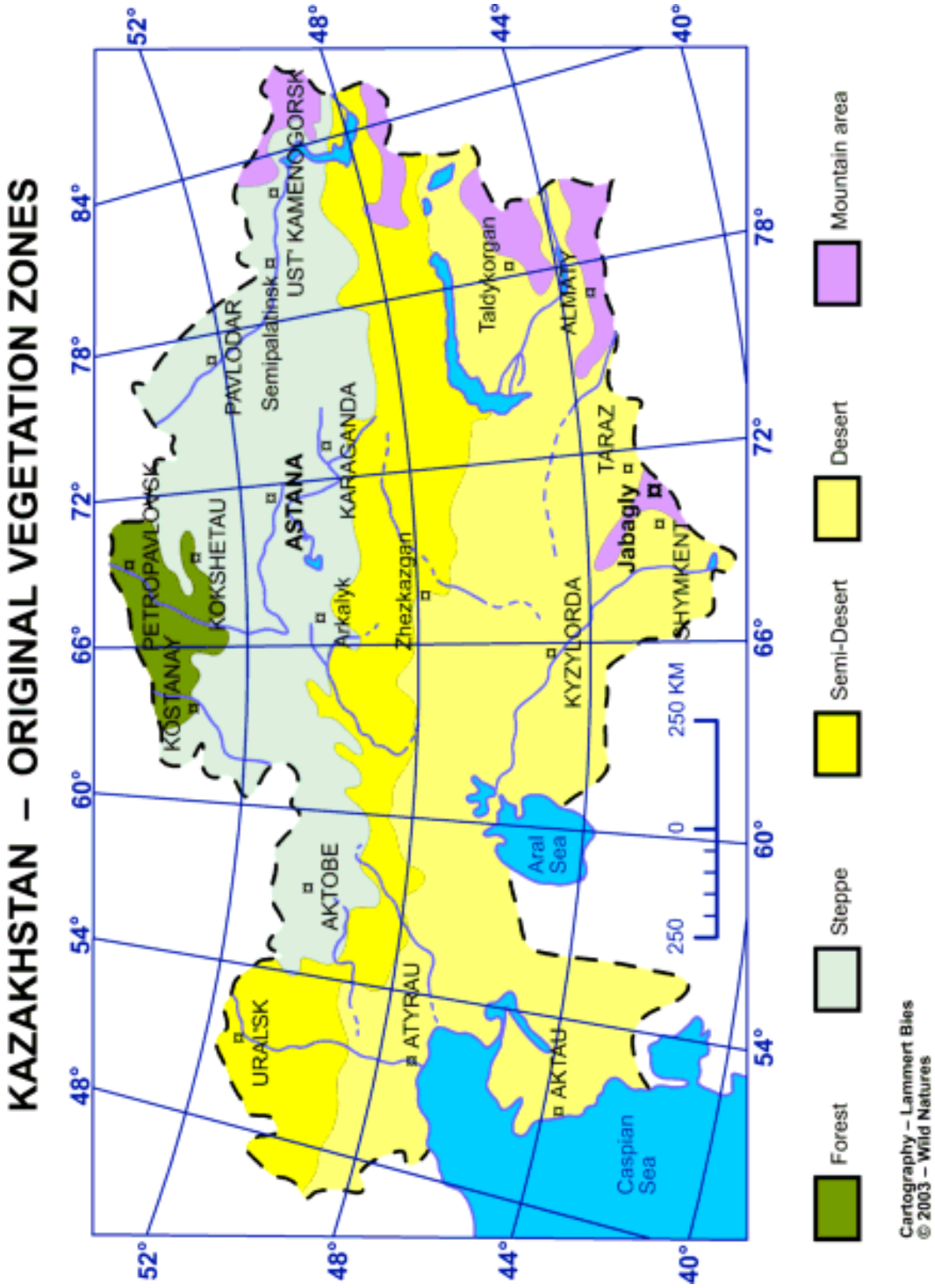
APPENDICES

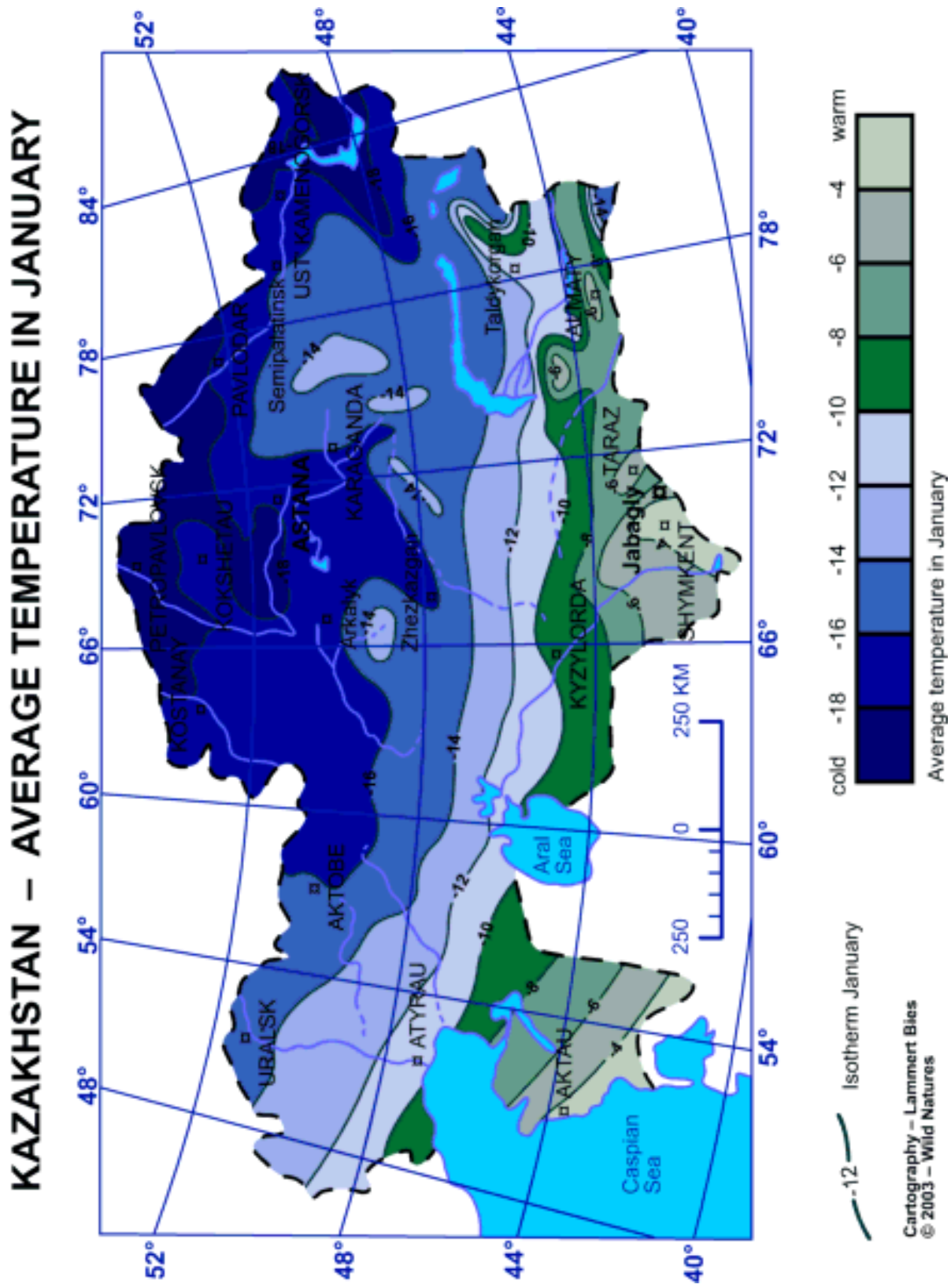
Appendix 1


KAZAKHSTAN – RELIEF AND TRANSPORTATION
52°
48°
44°
40°
84°
78°
72°
66°
60°
54°
48°
PETROPAVLOVSK
KOSTANAY
KOKSHETAU
PAVLODAR
Semipalatinsk
USTKAMENOGORSK
ASTANA
KARAGANDA
Arkalyk
Zhezkazgan
Taldykorgan
ALMATY
TARAZ
Jabagly
SHYMKENT
KYZYLORDA
AKTOBE
URALSK
ATYRAU
AKTAU
Aral Sea
Caspian Sea
250 KM
0
250
below sea-level
0
100
200
500
1000
2000
more
Height above sea-level
Main road
Railway
Cartography – Lammert Bies
© 2003 – Wild Natures

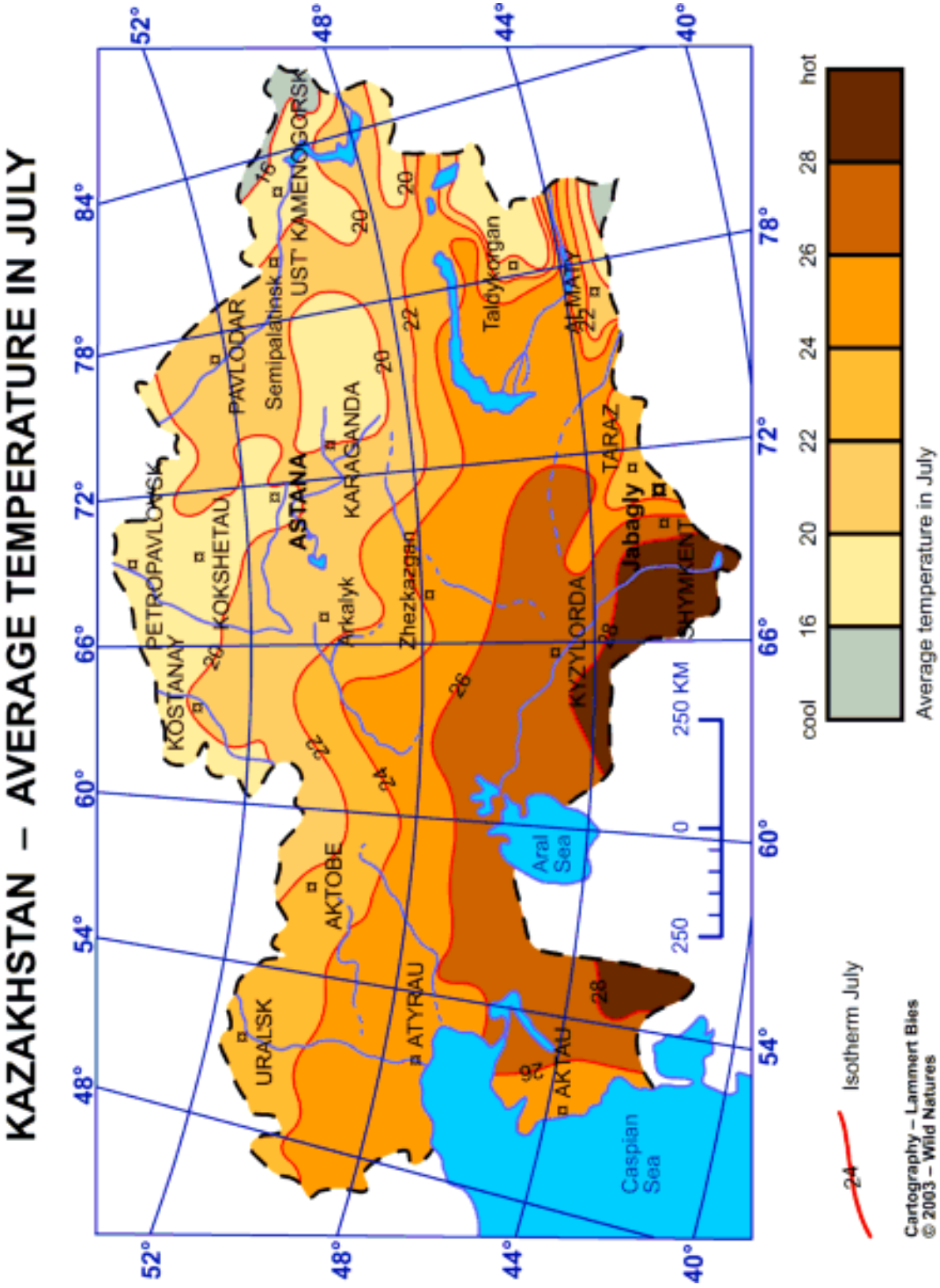
Appendix 2


KAZAKHSTAN – ORIGINAL VEGETATION ZONES
52°
48°
44°
40°
84°
78°
72°
66°
60°
54°
48°
PETROPAVLOVSK
KOSTANAY
KOKSHETAU
PAVLODAR
Semipalatinsk
UST' KAMENOGORSK
ASTANA
KARAGANDA
Arkalyk
Zhezkazgan
Taldykorgan
ALMATY
TARAZ
Jabagly
SHYMKENT
KYZYLORDA
AKTOBE
URALSK
ATYRAU
AKTAU
Aral Sea
Caspian Sea
250 KM
0
250
Forest
Steppe
Semi-Desert
Desert
Mountain area
Cartography – Lammert Bies
© 2003 – Wild Natures

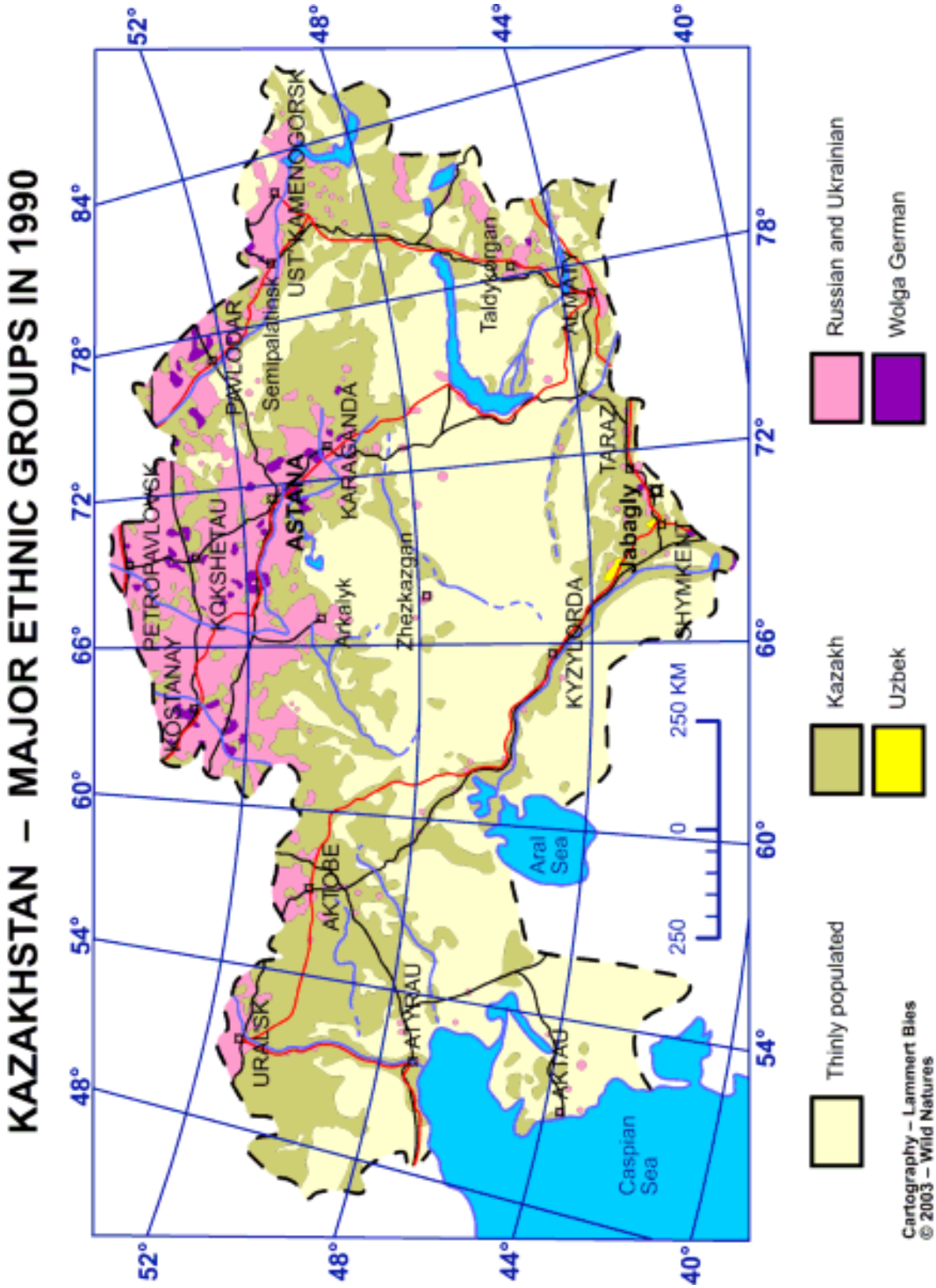
Appendix 3


KAZAKHSTAN – AVERAGE TEMPERATURE IN JANUARY
52°
48°
44°
40°
84°
78°
72°
66°
60°
54°
KOSTANAY
PETROPAVLOVSK
PAVLODAR
Semipalatinsk
USTKAMENOGORSK
KOKSHETAU
ASTANA
KARAGANDA
Arkalyk
Zhezkazgan
Taldykorgan
ALMATY
TARAZ
Jabagly
SHYMKENT
KYZYLORDA
AKTOBE
URALSK
ATYRAU
AKTAU
Aral Sea
Caspian Sea
250 KM
0
250
cold
-18
-16
-14
-12
-10
-8
-6
-4
warm
Average temperature in January
-12
Isotherm January
Cartography – Lammert Bies
© 2003 – Wild Natures

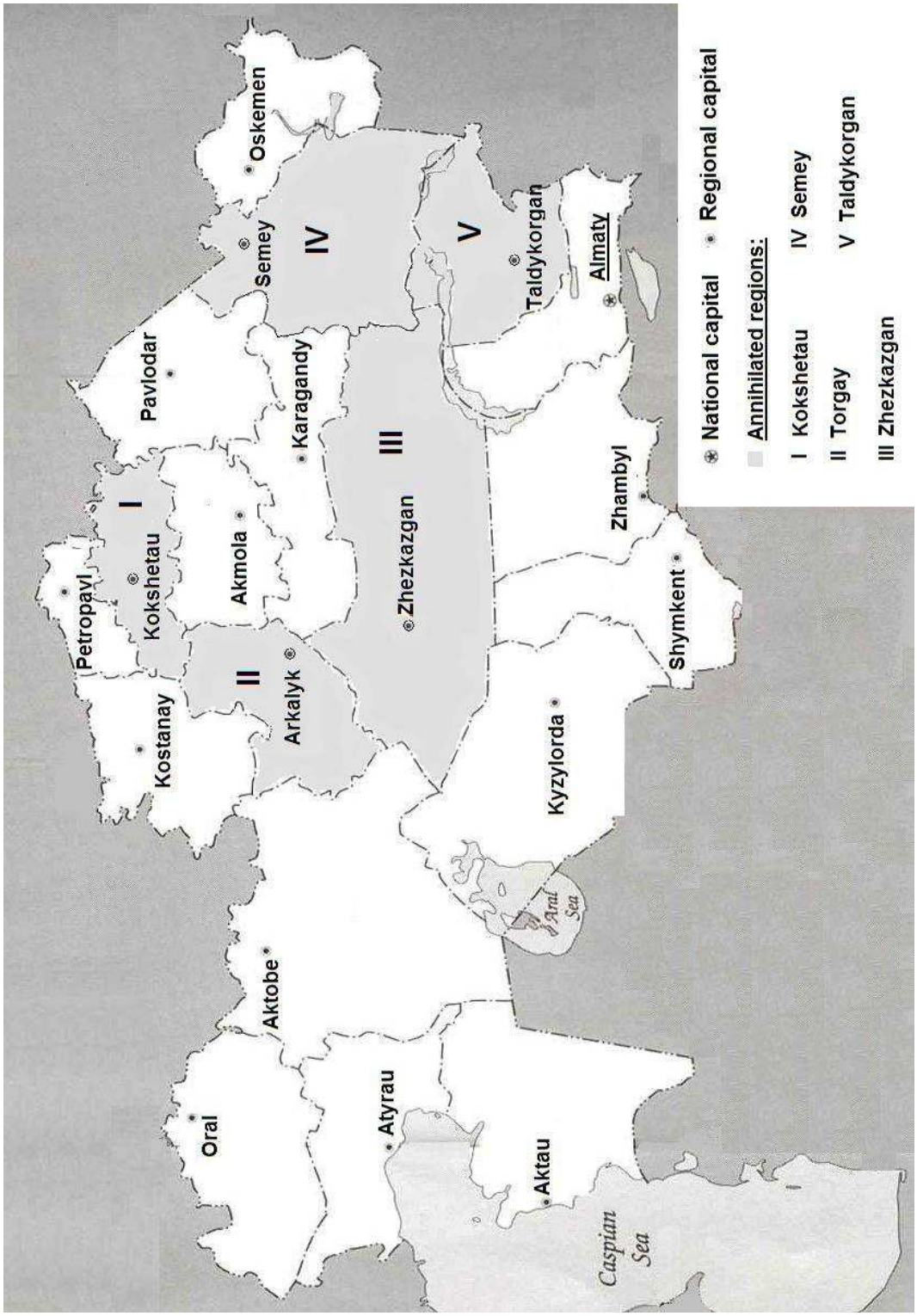
Appendix 4


KAZAKHSTAN – AVERAGE TEMPERATURE IN JULY
52°
48°
44°
40°
84°
78°
72°
66°
60°
54°
PETROPAVLOVSK
KOSTANAY
KOKSHETAU
PAVLODAR
Semipalatinsk
UST' KAMENOGORSK
ASTANA
KARAGANDA
Arkalyk
Zhezkazgan
Taldykorgan
ALMATY
TARAZ
Jabagly
SHYMKENT
KYZYLORDA
AKTOBE
URALSK
ATYRAU
AKTAU
Aral Sea
Caspian Sea
250 KM
0
250
cool
16
20
22
24
26
28
hot
Average temperature in July
Isotherm July
Cartography – Lammert Bies
© 2003 – Wild Natures

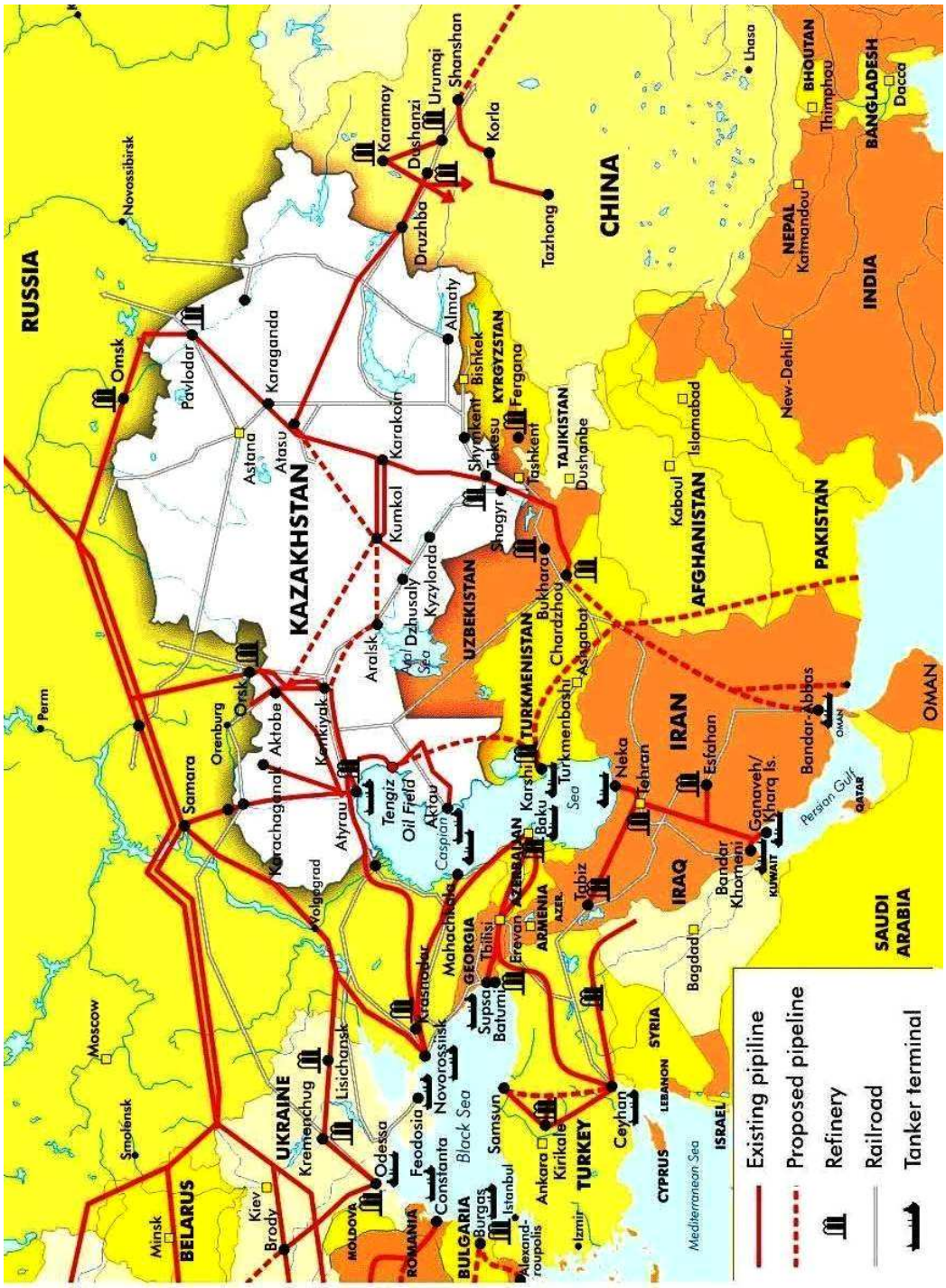
Appendix 5


KAZAKHSTAN – MAJOR ETHNIC GROUPS IN 1990
52°
48°
44°
40°
84°
78°
72°
66°
60°
54°
PETROPAVLOVSK
KOSTANAY
KOKSHETAU
PAVLODAR
Semipalatinsk
USTKAMENOGORSK
ASTANA
KARAGANDA
Arkalyk
Zhezkazgan
Taldykorgan
ALMATY
TARAZ
Jabagly
SHYMKENT
KYZYLORDA
AKTOBE
URALSK
ATYRAU
AKTAU
Aral Sea
Caspian Sea
250 KM
0
250
Russian and Ukrainian
Wolga German
Kazakh
Uzbek
Thinly populated
Cartography – Lammert Bies
© 2003 – Wild Natures

Appendix 6


Oskemen
Semey
IV
V
Taldykorgan
Almaty
Pavlodar
Karagandy
III
Zhambyl
I
Kokshetau
Akmola
Zhezkazgan
Petropavl
II
Arkalyk
Shymkent
Kostanay
Kyzylorda
Aral Sea
Aktobe
Oral
Atyrau
Aktau
Caspian Sea
National capital
Regional capital
Annihilated regions:
I Kokshetau
II Torgay
III Zhezkazgan
IV Semey
V Taldykorgan

Appendix 7


RUSSIA
KAZAKHSTAN
CHINA
UKRAINE
BELARUS
UZBEKISTAN
TURKMENISTAN
KYRGYZSTAN
TAJIKISTAN
AFGHANISTAN
PAKISTAN
IRAN
IRAQ
SAUDI ARABIA
INDIA
NEPAL
BHOUTAN
BANGLADESH
TURKEY
GEORGIA
ARMENIA
AZERBAIJAN
SYRIA
LEBANON
ISRAEL
CYPRUS
OMAN
QATAR
KUWAIT
Black Sea
Caspian Sea
Aral Sea
Persian Gulf
Mediterranean Sea
Moscow
Novossibirsk
Perm
Orenburg
Samara
Volgograd
Krasnodar
Novorossiisk
Lisichansk
Kremenchug
Odessa
Feodosia
Constanta
Burgas
Istanbul
Samsun
Ceyhan
Kirikale
Ankara
Izmir
Alexandroupolis
Smolensk
Minsk
Kiev
Brody
Onsk
Pavlodar
Karaganda
Astana
Atasu
Karakoin
Kumkol
Aralsk
Dzhusaly
Kyzylorda
Shymkent
Taraz
Bishkek
Almaty
Fergana
Tashkent
Dushanbe
Shagyr
Bukhara
Chardzhou
Turkmenbashi
Ashgabat
Karshi
Baku
Tbilisi
Yerevan
Tabiz
Neka
Tehran
Esfahan
Bandar-Abbas
Ganaveh/ Kharq Is.
Bandar Khomeni
Bagdad
Kaboul
Islamabad
New-Dehli
Thimphou
Dacca
Lhasa
Tazhong
Korla
Urumqi
Shanshan
Dushanzi
Karamay
Druzhba
Orsk
Aktobe
Kenkiyak
Atyrau
Tengiz
Oil Field
Aktau
Korachaganak
Mahachkala
Supsa
Batumi
Kiev
Brody
Minsk
Pipeline
Existing pipiline
Proposed pipeline
Refinery
Railroad
Tanker terminal