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Differentiation of marital and reproductive behavior in East Kazakhstan

Master Thesis

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Differentiation of marital and reproductive behavior in East Kazakhstan

Abstract

This study primarily addresses nuptiality and fertility patterns among youth in East Kazakhstan region. The data are obtained from censuses, vital statistics and survey “Marital and reproductive behavior of young women in Ust-Kamenogorsk”. The survey data collection has been supported by Center of International programs of Kazakhstan “Bolashak” and Charles University in Prague.

The aim of the thesis is to study marital and reproductive behavior in East Kazakhstan region, in particular, differentials by sex, age, nationality and place of residence.

Nuptiality and fertility rates have increased in the region during the study period. Hence, the impact of external socio-economic factors on marital and reproductive behavior of population was analyzed.

Keywords: Nuptiality, Marriage, Divorce, Fertility, Kazakhstan, East Kazakhstan region, Ust-Kamenogorsk, Youth

Дифференциация брачно-репродуктивного поведения на территории Восточного Казахстана

Абстракт

Данная работа прежде всего затрагивает процессы брачности и рождаемости среди молодежи на территории Восточно-Казахстанской области. В ходе написания работы были использованы данные переписей населения, текущей статистики и социологического исследования «Брачное и репродуктивное поведение молодежи города Усть-Каменогорска». Сбор полевого материала обеспечен при содействии Центра международных программ «Болашак» Республики Казахстан и Карлового университета в Праге.

Целью работы является изучение брачного и репродуктивного поведения в Восточном Казахстане, и, в частности, его дифференциации по полу, возрасту, национальности и месту жительства.

Во время изучаемого периода коэффициенты брачности и рождаемости в регионе выросли. Исходя из этого, возникает вопрос, насколько внешние социально-экономические факторы повлияли на положительные изменения в брачно-репродуктивном поведении населения.

Ключевые слова: Брачность, Брак, Развод, Рождаемость, Казахстан, Восточный Казахстан, Усть-Каменогорск, Молодежь

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Introduction

Increase of nuptiality and fertility levels: permanent or random event?

It was 14th August 2009 when the project of first Conception of Demographic policy and family consolidation in the Republic of Kazakhstan for 2010-2020 was presented in Almaty. It seems to me that in spite of its failure, this date can be considered crucial in formation of population policy in Kazakhstan. Yet not long ago issues of demographic development had inferior meaning in political decision making, and the words like "reproductive behavior", "marital age" and "life expectancy" were not fully comprehended by government officials. Nowadays, it has become very popular among politicians to use slogans such as "depopulation", "Russian's cross", "fertility decline", but whether they clear understand the heart of the problem and what stays beyond it is another question. As the last presented Conception showed they don't. However, the positive moment is that a lot of main issues were posed in this presentation, and the downside is that reasons and consequences of the current demographic issues were not included in there.

Therefore, first of all, a study of demographic situation in Kazakhstan from the scientific point of view has to be done, and only after then common development strategy could be formed. This kind of analysis should be multifold, concerning regional specialization, economical, political and social factors as well. I hope that this research will take its place among other demographic researches.

Nowadays, Kazakhstan is a dynamically developing country with young population and as a result having comparatively favorable indicators of nuptiality and fertility. In recent years qualitative changes in fertility patterns have occurred that delude politicians into thinking about direct connection between increase of population reproduction and increase of population income. An officially proclaimed trend is that youngsters prefer to get marry and have children because future is clear for them, they feel safety economically and they are ready to have family.

Another myth, which is wide-spread among officials, is a return to the traditionalism. However, we can actually observe spreading of traditions in everyday life, such as in wedding ceremonies and various birth and death rites. But how true are they? Are people really returning to their roots, or is it another what people do, so I do? Many people believe that Kazakhstan has a particular place in the world and it can overcome the demographic destiny of its nearest neighbors. And they think that all we have to do is to support such attitudes and continue to stimulate youth financially.

In this work I will try to analyze the real trends of marital and reproductive behavior on the basis of data from East Kazakhstan region and describe what can happen with it in the future.

The goal of the thesis is to characterize the pattern of women marital and reproductive behavior in East-Kazakhstan region and prospects of its development.

For achieving this goal it is necessary to investigate following objectives:

- To characterize nuptiality and fertility as demographic components of natural increase and objects of statistical study with their categories and indicators;

- To explore the character of nuptiality and fertility dynamics in the region;
- To reveal basic characteristics, patterns and peculiarities forming the level and structure of nuptiality and fertility of rural and urban population of the region;
- To analyze the current situation and explore trends of transformation of nuptiality and fertility in East-Kazakhstan region;
- To explore interregional differentiation of nuptiality and fertility considering socio-economical and demographic factors;
- To analyze factors, which determine nuptiality and fertility levels and structures;
- To compare model of marital-reproductive behavior of women in East-Kazakhstan region with other regions;
- To estimate future trends of nuptiality and fertility in the region.

In this case the object of the study will be marital and reproductive situation in East-Kazakhstan region and the subject will be demographic analysis of nuptiality and fertility, and their factors.

The research is based on the data from official statistics published in National Demographic Yearbooks, on the data from Censuses, on materials from Demographic collections of Statistical Agency of the Republic of Kazakhstan, and on the data from sociological survey "Reproductive attitudes of women in East-Kazakhstan region" published in 2003.

It seems that that there is a certain relation between marital behavior and reproductive patterns. If a person gets married earlier in his/her lifetime, then he/she will probably have higher reproductive orientation. Higher orientation to have a family refers to the fact that a person who gets married in younger ages has relatively high number of children. Correspondingly, weaker desire in family life leads to a postponement of marriage or the refuse of marriage and consequently having fewer children. In this research we will investigate the relationship between those two events: marriage and birth, and also we will explore how long the current positive trend in nuptiality and fertility rates will last and what changes face us in the future.

Outlines of the study

Characteristic of modern marital-reproductive situation of East-Kazakhstan region is the main issue of this work. And each chapter performs its clear function: methodological, retrospective, analytical and prognostic. The analysis is restricted to empirical character of the research and to availability of statistical data. The previous survey was taken almost five years ago and for this reason its results have limited character as well.

In the **first chapter** basic methodological issues are shown, such as definitions, existing theories, and relevant methods. When choosing relevant methods an important attention was given to data availability, and therefore, selection is limited to calculation of basic demographic indicators from cross-sectional perspective for hypothetical population. When choosing a relevant theory we analyzed official approaches as well as alternative views. The leading theory in our case is the

theory of the first and second demographic transition. However, one have to take into account that these theories may not always be applicable for situation in Kazakhstan.

The second chapter describes historical retrospective review of nuptiality and fertility of the region. In this chapter the following information is provided: the history of region appearance, basic demographic characteristics of the population in East-Kazakhstan region, historically developed peculiarities of marital and reproductive behavior of two major ethnos: Kazakhs and Russians. The culture of those nations had conclusive effect on the current demographic situation. Both ethnicities were dominant in different periods of time, but nowadays we can see their integration.

The third chapter analyzes survey data using the methods of demography. In this chapter, the picture of marital-reproductive behavior, which is observed in the region, is depicted. Also here we carry out an analysis of various socio-economical and political factors which can influence women behavior in East Kazakhstan. Generally, population is differentiated by number of factors, such as ethnic, territorial, economical, etc. Special attention is devoted to marital and reproductive attitudes of youth, because this category of population determines future population of any country.

Relevance and limitations of this study

Strictly speaking, this thesis is a continuation of the project called “Reproductive attitudes of women in East-Kazakhstan region” which was held in 2003 as a part of the research program «Strategy of demographic development of the East-Kazakhstan region” led by a group of scientists from the Demographic Research Institute. This has some positive and at the same time some negative moments for our research. The positive side is that this group gathered the basic data and made its analysis, so that we have some demographic data for comparison with the current situation. Moreover, we have an opportunity to monitor how the model of marital-reproductive behavior of women in East Kazakhstan progresses. The negative side is that there may be some divergence in the problem approach, since the previous group may have different methodology. Furthermore, the survey I conducted in 2009 was for a narrower group but with more issues in it.

Relevance of this work consists in an approach where reproductive behavior is examined with regards to marital behavior. Also the author uses sophisticated methods of demographic analysis including statistical software SAS. A comparative analysis of East-Kazakhstan region with other regions of Kazakhstan and its neighbor-country Russia, which influences the demographic situation in Kazakhstan indirectly, can give us a new vision of the problem.

The author supposes that, firstly, marital behavior of women influences their reproductive behavior significantly due to the important value of marriage in the society of Kazakhstan. Secondly, positive changes in number of events of recent years are related to a younger population structure than to changes in reproductive attitudes. Thirdly, factors like ethnicity, education and place of residence have exceptional importance in differentiation of women behavior. Thus, the author assumes that the lowest indicators of fertility will have Russian women which live in cities and have university education. Fourth, there is new tendency of ruralization of marital-reproductive

behavior taking place in cities, which is related to intensive migration from countryside to satellite towns, mainly to Ust-Kamenogorsk and Semey. Fifth, demographic behaviors of two main ethnicities in East Kazakhstan region differ significantly from demographic behaviors of these ethnicities living in other regions. Particularly it differs from behavior of Kazakhs staying in South Kazakhstan region and Russians living in Russia.

The question of the family future stays open. We don't know to what extent the population will adapt Western model of marital and reproductive behavior. At present, Kazakhstani women become closer and closer to European ones in their behavior. Women's desire for higher education, increase in an average marriage age, decline of fertility and rise in the number of incomplete families confirms our assumption.

Chapter 1

Theoretical framework

1. 1. Overview of the literature

The research of new birth rate tendencies and family and marriage transformation fits into the context of one the most heated intellectual disputes of the modern developed world and that is the future of family and birth rate. The problems of conjugality and birth rate were widely considered in the Soviet and later in Russian literature and in the research of western scientists was well. And since recently it has been also given more consideration on these issues in Kazakhstan.

The subject area of population's reproductive behavior within the general birth rate issue started to attract attention of many scientists since the second half of the 20th century. A series of project was published in the fifties, introducing methods of birth rate measurement, designs of marriage reproductive performance (P. Karmel, J. Hajnal, J. Bourgeois-Pichat), parity progression ratio (L. Henry), cohort method (P.K. Whelpton, L. Henry, N. Ryder), children's number expected factors (P.K. Whelpton, R. Freedman). Special sampling survey was started like the family survey in England in 1946 under the guidance of D. Glass and the research of social and psychological factors related to fertility behavior. Since this time the research practice has been extending and by the sixties they covered all economically developed and some developing countries. Extensive surveys and comparative researches have appeared concerning the birth rate dynamics and differentiation with the use of apparatus critics of sciences neighboring demography - sociology, psychology, ethnography and etc.

Within the area of neoclassic political economy they are working out "economic theories of fertility and household", concepts of "importance and value of children" based on the interaction of economic and demographic process. In the point of view of one of the authors of the given direction named as G. Becker, "the family reproductive activity can be considered as the variety of consumers' behavior and children as goods". In view of this the central position of reproductive behavior research is the characteristics of economic motivation of need in children, influence of family income level, human time factor, housing conditions, education expenses, medical service and social insurance presenting "real level of demand in children" in the result. Other researchers which works worth to mention in this field of study are Schultz T., Willis R., De Tray D., Benham L., Mincer J., Leibowitz A., Gronau R., Nerlove M., and others. The work of Gary Becker and others initiated contemporary research on family economics with the application and extension of microeconomic theory and empirical methods.

Throughout the 1970s and 1980s, when public discourse centered on the future of the "family", researchers studied cohabitation, childbearing outside marriage, alternative life-styles and high rates of divorce. Today family researches study these same subjects, sometimes using different language

(e.g. union formation, gay and lesbian partnerships), and with particular emphasis given to their effects on children.

Theory of the second demographic transition

The central theory of significant demographic changes is the theory of "first demographic transition" (FDT) or "demographic revolution". Though in many western countries due to fall in the level of fertility below replacement level, it developed into the theory of the "second demographic transition" (SDT). The SDT brings sustained sub-replacement fertility, a multitude of living arrangements other than marriage, the disconnection between marriage and procreation, and no stationary population. Western populations face declining sizes, and if it were not for immigration, that decline would have started already in many European countries. In addition, extra gains in longevity at older ages in tandem with sustained sub-replacement fertility produce a major additional ageing effect as well. This ageing cannot be fully compensated by "replacement migration". Instead, multi-ethnic societies come into existence (Lesthaeghe).

Lesthaeghe supposed that the answer to the question whether the SDT can spread beyond Western societies and cultures is probably positive. Just like the FDT in many developing countries benefited from communication revolution, so will also the diffusion of the SDT be enhanced by global communication and by the power of "developmental idealism".

After the collapse of the Soviet Union, Kazakhstan as other post-soviet countries faced demographic crisis and such demographic indicators as fertility level, age at first childbearing, divorce rate etc came close to the level of western developed countries. At the same time, mortality level had become much higher than in previous periods. In the beginning of the 21th century almost all indicators has improved, and the risk of depopulation passed for the moment. However, the situation of marital and reproductive behavior in East Kazakhstan region, particularly in Ust-Kamenogorsk, which are objects of our study, differ substantially from the demographic situation in Kazakhstan as a whole. This is related to high concentration of Russian population in the city and the region. Proceeding from this, we want to assess pros and cons of SDT in this region.

According to van De Kaa SDT it has the following main features:

• Substantial decline in period fertility, partly resulting from postponement of births, so that (estimated) cohort fertility of currently reproducing women is expected to reach a maximum value well below replacement

• Substantial decline in the total first marriage rate associated with an increase in mean age at first marriage

• Strong increase in divorce rate (where allowed) and in the dissolution of unions

• Strong increase in cohabitation, even in countries where this was not a traditional practice

• Strong increase in the proportion of extra-marital births

• Catalytic shift in contraceptive behavior with modern means replacing traditional methods.

Let's start from the decline of fertility. It is, obviously, possible for women in Western Europe to have 75% of their births after age 27. On the postponement side we should place social and economic factors associated with prolonged education and longer career building time in

deregulated labor markets. However, to these "mechanical" (e.g. prolonged study periods) or structural factors also cultural features can be added such as greater aspirations for self-realization, a greater tendency to keeping an open future, or higher consumption and leasure aspirations. The former are typical structural features of post-industrial societies, whereas the latter are more closely connected to the expressive values orientations. Together these two sets of factors have a negative effect on fertility operating via their postponement effect. Equally classic is that the postponement of parenthood follows in the wake of rising ages at marriage, particularly when out-of-wedlock fertility is low. However, shotgun marriages and births in the first 8 months of marriage may become more frequent, as is already true for Japan (Lesthaeghe).

TFR level (2007) is 1.8 in East Kazakhstan region, which is one of the lowest in the country. And it is that low even though the last decade had better situation than "post-perestroika" period. Mean age at childbearing in urban areas of East Kazakhstan region increased from 25.6 in 1999 to 27.4 in 2007 (Figure 22). Although there is no available data of mean age at first childbearing, we can state that mother's age at childbearing has increased. Female urban residents of East Kazakhstan have almost 60% of their child births after age 25 (Table 4). There is an increase in the absolute number of the first child during 2003-2007, while the number of second births has decreased (Table 5). Moreover, considering that majority of female respondents indicated job and work as their priority values, it seems clear that value of family, which was third popular value, has conceded to self-actualization.

Marriage has preserved its leading position as an institute for family formation in Kazakhstan, as well as in East Kazakhstan region. Furthermore, marriage has still remained the predominant precondition for procreation. Also cohabitation and extra-marital births are rare. Another feature is the absence of home leaving in favor of independent single living or in favor of premarital cohabitation. Here, situation in Kazakhstan is similar to Japan or countries in Southern Europe, though these countries entered SDT by other indicators. Lesthaeghe explains this through D.Reher's (1998) theory, which says that distinction between the historically "strong family system" of Southern Europe and the traditionally "weak" one of Western and Northern Europe.

In the "weak system" children can leave the parental household before marriage, and then they fend for themselves in an interim period of celibacy prior to marriage. Historically, they became servants, apprentices, landless and/or seasonal laborers, industrial workers, soldiers, seamen, or clergymen. In contemporary Northern and Western Europe, welfare provisions still stress this earlier independence via sufficient student housing, scholarships, student transportation subsidies, youth unemployment benefits and employment programs, and even guaranteed minimum incomes for single persons older than 18 and no longer living at home. The result is still earlier home leaving for independent living, sharing or cohabiting. Even men learn to stand on their own feet, also when typical household tasks are involved. Greater gender symmetry also fosters higher female employment rates, and vice versa. The household standard of living is based on dual incomes, but women can take off spells of time for family reasons (e.g. maternity leave, optional leaves for child-raring or caring for sick partner or parent, etc).

In the “strong family” type, familial ties and solidarity – even allegiance to alliances of families as in Southern Italy - are more persistent throughout life. Men and women only leave the parental family to marry, and sons can even bring their wife into the parental home. Men are looked after by their mother and then immediately thereafter by their wife. The old gender roles persist and men stay away from housework. Furthermore, the family bonds continue to function throughout life, both between siblings (e.g. in business) and between generations. Older people are still taken in by their children. Even when most couples want to become home-owners relative high housing costs tend to retard the departure. The overall outcome has been that home leaving is much later than in Western and Northern Europe, and that there is little cohabitation or fertility among unmarried couples. Instead, young adults continue to live in their “guilded nests” provided by caring parents. And for women, motherhood also means dropping out of the labor force, not only because this is to be expected from a “good mother”, but also because child care facilities are scarce and the returning to an earlier job more difficult. Opportunity costs are hence increased as a consequence of the persistence of old role patterns and inflexible labor markets.

Increase of migrational flows of rural youth into cities not only furthers independence of these youngsters, but also let new forms of relationships besides marriage to appear. Cohabitation is still impossible for many of young couples, but LAT (living apart together) is becoming very popular.

Another side of marriage is divorce. Countries that entered SDT have high rates of divorce. In fact, marriage as a status is itself also considerably less attractive than around the mid-1960s when almost everyone ever entered into it. There is really no industrialized country at all where total first marriage rates have not declined and an increase in the mean age at first marriage has not been documented. There is variation in timing and speed. Despite increasing divorce rate in East Kazakhstan, marriage has not lost its attractiveness yet. Mean age at marriage is 24.3 (Figure 28). Crude marriage rate has not changed much, cities has enjoyed higher rates due to increased flow of migrants, and exceeded rates in rural area. So we can conclude that SDT has not occurred in this field yet.

There is no official data for use of contraceptives for East Kazakhstan region. So, only the results from our survey help here (Table 11a,b). First of all, we can say that youth uses contraceptives very often, and urban residents are more experienced and diverse in using them. The proportion of couples in the reproductive age groups using contraception to prevent a pregnancy is high enough. At the same time the more traditional means of contraception were driven out by more effective means and methods. Since the survey was conducted among youth, sterilization was not a popular contraceptive mean among them. 56.8% of female respondents used contraceptives with married relying heavily on the IUD, while single the condom and the pill are preferred. So, we can say that female youth plans its pregnancy, and has sex not with aim to implement reproduction.

The most typical distinction which makes East Kazakhstan region and Kazakhstan different from other countries that entered SDT is high morality and low life expectancy. Lesthaeghe claims that where an increase in life expectancy has not occurred - as is the case in a number of former socialist countries - it can clearly be blamed on crisis conditions, the lack of proper medical care

and services. The lifestyle in these countries probably was a contributing factor. Meslé specifically mentions dietary habits based on heavy consumption of pork and animal fats, and increases in alcohol consumption and cigarette smoking as contributing to a widening of the gap in life expectancy between these and the other industrialized countries. In the latter countries the end of the improvement in life expectancy is not yet in sight. Nizard (1997) has, in fact, argued that a fourth phase of transition has just begun. A phase during which mortality from malignant tumours will decrease and the incidence of such illnesses will decline as a consequence of improved nutritional information. But at present Kazakhstan is behind European countries by these indicators.

Hence, it is still early to say that East Kazakhstan entered SDT phase, although there is a tendency for establishing small families and increasing independence of young women, which seek their career, and this may lead to decrease in fertility. Besides SDT there are also a number of other theories of low fertility, such as rational choice theory, risk aversion theory, post-materialist values theory and gender equity theory (P. McDonald), which can explain low fertility.

Significant contribution to the decision of methodological problems of marriage in the Russian historiography was made by scientists-demographers: Y. L. Bessmertnyi, G.A.Bondarskaya, E.K. Vasiljeva, A. G. Vishnevsky, S. I. Golod, O.V.Grinina, L. E. Darsky, I.P. Iljina, O. A. Kvitkin, and M.S.Mackovsky.

Many foreign scientists did and are still doing various researches of family formation process and marriage stability and among them Hungarian scientist E. Bacso and polish L. Stecky and O. Plankova and others.

The problem of reproductive behavior was under a big study in the soviet historiography. Moreover the principal theme of demographic research is presented by the study of birth rate decrease reasons and factors (V.A.Borisov, L.E.Darsky, B.C.Urlanis), the cohort analysis method comes to customary (V.S.Steshenko, R.I.Sifman), and marriage researches (L.E.Darsky, M.S.Tolc, A.B.Sinelnikov) and reproductive guidelines (V.A.Belova) are displayed.

The changes in birth rate character in the current period made necessary the designing of new methods of its measurement. The process research in real generations turned out to be the most effective by so called cohort method, introducing the following development and perfection of the anamnestic method cultivated by G.A.Batkis and V.V.Paevsky. R.I.Sifman was one of the first ones who recreated the practice of anamnestic research.

Birth rate development peculiarities of some nations were the subject of research of G.A. Bondarskaya «Rozhdaemost v SSSR (etnodemograficheskii aspekt)». The project of Gerasimova M.A. «Struktura semji» “Family structure” researches the formation process and family demographic structure on the basis of material of social economic sampling family research of Kostroma city conducted in 1969-1970. The monograph presents family research stages in the soviet historiography; family typology by kinship signs, by demographic types and by the number of family members, peculiarities of age related sexual structure of essential family types; interrelation of conjugal state and family structure; factors influencing the family distribution according to the size and others.

In whole, the theory of reproductive behavior was developed in the soviet demography in the seventies that indicates on the qualitative new approach to the given range of problems. Sociological demographical investigations on reproductive subject played a significant part here.

Later theoretical and methodological problems of reproductive behavior were discovered in the A.I. Antonov's research "Birth rate sociology". This author was the first one who set forth the theory of reproductive behavior on the basis of soviet and foreign research materials, discovering its norms, policies, causes and other subjects. In addition he made an attempt to give definition to birth rate decrease and to determine the demographic policy measures according to its stimulation. In this way, there is a big attention given to questions of reproductive and self-preservation behavior in the tutorial of V.M. Medkov named as «Demografiya» ("Demography")

The book of S.I. Golod «Semya i brak: istoriko-sociologichesky analiz» ("Family and marriage: historical sociological analysis") was devoted to the analysis of family development regularity, to the classification of historical types and family values like intimacy and autonomy. The change of policies in respect of children' importance appears in the given project at the consideration of questions of marriage, sexuality, procreation.

The so called opinion researches on the family size were attempted in different countries in the twenties and thirties of the 20th century. One of the first researches was made by the workers of Kharkov University. The survey results of 119 peasant women allowed to make a conclusion that the need of a woman in a child at the presence of a small number of children is quickly decreasing.

In 1936 the American Institute of Public Opinion entered upon the regular national-wide polling of men and women about the ideal family size. In 1965 and 1960 in the USA they implemented national-wide polling on the extensive research program of "American family development" (GAF-1, GAF-2 - opinion survey about the number of children and after 5 years period the degree of their realization on selection, representing the population of the whole family). Along with the ideal number of children the desired number revealed at the successful family conditions and an expected number of children. Similar researches were conducted in 30 countries approximately.

Since the beginning of 1960-ies KAP – researches in Asia, Africa and Latin America have been developing broadly where they investigated the policies of child sex and motives of child birth in a family. A distinctive peculiarity of these researches was the conduction of experiments in the developing countries directed on the education of respondents for methods of contraception and birth regulation.

In soviet science the opinions on family size were systematically observed since the middle of the 1960s within the direction of "birth sociology". Since 1969 they conducted regular all-USSR polls of women on expected number of children and indicators of preferred number of children. In the 1970s with the appearance of the reproductive behavior theory in a more developed form, they organized sociological demographical researches of new type. For understanding the reproductive behavior mechanism the information on all of the behavior components was needed: the needs in children, family conditions for its realization, value orientation of individuals (as criteria of valuation of reproductive situations). The Center of MGU on population's problem research

fulfilled investigation by the united program (including questionnaire with more than 600 questions) in 1976 and 1978 in Moscow and in Vilnius in 1976.

It's should be noted that Russia was later (in 2002) included in a big international project named as "Generations and Gender Project" implemented by the consortium of many leading foreign exploratory demographic centers coordinated by the European economic commission of UN. The Generations and Gender Survey (GGS) is one of the two pillars of the Generations and Gender Programme designed to improve understanding of demographic and social development and of the factors that influence these developments. Institute of Demography (IDEM), Higher School of Economics (Moscow) continues to take part in this project (its scientific director in Russia is S. Zacharov) in a close cooperation with the Independent Institute of Social Policy (Moscow) and Max Plank Institute for Demographic Research (Rostock, Germany). The Russian side was entrusted to do the approbation of the essential questionnaire (conducted in 2002) by the result of which they made changes to the structure and content of the questionnaire that became the basic one for all of the countries participants of the project.

In summer 2004 within the GGP/GGS project in Russia the essential poll of population was held by the national representative sorting. The research was conducted by the Independent Institute of Social Policy (Moscow) at the financial support of the Pension Fund of the Russian Federation and Max Plank Institute for Demographic Research (Germany). In summer of 2007 they performed the second wave of GGS in Russia at the financial support of the Pension Fund of the Russian Federation. The volume of selection like in the first wave made up more than 11 000 of respondents of both sex aged from 18-79 in 32 regions and 7.5 thousand respondents out of them (about 70%) were questioned in 2004 and 2007

The key features of the survey include panel design, multidisciplinary, comparability, context-sensitivity, inter-generational and gender relationships. The survey applies the life course approach, focusing on the processes of childbearing, partnership dynamics, home leaving, and retiring. The selection of topics for data collection mainly follows the criterion of theoretically grounded relevance to explaining one or more of the mentioned processes. A large portion of the survey deals with economic aspects of life, such as economic activity, income, and economic well-being; a comparably large section is devoted to values and attitudes. Other domains covered by the survey include gender relationships, household composition and housing, residential mobility, social networks and private transfers, education, health, and public transfers. The GGS questionnaire is designed for a face-to-face interview. It includes the core that each participating country needs to implement in full, and four optional sub-modules on nationality and ethnicity, on previous partners, on intentions of breaking up, and on housing, respectively. The participating countries are encouraged to include also the optional sub-modules to facilitate comparative research on these topics.

Unfortunately Kazakhstan did not take part in the GGS survey, whereupon we don't have an extensive base on the given range of problems. Separate researches of reproductive behavior were made by the regions but there is no all-kazakh data. It was Yesimova A.B. who studied the birth

rate problems in the South Kazakhstan region. The reproductive policies of women in East Kazakhstan were researched by the group if scientists demographers under the direction of Alekseyenko A.N. It was this research that became fundamental for data comparison and conduction of analysis in the given project.

On the modern stage within the international program of medical demographic researches assigned to get and analyze the information on birth rate, family planning, mother and child health the Kazakh Academy of nutrition conducted medical demographic research in 1995 and 1999 at the technical support by Macro International Inc (USA) and at the financial one by USAID in Kazakhstan. It was the first research of demographic situation and health condition conducted on the all-national level using methodology of social survey, that allowed to separate out regional ethnic age related peculiarities of child-bearing process and to get data on such little-studied questions as reproductive health and nutrition of women and children, the practice of breast feeding, contraception use and others. The survey results were used later in at the program development in the sphere of public health of the Republic of Kazakhstan.

1.2. Definition of marriage, its types, forms and functions.

The family is one of the fundamental social institutions in all societies, and such processes like marriage and birth form our imagination about it. But the definitions of the family and connected processes vary from place to place and from time to time. This section discusses theoretical issues in studies of marriage. It begins with the problems that arise in attempting to define the marriage. Next it describes the social institution of marriage, its legal structure, and key features of the institution.

Marriage is a legal contract between two individuals to form a sexual, productive, and reproductive union. Through the marriage, this union is recognized by family, society, religious institutions, and the legal system. Marriage defines the relationship of the two individuals to each other; to any children they might have, to their extended families, to shared property and assets, and to society generally. It also defines the relationship of others, including social institutions, toward the married couple (Linda J. Waite).

The marriage in demography is determined as “a historically provided, sanctioned and socially regulated form of relations between a man and a woman determining their rights and duties against to each other and children” (demographic dictionary).

Karl Marx wrote that the relation of a man to a woman is the natural relation of a human to a human. All these relations called as demographic ensure the stability of the process of population reproduction and its continuous renewal. The key features of marriage include a legally binding, long-term contract; sexual exclusivity; coresidence; shared resources; and joint production. Spouses acquire rights and responsibilities with marriage, enforceable through both the legal systems and through social expectations and social pressure. The marriage state supposes definite conditions of marriage and the order of its conclusion showed in various forms of marriage. By the use of the

institution of marriage the social economic interdependence of demographic process became apparent. For example, demography investigates the influence of the fact of marital status on birth rate, its duration and firmness, the frequency of marriages of people of both sex and different age, the age of marriage, the marriage number and marriage experience. In addition, the character of changes is observed that are taking place in all these processes under the influence of life conditions in different systems of social relations (Demographic dictionary).

By the legislation of the Republic of Kazakhstan the marriage is defined as a free, voluntary and equivalent union of a man and a woman based on sense of love and respect concluded for creation of a family and generating mutual rights and duties of spouses.

Scientists of jurisprudence give different definitions of marriage of not only terminological character, for instance Nechaeva A.M. believes that marriage is the union of a woman and a man concluded for life in principle to create a family. But not each cohabitation of a man and a woman is considered to be a family. In the opinion of Belyakova A.M. marriage is juristically free and voluntary union of a man and a woman directed on creation of family and generating mutual rights and duties. Marriage is based on sense of love, real friendship and respect.

Hungarian scientist Basco E. suggests that marriage is equivalent, free and lifelong voluntary union of a man and a woman for creation a family and generating rights and duties. One of the most original ones is the definition of marriage given by polish scientist Stecky L. In his opinion marriage is admitted and juristically regulated union of a man and a woman characterized by firmness and harmony of relations between them.

Bessmertnyi Y.L. separates three forms of marriage: religious, civil and factual. In his opinion their structure in whole, number of marriages and in different social stratum changed on various stages of historical development. It should be noted that forms named don't just characterize the order of marriage but represent marks of development and perspectives of this social institute.

The above listed marriage forms depending on can be socially approved or condemned can coexist or collocate with each other. It's possible to suggest conditional classification of marriage functions, though the conditionality is defined by a range of subjective moments and firstly by the nonequivalence of functions:

Institutional function. The enactment of marriage law and the appearance of connected with it jural relationship between spouses was historically logical and progressive event regulating marriage forms and property relations there. Marriage registration involves rights and duties of not only spouses but the government's creating the potential possibility of governmental security and support of marriage and family;

Economical function of marriage. Initially it was the result of sexual and age-related division of labor and had a character of mutual aid in support of children and old relatives; and is directed to its increase at the classes connected with private property;

Demographic function. The main reason of social and moral regulation of relations between sexes is the fact that they directly define the character of population reproduction;

Function of initiation. That is when marriage state is the social norm and marriage is one of the signs of social maturity and adequacy of a human and it is significantly showed at the early conclusion of marriage;

Sexual function. The given function is particularly important at the social disapproval of extramarital sexual relations. At present, as a rule it is of great importance at early marriage in urban society;

Emotional function. Marriage supposes not only the external but internal incentive as the expression of human's individuality. At present its significance in marriage is the highest, however due to many scientists' opinion it leads to mass instability of marriages as the emotional function is the last to come under regulation.

As we said before, the criteria of marriage effectiveness is not some sort of external circumstance (for example its duration) but internal power of unity that saves marriage. Its further fate, the quality of family created on its base and population's conjugal state as well depend on what function of marriage was the most important at the conclusion of marriage and how the function's correlation changed in the course of marriage.

As a result of the features just discussed, marriage has an impact on the behavior of spouses and thereby their well-being. The specialization, economies of scale, and insurance functions of marriage, all together increases the economic well-being of family members, and the increase is typically quite substantial. Generally, married people produce more and accumulate more assets than unmarried people (Lupton and Smith 2003). Married people also tend to have better physical and emotional health than single people, at least in part because they are married (Mirowsky and Ross 1989; Waite and Gallagher 2000). The social support provided by a spouse, combined with the economic resources produced by the marriage, facilitate both the production and maintenance of health.

Particularly I would like to define the "marital behavior" concept. Marital behavior is the behavior aimed at satisfaction of need in marriage, the behavior connected with the choice of marital partner (that means conjugal selection). Conjugal selection is the process by which due to complex of possible selections of marital partner somehow or other the one is selected as the only partner who will be a husband (wife) or the one to live with (Antonov).

Marital behavior is the system of actions and relations mediating the selection of marital partner and marriage. Sometimes marital behavior is understood much widely including actions directed on divorce (Medkov).

I'd like to mention that the marital behavior will be considered to wide extent in the given project that means it will include women attitudes on marriage as well.

At the research of marital status in many countries and in Kazakhstan as well they sort out fundamental categories: never married; married; widowed; divorced. Some countries' statistics subject to the type and form of marriage distinguishes persons who are in consensual marriage and in registered marriage, persons in marriage living apart, persons in first marriage and in a repeated one.

Thus demography deals with concrete implementations of such and such social phenomenon and relations. It considers the positions of such and such people from the point of view of the institute of marriage – their marital state, or the cases of changes of such state, that means the cases of marriage or its stopping due to divorce or widow. Meanwhile it deals with not separate persons but with the totality of demographic events (marriages, divorces, deaths) leading to the change of this state.

1.3. Definition of fertility, fecundity and reproductive behavior

A key function of marriage is bearing and rising of children. The institution of marriage directs the resources of the spouses and their extended families toward the couple's children, increasing child well-being. This subchapter discusses theoretical issues in fertility studies. It starts with describing key definitions of fertility and different related concepts. Also here we will present different theories explaining reproductive behavior of population

The fecundity in modern demography and family sociology is understood as biological ability of a woman, a man, and couple's to give a birth to children. Fecundity as ability to child-bearing should be differed from fertility characterized by the number of children already born. Theoretically the possible range of individual fecundity is highly wide: it varies from infertility (0 children) up to 35 births in singleton childbirth. However it's really considered that the average fecundity of a population doesn't exceed 15-16 childbirths. The observed maximum was of Hutterites. Their total fertility rate was 12.1 live births per woman.

The term infertility means the inability of mature organism to reproduction or just an inability to childbirth. Usually infertile is the marital union where they still don't have children for three or more years at the absence of contraception or conception, or because the pregnancies end by spontaneous abortion or stillbirth.

In the first case at the conditions of normal sexual life they say about sterility that means about inability for conception. Here one distinguishes permanent sterility (in older ages, after achieving a menopause) in reproductive period (as the sequence of illness or sterility operation) and temporary sterility (in the period of pregnancy, postpartum or post abortion, amenorrhea as a result of using contraception); natural sterility (produced by normal physiological reasons: age, pregnancy, breast feeding, amenorrhea and etc.) and artificial sterility (contraceptive), and also pathological (due to illness or trauma); absolute (null chance to conception) and relative (keeping some probability for conception).

Childlessness may be due to sterility but like the word infertility includes both physiological infertility and voluntary infertility which is often inaccurately called voluntary infertility (Demographic dictionary).

The number of births in different territories (country, region, and continent) in a different period and measured by famous demographic indicators (general and total fertility rate, age specific fertility rate and etc.) is the function of two variables. One of them is the demographic structure that

means the distribution of population by sex, age, marital status and other parameters. The other one is the reproductive behavior expressed in demography by fertility intensity.

Reproductive behavior is the system of actions and relations mediating definite number of children in a family (an also extramarital) (Antonov, Borisov).

In Belova V.A. opinion who is the leading specialist in the sphere of reproductive behavior research the reproductive behavior is the individual's inclination to act in a varying way in all questions connected with child-bearing (use or misuse of contraceptives; deeds connected with the number of children in a family and etc.)

Issues of reproductive behavior and its structure have been discussed in the literature not long ago. Practically up to the seventies the study of birth rate within demography was mostly led without any mentioning or use of "behavior" concept that means without the use of methods of sociology or social psychology. The so called "factual approach" prevailed in demography where meanings of varying social economic factors were compared to indicators of birth rate. It was only in the middle of the fifties that they started to move away from it and made an introduction to analysis of so called "spontaneous determinant" of birth rate mediating the action of social economic or basic factors on it.

When study birth rate to consider only external behavior factors is not enough and it's necessary to take into account internal factors, social and psychological structures – value orientations of a person, his desires, motives and needs. And reproductive behavior is expressed not only in somewhat external conditions, reproductive events, but also in changes of these internal structures, persuasions, strategies and motives.

The most stable and practically unchangeable reproductive behavior structure element of a person in all his/her life is the need for children.

The need for children is the social and psychological feature of a socialized individual which appears in the fact that the individual starts to feel difficulties in his/her individual self realization without children or appropriate number of children. For understanding of main point of the need for children there is a big role played by reproductive norm concept.

Reproductive norms are patterns or stereotypes of appropriate behavior related to childbearing of definite number of children determined by social milieu and accepted in those social groups where an individual belongs or would like to belong.

It's necessary to differ power of need for children. In this connection one distinguishes reduced reproductive behavior (1-2 children in a family), average children reproductive behavior (3-4 children) and having many children (5 or more children in a family) reproductive behavior and within each of these types the lines of reproductive behavior represented by specific combination of results of reproductive behavior characterized by definite direction and firmness. And it's the need for children interacting in dispositional system with life conditions that forms concrete lines of reproductive behavior (Antonov).

Quantitative and qualitative inertia of the need in children is appropriately discovered in reproductive strategies and reproductive motive concepts.

Reproductive strategies are psychological position of a person, specifying mutual coordination of actions of various types, characterized by positive or negative relation to childbearing of desired number of children.

Reproductive strategies are divided into two classes:

- strategies of having children regulating achievement of intended number of children. This class involves strategies on successful pregnancy, proto-genetic intervals (between formation of alliance and first birth) and inter-genetic interval (between the births of children by birth order), strategies on child sex, and strategies on adoption;
- strategies for contraception use and abortion.

In the fertility research one usually uses the concept of ideal, desired and expected number of children in a family; sometimes they use the number of children being planned at the moment of marriage.

Ideal number of children is not a reflection of child having intentions; it rather characterizes the awareness of respondents about varying problems of family, population and birth rate discussed in a society. Ideal number of children setting the best child having in society but not for a concrete respondent characterizes from one side that the awareness on what number of children is considered as “proper” by social opinion and from another side the perception of that what the interviewer expects from the respondent. In any case, ideal number of children doesn’t reflect social norm of a personal child having and consequently the need for children.

Expected number of children in a family and the number which was being expected or planned at the moment of marriage is the most reliable and exact due to the sense of reflection of need in children and first of all of final prediction of the number of children in a family among the all factors of preferred number of children. It’s witnessed by the results of comparison of different variants of preferred number of children with actual child having.

Reproductive motives reflect psychological position of an individual, impelling him to achieve individual aims of different type through the delivering of definite number of children. Reproductive motive characterizes personality sense of child’s birth to this world of any sequence. Children here are the means of achievement of varying aims. Reproductive motives should be differed from the birth rate limitation motives.

Separate aspects of reproductive motivation were researched in the 40ies but the attempts of creating reproductive motives classification and revealing all of the possible totality refer to the 60ies. At present there are tens of attempts to design the classification of reproductive motives. Here the projects of Kingsley D. were of great significance. He emphasized that the motivation to child bearing is only done by society (social organization) rejecting the presence of biologically provided determination of reproductive behavior and birth rate.

Child bearing motives typology developed by Judith Blake takes an important place in the history of reproductive behavior study. She subdivided all of the motives on economic and non-economic. This allowed to set the intensity of the last one typical to “modern” relation to children,

that means non-economic, contradicting the wide-spread opinion that it's economically more profitable to have less number of children in a family.

According to modern notion, reproductive motives or motives of birth rate are subdivided into economic, social and psychological.

Economical motives of child birth are the ones which stimulate for birth of varying number of children owing to the fact that through this event they achieve definite economic aims, that means the aims connected with the desire to get somewhat material profit or to increase (or keep) economic status. If the childbirth doesn't lead to any economic profit or doesn't propose them, then we should understand it as the absence of any economic motive of childbirth.

Social motives are those which stimulate for childbirth of definite number of children within the current social cultural norms of child having and which are individual reactions to these norms. Definite conformism against social cultural norms (including reproductive), that means, peculiar desire to live "like everybody" is the distinguishing characteristic of any (including reproductive) behavior. Social motives reflect this endeavor supported by various stimulus of moral and social (prestigious status) plan.

Social motives exist in the place where stimulus are found, meaning the strengthening or increase of social status, the growth of authority and prestige and etc. On the contrary, if there is no stimulus, benefits and "profit", then there is no social motives for birth rate of definite number of children. For example, in modern urban sphere with few children, parents of three or more children are subject to negative social psychological sanctions. They might be and are the object of mockery, moral censure and other types of negative social opinion.

Psychological motives are the motives which impel for birth of definite number of children owing to the fact that over this they achieve some purely private, social psychological and somewhat internal aims of the individual. They don't reflect social but exceptionally private interest in birth of definite number of children.

Correlation in the reproductive motivation structure of economic, social and psychological motives doesn't remain unchanged. It changes from era to era, reflecting the global process of historical death of having many children. General tendency here consists in the fact that economic and social motives of birth of several children in one family gradually declines or even tails, and the psychological internal motives come in to the picture.

In the West the explanation of birth decrease are concentrated around the theory of demographic transition. Theories of fertility transition have focused on a range of factors likely to affect couples' childbearing behavior. Although microeconomic mechanisms affecting the costs and benefits of childbearing and childrearing have dominated the research literature (e.g. Becker, 1960, 1991; Willis, 1973), additional perspectives have also been suggested. Some of these focus on changes in institutional contexts (McNicoll, 1980; Smith, 1990); others focus on variation in women's relationship to their husbands and in-laws (Dyson & Moore, 1983; Mason, 1987), changes in the social organization of families (Axinn, 1992a; Axinn & Yabiku, 2001; Thornton & Lin, 1994), or

on diffusion of new technology or new ideas (Anderson, 1986; Cleland & Wilson, 1987; Knodel & van de Walle, 1986; Montgomery & Casterline, 1993).

One of the most interesting is the theory of fertility supply-demand (Bulatao & Lee, 1983; Easterlin & Crimmins, 1985), which posits that a couple's supply of and demand for children jointly determine their motivation to regulate – or limit – their fertility. In other words, the number of children a couple wants given the number they have determines their motivation to stop childbearing. This motivation to regulate fertility, combined with the potential costs of regulating fertility – including monetary costs (e.g., the price of a contraceptive method), opportunity costs (e.g., missed work during recovery from a sterilization operation), and psychological costs (e.g., stress associated with violating personal or societal proscriptions against contraceptive use) – determines contraceptive use behavior (Hermalin, 1983). Thus, couples who have at least the number of children they want will tend to use a contraceptive method to terminate future childbearing (permanent contraception) if its cost do not overweigh their motivation.

Social psychological frameworks for understanding behavior are similar to this approach. For example, the theory of planned behavior (Ajzen, 1988; Fishbein & Ajzen, 1975) asserts that attitudes (in this case, attitudes toward additional childbearing) lead to behavioral intentions (intentions whether to have additional children), but are mediated by perceived social norms (e.g., disapproval of having or not having more children) and structural barriers (access to or costs of alternatives to having more children). An extension of the theory predicts that attitudes toward alternatives to large families, such as attitudes toward contraceptive use or sterilization, are likely to influence fertility decisions as well (Barber, 2001). For example, the extension predicts that positive attitudes toward contraceptive use are likely to reduce positive attitudes toward additional childbearing, to reduce the perceived costs of contraceptive use, and to increase the likelihood of adopting a permanent contraceptive method. In the fertility supply-demand framework, negative attitudes toward contraceptive use – for instance, the belief that contraceptive use is immortal – represent particularly important psychological costs to adopting a contraceptive method.

Of course, even individuals who prefer small families and who feel positively toward contraceptive use do not always adopt a permanent contraceptive method. Both the planned behavior theory and fertility supply-demand framework elucidate the importance of barriers to implementing childbearing preferences via contraceptive use. Other perspectives also emphasize the difficulty in translating preferences into rational behavior. One perspective describes humans as boundedly rational (e.g., Carley, 2001; Carley & Newell, 1994; Carley & Prietula, 1994). Another describes the extent to which humans systematically deviate from expected utility theory (e.g., Kahneman, Slovic, & Tversky, 1982; Ross, Greene, & House, 1977; Tversky & Kahneman, 1974). For example, decisions may be made based on whether individuals think that they could possibly regret the decision, rather than on the decisions expected benefit (Bell, 1982: Loomes & Sugden, 1982).

So, we have considered essential types of family behavior of individual – the marital and reproductive. Each of them, being the part of the family behavior is characterized by autonomy and

independence from others. This autonomy, increasing in the course of historical development is specified by the fact that marital reproductive behavior is directed on satisfaction of the most important human needs – the need in marriage and the need in children.

1.4. Data sources and methods.

Data sources

Studying of marriage, marital and reproductive behavior of population requires a researcher not only to deal with main characteristics of study area, but also socio-economic indicators, because it is almost impossible to analyze demographic processes not knowing significant factors influencing them. Demographic and economic analyses of marriage, fertility and related issues with them demand accurate and detailed characteristics of individual facts, of which these processes and phenomenon occurs.

This analysis may include data obtained from official country statistics (population censuses, vital statistics, public investigations etc.) and special observations, such as socio-demographic surveys.

Two groups of data sources were used while writing this work:

- Publications of Statistics Agency of Kazakhstan;
- Results from data processing of the social survey “Marital and reproductive behavior of youth of Ust-Kamenogorsk”, which were conducted by the author in autumn 2009 in Ust-Kamenogorsk.

The demographic and socio-economic data were obtained from publications of Statistics Agency of Kazakhstan. Apparently, the Demographic Yearbooks of Kazakhstan were used a lot. The Demographic Yearbook contains data about administrative territorial division, changing the overall size and age structure of the population, its location on the territory of Kazakhstan. It presents time series of population size, age, sex and urban/rural residence, natality, mortality and nuptiality, divorces and migration processes. It also includes generalized demographics indicators that characterize the processes of reproduction of the population of Kazakhstan's regions, total fertility rate, life expectancy at birth.

The data measures population in absolute numbers for the beginning of the year, which includes all permanent residents and temporarily leaving residents and grouping them by age, nationality, rural and urban population. There is a vital registry system that records all the births, deaths, marriages and divorces in the country. The data is grouped then by region, gender, age, nationality etc. Population is calculated by adding annual number of total births and immigrants to data of latest census of population and subtracting number of total deaths and emigrants from it.

Unfortunately data for annual yearbooks of Kazakhstan is only available since 1999. Demographic data had not been published in a systematic way until that time. Although we could find some helpful data from the published work by Statistics Agency of Kazakhstan named “Independent years of Kazakhstan (1991-2007)”. However, this data is not enough to conduct

complete analysis of our research topic. Therefore, we relied on Censuses of Population conducted in 1989 and 1999. Moreover, other statistical sources were used as well.

In the research, study of marital and reproductive behavior of population of East Kazakhstan region was made, where statistical sources provided by Statistics Department of East Kazakhstan region were used. Particularly, we obtained data from demographic yearbooks of East Kazakhstan region in 1999-2008, reports on economic development of the region, demographic situation in the region etc.

I am greatful to the Statistics Department of East Kazakhstan region for their website, because it was easier to sort data we needed for our demographic research and the design was good enough, what we cannot tell about the website of Statistics Agency of Kazakhstan. Moreover, all demographic yearbooks are published in Word or PDF format, and it takes a lot of time to handle with all the necessary data. The other drawback is that there is a lack of available data on age-sex structure and marital status, number of births for age groups of mothers, and etc.

Another source of data about marriage and fertility rates is provided by sample observations, which may become very important in demographic researches. For our research it was important to assess youth's perceptions of marital life and their adjustment in this period of market relationships. Therefore, we saw it necessary to conduct a sociological survey to extend our knowledge about marital and reproductive behavior of youth in East Kazakhstan region. The survey was named "Marital and reproductive behavior of youth of Ust-Kamenogorsk city" and it was conducted in October - November of 2009 in a city of Ust-Kamenogorsk, East Kazakhstan region, Kazakhstan. Ust-Kamenogorsk is a city with a well-developed infrastructure, universities and jobs, which makes it attractive for region's rural inhabitants. Since the largest part of this migration trend is the Kazakh youth, we decided to constrain our study to analysis of the youth, but particularly this group of migrants. Sample consisted of 480 young women, of which 120 were Russians and 360 were Kazakhs. The groups were divided into 4: Russian women that were city residents – 120, Kazakh women that were city residents – 120, Kazakh women that moved to the city before age 10 – 120 and Kazakh women that moved to the city after age 10 – 120. It seems quite interesting for use to observe adaptation process by rural migrants into urban life.

Results of data processing of the survey with full characteristics of respondents and their marital and reproductive behavior are presented in the Chapter 3.

Furthermore, we could observe the adjustments that happened in last 6 years largely to the work "Reproductive behavior of women in East Kazakhstan region" done by a group of researchers led by A.N.Alexeenko. This group conducted a survey with a sample size of 2000 women between age 15 and 49 in East Kazakhstan region in 2003. 50% of respondents were of Kazakh nationality, and other 50% were Russians. However, researchers did not aimed at conducting a detailed demographic analysis in the region, and therefore, we were limited by the analytical work they had provided us with.

Methods

Studying marriage and fertility attracts interests of researchers, because these processes along with divorce and widowhood determine form a family in modern societies.

As is characteristic of other demographic variables, there are many different measures of marriage and divorce. The most frequently cited statistic is the absolute number of marriages each year. While this statistic is useful in measuring gross changes in the number of marriages, it is not an analytically useful number because it does not take into account variations in population size or age structure. On the other hand, it can be used to evaluate primary views about changes of nuptiality through time-periods (Medkov).

The study of nuptiality deals with the frequency of marriages i.e., unions, between persons of opposite sexes which involve rights and obligations fixed by law and custom; with the characteristics of persons, united in marriage; and with the dissolution of such unions (Demographic Dictionary).

Increases (or decreases) in the number of marriages can result from a rise (or fall) in the population or an increase (decrease) in the number of young people in the population, such as resulted from the entry of the baby-boom cohorts into young adulthood in recent 10 years.

Nuptiality is a type of process that may take a form of repeated events. At present, a person can marry several times during his lifetime. And she can marry for the first time only once (so can she for the second, third etc).

The simplest measure of marriage is the crude marriage rate, which is the number of marriages occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year. Note that the crude marriage rate represents the number of marriages, not the number of people getting married.

Crude marriage rate can be calculated using the following formula:

$$CMR = M / {}_{1.7.}P * 1000$$

Where M is total number of all marriages in one year and ${}_{1.7.}P$ is the average number of persons living in that year (Swanson, Siegel, Shryock).

While this rate takes into account changes in the size of the population, it is affected by segments of the population that are not at risk of marriage, such as minors or those people currently married. Crude marriage rates are used most effectively for gross analyses in areas that may not have the additional data to compute more refined measures.

The same type of formulation was used to calculate the crude divorce rate, which is the number of divorces occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year.

Other indicators of nuptiality and divorce that were used throughout this work were obtained from statistical publications. That's why the corresponding formulas are not provided here.

Fertility is another key conception that helps us to develop the topic of research. Nuptiality, along with mortality and migration, is a demographic process that is related directly with reproduction of population. The analysis of fertility is, in several ways, more complicated than the

analysis of mortality. The difference is in the complexity of measurement of natality result from the special and, to some extent, unique characteristics of natality and of the factors affecting childbearing. These special characteristics give rise to a variety of measures, which may be quite different and which may give inconsistent results.

Siegel and Swanson enumerated six such characteristics. First, the entire population is not subject to the risk of having a child. Motherhood is largely restricted to women of childbearing age, while fatherhood, even though less constrained by a man's physiology, usually occurs within a somewhat limited range of ages.

Second, natality may be measured in relation to fathers as well as mothers, or even couples. Two parents, with different demographic, socioeconomic, and other characteristics, are involved in each birth.

Third, the event of birth in a sense occurs to both a child and a parent (or parents) and, in measuring natality, the characteristics of both the child and the parent have to be considered jointly.

Fourth, the same adult can have more than one birth in a lifetime and may be more or less continuously exposed to the risk of parenthood even after having a child. In fact, parenthood may occur twice to the same individual in a single year and, even, in the form of multiple births, twice or more to the same individual at the same hour.

Fifth, the time period of reference in relation to the population at risk is quite important because of the possibility of large annual fluctuations in fertility and large differences between annual levels of fertility and the levels of fertility performance of individuals and couples over a lifetime.

Finally, changes in fertility are strongly affected by personal attitudes, preferences, and motivations of women and their partners as shaped by the social and economic contexts within which they live. Shifts in childbearing have taken place in some highly industrialized countries like the United States and Sweden within the context of even more profound changes in the way in which individuals form relationships and establish families. It is no longer sufficient to analyze fertility within the bounds of traditional marriages; in many countries, it is necessary to explore the growing tendency to have children in nonmarital unions or independently of either legal or nonmarital unions. Such complexity requires the collection of extensive data, care in measurement, and the development of often elaborate theoretical frameworks.

The variables of first importance in the measurement and analysis of natality:

- age of mother;
- age-sex distribution of population and, particularly, age distribution of women in reproductive age (15-49);
- marital status of mother and marital structure of female population (Denisenko, Kalmykova).

The simplest and most common measure of fertility is the crude birth rate. The crude birth rate is defined as the number of live birth in a year per 1000 midyear population.

$$CBR = B / {}_{1.7.}P$$

Although the crude birthrate is a valuable measure of fertility, particularly in indicating directly the contribution of fertility to the growth rate, its analytic utility is extremely limited. This is

because it is affected by many factors, particularly the specific composition of a population with respect to age, sex, and related characteristics. Because the age and sex composition of a population has such a strong influence on the level of its crude birthrate, measures of fertility that are less affected by differences in age-sex composition from one population group to another are more useful analytically for inter area and inter group comparisons. A number of such measures have been developed and are variously referred to as specific, general, adjusted, or standardized, and as birth rates, fertility rates, or reproduction rates, depending generally on their degree of complexity or on their particular significance.

The total fertility rate was obtained from publication of Statistics Agency of Kazakhstan, and that's why the corresponding formulas are not provided here. The total fertility rate (TFR) of a population is the average number of children that would be born to a woman over her lifetime if she were to experience the exact current age-specific fertility rates (ASFRs) through her lifetime, and she were to survive from birth through the end of her reproductive life. It is obtained by summing the single-year age-specific rates at a given time.

The TFR is a synthetic rate, not based on the fertility of any real group of women, since this would involve waiting until they had completed childbearing. Nor is it based on counting up the total number of children actually born over their lifetime, but instead is based on the age-specific fertility rates of women in their "child-bearing years," which in conventional international statistical usage is ages 15–44 or 15-49. The TFR is therefore a measure of the fertility of an imaginary woman who passes through her reproductive life subject to all the age-specific fertility rates for ages 15–49 that were recorded for a given population in a given year. The TFR represents the average number of children a woman would have were she to fast-forward through all her childbearing years in a single year, under all the age-specific fertility rates for that year. In other words, this rate is the number of children a woman would have if she was subject to prevailing fertility rates at all ages from a single given year, and survives throughout all her childbearing years.

Table 1: Matrix sample in Excel

№	Nation	Year_bir	Educ	Occup	Dur_city_st	Place_bir	With_move	Marstat
1	1	1989	4	6	1	-1	-1	1
2	1	1988	4	6	1	-1	-1	1
3	1	1990	4	6	1	-1	-1	1
4	1	1991	3	6	1	-1	-1	1

To analyze data of survey "Marital and reproductive behavior in Ust-Kamenogorsk" SAS 9.2 software was used (data sorting, cross-tabulation, figures and charts). Firstly, matrix was developed in Excel, which included list of all questions and possible responses to them by the respondents. Each respondent was assigned with individual code. Each question was encoded, and if it required more than one answer an additional column was included for that. Incase a respondent left question unanswered or "null", for instance she indicated number of children as "0", then we entered "-1"

there. Other variants were encoded starting from “1” and above. As a result we obtained 480 variables and 112 observations.

Next the data was imported to SAS. We used procedure IMPORT there. The IMPORT procedure reads data from an external data source and writes it to a SAS data set. When we run PROC IMPORT, it reads the input file and writes the data to a SAS data set. The SAS variable definitions are based on the input records. It is possible to control the results with options and statements that are specific to the input data source. PROC IMPORT generates the specified output SAS data set and writes information about the import to the SAS log, where we can see the DATA step code that PROC IMPORT generates.

Then variable age was created, it calculated exact age of respondents, since they indicated date of birth in the questionnaire for better result and not their age. After that all respondents were divided into three age groups: 18-21, 22-24 and 25-29, so that we can analyze their behavior by age groups.

```
data anketa.ANKETA; length agegroup $ 6;
set anketa.ANKETA;
age=2009-Year_bir;
if age ge 18 and age le 21 then agegroup = '18-21';
if age ge 22 and age le 24 then agegroup = '22-24';
if age ge 25 and age le 29 then agegroup = '25-29';
run;
```

Then cross-tabulation was made through procedure FREQUENCY. The FREQ procedure produces one-way to ***n***-way frequency and contingency (cross tabulation) tables. For two-way tables, PROC FREQ computes tests and measures of association. For one-way frequency tables, PROC FREQ computes goodness-of-fit tests for equal proportions or specified null proportions. For one-way tables, PROC FREQ also provides confidence limits and tests for binomial proportions, including tests for noninferiority and equivalence. In this work one-way and two-way cross tabulation tables were formed. Since it was necessary to analyze Russian and Kazakh women separately we used procedure SORT. The SORT procedure orders SAS data set observations by the values of one or more character or numeric variables. The SORT procedure either replaces the original data set or creates a new data set. PROC SORT produces only an output data set. The data is sorted before using procedure FREQUENCY.

```
proc sort data=anketa.ANKETA;
by Nation ;
run;
```

Then we used PROC FREQ (example):

```
options formchar = "|----|+|---+=|-/\<>*";
proc freq data=anketa.ANKETA;
tables Educ*Educ_husb/ out=anketa.Educpart;
by nation;
run;
```

The FREQ Procedure

Table of Educ by Educ_husb

Educ(Educ)	Educ_husb(Educ_husb)					
Frequency / Percent / Row Pct / Col Pct	-1	2	3	4	8	Total
1	2 0.56 100.00 0.75	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.56
2	23 6.39 65.71 8.68	1 0.28 2.86 50.00	7 1.94 20.00 16.28	4 1.11 11.43 8.16	0 0.00 0.00 0.00	35 9.72
3	86 23.89 75.44 32.45	0 0.00 0.00 0.00	20 5.56 17.54 46.51	7 1.94 6.14 14.29	1 0.28 0.88 100.00	114 31.67
4	154 42.78 74.40 58.11	1 0.28 0.48 50.00	15 4.17 7.25 34.88	37 10.28 17.87 75.51	0 0.00 0.00 0.00	207 57.50
5	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.28 50.00 2.33	1 0.28 50.00 2.04	0 0.00 0.00 0.00	2 0.56
Total	265 73.61	2 0.56	43 11.94	49 13.61	1 0.28	360 100.00

Here we have education of respondent's partner by respondent education for nationality 1, which means «Kazakh». «-1» means that those respondents don't have a partner.

To construct figures Microsoft Excel was used.

SAS software was used to calculate duration specific divorce rate and average number of children.

Chapter 2

General description of demographic trends in the region

2.1. East Kazakhstan region's history and development of Ust-Kamenogorsk as its administrative center

East Kazakhstan region is situated on the eastern part of Kazakhstan on the banks of upper Irtysh River. Area of the region is 283.3 thousand sq. km, which is 10% of the area of Kazakhstan. It has borders with China and Almatynsky region on the South, with Russia on the North-West, with Karagandinsky and Semipalatinsky regions on the West. An administrative center of the region is a city of Ust-Kamenogorsk. East Kazakhstan region was formed in 1932, Semipalatinsk region being joined to it after the administrative reform in 1997. The region has 19 administrative units. There are 15 districts, 10 cities (6 of them are regional subordination cities), 3 villages, 838 auls (rural settlements) in the region. The cities Ust-Kamenogorsk, Semey, Ridder and Kurchatov have their own territory and they are independent administrative units.

Map 1: Location of East Kazakhstan region on the map of Kazakhstan

According to the data of Department of Statistics of East Kazakhstan region, in the beginning of 2009 East Kazakhstan region had over 1.4 million inhabitants; including 768.2 thousands of urban population (54.2%) and 649.6 thousands of rural population (45.8%). The average density of

population in East Kazakhstan is 5.0 people per 1 km^2. The most densely populated areas are the city of Kurchatov (530 people/km^2) and the city of Ust-Kamenogorsk (552 people/km^2). Male population in the region is 673.3 thousand people, and female population is 751.6 thousand people, which is 11.6% more than males. The largest ethnic groups are Russians and Kazakhs (more than 90% together; of which 53.9% are Kazakhs and 41% are Russians).

East Kazakhstan region connects South Siberia and the Altai region with Semirechie and Middle Asia. Its geographical position has always played a very important role in the historical development of tribes and people of the steppe belt of Western Asia. Archeological researchers testify to the fact that the region has been settled since great antiquity. The first inhabitants of the upper Irtysh were small groups of Neanderthals - ancient hunters for mammoths, rhinoceroses, and bison. In the era of bronze this territory was inhabitated by Andronov's tribes. Their most important and progressive craft was mining and metallurgy. They produced ten thousand of tones of bronze, which at that time made Eastern Kazakhstan one of the largest metallurgical centers of Northern Asia and Eastern Europe. The nomadic system was developed in VIII century and changed the economic and social system of the steppe inhabitants since then. New era of early nomads began – of Arimasps and Scythes.

In IX-XIII centuries Kimack and Nayman tribes settled down on the banks of river Irtysh. The largest town of Kimacks was called Imakiya. The Great Silk Way, spreading out trade routes to Altay, Zaysan, Tarbagatay and steppes of Semipalatinsk, played a significant role in economic life of these nomadic tribes. In XV century almost all the tribes living on the territory of modern Kazakhstan integrated into single Kazakh Khanate. The Khanate was divided into three territorial regions called zhooz: Great, Middle and Little. Kazakh tribes living in Eastern Kazakhstan belonged to the Middle zhooz.

A new period for the development of East Kazakhstan region starts with the colonial policy of the Russian Empire in the XVIII century. By the late XVII century borders of the Russian Empire reached territories of Kazakh tribes. The first half of XVIII century was of great sorrow for Kazakh people. Kazakh lands were attacked by Zhongars. Some Kazakh khans asked for protection from Russian tsars against Zhongar aggression. From that time on, the Russian Empire developed its economic and political ties with Kazakhstan and Middle Asia. As a part of its colonial policy, first expeditions were sent deep along the Irtysh River. In 1718, Vasilij Cheredovoi, an envoy of the Russian tsar Peter the Great, founded the fortress Semipalatnaya (today called Semipalatinsk or Semey) over the ruins of a Zhongarian monastery-fortress. In 1720, a mayor of the army of Peter the Great founded the fortress Ust-Kamenogorsk. For many decades Semipalatinsk and Ust-Kamenogorsk were the main centers of trade in the region. The trade routes from Russia to Middle Asia, China and Mongolia all crossed here. On the basis of the decree of the Senate of 1760 and 1762, the Russian government exiled here peasants from the Russian provinces, including convicts and political prisoners.

At the end of the nineteenth century a mass migration started, when the Great Siberian Railroad had been constructed. The migrants from Russia's central provinces settled down on the banks of

the Irtysh and in the Belagach steppe. During the nineteenth and twentieth centuries Kazakhs gradually abandoned their nomadic lifestyle and began to settle in the developing towns and cities. The treasures of Altay defined the intense development of the mining industry. The most famous deposits of polymetal ores were exploited in the nineteenth century: the Ziryanovsk deposit, the Ridder deposit, and the Belousov deposit.

The history of East Kazakhstan is interrelated closely with the history of the former USSR and Russia. It went through the revolutions of 1905-1907, 1917, the Civil War, and Stalin's repression of 1930-50s. During the Great Patriotic War, East-Kazakhstan supplied the battlefront with lead, copper, cadmium, tin, metal antimony and other metals, which were extremely needed to produce ammunition and arms. During the period from 1947 to 1989, about 500 nuclear explosions were carried out in the Semipalatinsk nuclear testing area. The explosions had a disastrous ecological impact on the environment and health situation in the region. In 1991 this nuclear testing area was closed due to the efforts of the international movement "Nevada-Semipalatinsk". By the President's Decree of 1997, the Semipalatinsk region was eliminated and included as a part of East Kazakhstan region. Since 1991, Kazakhstan has been an independent state and East Kazakhstan takes an active part in its political, social and economic life.

As was mentioned above, Ust-Kamenogorsk was founded in 1720 at the confluence of the Irtysh and Ulba rivers as a fort and trading post named Ust-Kamennaya. The city was established according to the order of the Russian Emperor Peter the Great, who sent a military expedition headed by Major Ivan Likharev in the search of Yarkenda gold. In 1868 the city became the capital of the Semipalatinsk Oblast.

During Soviet period a city of Ust-Kamenogorsk was developed into a major mining and metallurgical center of the region. The mining industry produces non-ferrous metals, especially uranium, beryllium, tantalum, copper, lead, silver and zinc. Moreover, it is a center for the construction industry of housing and ferroconcrete articles. The post-war industrial history of the city is closely intertwined with the Soviet nuclear bomb project, and the city was therefore kept closed to outsiders. One of the main industrial enterprises, the Ulba Metallurgical Plant (UMP), produces uranium products, which is a concern of national security. Another strategic enterprise is Titanium Magnesium Plant, which was built in 1965 in the district of Sogra. Modern Ust-Kamenogorsk has a population of 287,308 (January, 2009), which makes 21% of the whole region's population.

2.2. Economic, social, and cultural trends

Describing socio-economic situation of East Kazakhstan region we refer to country's data. Kazakhstan is a middle-income country with an estimated gross domestic income per capita of $6,140 in 2008 (GNI, Atlas method). It is the largest country in Central Asia and one of the most sparsely populated in the world. The country has considerable mineral wealth and vast areas of

arable land. Kazakhstan inherited significant amounts of infrastructure from the Soviet times and has a relatively well-educated population. Kazakhstan is important to world energy markets because it has significant oil and natural gas reserves. East Kazakhstan region, being the main supplier of non-ferrous metals, represents significant constituent of economy of Kazakhstan.

During the Soviet period Kazakhstan was a supplier of agricultural and raw materials for the former Soviet economy, where the military industry played the major role. Economy of the region was based mainly on production of non-ferrous metals and its primary processing. There were two strategic secret objects working with rare radioactive metals. A city of Kurchatov did not exist on any world map. A secret military laboratory developed nuclear weapon there. Semipalatinsky nuclear testing area was a place where atomic bombs were tested. Ecological consequences of these objects' activities still remain in the region.

Main economic and political content of more than 10 years of independence has become transition from the central command planning to a market system. During these years, Kazakhstan has made considerable progress in implementing complex political, economic and social reforms to establish a democratic state with a market economy. While the country has not experienced political disturbances during the transition period, it has faced numerous economic, social and environmental challenges.

The production cycle of industries in the command economy is regulated and planned directly by the government. Moreover, primary production and later stages of production supply-chain was divided among many Soviet republics and was coordinated by the government officials. After a collapse of the USSR the supply-chain management of industries had disintegrated, firms were not ready for the fact that all the processes in economy were not regulated and directed by the central government, but by market forces. Also, firms faced trade and other bureaucratic barriers, as countries had become independent. The first few years of Kazakhstan's independence were characterized by an economic decline (mostly due to the destabilizing force of disintegration of the Soviet Union): by 1995 real GDP dropped to 61.4% of its 1990 level. This economic deterioration exceeded the losses experienced during the Great Depression of the 1930s. The wide-ranging inflation observed in the early 1990s peaked at annual rate of up to 3,000% in mid-nineties.

As a result of the crisis, almost all large metallurgic enterprises in East Kazakhstan seized their activity. Recovery began only in 1997 after formation of joint-stock corporation "Kazzinc". The corporation was formed by a merger of three main producers of non-ferrous metals in the region: lead-zinc enterprise of Ust-Kamenogorsk, polymetallic enterprise of Leninogorsk and lead enterprise of Zyryanovsk. These three companies were a public property of Kazakhstan, and to attract investors the government included Bukhtarminskaya hydroelectric power plant as a long-term concession. Since then it found Glencore Int AG as a main investor with a controlling block of shares.

Urban economy had overcome the crisis only in the late nineties. Disintegration of "kolkhoz" system brought the rural economy to such degradation, that it had not overcome all consequences of the agricultural crisis yet. The sharp decline in the number of livestock and crop areas had caused

mass unemployment and huge outflow of rural population into nearby cities. Cities, such as Ust-Kamenogorsk, became a popular destination for rural migrants, because they still had some infrastructure and chances to get paid. Other towns, which were formed around industrial enterprises, were abandoned once the companies went bankrupt.

Kazakhstan was one of the earliest and most vigorous reformers among the countries of the former Soviet Union. In the early years of transition, prices were liberalized, trade distortions reduced, and small- and medium-scale enterprises (SMEs) privatized. The treasury and budget processes were significantly improved. Kazakhstan scores much less favorably, however, in the areas of land reform in the rural areas, in the creation of an enabling environment for the small and medium sized enterprises, and in the elimination of corruption. The government has established a basic framework to attract foreign direct investment (FDI) into its resource-rich oil and mineral sector. Banking reforms and pension reform followed, together with the unbundling and partial privatization of the electricity sector.

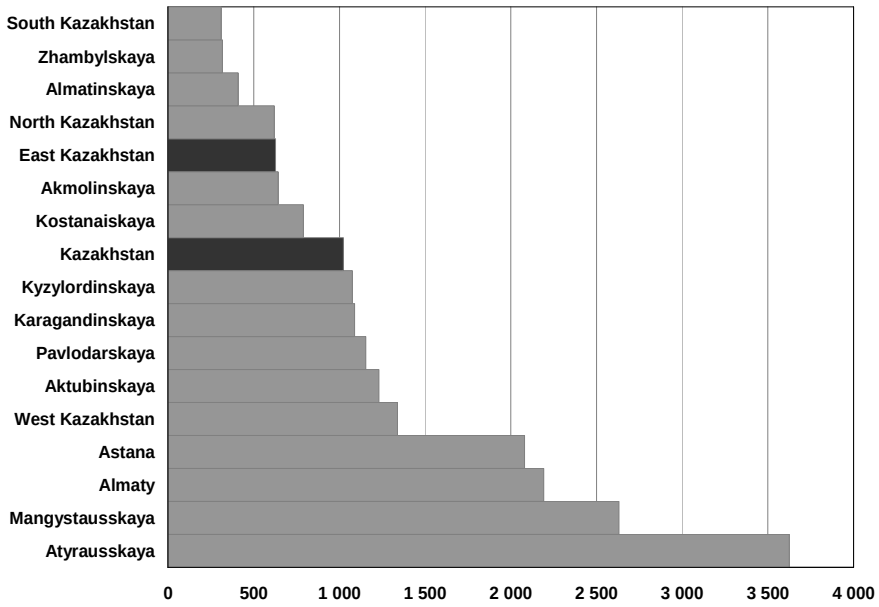
Only after a decade of reforms the crisis has passed. After posting moderate growth of 2.7% in 1999 as a whole, Kazakhstan's real gross domestic product (GDP) rose by 9.6% in 2000 and 13.2% in 2001, easily the country's best year of economic performance since independence. During 2002-2004 GDP growth was 9%, 9.1% and 9.3%, respectively. Moreover, according to The Economist Intelligent Unit Kazakhstan, Kazakhstan is within Top 10 world fastest-growing economies in 2005. Real income during this period grew by 13.5%. Real growth of average monthly pensions was 23.4% and there has been a significant increase in social payments by the state.

The main goals of current structural policy are diversification and development of non-oil sectors of economy. A number of development agencies and research centers (Development Institutions) has been established and the Government is looking at establishing techno and science parks to support the diversification of higher-value added industries. Although income levels and labor force of the service sector in economy has increased during the last decade, Kazakhstan in general and East Kazakhstan in particular still remains a center for natural resources production.

GDP of East Kazakhstan region amounted to 896.2 billion TNG in 2008, which was equivalent to 7.4 billions of dollars, and it constitutes 5.6% of GDP of Kazakhstan. GDP in the region has attained a positive growth level during last decade. So that, in 1999 GDP was 191.5 billion TNG, and it increased four-fold up to 896.2 billion by 2008. The region was ranked 6th by GDP level among other regions of Kazakhstan, right after western oil regions, Karagandynsky region and cities of republic status.

However, if we compare GDP per capita among regions of Kazakhstan, then East Kazakhstan region is at the bottom of rating list. This is largely due to the fact that Semipalatinskaya region were included into the region, and its economy is mainly based on agriculture, particularly livestock, which became unprofitable since Soviet Union collapse and needs large budget subsidies.

Figure 1: Gross domestic product of Kazakhstan, by regions in 2008 (in mln TNG, per capita)



Source: The Agency of statistics of Kazakhstan

East Kazakhstan region has export-oriented economy, which allows it to enjoy high growth rates, but with low value-added production. Moreover, regions with mining industries contribute the most to the export of Kazakhstan.

Figure 2: Gross Domestic Product of Kazakhstan by sector (in per cent)

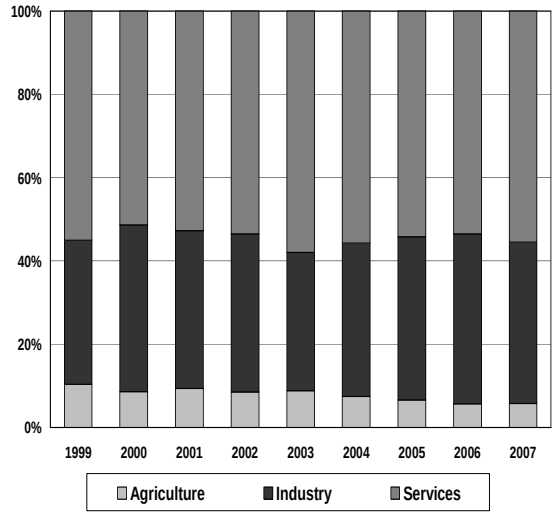
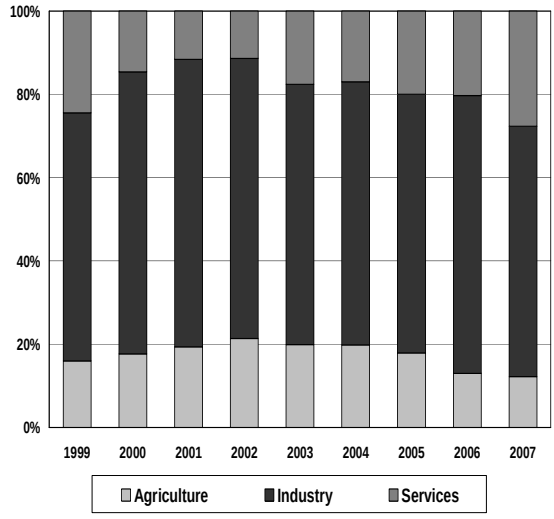


Figure 3: Gross Domestic Product of East Kazakhstan region by sector (in per cent)



Source: The Agency of statistics of Kazakhstan

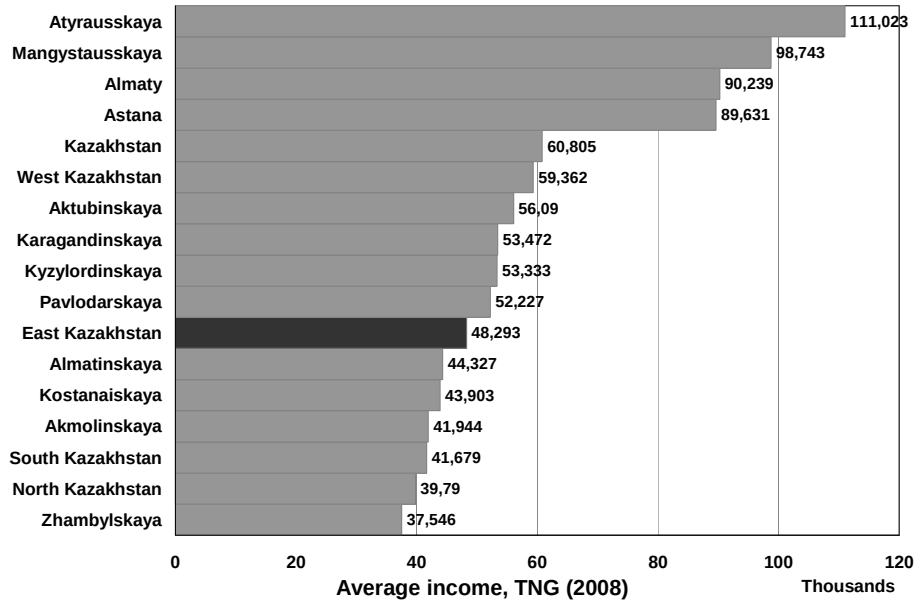
The data on GDP structure of East Kazakhstan suggests that economy of the region is industrial. Industrial sector accounts for 41% of GDP of Kazakhstan, non-ferrous enterprises contributing half

of that. However, there were structural adjustments in GDP level. The share of service sector has increased gradually since late 90-s. In 1999 GDP consisted of 16 per cent in agriculture, 60 per cent in industry and 24 per cent in services. By 2008, these percentages were 12 per cent, 52 per cent and 35 per cent, respectively. The proportion of GDP in agriculture and industry has decreased, while the proportion of services has increased.

Despite the positive impact of industrial policy of Kazakhstan, there is a tendency of decreasing positive growth rates. Although prices on oil and products of mining sector had increased in 2000-s, the real GDP growth rate decreased from 13.5% in 2001 to 9.4% in 2003-2007. Dependence on regions with mining industry makes the economy even more volatile. Considering that, development of manufacturing and service sectors became the most important priority of government policy.

If we compare main indices of living standards of Kazakhstan for last decade, then we can see that the average personal income has increased 5 times, the average wage has increased 6 times, the minimum wage has increased 25 times, the average pension has increased 4.6 times, and individual deposits in banks has increased 35 times. The subsistence wage in 2008 was 110 dollars per month though. However, there are many social issues as well. One of them is uneven income distribution, which is clearly apparent in export-oriented regions. So that, the ratio of capital profits and labor wage is not in a favor of the latter.

Figure 4: Average nominal monthly income in Kazakhstan, by regions in 2008



Source: The Agency of statistics of Kazakhstan

Another characteristic of economy of Kazakhstan is a huge gap in wage level in various sectors of economy. The statistics of calculating an average monthly income in Kazakhstan is tricky. The average income is measured using arithmetic rather than a weighted mean.

The highest salary is paid in the mining industry, particularly, in oil and gas regions of the country. For instance, the average monthly salary in Atyrauskaya region in 2008 reached 111,023 TNG (the maximum level in the country), in Mangystau – 98,743 TNG. These two are oil-producing regions of Kazakhstan. But at the same time the level of variation between the minimum (agricultural sector, such regions as Zhambylskaya, North Kazakhstan, and South Kazakhstan) and maximum (mining industry) wages in the region is 1:12 in Atyrauskaya, and 1:8 in Mangystauskaya regions.

Figure 5: Employed persons by sector in Kazakhstan (in per cent)

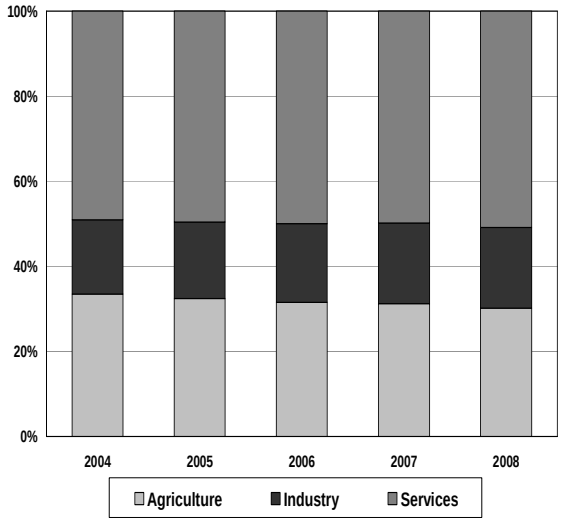
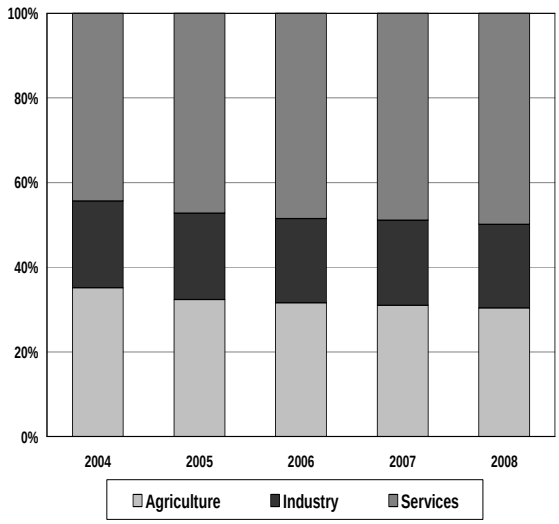


Figure 6: Employed persons by sector in East Kazakhstan (in per cent)



Source: The Agency of statistics of Kazakhstan

We have to take into account that the share of employed in the mining industry is only 2.5% of the country's employed people, while the share of employed people in the agricultural sector is 29.9%. Hence, one-third of employed people in regions of Kazakhstan, especially those that is not export-oriented, get lower wages in the agricultural areas.

The share of employed in the service sector of East Kazakhstan region has increased in recent years, while the share of employed in agricultural sector has decreased. The share of employed in the industrial sector has not changed at all. The industrial sector of the region is represented by mining and metallurgical production, which generates the highest revenues in the region. The average monthly salary in East Kazakhstan in 2008 reached 48,923 TNG (407 USD), while in Ust-Kamenogorsk it was 55,600 TNG (463 USD, the second highest in the region). Salaries vary depending on the sector of economy. Thus, the lowest salaries are in the agriculture (28,610 TNG; 238 USD), and the highest are in the mining industry (69,302 TNG; 576 USD). Salaries of workers in the service sector, such as education and health are two times lower than those employed in the industrial sector.

Figure 7: Employed women by sector in Kazakhstan (in per cent)

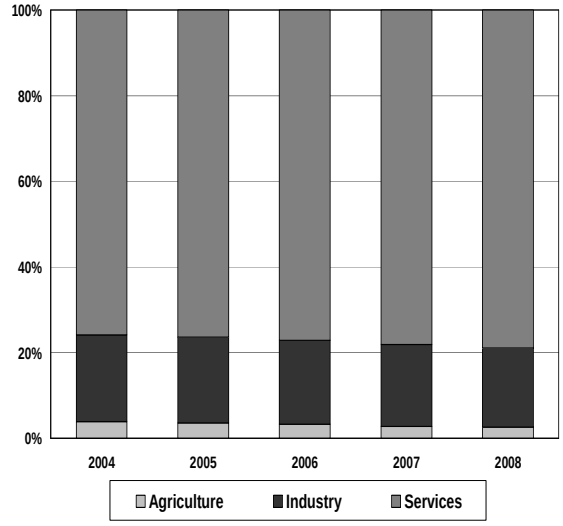
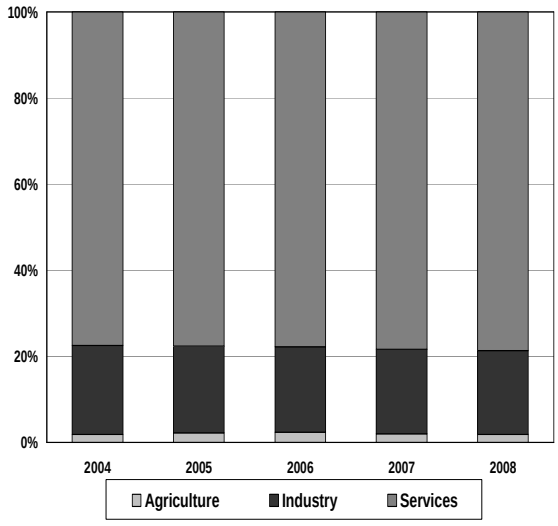


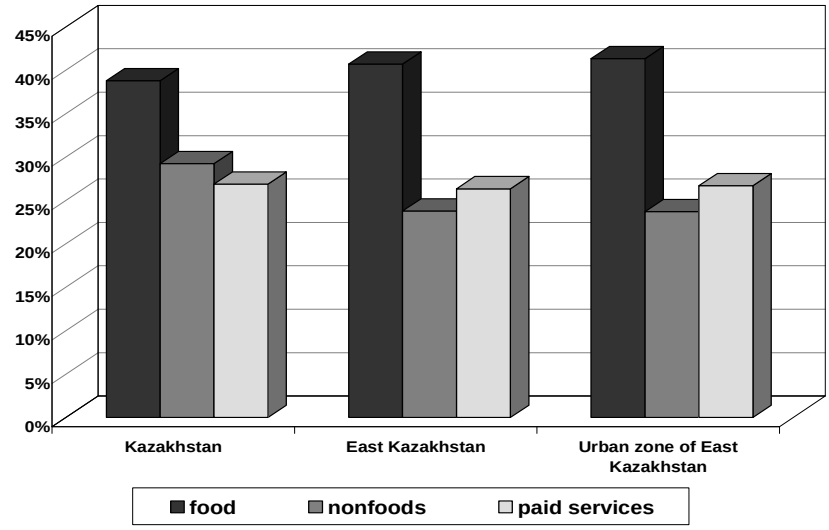
Figure 8: Employed women by sector in East Kazakhstan region (in per cent)



Source: The Agency of statistics of Kazakhstan

It is worth mentioning that the majority of employed people in the service sector are women. Which means that women's salaries are two times lower then men's that are employed within the industrial sector. Women accounted for 48.7% of the region's workforce in 2008. The data was available only on women employed at large and middle enterprise. But even that information was enough to represent general proportion of women employed in the industrial sector, which is mainly run by large and middle enterprises.

Figure 9: Consumer expenditures (in per cent), 2008



Source: The Agency of statistics of Kazakhstan

It is easy to see that a personal income in the country is lower than official figures by looking at the structure of their expenses. An average person spends almost half of her income on the purchase of food. A majority of the population can afford larger purchases only by means of credits, the interest rate on which remains still high.

Another important characteristic of living standard is housing. As a result of housing reforms conducted after Soviet Union collapse, most part (95%) of state housing assets were privatized. While according to Census of 1989 only 33% of housing was owned by private proprietors. To develop housing market the government of Kazakhstan initiated privatization process (transfer of housing fund owned by government and municipalities to private ownership) and municipalization (transfer of housing fund to local municipal governments). However, privatization made housing more expensive. And those who suffered more was the youth, cause from that moment on, it became impossible to get public housing from the workplace, while earnings were not enough to provide a young family with housing.

Table 2: Distribution of households by type of houses (in %)

	All households	*Urban zone*	*Rural zone*
Private house	43,2	24,9	76,1
Part of private house	0,2	0,2	0,3
Flat	52,0	68,7	22,1
Municipal apartment	0,3	0,4	0,1
Dormitory	2,2	3,3	0,3

Source: Survey of Republic of Kazakhstan in 1999

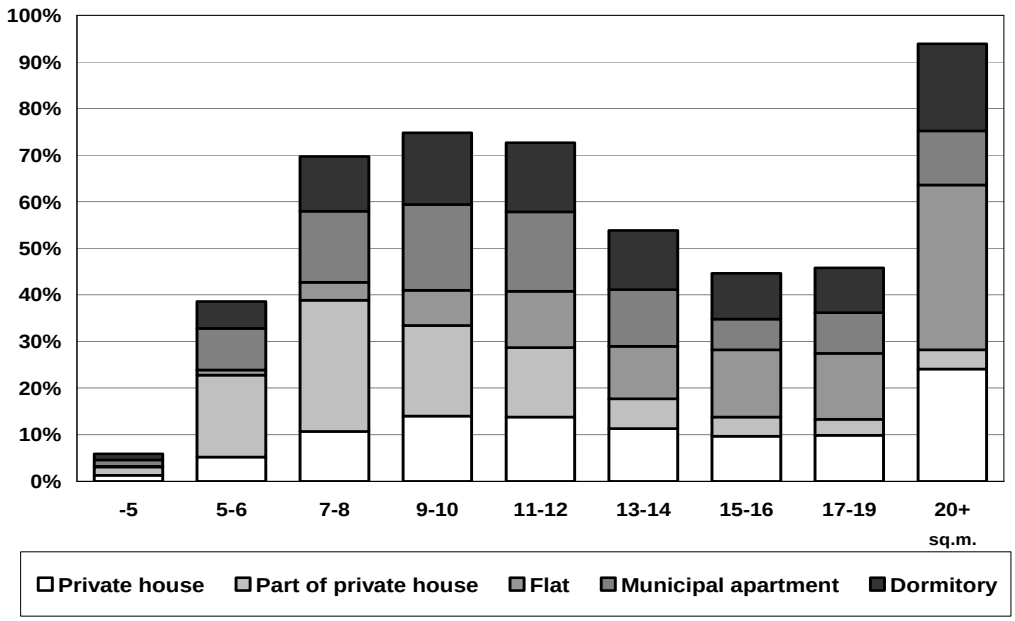
Housing has become an extreme issue in cities due to a mass migration of rural inhabitants into cities, which was aggravated by government policy for reduction of rural settlements. The housing issue has become a nightmare for young people in particular, since the age structure of migrants is rather young. Until the crisis of 2008 mortgage crediting was very popular among the population, although credit conditions were usurious enough. At present even this opportunity is limited. A majority of immigrants lodges in private sectors in city suburbs. Only few migrants may afford to buy their own apartment (all utilities included), the majority of them rents a room. Just-married couples face a paradox-situation, where they have to reside with their parents as a result of economic issues rather than tradition principles.

Unfortunately, the latest data on type of houses and their area could be obtained only from Census, which was conducted in 1999 (the Census of 2009 has not been published yet). But we assume that housing assets of urban population of East Kazakhstan has increased insignificantly, construction of new housing took place mainly in capital cities of Kazakhstan (Astana and Almaty). Therefore, we will use those data as the most adequate for our research.

The majority of urban population resides in private flats, and the largest group of those people has more than 20 sq.m. per capita. The second highest housing area is 7-12 sq.m. per capita, which is not large enough for a person to live comfortably. Unfortunately, before 90s housing rent was not

widespread in the Soviet countries, while now it is the most widespread among students, young families and rural migrants.

Figure 10: Type of houses by area (m^2) per person, urban population of East Kazakhstan, 1999



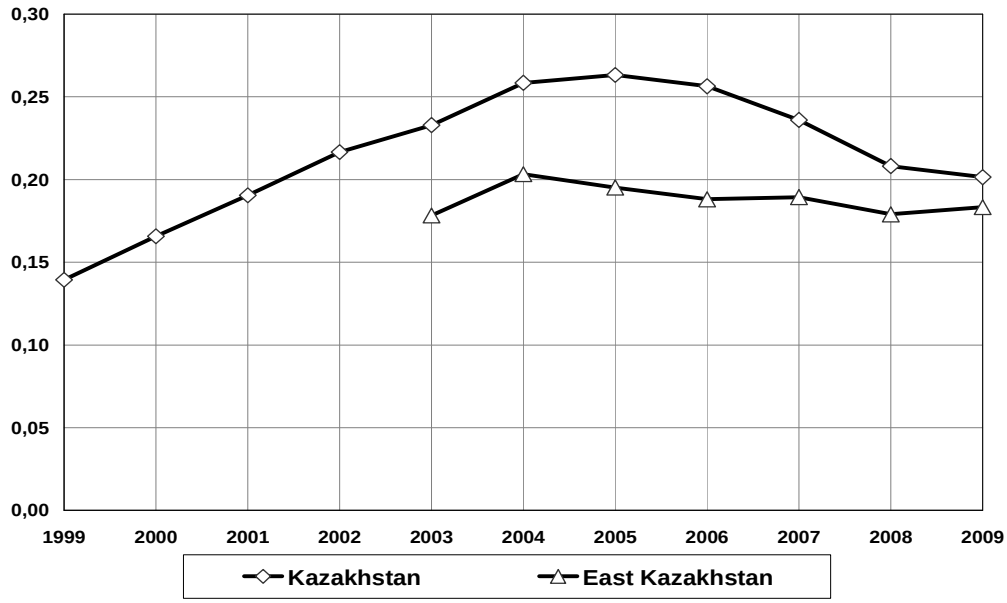
Source: Census of Republic of Kazakhstan in 1999

The population of Kazakhstan has relatively high literacy level. This level is related to reforms that took place in the Soviet Union, when secondary education became free and compulsory. The admission to higher education was free but limited though. Since the disintegration of Soviet regime a situation in education system has changed. Universities, colleges and private schools started to charge tuition fees. Scholarships were provided only to the best school graduates, the remaining students were charged a relatively low tuition fees. These reforms brought about a rapid increase in the number of universities: private universities emerged, and former institutes and colleges were reorganized as universities.

So that in two decades of Kazakhstan's independence, the number of universities has increased by 2.7 times (61 in 1991 and 167 in 2008). This had a disastrous impact on a quality of education. Ministry of Education had to cease facilities of many universities after auditing them according to new education standards required by Boulogne convention. The number of students has been decreasing recently due to changes in age structure of the population and reduction in population of this age group.

There were 9 universities, 48 colleges, 39 vocational schools in East Kazakhstan region (2009), Ust-Kamenogorsk having 4 universities, 14 colleges and 11 vocational schools. The number of people studying in all types of educational institutions was 43,428, which is 15% of the city population.

Figure 11: Gross enrollment ratio for tertiary education for population aged 15-24



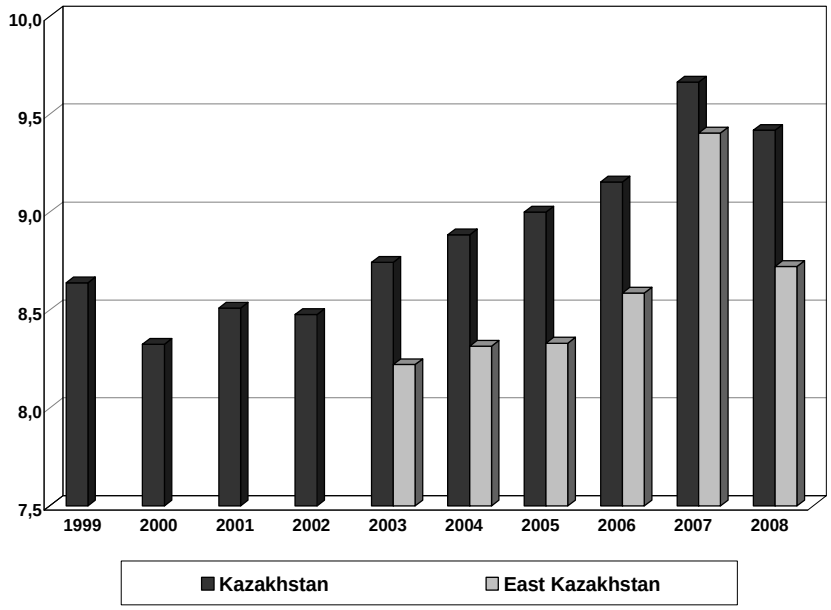
Source: The Agency of statistics of Kazakhstan

A fourth of all students in the city is studying in private institutions. It is important to note that since higher education became available only recently, it affected youth the most. Among older generation majority of population has vocational diploma, which is reflected on the general structure of the population.

The secondary education up to 9th grade is compulsory and free. Since Kazakhstan gained its independence from the USSR, schools started to teach in native Kazakh language along with former Russian schools. A number of such schools is growing rapidly, which is due to increasing popularity of native language. Thus, a number of pupils in the region studying in Russian schools decreased relatively to those studying in Kazakh schools. Numerically, pupils of East Kazakhstan region studying in Russian schools in 2004 were 8,000 more than in Kazakh schools, while in 2008 the parity changed, and Kazakh schools had 14,000 more pupils. These facilities made Kazakh language more popular in the region on one hand, but let Russians leave the region on the other.

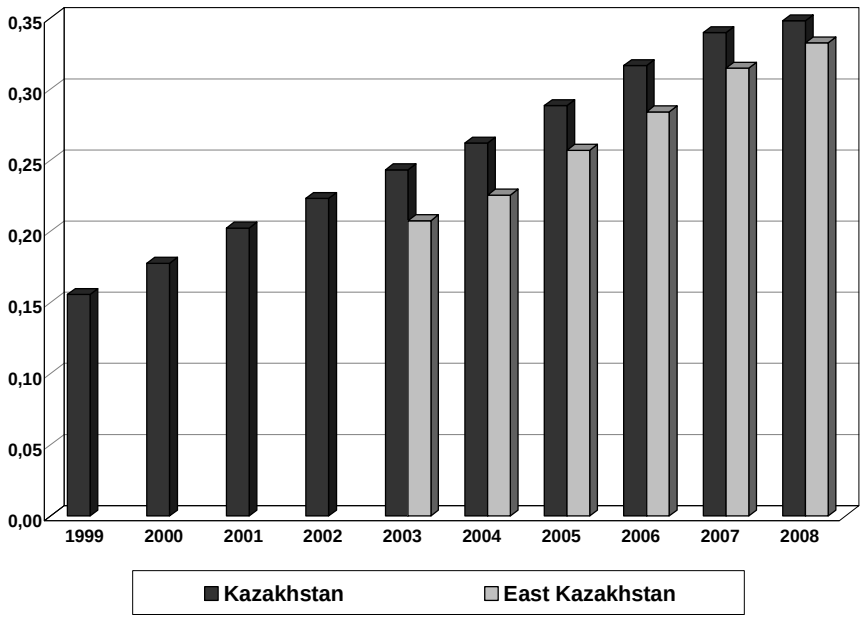
The preschool education has become a main concern for policy makers. After the collapse of the USSR, many kindergartens were privatized and used for other purposes by their new owners. Previous allocation system was based on parents-enterprises, which were abolished. Only few enterprises could provide kindergartens for their workers. Even the government failed to solve this issue. The number of preschool organizations decreased from 8,881 in 1991 to 1,500 in 2007. And the number of children engaged in these facilities decreased from 1,023,099 in 1999 to 257,053 in 2009.

Figure 12: Number of children in kindergarten per 1 teacher



Source: The Agency of statistics of Kazakhstan

Figure 13: Gross enrollment ratio for preschool education for children aged 3-5



Source: The Agency of statistics of Kazakhstan

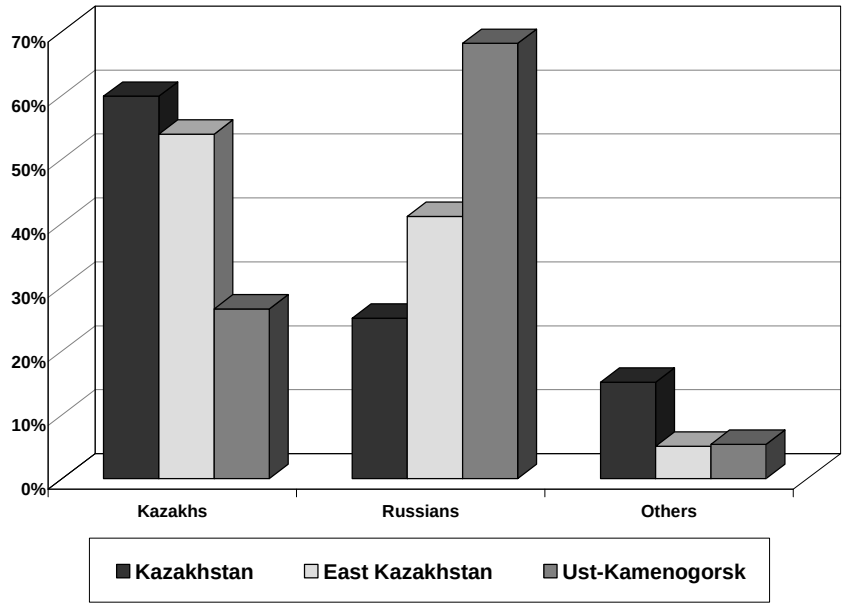
This issue has become critical, considering rural migrants that had a positive impact on the age structure of city's population. The fertility rate has increased since 2000, and consequently intensified the deficit issue of kindergartens. At present, tuition fees for preschool education facilities are expensive relative to personal income, and are almost the same as higher education fees. The recent increase in a number of kindergartens is not enough to cover the large deficit that

has occurred in the preschool education sector. Existing kindergartens are overcrowded. During recent 5 years the number of kindergartens in Ust-Kamenogorsk increased by 5, however, the number of children in them increased by almost 2 thousand.

With regard to nationality, there have been important changes since disintegration of the Soviet Union. The demographic situation in the region is determined by two ethnic groups: Kazakhs and Russians, together they constitute 90% in the population structure. In recent two decades a share of Kazakh and Russian ethnic groups together has increased even more. A decade ago the majority of population in the region was Russians, but now Kazakhs constitute 57%. Russian population has been decreasing in Ust-Kamenogorsk, though it still constitutes the majority of population.

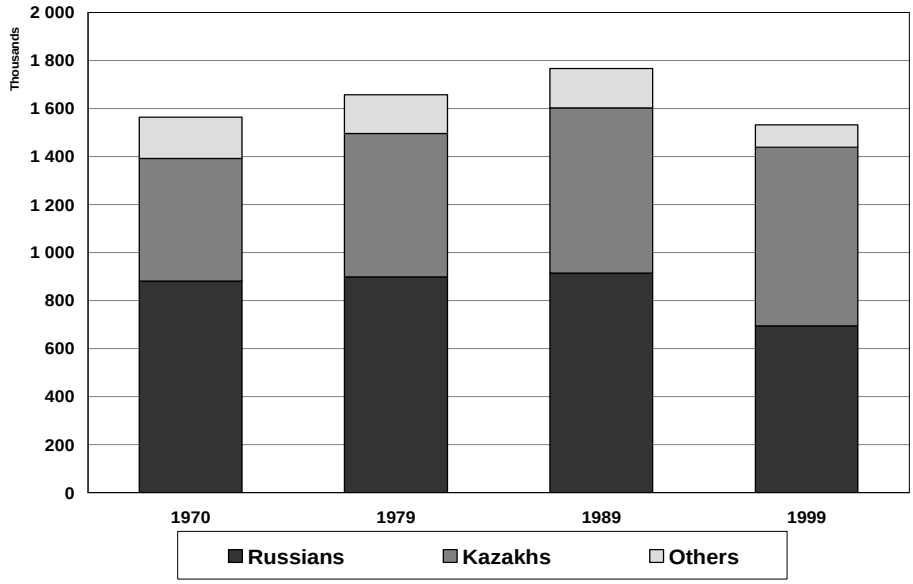
A key factor in the reduction of population of ethnic groups was due to the migratory outflow which took place in East Kazakhstan. In early 1990s the mass emigration was caused by the collapse of Soviet political system, which was followed by deep economic crisis. Russian and German ethnic groups left Kazakhstan to return to their ethnic motherland. This trend has stopped only after the crisis was overcome. Migratory flow has become more selective since then, and it is less dependent on political factors. Interstate migratory flows have decreased, while interregional migratory flows have increased. Numerically, a share for interregional emigration balance in East Kazakhstan in 1997 was 13% (share of interstate emigration was 68.8%), while in 2008 it was 86% (13%) respectively. Migratory flows in East Kazakhstan are ethnically-oriented. Thus, Germans migrate to Germany, Russians to the Russian Federation, and Kazakhs to other regions of Kazakhstan (particularly, Almaty, Astana, Akmola region).

Figure 14: Population by nationality (%), 2008



Source: The Agency of statistics of Kazakhstan

Figure 15: Population by nationality in Ust-Kamenogorsk (in abs. numbers, thou.)



Source: The Agency of statistics of Kazakhstan

The ratio of European ethnic groups in East Kazakhstan, and particularly in Ust-Kamenogorsk, is relatively high comparing with other regions of Kazakhstan. This group has following characteristics to be taken into consideration:

1. The majority of European ethnic groups live in cities. Thus, the birth rate among urban population is low.
2. This group is more likely to emigrate, which has direct and indirect consequences for the demographic situation.
3. The demographic behavior of Kazakh ethnic group has become similar to Russians due to long-term assimilation processes in cities.

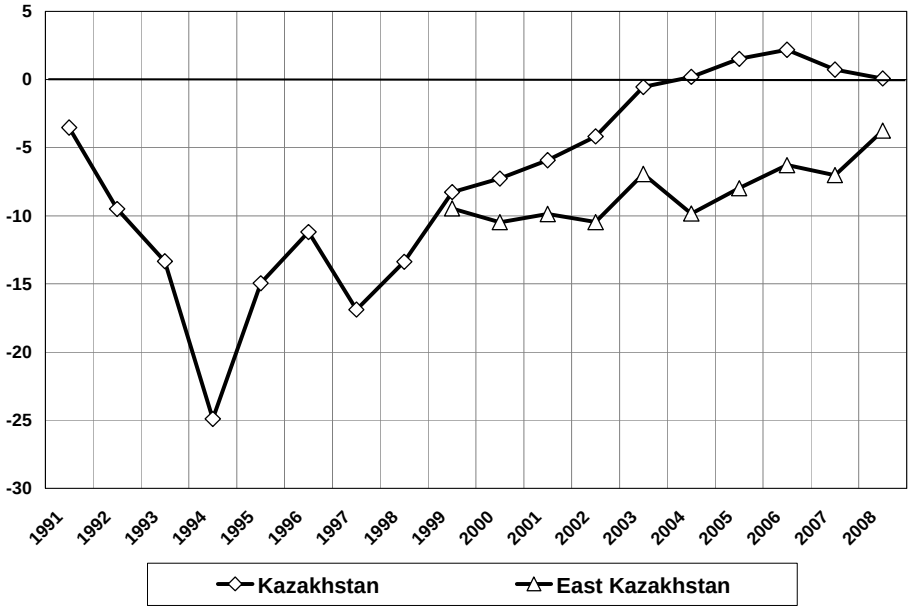
2.3. Population trends

Political and economical changes that took place in Kazakhstan since its independence had an impact on demographic development as well. Not only migratory flows have accelerated drastically, but traditional birth rate has also become similar to western one. As a consequence the population structure by sex has changed. It is obvious that adaptation of traditional model family in Kazakhstan began in Soviet period, but the situation has worsened since the economic collapse.

Since midst of 1990s population of the East Kazakhstan region has decreased as a consequence of negative net-migration and because number of deaths became higher than number of births. The population decreased by 13.3% (234.4 thousand) between censuses of 1989 and 1999, and it decreased by 7.5% (115.1 thousand) between census of 1999 and statistical data of 2009. The high rate of negative net-migration flow was due to migration of nonnative ethnic groups to their

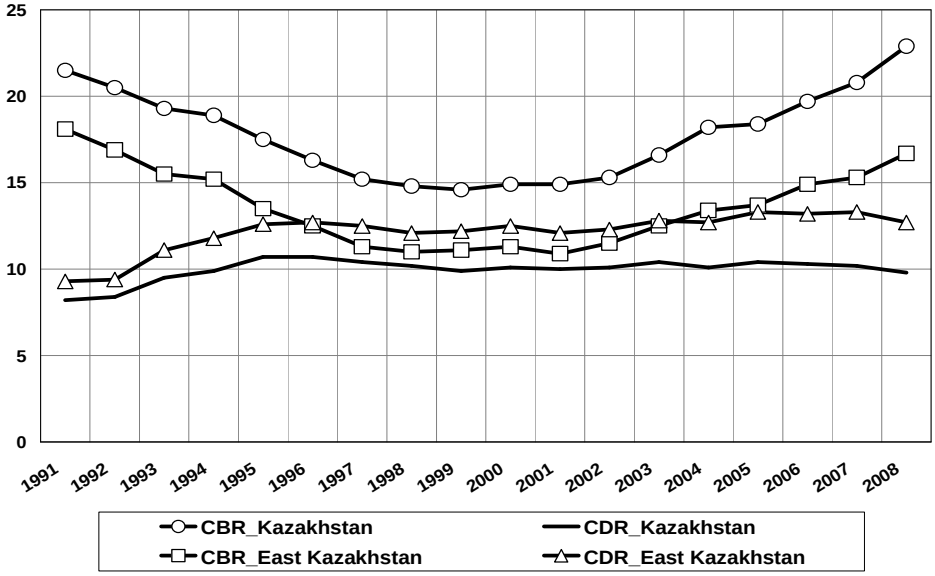
motherland. But since 2000 the flow of migrants out of the country has declined. Moreover, a positive population growth had an impact in gradual increase of population number.

Figure 16: Net migration rate in Kazakhstan (1991-2008)



Source: The Agency of statistics of Kazakhstan

Figure 17: Natural population change in Kazakhstan (1991-2008)



Source: The Agency of statistics of Kazakhstan

If we take into consideration the facts of birth rate decrease and migration, then it becomes clear that the demographic situation is rather critical in the East Kazakhstan region. If we look at the demographic situation with the countries overall, we can see that despite the crisis of 1990s and

decline in fertility rate the country avoided "the demographic cross". The positive population growth in Kazakhstan was attained due to traditionally high fertility rates in southern regions of the country.

We can see on figure 18 that the death rate in the East Kazakhstan region has exceeded the birth rate since 1996. That was the most difficult year for the economy of the young country. Thus this process has begun three years earlier in urban areas of the East Kazakhstan region (1993), but it never took place in rural areas of the region. Only after 7 years (2003) did the East Kazakhstan overcome the demographic crisis, though for urban areas it took place for 13 years (2006).

The most significant population losses occurred in younger age groups. Numerically, the number of younger age groups (ages 0-14) has decreased by 27.9% (106.2 thousand), which determined the whole population loss. The population in absolute numbers has decreased almost in all age groups. The only exception was the group ages of 50-59, which has increased by 21.7 thousand, which aggravated the situation even more. This age group had soon become pensioners, which then had their stake from the poor budget of that time. In the long term the population age structure of East Kazakhstan is of critical one. There are large numbers of people whose age has approached their pension age, which both with short life expectancy will bring about the growth of crude death rate.

The decline in fertility rates in the ends of 1990s can be concluded looking at the population structure of ages 5-10 in the graph below. It is worth mentioning that fertility rates have increased in Kazakhstan recently and East Kazakhstan as well but to a lesser extent than country general. This increase was due to a large number of women of reproductive ages of 1980s. Moreover, women that postponed births in 90s started to give births too.

Figure 18: Population pyramid of Kazakhstan in 2009

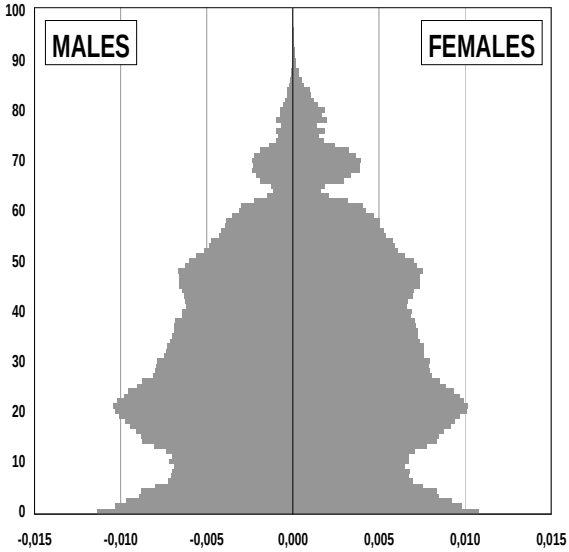
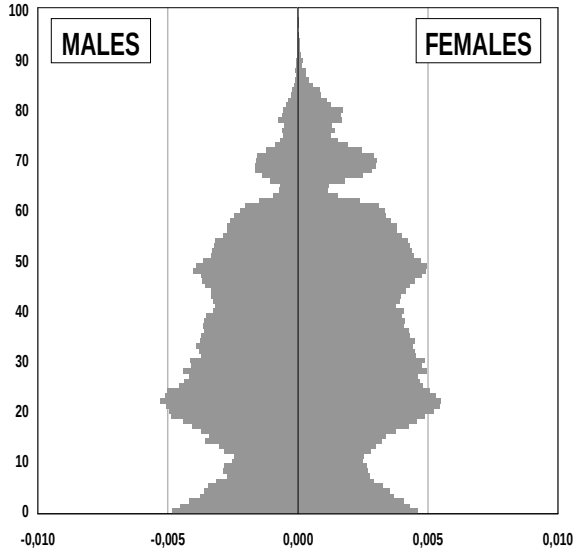


Figure 19: Population pyramid of urban zone of East Kazakhstan in 2009



Source: The Agency of statistics of Kazakhstan

From the graphs above it is clearly observed that the number of females is higher than the number of males due to a large mortality gap in older ages. And this difference continues to increase, so that the difference between life expectancies of men and women was 10.3 years in 1999 (men – 60.6, women – 70.9), and 11.9 in 2007 (60.7 and 72.6, respectively). This age gap is even larger in East Kazakhstan region – 12.75 (men – 59.16, women – 71.91 in 2007). This age difference cause disproportions of population in older age groups, and large number of widow pensioners, which aggravates their situation when they are old.

Table 3: Percentage of population aged 55+ in Kazakhstan, 2008

	Kazakhstan	*Urban zone of East Kazakhstan*	*Rural zone of East Kazakhstan*
55 - 59	2,44	5,82	5,19
60 - 64	2,81	3,18	2,76
65 - 69	2,81	3,59	3,55
70 - 74	2,26	3,09	2,84
75 - 79	1,33	2,03	1,82
80 - 84	0,86	1,33	1,13
85+	0,34	0,50	0,44

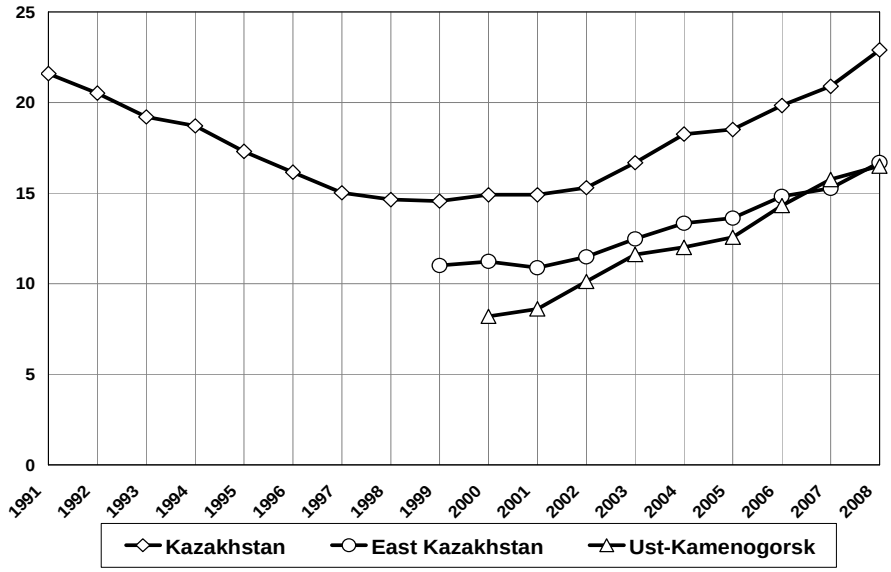
Source: The Agency of statistics of Kazakhstan

The age structure of population has only few distinctions between countries's general and the region itself. First, population of East Kazakhstan, especially urban population has had a higher rate of ageing in the period of 1999-2009. This is related to the fact that the number of children has decreased drastically in late 90s, while the share of adults has increased. Second, the reason of urban population ageing is interstate and interregional migration. These migratory flows are represented mainly by younger generation. Although the rural youth compensates losses of urban population ageing process significantly, but it is not enough yet.

Birth rate is a significant factor that determines natural population growth. Moreover, bearing children has been the primary reason for family formation in Kazakhstan. In 2000-2008 periods the number of newborns in the East Kazakhstan region has increased from 17 to 23.7 thousand in absolute numbers, while this number for Ust-Kamenogorsk has increased almost twice – from 2.6 to 4.7 thousand.

The dynamic of crude birth rate (CBR) shows that since 2000 the birth rate has been increasing, and CBR for Ust-Kamenogorsk in 2007 exceeds the rural index, although it was lower until that year. This data supports our conclusion that increase in birth rate of urban population is due to rural migrants. Birth rate of Kazakhstan in general is higher than East Kazakhstan region because of high birth rates in Southern regions of the country.

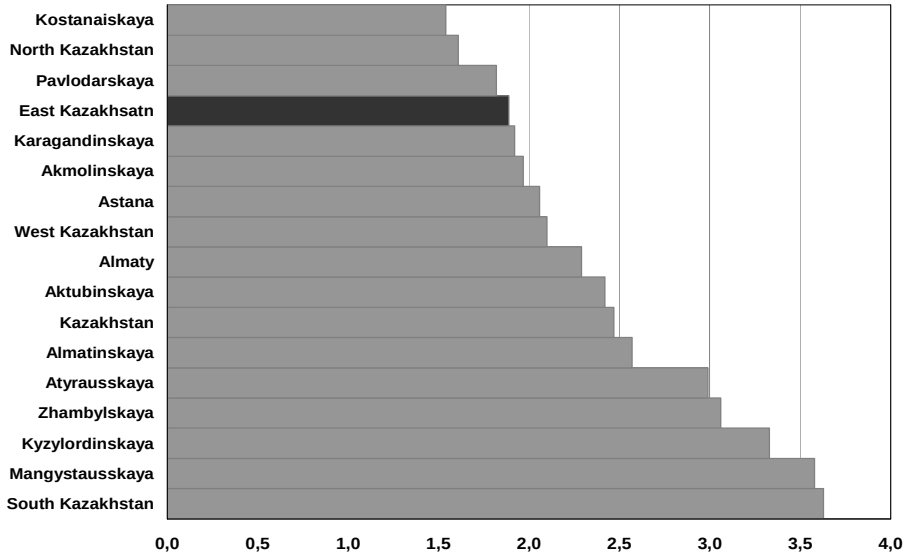
Figure 20: Dynamic of crude birth rate in Kazakhstan (2000-2008)



Source: The Agency of statistics of Kazakhstan

When using absolute numbers or crude rates, it is necessary to consider an impact of age factors on parameters of birth rate. Thus, here we used also Total Fertility Rate. For simple reproduction of population to take place, that is for replacement of two parents, it is necessary that every woman of fertile age (15-49) has two children. However, every woman of fertile age in the East Kazakhstan region in 2007 had 1.89 children (in 2006 – 1.85, in 1999 – 1.42). It is worth to note that during 1999-2007 periods there was a positive growth rate of TFR in East Kazakhstan; it has increased by 24.8%.

Figure 21: TFR in Kazakhstan in 2007



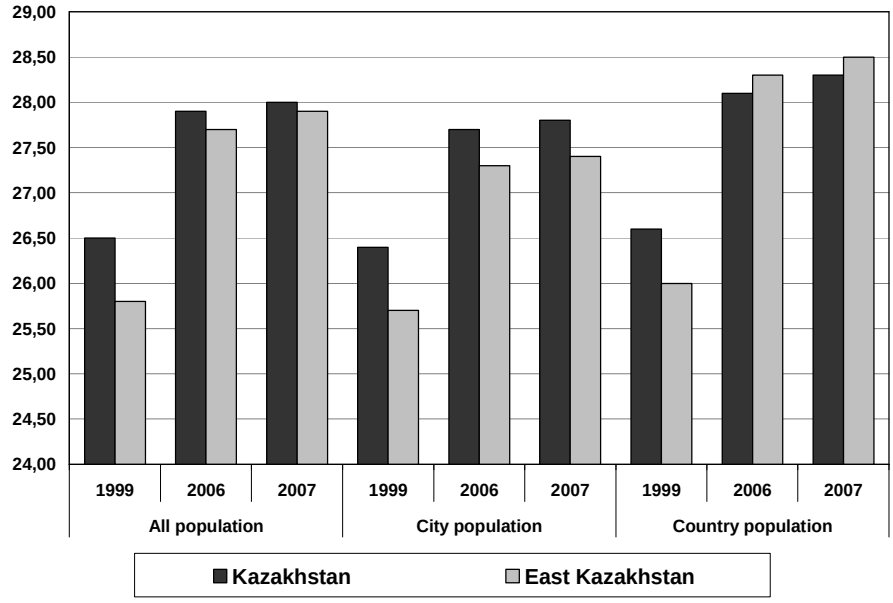
Source: The Agency of statistics of Kazakhstan

An analysis of TFR in a last decade shows that fertility level is increasing everywhere. TFR in Kazakhstan was 2.47 in 2007, while it was 1.8 in 1999. At the same time the comparative analysis of birth rate in East Kazakhstan and other regions of the country shows that in 2007 TFR in the East Kazakhstan region was the one of the lowest in the country (1.89), and it was almost the same as in regions of North Kazakhstan (1.61), Kostanay (1.54) and Pavlodar (1.82). Thus, East Kazakhstan joins northern regions of the country by its low fertility rates, which are related to large proportion of Russian population experiencing lower fertility level. However, southern regions of the country show high TFR, such that in Southern Kazakhstan region TFR was 3.63 and in Kyzylorda region – 3.33.

The analysis of age specific fertility rates for 2008 testifies that the peak of fertility level is among women aged 20-24. At the same time the fertility rates of older women has increased after the crisis due to postponed births. Thus, women who could not afford bearing a child in the 1990s started to give births once the economic situation had been stabilized. Hence, the childbearing ages are rising among women due to second and third births. This process already comes to the end now. Moreover, births are not likely going to increase in the near future, because the number of women of reproductive ages is decreasing due to low birth rates in 90s. And the youth is adapting Western family model, which is oriented on postponement of marriage on later ages and smaller number of children (1-2).

By this time, we can observe that an average age of mother at childbearing in the country is higher than in the previous decade. One has to pay attention that an average age of mothers at childbearing in rural areas is high not because women postpone birth, but because they have larger number of children (consequently at later ages) than an urban mother.

Figure 22: Dynamic of mean age at childbearing in Kazakhstan



Source: The Agency of statistics of Kazakhstan

Table 4: Life births by age of mother and age of father, urban population of East Kazakhstan region (in %), 2008

	Age of mother							
Age of father	*before 20*	*20-24*	*25-29*	*30-34*	*35-39*	*40-44*	*45-49*	*Total*
Total population	5,35	35,78	30,75	18,04	8,32	1,69	0,07	100
before 20	0,80	0,51	0,05	-	-	-	-	1,36
20-24	3,35	16,22	2,70	0,25	0,02	-	-	22,54
25-29	1,04	14,86	15,14	2,21	0,28	-	-	33,54
30-34	0,11	3,41	9,83	8,29	1,00	0,05	-	22,69
35-39	0,02	0,57	2,30	5,60	4,36	0,24	-	13,10
40-44	-	0,15	0,58	1,29	2,16	0,99	0,01	5,18
45-49	0,02	0,03	0,10	0,33	0,41	0,37	0,05	1,31
50-54	-	0,03	0,01	0,05	0,07	0,02	0,01	0,18
55+	-	-	0,04	0,02	0,03	0,02	-	0,11

Source: The Agency of statistics of Kazakhstan

An increase in the number of newborns in recent years was due to the growth of first birth order and also of women who already have children. As the analysis shows, the number of second birth, third birth order and over in 2007 was 119.8% compared to 2003, while the number of first born children was 118% compared to 2003.

Table 5: Dynamic of fertility in East Kazakhstan region, 2003-2007

		Live birth by birth order					
Year	*Total*	*First birth*	*% from total number*	*Changes in the total number of birth compared with previous year*	*Birth of 2+ order*	*% from total number*	*Changes in the total number of birth compared with previous year*
2003	18288	9229	50,5	385	9059	49,5	890
2004	19397	9465	48,8	236	9932	51,2	837
2005	19638	9627	49,0	162	10011	51,0	79
2006	21205	10060	47,4	433	11145	52,6	1134
2007	21741	10886	50,1	826	10855	49,9	-290

Source: The Agency of statistics of Kazakhstan

The total number of newborns has increased in 2007. And there is a tendency of increasing number of extra-marital births. Changes in the total number of extra-marital births compared with previous years are high; it reached 24.7% in 2007 with regards to newborn children as a whole. In 2007 only 32.5% of extra-marital newborns were registered by both parents that were in cohabitation (there was 25.6% in 2003, 33.1% in 2004, 34.2% in 2005, and 34.4% in 2006). According to some researchers, children that were born out of marriage and staying with one parent are more exposed to diseases and have higher mortality rates then children staying with both parents. Moreover, children staying in one parent families are subject to difficulties in their lives, and have less material security. Thus, a rise in number of children in this category may bring negative consequences to the society. (Source: Demographic aspects of East Kazakhstan region in 2007, Report of EKR Department of Statistics Agency of Kazakhstan).

Reproductive principles are related to ethnic groups. Kazakhs constitute the majority of newborns – 62.2%, Russians constitute 29.1%, while the population proportion is 53.2% and 41.7% respectively. Crude birth rate was 19 Kazakhs, 16 Germans, 13 Tatars, 11 Russians and 8 Ukrainians per 1000 inhabitants of the same nationality. Kazakhs prefer to have 2-3 children and more rarely more than 3 children, while other ethnic groups prefer to have 1-2 children. The survey of 2007 tells that the share of first birth order among Kazakhs is 44.9%, while the share of second birth, third birth orders and over is 55.1%. Comparatively, the share of first birth order among Russians was 61.2%, Tatars – 55.7%, Germans – 56.5%. Moreover, the share of third birth order among Kazakhs was 16.1%, Russians – 6.2%, Germans – 6.3%.

Another feature of post-transition period of the country is an ethnical differentiation. Crude birth rates in urban areas have recently exceeded crude birth rates in rural areas. This process is common not only for East Kazakhstan, but also for the country in general. The growth in cities is related to ethnic factor. There is an increasing number of Kazakh population of reproductive age, which migrated from rural areas into cities. Their reproductive behavior depends on establishing traditional families yet. These migrants replace decreasing European population which has small families, and they contribute to the growth of fertility rates in cities.

Marital characteristics of population still play a great role in reproductive behavior of population. During the period 2000-2008 the number of marriages in Ust-Kamenogorsk increased by 27% (in absolute numbers it increased from 8.8 thousand in 2000 up to 11.2 thousand in 2007). Marriage rate has increased respectively. The crude marriage rate in 2008 was 7.9 per 1000 people. There were 7.1 rural and 9.7 urban couples per 1000 people which married in 2008.

The main impact on the fertility growth rate in recent years was due to “demographic wave”, i.e., there is significant proportion of younger population who entered “marriage market”. Development of this process is different among regions of the country. The number of marriages has decreased by 1.6 thousand in 2008, which shows adjustments in age structure of population. The highest crude marriage rate in the region took place in a city of Ust-Kamenogorsk; it was 9.73 per 1000 people.

One of the main marriage parameters is the age of marriage. The legislative marriage age in Kazakhstan is 18 years old for men and women. Municipal government has the right at the request of persons, wishing to marry, allow them to marry, once they reach an age of 16. The mean age of men married first time was 26.9 in 2008, women's age was 24.4. The majority of marriages (63.7%) were registered in urban areas. But rural women marry first time earlier than urban.

The mean marriage age of Russian ethic group is higher than other groups. However, the mean age of Kazakhs who married first time is higher. Germans usually get married at younger ages. The largest difference in ages of grooms and brides are among Germans (2.7). Russians are 2.5 years older than their brides, Kazakhs – 2.4.

A demographer has take into consideration proportion of sexes that has its impact on the formation of future population structure. This component in the East Kazakhstan region has been subject to significant disproportions in various age groups. Alas, there is no recent statistical data available for age-sex structure by marital status of population in Ust-Kamenogorsk, except published censuses of 1989 and 1999. The age-sex structure of population has changed somewhat during this period. The share of men and women aged 15-39 has decreased, while the total share of men and women aged 40-49 has increased. In the census of 1989 proportion of men on 1000 women aged 15-29 was 947, 30-49 – 976, 50 and over – 623. In the census of 1999 there is a sharp reduction in the number of men aged 30-49. Proportion is already 887 men on 1000 women. The disproportion of population structure by sex in Kazakhstan may influence the formation of marital-family structure and fertility by women of reproductive ages.

Figure 23: Age and sex pyramid by marital status in Kazakhstan, 1989

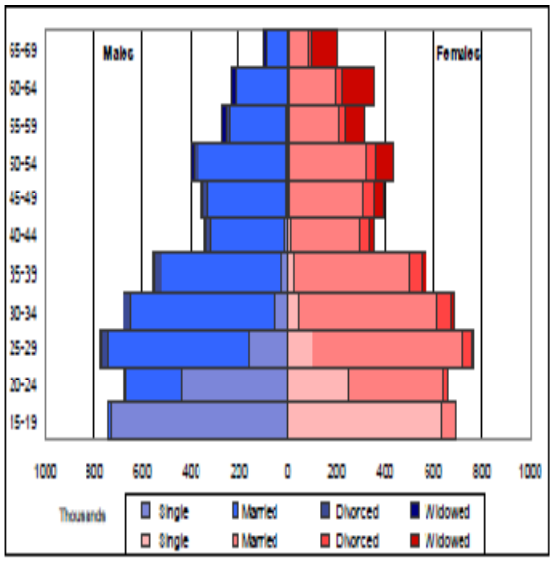


Figure 24: Age and sex pyramid by marital status in urban zone of East Kazakhstan, 1989

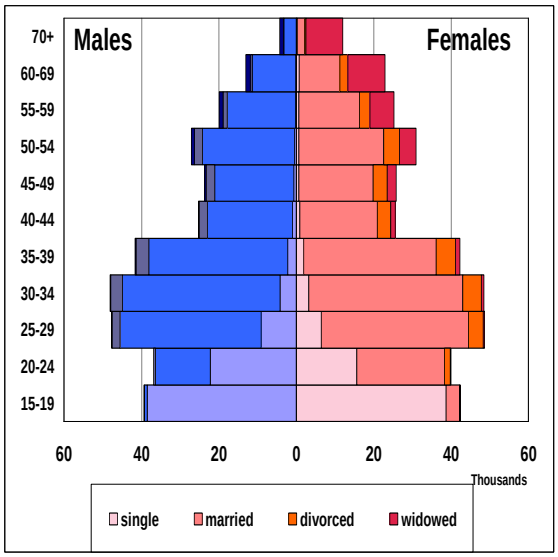


Figure 25: Age and sex pyramid by marital status in Kazakhstan, 1999

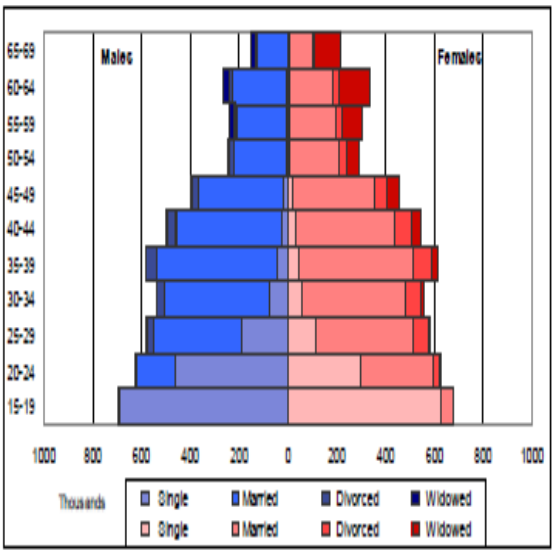
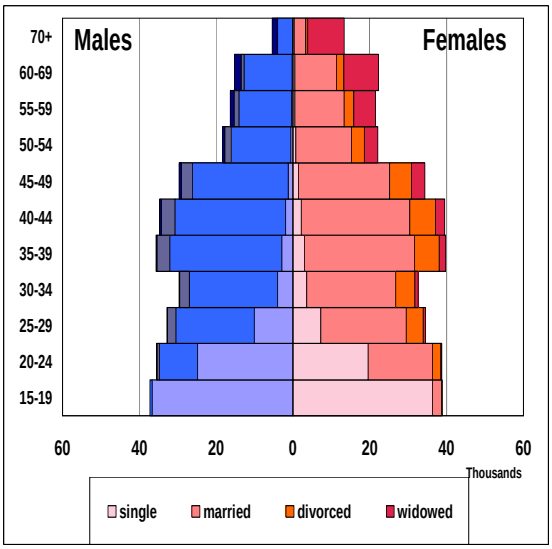


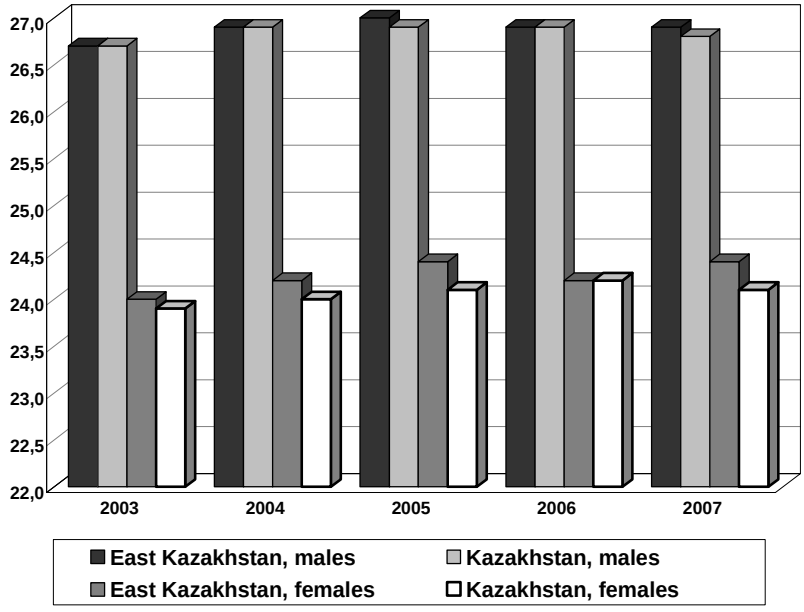
Figure 26: Age and sex pyramid by marital status in urban zone of East Kazakhstan, 1999



Source: The Agency of statistics of Kazakhstan

Figure 24 and 26 show that the share of unmarried women and men aged 20-24 in East Kazakhstan has been increasing. Furthermore, there is increasing number of widowed women in a older age groups due to lower life expectancy of men. The data for 2007 tells us that difference between ages of men and women approached 11.9 years.

Figure 27: Mean age at first marriage in Kazakhstan for males and females

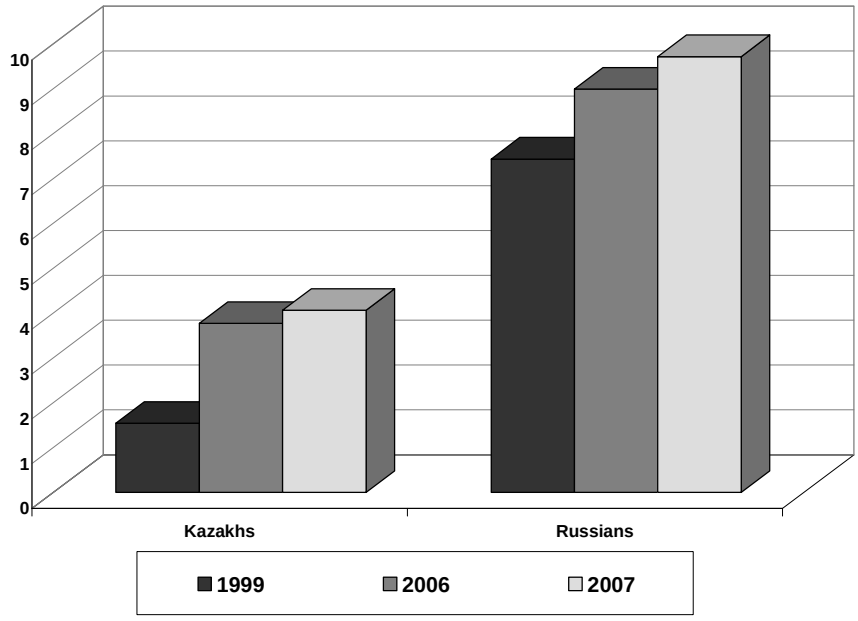


Source: The Agency of statistics of Kazakhstan

The common difference between ages of grooms and brides is 2-3 years. The deviation depends upon deformation of sex-age population structure. The age difference in the East Kazakhstan region was 2.5 years in 2008. In urban areas it was 2.3 years, in rural areas – 3.0. Difference between mean age at marriage (first and second times) varies among ethnic groups for males and females: Kazakhs – 2.7, Russians – 2.5, Germans – 2.4.

The increase of interethnic marriages in East Kazakhstan was caused by existence of two big nations on its territory. We can compare country data of interethnic marriages among Kazakh women for the recent 10 years. The proportion of such marriages among Kazakh women was three times lower in 1999 than in 2007 (figure 7). Apparently, there is a symbiosis of cultures in the city life; however, Kazakh women still marry more often with their own ethnic group than Russians.

Figure 28: Mixed marriages by nationality of brides in Kazakhstan (in abs num., thou.)



Source: The Agency of statistics of Kazakhstan

The multinational structure of population with various cultural traditions assumes that every ethnic group has its own rules related to family and marriage. The proportion of interethnic marriages was 12.8% of overall marriages in 2007. The proportion of Kazakhs married with other nationalities was 6.3% among men and 3.5% among women. The proportion of Russians was 11.0 among men and 15.5% among women, Tatars – 88.4 and 89.0%, Germans – 88.4 and 88.1%. The ratio of these ethnic groups of all ages in total population number of the East Kazakhstan region is following: Kazakhs – 53.2%, Russians – 41.7%, Tatars – 1.6%, Germans – 1.4%. Thus, the lower the ratio of ethnic group in population the higher is its interethnic marriage rate.

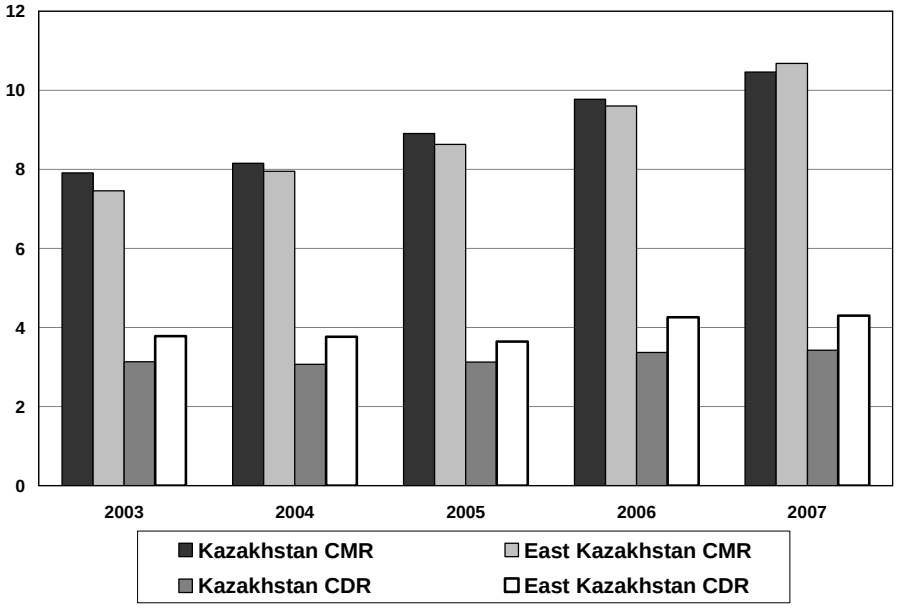
Remarriages compensate broken marriages due to divorce and widowhood. 1494 men (13.2% of total married men) and 1306 women (11.6% of total married women) married second time in 2008. Urban inhabitants marry second time (after divorces and widowhood) more often than rural inhabitants. Urban inhabitants remarried after divorce constituted 15.6% of total marriage, and 2.0%

after widowhood, while for rural population these proportions were 9.7% and 2.4% respectively. The highest rates of remarriages are among Russians and Germans (21.2% and 15.3% respectively of total marriage).

The divorce rate is another important factor in a formation of marital-family structure of population and its reproduction. The divorce rate determines marriage stability and traditionalism of a society. During many years divorce rate in the East Kazakhstan region was higher than country average. The highest rate in the East Kazakhstan took place in cities of Ust-Kamenogorsk and Ridder, distinguished by high proportion of European population.

Mean age of divorcing men and women in the East Kazakhstan region in 2007 was 37.3 and 35.1 respectively. The highest divorce rate is among men aged 30-34 and among women aged 25-29.

Figure 29: Crude marriage rate and crude divorce rate in Kazakhstan



Source: The agency of statistics of Kazakhstan

The analysis of marriage duration before divorce shows that the most divorces occur after 5-14 years of married period. Average duration of marriage before divorce was 10.9 years in 2007 (10.8 years in 2006, 11.4 in 2005, 11.5 in 2004, 11.3 in 2003). The reasons for divorce are different: from material difficulties to psychological incompatibilities of couples. An adverse environment in family and divorce of parents has negative impact on children's own marriage life. However, presence of children in families is not an obstacle for getting divorced. Almost in every second divorced marriage (42%) in 2007 there was one child brought up, in every seventh – two and more children. There is a higher rate of divorced parents with two or more children that took place in rural areas, while in urban areas there are more divorces of parents with one child.

3180 children lived with one of their parents in 2007 as a result of divorce. The proportion of children of divorced couples per a divorce in rural areas is 24.6% higher than in urban areas due to

rural inhabitants having more children per family. There are more childless couples that got divorced recently. Thus, 1910 childless couples got divorced in 2007, which constitutes 43.8% of total divorces. While in 2003 in East Kazakhstan only 1343 couples got divorced (33.9%).

Although the population of East Kazakhstan has decreased annually during 1990-2008 period, its decreasing tendency is slowing down due to natural growth of population. The economic crisis had brought the society to stagnation, and only after 1997, when the crisis was overcome, positive adjustments have happened. However, the fertility rate in the region is still low. The increasing crude birth rates are caused by growing number of women of reproductive ages, born in a baby-boom period of 1980s. This will not last for a long time, especially, considering there are so many socio-economic issues that have to be addressed. Marriage and family is social institutes that depend on economic transformation of the society. As a consequence of these reforms, there is a growing number of divorces and cohabitation couples (an increasing number of extra-married children registered on both parents indirectly lead us to this conclusion). The western model of marital behavior is common in urban areas.

Chapter III

General description of the survey

3.1. Characteristic of survey sample

In this chapter main results of the survey will be described. The survey called "Marital and reproductive behavior of women in Ust-Kamenogorsk" was conducted in October, 2009 in Ust-Kamenogorsk, the main city of East Kazakhstan region. The aim of the survey was to reveal characteristics of marital and reproductive behavior of youth and to analyze factors that influence them. To get answers on questions we raised the sample size consisting of 480 women aged 18-29. The representatives of two basic nations in the region were included: Kazakhs and Russians. Another factor that was taken into account was duration of city residence.

The survey had following objectives:

1) To reveal family and marriage values of women depending on demographic characteristics such as age, nationality, education, duration of city residence;
2) To analyze the impact of external factors (parents opinion, religion affiliation, and government interventions) on reproductive and marital behavior of young women.

Following hypotheses are investigated:

1) Marital and reproductive attitudes of younger women differ from older ones;
2) Kazakh women have more traditional view towards family and children compared with Russian women;
3) Women with tertiary education prefer to set up family later and have fewer children;
4) Long-term long lasting residence in cities and further "russianization" of population lead to acceptance of Western standards for women behavior.
5) Type of parental family has little significance on the behavior of young women in comparison to other socio-economic factors;
6) Religious women and those women whose husband and parents are religious show more traditional marital-reproductive behavior;
7) Government aid has insignificant role in women's decision about having child.

We proceeded from assumption that stereotypes of marital-reproductive behavior of women are formed in accordance to social reality in which the life experience is gained. Therefore, duration of city residence determines fertility process and reproductive traditions to some degree. Generally, the adaptation period of a person on his new residence is 8-10 years. By this time migrant has a chance to get acquainted with moral, social norms and to adjust his mentality to new environment. To simplify the objective of the survey we assume women living in the city since age ten have similar attitude as city residents. However, we have to take into account that her family and relatives will still have a significant impact on her behavior.

Four main groups were formed as a result of above assumptions: Kazakhs, which were born in Ust-Kamenogorsk, Russians, which were born in Ust-Kamenogorsk, Kazakhs, which moved to Ust-Kamenogorsk before age ten, and Kazakhs which moved to Ust-Kamenogorsk after age 10. A distinction, subject to ethnic group of respondents, is that migratory activity of Kazakh women is higher that Russian women. Since the migration rate from rural areas to urban areas is low among Russian population, we only considered native Russian population in urban area. Generally, Russians prefer to migrate to their historical motherland – Russia, while Kazakhs migrate from rural areas to urban. Thus, proportion of Kazakhs has increased in the city. According to recent research on issue of reproductive behavior of women of East Kazakhstan region one can see that Kazakh women who migrated from villages are more likely to find job and become city resident after graduating from university, rather than Russian women who are more likely to return to their villages after graduating.

Since the study is about reproductive behavior of youth, we restricted age between 18 and 29. According to Kazakhstani laws, youth is a category of people aged 16-29. But, since marriage is allowed officially from age 18, and nuptiality is still a dominant factor that determines fertility, we constrained age to 18-29.

All women were divided into three age groups (18-21, 22-24, 25-29) in addition of education options also with regards to their supposed work activity. The age group of 18-21 was selected, because we assumed that majority of this group were pursuing their education. Women in this age group usually complete secondary school and continue to study either university or college. The survey demonstrated that 92.5% of women in this age group were in education process. The second age group is characterized by women who had already finished their education and had an opportunity either to continue their education to receive MA or PhD degree, or to start working, or to get married. According to survey this age group is characterized by women that are already working (73.6%), only some of them continue their education (17.6%). Most of which are pursuing their Master's degree, and their marital life is postponed on some time more. The last age group is represented by the oldest women in our survey. Most of them have already been married and have had children. Almost all women (85.6%) in the age group of 25-29 already work. Moreover, there are 6.8% of women in this age group which are on maternity leave (comparing to 3.9% in the age group of 22-24).

Furthermore, there were other factors that were considered in the survey, such as education level and employment level of women, their income, type of residence, and type of parent family. The characteristics of respondents obtained as a result of the survey may refer to their marital status, education level, and employment level of a partner.

. The absolute number of respondents contributed to these groups is shown on the Table 5.

Table 6: Distribution of women according to nationality, age, and duration of city staying

		Status of residence			
Nationality	*Age groups*	*Local*	*Moved before the age 10*	*Moved after the age 10*	*Total*
Kazakhs	18-21	40	40	40	120
	22-24	40	40	40	120
	25-29	40	40	40	120
Russians	18-21	40	0	0	40
	22-24	40	0	0	40
	25-29	40	0	0	40
Total		240	120	120	480

Source: Sample Survey Ust Kamenogorsk 2009

Education is one of the most important characteristics, since it has ingenuous impact on marriage age, and thereafter, on time of the first child birth. Women with tertiary education give more preference to their jobs and career growth, which negatively impacts on formation of a family. Graduates from secondary schools in Kazakhstan have opportunity to continue their education in tertiary education (mostly universities), as well as in vocational or technical post-secondary education. Upon completion of a nine-year program the pupil has a choice of either completing the remaining three years at secondary school or of a transfer to a specialized professional training school. In the Soviet system these were divided into low-prestige PTU's (Professionalnoe Tehnicheskoe Uchilishe) and better-regarded technicums and medical (nurse level) schools; in 2000s, many such institutions, if operational, have been renamed to colleges. They provide students with a working skill qualification and a high school certificate equivalent to 11-year education in a normal secondary school. Kazakh and Russian vocational schools fall out of ISCED classification, thus the enrollment number reported by UNESCO is lower, 1.41 million; the difference is attributed to senior classes of technicums that exceed secondary education standard.

Majority of female interviewees (59%) had or were pursuing their first stage of tertiary education (we used ISCED classification for education levels). And these data do not vary with age, which means that there is a stable interest in getting a tertiary education by young women over time.

Another popular reply to the question about education level was vocational or technical (31%), and the highest shares (33.5%) of those had or were pursuing vocational or technical were women aged 18-21. This is possibly related to the adjustments that happened in the education system. Since 2004 graduates of the 11^{th} form (grade) have been obliged to pass the Uniform National Test consisting of 4 subjects, and on the basis of the results of this test a graduate receives school leaving certificate and he /she may enter university or college without having any other examinations (with condition that applicant gets high test scores). But if a graduate meets a minimum required score,

then he/she only gets reference on completing school. This reform made pupils that were uncertain of their knowledge complete the 9th grade (lower secondary or second stage of basic public education) and then to enter college. College graduates could enter university passing entry examinations without passing UNT but on a payment basis. Since 2009 this system harshened, the Uniform National Test was divided into two parts, and included two more subjects, which decreased the number of pupils graduating from 11th grade even more.

Perhaps differences in education level depending on duration of being resident of Ust-Kamenogorsk are related to these reforms. Such that the share of first stage of tertiary education (bachelor degree) among women who moved to the city after they were aged 10 (65%) is higher than among local women (50.4%) and primarily those which moved to the city before age 10 (60%). But the share of local women studying colleges is 33.4%, which is higher than that of migrants (25%).

There are only a small percentage of women (9.2%) which has basic or secondary education among all age groups.

Also, we can compare data of education level of respondents, their parents and partners.

Table 7a: Education of respondents and their partners: Kazakh nationality

Education of respondents	*Education of husband*					
	Basic	*Secondary*	*Vocational*	*Tertiary*	*Other*	Total
Basic	0	0	0	0	0	0
Secondary	0	1	7	4	0	12
Vocational	0	0	20	8	0	28
Tertiary	0	1	15	37	0	53
Other	0	0	1	1	0	2
Total	0	2	43	50	0	95

Note: in abs. numbers

Source: Sample Survey Ust Kamenogorsk 2009

Table 7b: Education of respondents and their partners: Russian nationality

Education of respondents	*Education of husband*					
	Basic	*Secondary*	*Vocational*	*Tertiary*	*Other*	*Total*
Basic	0	0	0	0	0	0
Secondary	1	0	1	0	0	2
Vocational	0	1	11	1	0	13
Tertiary	0	1	11	12	0	24
Other	0	0	1	0	0	1
Total	1	2	24	13	0	40

Note: in abs. numbers

Source: Sample Survey Ust Kamenogorsk 2009

We used absolute numbers since many respondents did not have any partners at the time of the survey, which brought about to low values in several categories. Interestingly, in most cases education of a husband and a wife coincides with each other, which shows the preferable homogeneity of marriage. Similarly, the male population demonstrates lower level of education. Among men there are more those who receive vocational or technical education. This is because most specialities in these institutions are mainly designed to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade or class of occupations or trades. And men are more focused on acquiring this type of specialization.

Table 8a: Education of respondents' parents by age (in %): Kazakhs

Education of parents	*Age groups of respondents*						*Total*	
	18-21		*22-24*		*25-29*			
	Mother	*Father*	*Mother*	*Father*	*Mother*	*Father*	*Mother*	*Father*
Secondary	12,4	11,6	17,9	13,0	9,2	9,9	13,2	11,5
Vocational	38,8	39,3	40,2	46,3	37,8	44,6	38,9	43,3
Incomplete tertiary	10,7	7,1	13,7	10,2	10,1	7,9	11,5	8,4
Tertiary	38,0	42,0	28,2	30,6	42,9	37,6	36,4	36,8
Total	100	100	100	100	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

Table 8b: Education of respondents' parents by age (in %): Russians

Education of parents	*Age groups of respondents*						*Total*	
	18-21		*22-24*		*25-29*			
	Mother	*Father*	*Mother*	*Father*	*Mother*	*Father*	*Mother*	*Father*
Secondary	5,1	3,2	12,8	18,4	7,7	12,5	12,0	11,8
Vocational	48,7	51,6	38,5	55,3	30,8	37,5	39,0	49,5
Incomplete tertiary	5,1	6,5	7,7	7,9	15,4	12,5	11,0	8,6
Tertiary	41,0	38,7	41,0	18,4	46,2	37,5	38,0	30,1

Source: Sample Survey Ust Kamenogorsk 2009

The data about education of parents show that parents of women had lower education level than their children. Only 36.4% of female and 36.8% of male parents of Kazakhs and 38% of female and 30.1% of male parents of Kazakhs had the tertiary education. Moreover, there is a larger portion of female parents who are Russian with the tertiary education than female Kazakhs. This is because majority of older female Kazakhs lived in rural areas, and had a limited chance to get the tertiary education. The vocational education was very popular among them though. This is related to the Soviet system of education, which provided free education, but restricted entrance to universities.

At that time the country needed workers in factories and plants particularly, and basic education was enough to work in villages.

Female employment is another important factor, which influences marital and reproductive behavior.

By occupation, most of women work in public (budgetary) organizations (28.1%) and in small commercial organizations (28.1%), which corresponds to statistical data about distribution of female workers employed mainly in services sector on national level. Only 5.8% of women have their own business. It is worth noting that the share of migrant women working in public organizations (33.3%) is higher than of local residents (26.5%), which prefer to seek employment in private companies (21.5% versus 13.3%). Wages in public organizations are lower than in private companies, but competition is lower there too. Local residents have more advantages over migrants at labor market, such as better networking, education and ambitions. This also applies to entrepreneurship; migrants do not have their own business at all.

Table 9a: Occupation of respondents and their partners: Kazakhs

*Occupation of respondent**	*Occupation of partner*								
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*Total*
1	19	15	5	0	1	0	0	0	41
2	7	10	4	0	0	2	0	2	25
3	0	1	1	0	0	0	0	0	2
4	0	1	1	0	0	0	0	0	2
5	6	7	1	0	0	0	0	0	14
6	1	4	0	0	1	1	0	0	7
7	1	2	0	1	0	0	0	0	4
8	0	0	1	0	0	0	0	0	1
Total	34	40	13	1	2	3	0	2	95

Note: in abs. numbers

Source: Sample Survey Ust Kamenogorsk 2009

Table 9b: Occupation of respondents and their partners: Russians

*Occupation of respondent**	*Occupation of partner*								
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*Total*
1	7	8	1	0	0	0	0	0	16
2	2	6	1	1	0	0	0	0	10
3	0	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	0	0	1
5	0	3	0	0	0	0	0	0	3
6	3	6	0	0	0	0	0	0	9
7	0	0	1	0	0	0	0	0	1
8	0	0	0	0	0	0	0	0	0
Total	13	23	3	1	0	0	0	0	40

Note: in abs. numbers

Source: Sample Survey Ust Kamenogorsk 2009

Occupation:

1. Work in public (budgetary) organizations
2. Work in commercial organizations
3. Have own business
4. Work out of household (paid or unpaid)
5. Housewife
6. Student
7. Unemployed
8. Disabled

Workplace of husband determines his income level, which impacts on reproductive behavior of young family. Even though, majority of husbands also works in commercial organizations and government agencies and only few of husbands own a business, yet this situation is not homogenous. Most males prefer to work in commercial organizations, because it is easier for them to get hired there. Typically, men with university degree are employed in government service, while those with a college degree in commercial organizations.

Table 10a: Income of respondents by age (in %): Kazakhs

*Income**	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
1	19,8	31,1	10,8	20,6
2	28,9	33,6	30,0	30,8
3	43,0	33,6	46,7	41,1
4	4,1	1,7	10,0	5,3
5	0,0	0,0	2,5	0,8
6	4,1	0,0	0,0	1,4
Total	100	100	100	100

Table 10b: Income of respondents by age (in %): Russians

*Income**	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
1	10,0	22,5	16,3	16,3
2	32,5	20,0	25,6	26,0
3	47,5	45,0	41,9	44,7
4	7,5	10,0	9,3	8,9
5	0,0	2,5	7,0	3,3
6	2,5	0,0	0,0	0,8
Total	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

Note:

Income

1. Income is enough to afford anything I want
2. Income is enough to purchase long durable goods (refrigerator, TV sets etc), but I cannot afford to buy a house or a car at the moment
3. Income is enough to cover costs on necessities (food and clothing), although larger purchases have to be postponed
4. Income is only enough to buy food
5. Income is not enough to buy food, and I am constantly in debts
6. No answer

Income level and housing conditions may refer to social status of respondents. The major source of support for majority of women studying in college or university is provided by their parents. Parental relations between parents and children remain for a long time important in Kazakhstan, particularly among Kazakh population. This may be expressed as a financial assistance to children and later to grandchildren, as well as nonmaterial help. The often practice is that young migrant couples in financial trouble give their older child to parents to upbring him until a certain age. Another kind of family support is staying in extended family, when young couples cannot afford their own dwelling and stay with their parents. A common Kazakh family may include several generations together: grandfather and grandmother, parents, children (married), and grandchildren.

In the survey we asked women to characterize their income level with ability to cover their consumer needs. The highest category was "income is enough to afford everything" and the lowest was "income is not enough to buy food". Majority of respondents described their income level as middle and slightly above middle (91.7%). This data do not vary with age much, which supports our assumption about income source of the youth.

Alas, a housing issue is a main issue for youth, particularly for those who moved from rural areas. And this is the main cause for delaying marriage and child birth. Moreover, income of one spouse is not enough to cover costs of the whole family, which makes both of spouses to work. If we take into account high costs and deficit of preschool organizations, then the situation becomes more critical. That's why modern women dream of taking care of families and children at home, however, they have to work in order to receive money necessary for family budget. Their behavior in this case repeats behavior of their mothers (both parents were working equally of 57.3% of respondents).

Figure 30a: Distribution of housing area per respondent in a household (in %): Kazakhs

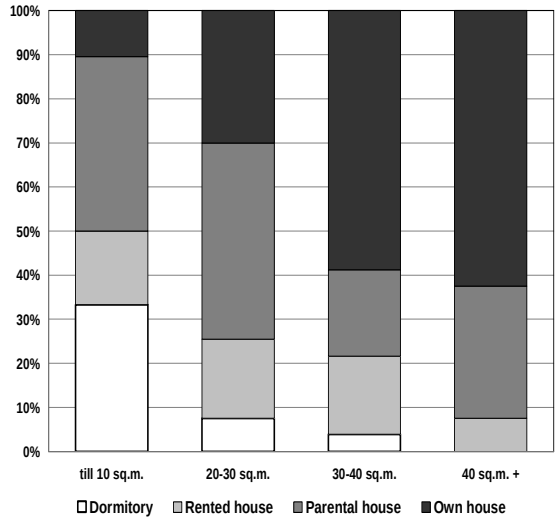


Figure 31b: Distribution of housing area per respondent in a household (in %): Russians

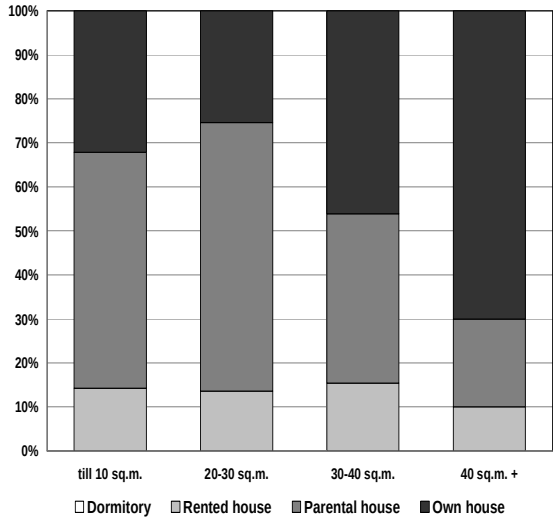


Figure 31a: Distribution of housing area per respondent in a household (in %): age group 18-21

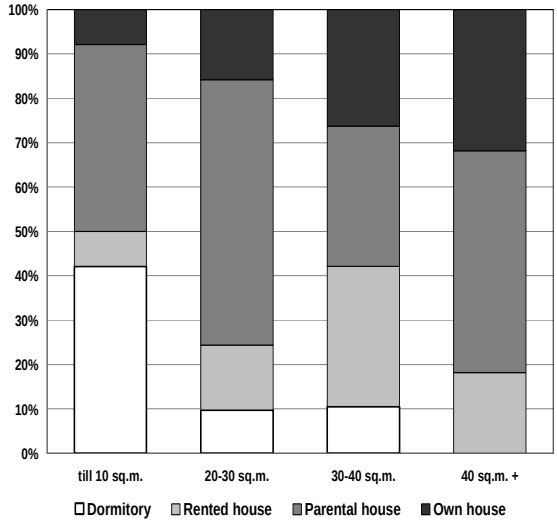


Figure 31b: Distribution of housing area per respondent in a household (in %): age group 22-24

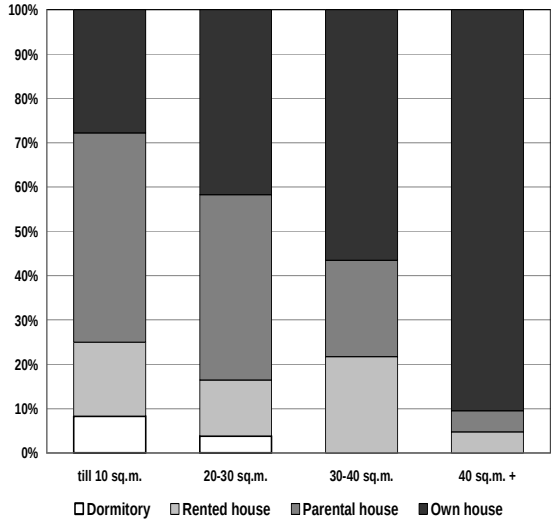
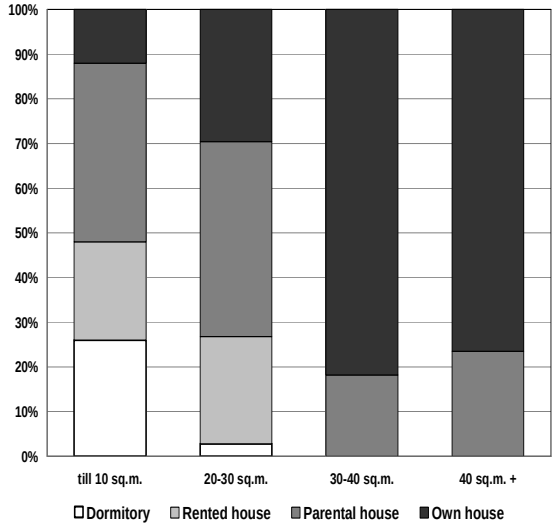


Figure 31c: Distribution of housing area per respondent in a household (in %), age group 25-29



Source: Sample Survey Ust Kamenogorsk 2009

66.5% of interviewees said that they stay in dormitories, rented houses, or with their parents, and only 33.5% had their own house. Only 29.2% of female migrants had their own houses, while 34.2% of local residents and 36.7% of those moved before age 10 stayed in their own dwelling. The share of migrants (25.8%) living in dormitories is much higher than local residents (1.7%) and those who moved before age 10 (10%).

Another issue related to housing conditions is distribution of housing area per person in a household.

Overall, women that stay in the city for a long time have lesser deficit of housing space. Majority of them had 20-30 sq.m. per person. This disparity is notable between female Kazakhs and Russians. Nonlocal residents of Ust-Kamenogorsk (mostly Kazakhs according to survey results) have a smaller space though. Those who stay in their own house have the larger are, and the smaller are is among women staying in dormitories or with their parents.

Now we turn to marital status of respondents. The questionnaire was divided into three blocks (parts) to get more detailed information about marital status of young women: women, who are engaged in their first official or unofficial marriage; women, who are divorced or widowed; and women, who have not married yet.

Figure 32a: Marital status of respondents by age (in %): Kazakhs

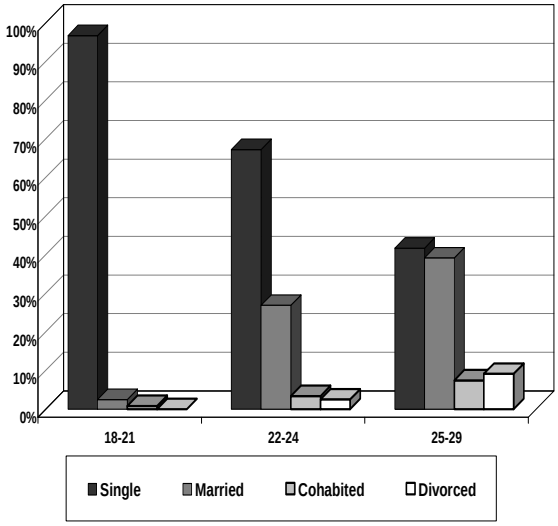
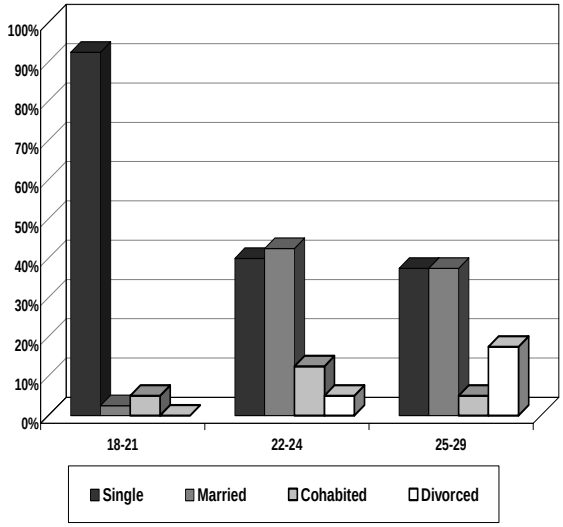


Figure 32b: Marital status of respondents by age (in %): Russians

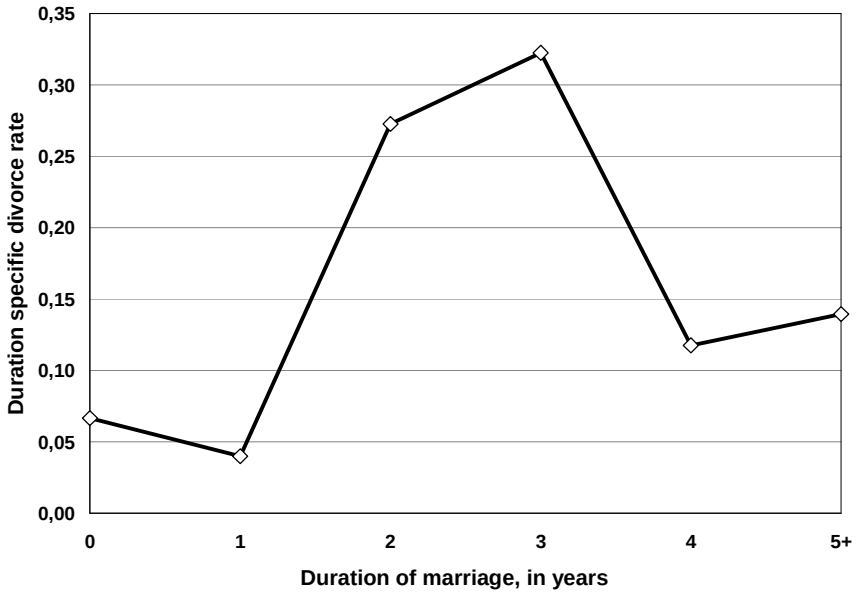


Source: Sample Survey Ust Kamenogorsk 2009

The marital status of respondents varies with age; the older is women, the more chance that she is married. Thus, the highest concentration of married, cohabitated or widowed women is in the oldest age group 25-29. Majority of respondents of both nations (65.6%) stated that they were lonely, only 28.8% of interviewees live with a partner. To conclude, many women postpone marriage until age of 22-24, and many up until 25-29. There is a higher portion of married and cohabitating females among Russians in the older age groups, and also they have more divorces.

Another important factor in family status in a society is an occurrence rate of divorce. Only 4.8% of respondents indicated that they were divorced, most of which got married when they were 20-23, and the average marriage duration was 2-3 years. The proportion of those who remarry was low. However, it is well-known that many divorced women do not hurry in getting married again, instead they prefer to cohabitate.

Figure 33: Duration specific divorce rate



Note: both nationalities

Source: Sample Survey Ust Kamenogorsk 2009

Now let's turn to fertility rates of respondents. Majority of women of both nationalities do not have any children (77.6%), or have one child (16.7%), two or more children is rare. The oldest age group of 25-29 has higher birth rates, however, even there majority of women does not have children. Average number of children for Kazakhs is 1.33 and for Russians is 1.22.

Figure 34a: Number of children per woman by age (in %): Kazakhs

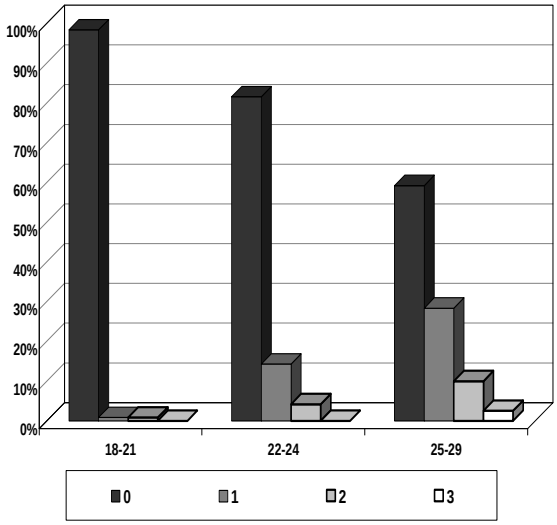
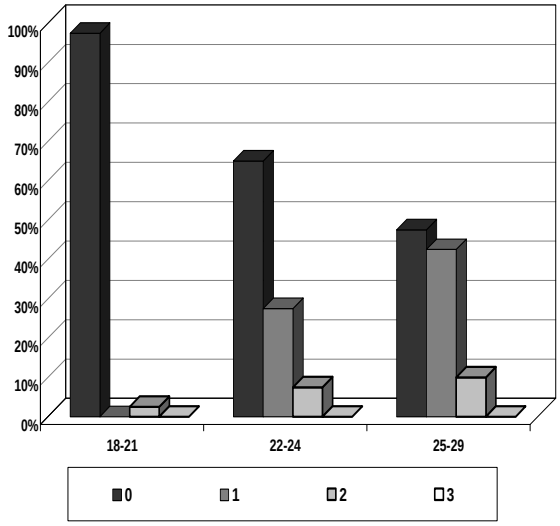


Figure 34b: Number of children per woman by age groups (in %): Russians



Source: Sample Survey Ust Kamenogorsk 2009

This tendency implies fertility postponement, which may negatively impact the number of births in the future. Considering that reproductive age is constrained, and there are other negative factors decreasing it even more, such as poor environment, low level of medical care and high infant mortality rate, we suppose that woman will not have more than 3 children in the future. However, that's what government promises. But urbanization of rural inhabitants, which demonstrate the highest birth rates, we can infer about a decline of population growth in the future.

Distribution of birth rates according to marital status of women confirms our assumption about relationship between marriage and birth rates. It can be seen that married women or those women who were married have higher birth rates. The other thing that is obvious is that they do not hurry to have a second child. The phenomenon of small families is becoming widespread in the country. This term came from Russian researchers, which already faced this issue in 1990s. Small family consists of one or two children. Russian researcher Antonov suggested that for older generation to be replaced by following one, an average family shall have 2.5 children, which is equivalent to one quarter of two children families, one third of three children families, 14% of those who do not have any children at all or have one child, and 7% of five and more children families. Otherwise, depopulation will take place. It is obvious that almost all young couples want to have children, but what is more important how many. According to the survey most couples prefer to have one or two children at most.

The survey showed that majority of divorced women has one child, while those who cohabitate have even two children. This means that there is an increasing number of children who will be upbrought in a family with one biological parent. These children face not only psychological problems but also socio-economic problems as well. They are less socially protected than children upbrought in full families, and they have higher rates of diseases and mortality.

It is necessary to mention youth's attitude towards contraception when talking about reproductive behavior. Contraception indicates level of youth sexual competence on one hand, and proliferation of premarital sexual relations on the other hand. It is a well-known that ignorance, while using urgent contraceptive (like Postinor, which is very popular among Kazakhstani youth), may bring about serious health consequences up to infertility. Moreover, as a result of inaccurate use undesirable pregnancy may come true.

The survey showed that majority of respondents of both nationalities do not use any means of contraception (26%), which is probably related to the fact that there were many married women, and those women who have irregular sex or have not started sexual life yet. The second popular answer was condoms (21.3%), hormone pills were third popular choice among women aged 22-29, although only 1.2% of the youngest age group 18-21 used them. More adult women (21.9%) marked that they used intrauterine devices. The youngest women aged 18-21 (29.8%) does not have sex at all. They selected not having sex 15 times more than women in other age groups, which means that sexual activity in this age group has not started yet. However, these young women (24.8%) refused to answer what contraception type they use. It is worth noting that urban women uses safer means of contraception than rural migrants, moreover, their range of them is wider.

Table 11a: Use of contraception by marital status of respondents (in %): Kazakhs

*Contraceptive use**	*Marital status*					*Total*
	Single	*Married*	*Cohabited*	*Widowed*	*Divorced*	
1	30,8	17,1	35,7	28,6	0,0	27,4
2	17,4	17,1	14,3	28,6	25,0	17,7
3	5,3	15,9	14,3	14,3	0,0	8,3
4	2,4	11,0	7,1	7,1	0,0	4,7
5	0,4	36,6	21,4	7,1	25,0	10,0
6	0,0	0,0	0,0	0,0	0,0	0,0
7	21,1	1,2	0,0	7,1	25,0	15,2
8	22,3	1,2	7,1	7,1	25,0	16,3
9	0,4	0,0	0,0	0,0	0,0	0,3
Total	100	100	100	100	100	100

Table 11b: Use of contraception by marital status of respondents (in %): Russians

*Contraceptive use**	*Marital status*					*Total*
	Single	*Married*	*Cohabited*	*Widowed*	*Divorced*	
1	17,6	24,2	33,3	33,3	0,0	21,7
2	39,7	24,2	11,1	22,2	100,0	32,5
3	11,8	12,1	22,2	22,2	0,0	13,3
4	0,0	3,0	0,0	0,0	0,0	0,8
5	0,0	36,4	33,3	22,2	0,0	14,2
6	0,0	0,0	0,0	0,0	0,0	0,0
7	10,3	0,0	0,0	0,0	0,0	5,8
8	17,6	0,0	0,0	0,0	0,0	10,0
9	2,9	0,0	0,0	0,0	0,0	1,7
Total	100	100	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Contraceptive use

1. I do not use any means
2. Condoms
3. Hormonal (pills)
4. Biological methods (calendar etc.)
5. Intrauterine devices
6. Surgical sterilization
7. Abandoning sexual life
8. No answer
9. Other

The data about use of contraceptive means by respondents according to their marital status suggests that intrauterine devices are mostly used by women who have or had permanent partners: married, and to a less extent widowed and divorced. Condoms are most popular among those women who do not have regular relationships, such as lonely, divorced or widowed women. Abandoning sexual life is characteristic to lonely young women, and widowed. There is a substantial difference in attitudes of Russian and Kazakh women, particularly, lonely ones. Russian females use contraceptives more often.

To complete characteristics of respondents it seems necessary to trace relations between generations. Parental family is a main institute that forms marital and reproductive behavior of respondents. In a questionnaire respondents were to answer on a range of questions characterizing family type of their parents. 71.6% of women said that they were brought up in a two-parent family, where both of them were biological parents. 15.6% of respondents were brought up by a single mother. And, only 7.7% had been adopted. These findings argue that divorce existed in the older generation as well. Such a behavior of parents has an impact on behavior of youth.

Table 12a: Respondents according to type of parental family and marital status category (in %): Kazakhs

*Type of family**	*Marital status*					*Total*
	Single	*Married*	*Cohabited*	*Divorced*	*Widowed*	
1	81,4	69,5	64,3	42,9	100,0	76,7
2	5,3	9,8	21,4	7,1	0,0	6,9
3	0,4	2,4	0,0	0,0	0,0	0,8
4	10,5	11,0	14,3	50,0	0,0	12,2
5	1,6	7,3	0,0	0,0	0,0	2,8
Total	100	100	100	100	100	100

Table 12b: Respondents according to type of parental family and marital status category (in %): Russians

*Type of family**	*Marital status*					*Total*
	Single	*Married*	*Cohabited*	*Divorced*	*Widowed*	
1	57,4	57,6	77,8	33,3	0,0	56,7
2	5,9	15,2	11,1	22,2	0,0	10,0
3	2,9	3,0	0,0	11,1	0,0	3,3
4	27,9	21,2	11,1	33,3	100,0	25,8
5	5,9	3,0	0,0	0,0	0,0	4,2
Total	100	100	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Type of family

1. In complete family with both biological parents
2. In complete family, where one of my parents was not my biological father (mother)

3. In incomplete family with father
4. In incomplete family with mother
5. In the family of my grandparents / In the family of my relatives
6. In foster home (with guardians, in orphanage)

If we compare marital status of respondents with the type of family which they were brought up in, then we can observe a direct correlation. The total distribution for some groups is less than 100% since we did not include all types of parental families, and we omitted those for which there were only few answers. Majority (60.9%) of divorced women were brought up in a family with a single mother, or with one of biological parents. The highest portion of respondents that were brought up in a family with one of biological parents is among cohabitating couples (17.4%). Undoubtedly, education and experience that were received in a parental family impact the formation of one's own family.

Young woman whose parents were divorced has a higher chance to get divorce herself, and vice versa. This is like a phenomena of orphans, which were brought up in orphanages, they find it difficult to set up their own family, because they have not experienced this in a process of socialization.

When we analyze type of family in a relation to nationality of respondents, we can see that Kazakh women have more traditional behavior. Majority of Kazakh women lives in two-parent extended family. The proportion of Kazakh women who were brought up in incomplete family is two times less than the proportion of Russian women (23.3% against 43.4%, respectively). This is related to more strong family ties among Kazakhs. Up until recently, a Kazakh woman who have lived alone, without a husband or divorced, was considered as a "square peg in a round hole", and was condemned by relatives and society. Children were brought up in incomplete families as a consequence of widowing of one parents, rather than being divorced. This is especially true for rural areas.

Interestingly, majority of women considers their parental family as a traditional one (81.7%). This view is typical, particularly, among Kazakh women, which moved to the city recently. Russian women are more critical in this issue, the proportion of those who does not consider their parental family as a traditional one were three times higher (15% against 5.6%). This is an evidence of the fact that family, even deformed one, continues to remain something special for majority, a symbol of traditions.

Further in the research we will consider the main finding of the survey. The survey consisted from several parts dealing with following topics: marital and reproductive behavior and attitude towards marriage, children and family duties.

3.2. Marital behavior of respondents

Despite current modernization of Kazakhstani society marriage still remains a significant value to many young women. It is common in our society to marry before having children. However, recently new tendencies have taken place in formation of families: emerge of cohabitating couples, growth of divorce rates and postponement of child births. In this section of the research an analysis of marital and family norms of youth will be made. A questionnaire of the survey observed such topics as marital behavior of youth, attitude towards premarital sexual relations, age of marriage, obstacles to get married, attitude towards divorce, desired type of family and allocation of duties in a family.

As we have mentioned above, most of young women aged 18-29 were not married, and the highest chance to be alone is in the age group of 18-21. We will try to analyze attitude of respondents towards marriage according to their marital status.

Table 13a: Place of meeting her future husband by age group (in %): Kazakhs

Acquaintance	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
School/University	19,8	31,1	10,8	20,6
Job	28,9	33,6	30,0	30,8
Party	43,0	33,6	46,7	41,1
Family party	4,1	1,7	10,0	5,3
Internet	0,0	0,0	2,5	0,8
Other	4,1	0,0	0,0	1,4
Total	100	100	100	100

Table 13b: Place of meeting her future husband by age group (in %): Russians

Acquaintance	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
School/University	10,0	22,5	16,3	16,3
Job	32,5	20,0	25,6	26,0
Party	47,5	45,0	41,9	44,7
Family party	7,5	10,0	9,3	8,9
Internet	0,0	2,5	7,0	3,3
Other	2,5	0,0	0,0	0,8
Total	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

Women, who were in marriage at the time of the survey, were asked about duration of their relationships with future husband before marrying, and whether they dated other partners before that. These questions allow us to assess how traditional relationships in the society are, because long-term relationships with her future husband until the marriage for a few years and premarital sexual relationships are features of modern society. A process of family formation is an important

characteristic, based on which one can determine its future. We tried to understand how responsible was married women to that issue, what was the duration of relationships with their current husbands, what was social criteria in a choice of partner.

The survey showed that majority of women of both nationalities met their current husbands at work (25.2%) or at party (37.8%). Which means that institution of procuration, when young pairs get acquainted at some family meetings, does not function anymore, which weakens family institution. Up until prerevolutionary period in Kazakhstan one's parents chose a spouse for her. Since Soviet times these traditions were abandoned, however, in rural areas parents had a last word for couple's marriage. This was particularly true for those young women who could not get married. They were brought together with single men through relatives and friends. However, the survey showed that this was not the case in the city.

Table 14: Duration of relationships with the future husband by duration of being resident in Ust-Kamenogorsk and nationality (in %)

Duration, in years	*Duration of being resident in Ust-Kamenogorsk**				*Total*
	1		*2*	*3*	
	Kazakhs	*Russians*	*Kazakhs*	*Kazakhs*	
1	41,9	55	61,3	45,5	49,5
2	29,0	17,5	22,6	21,2	24,2
3	16,1	15	9,7	12,1	12,6
4	6,5	7,5	6,5	21,2	11,6
Total	100	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Duration, in years

1. Women staying in the city since their births
2. Women staying in the city before age 10
3. Women staying in the city after age 10

As data in table 12 shows, half of married women get married in their first year of dating future husbands, and this data do not vary with regards to duration of residence in Ust-Kamenogorsk. Thus, attitudes of rural and urban inhabitants are similar in this case. This implies that there have been changes in the society, and woman emancipation. Marriage is a matter of choice, and most young women prefer to verify relationships with time. Also, this may be a matter of financial and other difficulties young couples face.

To understand how traditional is premarital behavior of young women, we asked them number of serious relationships before marriage. We did not ask straightforward the number of premarital sex partners, because it is considered impolite in Kazakhstan. However, this question demonstrates level of loyalty towards this question. Since serious relationships implies premarital sex most of the time.

Table 15: Number of boyfriends before future husband by duration of being resident in Ust-Kamenogorsk and nationality (in %)

Duration, in years	*Duration of being resident in Ust-Kamenogorsk**				*Total*
	1		*2*	*3*	
	Kazakhs	*Russians*	*Kazakhs*	*Kazakhs*	
0	51,6	22,5	35,5	63,6	42,2
1	45,2	55,0	38,7	18,2	40,0
2	3,2	15,0	19,4	9,1	11,9
3	0,0	5,0	3,2	6,1	3,7
4	0,0	0,0	3,2	3,0	1,5
Total	100	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Duration, in years

1. Women staying in the city since their births
2. Women staying in the city before age 10
3. Women staying in the city after age 10

Respondents showed traditionalism in a question about premarital partners. Women do not change their partners frequently before marriage, 40% of respondents dated only one boyfriend, and 42% did not have anyone before marriage. City residents changed their partners more often though. However, majority of city residents said that they did not have any serious relationships with other men, or that they only had one. Russian women demonstrated more loyalty in choosing partner (55% of them indicated that they had one boyfriend and 22.5% that they had several partners before meeting their husband). We can conclude that women are less traditional before marriage.

Another group of respondents are divorced women. We tried to find out reasons for divorce in the questionnaire, whether they married again or built new relationships, and the reason for not starting new relationships. The portion of divorce is very small (4.8%), and this may influence reliability of results.

Divorced women were then asked to identify reason for divorce, out of 8 reasons they could have chosen up to 2.

Most popular reason for divorce among young women was interference of parents or relatives. This implies that role of parents on decision of family life of young couples has decreased, and traditional relationships in family have changed as well. Another important reason was alcoholism of spouse.

Table 16: Reasons of divorce for divorced women by nationality (in %)

*Reasons**	*Kazakhs*		*Russians*		*Total*	
	Reason #1	*Reason #2*	*Reason #1*	*Reason #2*	*Reason #1*	*Reason #2*
No reason reported	0,0	17,6	0,0	66,7	0,0	37,9
1	17,6	0,0	16,7	0,0	17,2	0,0
2	0,0	5,9	8,3	0,0	3,4	3,4
3	35,3	5,9	25,0	0,0	31,0	3,4
4	17,6	5,9	16,7	0,0	17,2	3,4
5	23,5	17,6	8,3	0,0	17,2	10,3
6	0,0	5,9	8,3	0,0	3,4	3,4
7	0,0	35,3	16,7	8,3	6,9	24,1
8	5,9	5,9	0,0	25,0	3,4	13,8
Total	100	100	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Reasons

1. Inability of having children
2. Poor health of spouse
3. Interference of parents/relatives
4. Adultery of spouse
5. Unreasonable jealousy, violence in family
6. Sexual incompatibility
7. Alcoholism of one of spouses
8. Irreconcilable contradictions between spouses

Inability to have children was chosen by 17.6% of Kazakhs and 16/7% of Russians interviewees, which implies that having children is still of importance for women. At the same time sexual incompatibility is of little significance for divorce among all women (3.4%). However, is more important for Russians.

Of all divorced women that were interviewed only 17.2% married again. The rest 30% are ready to start new relationships, 39.4% are not ready yet, and 30% found difficulty in replying. Then, we asked divorced women, who do not have any partner yet, the reason for delaying new relationships. This will help us to understand difficulties these women face.

The main barrier for divorced women to marry again is not financial reason, but lack of partner. This implies that divorced women still want to marry, but it is difficult for them to find worthy candidate. Kazakh women find it even more difficult to get married again. This is related not only to find suitable partner, but also due to some cultural traditions. The woman is blamed for being divorced, and therefore, being divorced is considered as improper behavior.

Table 17: Reason for postponement of repeated marriage for divorced women by nationality (in %)

Reason	*Nationality*		*Total*
	Kazakhs	*Russians*	
Do not want to repeat past mistakes	18,2	33,3	23,5
Because of children	18,2	16,7	17,6
Lack of financial conditions	0,0	0,0	0,0
Lack of worthy candidate	54,5	50,0	52,9
Other	9,1	0,0	5,9
Total	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

The remaining group of respondents is single young women who constituted majority of interviewed women. 39.1% of them said that they had boyfriend, however, the other 60.9% did not have any serious relationships with anybody at the moment of the interview. So, it was interesting for our research to know when they were planning to marry, and what prevents them from doing so.

Table 18a: Planning of marriage for single women by age (in %): Kazakhs

Planning of marriage	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
Next year	8,5	35,8	8,0	17,3
In 5 years	48,7	35,8	50,0	44,8
In 5-10 years period	14,5	1,2	8,0	8,9
Not going to marry	3,4	4,9	8,0	4,8
Have not thought about that	12,8	13,6	8,0	12,1
No answer	12,0	7,4	18,0	11,7
Other	0,0	1,2	0,0	0,4
Total	100	100	100	100

Table 18b: Planning of marriage for single women by age (in %): Russians

Planning of marriage	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
Next year	2,6	43,8	26,7	17,4
In 5 years	52,6	25,0	20,0	39,1
In 5-10 years period	28,9	6,3	0,0	17,4
Not going to marry	5,3	6,3	26,7	10,1
Have not thought about that	7,9	6,3	6,7	7,2
No answer	2,6	12,5	20,0	8,7
Other	0,0	0,0	0,0	0,0
Total	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

There are 44.8% of Kazakhs respondents and 39.1% of Russians who are planning to get married in next 5 years. And even absence of permanent partner does not hold from that. Those women who have a boyfriend often plan to get married in a year (35.5%) or in 5 years (40.3%) at maximum.

In the questionnaire women were asked reasons that were in their way to get married. And they had 5 available choices, which they could select. However, most of women constrained themselves with two or three reasons. Here, we indicated most popular answers only.

Table 19a: Troubles for marriage of first importance for single women by age (in %): Kazakhs

Trouble for marriage of first importance	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
1	74,1	18,5	10,0	42,9
2	14,7	51,9	38,0	31,6
3	1,7	13,6	12,0	7,7
4	7,8	13,6	30,0	14,2
5	0,9	2,5	8,0	2,8
6	0,9	0,0	2,0	0,8
Total	100	100	100	100

Table 19b: Troubles for marriage of first importance for single women by age (in %): Russians

Trouble for marriage of first importance	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
1	65,8	18,8	6,7	42,0
2	13,2	62,5	33,3	29,0
3	7,9	12,5	20,0	11,6
4	7,9	6,3	33,3	13,0
5	5,3	0,0	0,0	2,9
6	0,0	0,0	6,7	1,4
Total	100	100	100	100

Table 19c: Troubles for marriage of second importance for single women by age (in %): Kazakhs

Trouble for marriage of second importance	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
No trouble reported	40,5	60,5	68,0	52,6
2	39,7	12,3	4,0	23,5
3	4,3	6,2	8,0	5,7
4	10,3	9,9	14,0	10,9
5	4,3	11,1	6,0	6,9
6	0,9	0,0	0,0	0,4
Total	100	100	100	100

Table 19d: Troubles for marriage of second importance for single women by age (in %): Russians

Trouble for marriage of second importance	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
No trouble reported	36,8	62,5	66,7	49,3
2	42,1	6,3	6,7	26,1
3	7,9	0,0	0,0	4,3
4	5,3	25,0	20,0	13,0
5	7,9	6,3	6,7	7,2
6	0,0	0,0	0,0	0,0
Total	100	100	100	100

Notes:
Source: Sample Survey Ust Kamenogorsk 2009

1. Need to complete education
2. Desire to make a career
3. Lack of financial conditions
4. Lack of worthy candidate
5. Moral and physical unreadiness

Almost half of respondents indicated the only reason as a barrier for marriage. One of the main reasons of marriage delay among women aged 18-21 was to complete their education, for the rest – career. The second main barrier was desire to make a career. Some women also indicated lack of worthy candidate. Lack of financial conditions is not a barrier for most of women, especially for younger ones. Only few are stopped by lack of financial conditions (8.5% of both nationalities). Here, we can see that romantic sentiments give away in front of material values. Only some indicates an absence of worthy candidate (13.9% of both nationalities), although in the oldest age group it has a grater role than in other groups (30% of Kazakhs aged 25-29 and 33.3% of Russians). Moreover, we can state that nationality and duration of living in city have insignificant impact.

3.3. Reproductive behavior of respondents

Reproductive behavior of young women is on of main factors that determines demographic future of a country. Firstly, we will observe behavior of young women who are already married. We asked respondents of this category if they planned to have children in next three years. Moreover, we tried to analyze reproductive plans of married women with regards to number of children they had at the moment of survey.

The survey showed that young women had moderate reproductive behavior, and they did not plan to have any children in next three years yet. However, childless women were more eager to child bear (81.1% of both nationalities). As the number of children increases, women's desire to expand her family decreases. And once again, we come to a conclusion that majority of women consider a family with one or two children as ideal one.

Figure 35a: Planned number of children for married woman depending on the number of children she has (in %): Kazakhs

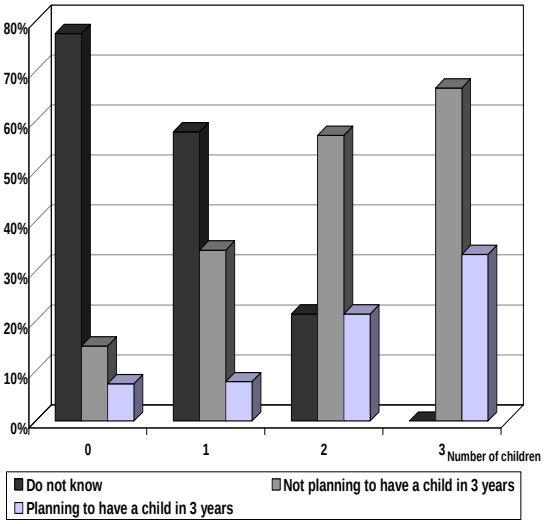
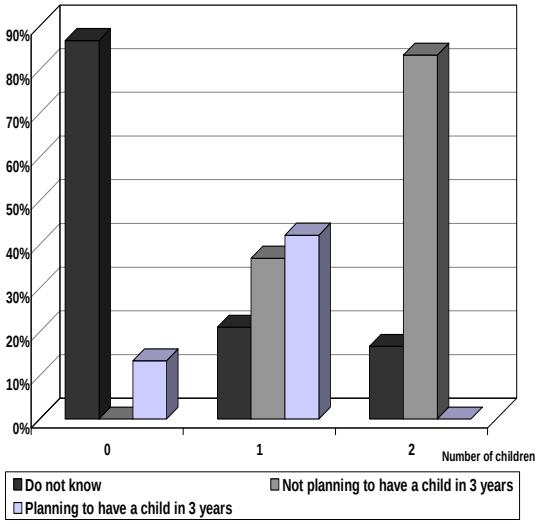


Figure 35b: Planned number of children for married woman depending on the number of children she has (in %): Russians



Source: Sample Survey Ust Kamenogorsk 2009

It is important to mention that childbearing is inseparable with marriage for most women. We deducted this by comparing reproductive behavior of single and married women. Here we asked single women if they planned to have children in next three years.

Table 20a: Planning of children in nearest 3 years for unmarried women by age (in %): Kazakhs

Planning of children	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
Yes	10,3	46,9	40,0	28,2
No	73,5	38,3	34,0	54,0
Do not know	16,2	14,8	26,0	17,7
Total	100	100	100	100

Table 20b: Planning of children in nearest 3 years for unmarried women by age (in %): Russians

Planning of children	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
Yes	5,3	68,8	26,7	24,6
No	81,6	18,8	46,7	59,4
Do not know	13,2	12,5	26,7	15,9
Total	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

27.4% of female interviewees answered to this question positively, most of which were Kazakh women (28.2% versus 24.6%) in older age groups. Rest of women had a negative answer (55.2%), or had a doubt about that (17.4%). These results confirm that marriage is still a significant institution in the society, and also imply that young women are more interested in getting married than having children. The youngest female respondents showed the least interest in particular.

Studying of desired number of children is more significant for analyzing reproductive behavior of youth than studying real birth rates. Norms about childbearing is developed out of ideal number of children, which is usually 2 times higher than real birth rates. This helps us to understand an ideal type of family and assess reproductive behavior of society.

Table 21: Ideal number of children per woman by duration of being resident in Ust-Kamenogorsk and nationality (in %)

Ideal number of children	*Duration of being resident in Ust-Kamenogorsk**				*Total*
	1		*2*	*3*	
	Kazakhs	*Russians*	*Kazakhs*	*Kazakhs*	
1	2,5	6,7	1,7	0,8	2,9
2	30,0	63,3	26,7	13,3	33,3
3	43,3	24,2	50,0	45,8	40,8
4	20,0	4,2	20,0	30,8	18,8
5	2,5	1,7	1,7	7,5	3,3
6	1,7	0,0	0,0	1,7	0,8
Total	100	100	100	100	100

Notes

Source: Sample Survey Ust Kamenogorsk 2009

Duration of being resident in Ust-Kamenogorsk

1. Women staying in the city since their births
2. Women staying in the city before age 10
3. Women staying in the city after age 10

The survey showed that average ideal number of children was 2.89 children per respondent. This average was higher for Kazakh women (3.08 versus 2.31 for Russians), particularly for those women who moved to the city recently (3.36). This indicator was lower for women of both nationalities that were local residents (2.63).

To get a broader picture, we included in our survey a question about expected number of children. This is a distinctive measurement tool for assessing transformation of individual reproductive orientations under existing influences, and also it is a connecting chain between desired and existing number of children.

Generally, behavior norms do not always transform into definite behavior activities. This was true for our case in demographic sphere as well. An average expected number of children was 2.43 children per respondent. This is 0.45 less than desired number of children and 0.32 more than

coefficient of normal reproduction per female. If we consider that positive demographic trend was largely due to age structure, and this picture is going to worsen because of low birth rates in 1990s.

Table 22: Expected number of children per woman by duration of being resident in Ust-Kamenogorsk and nationality (in %)

Desired number of children	*Duration of being resident in Ust-Kamenogorsk*				*Total*
	1		*2*	*3*	
	Kazakhs	*Russians*	*Kazakhs*	*Kazakhs*	
1	5,0	15,0	4,2	4,2	7,1
2	35,8	54,2	25,0	15,8	32,7
3	17,5	12,5	20,8	20,0	17,7
4	9,2	1,7	9,2	6,7	6,7
5	2,5	0,8	0,0	1,7	1,3
6	0,0	0,0	0,0	0,8	0,2
As God wills	30,0	15,8	40,8	50,8	34,4
Total	100	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

It is worth noting that expected number of children varies among different social groups insignificantly. The main difference is between Russian and Kazakh women. Russian females prefer to have family with one-two children, while Kazakh females are more inclined to have family with two-three children.

Even though there were 2.9% and 22.9% of respondents who considered an ideal family with one and many children, respectively, this proportions changed when we asked about expected number of children substantially – 10.8% and 12.4%.

Distinctive standard of family size by interviewees regardless of their nationality and age is a family with two children. Half of all respondents (49.8%) preferred this family size. 27% of respondents prefer to have family with three children and 10.8% of women prefer to have family with one child. Four children family was chosen by 10.2%. Reproductive behavior of young females does not go beyond 4 children in a family.

Another possible answer for expected number of children was “As God wills”, and 34.4% of respondents replied like that. Answers vary with regards to age: 40% of female interviewees in age groups 18-21 and 22-24 chose that answer, while the older age group 25-29 had fewer reliance on God in this issue (23.1%) ,as well as with regards to nationality: Kazakh women relied on Allah’s (God) will more often (40.6%), while only 15.8% of Russians did.

Experience that female respondents earned in their families is another significant factor that influences desired number of children.

We can observe that there is direct relationship of desired number of children depending on type of parental family. Almost all respondents focus on numbers of children by parental family, except families with one child, which only few has indicated. Most young females indicated family of two-

three children as an ideal one. Russian women are more oriented on family of two children, while Kazakh women want three children on average. Majority of those women who wanted to have family of three children grew up in families with many children. Therefore, the impact of parental family on this behavior is obvious.

Table 23a: Desired number of children by number of children in parental family (in %): Kazakhs

Desired number of children	*Number of children in parental family*				*Total*
	1	*2*	*3*	*4*	
1	20,6	11,1	2,8	1,9	7,5
2	41,2	55,6	41,7	34,0	43,2
3	17,6	27,8	37,5	41,5	32,9
4	20,6	5,6	18,1	22,6	16,4
Total	100	100	100	100	100

Table 23b: Desired number of children by number of children in parental family (in %): Russians

Desired number of children	*Number of children in parental family*				*Total*
	1	*2*	*3*	*4*	
1	20,0	24,0	0,0	0,0	17,8
2	63,3	62,0	72,2	66,7	64,4
3	10,0	12,0	27,8	33,3	14,9
4	6,7	2,0	0,0	0,0	3,0
Total	100	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

Next, we wanted to understand what factors make woman reduce desired number of children. We distinguished several factors that may be a barrier for having desired number of children: socio-economic (financial and housing issues) and individual-psychological (health condition, work and study).

The main factors that prevented our respondents from implementing their reproductive preferences were indicated by them as following: financial issues (47.9%), problems at work/study (25.6%) and health condition (15.8%)

These factors vary their significance with regards to nationality, age, financial conditions, and level of education and family status of respondents.

Financial matters, as a factor preventing from having desired number of children, lose their significance with age increase of respondents; however, a housing issue arises there. Urbanization processes led to price increases for houses, which most of migrants cannot afford. This explains us why many young women still stay with their parents after marriage (12.4%). Another way to deal with housing issue was to buy suburban cottages (“datchas”), which were then insulated to make it a permanent dwelling. If a young couple moves with their family, then they try to buy a house that

fits all its members. Money they get from selling their house in the village is just enough to buy "dacha" or uncomfortable house at city outskirts. However, when a young couple moves alone, then they rent a flat or stay at dormitory. And this situation may continue even after marriage.

Table 24: Factors influencing on realization of reproductive preferences of respondents by nationality (in %)

Factors preventing from having desired number of children	*Nationality*		
	Kazakhs	*Russians*	*Total*
Your job / study	25,6	25,8	25,6
Job / study of your husband	4,4	1,7	3,8
Housing conditions	28,3	22,5	26,9
Financial difficulties	20,3	23,3	21
Level of health	15,3	17,5	15,8
Total	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

Housing issue is most critical for those couples that stay in rented flats (38.9%) or dormitories (31.9%), where respondents have only up to 10 sq.m. per person of living area.

One has to mention that financial issues are almost equally significant for respondents with different income levels. Such that female respondents with income above middle indicated this issue more significant than women with middle income (23.8% versus 20.2%). Apparently, this is not related with real cost calculation on child, but with level of comfort that decreases at child birth.

Indicating such barriers of having ideal number of children as work and study shows increase of women's financial independence. At the other side this implies that one spouse cannot provide his family financially, and both spouses have to work. We can observe increased significance of those factors among older age groups.

To sum up, majority of young females consciously withhold to have ideal number of children for their families, because they are afraid to disturb their usual lifestyle, financial stability, or career.

3.4. Value orientation of respondents

To understand significance of marriage and family in lives of youth, we need to observe how youth assesses its importance among such values as job, education, friends, money, politics, religion etc. This issue is also important, because of the fact that value transformation is determined by some researchers as the second demographic transition.

Recently, there are many debates run in Kazakhstan about value deterioration amongst youth, and increasing moral degradation of society. That traditional life values such as family, children, love and friends were replaced by new "market" values, such as money and career. We will analyze

how justified is this valuation, and whether the value notion of family is still the same amongst youth and has not changed that much.

The socio-historical analysis of family behavior of citizens of Kazakhstan showed that family and children had high significance for its inhabitants. Kazakhstan right up to joining the Soviet Union was a traditional proislamic state, where large families was a norm, the elder had an indisputable authority, ethical moral and behavior was under tough control, and levirate and polygamy was widely spread. Family was of primary importance to Kazakhs. High fertility rates of our ancestors prove that fact. Breakdown of family values started when Kazakhstan was a part of the Soviet Union, high industrialization rates demanded extra labor forces of women, which made them over-busy and decreased women's interest to family. Moreover, relationship between parents and their children had deteriorated due to the fact that busy parents passed upbringing and education of their children to public institutions, such as nurseries, kindergartens, schools, boarding schools, all sorts of interest clubs etc, and as a result children cooled towards their parents.

The collapse of Soviet regime brought about deep economic crisis and loss of social values on one hand, and formation of new social values on other hand. Return to religion and practice of religious norms has awakened traditional ceremonies of marriage proposals and child births. East Kazakhstan region had gone through some changes as well. It was evident in Ust-Kamenogorsk, particularly. Shift of rural Kazakh population into urban centre has altered general pattern of family relationships, because rural migrants preserved their marital and reproductive behavior in the city. This brought about a population growth in urban areas.

Besides, nowadays Kazakhstan is oriented on the West in its economic and political reforms. As a consequence, western ideology is widely-spread, particularly among the youth, so called new generation. In this chapter we tried to understand how these two contradictory tendencies affected value norms of youth.

Value ranking of respondents.

To determine the value of family and children in youth's understanding, we asked them to rank 12 values starting from the most important ones for them. Among those values were education, work, social recognition, implementing own ideas, power, money, marriage, life in happy marriage, child birth, upbringing of children etc.

Top most important values are education, career, marriage and child birth. Education was rated number one priority by 38% of young women; it was the most important priority for the youngest age group (58.5%). The second most important factor was well-paid job, which was chosen by 37% of respondents, and again it was most popular choice in the youngest age group 18-21 (51.3%). Getting married was only of third importance for young women (23.3%), Kazakh girls are more willing to marry though (24.9%). Having a child was a priority number four for your respondents (23.8%). This arrangement of values, when marriage is a higher priority than having a child implies that marriage is still traditional way of family formation. Furthermore, significance of family formation increases with ageing. Thus, there was a wide dispersion for value of family between four

highest priorities in the age group 25-29. Hence, it is obvious that the youth is still highly oriented on family formation and it follows with children births.

Table 25: Ranking of values by nationality (in %)

	1 rank		*2 rank*		*3 rank*	
Value	*Kazakhs*	*Russians*	*Kazakhs*	*Russians*	*Kazakhs*	*Russians*
Education	41,0	30,0	8,8	5,8	3,0	5,9
Germany	13,3	15,0	38,0	34,2	12,4	9,2
Marriage	11,9	14,2	16,0	14,2	24,6	19,3
Children	9,1	5,8	12,4	12,5	14,9	15,1
Husband	2,2	3,3	6,1	4,2	11,0	10,1
Power	2,8	5,8	3,6	4,2	5,8	1,7
Money	4,7	7,5	3,0	2,5	8,6	8,4
Upbringing children	1,4	5,8	4,7	7,5	6,9	7,6
Quiet life	4,7	5,8	0,6	3,3	3,3	3,4
Active life	5,8	3,3	2,8	6,7	4,7	5,9
Public recognition	1,1	0,8	3,9	3,3	1,7	7,6
Creative realization	1,9	2,5	0,3	1,7	3,0	5,9
Total	100	100	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

Money, authority, upbringing of children was of secondary importance to our respondents. The most unpopular priority values were implementation of creative ideas, active life, and public recognition. Majority of respondents rated them as 10-12 most important priority values.

Relevance of life values differs among various social groups. Age is one of significant differentiating factors. Thus, priority values such as marriage and child is significant for the eldest age group of 25-29, which suggests that family formation has not lost its significance, but shifted its age scope. Nowadays, young women prefer to establish their social status, and only then to form a family, which is a normal consequence of adaptation to new economic environment.

Moreover, it is worth to note that education and job is the highest value priority for those women who moved to the city recently, which is related with objective of migration, and implies about change in reproductive behavior of villagers. Family formation is more of an issue in cities rather in villages. So that modern urban family does not require a lot of children.

Main differences in value priorities by ethnic group were observed in marriage, children and husband values. Russian women were less interested in these values than Kazakh (24.7% of Kazakh and 19.9% of Russian women were willing to marry, 25.6% of Kazakhs wanted to have children and only 18.3% of Russians did, and so on).

Another important moment in assessing values of youth is their attitude towards premarital sex. Respondents had less traditional view of premarital sex. Majority justifies this if they feel in love – 31%, 25% of women suppose that you can have sex only with your future husband, and only 19.6%

of respondents are intolerant towards premarital sex. 23.1% of women consider premarital sex as a proper action. Russian and urban Kazakh women are more tolerant towards having sex before getting married.

Thus, we can observe that family and children has high value among respondents. Young women, as 20 years before, are willing to get married by love, give birth and educate their children. However, new desires were included to these feminine values, such as getting a tertiary education or seeking a career. Respondents have a healthy attitude for their sexual life, which may have a positive impact on their reproductive behavior. In the next sub-chapter we will analyze the reasons behind formation of a family.

Value attitude of respondents towards marriage

Now let's analyze value questions that were addressed to respondents regardless of their marital status. These questions were to reveal women's attitudes towards family, allocation of duties in family, reasons for marriage and divorce, and ideal age at marriage.

Figure 36a: Ideal situation in marriage by age of respondents (in %): Kazakhs

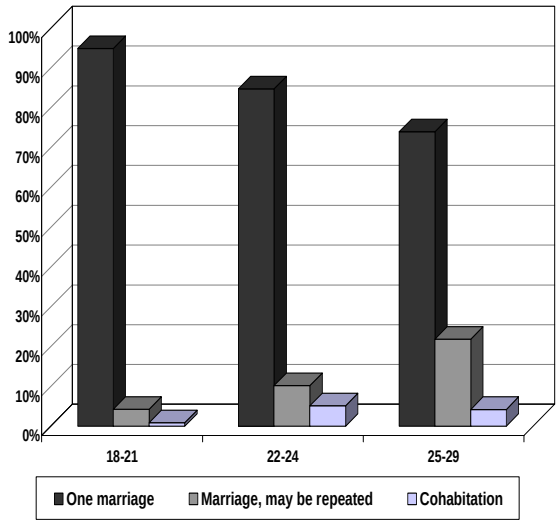
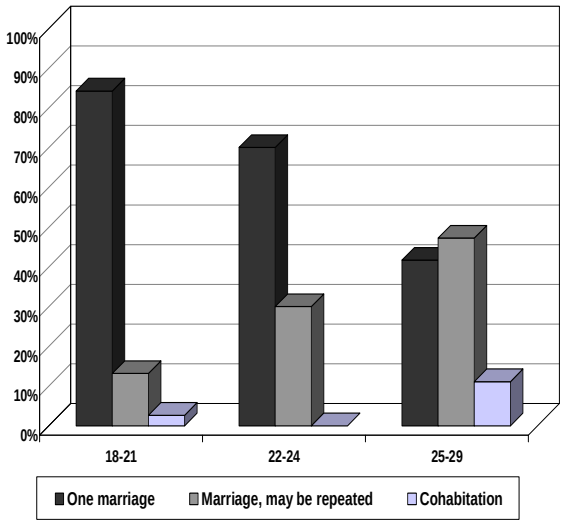


Figure 36b: Ideal situation in marriage by age of respondents (in %): Russians



Source: Sample Survey Ust Kamenogorsk 2009

The question we want to discuss first is the type of family that is desired by the respondents. Family type is one of significant elements of traditional society. And, extended family is ruined primarily as a consequence of urbanization. 65.6% of respondents indicated that they prefer to live as a nuclear family (a husband, a wife, 1-2 children). This answer is frequent, particularly, among urban inhabitants. Only 16.7% of respondents saw as an alternative - living in a traditional family. The older respondents are, the more popular is a choice of nuclear family. All these give evidence that behavior of rural migrants changes gradually under city life. Thus, we can say that urbanization has a disastrous effect on traditional family type.

The conclusion we made is supported by respondents' answers on other questions related to family life concerning reason for marriage. Significance of marriage for women varies depending on several reasons. Majority of women get married because of love (48.1%), others wants to have happy family life (29.2%). Such answers as relatives' persistence, financial well-being, desire to live independently from their parents etc were not popular among respondents. Indeed, the youngest women were the most romantic, thus, 61% of the women aged 18-21 said that they were willing to get married because of love, while only 33.1% of the oldest age group 25-29 of women wished so.

Moreover, the youngest women chose to marry once for whole life, while the older were more cautious to choose. They think that it is normal to marry several times. Repeated marriage is supported more by Russian women (28.3% against 11.9%), and urban Kazakh women (19.2% against 10.8% rural migrants). The number of respondents considering cohabitation as an optimal choice was insignificant, which means that marriage is still important for women. We can see that the oldest age group of women is more democratic in their answers; however, there are many women amongst them who have a traditional view of marrying once and for whole life.

Furthermore, there is an increase of tolerance towards mixed marriages. 41% of women are ready to get married with a man of other ethnic group; the proportion of Russians is higher (50%), although Kazakh women demonstrate high level of loyalty as well (38.1%).

The age at marriage is very important factor in formation of family. In a traditional society women marries at earlier age, and her reproductive age began earlier. Interviewees were asked to tell ideal age at marriage for males and females. Now we want to compare ideal age at marriage for males and females (by women point of view).

Here we combined answers of women about ideal age by age groups, so that we obtained 4 age groups (18-21; 22-24; 25-29; 30-35). Majority of women indicates age of 22-24 as an ideal, so that they can complete university and start working. But, there is still gender inequality in age of getting married. Men's age shifted to a later period, and the difference between women's age became 3-4 years. Kazak woman, migrants in particular, have more traditional view, because they indicate earlier ages at marriage for females.

Figure 37a: Ideal age at marriage for males and females by respondents' opinion (in %): Kazakhs

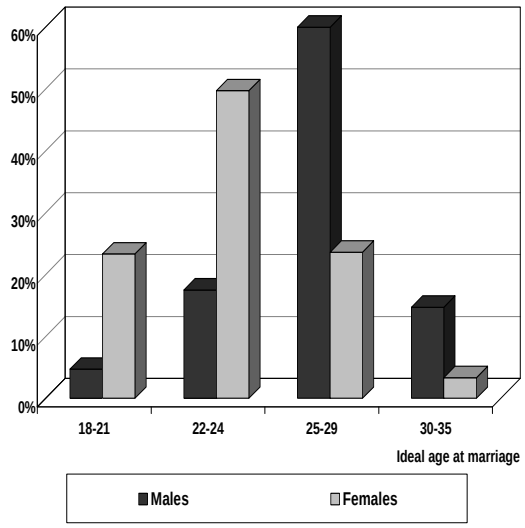
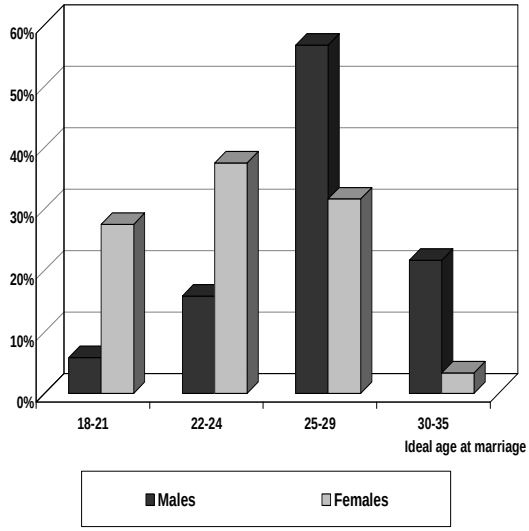


Figure 37b: Ideal age at marriage for males and females by respondents' opinion (in %): Russians



Source: Sample Survey Ust Kamenogorsk 2009

The other side of marriage is a divorce. We tried to understand interviewees' attitudes towards it through some reasons that could lead to divorce. They were asked to indicate up to 3 reasons for divorce. Although respondents were offered with three reasons, many of them indicated only one or two reasons (84% indicated two reasons, and 65.4% indicated three reasons). Therefore, we demonstrated graphically only first two reasons.

As the first reason majority of respondents indicated adultery of husband (34.2%), the second reason was family violence (30.6%), and alcoholism was only the third reason (31.3%). The age of women is the main factor that influence attitude towards divorce. The youngest are the most romantic, because they tend to maximize personal relationships and its integrity. We can observe that mostly they have negative attitude towards adultery of husband. Also, they are afraid of family violence (40.4% the youngest age group, 31.4% and 20% the older groups, respectively).

The inability to have children is such a reason for divorce which characterizes the level of traditional relation to family. This answer was relatively popular among Kazakhs (18.3%), which infers to a stronger male role in family. Unfortunately, up until now majority of male Kazakhs thinks that childless family is guilt of women. However, talking about male infertility is a matter of taboo.

Figure 38a: Attitude towards divorce of all categories of respondents by age (in %): Kazakhs (reason for divorce#1)

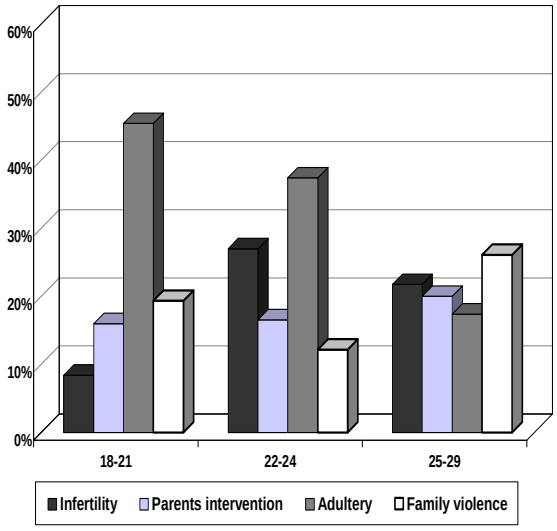


Figure 38b: Attitude towards divorce of all categories of respondents by age (in %): Russians (reason for divorce#1)

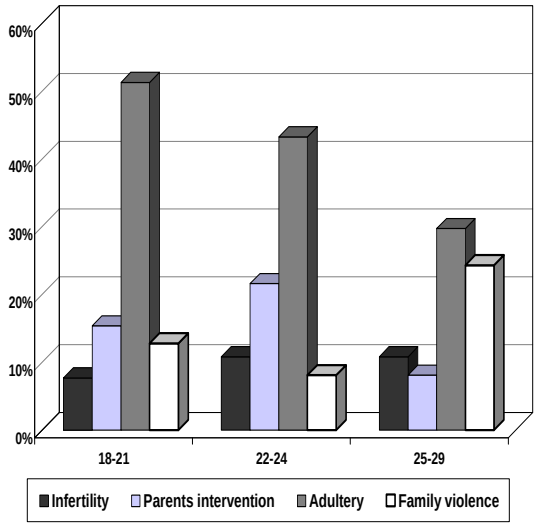


Figure 38c: Attitude towards divorce of all categories of respondents by age (in %): Kazakhs (reason for divorce#2)

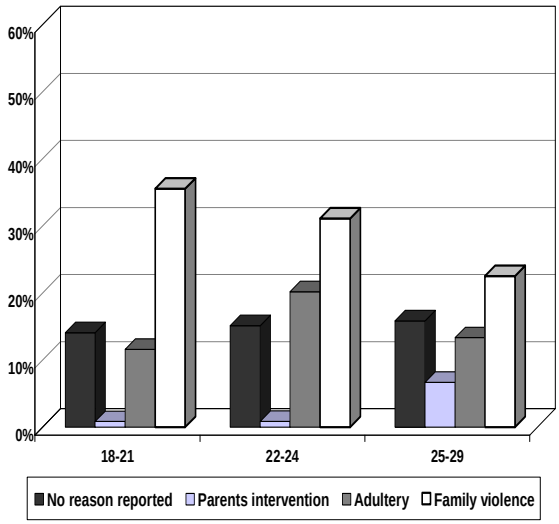
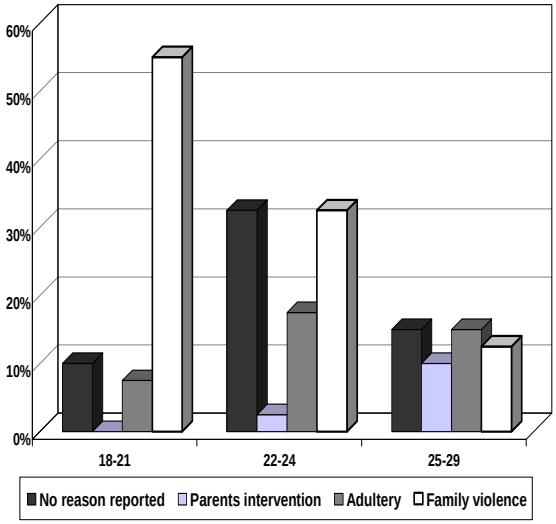


Figure 38d: Attitude towards divorce of all categories of respondents by age (in %): Russians (reason for divorce#2)



Source: Sample Survey Ust Kamenogorsk 2009

The attitude towards family may also be observed by seeing how respondents allocate their domestic chores. We asked them how they would like their duties to be allocated in their future families, considering how it happened in their parents' families, as well as how allocation happens in families of women who already have partners. It seems more important for us to observe desired distribution of domestic duties, because it tells us about youth's attitude towards family life.

Majority of women thinks that husband and wife should have equal duties at home (44%), the rest thinks that husband should earn money and wife should look after home and family (39.2%). Interestingly, the last answer is indicated by twice as much among older women, which are already married. In figures above we can see that this answer is more popular among female Kazakhs, particularly in older ager groups. Although if we compare distribution of duties in families of married respondents, there many women say that they have equal income contribution in families. Here, desires of women do not coincide with real economic situation.

Figure 39a: Desired distribution of domestic chores by age and family types (in %): Kazakhs

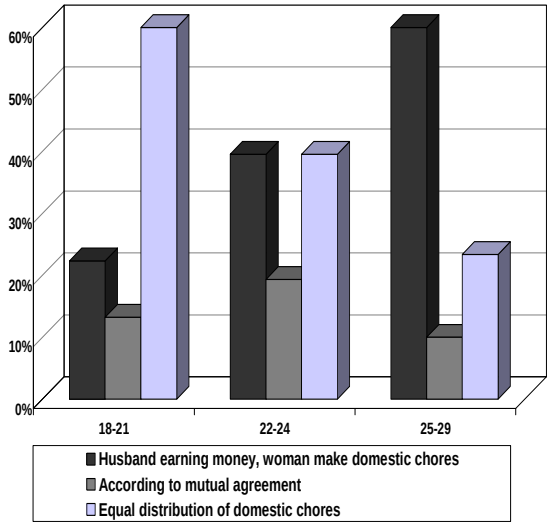
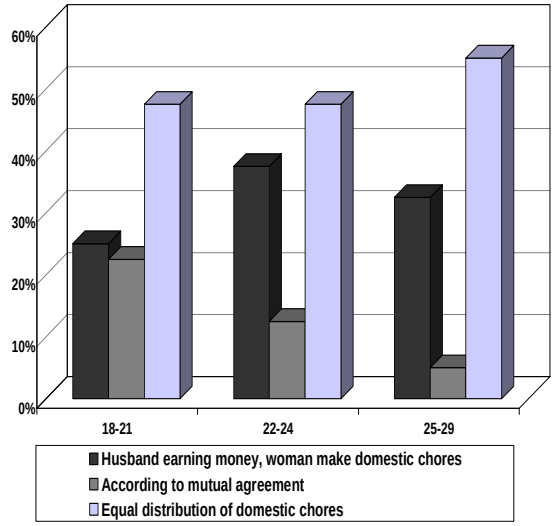


Figure 39b: Desired distribution of domestic chores by age and family types (in %): Russians



Source: Sample Survey Ust Kamenogorsk 2009

The growth of marriages in the city is explained by migratory processes between villages and cities, because most of migrants are Kazakh youth, who try to live according to those marital and reproductive norms installed in their childhood. However, these young women are in ambiguous situation at present, when their traditional behavior is faced with the necessity to adapt in a city life. Majority of those women start to change their behavior towards a city model family, which may bring to decrease in a number of marriages and births.

Marginalization of urban population has a negative impact on reproductive behavior, which we are going to discuss in the next sub-chapter.

Value attitude of respondents towards childbearing

Interviewees were asked ideal age at childbearing for males and females.

Table 26: Ideal age at childbearing by respondents' point of view for males and females by nationality (in %)

Age at childbearing for males	*Nationality*		*Total*	*Age at childbearing for females*	*Nationality*		*Total*
	Kazakhs	*Russians*			*Kazakhs*	*Russians*	
20-24	18,3	14,2	17,3	*18-19*	2,5	5,0	3,1
25-29	63,3	58,3	62,1	*20-24*	58,9	45,0	55,4
30-34	14,4	21,7	16,3	*25-29*	33,9	44,2	36,5
35-40	3,9	5,8	4,4	*30-35*	4,7	5,8	5,0
Total	100	100	100	*Total*	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

As the data shows, females have younger age ideals than males. Most respondents indicated the age group 25-29 as an ideal age for males, and the most popular age was 25 (24%). For females an ideal age was 20-24, and here again the most popular age was 25 (26.5%). Age scope varies with regards to nationality of respondents: Russian women were disposed to postpone childbearing to later time.

Then we tried to understand impact of society's opinion on females when planning children. Opinions of majority have been divided into two.

Table 27a: Importance of one's opinions for respondents in determining number of children (in %): Kazakhs

*Opinion**	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
1	2,7	6,1	0,8	3,2
2	51,8	49,1	53,3	51,5
3	0,0	5,3	4,2	3,2
4	38,2	36,8	37,5	37,5
5	7,3	2,6	4,2	4,7
Total	100	100	100	100

Table 27b: Importance of one's opinions for respondents in determining number of children (in %): Russians

*Opinion**	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
1	0,0	0,0	0,0	0,0
2	27,8	25,7	38,5	30,9
3	2,8	0,0	0,0	0,9
4	52,8	65,7	59,0	59,1
5	16,7	8,6	2,6	9,1
Total	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Options

1. Prevailing norms and traditions in society
2. Spouse's opinion
3. Parents'/relatives' opinions
4. Own opinion
5. No answer

Kazakh women relies mostly on their spouses' opinions in determining number of children (51.5%), particularly nonlocal residents, and only then their own opinions (37.5%). Only 3% of respondents indicated that they listen to their parents' opinions or follow norms in society. For Russian women the most important was their own opinion (59.1%), and then their spouses' opinions (30.9%). There was almost nobody who cared about opinion of their parents or society in determining number of children. As we see the youth, particularly urban is becoming more individualistic in determining number of children, and this supports our hypothesis of breakup of traditional family under the influence of urbanization.

Attitude towards induced abortion as a means of "contraception" tells us about sexual literacy of women, and their treatment of health. It would be cautious if majority denied induced abortion as a means of contraception, because child birth would threaten mother's life.

Table 28a: Reason for induced abortion by age (in %): Kazakhs

*Reason for abortion**	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
1	76,0	67,2	81,7	75,0
2	12,4	14,3	9,2	11,9
3	2,5	2,5	0,8	1,9
4	9,1	16,0	8,3	11,1
Total	100	100	100	100

Table 28b: Reason for induced abortion by age (in %): Russians

*Reason for abortion**	*Age groups*			*Total*
	18-21	*22-24*	*25-29*	
1	55,0	62,5	80,0	65,8
2	25,0	22,5	10,0	19,2
3	10,0	5,0	5,0	6,7
4	10,0	10,0	5,0	8,3
Total	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Reason for abortion

1. If child birth threatens her mother's health
2. If foetus has anomalies while developing in mother's womb
3. If a child is undesired
4. Unallowable despite any condition

Majority of respondents concede induced abortion only due to medical reasons; Kazakh women appeal to the health of mother (75% against 65.8%), while Russians to the health of child (19.2% against 11.9%). Only 10% of women consider that making abortion is unallowable by any reasons. However, 4.3% of the youngest respondents approve abortions in order to prevent undesired pregnancy, which are mostly supported by urban women.

Another factor of weaking of family relations is abolishment of such social institute of upbringing of children as parental family. Here respondents were asked who they would approach for assistance in upbringing children.

Only 14.6% respondents said that they will ask for assistance solely their parents. Most interviewees believe that preschool institutions are necessary for child upbringing, but also do not reject their parents' assistance (63.8%). This is especially evident among urban residents (12.1%

supporters of child upbringing by parents versus 20.4% who supports preschool institutions). The other factor that may explain decreasing role of grandparents in upbringing children is that they still continue to work full-time, and they do not have enough time to spend with their grandchildren. The fact is that we are spending less and less time in family, but rely more on public social institutes, rather than assistance from our relatives.

Table 29a: Destination of approach for assistance in upbringing children by age (in %): Kazakhs

*Care about children**	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
1	13,2	15,1	15,8	14,7
2	67,8	58,0	68,3	64,7
3	13,2	25,2	15,0	17,8
4	5,8	1,7	0,8	2,8
Total	100	100	100	100

Table 29b: Destination of approach for assistance in upbringing children by age by age groups (in %): Russians

*Care about children**	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
1	17,5	22,5	2,5	14,2
2	72,5	47,5	62,5	60,8
3	7,5	20,0	32,5	20,0
4	2,5	10,0	2,5	5,0
Total	100	100	100	100

Notes:

Source: Sample Survey Ust Kamenogorsk 2009

Care about children

1. Only grandparents
2. Grandparents and preschool institutions
3. Only preschool institutions
4. Other

Another factor in determining level of traditionalism of female reproductive behavior is family with many children. We asked respondents minimal number of children that defines family with many children. There were considerable differences of opinions. Significant differentiation was revealed in groups of respondents by nationalities, residence status, and age.

Table 30a: Definition of family with many children by age (in %): Kazakhs

Number of children	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
3+	24,0	10,1	22,5	18,9
4+	45,5	37,8	26,7	36,7
5+	30,6	52,1	50,8	44,4
Total	100	100	100	100

Table 30b: Definition of family with many children by age (in %): Russians

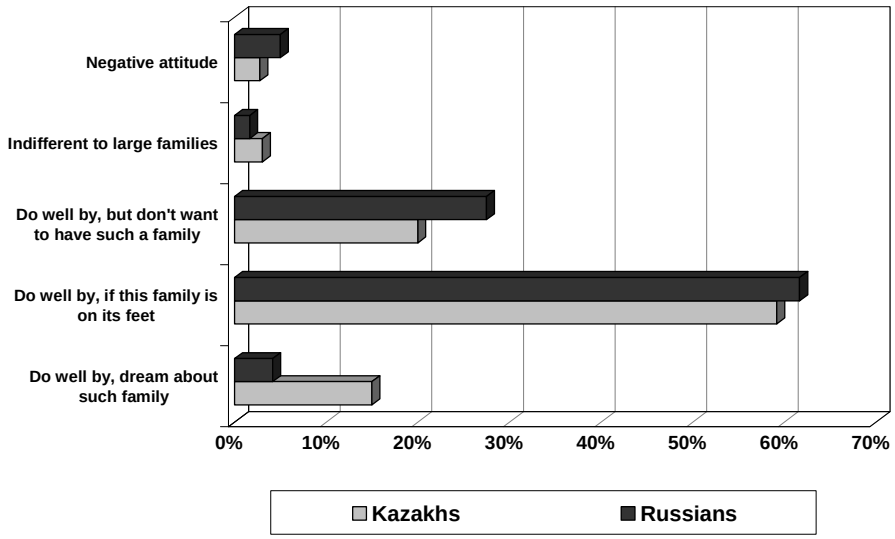
Number of children	*Age groups*			
	18-21	*22-24*	*25-29*	*Total*
3+	32,5	35,0	40,0	35,8
4+	40,0	35,0	57,5	44,2
5+	27,5	30,0	2,5	20,0
Total	100	100	100	100

Source: Sample Survey Ust Kamenogorsk 2009

Russian women consider a family with three children as many children family (35.8% of Russian women versus 18.9% of Kazakh women). Majority of local residents define that family with many children consists of 4 or more children. However, majority of migrant women determines a family with many children when there are 5 or more children in the family (40.8% of women which stay in the city before age 10 and 49.2% of those which stay after age 10).

Moreover, we asked respondents to characterize their own attitude towards families with many children. Out of that we can assess possibility of them to build such a family.

Figure 40: Attitude towards families with many children by nationality (in %)



Source: Sample Survey Ust Kamenogorsk 2009

Although majority of respondents have a positive attitude towards such families, only 12.3% of them wished to have such a family, mainly, rural migrants which moved recently to the city. Negative attitude towards families with many children is observed among city residents regardless of their nationality; however, their portion is only 3.3%. There are insignificant variations with regards to age group, though younger age groups have more positive view of families with many children than in older age groups (13%, 15% and 8.8% respectively).

Thus, we can see that even though the marriage level among respondents is relatively low, the marriage value is still high. Marriage remains the core of family life for majority, and it is associated with births of children. The high value of marriage suggests that a number of lonely women will not be large. However, marriage delay by the majority of women automatically shortens generative activity of women, which in its case delays births of children.

At the same time new tendencies take place in the society: loyal attitude towards cohabitation, divorces, premarital sex and mixed marriages. These new characteristics are more easily adopted by Russian women, rather than Kazakh women, which demonstrate more traditional attitude.

Kazakh migrant women have more traditional attitude toward family relations, but their attitude alters in a city life. This is reflected in delay of getting married and birth of children, increase in value of education and job, weakening of norms of sexual behavior. Regardless of duration of city residence, majority prefer to have nuclear families.

Preliminary conclusion of the survey is as following:

1. Marriage has still a great value for many young women. We can asset with every reason that “everybody desires to get married” is relevant yet. And the main reason for that is love.
2. The value of family (having children) is lower than the value of marriage. After getting married women do not hurry to have children due to financial reasons. Those women, which are not married yet have only abstract notion about having children, though their age is the most suitable for child-bearing.
3. Marriage preserves its traditional role of building a family. And young women keep a cycle, first marriage and only then children. As the survey has shown, extramarital births are not very popular among young respondents.
4. Most respondents prefer to have one or two children family. And the main obstacles for increasing family size are to continue study or work, so we can see that economy of city leads to egoistic approach towards her reproductive behavior.
5. Family duties are allocated democratically; home workload is divided between couples equally, though a husband preserves a leading role in decision of family issues.
6. The society has become more tolerant to deviations from the traditional family model, such as growth of premarital sexual relations and divorces. As a result the number of single mothers has increased and cohabitation has become widespread.

Conclusion

The analysis of marital and reproductive behavior of youth of East Kazakhstan region showed that even if there is a positive development of nuptiality and fertility at the moment, the value orientations of youth may affect this positive trend in future.

In the first part of the research we compared demographic trends of the region with country's situation, and also we studied socio-economic development of the region to determine external factors that may influence demographic behavior of population.

East Kazakhstan is a center of metallurgical production of Kazakhstan, main enterprises of which are concentrated in a city of Ust-Kamenogorsk, an administrative centre of the region. Yet an average salary in the region is relatively fair with comparison to country's average (10^{th} rank among 16 regions). This is also true for GDP per capita of the region; it is ranked 12^{th} among regions of Kazakhstan. And this is because there is an uneven distribution of production in the region. Metallurgical corporations are located mainly in the northern-east part of the region, while cattle-breeding is a main source of income for the western and southern parts of the region. Since agricultural production in the region is rather unprofitable, salaries and GDP per capita there is also lower than in the industrial part. This makes Ust-Kamenogorsk with its jobs, universities and infrastructure an attractive place for rural inhabitants, which are mainly of Kazakh nationality.

Majority of residents of Ust-Kamenogorsk are Russians at the moment, while in the region Kazakhs are the largest group by nationality. An analysis of censes for the last 3 decades (1979, 1989, 1999) showed that proportion of Russian and Kazakh population has been constantly changing so that the proportion of Kazakhs is rising among city residents. The most critical adjustments occurred in the late 1990s due to a large outflow of Russian population, mainly to the Russian Federation. Migration analysis showed that net migration rate in East Kazakhstan was lower than country's average, and it is not positive yet.

The national structure of the region with a high proportion of Russian population residing in cities in particular had impact on other demographic indicators, such as nuptiality and fertility. Thus, East Kazakhstan region is ranked the last by fertility among other regions of Kazakhstan. An average age at marriage in the region is higher than country's average. The same is true for divorces. In 1990s the demographic situation became rather critical, so that CDR prevailed CBR meaning that the region entered so-called "demographic cross". It was overcome only in 2003.

An analysis of age-gender structure of the region demonstrated similar trends with the country's average. Distinct part, however, was that population of the region is older than country's average, particularly city population, which has the highest proportion of population above 55 years old. The youth born in a "baby-boom" of 1980s entered their reproductive age at present, which boosted fertility recently in the region as well as in the country.

As a whole, population of the region has rather modernized marital and reproductive behavior than population of southern regions. The other distinct characteristics of the region are that recently

indicators of nuptiality and fertility in cities is prevailing rural areas. This is explained by migration from rural areas into cities.

In the last part of the research we analyzed results from conducted sociological survey, the study object of which was women aged 18-29. The analysis showed that marital and reproductive behavior of young women differs with regards to three characteristics that were chosen for the survey: nationality, age and duration of being resident in Ust-Kamenogorsk.

Characteristics of socio-economic indicators of respondents demonstrated that majority of female interviewees (59%) had or were pursuing their first stage of tertiary education (bachelor degree). And these data do not vary with age, which means that there is a stable interest in getting a tertiary education by young women over time. The working females are mainly employed in the public (budgetary) spheres, which has the lowest salaries. The income level of respondents, particularly in the youngest age group, is determined largely by income levels of their parents, which tells about financial dependency of young females from their parents or partners. The same is true about housing. The proportion of women having their house is rather low.

We can make the following conclusion about nuptiality and fertility among female respondents of our survey. The marital status of respondents varies with age; the older is women, the more chance that she is married. Thus, the highest concentration of married, cohabitated or widowed women is in the oldest age group 25-29. Majority of respondents of both nations (65.6%) stated that they were lonely, only 28.8% of interviewees live with a partner. To conclude, many women postpone marriage until age of 22-24, and many up until 25-29. There is a higher portion of married and cohabitating females among Russians in the older age groups, and also they have more divorces. Fertility picture is as following: majority of women of both nationalities do not have any children (77.6%), or have one child (16.7%), two or more children is rare. The oldest age group of 25-29 has higher birth rates, however, even there majority of women does not have children. Average number of children for Kazakhs is 1.33 and for Russians is 1.22.

Marital behavior of young females is characterized by postponement of age at marriage and childbearing. Respondents explain this by the fact that they have to complete their education and find a job. At the same time, the value of marriage is still high enough. We can observe this from responses of women when ranging their values. Also, the fact that majority of women consider that childbearing is optimal while being married implies that marriage is a high priority for young females.

Ideal number of children for women is determined by norms that were inhabited in parental family. Typically, parental families of Russians exhibited low norms for having children, which showed up in their children's families; ideal number of children of them was 1-2. Ideal number of children of Kazakh females was lower than those of their parents as well. However, young females, which grew up in many children families demonstrated rather higher desire to have three or more children.

When we compared behavior of Kazakh females, then we saw that it differentiates with regards to duration of being resident in the city. Behavior of females who resides in the city since birth is

similar to behavior of Russian females, meaning that they marry at older ages and have smaller families. Women that moved into the city before age 10 belong to an interim phase in behavior. They are more traditional than native city residents, but differ from behavior of rural inhabitants. The most perspective group from fertility growth point is Kazakh females which moved to the city recently and still follow traditions of rural life. They are the most loyal towards marriage, many children family, and connectedness to their parental family.

Thus, we may conclude that behavior of young females residing in the city is not homogenous, but depends on many factors. They are nationality, age and duration of being resident in the city. Generally, we may observe that there is a growth of individual values, such as education and prestigious job. At the same time, the role of family is decreasing despite it still remains of high importance to young females.

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