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KAZAKHSTAN AND ESTONIA: EVALUATION OF PREFERENCES IN INTERMARRIAGES²

Abstract. This paper is devoted to the “ethnic” preferences in partners’ choice for the inter-ethnic marriages in Estonia and Kazakhstan (countries with the share of Russians more than 20% in the total population). As a measure for the preferences the author uses inter-ethnic distance and for the calculation national census data by nationality and marriage status are used.

Key words: inter-marriage; preferences; ethnic composition

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Introduction

In this work we consider the “ethnic” preferences of the titular nationalities and Russians in choosing a partner for marriage in Estonia and Kazakhstan. It is expected that, with the increase in national diversity in the union republics, intermarriages were widespread by the end of the Soviet period. Also, we shall define intermarriage: It is considered to be a marriage (both officially registered and de facto, depending on the available statistics) in which the spouses have indicated that they belong to different nationalities.

If considering the classification proposed by Topilin [Topilin, 1995], by 1989, the proportion of intermarriages was high (over 20%) in five republics (in

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descending order: Latvia, Ukraine, Belarus, Moldova, Kazakhstan). We shall note that Estonia was in 6th place, and by Topilin's classification - at the middle level. We also note that the growth in the number of mixed families in the republics we have chosen was in the Soviet period at an average level for leaders: from 1959 to 1989, the proportion of ethnically mixed families in the territory of Kazakhstan increased by 66% and in Estonia by 73%, whereas in Belarus, for example, the increase was 124% [Topilin, 1995].

However, for comparative analysis we used data for Estonia and Kazakhstan. The choice of Kazakhstan and Estonia is due to the following factors. Firstly, there is a fairly large Russian diaspora in both countries. It is important to note that in these republics, during the Soviet and early post-soviet period (the first census after 1989), the proportion of the titular nationality was one of the lowest (the smallest in Kazakhstan and the third largest in Estonia, after Latvia) and the proportion of Russians, respectively, is one of the highest (Table 1). Secondly, there is considerable potential for comparative analysis, and there are manifested multidirectional tendencies in the countries to contract intermarriages and the share of Russian and the titular population. For instance, the share of mixed marriages in Estonia after the dissolution of the Soviet Union declined, but grew in Kazakhstan: as of the census of 2009 in Kazakhstan and 2010 in Estonia, the share of mixed marriages was 14% in Estonia and 39% in Kazakhstan. However, if we assess the current situation in the republics we selected, the Estonian Statistical Committee now estimates that the proportion of Estonians is approximately 68.8% and the share of Russians is 25.1% (as of 2015), so it may be noted that the national composition of the Republic is in a relatively balanced state (the changes are minimal compared to the 2000 census); at the same time, the statistical Agency of the Republic of Kazakhstan estimates the share of Kazakhs at the beginning of 2016 as 66.5% and the share of Russians as 20.6% (i.e., while the share of mixed marriages in Kazakhstan is higher and the trend is positive, the share of Kazakhs in the population is growing and the share of Russians is declining). Thirdly, unlike the Ukraine and Belarus, Kazakhstan and Estonia do not have a high risk of assimilation of Russians with a titular population by changing self-identification after gaining independence (also to some extent the problem exists in Moldova, where a cross-change of national identification is possible between Russians and Ukrainians). On the contrary, for example, the difference between the reproductive and matrimonial behavior of Russians (rather the Eastern European model) and Estonians (more of the Northern European model) is also noticeable for the second generation of migrants [Kulu H. et al., 2015; Rahnu L. et al., 2015; Puur A. et al., 2012]. Similarly, the values and attitudes regarding marriage and childbirth in Kazakhstan differ significantly between Russians and Kazakhs, and even more so between "European" and "Asian ethnic groups". Fourthly, both countries have relatively qualitative data on nuptiality and national composition

on the basis of relatively recent censuses (which is not the case of the Ukraine or Moldova).

Table 1. The share of the titular nation and Russians in the national composition of the population according to data from post-war censuses

Country	Nationality	1959	1970	1979	1989	Post-soviet census ¹
Kazakhstan	Titular nationality	30	32.4	36	39.7	53.4
	Russians	42.7	42.4	40.8	37.8	30
Estonia	Titular nationality	74.6	68.2	64.7	61.5	67.9
	Russians	20.1	24.7	27.9	30.3	25.6

Source: Demoscope Weekly. Census of the USSR population. <http://demoscope.ru/weekly/pril.php>.

Note that an additional limitation on the work is the fact that, as we deal with people who are married at the time of the census, without an amendment to the age and duration of the marriage, the obtained result may be somewhat distorted for account of changes in preferences in different generations, as well as varying levels of mortality and divorce among different nationalities.

Literature Review

Issues of inter-ethnic marriages in the post-soviet area and, earlier, within the borders of the USSR are of interest to researchers in various branches of science. However, the topics of the formation and stability of intermarriages remain not fully explored, often with a limited amount of detailed statistical data. During the Soviet period, the main aspects of the work on the state of mixed marriages in the USSR were comparative analyses of the situation in the republics. Publications that focus on the territorial distribution of the phenomenon include the materials of A.G. Volkov, who has done a massive effort to study inter-ethnic marriages on the territory of the USSR, according to the data of the population censuses and sociological surveys. The work of 1991 [Volkov, 1991] provides a summary of the current situation and dynamics of intermarriages in the republics, the ratio and compatibility of individual ethnic groups and an explanation of the preferences of the representatives of different nationalities in choosing a partner. However, since the work is of a generalizing nature, the data for both Estonia and Kazakhstan are not sufficiently detailed.

Important study of mixed married couples by A.A. Susokolov [Susokolov, 1987], which appeared earlier, is more descriptive and does not provide further information on factors influencing the formation of intermarriages.

¹ The first post-soviet census of the population in these countries took place in different years (Kazakhstan in 1999, Estonia in 2000).

Ju. V. Arutjunjan's more up-to-date study primarily devoted to inter-ethnic marriages of Russians with members of other ethnic groups, is interesting and important [Arutjunjan, 1999].

In A.V. Topilin's work [Topilin, 1995] a synthesis of previous studies is given, but the author himself goes a step further and focuses on a detailed study of the preferences and behavior of children who have grown up in mixed families, the database for the analysis were sample surveys.

D. Gorenburg's work [Gorenburg, 2006] reconsiders the role of inter-ethnic marriages in Soviet culture and socio-economic development. The phenomenon itself is being considered in a broader sense, and in the article the author considered the impact of inter-ethnic marriages on national self-identification.

O.D. Fais, considering inter-ethnic marriages only in the case of the capital, concludes that intermarriage is often linked not to the characteristics of the spouses, but to the "absorption" of Moscow and the desire to gain a foothold in the capital. Subsequently, divorce rates are also higher in such unions, and people enter into a second, now mono-national marriage [Fais, 1997].

In the Roschins' work [Roschina, Roschin, 2006], based on research data of the Russian monitoring of the economic and health situation (RLMS) the main determinants of marriage were investigated. The purpose of the article was to compare the characteristics of spouses in order to test Becker's hypothesis of the choice by similarity or difference against the assumption of sociologists and psychologists on the inclination to homomorphic marriages. The article dealt with a large number of socio-demographic and even psychological characteristics of partners, including the condition of monoethnic or mixed marriages. However, the authors, largely because of the small samples, were unable to identify significant national differences. The authors, though, identified only national standard features: representatives of small peoples had earlier marriages than Russians, and in the North Caucasus, women were entering marriage at an earlier age; people in most situations prefer to choose a marriage partner of their nationality (and there have also been ethnic groups that virtually took no part in intermarriages). The results largely confirmed the main assumptions used in the analysis of inter-ethnic marriages: the proportion of married women in the national group is highest among Russians (both men and women) – due to the higher number of Russians in the sample (a large ethnic group is highly likely to meet their representatives in the matrimonial market) and Northern Caucasian Nationalities (a closed, more traditional group residing in the territories with a small percentage of other nationalities). All other ethnic groups, not as densely populated as the peoples of the North Caucasus, have a very high proportion of inter-ethnic marriages with Russians, much higher than others, and sometimes with their fellow ethnic groups.

The situation of ethnically mixed marriages in selected CIS countries has been analyzed in recent years. For instance, L.V. Ostapenko and colleagues from the Institute of Ethnology and Anthropology of the Russian Academy of Sciences

[Ostapenko et al., 2012] conducted a detailed analysis of the situation of Russians in Moldova in 2012, as well as touching upon the peculiarities of inter-ethnic marriages and the factors of their contracting. It is further necessary to refer to the work on ethnically mixed marriages in Kazakhstan and Estonia.

Kazakhstan. In terms of evaluation of the historical retrospective of inter-ethnic marriage in Kazakhstan, it is worth highlighting the work of Y.A. Evstigneev [Evstigneev, 1974] devoted the study of mixed marriages in the cities of northern Kazakhstan at the end of the 1960s, as well as the issue of the choice of nationality of children born in these marriages.

A.B. Kalyshev's study [Kalyshev, 1984] dedicated to a later period of time, on the other hand, deals with mixed marriages in rural Kazakhstan, only between Kazakhs and Russians. The scope of the work is very similar to our current study, and it is the ethnic preferences in mixed pairs that are considered. The author shows that, at the end of the 1980s, marriages between Kazakhs and Russians, despite the overall increase in their total number, are rather rare and occur up to 10 times less often than would be expected based on the ethnic composition of the population. At the same time, Russian marriages with Ukrainians and Germans are more widely spread than theoretically expected figures. In the current article, we will consider to what extent this trend has been maintained.

At the present stage, the issue of mixed marriages and families are highlighted in the works of S.K. Ualieva [Ualieva, 2011], but they are based on qualitative research carried out in recent decades in different regions of the republic. Unfortunately, due to the limitations of the method used, the results are not sufficient to describe the situation of intermarriages in Kazakhstan in a comprehensive manner. Of the articles dedicated to the relatively small diasporas of Kazakhstan, it is worth noting the work of N. Yem and C. Epstein [Yem, Epstein, 2015] on matrimonial behavior of Koreans after the deportation and up to 1965, as well as the relationship of the behavior to changes in social status. A comparative analysis of the behavior of young people in the Russian marriage market (Yakutia is selected for comparison) and Kazakhstan (for different nationalities) in the 2000s. is given in the work of M.A. Abramova [Abramova, 2008].

In V.I. Kozlov's work [Kozlov, 1982] a generalizing ethnic survey based on materials of the population censuses is presented. The book provides information and calculations of the national "attraction" index in the marriage of individual ethnic groups (much like the calculations within our article). Most of the work is devoted to the European part of the USSR, where cities varying in ethnic composition are studied separately, but detailed information on this is not available for the Kazakh and Estonian SSR.

Estonia. The spread of ethnic marriages in the country has now been sufficiently studied. Thus, for instance, the situation at the beginning of the 2000s, among other EU countries, was presented in the European Commission's report of 2008 [European Commission, 2008].

A detailed work on the main factors in the selection of a partner using microdata from the 2000 census of the population of Estonia has been carried out by researchers van Ham and Tammaru [van Ham и Tammaru, 2011], who determined that, among other ethnic groups in Estonia, Slavs, especially Russians, enter mixed marriages are less often than members of other minorities. It is noted that Finns often marry Estonians. Besides, the likelihood of ethnically mixed marriages among minorities is higher amongst those living in rural areas, as well as its increase among migrants from generation to generation (third generation migrants have the highest level). The likelihood of entering mixed marriages for Estonians increases for female residents of large cities and migrant descendants. Thus, the forming of ethnically mixed couples is influenced by the openness of the ethnic group and the potential for meeting with a partner of another nationality (in the larger cities it is higher). Some controversial results were obtained by the authors relating to the level of education.

In the work of Rahnu and the colleagues [Rahnu et al., 2016], based on the unique material of several sample surveys conducted in the mid-2000s, the authors have once again confirmed the growing convergence among the ethnic groups, which is caused by the prevalence of mixed marriages among minorities from generation to generation, which have one through migration. However, the convergence of groups has been rather slow, and the deterrent can be found in living in communities where there is a large concentration of minorities and Estonian is not spread. However, a strict difference between the town and rural area as well as the influence of the level of education on the formation of ethnically mixed couples was not identified in the study.

Thus, turning to our analysis, we can build on the following hypotheses. In both republics, there is not just some ethnic segregation in matrimonial preferences between the representatives of the titular nationality and the Russians, but also a more comprehensive formation of preferences. Thus, in Kazakhstan a clustering of preferences when entering intermarriage will be observable among “European” (Russians, Ukrainians, Germans) and “Asian” (Kazakhs, Uighurs, Uzbeks) ethnic groups, and in Estonia the existence of a division to “Ugro-Finnish” (Finns and Estonians) and “Other” (mostly Slav) clusters. Besides, using Estonian data we will check: 1) the extent to which preferences are changing in the countryside and in a large city (in the latter case, it is much more likely to meet a representative of one’s “own” cluster), 2) is there a difference in ethnic preferences for official marriages and unregistered partnerships (in the latter case, there may be a more free exchange of partners between “ethnic clusters”).

Quantitative assessment of preferences for inter-ethnic marriage

Methods for estimating inter-ethnic preferences in marriage have long been used, and the approaches proposed for measurement vary significantly. In this work we

shall stop at so-called ethnic distances. They are often used to assess preferences for interracial marriages in the United States. For instance, in Shin's work [Shin, 2014] on the assessment of the prevalence of mixed marriages among the white, black and Hispanic populations according to sample surveys.

These ideas, based on the use of index methods to measure distances, were considered in some works in the 1960s [Price, Zubrzycki, 1962; Parkman, Sawyer, 1967].

The method of calculation used by us is presented in detail in E.L. Soroko's work [Soroko, 2014]. It presents the option of estimating the inter-ethnic distance between the ethnic groups of the Russian Federation based on the 2010 census data.

The basic principle of calculating the inter-ethnic distance is to correlate the actual numbers observed in the population census with the ethnic combinations of the spouses with hypothetical numbers that might be expected in the assumption of proportionality of such marriages to the number of men and women of the respective nationalities in the total population.

In this case, the inter-ethnic distance is considered to be a factor that is inversely proportional to the formation of preferences. That is, the higher the preference, the lower the distance.

The basic formula is the following equation:

$$D_{ij} = \frac{1}{2} \left(\frac{1}{E_{ij}} + \frac{1}{E_{ji}} \right),$$

where E_{ij} — are ethnic preferences for men and E_{ji} — for women. That is, E is the difference between the actual distribution of the combinations in the census data and the estimated distribution. The figures for both sexes are calculated in the same way, let's consider the specifics of calculations by the example of the formula for E_{ij} (men):

$$E_{ij} = \frac{n_{ij}}{n_{ij}^R}.$$

At the same time n_{ij} is the proportion of a specific ethnic combination among all mixed couples as a result of the census, and n_{ij}^R is the calculated distribution, which shows the proportion of families with a combination of nationalities (i , j) among all mixed families — that is, our hypothetical value of the number of mixed marriages when a partner is randomly chosen (no preferences):

$$n_{ij}^R = \frac{M_i F_j}{FM}.$$

In this case, M and F is the number of men and women in a mixed marriage. And M_i is the number of men in mixed marriage of nationality i of interest to us, and F_j is the number of women of nationality j , married to men of nationality i for each case.

Inter-ethnic distance is a dimensionless value: the value “1” corresponds to the absence of any ethnic preferences in the formation of mixed marriages. The outcome interpretation derives from the following principles: a result below “1” reveals great preferences for the formation of pairs in the given combination of nationalities of the husband and wife, and figures over “1” reflect the obstacles and barriers to the formation of mixed marriages in such a combination of nationalities.

In the current phase, it is not possible to apply such estimates for men and women separately because of the non-linearity of the original gender aggregation formulas.

Assessment of inter-ethnic distances in Kazakhstan

We calculate the propensity for the formation of mixed married couples for individual ethnic groups based on materials of the 2009 census of Kazakhstan.

It is noted that, according to the census of 2009 on the territory of Kazakhstan 63% were Kazakhs, 23.7% Russians, 2.9% Uzbeks, 2.1% Ukrainians, 1.4% Uighurs, 1.3% Tatars and 1.1% of Germans. Under sufficiently heterogeneous population resettlement: a high percentage of Russians and Europeans in the north and east of the country, with their relatively small proportion in the south (excluding major cities such as Almaty), which contributes to the creation of densely populated areas of different nationalities or Ethnic groups.

Initially, a matrix of ethnic combinations of existing couples is built to calculate these indicators (Table 2).

Table 2. Matrix of ethnic combinations in couples for 7 ethnic groups in Kazakhstan, 2009, number of couples

Wife's nationality	Husband's nationality							
	Kazakhs	Russians	Uzbeks	Ukrainians	Uighurs	Tatars	Germans	Other
Kazakhs	1 928 733	24 067	4721	1915	4058	4588	6507	31 404
Russians	79 559	589 573	2376	32511	7302	12195	24903	11 917
Uzbeks	88 966	13 303	82392	181	696	409	90	2969
Ukrainians	54 133	273 125	270	10568	79	1864	4568	5513
Uighurs	154 335	20 616	1416	108	35 998	451	100	3405
Tatars	240 810	189 884	1127	3440	606	5883	1473	7091
Germans	58 634	266 424	172	5824	93	1022	4175	5381
Other	41 494	21 974	1472	872	778	422	669	1090

Source: Marriage and family. The results of the National census of 2009 in the Republic of Kazakhstan, 2010.

In the transition from absolute figures to relative values, it will be visible that fundamentally the share of mixed marriages among different ethnic groups will not be the same. Heterogeneity also occurs within one ethnicity when choosing a partner by representatives of different genders. For instance, among Kazakh women only 3.9% of the population are in mixed marriages, and among Kazakh men it is about 27.1%, also among Russian women about 22.5% of the population is in mixed marriages, and over half the men: 57.9%. Notice that the total share of intermarriages in Kazakhstan is about 39%.

As a result, according to the calculations made the inter-ethnic distance between Russians, Kazakhs and some non-indigenous predominant ethnic groups in the Republic the following estimates were achieved (Tables 3 and 4).

Table 3. Assessment of inter-ethnic distances between Estonians and 6 ethnic groups on the basis of prevalence of mixed marriages, Kazakhstan, 2009

Nationality	Inter-ethnic distance $D(xy)$
Kazakhs	1.2
Uzbeks	2.12
Ukrainians	0.36
Uighurs	2.15
Tatars	0.63
Germans	0.37
Other	1.0

Executed by calculating data from: Stat. Compilation, the results of the national census of 2009 in the RK, national composition, religion and language proficiency in the RK, 2010.

Table 4. Assessment of inter-ethnic distances between Kazakhs and 6 ethnic groups on the basis of prevalence of mixed marriages, Kazakhstan, 2009

Nationality	Inter-ethnic distance $D(xy)$
Russians	1.2
Uzbeks	0.3
Ukrainians	1.83
Uighurs	0.32
Tatars	0.49
Germans	1.33
Other	0.39

Executed by calculating data from: Stat. Compilation, the results of the national census of 2009 in the RK, national composition, religion and language proficiency in the RK, 2010.

In this case, by ethnic proximity to the Russians, the nationalities were distributed in the following order: Ukrainians, Germans, Tatars, followed by

Kazakhs, the indicator for which is already over one unit, which suggests the presence of some obstacles to marriage. The farthest distance between Russians and Uzbeks (the rapid increase in the number of representatives of this nation in Kazakhstan began relatively recently, and the number of Russians, especially at a young age, is declining, in addition, the territory of settlement of Russians and Uzbeks, as a rule, does not match) and Uighurs. The other nationalities showed indicators very close to 1. Thus, expectedly the closest ethnic group to the Russians are other European groups – Ukrainians and Germans, then the Turkic-speaking Tartars, but in many aspects close to the Slavic culture. Note that in Russia the inter-ethnic distance between Russians and Ukrainians is considerably higher than in Kazakhstan – 0.66, even more so the difference with Germans 0.94, the difference in distance with the Tatars in Russia and Kazakhstan is not so great (0.84 in Russia and 0.63 in Kazakhstan). Thus, these figures show a more frequent contact between the “European” nationalities in Kazakhstan than in Russia, which is likely to be facilitated by geographical characteristics of residence. In Russia, similar preferences are observed between the Tatars and Bashkirs, who live mostly in neighboring territories.

At the same time, it is worth noting that the inter-ethnic distances between Kazakhs and Tatars are even lower than those of Russians and Tatars, although slightly higher than those of the Uzbeks and Uighurs. Thus, one can speak of the intermediate situation of the Tatars in the “marriage market” of Kazakhstan between “European” and “Asian” ethnic groups. We shall note once again that the distance between Kazakhs and Russians in Kazakhstan exceeds 1 (1.2, which roughly corresponds to the distance between Russians and Georgians in Russia), which is slightly higher than the distance between similar ethnic groups in Russia, where it is 0.97 (the virtual absence of preferences) [Soroko, 2014]. The relatively low preference for ethnic marriages, corresponding to the differences between Russians and Chechens with the Ingush in Russia, will be observed between Russians and representatives of “Asian” minorities: Uzbeks with Uighurs in Kazakhstan. In the case of the Uzbeks, the explanation was cited above and, in the case of the Uighurs, where the phenomenon was difficult to explain only by migration, there were apparently particular settlement and sociocultural characteristics. A further reason for the relatively high inter-ethnic distance between “European” and “Asian” ethnic groups is also the language, since the absolute majority of Russians and other “European” nationalities are not proficient in Kazakh and have no particular motivation to study it.

Assessment of inter-ethnic distances in Estonia

As of the census of 2011, on the territory of Estonia almost 69% were Estonians, 25.5% Russians, 2.05% Ukrainians, about 1.5% Belarusians, 0.8% Finns, the proportion of the remaining ethnic groups was less than 0.2% each. Also, as in

the case of Kazakhstan, there is an uneven settlement of minorities within the republic: the Slavic ethnic groups are represented mainly in Tallinn and two counties in the north-east of the country.

Table 5. Matrix of ethnic combinations in couples for 7 ethnic groups in Estonia, 2011, number of couples

Wife's nationality	Husband's nationality							
	Estonians	Russians	Ukrainians	Belarusians	Finns	Tatars	Jews	Other
Estonians	177781	8184	901	378	766	53	54	1043
Russians	5783	54032	2685	1807	528	214	106	1376
Ukrainians	851	3777	1462	253	51	22	14	181
Belarusians	292	2110	184	673	27	10	7	112
Finns	1029	546	51	32	190	6	4	31
Tatars	44	270	20	11	3	124	3	15
Jews	106	311	26	14	2	4	122	20
Other	1760	2078	232	125	46	37	17	789

Source: The results of the 2011 population and household census in Estonia. <https://www.stat.ee/phc2011>

The data (Table 5) allow us to calculate the inter-ethnic distances between the major ethnic groups in a similar way to Kazakhstan for marriage and companions, as well as for the city, rural area and the capital (Tallinn). The hypothesis is the more open the society, the easier it is to meet someone of one's own kind.

It should also be noted that, unlike Kazakhstan, there is no particular difference between preferences for mixed marriages among the different sexes by the main nationalities: thus, 94–95% of Estonians of both sexes marry with members of their own nationality, for Russians this indicator accounts for about 76% for men and 81% for women (some gender gap exists but is not as large as in Kazakhstan). Moreover, in comparison with Kazakhstan, there is still less mixing of the population of the titular nationality and the Slavic minority, despite the linguistic factor: higher levels of proficiency in the Estonian language and motivation to study it. In addition, the dynamic (see Introduction) shows a decrease in the share of mixed pairs. Among Finns, marriages with members of their own nationality amount to about 10%, among Slavic peoples without Russians, and Tatars – 20–25%. Similar results are obtained from Estonian microdata in the literature review.

Table 6. Assessment of inter-ethnic distances between Russians and 6 ethnic groups on the basis of prevalence of mixed marriages, Estonia, 2011

Nationality	Inter-ethnic distance D (xy)		
	Marriage and cohabitation	Cohabitation only	Marriages only
Estonians	0.587	0.556	0.597
Ukrainians	0.552	0.597	0.546
Belarusians	0.525	0.547	0.523
Finns	1.132	1.286	1.092
Tatars	0.565	0.566	0.565
Jews	0.660	0.689	0.659
Other	0.789	0.896	0.763

Source: The results of the 2011 population and household census in Estonia. <https://www.stat.ee/phc2011>

Table 7. Assessment of inter-ethnic distances between Estonians and 6 ethnic groups on the basis of prevalence of mixed marriages, Estonia, 2011

Nationality	Inter-ethnic distance D (xy)		
	Marriage and cohabitation	Cohabitation	Marriages
Russians	0.587	0.556	0.597
Ukrainians	1.443	1.222	1.474
Belarusians	2.221	1.897	2.247
Finns	0.485	0.566	0.463
Tatars	2.025	1.643	2.192
Jews	1.141	1.326	1.088
Other	0.704	0.712	0.705

Source: The results of the 2011 population and household census in Estonia. <https://www.stat.ee/phc2011>.

However, the matrix shows that for Russians when they enter into a mixed marriage, the choice of a partner of another nationality is virtually no fundamental (Finns are an exception), that is, between them and Estonians (especially when cohabiting) there is about the same distance as Ukrainians, Belarusians and Tartars (when entering into a registered marriage it slightly increases¹).

¹ However, the lesser legibility when entering into cohabitation may be due to the effect of generations (as described in the literature review by country): subsequent generations of migrants are more willing to enter relations with representatives of other nationalities, there is more offspring among young people, among which co-habitations are more common.

Estonians are most willing to enter into registered marriages with Finns (but not cohabiting: the distances from Estonians are the same for Russians and Finns), and the Russians are second (Tables 6, 7). Other nationalities have some kind of barrier to intermarriages with Estonians. However, if the Jews were to be replaced by roughly similar by numbers, but representing a more proximate to Estonians in terms of culture and duration of cohabitation nation - the Latvians, then the distance would be near 0.97 (a little closer, but still further with the Finns and Russians). When considering the distance between Latvians and Russians, it will grow to about 0.7, which is further than with the Slavs, but still less than 1.

We shall note that our hypotheses, submitted on the basis of the findings of Estonian researchers, are confirmed (inter-ethnic preferences disaggregated by settlement are presented in Tables 8 and 9). So, in rural areas, the inter-ethnic distance between Russians and Estonians is even lower, in small ethnic groups, at the same time, in the case of Estonians, who make up the absolute majority of the rural population of their country, ethnic distances are reduced with all small Ethnic groups, except for Jews and others. Thus, in the countryside, it is likely that there are simply no areas where ethnic groups other than Estonians are concentrated, so that their few representatives marry Estonians. In large Tallinn, with few exceptions (Russians and Finns, Estonians and Tatars, as well as Jews), there are no differences with the usual city.

Although the overall picture is that in Tallinn, 20% of the total population and about 8–9% of Estonians (the figure is higher than the national average) are in mixed marriages, the figure is 16.5% for Russians and 23% for men in the country as a whole. In the countryside 7.8% of couples are mixed, with almost 30% of Russian women and 40% of men being part of them. In cities about 17.5% of couples are mixed. Among Russians and Estonians this figure will be slightly lower than in Tallinn.

Table 8. Assessment of inter-ethnic distances between Russians and 6 ethnic groups on the basis of prevalence of mixed marriages, Estonia, 2010

Nationality	Inter-ethnic distance D (xy)		
	City	Rural area	Tallinn
Estonians	0.523	0.498	0.530
Ukrainians	0.567	0.810	0.542
Belarusians	0.490	0.708	0.491
Finns	1.172	1.915	1.556
Tatars	0.557	0.568	0.546
Jews	0.827	1.067	0.769
Other	2.832	4.285	2.306

Source: The results of the 2011 population and household census in Estonia. <https://www.stat.ee/phc2011>

Table 9. Assessment of inter-ethnic distances between Estonians and 6 ethnic groups on the basis of prevalence of mixed marriages, Estonia, 2010

Nationality	Inter-ethnic distance D (xy)		
	City	Rural area	Tallinn
Russians	0.523	0.498	0.530
Ukrainians	1.944	1.010	2.067
Belarusians	2.467	1.582	2.380
Finns	0.813	0.517	0.824
Tatars	2.278	1.460	2.034
Jews	1.507	1.539	1.364
Other	0.639	0.733	0.621

Source: The results of the 2011 population and household census in Estonia. <https://www.stat.ee/phc2011>

Conclusion

The prevailing situation in the Republic of Kazakhstan is one of the exclusive in the post-soviet area, which is reflected in the relatively high proportion of mixed marriages. In a situation of very similar ethnic composition, Estonia has a significantly (approximately 2.5 times) lower percentage of mixed unions.

In the territory of Kazakhstan, the situation is characterized by a fairly common preference for mixed marriages within European and Asian ethnic groups. In Estonia, it is also possible to observe the tendency of Finns to marry Estonians, and Slavs among themselves.

In the case of mixed marriages between Russians, on the other hand, in Kazakhstan the ethnic distance between the Kazakhs and the nearest in terms of size ethnic minority (Russians) is considerably higher than between Estonians and Russians. Largely because of the existence of “Asian” ethnic groups - an additional “marriage market”.

Thus, in Kazakhstan, there are more mixed marriages, also due to more intensive links within the “European” and “Asian Cluster”, and Russians and Kazakhs have a sufficiently large inter-ethnic distance. In Estonia, among the representatives of the titular nation in particular, there are few mixed marriages, but when they are concluded, the distance between Russians and Estonians is rather small.

The emigration processes and ageing of European ethnic groups in Kazakhstan influence the formation of an inter-ethnic distance, so in the future we expect nationalities to distant in preference of one other, because of the decline in the number of non-indigenous ethnic groups. In Estonia, ageing among Russians is not so distinct from Estonians.

It will be noted that, through natural growth and migratory processes, in Kazakhstan an increase in the representation of the titular Nation and “Asian” ethnic groups continues, as well as the disappearance of the “European ethnic groups” (an additional role is also played by the difference in the age structure — “Asian ethnic groups”, including Kazakhs, the younger, rejuvenation is also facilitated by intensive immigration). At the same time within the “European” and “Asian” cluster itself, there is an intense “absorption” by Russians and Kazakhs, respectively, of small nationalities through mixed marriages. However, in the “Asian” cluster, the representation of Uighurs and Uzbeks is likely to continue to grow through migration, possibly providing additional capacity to increase the share of mixed marriages in the republic (in the “European” cluster such a potential is likely to be virtually exhausted).

In Estonia it is likely that, in the near future, Finns will be almost completely absorbed by Estonians and European Slavic nationalities by Russians. At the same time, the low prevalence of mixed marriages between the republic’s largest nationalities, despite a small ethnic distance, will for rather long maintain the current ethnic composition of the population unless a dramatic change in the migration situation takes place.

References

1. *Arutjunjan Ju. V.* 1999. On national relations in post-soviet societies: the interpersonal aspect. *Sociologicheskie issledovanija* [Sociological research]. No. 4. Pp. 58–62 (in Russian).
2. European Commission (2008) Research Note Mixed Marriages in the EU Directorate-General “Employment, Social Affairs and Equal Opportunities”. Unit E1. Social and Demographic Analysis.
3. *Evstigneev I. A.* 1974. Inter-ethnic marriages in some cities of northern Kazakhstan. *Soviet Sociology*. Vol. 13. No. 3. Pp. 3–16.
4. *Fais O. D.* 1997. The issue of nuptiality of representatives of certain ethnic groups of the population of Moscow in the modern era (1992–1994). *Sem’ja, gender, kul’tura: Materialy mezhdunarodnyh konferencij 1994 i 1995 gg.* [Family, gender, culture: Proceedings of the 1994 and 1995 international conferences]. Chief ed. V.A. Tishkov. Moscow, IEA, pp. 230–238 (in Russian).
5. *Gorenburg D.* 2006. Rethinking inter-ethnic marriage in the Soviet Union. *Post-Soviet Affairs*. Vol. 22. No. 2. Pp. 145–165.
6. *Van Ham M., Tammaru T.* 2011. Ethnic minority–majority unions in Estonia. *European Journal of Population. Revue Européenne de Démographie*. Vol. 27. No. 3. P. 313.
7. *Kalyshev A. B.* 1984. Intermarriages in rural areas of Kazakhstan: According to the Pavlodar region data. 1966–1979. *Sovetskaja jetnografija* [Soviet ethnography]. No. 2. Pp. 71–77 (in Russian).
8. *Kozlov V. I.* 1982. *Nacional’nosti SSSR: Jetnodemograficheskij obzor* [Nationalities of the USSR: Ethnodemographic Review]. 2nd ed., reviewed and enhanced. Moscow.
9. *Kulu H., Hannemann T., Pailhé A., Neels K., Rahnu L., Puur A., Bernardi L.A.* 2015. Comparative study on fertility among the descendants of immigrants in Europe. *Families and Societies Issue*. Vol. 40.

10. *Muzhchiny i zhenshchiny v Respublike Kazahstan. Itogi Nacional'noj perepisi naselenija RK 2009 goda* [Men and women in the Republic of Kazakhstan. Results of the 2009 National Population Census]. Stat. Compilation. Astana, 2011 (in Russian).
11. *Ostapenko L. V., Subbotina I. A., Nesterova S. L.* 2012. *Russkie v Moldavii. Dvadcat' let spustija... (jetnosociologicheskoe issledovanie)* [Russians in Moldova. Twenty years later... (ethno sociological research)]. Moscow, IEA RAS.
12. *Parkman M. A., Sawyer J.* 1967. Dimensions of ethnic intermarriage in Hawaii. *American Sociological Review*. Pp. 593–607.
13. *Price C. A., Zubrzycki J.* 1962. The use of inter-marriage statistics as an index of assimilation. *Population Studies*. Vol. 16. No. 1. Pp. 58–69.
14. *Puur A., Maslauskaitė A., Stankuniene V., Zakharov S.* 2012. Transformation of partnership formation in Eastern Europe: The legacy of the past demographic divide. *Journal of Comparative Family Studies*. Pp. 389–417.
15. *Rahnu L., Puur A., Sakkeus L., Klesment M.* 2016. Report: Country-specific case studies on mixed marriages. Dynamics of mixed partnerships in Estonia. *Families and Societies. Working Paper Series*. No. 57. Pp. 63–112.
16. *Rahnu L., Puur A., Sakkeus L., Klesment M.* 2015. Partnership dynamics among migrants and their descendants in Estonia. *Demographic Research*. Vol. 32. Pp. 1519–1566.
17. *Roschina Y. M., Roschin S.Y.* 2006. *Brachnyj rynek v Rossii: vybor partnera i faktory uspeha* [Marriage market in Russia: choice of partner and success factors]. Preprint WP4/2006/04 (in Russian).
18. *Shin S.* 2014. Preferences vs. Opportunities: Racial/Ethnic Intermarriage in the United States. *PIER Working Paper* 14-040.
19. *Soroko E.L.* 2014. Ethnically mixed married couples in the Russian Federation. *Demograficheskoe obozrenie* [Demographic Review]. No. 4. Pp. 96–123 (in Russian).
20. *Susokolov A.A.* 1987. *Mezhnacional'nye braki v SSSR* [Intermarriages in the USSR]. Moscow, Mysl' Publ.
21. *Topilin A.V.* 1995. International Families and Migration: issues of influence. *Sociology of national relations. Socis* [Sotsis]. No. 7. Pp. 76–83 (in Russian).
22. *Ualieva S.* 2011. Inter-ethnic marriages, mixed origins and “Friendship of Peoples” in the Soviet and post-soviet Kazakhstan. *Neprikosnovennyj zapas* [Emergency ration]. No. 6. Pp. 234–244 (in Russian).
23. *Ualieva S. K.* 2012. Ethnodemographic characteristics of family and marriage relations and inter-ethnic marriages at the turn of the century In: *Semejno-brachnye otnoshenija naselenija Kazahstana na rubezhe vekov: istoriko-demograficheskij aspekt* [Family-marriage relations of the population of Kazakhstan at the turn of the century: the historical and demographic aspect]. Ust-Kamenogorsk: Librius Publ., pp. 165–179.
24. *Volkov A. G.* 1991. Ethnically mixed families and international marriages. In: *Sem'ja i semejnaja politika* [Family and family policy]. Moscow, Institute for Social and Economic Problems of the Population, pp. 68–86.
25. *Volkov A. G.* 2014. *Izbrannye demograficheskie trudy: sbornik nauchnyh statej* [Selected demographic works: a collection of scientific articles]. Moscow, Publ. house of the Higher School of Economics.
26. *Yem N., Epstein S. J.* 2015. Social Change and Marriage Patterns among Koryo Saram in Kazakhstan, 1937–1965. *Seoul Journal of Korean Studies*. Vol. 28. No. 2. Pp. 133–152.