









The Department of Demographic and Migration Policy

MGIMO University

THE RUSSIAN ACADEMY OF SCIENCES
Scientific Council "Demographic and Migration problems of Russia" at the UN RAS

Federal Research Sociological Center of the Russian Academy of Sciences Institute for Demographic Research

### DEMOGRAPHIC DEVELOPMENT OF POST-SOVIET COUNTRIES (1991-2021)

TRENDS, DEMOGRAPHIC POLICY,
PROSPECTS

ANALYTICAL REPORT









# THE RUSSIAN ACADEMY OF SCIENCES SCIENTIFIC COUNCIL "DEMOGRAPHIC AND MIGRATION PROBLEMS OF RUSSIA" AT THE UN RAS

FEDERAL RESEARCH SOCIOLOGICAL CENTER
OF THE RUSSIAN ACADEMY OF SCIENCES
INSTITUTE FOR DEMOGRAPHIC RESEARCH

### DEMOGRAPHIC DEVELOPMENT OF POST-SOVIET COUNTRIES (1991–2021): TRENDS, DEMOGRAPHIC POLICY, PROSPECTS

#### ANALYTICAL REPORT

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The analytical report was prepared by the research team of the Institute for Demographic Research FCTAS RAS. The report examines trends in the demographic development of the countries of the former USSR during 1991–2021. The report provides a comprehensive analysis of demographic and migration processes, as well as the effectiveness of the demographic and migration policies of the countries of the former USSR over thirty years with some forecast estimates of the population dynamics in the region in the medium term. Data from the Interstate Statistical Committee of the CIS, National Statistical Services, Eurostat and international organizations of the UN system were used in the preparation of this analytical report. The report is addressed to government officials, researchers, university professors, postgraduates and students.

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#### INTRODUCTION

The analytical report «Demographic Development of the post-Soviet countries (1991–2021): trends, demographic policy, prospects» was initiated and prepared by scientists of the Institute for Demographic Research of the Federal Research Sociological Center of the Russian Academy of Sciences within the framework of the United Nations Population Fund program supported by the Russian Federation to improve the collection, analysis and use of population data for the development of demographic policy in the CIS region (CISPOP) ahead of the Ministerial Conference on Demography in Sofia (Bulgaria), held on December 2–3, 2021.

The presentation and discussion of the analytical report took place at the III All-Russian Demographic Forum with international participation (December 3–4, 2021).) and the XIII International Forum «Migration Bridges in Eurasia» (December 8–9, 2021), which was attended by experts from twenty-five countries, including ten countries of the former USSR (Azerbaijan Republic, Republic of Armenia, Republic of Belarus, Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, Russian Federation, Republic of Tajikistan, Republic of Uzbekistan, Ukraine).

The main purpose of the analytical report is to summarize some results of the demographic development of fifteen countries of the former USSR which previously formed a single state but after its collapse developed in various socio-economic conditions. The report provides a comprehensive analysis of demographic and migration processes, as well as the effectiveness of demographic and migration policies of the countries of the former USSR for thirty years and provides some forecast estimates of population dynamics in the region for the medium term.

An important aspect is the geopolitical framework of demographic analysis. First of all, it should be noted that the Commonwealth of Independent States (CIS) with a population of 280 million people (2020) has developed and is functioning in the post-Soviet space: Republic of Azerbaijan, Republic of Armenia, Republic of Belarus, Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, Russian Federation, Republic of Tajikistan, Republic of Uzbekistan. Within the CIS there is a visa-free regime for the population movement, common documents have been adopted in the field of socio-demographic development and migration regulation.

The Eurasian Economic Union (EAEU), which was formed in 2014–2015 and has a population of 186 million people (2020) is distinguished by a deeper degree of integration: Republic of Armenia, Republic of Belarus, Republic of Kazakhstan, Kyrgyz Republic, Russian Federation. Within the framework of the EAEU a common labor market, single customs regime, and visafree travel have been formed.

Three Baltic countries (Republic of Latvia, Republic of Lithuania, Republic of Estonia) with a population of about 6 million people in 2004 joined the European Union (EU), on the one hand, maintaining certain demographic and migration ties with other countries of the former USSR, and on the other hand, having the opportunity of visa-free migration exchange with the countries of the Schengen area which intensified emigration of the population to the West.

Thirty years after the collapse of the USSR were accompanied by serious geopolitical and socio-economic transformations for all states. There was a strong differentiation of demographic processes in the region. The population has decreased in nine states: Republic of Armenia, Republic of Belarus, Republic of Georgia, Republic of Moldova, Russian Federation, Ukraine, Republic of Latvia, Republic of Lithuania and the Republic of Estonia. The population of six countries in the region has increased: Republic of Azerbaijan, Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan, Republic of Uzbekistan. Thus, the main increase in the population in the region was provided by the countries of Central Asia and the Republic of Azerbaijan which maintain a high natural population growth due to high birth rates.

In 2021, the population of the CIS was 287 million people. The population of the Baltic states is 6 million people, Republic of Georgia – 3.7 million people, Turkmenistan – 6.1 million people. Thus, the population of the countries of the former USSR is currently 298 million people. The population of the Russian Federation is 51% of the population of the CIS countries and 49% of the population of the former USSR. For thirty years the population of the countries of the former USSR has increased by only 8.5 million people, or 3%¹. The share of the countries of the former USSR in the world population fell to 3.9%. Despite the general growth in the population of the region, in terms of demography it is very differentiated and different countries have different problems in the field of socio-demographic development.

Over the past thirty years the overwhelming majority of the countries of the former USSR have achieved significant positive results in terms of increasing life expectancy of the population, narrowing the gap in life expectancy between men and women, reducing child and maternal mortality and reducing mortality from preventable causes. National programs for demographic development linked with the UN Sustainable Development Goals have been developed and are being implemented.

With their own characteristic features, the countries of the post-Soviet space follow the global trends of demographic development. These global trends include an increase in life expectancy at birth, urbanization, qualitative changes in the reproductive attitudes of the population (a decrease in the birth rate, the spread of later marriage and the age of mothers at the birth of their first child, an increase in the proportion of children born during officially registered marriage). For different countries of the post-Soviet space such changes occur at different dynamic and are determined both by the prevailing age and gender structure, ethnic and confessional structures of the population and by the level of economic development, the socio-political situation in society, the intensity of migration processes and other internal and external factors.

Mentioned processes of depopulation are currently characteristic of such countries as Russian Federation, Republic of Belarus, Republic of Latvia, Republic of Lithuania, Republic of Estonia, Ukraine and the Republic of Moldova. Their demographic future will mainly depend on the effectiveness of demographic policy measures, as well as the contribution of migration to changes in the size and age and sex structure of the population. At the same time, in the post-Soviet space, the Russian Federation is a key recipient country of migrants from other countries of the former USSR, while other indicated countries are losing population in migration exchange with Russia, EU and other countries. The Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Republic of Uzbekistan, and Turkmenistan are characterized by a progressive demographic structure, retain relatively high values of the total fertility rate and in the future their population will continue to grow at a slow rate. For these countries, a rather high level of labor emigration is also a specific feature. For the Republic of Azerbaijan, Republic of Armenia and the Republic of Georgia the migration outflow and the gradually decreasing birth rate have a significant impact on the possibilities of demographic growth.

In preparation of this analytical report, the data of the Interstate Statistical Committee of the CIS, national services of state statistics, Eurostat, and international organizations of the UN system were used.

The team of authors would like to express gratitude to the Regional Office of the United Nations Population Fund in Eastern Europe and Central Asia, as well as to the Government of the Russian Federation for supporting the research and publication within the framework of the CIS Pop project.

Director of the Institute for Demographic Research FCTAS RAS, RAS Corresponding Member S. V. Ryazantsev

<sup>&</sup>lt;sup>1</sup> Population and social indicators of the CIS countries and individual countries of the world 2017–2021. URL: http://www.cisstat.org/life\_quality/sb\_soc\_indicate2017-2020.pdf

### SECTION 1. POPULATION DYNAMICS AND DEMOGRAPHIC STRUCTURE OF THE POPULATION OT THE FORMER USSR COUNTRIES

#### 1.1. Population dynamics

#### Demographic processes during USSR: key trends

The birth rate in most of the republics of the USSR in the 1970s and 1980s corresponded (or was lower) to the level of economically developed Western countries. Despite a significant increase in the total fertility rate (TFR) in the RSFSR, the Ukrainian SSR, the Byelorussian SSR and several other republics of the USSR in 1986–1988, by 1989 five republics of the USSR had ceased to provide idle time and switched to a mode of narrowed population reproduction. Among them are the RSFSR (2.02), the Belarusian SSR (2.03), the Ukrainian SSR (1.93), the Lithuanian SSR (1.98), the Latvian SSR (2.05)<sup>1</sup>.

The dynamics of life expectancy indicators of the population of the republics of the USSR in 1960–1980 demonstrated values below the average of European or North American countries. If in 1989 the USSR lagged behind European countries by about 2.5 years in terms of life expectancy for women, the value of the same indicator for men was lower than the European average by almost 4.5 years.

By 1989 more than 2/3 of the population of the USSR lived in cities. The fairly high rates of urbanization were explained by the significant rates of industrialization and the development of industrial cities where about 80% of the country's industry was located. Many rural residents were forced to move to cities due to the lack of jobs in the industry. In addition, since 1965 a campaign was carried out to transfer some agricultural land from agricultural to industrial use, which greatly accelerated the processes of urbanization. Accelerated urbanization and the rapid development of the urban way of life significantly influenced the transformation of the model of reproductive behavior of the population and the demographic development of the republics of the USSR.

The results of the 1989 All-Union Population Census showed that most of the Soviet republics had a stable demographic growth, while the rate of population growth in the Soviet Union as a whole was increasing. If in the inter-census period of 1970–1979 the population of the USSR increased by 8.6%, then between 1979 and 1989 it already increased by 9.3%.

With a population of 286.7 million people by 1989, the USSR was in third place in the list of the most populated countries in the world, second only to China and India<sup>2</sup>. However, despite the fairly stable population growth rates, in the period 1939–1989 the USSR gradually lost its share in the world population – from 7.4% in 1939 to 5.5% in 1989. (Figure 1.1.1).

In 1981–1991 the general rate of population growth in the socialist republics, according to the data of the national statistical departments of the former USSR countries, was 9%. To a large extent, the downward movement of this indicator is due to the demographic transition and rapid population growth in the developing countries. In the republics of the former USSR there was a slowdown in the rate of natural population growth in the late 1980s – early 1990s. due

<sup>&</sup>lt;sup>1</sup> Andreev E. M., Darskiy L. E., Kharkov T. L. Population of the Soviet Union: 1922–1991. M .: Publishing house «Science». P. 94.

<sup>&</sup>lt;sup>2</sup> Ibid

to the transition of many of them to the third and fourth stages of the demographic transition, which is characterized by a narrowed type of population reproduction.

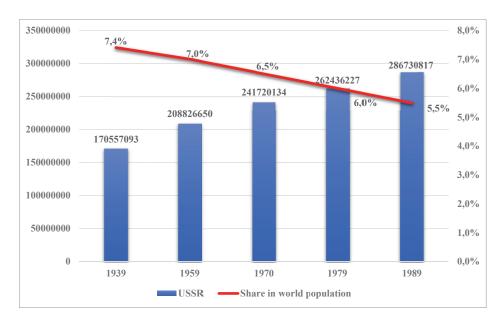


Figure 1.1.1. Dynamics of the population and the share of the USSR in the world population in 1939–1989.

#### Population dynamics in 1991-2021

After the collapse of the USSR on the territory of 9 countries (Russian Federation, Republic of Belarus, Ukraine, Republic of Lithuania, Republic of Estonia, Republic of Latvia, Republic of Kazakhstan, Republic of Moldova, Republic of Georgia) in 1991–2001 there was a fairly high decline in population, which averaged 11% over the period under review.

The negative demographic dynamics in the post-Soviet republics led to the fact that in the period from 1991 to 2001 the total population of all 15 former republics of the USSR decreased by 176.6 thousand people, or 0.6%.

The population decreased in nine countries, including the Republic of Armenia, Republic of Belarus, Republic of Georgia, Republic of Moldova, Russian Federation, Ukraine, Republic of Latvia, Republic of Lithuania and Republic of Estonia. The most significant population decrease in the period 1991–2001 was in the Republic of Georgia (-19.3%), Republic of Moldova (-16.7%), Republic of Kazakhstan (-11.9%), Republic of Latvia (-11.5%), Republic of Estonia (-11.2%), Republic of Lithuania (-5.8%), Ukraine (-5.7%), Republic of Belarus (-2%), Russian Federation (-1.3%). The population increased only in six countries of the region, among them are Turkmenistan (30.5%), Republic of Uzbekistan (20.2%), Republic of Tajikistan (16.9%), Republic of Azerbaijan (12.4%), Kyrgyz Republic (10,8%), Republic of Armenia (6.4%) (Fig. 1.1.2)<sup>1</sup>.

During 2002–2011, the scale of depopulation in the post-Soviet Baltic States, the South Caucasus and Eastern Europe decreased, as well as the rate of population growth in Central Asian countries. In the Republic of Armenia since 2002, there has been a tendency of population decrease, and in the Republic of Kazakhstan – of positive demographic growth.

<sup>&</sup>lt;sup>1</sup> World Population Prospects 2019, Volume I: Comprehensive Tables. URL: http://www.un.org; Population and social indicators of the CIS countries and individual countries of the world 2017–2021. URL: http://www.cisstat.org/life\_quality/sb\_soc\_indicate2017-2020.pdf

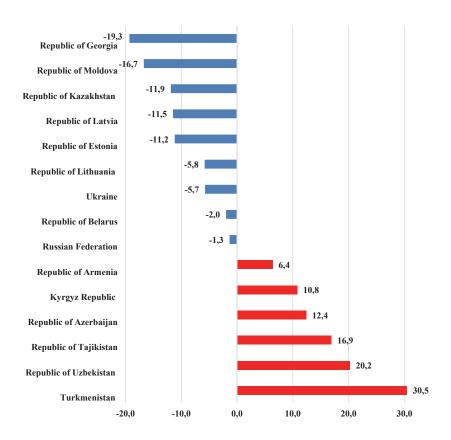


Figure 1.1.2. Population dynamics of the former USSR countries in 1991–2000 (%)

In the period from 2002 to 2011, the population declined in the Republic of Georgia (-13.7%), Republic of Lithuania (-11.6%), Republic of Latvia (-10.6%), Ukraine (-5.5%), Republic of Belarus (-4.7%), Republic of Estonia (-3.9%), Russian Federation (-1.9%), Republic of Moldova (-1.9%). Only seven countries of the former USSR had positive demographic dynamics during this period. Among them are the Republic of Armenia (1.5%), Republic of Kazakhstan (10.7%), Kyrgyz Republic (10.7%), Turkmenistan (11.1%), Republic of Azerbaijan (11.2%), Republic of Uzbekistan (15.1%), Republic of Tajikistan (19.6%) (Figure 1.1.3).

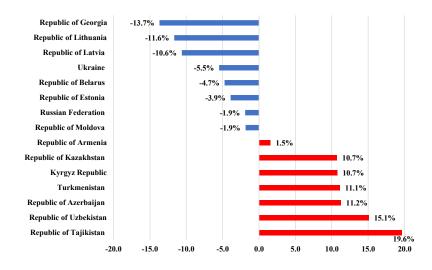


Figure 1.1.3. Dynamics of the population of the former USSR countries in 2001–2011., %

The period 2011–2021 for the countries of the former USSR was characterized by the following features:

- Firstly, by stabilizing the rate of population change in states with depopulation;
- Secondly, an increase in population growth rates in the countries with positive demographic dynamics.

The demographic situation in the Republic of Moldova draws particular attention in the context of the relative decline of the population. The population decreased by a third part (-27%), which is an anti-record for this period in the entire post-Soviet space. At the same time, the Republics of Belarus and Georgia managed to reduce the scale of population decline to -1.4% and -1.2%, respectively. The Russian Federation and the Republic of Estonia have positive demographic growth. But in the Republic of Estonia it was only 0.4%, in the Russian Federation it is already 2.2%.

Besides the aforementioned countries, whose population in 2011–2021 decreased most in the Republic of Armenia (-9.5%), Ukraine (-8.5%), Republic of Latvia (-7.4%), Republic of Lithuania (-6.9%), Republic of Belarus (-1.2%), Republic of Georgia (-0.3%). The population has increased in the Republic of Uzbekistan (22.3%), Republic of Tajikistan (21.8%), Turkmenistan (21.4%), Kyrgyz Republic (19.5%), Republic of Kazakhstan (13.2%), Republic of Azerbaijan (9.6%) (Fig. 1.1.4).

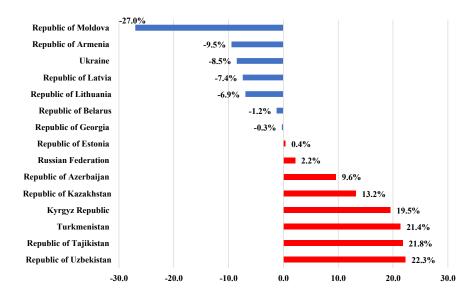


Figure 1.1.4. Population dynamics of the former USSR countries in 2011–2021., %

According to the effectiveness of demographic processes and the rate of population change in 1991–2021, four groups of countries of the former USSR were identified.

Group 1. Countries with rapid population growth (from 1 to 3% per year). During the period under review in 1991–2021, the population increased in the Republic of Tajikistan (by 77.4%), Republic of Uzbekistan (by 66.9%), Turkmenistan (by 64.2%), Kyrgyz Republic (by 50.1%), Republic of Azerbaijan (by 40.2%).

Group 2. Countries with moderate population growth (from 0.1 to 1% per year). During the period under review in 1991–2021, the population increased in the Republic of Kazakhstan (by 12.4%).

Group 3. Countries with moderate population decline (from 0.1 to 1% per year). During the period under review in 1991–2021, the population decreased in the Russian Federation (by -1.4%), Republic of Belarus (by -8.2%), Republic of Estonia (by -15.2%), Republic of Armenia (by -17.1%), Ukraine (by -19.4%), Republic of Lithuania (by -24.5%), Republic of Latvia (by -28.8%).

Group 4. Countries with accelerated population decline (from 1% per year). During the period under review in 1991–2021, the population decreased in the Republic of Georgia (-31.6%) and in the Republic of Moldova (-40.5%).

From the point of view of population reduction in absolute terms, the most difficult demographic situation is in Ukraine, where the population has decreased by more than 10 million people in the last thirty years. A significant decrease in the population was also in the Russian Federation (by 2.1 million), Republic of Moldova, Republic of Georgia (1.7 million people each) (Figure 1.1.5).

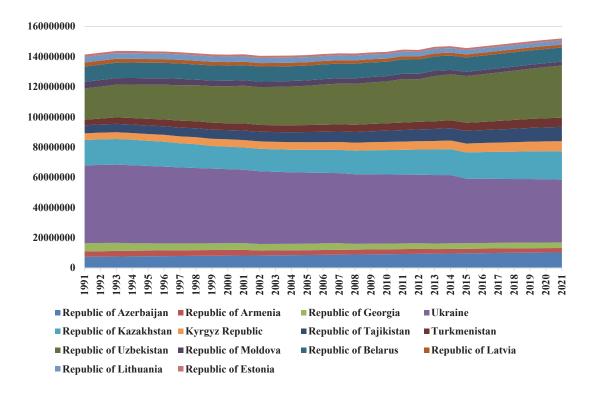


Figure 1.1.5. Dynamics of the population of the countries of the former USSR (excluding the Russian Federation) in 1991–2021, thousand people

Despite some predetermination of demographic processes in a number of countries in the region in the context of demographic transition, it was the collapse of the USSR and the subsequent deterioration of the socio-economic situation and the decline in the standard of living of the population that had a negative impact on the parameters of demographic development. In particular, negative socio-economic factors contributed to the emergence of the phenomenon of «supermortality» of the population, a decrease in the birth rate, migration outflow and as a result of stable depopulation which developed into a deep demographic crisis in a number of countries of the former USSR.

The main determinants of the demographic crisis in the post-Soviet countries in addition to a significant emigration outflow of the population abroad were a significant decrease in the birth rate and a high increase in premature mortality.

The main area of population growth in the post-Soviet space is concentrated in the countries of Central Asia and the Republic of Azerbaijan. In the period 1991–2021 the Republic of Azerbaijan has demonstrated positive demographic dynamics, increasing the population by 2.9 million people since the collapse of the USSR. However, the population growth rate of the Republic of Azerbaijan is gradually stabilizing, if in 2011 the population growth rate was 1.2%, then in 2021 – 0.5%. The Central Asian countries over the past ten years have on average an increase in population growth rates, which is especially typical for the Republic of Kazakhstan, Kyrgyz Republic, Turkmenistan and the Republic of Uzbekistan. In total, these countries together with the Republic of Tajikistan increased the population by 24.7 million people in the period 1991–2021.

#### **Current population**

In 2021 the population of the CIS was 287 million people. The population of the Baltic states is 6 million people, the Republic of Georgia – 3.7 million people, Turkmenistan – 6.1 million people. Thus, the population of the countries of the former USSR is currently 298 million people. The population of the Russian Federation is 51% of the population of the CIS countries and 49% of the population of the former USSR. For thirty years, the population of the countries of the former USSR has increased by only 8.5 million people, or 3%¹. The share of the countries of the former USSR in the world population decreased to 3.9%. Despite the general growth in the population of the region, in terms of demography, it is very differentiated and different countries have different problems in the field of socio-demographic development.

Table 1.1.1 presents some parameters of the demographic development of the countries of the former USSR in 2020 according to the data of the national statistical services in a consolidated form. The first place in terms of absolute population has Russian Federation (146.2 million), followed by Ukraine (41.6 million) and the Republic of Uzbekistan (34.6 million). The smallest population is observed in the Baltic countries: Republic of Lithuania (2.8 million), Republic of Latvia (1.9 million) and the Republic of Estonia (1.3 million). During the post-Soviet period, in all countries without exception, urbanization processes can be noted. The highest values of the share of the urban population have the Republic of Belarus (77.9%), Russian Federation (74.8%) and the Republic of Latvia (70.3%). The smallest share of the urban population is observed in the Republic of Tajikistan (26.2%). The urban population, on average, is characterized by a lower birth rate. For the Republic of Uzbekistan, Republic of Tajikistan and Turkmenistan the predominance of men in the total population is a feature of the demographic structure.

Table 1.1.1.

Parameters of the demographic development of the countries of the former USSR in 2020 according to the data of the national statistical services

Country	Population as of 01.01.2021, thousand people	Share of men in the population, %	Share of urban population, %	Life expectancy at birth, years	Total fertility rate, ppm	General mortality rate, ppm	Total fertility rate
Republic of Azerbaijan	10119,1	49,9	53,0	73,2	12,7	7,6	1,70
Republic of Armenia	2961,9	47,2	63,9	76,5*	12,3	11,9	1,60
Republic of Belarus	9349,6	46,2	77,9	74,5	9,3	12,8	1,45**
Republic of Georgia	3728,6	48,2	59,4	73,3	12,5	13,6	1,97
Republic of Kazakhstan	18879,6	48,3	59,1	71,4	22,4	8,6	3,13
Kyrgyz Republic	6636,8	49,6	34,4	71,7	24,0	6,1	3,05
Republic of Latvia	1893,2	46,2	70,3	75,1	9,2	15,2	1,55
Republic of Lithuania	2795,7	47,0	67,5	75,1	9,0	15,6	1,48
Republic of Moldova	2597,1	47,7	58,8	69,8	11,6	15,4	1,77
Russian Federation	146171,0	46,4	74,8	71,5	9,8	14,6	1,51
Republic of Tajikistan	9506,0	50,7	26,2	75,1*	25,4*	3,6*	2,43*
Turkmenistan***	5579,9	53,2****	53,0	71,5	17,9	6,0	2,04
Republic of Uzbekistan	34558,9	50,3	50,7	73,4	24,6	5,1	2,40****
Ukraine****	41588,4	46,3	69,6	71,4	7,8	15,9	1,22
Republic of Estonia	1330,1	47,4	69,6	78,8	9,9	11,9	1,58

Sources: Data of the State Statistical Committee of the Republic of Azerbaijan. URL: https://www.stat.gov.az/source/demography/; Statistical Committee of the Republic of Armenia. URL:

<sup>&</sup>lt;sup>1</sup> Population and social indicators of the CIS countries and individual countries of the world 2017–2021. URL: http://www.cisstat.org/life\_quality/sb\_soc\_indicate2017-2020.pdf

https://www.armstat.am/ru/?nid=12&thid=demo&type=0&submit=Search; https://www.armstat.am/ ru/?nid=586&vear=2020: National Statistical Committee of the Republic of Belarus, URL: https:// www.belstat.gov.by/ofitsialnaya-statistika/solialnaya-sfera/naselenie-i-migratsiya/; https://www.belstat. gov.by/ofitsialnaya-statistika/solialnaya-sfera/naselenie-i-migratsiya/naselenie/statisticheskie-izdaniya/ index 14357/; National Statistical Office of the Republic of Georgia. URL: https://www.geostat.ge/en/ single-archive/3361#; Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. URL: https://stat.gov.kz/official/industry/61/statistic/7; National Statistical Committee of the Kyrgyz Republic. URL: http://www.stat.kg/ru/statistics/naselenie/; The official statistical portal of the Republic of Latvia. URL: https://admin.stat.gov.lv/system/files/publication/2021-10/ Nr\_05\_Demografija\_2021\_%2821\_00%29\_LV\_EN.pdf; Official statistical portal of the Republic of Lithuania. URL: https://osp.stat.gov.lt/gyventojail; National Bureau of Statistics of the Republic of Moldova. Access mode: https://statistica.gov.md/category.php?l=ru&idc=103; Federal State Statistics Service of the Russian Federation. URL: https://rosstat.gov.ru/folder/12781; https://rosstat.gov.ru/ compendium/document/13269; Agency on Statistics under the President of the Republic of Tajikistan. URL: https://stat.tj/en/database-socio-demographic-sector; The World Factbook. URL: https://www.cia. gov/the-world-factbook/countries/turkmenistan/#people-and-society; State Committee of the Republic of Uzbekistan on Statistics. URL: https://stat.uz/ru/ofitsialnaya-statistika/demography; State Statistics Service of Ukraine. URL: http://database.ukrcensus.gov.ua/PXWEB2007/; Statistics Department of the Republic of Estonia. Access mode: https://www.stat.ee/en/find-statistics/statistics-theme/population

Notes: \* Data for 2019; \*\* Data for 2018; \*\*\* National statistics for Turkmenistan are not available. Data shown is based on CIA estimates as of 2021; \*\*\*\* Estimated by the UN Department of Economics and Social Relations for 2019; \*\*\*\*\* Official national data for Ukraine are published the Crimea and the city of Sevastopol; data for Donetsk and Luhansk regions are included in demographic surveys.

## 1.2. Gender and age structure of the population and demographic aging of the population

#### Dynamics of the sex and age structure of the countries of the former USSR.

According to the 1989 census, the population of the USSR reached 286.7 million people including 135,361 thousand men and 151,370 thousand women<sup>1</sup>. In the Soviet Union in the 1980s the aging process of the population began to increase. The number of people over the working age (men aged 60+, women 55+) increased by 21% during 1979–1989, while the entire population increased by only 9%. The proportion of this age group in the whole country amounted to more than 17% of the total population including in the RSFSR, the Ukrainian SSR, the Belarusian SSR and the Baltic Republics – 19–21%, the republics of Central Asia – 8–10%.

Currently, the population of the CIS region is 287 million people (2021) including 134 million men and 153 million women. In the countries of the European part of the region where population declines, women predominate over men: the greatest demographic gender asymmetry is observed in the Russian Federation – 1154 ppm, Ukraine – 1158 ppm, Republic of Belarus – 1164 ppm. There are more men than women in the Republic of Uzbekistan and the Republic of Tajikistan².

Demographic gender asymmetry is concentrated in older age cohorts. For example, in the Russian Federation the numerical excess of women over men in the population has been observed since the age of 35 and increases during their age (Table 1.2.1). This situation should be considered as unfavorable, since it is a consequence of the high level of premature mortality of men due to socio-economic reasons. The asymmetry of the sexes in the older age cohorts is becoming an essential factor in the process of demographic aging of the population in the post-Soviet countries.

Table 1.2.1. **Age and sex groups in the total population of the Russian Federation (people on January 1, 2021)** 

Age groups (age)	Both sexes	Men	Women	The difference in the
				number of men compared
				to the number of women
				(+ or -)
Younger than working age	27 387 130	14 059 858	13 327 272	+ 732 536
In working age	81 881 097	42 706 567	39 174 530	+3 532 037
Older than working age	36 902 788	11 081 374	25 821 414	- 14 740 040

*Source:* The population of the Russian Federation by gender and age as of January 1, 2021. Statistical Bulletin. Moscow: Rosstat. 2021. URL: https://rosstat.gov.ru/storage/mediabank/Bul\_chislen\_nasel-pv\_01-01-2021.pdf

The demographic indicator of average life expectancy at birth (ALE) indicates the quality of life in the country. In 1990 ALE in the USSR for men was 63.73 years, for women  $-74.30^3$ .

Over thirty years ago, ALE was included as a component in the Human Development Index (HDI). In Europe, the leader in life expectancy for men is Italy (81.2 years), among women – Spain (86.3 years)<sup>4</sup>. In the CIS countries in 2020, life expectancy was much lower than European values:

<sup>&</sup>lt;sup>1</sup> The population of the USSR according to the All – Union Population Census of 1989. URL: https://istmat.info/files/uploads/17594/naselenie\_sssr.\_po\_dannym\_vsesoyuznoy\_perepisi\_naseleniya\_1989g.pdf

<sup>&</sup>lt;sup>2</sup> Population and social indicators of the CIS countries and individual countries of the world in 2017–2021. Moscow: Interstate Statistical Committee of the CIS. 2021. URL: http://www.cisstat.org/life\_quality/sb\_soc\_indicate2017-2020.pdf

<sup>&</sup>lt;sup>3</sup> What does Rosstat know about life expectancy. URL: http://www.odnako.org/blogs/chto-znaet-rosstat-o-prodolzhitelnosti-zhizni-1/

<sup>&</sup>lt;sup>4</sup> Population and social indicators of the CIS countries and individual countries of the world in 2017–2021. Moscow: Interstate Statistical Committee of the CIS. 2021. URL: http://www.cisstat.org/life\_quality/sb\_soc\_indicate2017-2020.pdf

women – 77.5 years, men – 70 years (Table 1.2.2). The maximum values in the CIS were observed among men in the Republic of Azerbaijan – 74 years, and among women in the Republic of Armenia – 79.5 years. Life expectancy in the Baltic countries was closer to European values Republic of Estonia – 78.8, Republic of Latvia – 75.1, Republic of Lithuania – 75.1 years. The difference in life expectancy for men in the CIS and the EU is 8.3 years and for women – 6.1 years. Low life expectancy due to high mortality in the countries of the former USSR in comparison with the developed countries of the world is widely analyzed in the scientific literature<sup>1</sup>.

Table 1.2.2.

Average life expectancy in the countries of the former USSR in 2020 (years)

Countries	Men ALE	Women ALE	The difference in life expectancy of women and
			men, years
CIS	70,0	77,5	7,5
Republic of Azerbaijan	74,0	78,7	4,7
Republic of Armenia	73,1	79,5	6,4
Republic of Belarus	69,3	79,4	10,1
Republic of Kazakhstan	68,8	77,3	8,5
Kyrgyz Republic	67,6	75,8	8,2
Republic of Moldova	66,8	75,1	8,3
Russian Federation	68,2	78,2	10,0
Republic of Tajikistan	73,5	76,8	3,3
Republic of Uzbekistan	72,8	77,4	4,6
Ukraine	66,7	76,7	10,0

*Source:* Population and social indicators of the CIS countries and individual countries of the world in 2017–2021. Moscow: Interstate Statistical Committee of the CIS. 2021. URL: http://www.cisstat.org/life quality/sb soc indicate2017-2020.pdf

There was also a significant gender difference in life expectancy. For the CIS as a whole, this gap is 7.5 years (2020). The largest gap in life expectancy between men and women is observed in the Republic of Belarus – 10.1 years. In the Russian Federation and Ukraine, the gap reaches 10 years. There is also a significant gap in the Republic of Lithuania – women live 9.9 years longer than men<sup>2</sup>. The smallest difference in life expectancy between the sexes was noted in the Republic of Tajikistan – 3.3 years, Republic of Uzbekistan – 4.6 years, Republic of Azerbaijan – 4.7 years. This gap in turn gives rise to a disparity in the marriage market and has some negative consequences for the social and pension system.

The increase in the number and proportion of the elderly and old people in the structure of the population («demographic aging») is a serious challenge for modern society both at the global and national levels³. Demographic aging of the population has a serious impact on various aspects of human and family life, as well as a whole society. These issues relate to varying degrees to the countries of the former USSR, since they are at different stages of the demographic transition.

Multidirectional dynamics and differentiated qualitative changes in demographic processes in the countries of the former USSR led to significant shifts in the age structure of the population. The share of the population aged 65+ years and older in 2020 in Ukraine was 17%, in the Russian Federation – 15%, Kyrgyz Republic – 5%, Republic of Uzbekistan – 5%, Turkmenistan – 5% and in the Republic of Tajikistan – only 4 % (Table 1.2.3).

<sup>&</sup>lt;sup>1</sup> Khavinson V. Kh., Mikhailova O. N. Health and Aging in Russia. In: Global Health and Global Aging. Ed. by: M. Robinson, W. Novelli, C. Pearson, L. Norris. AARP Foundation. Jossey-Bass. 2007. P. 226–237.

<sup>&</sup>lt;sup>2</sup> A blow to the age. How COVID-19 Affected Life Expectancy in the Baltics. URL: https://baltnews.ee/infographics/20210420/1019452430/Udar-po-vozrastu-Kak-COVID-19-povliyal-na-rodolzhitelnost-zhizni-v-Pribaltike-.html

<sup>&</sup>lt;sup>3</sup> Alper F., Alrep A., Ucan O. The Economic Impacts of Aging Societies // International Journal of Economics and Financial Issues. 2016. № 3. P. 1225–1235; Sidorenko A.V., Mikhailova O.N. Implementation of the Madrid International Plan of Action on Ageing in the CIS countries: the first 10 years // The successes of gerontology. 2013. Vol. 26. No. 4. pp. 585–593.

Age structure of the former USSR countries in 2020,
(% of the total population)

Countries	Distribution of	the population by three	age groups, %
	0–14	15-64	65+
CIS	19	69	12
Republic of Azerbaijan	23	70	7
Republic of Armenia	20	68	12
Republic of Belarus	17	68	15
Republic of Kazakhstan	27	66	7
Kyrgyz Republic	33	62	5
Republic of Moldova	19	67	14
Russian Federation	18	67	15
Republic of Tajikistan	34	62	4
Turkmenistan (2001))	37	59	5
Republic of Uzbekistan	29	66	5
Ukraine	15	68	17

*Source:* Population and social indicators of the CIS countries and individual countries of the world in 2017–2021. Moscow: Interstate Statistical Committee of the CIS. 2021. URL: http://www.cisstat.org/life quality/sb soc indicate2017-2020.pdf

#### Typology of the countries of the former USSR by the level of demographic aging.

According to the level of demographic aging, the countries of the former USSR can be divided into three groups.

Countries with «old population» – the Russian Federation, Republic of Belarus, Ukraine. The share of people aged 65+ in them is the highest in the region – 15% -17%. The share of the working-age population (15–64 years) is 67%, 68% and 68%, respectively. The share of children and adolescents (0–14 years old) is 18%, 17%, 15%. This group of countries is facing acute problems of replenishment of pension funds, the shortage of labor resources is aggravating, there is an outflow and shortage of young people in rural areas.

The second group includes countries that are on the threshold of old age and occupy an intermediate position between countries with old and young populations: Republic of Armenia, Republic of Kazakhstan, Republic of Moldova. The proportion of the elderly (65+ years old) is 12%, 7%, 14%, respectively. Despite the noticeable share of the elderly population, countries have labor resources (15–64 years old) – 68%, 66%, 67%, respectively. But this security is complicated by mass labor emigration, which leads to the «washing out» of the country's labor and reproductive potential. The share of children in these countries is low in the Republic of Armenia (20%) and the Republic of Moldova (19%), but significant in the Republic of Kazakhstan (27%).

The third group is made up of countries with a «young population». These include most of the countries of Central Asia and the Republic of Azerbaijan. Here the share of children and adolescents (0–14 years old) is maximal: in Turkmenistan 37%, in the Republic of Tajikistan – 34%, in the Kyrgyz Republic – 33%. The share of the population of working age (15–64 years) is also large – in the Republic of Azerbaijan – 70%, in the Republic of Uzbekistan – 66%. On the whole, these countries are well-endowed with labor resources (even those with a surplus of labor); «youth bubbles» have been formed here, which often push the young population into emigration. The share of the elderly (65+ years old) in the Republic of Azerbaijan is 7%, which is not a high indicator against the background of other countries of the former USSR.

Table 1.2.4 shows the ranking of the countries of the former USSR by the level of demographic aging of the population for the period 2013–2020. First of all, the number of countries that have a «young» population structure has decreased: if in 2013 there were four of them, then in 2020 there

was only one left – Republic of Tajikistan. The category of countries with a «mature» population structure has significantly expanded: in 2013 there were only two countries and in 2020 there were already five. The number of countries with the «old» age structure has not changed: in 2013 and in 2020 there were eight of them. But the significant expansion of the intermediate group of countries and the increase in the proportion of older people in all countries proves that demographic aging in the region is accelerating. The «oldest» in the CIS is Ukraine, with the share of the population aged 65+ increased from 15.1% in 2013 to 17% in 2020. But the Baltic countries can be considered the oldest states in the post-Soviet space. Here, the process of demographic aging is growing rapidly: from 2001 to 2020, the proportion of people aged 65+ in the Republic of Estonia increased from 15.5% to 20%; in the Republic of Latvia – from 15.1% to 20.5%; in the Republic of Lithuania – from 13.9% to 19.9%. These are actually European trends: in 2001 in the EU the proportion of people aged 65+ was 15.8% of the population, in 2020 the figure reached 20.6%<sup>1</sup>.

The «youngest» state in the post-Soviet space is still the Republic of Tajikistan, but its population is gradually becoming a little «older»: the proportion of elderly people increased over the mentioned period by 0.8%. However, the Republic of Tajikistan remains the only country in the category of countries with a «young» population.

Table 1.2.4. **Ranking of the countries of the former USSR by the level of population aging according to the UN classification in 2013–2020.** 

Percentage of people aged 65 and older, %	The stage of population aging	Country % of the population aged 65 years and older (2013)	Country % of the population aged 65 years and older (2020)
Less than 4%	«Young» population	Republic of Tajikistan (3.2%), Turkmenistan (4.1 %), Kyrgyz Republic (4,2%), Uzbekistan (4,3%)	Republic of Tajikistan (4%)
From 4% to 7%	«Mature» population	Republic of Azerbaijan (5,6%), Republic of Kazakhstan (6,7%)	Kyrgyz Republic (5%), Turkmenistan (5%), Republic of Uzbekistan (5%), Republic of Azerbaijan (7%), Republic of Kazakhstan (7%)
More than 7%	«Old» population	Republic of Armenia (10.3 %), Republic of Moldova (11,4%), Russian Federation (13%), Republic of Belarus (13.8%), Republic of Lithuania (13,9%), Ukraine (15,1%), Republic of Latvia (15,1%)*, Republic of Estonia (15,5%)*	Republic of Armenia (12%), Republic of Moldova (14%), Republic of Belarus (15%), Russian Federation (15%)

Note: \* Data for the Baltic countries are for 2001.

*Source:* Population and social indicators of the CIS countries and individual countries of the world in 2017–2021. Moscow: Interstate Statistical Committee of the CIS. 2021. URL: http://www.cisstat.org/life\_quality/sb\_soc\_indicate2017-2020.pdf; Proportion of population aged 65 and over. URL: https://ec.europa.eu/eurostat/databrowser/view/tps00028/default/table?lang=en

#### Challenges of demographic aging and demographic policy responses.

Demographic aging is a process whose vector changes the age structure of the population and is expressed in an increase in the number and proportion of old people in the population. This process affects all countries in the region with three main trends:

• different levels of demographic old age in the countries of the former USSR;

<sup>&</sup>lt;sup>1</sup> Proportion of population aged 65 and over. URL: https://ec.europa.eu/eurostat/databrowser/view/tps00028/default/table?lang=en

- different rates of changes in the age structure of the population;
- demographic gender asymmetry across the countries of the region (difference between the number of men and women).

Population aging is an increasingly acute global problem. A rapidly aging population poses new challenges for public health. The main threats to the health of aging groups of people are transforming. At the beginning of the 20th century, the main threats to health were infectious and parasitic diseases which primarily increased the mortality rate of children of different ages. Currently, the noncommunicable diseases (heart disease, arthritis and dementia) that commonly affect adults place the greatest burden on the health care system. As a result of demographic aging, new disease models are being formed. This phenomenon is described as part of the «epidemiological transition»<sup>1</sup>. The researchers emphasize that the COVID-19 pandemic has made significant adjustments to the dynamics of mass diseases in the 21st century, viewing this period as an era of new pandemics and an aging population.

To solve the problems arising in connection with the aging of the population it is important to study both dynamic and structure, including the geographical features of demographic aging of the population. The methodology for assessing the processes of demographic aging of the population is gradually being improved, which makes it possible to compare the differences in aging of the population both at the global level and between countries. A number of agerelated diseases have been identified from a comprehensive list of causes. In conjunction with mortality rates this approach allows both life expectancy and population health to be measured, as well as to avoid setting arbitrary age thresholds. The proposed new indicator makes it possible not only to use the information of chronological age, but also to operate with data on the state of health and the severity of the disease in the aging population.

Among countries with similar levels of the overall age-standardized burden of age-related mortality, patterns of burden of disease accumulation by age differ, with some populations carrying the burden of disease at an earlier age than others. While global «average age» of aging is 65 years, for the inhabitants of Japan and Switzerland, the «average age» of aging is 76.1 years. The top five slowly aging countries also include France (76 years), Singapore (76 years) and Kuwait (75.3). However, among citizens of the Russian Federation, a set of disease characteristic of old age appears already at the age of 59<sup>2</sup>.

The challenges of demographic aging give rise to two types of states' responses. On the one hand, states try to develop demographic strategies that include pension reforms, the development of social infrastructure and the development of social policy. On the other hand, demographically «young» have the opportunity to learn from the experience of demographically «old» countries. In this situation, the most important resource is the time when countries can be used to adapt to changing demographic structures. The Madrid International Plan of Action on Aging was adopted at the UN level in 2002³, which is the global guiding document for UN member states to implement policies to respond to population aging and build societies for all ages⁴.

Omran A R. The epidemiologic transition: a theory of the epidemiology of population change. The Milbank Quarterly. 2005. № 83 (4). P. 731–757.

<sup>&</sup>lt;sup>2</sup> Chang A. Yu., Skirbekk V. F., Tyrovoras S., Kassebaum N. J., Dilman J. L. Measuring Population Aging: An Analysis of the 2017 Global Burden of Disease Study. Lancet Public Health. 2019. № 4. P. 159–167. URL: https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(19)30019-2/fulltext

<sup>&</sup>lt;sup>3</sup> Political Declaration and Madrid International Plan of Action on Ageing 2002. Report of the Second World Assembly on Ageing. Madrid, April 8–12, 2002 United Nations, New York, 2002. URL: http://undesadspd.org/ Portals/0/ageing/documents/Fulltext-Russian.pdf

<sup>&</sup>lt;sup>4</sup> Khavinson V. K., Benberin V. V., Mikhailova O. N., Sidorenko A. V. Aging in countries with developing economies: challenges and opportunities. Management Consulting. 2015. № 11 (83). URL: https://cyberleninka.ru/article/n/starenie-v-stranah-s-razvivayuscheysya-ekonomikoy-vyzovy-i-vozmozhnosti

### 1.3. Typology of countries by parameters of demographic development in the context of demographic transition

#### Demographic transition: general aspects.

Demographic transition is a set of conceptual provisions used by modern demographic science to explain the mechanisms of determination of demographic processes that underlie the change in the types of population reproduction<sup>1</sup>. For all the logic of the theory of demographic transition, it has a number of limitations due to the differences in the socio-cultural field and the institutional environment.

The foundations of the theory of demographic transition were made in 1929 by the American scientist Warren Thompson (1887–1973), who analyzed global trends in the dynamics of fertility and mortality in the first quarter of the 20th century in the book «*Danger Spots in World Population*»<sup>2</sup> and article «*Population*»<sup>3</sup>. W. Thompson identified demographic patterns and classified the studied countries into three groups:

- (A) Northern and Western Europe and the USA transition from high rates to very low rates of natural increase, close to the level of depopulation.
- (B) Italy, Spain and the «Slavic» population of Central Europe declining trends in both fertility and mortality, but maintaining natural population growth for some time.
- (C) Rest of the world virtually uncontrolled birth and death rates (75% of the world's population).

A significant contribution to the development of the theory of demographic transition was made by the French demographer A. Landry (1874–1956), who studied in his work «La révolution démographique. Études et essais sur les problèmes de la population» trends in the development of population from the 18th century to the beginning of the Second World War. A. Landry identified three stages of demographic development, the last of which was stagnation or depopulation, largely predicting demographic changes at the end of the 20th century, as well as the relevance of the implementation of family and demographic policy in European countries in the future<sup>4</sup>.

In 1945, the American scientist Frank Notstein (1902–1983) proposed the final version of the theory of demographic transition, explaining the long-term trends towards a decrease in fertility and mortality, which lead to a significant change in the age composition of the population<sup>5</sup>. According to this interpretation, sex and age structure of the population mainly depends on fertility and mortality rates, as well as on factors such as migration, socio-economic situation, wars, political changes, hunger and natural disasters. F. Notshtein already identifies four stages of the change in the types of population reproduction:

- "Traditional" (Pre-transition) high, close to natural values of fertility and mortality.
- "Transitional" (Early transition) reduction of mortality rates in conditions of high fertility, rapid population growth.
- «Stabilizing» (Late transition) the birth rate begins to decline, the rate of population growth decreases.

<sup>&</sup>lt;sup>1</sup> Demographic Conceptual Dictionary. Ed. L.L. Rybakovsky. M .: Center for Social Forecasting. 2003.352 p.

<sup>&</sup>lt;sup>2</sup> Danger Spots in World Population by Warren S. Thompson. New York: Alfred A. Knopf. 1930. 343 p.

<sup>&</sup>lt;sup>3</sup> Warren S. Thompson. Population // American Journal of Sociology. Vol. 34. No. 6. May 1929. Published By: The University of Chicago Press. Pp. 959–975.

<sup>&</sup>lt;sup>4</sup> Landry A. La révolution démographique : études et essais sur les problèmes de la population/ Adolphe Landry; réédition, préf. Alain Girard. Paris: Presses Universitaires de France. 1982. 231 p. (Classiques de l'économie et de la population. INED). <sup>5</sup> Notestein F. W. (1945). Population – The Long View. In Food for the World. Ed. Theodore W. Schultz. Chicago: University of Chicago Press.

• «Aging» (Post-transition) – an increase in the proportion of older people as a result of a decrease in fertility and mortality and an increase in life expectancy, population growth is insignificant and tends to decrease.

The speed of completion of the demographic transition for different states differs based on both the different levels of socio-economic development, the specifics of the gender and age composition of the population and the ethnic and cultural characteristics of the country.

Despite the fact that a number of researchers have developed and substantiated the concepts of the «second» [Lesthaeghe, van de Kaa, 1986], «third» [Coleman, 2006], and even «fourth» [Iontsev, Prokhorova, 2011] demographic transitions, it is far from the point that all countries of the planet have completed the demographic transition in the "classical" understanding of this theory [Notestein, 1945]¹. Currently, you can find countries that are still in the second stage of demographic transition (for example, Congo, Somalia, Niger, Burkina Faso), where a high birth rate (about 5–6 children per woman of reproductive age) is combined with a high mortality rate and low life expectancy. In this context, it should be noted that the countries of the former USSR have already gone through many stages of the demographic transition.

The theory of demographic transition can be considered as a universal model that substantiates the historical process of changing the types of population reproduction and actually answers the question – why in some regions natural growth has stopped long ago, while other countries and regions still demonstrate its positive significance. The demographic transition can be used very effectively to predict demographic trends in developing countries.

#### Stages of demographic transition in the countries of the former USSR

The demographic transition in post-Soviet society is a complex and contradictory process. On the one hand, a number of states of the former USSR have already passed its main stages, on the other hand, some republics are in the process of demographic transformation.

The collapse of the USSR and the subsequent socio-economic crisis created the preconditions for a decrease in the birth rate and an increase in mortality. But this process did not greatly affect the speed of the demographic transition and could not replace it, which proves the fairly rapid return of the demographic indicators of a significant number of USSR countries to the level of the early 1990s.

Trends in the demographic development of the countries of the former USSR in 2015–2020 show a significant differentiation of indicators of the vital movement of the population (Fig. 1.3.1). Three groups of countries can be distinguished:

- countries with high rates of natural growth: Republic of Tajikistan, Kyrgyz Republic, Turkmenistan, Republic of Uzbekistan, Republic of Kazakhstan, Republic of Azerbaijan;
- countries with low rates of natural growth: Republic of Armenia, Republic of Georgia, Russian Federation;
- countries with negative rates of natural growth (loss): Republic of Belarus, Republic of Moldova, Ukraine, Republic of Latvia, Republic of Lithuania, Republic of Estonia.

<sup>&</sup>lt;sup>1</sup> Lesthaeghe R, van de Kaa D. (1986). Twee demografische transities? [Second Demographic Transition]. Bevolking: groei en krimp [Population: growth and shrinkage]. Deventer: Van Loghum Slaterus. Pp. 9–24; Coleman D. Immigration and Ethnic Change in Low-Fertility Countries: A Third Demographic Transition. Population and Development Review. Vol. 32. № 3. 2006. Pp. 401–446; Iontsev, V.A., Prokhorova Yu.A. Myths and reality of the fourth demographic transition in Russia // Living standards of the population of Russian regions. 2011. No. 12 (166). P. 3–11.

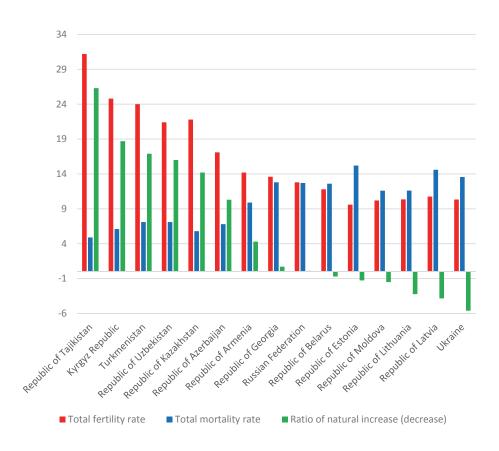


Figure 1.3.1. Indicators of natural population movement in the countries of the former USSR in 2015–2020 (per 1000 people)

Table 1.3.1.

Indicators of demographic development of the countries of the former USSR in the context of the stages of demographic transition

Country		ement ind eople, 201	icators (per 5–2020)	TFR (2015-	ALE (2015–	Median age	Stage of demographic	
	Birth rate	Death	difference	2020)	2020)	(2020)	transition	
		rate	rate					
Republic of Tajikistan	31,2	4,9	26,3	3,61	70,8	22,4	III stage	
Republic of Kyrgyzstan	24,8	6,1	18,7	3	71,2	26		
Turkmenistan	24	7,1	16,9	2,79	68	26,9		
Republic of Uzbekistan	21,4	7,1	16	2,76	73,2	30,7		
Republic of Kazakhstan	21,8	5,8	14,2	2,43	71,5	27,8		
Republic of Azerbaijan	17,1	6,8	10,3	2,08	72,8	32,3	IV stage	
Republic of Armenia	14,2	9,9	4,3	1,76	74,9	35,4		
Republic of Georgia	13,6	12,8	0,7	2,06	73,5	38,3		
Russian Federation	12,8	12,7	0,1	1,82	72,3	39,6	Completion	
Republic of Belarus	11,8	12,6	-0,7	1,71	74,5	40,3	of the	
Republic of Estonia	9,6	15,2	-1,3	1,44	71,8	41,2	demographic	
Republic of Moldova	10,2	11,6	-1,5	1,26	71,7	37,6	transition	
Republic of Lithuania	10,4	11,6	-3,2	1,59	78,46	42,4		
Republic of Latvia	10,8	14,6	-3,8	1,72	75,05	43,9		
Ukraine	10,3	13,6	-5,6	1,67	75,65	45,1		

Source: The 2019 Revision of World Population Prospects. New York. United Nations. URL: https://population.un.org/wpp/

To analyze the stage of demographic transition for the countries of the former USSR, the following indicators were used:

- crude birth and death rates,
- coefficient of natural growth,
- total fertility rate,
- indicator of life expectancy,
- median age.

A key question arises: «How to separate the objective socio-economic and political factors of the deterioration of the demographic situation in the post-Soviet countries, caused by the collapse of the USSR and the painful transition to a market economic model, from the inevitable evolutionary processes of demographic modernization due to the demographic transition?» One of the methodological tools for solving this contradiction is a deeper analysis of the dynamics of the total fertility rate, at least in the medium term.

#### Dynamics of the total fertility rate in the countries of the former USSR in 1990–2020

The negative dynamics of the population size is more likely an indicator of the socioeconomic crisis and in the case of the Eastern European countries and the Baltic countries it is also a consequence of the intensive migration outflow of the population, rather than a long-term change in the model of reproductive behavior in the context of the demographic transition.

In the period 1992–2002 TFR in all 15 post-Soviet republics decreased by 28.6%. At the same time, Republic of Azerbaijan, Republic of Armenia, Republic of Kazakhstan and the Republic of Moldova which had an expanded regime of population reproduction by 1992 by the second half of the 1990s. make the transition to narrowed reproduction, demonstrating a decrease in TFR to an average of 1.8 children per woman of reproductive age (Fig. 1.3.2).

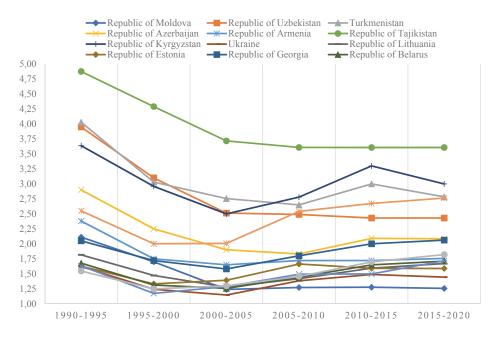


Figure 1.3.2. Dynamics of TFR in the countries of the former USSR in 1990–2020, births per woman (15–49 years)

The TFR decreased most significantly in the ten years after the collapse of the USSR in the Republic of Lithuania (-37.5%), Republic of Uzbekistan (-37%), Ukraine (-36%), Republic of Azerbaijan (-34.3%) and Turkmenistan (-32.6%). In addition, since 1992 the mortality rate of the population began to increase significantly, especially increased by 2002 in the Republic

of Kazakhstan (45.6%), Republic of Belarus (30.9%) and the Russian Federation (26.2%). The same three states became leaders in reducing life expectancy, which decreased by an average of 1.8 years in the period 1992–2002. The Russian Federation has become the leader in the level of reduction of men's ALE among other countries, where this indicator decreased by 3.5 years during the specified period.

In the period 1992–2002, the TFR in all fifteen countries of the former USSR decreased by 28.6% in total. At the same time, the Republic of Azerbaijan, Republic of Armenia, Republic of Kazakhstan and the Republic of Moldova which had an expanded population reproduction regime by the second half of the 1990s with a transition to narrowed reproduction, what demonstrating a decrease in the TFR to an average of 1.8 children per woman of reproductive age.

The first stage of a sharp decline in the birth rate in fifteen former Soviet countries took place in 1992–1996, when the average value of the TFR decreased by 0.62 points or 23%. Considering that the peak of serious economic shocks in the post-Soviet countries took place in 1991–1999. Such a rapid decline in demographic potential can indeed be considered a consequence of geopolitical and socio-economic shocks.

However, further analysis shows that the minimum values of the TFR for the period 1992–2018 became characteristic of the post-Soviet countries (with the exception of the Republic of Moldova) in 1999–2005, which poorly correlates with positive structural transformations, the revival of economic activity and GDP growth. Moreover, in the period 2008–2012 in most countries of the former USS, a steady increase in the birth rate and natural population growth begins, which falls during the negative consequences of the global financial and economic crisis of 2008, which also affected the countries of the post-Soviet space. During this period of time, the Republic of Azerbaijan, Republic of Kazakhstan, Kyrgyz Republic and the Republic of Uzbekistan returned to the regime of expanded reproduction of the population, and the Republic of Belarus, Republic of Georgia, Republic of Kazakhstan and the Russian Federation not only returned to the value of the TFR of 1992, but even reached a higher birth rate compared to the beginning of the period under review. In the case of the Republic of Kazakhstan, comparing the periods 1990–1995 and 2015–2020 with each other, one can even see an increase in the TFR in comparison with the initial period.

We can mention the presence of much deeper socio-cultural and ethno-religious factors that form the standards of reproductive behavior, but are not directly dependent on the indicators of the economic situation of the state.

All post-Soviet Central Asian countries are at the third stage of demographic transition (along with India, Mexico, Venezuela, South Africa). This is evidenced by the high birth rate, low mortality and high population growth rates. In the Republic of Kazakhstan with a high birth rate, demographic aging of the sex and age structure of the population is observed, which also demonstrates a gradual movement towards the «fourth» stage of transition.

The Republic of Azerbaijan, Republic of Armenia and the Republic of Georgia correspond to a greater extent to the «fourth» stage of transition. The demographic development of the Republic of Azerbaijan is characterized by stable population growth. In 2020, the country's population increased by 140 thousand people, but the birth rate and mortality in the republic reflect a downward trend, and the process of increasing the proportion of the population in older age groups is also relevant. The Republic of Armenia has a low birth rate (12.3 per 1,000 people in 2020), growing mortality rates (11.9 per 1,000 people in 2020), a «fading» of natural population growth and a stable population decline. This allows us to conclude that the fourth stage of the demographic transition has been completed and the gradual movement towards the depopulation stage. The Republic of Georgia is characterized by similar trends and almost zero value of natural growth.

The Russian Federation, Republic of Belarus, Ukraine, Republic of Moldova, the Baltic States, as well as all European countries – are not just at the fourth stage of demographic transi-

tion, they have already completed the demographic transition. Given that there are trends in population decline and the intensification of the demographic aging process in countries, we can call this the fifth stage of the demographic transition (otherwise, it is depopulation). This stage is characterized by serious changes in the family model and fertility. The narrowed type of reproduction, which has been fixed in recent years is formed under the influence of not only systemic socio-demographic factors (changes in reproductive behavior, the decline in the importance of the institution of marriage, etc.), but is also a consequence of the «aged» age structure of the population.

The theory of demographic transition does not fully explain the trends in the demographic development of post-Soviet countries after the collapse of the USSR. However, the role of socioeconomic factors also cannot be overestimated. Moreover, due to the fact that in the period 2008–2012 in most of the former USSR countries the levels of fertility and natural population growth not only returned to the value of the early 90s, but even demonstrated higher values. It is the theory of demographic transition that is able to explain more complex and deep reasons for the formation of reproductive behavior patterns that are not directly dependent on economic development indicators.

In this context, modern studies of the influence of ethno-confessional characteristics on the birth rate are relevant. In addition to the post-Soviet countries, the impressive natural population growth, for example in Israel (TFR >3), according to the authors, is largely due to the religious factor (as well as the fairly high birth rate in Ireland for the EU – is largely associated with the significant role of the Catholic Church in society).

#### 1.4. State strategies of demographic policy

The formation and implementation of state strategies, concepts and programs in the field of demographic development after the collapse of the USSR did not begin immediately and proceeded unevenly. By inertia, in many countries, the influence of the socio-demographic policy of the USSR was aimed to create favorable conditions for population growth, education of younger generation, improving the conditions of motherhood and improving health security of the population<sup>1</sup>. A certain influence on the socio-demographic policy of the new countries was exerted by the approaches of the UN, international conventions and declarations.

The turning point in the formation of strategies for the demographic policy of the new countries of the former USSR was the Cairo International Conference on Population and Development which took place in 1994. It established the basic principles from which governments should proceed when implementing demographic policy and new states were guided by them<sup>2</sup>.

In all countries of the former USSR the basis for the implementation of state demographic policy is the Constitution in which a person is guaranteed a right for security and health protection, liberty, medical care and medical insurance, equality of constitutional rights and freedoms for all citizens, protection of family, childhood, motherhood and fatherhood.

Twelve countries of the former USSR have developed and approved a variety of normative legal documents on the issues of demographic development. Among them are the Azerbaijan Republic, Republic of Armenia, Republic of Belarus, Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, Russian Federation, Republic of Tajikistan, Ukraine. The documents are devoted to the issues of demographic security, family support, stimulation of the birth rate, maintenance of health security and reduction of mortality, regulation of migration and repatriation. For example, the Baltic states have made an emphasis on family policy in solving demographic problems. The Republic of Uzbekistan – on programs to improve the health of the population and support the family. The Republic of Tajikistan has focused on the issues of regulating labor migration and stimulating employment of the population. The most comprehensive approach to solve demographic problems is distinguished by the Russian Federation and the Republic of Belarus, which have developed an almost complete range of documents and programs for demographic development in various areas.

Attempts were also made to coordinate national demographic policies in the CIS and EAEU format. For example, in 2011 a draft Concept for a Coordinated Social and Demographic Policy of the CIS Member States was worked out<sup>3</sup>. In the EAEU format the idea of a common labor market and a facilitated regime for hiring labor migrants from the CIS countries have been implemented. However, despite these attempts in the countries of the former USSR, in the formats of the CIS and the EAEU there is no single demographic policy aimed at preserving and mutual rational use of the demographic potential.

In 1996 the country approved the Concept of Demographic Development. The Family Code was adopted in 1999<sup>4</sup>. In 2004 the President approved the State Program for the Development of Demography and Population in the Republic of Azerbaijan, the goals of which were

¹ On measures to strengthen state assistance to families with children: Resolution of the Central Committee of the CPSU and the Council of Ministers of the USSR of 22.01.1981 r. № 235. URL: https://normativ.kontur.ru/document?moduleId=1&documentId=77334

<sup>&</sup>lt;sup>2</sup> Report of the International Conference on Population and Development (September 5–13, 1994, Cairo, Egypt). UN. New York. 1995. 195 p.

<sup>&</sup>lt;sup>3</sup> Decision of September 2, 2011, the city of Dushanbe on the draft Concept of a coordinated social and demographic policy of the member states of the Commonwealth of Independent States The Council of Foreign Ministers of the Commonwealth of Independent States decided: to approve and submit for consideration at the next meeting of the Council of Heads of Government of the Commonwealth of Independent States the draft Concept of coordinated social and demographic policy of the member states of the Commonwealth of Independent States and the draft Decision of the Council of Heads of Government CIS on this issue (attached) \*.

<sup>&</sup>lt;sup>4</sup> Family Code of the Republic of Azerbaijan. Approved by the Law of the Republic of Azerbaijan dated December 28, 1999. № 781-IQ. URL: http://online.zakon.kz/Document/?doc\_id=30420386

to achieve the development of demographic processes in accordance with the socio-economic strategy of the country, to increase the average age of death of the population, to ensure the health of mothers and children, as well as strengthen families and regulation of migration.

Table 1.4.1.

The presence of normative legal documents in the countries of the former USSR in the main areas of demographic development

Country	Fertility stimulation	Maintaining health, reducing mortality	Family support	Regulation of migration, attracting migrants (compatriots)
Republic of Azerbaijan	+	+	+	+
Republic of Armenia	+	+	+	+
Republic of Belarus	+	+	+	+
Republic of Georgia	-	-	-	+
Republic of Kazakhstan	+	+	+	+
Republic of Kyrgyzstan	+	+	+	+
Republic of Latvia	-	-	+	+
Republic of Lithuania	-		+	+
Republic of Moldova	+	+	+	+
Russian Federation	+	+	+	+
Republic of Tajikistan	+	+	+	+
Turkmenistan	-	-	+	+
Republic of Uzbekistan	-	+	+	+
Ukraine	+	+	+	+
Republic of Estonia	-	-	+	+

#### State demographic policy of the Republic of Azerbaijan

The State Migration Program of the Republic of Azerbaijan for 2006–2008 was adopted<sup>1</sup>. The State Migration Service was created in the country, which was entrusted with the responsibility of implementing state policy programs on migration issues, developing a mechanism for managing, regulating and forecasting migration processes and coordinating the work of relevant state structures in this area<sup>2</sup>. The Employment Strategy (2006–2015) and the program for its implementation (2007–2010) were also adopted<sup>3</sup>.

The issues of demographic development are also reflected in the Concept of the country's development plan «Azerbaijan 2020: a look into the future»<sup>4</sup>. The main priorities of the concept are: improving the quality of education and health care, strengthening social protection of the population, ensuring gender equality and family development, developing the potential of youth and sports, overcoming poverty, expanding the middle class, preserving the gene pool of the Azerbaijani people, ensuring national security for a set of regulation of migration and demographic processes in the Republic of Azerbaijan. In development of this document, the State Program of Socio-Economic Development of Regions for 2019–2023 was approved<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> State Migration Program of the Republic of Azerbaijan (2006–2008). Presidential order dated July 25, 2007. № 1575.

<sup>&</sup>lt;sup>2</sup> On the establishment of the State Migration Service of the Republic of Azerbaijan. Presidential Decree No. 560 of March 19, 2007.

<sup>&</sup>lt;sup>3</sup> «On approval of the» Program for the implementation of the Employment Strategy of the Republic of Azerbaijan (2007–2010). «Presidential Decree No. 2167 May 15, 2007.

<sup>&</sup>lt;sup>4</sup> Development concept «Azerbaijan 2020: a look into the future». Order of the President of Azerbaijan dated November 29, 2009 No. 1862.

<sup>&</sup>lt;sup>5</sup> State program of socio-economic development of the regions of the Republic of Azerbaijan in 2019–2023. Decree of the President of the Republic of Azerbaijan. January 29, 2019. URL: https://ru.president.az/articles/31697

#### State demographic policy of the Republic of Armenia

The basic documents aimed at regulating demographic processes are the Strategy for Demographic Policy for 2009–2035.<sup>1</sup>, Strategy for Prospective Demographic Development of Armenia for 2014–2025.<sup>2</sup>, as well as a program of measures aimed at regulating demographic processes to achieve an increase in the country's population. In 2004 the Family Code was adopted, which had a positive impact on supporting families<sup>3</sup>.

#### State demographic policy of the Republic of Belarus.

In 1996 the Republic of Belarus developed the Concept of the State Demographic Policy and approved the Main Directions for the Implementation of the Demographic Policy according to the sustainable development of the economy during the transition period<sup>4</sup>. The main goal was to create conditions that ensure the implementation of national demographic interests in combination with the interests of a person on the basis of increasing the level and quality of life. Also in the country there are measures that are related to the regulation of certain aspects of the demographic situation. The Law on the Rights of the Child initiated the National Action Plan for the Protection of the Rights of the Child 1995–2000 and defined the state policy of the country in relation to children<sup>5</sup>. The Regulation on child protection bodies in the Republic of Belarus was approved<sup>6</sup>. In 1996 the country approved an action plan to improve the status of women for 1996–2000<sup>7</sup>. In 1998 the Main Directions of the State Family Policy of the Republic of Belarus were approved<sup>8</sup>. In 1999, the Marriage and Family Code was adopted, which regulates family and marriage relations<sup>9</sup>. In 1999 the Labor Code of the Republic of Belarus was adopted<sup>10</sup>.

In 2002 the Law «On Demographic Security of the Republic of Belarus» was adopted<sup>11</sup>. The document established the legal and organizational foundations for ensuring demographic security served as the basis for the development and approval by the government of various demographic measures, a consistent series of national demographic security programs. The priorities of demographic security programs were fertility, morbidity and mortality, migration, age structure of the population and demographic aging. In 2003 the National Action Plan for the Improvement of the Situation of Children and the Protection of Their Rights for 2004–2010 was adopted<sup>12</sup>. In 2005 the National Program for Demographic Security for 2006–2010 was ap-

<sup>&</sup>lt;sup>1</sup> Armenian government approved the strategy of the country's demographic policy until 2035. URL: https://newsarmenia.am/news/politics/arm1-20090702-42099882/

<sup>&</sup>lt;sup>2</sup> Strategic program for the long-term development of the Republic of Armenia for 2014–2025. URL: https://www.gov.am/ru/prsp/

Family Code of the Republic of Armenia No. 3P-123 dated December 8, 2004 (As amended by the laws of the Republic of Armenia dated August 4, 2005 No. 3P-144, May 27, 2009 No. 3P-123, April 1, 2010 No. 3P-31, February 28, 2011 No. ZR-46, May 20, 2013 No. ZR-26, June 4, 2015 No. ZR-47 (entered into force on September 11, 2015), July 7, 2015 No. ZR-78, January 12, 2018 No. ZR-10, February 7, 2020 No. ZR-62, March 18, 2020 No. ZR-100, February 16, 2021 No. ZR-67). Adopted by the National Assembly of the Republic of Armenia on November 9, 2004.

<sup>&</sup>lt;sup>4</sup> On the Concept of the State Demographic Policy and the Main Directions for the Implementation of Demographic Policy, taking into account the sustainable development of the economy in the transition period. Resolution of the Council of Ministers of the Republic of Belarus of June 24, 1996. № 996.

<sup>&</sup>lt;sup>5</sup> Law of the Republic of Belarus «On the Rights of the Child» 2570-XII of November 19, 1993. URL: https://kodeksy-by.com/zakon rb o pravah rebenka.htm

<sup>&</sup>lt;sup>6</sup> Regulations on child protection authorities in the Republic of Belarus. URL: https://pravo.by/document/?guid=3871&p0 =C29901676

<sup>&</sup>lt;sup>7</sup> Action Plan for the Advancement of the Status of Women 1996–2000. Decree of August 29, 1996. № 1032.

<sup>&</sup>lt;sup>8</sup> Decree of the President of the Republic of Belarus of January 21, 1998 No. 46 «On Approval of the Main Directions of the State Family Policy of the Republic of Belarus».

<sup>&</sup>lt;sup>9</sup> Marriage and Family Code of the Republic of Belarus. URL: https://kodeksy-by.com/kodeks\_rb\_o\_brake\_i\_semje.htm

<sup>&</sup>lt;sup>10</sup> Labor Code of the Republic of Belarus dated July 26, 1999 No. 296-3. Passed by the House of Representatives on June 8, 1999.

<sup>&</sup>lt;sup>11</sup> On the demographic security of the Republic of Belarus. Law of the Republic of Belarus No. 80-3 dated January 4, 2002. URL: https://belzakon.net/Законодательство/Закон PБ/2002/1218

<sup>&</sup>lt;sup>12</sup> On the national action plan to improve the situation of children and the protection of their rights in the Republic of Belarus for 2004–2010, dated 18.12.2003. № 1661.

proved, but criticism of it led to the development of a new program for demographic development for 2007–2010, which was approved in 2007<sup>1</sup>.

In 2011 the National Program of Demographic Security of the Republic of Belarus for 2011–2015 was adopted<sup>2</sup>. National Action Plan for the Improvement of the Situation of Children and the Protection of Their Rights for 2012–2016<sup>3</sup>. In 2016 the State Program «People's Health and Demographic Security of the Republic of Belarus» for 2016–2020 was adopted<sup>4</sup>, the goals of which are to stabilize the population and increase life expectancy. The program included subprograms: «Family and Childhood», «Prevention and Control of Noncommunicable Diseases», «Prevention and Overcoming of Drunkenness and Alcoholism», «Tuberculosis», «Prevention of HIV Infection», «External Migration», «Ensuring the Functioning of the Healthcare System of the Republic of Belarus»<sup>5</sup>. Usually, in the Republic of Belarus demographic programs are designed for a five-year period, which allows adjusting the goals of demographic policy. Currently, in the field of demographic development there is a National Action Plan to improve the situation of children and protect their rights for 2017–2021<sup>6</sup>.

#### State demographic policy of the Republic of Kazakhstan

Demographic processes are recognized as key priorities for the country's development. In 1997 the Agency for Migration and Demography was established – the central executive body that worked until 2004. The key mission was to develop and implement the state demographic and migration policy, ensuring population growth. In 1998 the National Commission for Family and Women's Affairs was established as an advisory and advisory body under the President. The main task is to help improve the demographic situation in the country.

In the early 2000s management of demographic processes was ensured within the framework of the Concept of State Demographic Policy of the Republic of Kazakhstan<sup>7</sup>. In 2001 the Program of Demographic Development of the Republic of Kazakhstan for 2001–2005 was adopted<sup>8</sup>. The goal of demographic policy was to overcome negative trends in demographic processes, prevent depopulation and ensure quantitative and qualitative population growth in accordance with the country's long-term development strategy.

In 2003 the Concept of Gender Policy in the Republic of Kazakhstan was adopted. Since 2011, family policy has been regulated by the Code of the Republic of Kazakhstan «On Marriage (Matrimony) and the Family». In 2016 the Concept of Family and Gender Policy in the Republic of Kazakhstan till 2030 was adopted<sup>10</sup>, which formulates two key goals. Firstly, in the field of family policy, it focuses on the support, strengthening and protection of families, creation of

<sup>&</sup>lt;sup>1</sup> National program of demographic security of the Republic of Belarus for 2007–2010. Decree of the President of the Republic of Belarus dated March 26, 2007. № 135.

<sup>&</sup>lt;sup>2</sup> National program of demographic security of the Republic of Belarus for 2011–2015. Decree of the President of the Republic of Belarus of August 11, 2011. № 357.

<sup>&</sup>lt;sup>3</sup> On the national action plan to improve the situation of children and protect their rights for 2012–2016. Resolution of the Council of Ministers of the Republic of Belarus dated March 12, 2012. № 218.

State program «People's health and demographic security of the Republic of Belarus for 2016–2020.» Resolution of the Council of Ministers of the Republic of Belarus dated March 14, 2016. № 200.

<sup>&</sup>lt;sup>5</sup> State program «People's health and demographic security of the Republic of Belarus for 2016–2020.» Resolution of the Council of Ministers of the Republic of Belarus dated March 14, 2016. № 200.

<sup>&</sup>lt;sup>6</sup> On the national action plan to improve the situation of children and protect their rights for 2017–2021. Resolution of the Council of Ministers of the Republic of Belarus of September 22, 2017 № 710. URL: http://www.government.by/upload/docs/file1b3ddc50c947df13.PDF

<sup>&</sup>lt;sup>7</sup> The concept of the state demographic policy of the Republic of Kazakhstan. Resolution of the Government of the Republic of Kazakhstan dated August 17, 2000 № 1272. URL: http://adilet.zan.kz/rus/docs/P000001272\_

<sup>&</sup>lt;sup>8</sup> Demographic Development Program of the Republic of Kazakhstan for 2001–2005. Resolution of the Government of the Republic of Kazakhstan dated October 30, 2001. № 1380. URL: http://online.zakon.kz/Document/?doc\_id=1025680

<sup>&</sup>lt;sup>9</sup> Code of the Republic of Kazakhstan dated December 26, 2011 No. 518-IV «On marriage (matrimony) and family.»

<sup>&</sup>lt;sup>10</sup> Concept of family and gender policy in the Republic of Kazakhstan until 2030 Decree of the President of the Republic of Kazakhstan dated December 6, 2016 № 384. URL: http://adilet.zan.kz/rus/docs/U1600000384

the necessary conditions conducive to the physical, intellectual, spiritual, moral development of families and their members, protection of motherhood, fatherhood and childhood. Secondly, in the field of gender policy – the achievement of equal rights, benefits, responsibilities and opportunities for men and women in all spheres of social life, overcoming all forms and manifestations of gender discrimination.

#### State demographic policy of the Kyrgyz Republic

In 2000, the Concept of the State Demographic and Migration Policy of the Kyrgyz Republic was adopted, which was in effect in 2004–2010<sup>1</sup>. The goal was to provide prerequisites for creating a favorable demographic situation, achieve an optimal reproduction regime and regulating migration processes aimed at sustainable socio-economic progress and the implementation of national priorities in combination with the interests of each person. In 2003 the Family Code of the Kyrgyz Republic was adopted, which defines family policy<sup>2</sup>. Currently, the Concept of the demographic development of the country until 2040 is being developed.

#### State demographic policy of the Republic of Latvia

In 2004 the Concept of the State Family Policy was adopted<sup>3</sup>, which defines social services designed to meet the needs of various families with children, attitudes towards social shifts in the family paradigm. Cohabitation is defined as a social problem along with alcoholism and drug addiction. Family policy guidelines aimed at strengthening the traditional family, increasing fertility and improving support for families are reflected in the State Family Policy Guidelines 2011–2017<sup>4</sup>. In 2013–2016 the Action Plan to Support Re-emigration was adopted<sup>5</sup>. However, according to experts, it failed<sup>6</sup>.

#### State demographic policy of the Republic of Lithuania

The strategic documents defining the content of demographic policy in the country include the Concept of Family Policy (1996); The National Population Policy Strategy (2004); National Family Policy Concept (2008)<sup>7</sup>. The most important laws include: Child Benefit Act, Sickness and Maternity Social Insurance Act<sup>8</sup>, Law on social care for children<sup>9</sup>. Marriage and divorce issues are regulated by the Civil Code<sup>10</sup>. In 2011 the code introduced the institution of registered partnerships between heterosexual couples.

<sup>&</sup>lt;sup>1</sup> The concept of the state demographic and migration policy of the Kyrgyz Republic. Decree of the President of the Kyrgyz Republic dated April 28, 2000. № 102.

<sup>&</sup>lt;sup>2</sup> Family Code of the Kyrgyz Republic of August 30, 2003. № 201.

<sup>&</sup>lt;sup>3</sup> Concept «On support of families with children (State family policy)». 2004. URL: http://polsis.mk.gov.lv/LoadAtt/file36511.

<sup>&</sup>lt;sup>4</sup> The main directions of the state family policy for 2011–2017. URL: http://www.lm.gov.lv/upload/berns\_gimene/bernu\_tiesibas/akti/gimpamatpreciz.doc

<sup>&</sup>lt;sup>5</sup> Latvian Cabinet of Ministers supported the plan of remigration. URL: https://regnum.ru/news/polit/1619048.html

<sup>&</sup>lt;sup>6</sup> Re-emigration plan failed, Latvia continues to lose residents. URL: https://eadaily.com/ru/news/2018/02/05/smi-plan-reemigracii-provalilsya-latviya-prodolzhaet-teryat-zhiteley

<sup>&</sup>lt;sup>7</sup> Family & Children. Lithuania. URL: https://splash-db.eu/policydescription/family-policies-lithuania-2015/#searchresult

<sup>&</sup>lt;sup>8</sup> Law on sickness and maternity social insurance of the Republic of Lithuania. № IX-110. URL: http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc 1

<sup>&</sup>lt;sup>9</sup> Law on Benefits for Children of the Republic of Lithuania of November 3, 1994. № I-621.

<sup>&</sup>lt;sup>10</sup> The Civil Code of the Republic of Lithuania 21 June 2011. № VIII-1864.

#### State demographic policy of the Republic of Moldova

In the field of demographic development, several documents have been developed. The first of these was the National Strategic Program in the field of demographic security of the Republic of Moldova for 2011–2025<sup>1</sup>. The goal of the program is to solve demographic problems in order to reduce the level of demographic decline and create conditions for quantitative and qualitative population growth with strengthening the relationship between demographic and socio-economic security for development. Family rights are protected by the Family Code adopted in 2000<sup>2</sup>.

National Strategy for Migration and Asylum 2011–2020 is focused on regulating the processes of migration and granting asylum, bringing the national legal framework in line with the provisions of international law and EU legislation, regulating the movement of citizens, which will contribute to the socio-economic development of the country, its security and the achievement of the goals of European integration<sup>3</sup>.

In 2012 and 2016e National Strategies «Moldova-2020» were adopted<sup>4</sup> and «Diaspora-2025»<sup>5</sup> were adopted, which aim was to develop a sustainable and comprehensive framework of cooperation between government institutions and the diaspora, based on trust and common initiatives to facilitate opportunities for the effective return of the diaspora.

#### State demographic policy of the Russian Federation

The country is focusing its demographic policy on solving the problem of depopulation on the basis of an integrated approach of ways to support families, stimulate the birth rate, reduce mortality and attract compatriots to Russia.

In 1992, the law «On additional measures for the protection of mothers and children» was adopted<sup>6</sup>, which regulated the duration of maternity leave. In 1993 the Concept of State Family Policy was adopted. Since 1994, a single monthly child benefit has been introduced replacing other benefits<sup>7</sup>.

In 1994, Federal Program «Children of Russia» for 1994–2010 was approved<sup>8</sup>. Its main goal was to ensure social guarantees for children, their access to education and health care, as well as the observance of children's rights. It included six subprograms: (1) Family planning, (2) Children from the North, (3) Children with disabilities, (4) Orphans, (5) Children of Chernobyl and (6) Baby food industry. The National Action Plan for Children was developed and adopted for implementation<sup>9</sup>.

<sup>&</sup>lt;sup>1</sup> National strategic program in the field of demographic security of the Republic of Moldova for 2011–2025. Decree of the Government of the Republic of Moldova of October 12, 2011 No. 768.

<sup>&</sup>lt;sup>2</sup> Family Code of the Republic of Moldova dated October 26, 2000. № 1316-XIV.

<sup>&</sup>lt;sup>3</sup> National Strategy for Migration and Asylum 2011–2020. Decree of the Government of the Republic of Moldova dated September 08, 2011. № 655.

<sup>&</sup>lt;sup>4</sup> Strategianaţionalădedezvoltare: 8 soluţiipentrucreştereaeconomicăşireducereasărăciei [Denumireastrategieimodificatăprin LP121 din 03.07.14, MO293-296/03.10.14 art.603]. URL: http://adrgagauzia.md/public/files/ADR UTAG/strateg Moldova 2020.pdf

<sup>&</sup>lt;sup>5</sup> National Strategy «Diaspora-2025». Decree of the Government of the Republic of Moldova dated February 26, 2016. № 200 P.77-122

<sup>&</sup>lt;sup>6</sup> Law of the Russian Federation «On additional measures for the protection of mothers and children» dated April 4, 1992. N 2660-1.

<sup>&</sup>lt;sup>7</sup> Selezneva E. (2016) Struggling for new lives: Family and fertility policies in the Soviet Union and modern Russia. IOS Working Papers. No. 355. April 2016. InstitutfürOst-und Sudosteuropaforschung. URL: http://hdl.handle.net/10419/148912

<sup>&</sup>lt;sup>8</sup> Federal program «Children of Russia». Decree of the President of the Russian Federation on August 18, 1994. № 1696.

<sup>9</sup> National Action Plan for Children. Decree of the President of the Russian Federation of September 14, 1995. № 942.

The Government of the Russian Federation approved the Safe Motherhood program for 1995–1998<sup>1</sup>. The Family Code came into force in 1996<sup>2</sup>. New concepts were introduced such as the marriage contract (Art. 40–44) and the foster family (Art. 151–154); a number of amendments and additions were made to the procedure for collecting alimony (Art. 80–120); facilitated the establishment of paternity in a judicial proceeding in relation to children born out of a registered marriage (Art. 49); amended the rules governing marriage and divorce.

In 1996 the document «Main Directions of State Family Policy» on the basis of the Concept of Family Policy was prepared<sup>3</sup>. It provided for «... further development of the system of family benefits, covering all families with children; a gradual increase in the share of expenditures on family benefits, including benefits for pregnancy and childbirth and childcare under the age of one and a half years, in the gross domestic product to 2.2%<sup>4</sup>.

The 1997 Concept of National Security was of great importance for the formation of demographic policy<sup>5</sup>, which outlined the problem of overcoming the demographic crisis and the 2000 National Security Concept<sup>6</sup> in which population policy was introduced as a key element of political activity in the field of national security.

In 2000 the Concept of Demographic Policy until 2015 was adopted. Its goal was to stabilize the population and form the prerequisites for subsequent demographic growth. In 2007 an updated Concept of Demographic Policy for the Period up to 2025 was adopted<sup>7</sup>. After the adoption of this concept at the regional level, own demographic documents and projects were developed aimed at solving certain demographic problems, according to the peculiarities of regional demographic development.

Maternity (family) capital, introduced on January 1 in 2007 became an important measure of demographic policy<sup>8</sup>. In 2006 the Priority National Project «Health» was launched aimed at improving the health of the population<sup>9</sup>.

In 2007, the Children of Russia Federal Program for 2007–2010 was adopted <sup>10</sup>. The program was aimed at improving the demographic situation (reducing the mortality of newborns, children and mothers; improving their health); improving the social security in society (reducing the number of street children and orphans); special attention was paid to the living conditions of children and families in difficult life situations. It included three subprograms: «Healthy Generation», «Gifted Generation» and «Children and Family».

In 2008, the Concept of long-term socio-economic development for the period up to 2020 was approved<sup>11</sup>, which remained the task of reducing the rate of natural population decline stabilizing the population and creating conditions for its growth, as well as improving the quality of life and increasing life expectancy. The task was to ensure the stabilization of the population at a level of at least 142–143 million people by 2015 and create conditions for increasing the population to 145 million people and an average life expectancy of up to 75 years by 2025.

<sup>&</sup>lt;sup>1</sup> Safe Motherhood Program 1995–1998 Resolution of the Government of the Russian Federation of October 14, 1994. № 1173

<sup>&</sup>lt;sup>2</sup> Family Code of the Russian Federation of December 29, 1995. № 223-FZ.

<sup>&</sup>lt;sup>3</sup> The main directions of state family policy. Decree of the President of the Russian Federation of May 14, 1996. № 712.

<sup>&</sup>lt;sup>4</sup> Federal Law «On the subsistence level in the Russian Federation» dated October 24, 1997. № 134.

<sup>&</sup>lt;sup>5</sup> The concept of national security of the Russian Federation. Decree of the President of the Russian Federation of December 17, 1997. № 1300.

<sup>&</sup>lt;sup>6</sup> The concept of national security of the Russian Federation. Decree of the President of the Russian Federation of January 10, 2000. № 24.

<sup>&</sup>lt;sup>7</sup> The concept of the demographic policy of the Russian Federation for the period up to 2025. Decree of the President of the Russian Federation of October 9, 2007. № 1351.

<sup>8</sup> Federal Law «On additional measures to support families with children» dated December 29, 2006. № 256.

<sup>9</sup> National program «Health». URL: http://www.rost.ru/projects/health/p04/p34/a35.shtml

<sup>&</sup>lt;sup>10</sup> «On the federal target program« Children of Russia »for 2007–2010.» Resolution of the Government of the Russian Federation of March 21, 2007. № 172. URL: http://base.garant.ru/190869/#ixzz78Vt1tyaZ

<sup>&</sup>lt;sup>11</sup> «On the Concept of long-term socio-economic development of the Russian Federation for the period up to 2020». Order of the Government of the Russian Federation of November 17, 2008. № 1662-p. URL: http://www.consultant.ru/document/cons\_doc\_LAW\_82134/

In order to implement the Concept of Demographic Policy in Russia in 2012, the following concept was adopted: The Concept of State Migration Policy for the period until 2025<sup>1</sup>, in 2014 – Concept of state family policy for the period up to 2025, measures for their implementation were approved<sup>2</sup>. Sectoral programs were also adopted (federal target program «Prevention and control of socially significant diseases for 2007–2012)»; Concept of government policy on alcohol abuse reduction and prevention.

In 2019 the National Project «Demography» was approved, which includes five federal projects: «Financial support for families at the birth of children»: «Promotion of employment»; «The older generation»; «Strengthening public health»; «Sport as a norm of life.» National project «Demography» is being implemented until 2030<sup>4</sup>. The project is supposed to achieve the following goals: to increase the expected life expectancy of Russians up to 67 years, as well as to increase total fertility rate to 1.7 children per 1 woman and to increase the share of citizens with a healthy lifestyle.

#### State demographic policy of the Republic of Tajikistan

In 1998 the Family Code was adopted, which regulates the issues of family, marriage, motherhood, fatherhood and childhood<sup>5</sup>. In 2002 the Concept of Demographic Policy of the Republic of Tajikistan for 2003–2015 was adopted, which is focused on creating conditions for consistently solving demographic problems and improving the level and quality of life of the population. Subsequently, a number of documents were adopted: «Program for the formation of a healthy lifestyle in the Republic of Tajikistan until 2010»<sup>6</sup>, law «On Youth and State Youth Policy»<sup>7</sup>, national program for the formation of a healthy lifestyle in the Republic of Tajikistan for the period 2011–2020<sup>8</sup>, resolution «On the prospects for the prevention and control of noncommunicable diseases and injuries in the Republic of Tajikistan for 2013–2023.»<sup>9</sup>. The implementation of the documents allowed to reduce the level of child, maternal and general mortality, which led to an increase in life expectancy at birth<sup>10</sup>.

#### State demographic policy of Turkmenistan

Demographic issues in Turkmenistan were regulated by the laws «On migration»<sup>11</sup>, «On the protection and promotion of breastfeeding and requirements for baby food»<sup>12</sup>. The Family

<sup>&</sup>lt;sup>1</sup> The President approved the Concept of the state migration Policy of the Russian Federation for the period up to 2025. URL: http://kremlin.ru/events/president/news/15635

<sup>&</sup>lt;sup>2</sup> On the approval of the action plan for 2015–2018 for the implementation of the first stage of the Concept of State Family Policy in the Russian Federation for the period up to 2025. Decree of the Government of the Russian Federation of August 25, 2014. № 1618-p.

<sup>&</sup>lt;sup>3</sup> National project Demography. URL: https://mintrud.gov.ru/ministry/programms/demography

<sup>&</sup>lt;sup>4</sup> On the National Development Goals of Russia until 2030 Decree of the President of the Russian Federation dated July 21, 2020. URL: http://kremlin.ru/events/president/news/63728

<sup>&</sup>lt;sup>5</sup> Tajikistan: Family Code of the Republic of Tajikistan dated November 13, 1998. URL: http://www.adlia.tj/show\_doc.fwx?rgn=805

<sup>&</sup>lt;sup>6</sup> The program of formation of a healthy lifestyle in the Republic of Tajikistan until 2010 dated March 3, 2003. № 84.

<sup>&</sup>lt;sup>7</sup> The Law of the Republic of Tajikistan «On Youth and State Youth Policy» dated July 15, 2004. № 52.

<sup>&</sup>lt;sup>8</sup> National program for the formation of a healthy lifestyle in the Republic of Tajikistan for the period 2011–2020 dated October 30, 2010. № 560.

<sup>&</sup>lt;sup>9</sup> On the Prospects for the Prevention and Control of Noncommunicable Diseases and Injuries in the Republic of Tajikistan for 2013–2023. of December 3, 2012. № 676.

<sup>&</sup>lt;sup>10</sup> Petrushkov M. Demographic policy in the Republic of Tajikistan.URL: http://www.ca-portal.ru/article:28656

<sup>&</sup>lt;sup>11</sup> Law of Turkmenistan «On migration» dated December 7, 2005. № 30-III.

Law of Turkmenistan «On protection and promotion of breastfeeding and requirements for baby food» dated April 18, 2009.
№ 30-IV.

Code was adopted in 2012<sup>1</sup>. No strategic documents on demographic and migration policy were adopted.

#### State demographic policy of the Republic of Uzbekistan.

In matters of demographic policy an emphasis is made on supporting families and the health of the population. In 1997 the state program of measures to ensure the realization of the interests of the family was approved<sup>2</sup>. The main provisions of family and demographic policy are presented in the Family Code (1998)<sup>3</sup>. In 2000, the State Program «Healthy Generation» was adopted<sup>4</sup>. The implementation of one-year programs was aimed at solving demographic problems: «Year of the Family» (1998)<sup>5</sup>, «Year of the Healthy Generation» (2000)<sup>6</sup>, «Year of Mother and Child» (2001)<sup>7</sup>, «Year of Youth» (2008)<sup>8</sup>, «Family Year» (2012)<sup>9</sup>, «The Year of the Healthy Child» (2014)<sup>10</sup>, «The Year of a Healthy Mother and Child» (2016)<sup>11</sup>.

#### State demographic policy of Ukraine

The main instrument for the implementation of demographic policy in Ukraine is state support for families, youth and socially unprotected groups of the population. In 1995–1998 nineteen decrees were signed on improving the situation of children, youth, women, families: «Fundamentals of Ukrainian legislation on health protection»<sup>12</sup>, «On promoting the social formation and development of youth»<sup>13</sup>, «On state aid to families with children»<sup>14</sup>, «On the basics of social protection of disabled people in Ukraine»<sup>15</sup>, «On the status and social protection of citizens affected by the Chernobyl disaster»<sup>16</sup>, «On the prevention of AIDS and social protection of the population»<sup>17</sup>, «On labor protection»<sup>18</sup> and others.

¹ On the approval and implementation of the Family Code of Turkmenistan. Law of Turkmenistan dated January 10, 2012. № 258-IV. URL: http://www.turkmenistan.gov.tm/?id=779

<sup>&</sup>lt;sup>2</sup> On the state program of measures for 1998 to ensure the realization of the interests of the family. Order of the President of the Republic of Uzbekistan dated December 9, 1997 No. F-796.

<sup>&</sup>lt;sup>3</sup> Family Code of the Republic of Uzbekistan dated April 30, 1998. № 608-I.

<sup>&</sup>lt;sup>4</sup> On the state program «Healthy Generation». Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated February 15, 2000. № 46.

<sup>&</sup>lt;sup>5</sup> On the state program of measures for 1998 to ensure the realization of the interests of the family. URL: http://dd.gov.uz/ru/pages/1998

<sup>&</sup>lt;sup>6</sup> On the state program «Healthy Generation». Resolution of the Cabinet of Ministers of the Republic of Uzbekistan. URL: http://dd.gov.uz/ru/pages/2000

<sup>&</sup>lt;sup>7</sup> On the state program «Mother and Child». Resolution of the Cabinet of Ministers of the Republic of Uzbekistan. URL: http://dd.gov.uz/ru/pages/2001

 $<sup>^{8}</sup>$  On the state program «Year of Youth». Resolution of the President of the Republic of Uzbekistan. URL: https://lex.uz/docs/1323064

 $<sup>^{9}</sup>$  On the state program «Year of the Family». Resolution of the President of the Republic of Uzbekistan. URL: http://dd.gov. uz/ru/pages/2012

<sup>&</sup>lt;sup>10</sup> On the state program «Year of the Healthy Child». Resolution of the President of the Republic of Uzbekistan. URL: http://dd.gov.uz/ru/pages/2014

On the state program «Year of a healthy mother and child.» Resolution of the President of the Republic of Uzbekistan. URL: http://dd.gov.uz/ru/pages/2016

<sup>&</sup>lt;sup>12</sup> Fundamentals of Ukrainian legislation on healthcare. URL: http://consultant.parus.ua/?doc=003Q926DF4

<sup>&</sup>lt;sup>13</sup> On the promotion of social formation and development of youth in Ukraine. Law of Ukraine dated February 5, 1993. № 2998-XII URL: http://base.spinform.ru/show\_doc.fwx?rgn=14461

<sup>&</sup>lt;sup>14</sup> On state aid to families with children. URL: http://consultant.parus.ua/?doc=003QB4B372

On the basics of social protection of disabled people in the Ukrainian SSR. URL: http://consultant.parus.ua/?doc=002MU4EB32
 On the status and social protection of citizens affected by the Chernobyl disaster. Law of Ukraine dated February 28, 1991.

New 796-XII. URL: http://base.spinform.ru/show\_doc.fwx?rgn=15896

17 About the introduction of the Law of Ukraine «On the problem of infection with immune deficiency syndrome (SNID) and

 $social\ protection\ of\ the\ population. "URL:\ http://search.ligazakon.ua/l\_doc2.nsf/link1/T102861.html^{18}\ On\ security\ protection.\ Ukrainian\ law.\ URL:\ http://ohranatruda.in.ua/pages/21/$ 

In 2004, the Concept of Demographic Development of Ukraine for 2005–2015 was adopted¹. It notes that demographic policy should be aimed at achieving the Millennium Development Goals, as well as observing the principles and goals recommended by the Program of Action of the International Conference on Population and Development (Cairo, 1994) and adapted to the conditions of Ukraine. As a tool for the implementation of the Concept of Demographic Development of Ukraine, program documents were used aimed at strengthening family and marriage relations and the formation of a conscious attitude of the younger generation to the formation of families: the National Program «Family Planning» (1994)², program «Ukrainian family» (2001)³ and others.

#### State demographic policy of the Republic of Estonia

In Estonia a new family law was adopted in 1995. The 2010 Family Law Act also defines marriage as a union of one man and one woman and does not impose any explicit legal consequences on unions other than registered marriage. Partners under the age of 18 were required to obtain court approval to marry. In 2014 Parliament approved the Civil Partnership Law, which came into force on January 1, 2016. The Partnership Law gives unmarried couples, regardless of sexual orientation the same rights as married couples to property and inheritance. It also allows one partner to adopt the children of the other partner. The law requires unmarried couples to register their partnership in order to obtain these rights<sup>4</sup>. Since 2002, the Concept of a Policy for Family and Children has been implemented, which consists of four main areas: family benefits, maternity leave and childcare, organization of childcare during working hours and tax incentives. There are no other conceptual documents in the field of demographic policy in the Republic of Estonia.

<sup>&</sup>lt;sup>1</sup> The concept of demographic development of Ukraine for 2005–2015. Order of the Cabinet of Ministers of Ukraine dated October 8, 2004. № 724-p.

<sup>&</sup>lt;sup>2</sup> National family planning program. Resolution of the Cabinet of Ministers of Ukraine dated September 13, 1995. № 736. URL: http://uamurder.narod.ru/t3.htm

<sup>&</sup>lt;sup>3</sup> Measures for the implementation of the «Ukrainian Family» Program. Resolution of the Council of Ministers of the Autonomous Republic of Crimea dated July 10, 2001. № 268. URL: http://search.ligazakon.ua/l\_doc2.nsf/link1/AP010268. html

<sup>&</sup>lt;sup>4</sup> SPLASH-db.eu (2014): Policy: «Family Policies: Estonia». URL: https://splash-db.eu

### SECTION II. FAMILY, MARRIAGE, FERTILITY AND FAMILY SUPPORT POLICY IN THE COUNTRIES OF THE FORMER USSR

#### 2.1. Marital structure of the population

Over the past decades the modernization processes taking place in the countries of the former USSR have affected all spheres of human life including marriage and family relations: there is an increase in the age of marriage, an increase in the number of divorces and a decrease in the marriage rate. In addition, the traditional system of gender stratification and the distribution of gender roles in the family is being shaped. This happens due to the process of masculinization of women, as well as the emergence and spread of a new male model of the feminine type. The regulatory influence of norms and standards of marital and family behavior previously established in society and enshrined in the public consciousness has significantly weakened, as a result of which there have been changes in the premarital behavior of young people, as evidenced by the spread of the phenomenon of cohabitation, which is becoming a practically mandatory stage preceding marriage or its absolute alternative. Undoubtedly, these tendencies have an impact on marital behavior, implementation of sex-role functions in marital relations, as well as on the formation of ideas about marriage<sup>1</sup>.

All these processes are reflected in the change in the marriage structure of the population, information about which is traditionally provided by the population censuses. The last population census in the USSR was carried out in 1989. Over the past 30 years' population censuses have been carried out in almost all countries in the post-Soviet space. The only exception is Uzbekistan. Population census data for Turkmenistan (1995 and 2012) are not available on the Internet.

The COVID-19 pandemic has interfered with the timely conduct of the 2020s round of censuses. In some countries, the population census of 2019 was held, but the data necessary for this study are available only from the population census of the Republic of Belarus in 2019. This explains that the analysis of the marriage composition of the population is still limited to the data of the 2010s.

In all countries in the post-Soviet space for which information on the marital composition of the population is available, the age at first marriage has increased over the past thirty years. This is evidenced by a significant increase in the share of never married young people (Table 2.1.1).

According to the 2002 census among men aged 25–29 the proportion of never married in the Russian Federation increased by 14.4% points compared to 1989 (hereinafter referred to as pp = percentage points). The most significant growth in the 1990s was in the Republic of Estonia (by 38.1 pp), the Republic of Latvia (by 36.7 pp), the Republic of Moldova (by 26.0 pp), the Republic of Armenia (by 16.3 pp) and the Republic of Lithuania (by 19.8 pp). However, it increased in Ukraine (by 14.2 pp), Georgia (by 14.1 pp), the Republic of Azerbaijan (by 13.0 percentage points), the Republic of Kazakhstan (by 12.4 pp), the Kyrgyz Republic (by 9.5 pp) and the Republic of Tajikistan (by 8.5 pp) (Table 2.1.1).

<sup>&</sup>lt;sup>1</sup> Rostovskaya T. K., Kuchmaeva O. V. Dynamics of marriage and divorce rates in Russia. Demographic development of Russia: trends, forecasts, measures. National Demographic Report – 2020 / Ed. ed. S. V. Ryazantsev. – M.: LLC «United Edition», 2020. – 156 p., Pp. 23–35.

#### The share of never married (% of the total population of the corresponding sex and age)

		Age (years)											
Country	Year	15– 19	20- 24	25– 29	30- 34	35– 39	40- 44	45- 49	50- 54	55- 59	60- 64	65– 69	70 and more
					Men								
Republic of	1989¹	98,7 <sup>2</sup>	78,2	30,0	8,2	3,9	2,4	1,5	1,1	0,9	0,7	1,4	1,2
Azerbaijan	1999³	97,5⁴	83,2	43,0	14,4	5,3	2,4	1,7	1,2	0,8	0,5	0,5	0,5
Azerbaijan	2009⁵	99,7	85,0	47,0	21,8	11,3	5,1	2,7	1,6	1,2	0,9	0,7	0,5
	1989	97,7	71,2	25,9	8,6	4,3	2,3	1,5	1,2	0,9	0,6	1,3	0,9
Republic of Armenia	2001 <sup>6</sup>	99,2	83,1	42,2	17,4	7,9	3,	,5	1,	7	1,	,0	4,2
	2011 <sup>7</sup>	99,0	86,5	49,2	23,9	15,5	10,5	6,8	4,7	3,6	3	,1	2,1
	1989	98,1	61,2	20,2	10,3	6,8	4,8	3,6	2,4	1,6	1,2	1,2	1,1
Danublia of Dalamia	1999 <sup>8</sup>	99,0	49	9,4	10	10,7		6,2 3		,5 1,7		,7	0,9
Republic of Belarus	2009 <sup>9</sup>	99,3	79,0	39,4	20,8	12,9	8,4	6,6	5,4	4,2	3,0	2,3	1,3
	201910	98,8	82,4	41,1	22,7	14,6	12,4	10,1	6,8	5,6	4,4	3,3	2,0
	1989	96,5	71,7	35,2	15,9	8,7	5,2	3,5	2,3	1,7	1,4	1,7	1,6
Republic of Georgia	200211	97,7	78,3	49,3	28,0	15,5	9,1	6,0	4,4	3,4	2,6	2,0	1,5
	201412	96,5	74,7	44,4	27,3	19,1	13,8	9,6	6,6	4,4	3,3	2,6	1,6
Danielia of	1989	98,2	64,8	20,6	8,6	4,9	3,2	2,5	1,7	1,2	0,8	0,8	0,6
Republic of Kazakhstan	1999 <sup>13</sup>	98,6	74,1	33,0	14,1	8,2	5,4	3,9	2,7	2,1	1,	,4	0,7
NazaKIIStdII	200914	99,1	81,0	44,7	24,9	15,9	10,4	8,1	6,5	5,3	4,9	4,6	4,6
Danielia of	1989	98,6	62,5	13,8	4,5	2,7	1,9	1,3	1,0	0,6	0,4	0,6	0,5
Republic of	1999 <sup>15</sup>	16	71,6	23,3	6,8	3,5	2,3	1,9	1,4	1,0	0,	,6	0,3
Kyrgyzstan	200917	99,0	79,8	34,4	11,8	5,7	3,1	2,3	1,6	1,4	1,	,0	0,6

<sup>&</sup>lt;sup>1</sup> For 1989, for all countries, it was calculated according to: Results of the 1989 All-Union Population Census. Volume 2, Table 3 – Distribution of the population of union and autonomous republics, autonomous regions and districts, territories and regions by population by marital status, sex and age. URL: http://www.demoscope.ru/weekly/ssp/rus\_mar\_89.php; http://www. demoscope.ru/weekly/ssp/sng mar 89.php

<sup>&</sup>lt;sup>2</sup> In tables 1–4, according to the 1989 census, the younger age group is 16–19 years old (and not 15–19 years old, as according to other censuses)

<sup>&</sup>lt;sup>3</sup> Calculated according to UN data. URL: http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23

<sup>&</sup>lt;sup>4</sup> In tables 1–4 for the Republic of Azerbaijan, according to the 1999 population census, the data refer to the age group 16–19,

<sup>&</sup>lt;sup>5</sup> Calculated according to UN data. URL: <a href="http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23">http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23</a>

Women and Men in Armenia, 2005. Yerevan, 2005. P. 17. URL: http://armstat.am/file/article/gender ang 2005.pdf; judging by the data, in the age group of 70 years and older, the values of indicators indicated for men refer to women and vice versa. It is impossible to verify this, since the absolute numbers of marital status available on the Internet from the results of this census are presented in the age group, where the oldest age group is 50 years and older (http://docs.armstat.am/census/pdfs/22. pdf). This rearrangement of data is evidenced by the results of the 2011 census in Armenia.

<sup>&</sup>lt;sup>7</sup> 2011 Population Census Results of the Republic of Armenia. URL: https://www.armstat.am/file/doc/99484783.pdf

<sup>&</sup>lt;sup>8</sup> Women and men of the Republic of Belarus, 2013. Minsk, 2013. P.63. URL: https://www.belstat.gov.by/ofitsialnaya-statistika/ makroekonomika-i-okruzhavushchaya-sreda/gendernaya-statistika-i-statistika-otdelnykh-grupp-naseleniya/gendernayastatistika/statisticheskie-izdaniya/index 169/

Population census 2009. Population of the Republic of Belarus: its size and composition. Volume II. Minsk, 2010. P. 360. https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomika-i-okruzhayushchaya-sreda/perepis-naseleniya/ perepis-naseleniya-2009/statisticheskie-izdaniya/statisticheskie-sborniki/index\_545/

<sup>&</sup>lt;sup>10</sup> Total population, population by sex and age, marital status, education level, nationalities, language, sources of livelihood in the Republic of Belarus. Minsk, 2020. P. 19–22. URL: https://www.belstat.gov.by/upload/iblock/471/471b4693ab545e3c40d

Calculated according to UN data. URL: <a href="http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23">http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23</a>

<sup>&</sup>lt;sup>12</sup> Calculated according to UN data. URL: <a href="http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23">http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23</a>

<sup>&</sup>lt;sup>13</sup> Population of the Republic of Kazakhstan by state of marriage. Results of the 1999 population census in the Republic of Kazakhstan. Almaty, 2000. P. 5. URL: https://stat.gov.kz/for\_users/national/1999

<sup>&</sup>lt;sup>14</sup> Calculated by: Marriage and Family. Results of the 2009 National Population Census in the Republic of Kazakhstan. Astana, 2010. P. 5-12. URL: https://stat.gov.kz/for\_users/national/2009/general

<sup>15</sup> URL: http://www.stat.kg/media/files/4ca32a3a-025f-4e42-ac2a-d2827bf63155.pdf

<sup>&</sup>lt;sup>16</sup> In Tables 1–4 for the Kyrgyz Republic, there is no data for the age group 15–19 according to the 1999 census, since in the publications available on the Internet only relative indicators are given separately for ages 15, 16–17 and 18–19 years. 

Calculated by URL: <a href="http://www.stat.kg/media/files/4ca32a3a-025f-4e42-ac2a-d2827bf63155.pdf">http://www.stat.kg/media/files/4ca32a3a-025f-4e42-ac2a-d2827bf63155.pdf</a>

							Age (	years)					
Country	Year	15– 19	20- 24	25– 29	30- 34	35– 39	40– 44	45– 49	50- 54	55– 59	60– 64	65– 69	70 and more
Republic of Latvia	1989	96,7	61,4	22,3	12,2	9,2	7,7	6,7	5,0	4,0	3,2	3,3	3,6
	2000¹	99,7	89,9	59,0	28,4	16,6	12,1	10,8	9,8	9,7	7,7	6,7	5,9
	2011 <sup>2</sup>	99,9	94,4	70,9	48,9	35,3	20,8	13,4	9,7	8,2	7,0	6,8	4,7
	2021 <sup>3</sup>	99,9	96,3	79,6	57,4	41,6	34,3	28,7	18,1	11,9	8,3	6,7	4,4
Republic of Lithuania	1989	97,3	66,1	22,2	11,5	8,6	6,6	5,6	4,3	3,5	3,1	3,1	3,5
	20014	99,6	82,4	42,0	19,5	11,8	8,6	7,8	6,6	5,4	4,5	3,5	3,1
	20115	99,9	93,8	63,3	34,7	22,7	13,8	9,3	7,1	6,3	5,1	3,8	3,0
Republic of Moldova	1989	97,9	58,6	14,3	5,1	2,6	1,7	1,2	0,8	0,6	0,5	0,4	0,4
	2004 <sup>6</sup>	99,2	81,0	40,3	17,3	8,7	5,8	3,9	2,8	2,2	1,5	1,1	0,7
	2014 <sup>7</sup>	98,6	86,0	51,3	29,0	19,6	13,0	9,1	6,4	4,4	3,2	2,6	2,0
Russian Federation	1989	97,0	60,0	20,9	10,5	6,8	4,8	3,7	2,6	1,7	1,2	1,1	0,9
	2002 <sup>8</sup>	98,4 <sup>9</sup>	74,6	35,3	17,0	10,1	7,1	5,4	4,0	3,1	2,4	1,7	1,0
	201010	98,2 <sup>11</sup>	77,5	40,3	21,1	13,0	8,2	6,1	4,5	3,4	2,4	1,8	1,1
Republic of Tajikistan	1989	98,5	55,9	8,3	2,5	1,7	1,1	1,0	0,8	0,7	0,5	1,2	1,1
	200012	97,7	64,8	16,8	3,7	1,9	1,3	1,2	1,1	1,0	1,0	0,9	1,0
	201013	97,7	68,6	19,9	6,1	3,0	1,6	1,0	0,8	0,7	0,8	1,0	1,4
Ukraine	1989	97,4	58,7	17,8	8,3	5,1	3,5	2,7	1,9	1,3	1,0	1,0	0,8
	200114	98,6	73,1	32,0	13,9	8,0	5,6	4,1	3,0	2,3	1,8	1,2	0,8
	1989	97,4	65,2	24,3	13,1	9,9	8,8	7,6	6,4	5,3	4,3	4,4	4,6
Estonian Republic	200015	99,6	90,8	63,4	37,2	21,4	14,8	12,4	10,5	9,8	8,1	6,4	5,5
	201116	99,8	96,3	81,1	61,7	48,0	33,6	21,1	14,2	11,0	8,8	7,8	5,2
					Nome	n	r			,	·		
Republic of	1989	90,6	48,7	22,5	11,8	6,4	3,7	2,5	1,9	2,0	1,9	2,2	1,3
Azerbaijan	1999	87,2	51,0	23,9	13,3	9,3	6,1	3,9	2,6	1,8	1,5	1,4	1,3
	2009	91,7	55,4	28,6	16,7	11,2	8,2	6,9	5,3	3,8	2,6	2,0	1,8
Republic of Armenia	1989	83,2	33,4	15,7	10,8	7,7	4,8	3,5	3,2	3,4	3,2	2,9	1,5
	2001	92,2	51,1	21,5	11,0	7,3	6		5,		3,		0,7
	2011	93,4	58,7	30,1	19,3	12,8	9,2	7,4	7,8	8,3	7,	0	4,9

<sup>1</sup> Calculated by URL: LATVIJAS 2000. GADA TAUTAS SKAITĪŠANAS REZULTĀTI. Statistikas datu krājums. Rīga, 2002. P. 75-77. URL: https://istmat.info/files/uploads/52051/perepis\_naseleniya\_2000\_latviya.pdf)

<sup>&</sup>lt;sup>2</sup> Calculated by URL: https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START\_\_POP\_\_IR\_\_IRG/IRG010 
<sup>3</sup> Calculated by URL: https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START\_\_POP\_\_IR\_\_IRG/IRG010

<sup>&</sup>lt;sup>4</sup> Lietuvos gyventojai: struktūra ir demografinė raida. Vilnius, 2006. P. 104. URL: https://osp.stat.gov.lt/services-portlet/pubedition-file?id=10987; рассчитано по: http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23

<sup>&</sup>lt;sup>5</sup> Lietuvos Respublikos 2011 metų gyventojų ir būstų surašymo rezultatai. Vilnius, 2013. P. 344–345. URL: https://osp.stat.gov. lt/services-portlet/pub-edition-file?id=2348

<sup>&</sup>lt;sup>6</sup> Calculated by: Recensămîntul populației, 2004. Vol. 1. Caracteristici demografice, naționale, lingvistice, culturale. Chișinău, 2006, P. 170–171. URL: http://www.statistica.md/pageview.php?l=en&idc=263&id=2208

<sup>&</sup>lt;sup>7</sup> Calculated by URL: <a href="http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23">http://data.un.org/Data.aspx?d=POP&f=tableCode%3a23</a>

<sup>&</sup>lt;sup>8</sup> Calculated by URL: <a href="http://www.perepis2002.ru/index.html?id=31">http://www.perepis2002.ru/index.html?id=31</a>

<sup>&</sup>lt;sup>9</sup> In Tables 1–4 for the Russian Federation, data refer to the 16–19 age group, not 15–19.

<sup>&</sup>lt;sup>10</sup> Calculated by: Results of the 2010 All-Russian Population Census, T. 2. Age-sex composition and state of marriage, P. 294–295. URL: https://gks.ru/free\_doc/new\_site/perepis2010/croc/Documents/Vol2/pub-02-05.pdf

<sup>&</sup>lt;sup>11</sup> In Tables 1–4 for the Russian Federation, data refer to the 16–19 age group, not 15–19.

<sup>&</sup>lt;sup>12</sup> 2010 Population and Housing Census of the Republic of Tajikistan. Population of the Republic of Tajikistan by sex, age and marital status Volume II. Dushanbe, 2012. P. 214–217. URL: http://oldstat.ww.tj/ru/img/2336a7fa84c06406cfe3606ccfe6d5

<sup>&</sup>lt;sup>13</sup> 2010 Population and Housing Census of the Republic of Tajikistan. Population of the Republic of Tajikistan by sex, age and marital status. Volume II. Dushanbe, 2012. P. 214–217. URL: http://oldstat.ww.tj/ru/img/2336a7fa84c06406cfe3606ccfe6d5 8a 1356711769.pdf

Women and women of Ukraine for the tribute of the All-Ukrainian Population Census 2001. K., 2004. P. 112–113. URL: http://2001.ukrcensus.gov.ua/publications/#p11

<sup>&</sup>lt;sup>15</sup> Calculated by URL: https://andmed.stat.ee/en/stat/rahvaloendus\_\_rel2000\_\_perekonnaseis/RL205/table/tableViewLayout1 16 URL: https://andmed.stat.ee/en/stat/rahvaloendus rel2011 rahvastiku-demograafilised-ja-etno-kultuurilised-naitajad perekonnaseis/RL0403

							Age (	years)					
Country	Year	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70
		19	24	29	34	39	44	49	54	59	64	69	and
Republic of Belarus	1989	89,8	35,8	11,8	6,4	4,6	3,7	3,3	3,9	5,6	7,1	7,7	more 4,9
Republic of Delards	1999	93,7		),5	<u> </u>	,1		,9		,2		,5	6,8
	2009	96,0	58,7	25,0	13,7	8,5	5,7	4,5	3,8	3,6	3,2	2,9	4,7
	2019	96,3	61,0	21,9	12,4	9,4	8,4	6,7	5,0	4,2	3,6	3,3	3,0
Republic of Georgia	1989	82,6	41,4	21,1	12,6	9,1	7,4	6,0	5,6	5,6	5,8	5,9	4,1
	2002	87,5	52,2	28,4	17,2	11,4	8,9	7,8	7,1	6,8	5,9	6,0	6,0
	2014	85,6	48,5	22,5	13,6	10,2	9,0	8,2	7,3	7,0	6,7	6,3	5,5
Republic of	1989	88,6	36,9	13,2	6,9	4,4	3,1	1,9	1,7	2,1	2,5	2,7	1,5
Kazakhstan	1999	92,6	47,3	19,5	10,3	7,1	5,2	4,1	3,0	2,0	1,	,9	2,2
	2009	95,5	59,8	29,2	17,8	12,7	9,6	8,1	6,9	6,1	5,5	4,8	5,9
Kyrgyz Republic	1989	86,1	29,3	9,0	4,3	2,6	1,8	1,1	1,0	1,0	1,4	1,5	1,0
	1999		34,1	11,6	5,2	3,4	2,5	2,0	1,7	1,1	0	,9	1,1
	2009	91,9	48,5	17,7	7,6	4,7	2,9	2,5	2,1	1,9	1,	,3	0,8
Republic of Latvia	1989	89,6	38,4	15,3	9,4	6,9	5,6	5,2	5,2	6,0	6,8	7,6	8,0
	2000	98,6	79,8	42,4	20,2	13,3	10,7	9,3	8,3	8,3	8,3	9,3	11,8
	2011	99,2	86,4	56,9	38,5	26,0	15,7	11,4	9,5	8,4	7,3	7,2	8,3
	2021	99,5	90,5	64,5	42,0	30,8	26,7	21,5	14,2	10,7	9,0	7,9	6,7
Republic of Lithuania	1989	91,9	41,9	15,3	9,0	6,3	5,3	5,1	5,5	6,9	8,3	8,9	8,5
	2001	97,7	65,0	26,1	13,1	9,0	7,3	6,3	5,3	5,0	5,3	6,3	8,4
	2011	99,2	84,3	44,9	23,0	14,5	9,7	7,9	7,0	6,0	5,1	4,8	6,3
Republic of Moldova	1989	85,3	27,8	8,8	4,9	3,9	3,6	3,3	3,3	3,7	3,3	2,7	1,7
	2004	93,6	55,9	21,6	9,5	5,1	3,8	3,5	3,7	3,8	3,7	3,8	3,5
	2014	92,9	62,3	28,1	15,8	10,8	7,4	5,2	3,7	3,3	3,4	3,4	3,3
Russian Federation	1989	86,4	33,7	12,1	7,0	5,3	4,5	3,5	3,3	4,2	5,7	7,1	4,7
	2002	92,3	53,2	22,1	11,0	6,9	5,2	4,6	4,3	4,0	3,3	3,4	5,2
D 111 (T 111 )	2010	92,2	57,2	26,3	14,7	9,6	6,6	5,1	4,2	4,0	3,7	3,2	3,5
Republic of Tajikistan	1989	85,4	23,1	6,0	2,5	1,7	1,3	1,1	0,9	0,9	1,2	1,8	1,3
	2000	86,1	30,7	8,7	3,7	2,3	1,7	1,5	1,4	1,3	1,3	1,3	1,5
Lileraina	2010	86,6	34,5		6,8	3,3	1,9	1,4	1,1	1,1	1,3	1,8	2,2
Ukraine	1989	84,6	29,4	9,7	5,5 7.5	4,0	3,4	3,2	3,7	5,1	6,1	6,5	4,0
	2001 1989	92,1	45,8 40,6	16,3 16,3	7,5 10,1	4,7 7,4	3,7 6,7	3,4 6,8	3,1 6,3	3,0 6,9	3,1 8,1	4,2 9,0	5,6 9,4
Republic of Estonia	2000	98,6	80,4	48,3	27,6	16,8	12,7	10,3	8,9	9,1	7,9	8,9	10,7
republic of Estollia	2011	99,4	90,7	68,7	51,3	38,9	26,9	17,4	12,9	10,4	8,7	8,8	8,4
	2011	22,4	20,7	00,7	ر, ا ر	20,2	20,3	17,4	14,7	10,4	0,7	0,0	0,4

It was among 25–29-year-old men in the 1990s most countries experienced the most significant increase in the proportion of never married. Only in the Russian Federation, Republic of Tajikistan and Ukraine in 20–24 years it was slightly more than in 25–29 years.

In the 2000s. only in the Republic of Tajikistan the largest increase in the proportion of never married men was at the age of 20–24 (by 3.8 pp). In the Republic of Kazakhstan (by 11.7 pp), Kyrgyz Republic (by 11.1 pp), the Republic of Lithuania (by 21.3 pp) and the Russian Federation (by 5.0 pp) its greatest growth was in 25–29 years, in the Republic of Azerbaijan (by 7.4 pp), the Republic of Latvia (by 20.5 pp) and the Republic of Moldova (by 11.7 pp) – at the age of 30–34, in the Republic of Armenia (by 7.6 pp) and the Republic of Estonia (by 26.6 pp) – at the age of 35–39, in Georgia (by 4.7 pp) – in 40–44 years (in the age of 35 years and under the data of the 2014 population census showed a smaller proportion of never married than according to

the 2002 census; a decrease in the proportion of never married at young ages among men was in no other country).

According to the population censuses of the 2010s round, at the age of 35–39, 48.0% of men have never been married in the Republic of Estonia, 35.3% of men in the Republic of Latvia, 22.7% in the Republic of Lithuania and in the Republic of Moldova – 19.6%, Georgia – 19.1%, Republic of Kazakhstan – 15.9%, Republic of Armenia – 15.5%, Russian Federation – 13.0%, Republic of Belarus – 12.9%, Republic of Azerbaijan – 11.3%. Among all the countries, only in the Kyrgyz Republic and the Republic of Tajikistan almost all men aged 35–39 already had experience in marriage: the share of never married in the Kyrgyz Republic is 5.7%, in the Republic of Tajikistan – 3, 0%.

Women have the largest increase in the proportion of never married in the 1990s in the age group 20–24 years old. According to the 2002 census, in the Russian Federation it increased by 19.5 percentage points compared to 1989. Its growth was even greater in the Republic of Latvia (by 41.4 pp). The Republic of Estonia (by 39.8 pp), the Republic of Moldova (by 28.1 pp) and the Republic of Lithuania (by 23.1 pp). Its growth was lower in the Republic of Armenia (by 17.7 pp), Ukraine (by 16.4 pp), Georgia (by 10.8 pp), the Republic of Kazakhstan (by 10.4 pp), the Republic of Tajikistan (by 7.6 pp), the Kyrgyz Republic (by 4.8 pp) and the Republic of Azerbaijan (by 2.3 pp).

Comparison of the results of the 2010s and 2000s rounds of population censuses shows that the share of women who have never been married has increased to a greater extent not among 20–24, but among 25–29 years. In the Russian Federation its growth between the population censuses of 2002 and 2010 amounted to 4.2 pp.

It was significantly high in the Republic of Estonia (by 20.4 pp), Republic of Lithuania (by 18.8 pp), Republic of Latvia (by 14.5 pp), Republic of Kazakhstan (by 9,7 pp), Republic of Armenia (by 8.6 pp), Kyrgyz Republic (by 6.1 pp), Republic of Tajikistan (by 6.0 pp), Republic of Azerbaijan (by 4.7 pp). At the same time, in the Republic of Kazakhstan, Kyrgyz Republic and the Republic of Lithuania, in comparison with 25–29 years the share of never married in 20–24 years has increased (respectively by 12.5 pp, 14.4 pp and 19.3 pp). In the Republic of Latvia and the Republic of Estonia, on the contrary, a greater increase in this indicator occurred at an older age – 30–34 years (by 18.3 pp and 23.7 pp). In the case of men, the data of the 2014 census of the Republic of Georgia showed a decrease in the proportion of women who were never married before 40 years of age.

According to the population censuses of the 2010s round in the Republic of Estonia, 38.9% of women at 35–39 years old have never been married, in the Republic of Latvia – 26.0%, in the Republic of Lithuania – 14.5%, in the Republic of Armenia – 12.8%, Republic of Kazakhstan – 12.7%, Republic of Azerbaijan – 11.2%, Republic of Moldova – 10.8%, Republic of Georgia – 10.2%, Russian Federation – 9.6%, Republic of Belarus – 8, 5%, Kyrgyz Republic – 4.7%, Republic of Tajikistan – 3.3% (Table 2.1.1).

Thus, an increase in the age of marriage occurs in all countries in the post-Soviet space for which information is available. A relatively later marriage is typical, first of all, for the Republic of Latvia and the Republic of Estonia, and on the contrary, an earlier one – for Kyrgyz Republic and Republic of Tajikistan.

The data of the 2019 census of the Republic of Belarus showed an increase in the proportion of men who have never been married at the age of 25–29 (by 1.7 pp compared to 2009). But for 25–29-year-old women in 2019 this indicator was by 3.1 pp less than in 2009. In the Republic of Latvia the share of never married at the age of 25–29 in 2021 was significantly higher than in 2011, both among men (by 8.7 pp) and women (by 7.6 pp) (see Table 2.1.1).

If at young ages the share of never married is higher among men (they marry on average later than women), then at older ages, on the contrary, this indicator is higher among women and their level is slightly higher.

Table 2.1.2

### Average age at first marriage (years)

Country	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
					М	en									
Republic of Azerbaijan <sup>1</sup>	26,2	26,5	27,3	27,5	27,3	27,6	27,6	27,7	27,6	27,5	27,6	27,6	27,7	28,1	28,5
Republic of Armenia <sup>2</sup>	25,5	26,3	27,1	28,0	28,4	28,7	28,8	29,1	29,4	29,4	29,6	29,9	30,1	30,5	3
Republic of Belarus⁴	24,4	24,2	25,0	25,7	26,5	26,6	26,7	27,1	27,4	27,5	27,8	27,9	28,1		
Republic of Georgia ⁵		27,0	28,4	29,6	29,5	29,4	29,8	30,1	30,0	30,0	30,1	30,2	30,4	30,7	30,7
Republic of Kazakhstan <sup>6</sup>				26,9	27,0	26,9	26,9	27,0	27,1	27,2	27,3	27,5	27,6	27,6	27,5
Republic of Kyrgyzstan <sup>7</sup>			25,5	26,6	26,9	26,8	26,8	26,7	26,7	26,9	27,1	27,1	27,2		
Republic of Latvia <sup>8</sup>	24,1	25,0	26,5	28,0	29,4	29,7	30,0	30,3	30,6	30,9	31,2	31,5	31,5	32,0	32,0
Republic of Lithuania 9	24,2	24,3	25,7	27,0	28,5	28,8	29,0	29,3	29,5	29,7	30,0	30,2	30,3	30,7	30,3
Republic of Tajikistan 10	24,3	23,8	24,7	26,7	25,9	26,7	26,4	25,7	25,9	25,8	25,8	26,0	25,5	26,2	
Ukraine 11	24,2	24,2	25,3	25,9	26,7	26,8	27,0	27,3	27,4	27,6	27,9	28,2	28,5	28,6	28,8
Republic of Estonia <sup>12</sup>	24,6	25,7	27,4	28,6	30,2	30,6	31,0	30,8	31,1	31,5	32,1	31,7	32,1	32,3	29,8
					Wo	men									
Republic of Azerbaijan	23,2	22,9	23,1	23,4	23,1	23,4	23,7	23,7	23,7	23,6	23,7	23,7	23,7	24,0	24,3
Republic of Armenia	22,3	21,9	23,0	23,9	24,6	25,0	25,3	25,8	26,3	26,2	26,4	26,6	26,8	27,1	
Republic of Belarus	22,5	22,1	22,8	23,5	24,4	24,5	24,6	25,0	25,3	25,5	25,6	25,8	26,0		
Republic of Georgia		23,4	24,7	25,6	25,8	25,9	26,5	26,8	26,6	27,1	27,2	27,4	27,7	28,1	28,1
Republic of Kazakhstan				24,1	24,3	24,3	24,4	24,5	24,6	24,7	24,8	25,0	25,0	25,0	24,8
Republic of Kyrgyzstan			22,1	23,2	23,5	23,4	23,5	23,4	23,4	23,6	23,6	23,7	23,6		
Republic of Latvia	22,3	22,9	24,6	26,0	27,3	27,6	27,7	28,1	28,4	28,7	29,0	29,1	29,3	29,5	29,7
Republic of Lithuania	22,4	22,4	23,6	24,8	26,3	26,6	26,7	27,0	27,2	27,4	27,7	27,8	28,0	28,3	28,2
Republic of Tajikistan	21,5	21,1	21,6	23,0	22,3	23,1	22,6	22,6	22,3	22,1	22,0	21,8	21,6	22,1	
Ukraine	21,8	21,6	22,5	23,2	24,1	24,3	24,5	24,8	24,9	25,0	25,3	25,5	25,8	25,9	26,1
Republic of Estonia	22,5	23,5	24,9	26,2	27,8	28,1	28,6	28,4	28,7	29,0	29,8	30,0	29,6	30,4	28,3

<sup>&</sup>lt;sup>1</sup> AZƏRBAYCANIN DEMOQRAFİK GÖSTƏRİCİLƏRİ. Bakı, 2021. P. 367. URL: <a href="https://www.stat.gov.az/menu/6/statistical\_yearbooks/">https://www.stat.gov.az/menu/6/statistical\_yearbooks/</a>

² ՀԱՅԱՍՏԱՆԻ ԺՈՂՈՎՐԴԱԳՐԱԿԱՆ ԺՈՂՈՎԱԾՈՒ. 2020. ԵՐԵՎԱՆ, 2020. P. 116. URL: https://www.armstat.am/file/article/demog\_2020\_6.pdf; ՀԱՅԱՍՏԱՆԻ ԺՈՂՈՎՐԴԱԳՐԱԿԱՆ ԺՈՂՈՎԱԾՈՒ. 2016. ԵՐԵՎԱՆ, 2016. P. 98. URL: https://www.armstat.am/file/article/demog\_2016\_6.pdf

<sup>&</sup>lt;sup>3</sup> No available internet sources

<sup>&</sup>lt;sup>4</sup> Demographic Yearbook of the Republic of Belarus. Minsk, 2019. P 220. URL: <a href="https://www.belstat.gov.by/upload/iblock/91b/91b911b6266ed52902eb6f89f5dfab3a.pdf">https://www.belstat.gov.by/upload/iblock/91b/91b911b6266ed52902eb6f89f5dfab3a.pdf</a>

<sup>&</sup>lt;sup>5</sup> URL: <u>https://www.geostat.ge/en/modules/categories/323/marriages</u>

<sup>&</sup>lt;sup>6</sup> Demographic yearbook of Kazakhstan. Nur-Sultan, 2021. P.77–78; Demographic yearbook of Kazakhstan. Astana, 2017. P.100; Demographic yearbook of Kazakhstan. Astana, 2007. p. 175. Access mode: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>

Women and men of the Kyrgyz Republic. 2014–2018. Bishkek 2019. P. 32. URL: <a href="http://www.stat.kg/ru/publications/sbornikzhenshiny-i-muzhchiny-kyrgyzskoj-respubliki/">http://www.stat.kg/ru/publications/sbornikzhenshiny-i-muzhchiny-kyrgyzskoj-respubliki/</a>; Women and men of the Kyrgyz Republic. 2010–2014. Bishkek 2015. P. 25. URL: <a href="http://www.stat.kg/media/publicationarchive/534f0c98-fb76-4922-b8c1-6b8b8f44ba27.pdf">http://www.stat.kg/media/publicationarchive/b025ee77-203b-4a2f-9304-ba77c2367d93.pdf</a>

<sup>&</sup>lt;sup>8</sup> URL: https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START\_POP\_IL\_ILV/ILV060

<sup>&</sup>lt;sup>9</sup> Demografijos metraštis. 2013. Vilnius 2014. P. 97–98. URL: <a href="https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=2992">https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=2992</a>; Demografijos metraštis. 2004. Vilnius 2005. P. 78. URL: <a href="https://osp.stat.gov.lt/statistiniu-rodikliu-analize?hash=045cefc1-87d9-4aa7-a021-8521777e60c9#/">https://osp.stat.gov.lt/statistiniu-rodikliu-analize?hash=045cefc1-87d9-4aa7-a021-8521777e60c9#/</a>

<sup>&</sup>lt;sup>10</sup> Demographic Yearbook of the Republic of Tajikistan. Dushanbe, 2020. P. 239. URL: https://stat.tj/ru/publications

The population of Ukraine. 2020. Kyiv, 2021. P. 85. URL: <a href="http://database.ukrcensus.gov.ua/PXWEB2007/ukr/publ\_new1/2021/dem\_2020.pdf">http://database.ukrcensus.gov.ua/PXWEB2007/ukr/publ\_new1/2021/dem\_2020.pdf</a>; The population of Ukraine. 2013. Kyiv, 2013. P. 82. URL: <a href="http://database.ukrcensus.gov.ua/Pxweb2007/eng/publ\_new1/2013/publ2013.asp">http://database.ukrcensus.gov.ua/Pxweb2007/eng/publ\_new1/2013/publ2013.asp</a>

https://andmed.stat.ee/en/stat/rahvastik\_rahvastikunaitajad-ja-koosseis\_demograafilised-pehinaitajad/RV048

Finally, the proportion of never married aged 65–69 according to the 2010 census round was 7.8% for men and 8.8% for women in the Republic of Estonia, Republic of Latvia – 6.8% and 7.2%, respectively, Republic of Kazakhstan – 4.6% and 4.8%, Republic of Lithuania – 3.8% and 4.8%, Republic of Armenia (60–69 years old) – 3.1% and 7.0%, Republic of Georgia – 2.6% and 6.3%, Republic of Moldova – 2.6% and 3.4%, Republic of Belarus – 2.3% and 2.9%, Russian Federation – 1.8% and 3.2%, Kyrgyz Republic (60–69 years old) – 1.0% and 1.3%, Republic of Tajikistan – 1.0% and 1.8%, Republic of Azerbaijan – 0, 7% and 2.0%. At the same time, in the Republic of Tajikistan among men 50–64 years old and women 45–64 years old, the proportion of never married is less than among 65–69 years old. In the Republic of Moldova this is the case for women 55–59 years old (Table 2.1.1).

The rise in the average age at first marriage is also shown by the actual dynamics of this indicator. In comparison with the population censuses that have ended in most countries with the round of the 2010s it allows you to assess the changes that have occurred in recent years (Table 2.1.2).

Men have the largest increase in the average age at first marriage over the past 30 years in the Republic of Latvia (by 7.9 years). In the Republic of Lithuania, it was 6.1 years, in the Republic of Estonia – 5.2 years, in the Republic of Armenia – 5.0 years, in Ukraine – 4.6 years, in the Republic of Belarus – 3.7 years, in the Republic of Azerbaijan – 2,3 years, in the Republic of Tajikistan – 1.9 years.

For women, the increase in the average age of entry occurred to a lesser extent and the difference in the value of this indicator between men and women increased. Thus, grooms in their first marriages became a little older than brides were 30 years ago.

In the case of men, the largest increase in the average age at first marriage occurred in the Republic of Latvia (by 7.4 years). In the Republic of Lithuania, it increased by 5.8 years, in the Republic of Armenia – by 4.8 years, in Ukraine – by 4.3 years, in the Republic of Belarus – by 3.5 years, in the Republic of Azerbaijan – by 1.1 years, in the Republic of Tajikistan – by 0.6 years. Only in the Republic of Estonia the average age at first marriage for women increased (by 5.8 years) more than for men.

For the Republic of Georgia, the available data allow us to estimate the change in the average age at first marriage in comparison with 1995 (by 3.7 years for men and 4.7 years for women), for the Kyrgyz Republic – since 2000 (respectively, by 1,7 and 1.5 years), Republic of Kazakhstan – since 2005 (for 0.6 and 0.7 years). Thus, in addition to the Republic of Estonia, a greater increase in the average age at first marriage among women compared to men was also observed in Georgia and the Republic of Kazakhstan. Moreover, in the Republic of Georgia the differences in growth between women and men are one year. Thus, they are quite significant.

The differences between the countries in the post-Soviet space in the average age at first marriage are quite significant: from 26.2 years for men and 22.1 for women in Tajikistan to 32 and 29.7 respectively in the Republic of Latvia (Table 2.1.2).

An increase in the age of marriage, changes in the intensity of termination of marriages due to divorce and widows and remarriage have led to significant changes in the proportion of those who are married (Table 2.1.3).

Among men in the Russian Federation, the proportion of married people declined in the 1990s and 2000s at all ages. A more significant decrease took place between the 1989 and 2002 censuses. At the age of 25–29 it decreased by 16.1 percentage points. It also decreased by more than 10 percentage points in 20–24 (by 14.3 pp) and 30–34 (by 10.5 pp) years. In the period between the 2002 and 2010 censuses its reduction was much smaller (25–29 years old – by 4.0 pp, 20–24 and 30–34 years old – 2.8 pp each, 35–39 years old – 2.7 pp each), and in the age range of 55–64 years it slightly increased (table 2.1.3).

Table 2.1.3 The proportion of married people (% of the total population of the corresponding sex and age)  $^{\circ}$ 

							Age	(years	)				
Country	Year	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70 and
		19	24	29	34	39	44	49	54	59	64	69	more
					Me								
	1989	1,2	21,5	69,0	90,3	93,9	94,5	95,1	94,9	94,0	91,2	88,0	78,0
Republic of Azerbaijan	1999	2,4	16,6	56,3	84,3	93,2	95,7	95,8	95,2	94,3	92,0	88,1	77,7
	2009	0,3	14,9	52,1	76,5	86,5	92,3	94,7	95,2	94,3	91,8	88,5	76,0
	1989	2,2	28,3	73,0	89,9	93,7	95,1	95,4	95,1	94,6	92,4	88,8	76,0
Republic of Armenia	2001	0,8	16,8	54,9	79,2	89,0		3,4		3,9		9,7	30,4
	2011	0,9	13,3	50,2	74,8	82,3	86,6	89,9	91,7	91,8		9,1	72,0
	1989	1,9	37,8	76,5	84,5	86,6	87,4	87,9	89,5	90,9	90,7	89,0	74,6
Republic of Belarus	1999	0,9	46	<del></del>		),2		1,9	_	3,8		1,4	74,6
republic of Belarus	2009	0,7	20,1	56,4	70,6	75,2	77,8	79,5	80,6	81,5	82,0	80,5	70,3
	2019	1,1	16,9	55,0	70,5	75,7	74,4	73,9	74,2	75,9	75,4	76,9	66,2
	1989	3,4	27,8	63,3	81,8	88,5	91,5	92,8	93,3	93,0	90,6	86,8	74,5
Republic of Georgia	2002	2,2	21,2	49,0	69,3	81,3	87,4	90,0	90,8	90,8	89,1	86,1	73,7
	2014	3,2	24,6	53,6	69,9	77,2	81,8	85,7	88,5	90,3	90,0	88,5	73,0
Republic of	1989	1,8	34,1	76,0	86,4	88,9	89,6	89,4	89,7	89,5	88,2	85,8	74,2
Kazakhstan	1999	1,4	24,8	62,2	79,2	84,4	86,1	86,8	87,3	86,2		3,3	71,3
	2009	0,9	18,4	52,8	70,4	78,0	82,5	83,9	84,6	84,6	83,2	79,4	68,7
Republic of	1989	1,4	36,2	82,5	91,1	92,1	92,0	92,0	91,3	91,2	89,9	87,3	77,4
Kyrgyzstan	1999		26,8	71,5	86,5	89,9	90,8	90,3	89,5	89,3		5,7	74,8
	2009	0,9	19,1	61,0	80,3	85,9	88,9	89,8	89,6	88,2		1,0	69,1
	1989	3,3	37,2	73,1	80,0	79,8	78,9	78,8	80,4	82,2	82,8	81,5	69,2
Republic of Latvia	2000	0,3	9,8	38,1	64,8	73,7	76,0	75,2	75,2	76,7	78,7	80,6	76,6
•	2011	0,1	5,3	26,8	44,3	51,5	59,2	64,4	67,8	69,0	70,2	71,0	66,7
	2021	0,1	3,4	18,7	37,9	49,4	53,1	54,3	58,9	63,6	67,9	69,4	65,3
5 11 611	1989	2,6	33,0	74,6	83,0	83,7	84,2	84,7	86,4	87,4	87,2	85,7	73,0
Republic of Lithuania	2001	0,4	16,5	52,8	70,5	75,8	77,8	76,7	77,9	79,5	80,5	81,4	74,2
	2011	0,1	5,9	34,2	58,3	64,8	69,2	72,3	74,3	74,9	76,8	78,3	71,4
0 11 (14 11	1989	2,1	40,3	82,8	91,1	93,0	92,7	92,5	92,0	91,1	88,3	84,4	69,8
Republic of Moldova	2004	0,7	18,2	56,3	76,3	84,1	86,6	88,2	88,3	87,6	84,9	79,9	65,2
	2014	1,3	13,5	46,5	66,3	72,6	76,5	79,0	81,4	82,2	81,2	78,8	62,5
B . E	1989	3,0	38,4	74,5	82,3	84,2	84,7	84,9	86,5	88,1	88,0	86,6	75,1
Russian Federation	2002	1,6	24,1	58,4	71,8	77,2	79,7	80,9	81,9	82,3	81,7	81,4	71,6
	2010	1,7	21,3	54,4	69,0	74,5	77,8	79,9	81,7	82,6	82,6	80,2	69,9
December of Tarrier	1989	1,5	43,1	89,1	94,6	94,7	94,8	94,5	93,3	91,8	89,6	86,2	75,8
Republic of Tajikistan	2000	2,2	34,1	80,0	92,5	95,0	95,6	95,0	94,3	93,0	88,7	83,9	72,0
	2010	2,1	30,8	78,5	91,5	94,4	95,9	96,4	96,2	95,3	93,1	89,3	72,8
Ukraine	1989	2,6	39,8	77,7	85,2	87,2	87,9	88,3	89,5	90,5	89,4	87,6	73,6
	2001	1,0	24,8	60,8	74,9	79,7	81,9	83,1	84,3	84,9	84,0	82,9	71,8
Donublic of Catania	1989	2,5	33,6	71,4	79,0	79,8	79,2	79,3	79,9	81,5	81,7	80,5	68,7
Republic of Estonia	2000	0,3	8,5	31,3	50,9	62,8	67,2	68,8	70,7	71,9	73,8	74,5	67,7
	2011	0,2	3,3	16,5	32,2	41,2	48,6	55,6	61,6	64,8	68,2	70,3	67,3
Dopublic of A-orbali	1000	0.2	E0.0	711	Wom	1	02.0	00.2	76 1	60.0	E2.0	20.1	10.5
Republic of Azerbaijan	1989	9,2	50,0	74,4	82,6	84,5	83,0	80,3	76,4	68,0	53,8	39,1	18,5
	1999	12,5	47,4	72,2	81,1	83,4	83,5	80,6	75,8	69,9	61,8	50,4	25,8
	2009	8,2	43,3	67,7	76,8	80,4	81,6	80,4	76,2	68,5	59,6	50,5	31,4

<sup>&</sup>lt;sup>1</sup> Footnotes are similar to the table 2.1.1.

							Age	(years	)				
Country	Year	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70 and
		19	24	29	34	39	44	49	54	59	64	69	more
	1989	16,3	64,2	79,9	82,6	83,0	82,7	81,2	78,6	72,9	62,1	45,8	22,7
Republic of Armenia	2001	7,7	47,4	73,1	80,9	83,0	79	9,7	70	),8	58	3,1	76,5
	2011	6,4	40,0	66,6	74,5	77,9	79,0	78,3	74,5	67,9	56	5,3	31,7
	1989	9,9	61,3	82,1	85,0	83,6	80,8	77,5	74,4	67,9	57,3	43,9	17,9
Donublic of Polarus	1999	6,0	60	),7	77	',9	75	5,3	66	5,7	52	<u>2,</u> 9	24,2
Republic of Belarus	2009	3,9	38,9	67,2	72,5	72,6	72,0	70,9	68,1	62,0	54,3	43,9	23,8
	2019	3,6	37,1	71,6	77,3	76,1	71,7	68,1	62,9	59,9	53,2	44,9	21,1
	1989	16,8	56,1	74,1	79,9	80,9	79,9	78,3	75,0	69,0	58,5	43,0	20,1
Republic of Georgia	2002	12,1	45,1	65,6	74,4	78,3	78,0	75,6	71,3	66,0	59,0	50,5	26,9
	2014	13,7	48,8	72,4	79,1	80,0	79,0	77,1	74,3	68,5	59,2	49,4	27,0
Danublic of	1989	11,0	59,5	79,9	83,6	83,0	80,8	77,4	73,0	64,3	53,0	38,9	16,3
Republic of Kazakhstan	1999	7,1	47,4	68,9	75,3	76,4	75,4	72,8	68,9	62,2	49	9,8	21,6
Nazakiistaii	2009	4,3	37,6	63,8	71,0	72,3	72,4	70,6	67,1	61,1	53,5	43,4	24,9
Danielia af	1989	13,3	65,9	83,0	85,8	85,2	82,7	79,5	75,8	68,1	54,9	40,1	17,3
Republic of	1999		58,8	75,8	80,6	81,0	79,0	75,3	71,0	64,6	53	3,5	22,4
Kyrgyzstan	2009	7,6	46,8	71,0	76,9	77,4	76,9	74,0	68,7	61,3	48	3,1	24,5
	1989	10,1	58,1	76,2	77,9	75,7	72,8	69,7	67,0	61,2	52,3	40,9	18,0
Popublic of Latvia	2000	1,4	19,4	52,5	69,8	72,5	71,3	68,3	66,2	64,4	60,2	54,8	33,6
Republic of Latvia	2011	0,7	12,7	38,7	51,8	55,4	58,1	58,7	57,8	53,4	48,6	41,6	24,6
	2021	0,4	8,7	31,8	50,0	56,4	56,2	53,9	54,5	53,4	50,2	43,6	24,2
	1989	7,9	55,7	78,6	81,4	80,4	78,3	75,7	72,3	66,5	56,9	45,1	21,6
Republic of Lithuania	2001	2,3	32,5	63,8	71,2	72,2	71,1	68,2	66,0	62,2	56,6	48,4	26,2
	2011	0,8	14,4	49,8	65,1	65,7	65,7	65,0	63,1	59,3	54,3	47,8	26,5
	1989	14,1	68,2	84,6	86,1	84,1	80,4	76,6	72,7	66,0	56,7	45,6	22,6
Republic of Moldova	2004	6,1	40,8	69,3	77,9	81,2	80,4	77,4	71,9	64,8	54,8	45,6	25,0
	2014	6,9	35,2	65,8	74,5	75,4	75,2	74,9	72,0	65,4	55,9	45,5	23,2
	1989	13,1	62,2	80,1	82,4	80,5	77,4	73,9	70,9	63,8	53,4	40,1	16,3
Russian Federation	2002	7,4	42,8	66,1	71,4	73,1	72,7	70,3	66,2	60,4	52,4	44,7	23,1
	2010	7,5	39,1	63,9	69,9	70,2	69,4	68,5	65,7	59,7	52,1	41,7	23,2
	1989	14,3	73,8	88,3	90,3	88,8	86,5	83,2	79,7	72,9	57,7	42,1	20,2
Republic of Tajikistan	2000	13,4	64,9	83,2	87,2	87,9	86,7	83,5	77,9	72,6	64,3	54,3	25,2
	2010	13,0	62,8	79,5	84,5	86,6	86,7	85,0	81,3	74,1	64,0	53,6	32,2
Ukraine	1989	14,8	66,1	82,1	83,8	82,4	79,8	76,5	72,9	65,3	55,2	42,1	17,8
UNIAIIIE	2001	7,3	48,1	70,1	74,7	75,7	74,8	72,3	68,4	62,5	54,8	46,3	23,6
	1989	9,1	56,1	75,6	77,8	76,5	73,8	70,0	67,1	61,4	51,9	40,6	17,0
Republic of Estonia	2000	1,4	17,4	41,4	54,2	61,6	61,9	61,4	59,8	55,4	50,7	42,7	21,6
	2011	0,6	8,2	26,6	39,7	45,3	49,0	52,5	53,7	52,4	48,9	43,3	24,3

Similar changes in the proportion of married men took place in other countries in the post-Soviet space. Its greatest decrease occurred in the age group 25–29 years old and it was more significant in the 1990s: Republic of Estonia – by 40.1 pp, Republic of Latvia – by 35.0 pp, Republic of Moldova – by 26.5 pp, Republic of Lithuania – by 21.8 pp, the Republic of Armenia – by 18.1 pp, Ukraine – by 16.9 pp, the Republic of Kazakhstan – by 13, 8 pp, the Republic of Azerbaijan – by 12.7 pp, Kyrgyz Republic – by 11.0 pp. In the Republic of Georgia in the 1990s the largest decrease in the share of married people was also at the age of 25–29 (by 14.3 pp), but since the 2000s it increased. The largest decrease in 2014 compared to 1989 takes place at the age of 30–34.

Furthermore, different changes in the proportion of married men in the 1990s were in the Republic of Tajikistan. Among young ages it decreased in 2000 compared to 1989. But for the age of 25–29 its decline (by 9.1 percentage points) was relatively small and for the age of 35–60 the share married in 2000 was even slightly higher than in 1989. The situation is similar in the

Republic of Azerbaijan: in the age range from 20 to 40 years the proportion of married people decreased while at older ages it increased.

In other countries in the post-Soviet space in the 1990s there was no increase in the proportion of married men in any age group. Although, at older ages its decrease was significantly less than in 25–29 year-olds. For example, at the age of 45–49 years it ranged from 1.7 pp in the Kyrgyz Republic up to 10.5 pp in the Republic of Estonia.

As for the Russian Federation, the decline in the proportion of married men between the 2000s and 2010s census rounds was significantly less than in the 1990s. Some of its increase, except for the age of 55–64 in the Russian Federation, was in the Kyrgyz Republic at 50–54 years. In the Republic of Tajikistan, it happened at all ages over 40 years old. In the Republic of Georgia, the proportion of married men increased not only at 60–69 years old, but also at young ages up to 35 years old.

In the Republic of Kazakhstan (by 9.4 pp), Kyrgyz Republic (by 10.5 pp), the Republic of Lithuania (by 18.6 pp) and the Russian Federation (by 4.0 pp) the largest decrease in the share of married men among men in the 2000s as in the 1990s, was at the age of 25–29, but in the Republic of Azerbaijan (by 7.8 pp) – in 30–34 years and in the Republic of Armenia (by 6.7 pp), Republic of Latvia (by 22.2 pp) and the Republic of Estonia (by 21.6 pp) – at 35–39 years.

In most countries in the post-Soviet space at the age of 30 years the decline in the proportion of married men in the 1990s was more significant than in the 2000s and in the age range from 30 to 45 years, on the contrary, in the 2000s this share has decreased to a greater extent than in the 1990s. The exception is the Russian Federation, where at all ages in the 1990s the proportion of men who are married declined to a greater extent than in the 2000s.

According to the 2019 census of the Republic of Belarus, the proportion of married men was lower than in 2009 in almost all ages (except for 15–19 and 35–39 years old). In the Republic of Latvia in 2021 it is less than 10 years ago among all ages (the largest decrease was at 45–49 years (by 10.1 pp) and 50–54 years (by 8.9 pp).

Women experienced the largest decline in the proportion of married people in the 1990s at the age of 20–24: in the Republic of Latvia and the Republic of Estonia – by 38.7 pp, Republic of Moldova – by 27.4 pp, Republic of Lithuania – by 23.2 pp, Russian Federation – by 19.4 pp, Ukraine – by 18.0 pp, Republic of Armenia – by 16.8 pp, Republic of Kazakhstan – by 12.1 pp, Georgia – by 11.0 pp, Republic of Tajikistan – by 8.9 pp, Republic of Azerbaijan – by 2.6 pp. Only in the Kyrgyz Republic at the age of 25–29 it decreased (by 7.2 pp) slightly more than in 20–24 years (by 7.1 pp) (see Table 2.1.3).

At older ages its decline during this period was less or even it was a slight increase in the proportion of married people (in the Republic of Latvia – over 55 years old, in the Republic of Moldova – at 45–49 years old, in the Russian Federation, Ukraine and the Republic of Estonia – over 65 years, in Georgia – over 60 years old, in the Republic of Azerbaijan – 40–49 years old and over 55 years old, in the Republic of Tajikistan – 40–49 years old and over 60 years old). This was largely due to the decline in widowhood.

In the 2000s the proportion of married women continued to decline, but to a lesser extent than in the 1990s. In a number of countries, its main decrease took place in 20–24 years: the Republic of Lithuania – by 18.1 pp, Kyrgyz Republic – by 12.0 pp, Republic of Kazakhstan – 9.8 pp, Republic of Armenia – by 7.4 pp, Russian Federation – by 3.7 pp. In other countries, its decline in the 2000s. was more significant at older ages: in the Republic of Azerbaijan (by 4.5 pp) and the Republic of Tajikistan (by 3.7 pp) – at 25–29 years old, in the Republic of Latvia at 30–34 years (by 18.0 pp), in the Republic of Estonia (by 16.3 pp) and the Republic of Moldova (by 5.8 pp) – at the age of 35–39.

In the Republic of Georgia, according to the 2014 census the proportion of married women was higher than in 2002 at all ages up to 65 years.

The 2019 census of the Republic of Belarus showed an increase in the proportion of married women aged 25–39 and 65–69 years. In the Republic of Latvia in 2021, as compared to the

2011 census, a decrease in the proportion of married people happened at the age of up to 55 (except 35–39 years).

In addition to the Republic of Georgia in the 2000s, in the Republic of Tajikistan the share of married people in the age range from 45 to 60 years old has slightly increased in age composition of the population at this age.

The most significant differences in the proportion of married people between countries in the post-Soviet space at young ages are associated, first of all, with the difference in the age of marriage. According to the population censuses of the 2010s round, among 30–34-year-old men the share of married men in the Republic of Tajikistan is 91.5% and in the Republic of Estonia – 32.2%. In the Russian Federation it is 69.0%, slightly higher in the Republic of Georgia (69.9%), Republic of Kazakhstan (70.4%) and the Republic of Belarus (70.5%). At older ages, these differences are somewhat smoothed out, but remain significant. For example, at the age of 55–59, 64.8% of men in the Republic of Estonia are married and 69.0% in the Republic of Latvia. In the Republic of Lithuania this figure is 74.9%. In other countries in the post-Soviet space the share of married men of this age exceeds 80% (Russian Federation – 82.6%) and it is the largest in the Republic of Azerbaijan (94.3%) and the Republic of Tajikistan (95.3%).

Among women aged 30–34 the proportion of married people in the Republic of Estonia is 39.7% and in the Republic of Tajikistan – 84.5%. In most countries in the post-Soviet space the largest proportion of married women are in the age groups 35–39 years old or 40–44 years old. Only in the Republic of Latvia its maximum value is observed at 45–49 years and in the Republic of Estonia – at 50–54 years. In the age group 40–44 married women in the Republic of Estonia are less than half (49.0%), in the Republic of Latvia – 58.1%. In other countries in the range from 65.7% in the Republic of Lithuania to 81.6% in the Republic of Azerbaijan (Russian Federation – 69.4%) and the largest in the Republic of Tajikistan (86.7%) (Table 2.1.3).

When analyzing the changes and differences in the proportion of divorced and widowed according to population censuses, it should be noted that they are influenced not only by changes and differences in divorce and widowhood rates, but also by the prevalence of remarriage. This applies even more to the comparison of these indicators in men and women.

Table 2.1.4 **Proportion of divorced persons,% of the total population**of the corresponding sex and age <sup>1</sup>

Country	Year						Ag	e (year	s)				
		15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70 and
		19	24	29	34	39	44	49	54	59	64	69	more
					Ν	1en							
Republic of	1989	0,0	0,2	0,7	1,1	1,6	2,2	1,9	1,6	1,3	1,2	1,0	0,6
Azerbaijan	1999	0,0	0,2	0,6	0,9	1,0	1,1	1,3	1,3	1,0	0,7	0,6	0,5
	2009	0,0	0,1	0,8	1,3	1,7	1,7	1,4	1,2	1,1	1,0	0,7	0,4
Republic of	1989	0,0	0,3	0,8	1,2	1,4	1,7	1,8	1,7	1,3	1,1	1,0	0,7
Armenia	2001	0,0	0,1	2,8	3,2	2,7	2,	4	2,	0	1,	.6	2,3
	2011	0,0	0,2	0,5	1,1	1,9	2,3	2,2	1,9	1,6	1,	,5	1,0
Republic of Belarus	1989	0,0	1,0	3,2	5,0	6,2	7,1	7,1	5,8	3,9	2,8	2,0	1,1
	1999	0,0	4,	.2	9	,8	10	,6	9,	.0	4,	,8	1,9
	2009	0,0	0,8	4,1	8,4	11,5	13,0	12,5	11,6	10,2	8,1	5,7	2,9
	2019	0,1	0,7	3,8	6,7	9,5	12,6	14,7	16,4	14,5	13,9	11,3	4,4
Republic of Georgia	1989	0,0	0,5	1,3	2,0	2,3	2,6	2,4	2,2	1,6	1,4	1,2	0,8
	2002	0,0	0,5	1,5	2,4	2,7	2,7	2,5	2,5	2,2	1,7	1,3	0,9
	2014	0,1	0,7	1,8	2,7	3,4	4,0	3,9	3,5	2,7	2,4	1,9	1,1

<sup>&</sup>lt;sup>1</sup> See table footnotes 2.1.1

Country	Year						Ag	e (year	rs)				
		15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70 and
		19	24	29	34	39	44	49	54	59	64	69	more
Republic of	1989	0,0	1,0	3,2	4,7	5,7	6,3	6,2	5,5	4,2	3,2	2,3	1,2
Kazakhstan	1999	0,0	1,0	4,5	6,2	6,7	7,2	7,3	6,7	5,5	3	,8	1,7
	2009	0,0	0,6	2,4	4,3	5,5	6,0	6,2	6,0	5,2	4,2	2,9	1,8
Republic of	1989	0,0	1,2	3,5	4,1	4,8	5,4	5,0	4,7	3,3	2,6	2,0	1,0
Kyrgyzstan	1999		1,5	5,0	6,3	6,0	5,9	6,1	6,1	4,7	3	,2	1,4
	2009	0,1	1,0	4,4	7,5	7,8	7,2	6,4	6,0	5,7	4	,2	1,8
Republic of Latvia	1989	0,0	1,4	4,5	7,5	10,5	12,5	12,9	12,0	9,7	7,6	5,8	3,5
	2000	0,0	0,3	2,9	6,6	9,5	11,5	13,1	13,6	11,2	10,0	7,4	5,0
	2011	0,0	0,3	2,3	6,8	13,0	19,4	21,1	20,4	19,3	17,4	14,1	9,4
	2021	0,0	0,3	1,7	4,7	8,9	12,2	16,4	21,7	22,1	19,8	17,6	12,1
Republic of	1989	0,0	0,8	3,0	5,2	7,3	8,2	8,1	6,9	5,4	4,3	3,3	2,0
Lithuania	2001	0,0	0,8	4,9	9,7	11,8	12,6	13,9	12,9	10,8	8,7	6,2	3,2
	2011	_	0,3	2,5	6,9	12,2	16,3	17,1	16,4	15,1	12,4	9,2	5,5
Republic of	1989	0,0	1,1	2,8	3,4	3,9	4,7	4,5	3,9	3,0	2,4	1,6	0,9
Moldova	2004	0,0	0,7	3,2	6,1	6,7	6,5	5,9	5,5	4,9	3,7	2,7	1,3
	2014	0,0	0,4	2,0	4,5	7,3	9,5	10,1	8,9	7,4	5,9	4,3	2,2
Russian Federation	1989	0,1	1,5	4,5	7,0	8,6	9,7	9,8	8,4	6,0	4,2	2,9	1,6
	2002	0,1	1,3	6,2	10,8	12,1	12,1	11,9	11,0	9,8	7,2	5,1	2,6
	2010	0,1	1,2	5,2	9,6	11,9	13,0	12,3	11,0	9,6	7,7	6,1	3,2
Republic of	1989	0,0	0,8	2,2	2,5	3,0	3,2	2,9	2,7	2,1	1,7	1,3	1,0
Tajikistan	2000	0,1	0,8	2,2	2,4	1,7	1,6	1,8	1,7	1,4	1,4	1,0	0,8
	2010	0,1	0,4	1,1	1,5	1,6	1,3	1,1	0,9	0,8	0,7	0,7	0,5
Ukraine	1989	0,1	1,5	4,4	6,4	7,4	7,9	7,6	6,3	4,5	3,4	2,3	1,3
	2001	0,1	1,6	6,6	10,5	11,3	11,2	10,8	9,7	7,9	6,1	4,1	2,1
Republic of Estonia	1989	0,1	1,2	4,1	7,7	9,9	11,2	11,7	11,2	9,0	7,5	5,7	3,7
	2000	0,0	0,7	5,2	11,7	15,2	17,1	17,5	16,4	14,2	11,8	9,1	5,7
	2011	0,0	0,4	2,2	5,9	10,6	17,4	22,5	22,5	21,2	18,2	14,8	8,7
				r		men		r	,			,	
Republic of	1989	0,1	0,8	2,1	3,5	4,9	6,1	5,6	4,7	3,9	3,7	2,8	1,3
Azerbaijan	1999	0,2	1,1	2,3	2,9	3,2	3,6	3,7	3,4	2,6	1,8	1,3	0,9
	2009	0,1	1,1	2,8	4,4	4,7	4,2	3,9	3,5	3,0	2,2	1,5	0,8
Republic of	1989	0,3	1,8	3,3	4,5	5,7	6,5	6,0	5,2	4,0	3,5	2,5	1,1
Armenia	2001	0,1	1,2	4,4	5,8	5,9		,2	5	,9	3	,7	1,3
	2011	0,2	1,1	2,8	4,8	6,4	6,6	6,1	5,7	5,1		,8	1,8
Republic of Belarus	1989	0,2	2,7	5,6	7,5	9,7	11,3	11,2	9,7	7,4	6,4	4,8	1,8
	1999	0,3		,2		3,7		l,7		2,7		,4	3,6
	2009	0,1	2,3	7,3	12,5	16,4	17,8	17,5	16,2	14,9	12,3	9,0	4,8
	2019	0,1	1,9	6,3	9,3	13,0	17,1	19,8	20,9	18,8	17,1	14,7	6,2
Republic of Georgia	1989	0,4	2,0	3,9	5,4	6,5	6,8	6,3	5,8	4,8	4,2	3,1	1,3
	2002	0,3	2,2	4,5	5,4	5,8	6,3	6,1	5,6	4,8	3,9	3,1	2,3
	2014	0,5	2,3	4,5	5,9	7,0	7,1	6,2	5,5	4,9	4,2	3,4	1,7
Republic of	1989	0,3	3,3	6,1	7,9	9,4	10,3	10,0	9,3	8,1	6,9	4,9	2,0
Kazakhstan	1999	0,3	4,5	9,9	11,7	12,3	12,8	12,4	11,1	8,5		,2	3,0
	2009	0,2	2,3	6,1	9,1	11,3	11,8	11,8	10,9	9,5	7,4	5,1	3,3
Republic of	1989	0,5	4,4	7,1	8,0	8,5	9,6	8,8	7,8	6,4	6,2	4,3	2,0
Kyrgyzstan	1999		6,7	11,5	11,9	11,7	11,5	10,9	10,1	7,7		,1	2,9
	2009	0,4	4,5	10,4	13,5	14,2	13,6	12,9	11,7	10,0	6	,5	2,4

Country	Year						Ag	e (year	s)				
		15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70 and
		19	24	29	34	39	44	49	54	59	64	69	more
Republic of Latvia	1989	0,2	3,3	7,9	11,5	15,3	17,6	18,2	16,8	14,5	12,0	8,8	4,3
	2000	0,0	0,8	4,9	9,3	12,8	15,5	18,4	19,0	17,0	15,9	12,2	7,2
	2011	0,0	0,8	4,2	9,1	17,0	22,6	24,1	24,1	24,7	24,3	21,9	15,4
	2021	0,0	0,7	3,6	7,7	12,1	15,9	21,5	25,3	25,7	24,7	25,0	20,8
Republic of	1989	0,2	2,2	5,5	8,3	10,9	12,0	11,7	10,4	8,1	6,6	4,6	2,0
Lithuania	2001	0,0	2,1	9,1	13,8	15,6	16,7	17,6	16,3	13,6	11,0	7,6	3,8
	2011	0,0	1,2	5,0	11,0	17,6	20,7	20,8	20,2	19,2	16,8	13,3	7,6
Republic of	1989	0,5	3,6	5,7	7,3	8,8	10,1	9,8	8,5	6,4	5,4	3,6	1,6
Moldova	2004	0,3	3,1	8,2	11,0	10,8	10,5	10,1	9,5	8,6	5,9	4,5	2,1
	2014	0,2	2,1	5,4	8,4	11,1	12,6	11,4	9,9	8,7	7,0	5,4	2,7
Russian Federation	1989	0,4	3,8	7,2	9,4	11,6	13,8	14,2	12,9	10,5	9,0	7,1	3,4
	2002	0,3	3,7	10,7	15,4	16,3	16,5	16,4	15,8	15,0	11,7	9,1	5,4
	2010	0,3	3,4	9,1	13,8	17,3	18,9	18,4	17,2	15,9	13,7	11,0	6,4
Republic of	1989	0,2	2,5	4,6	5,4	6,4	7,0	6,9	6,1	4,6	4,6	3,2	2,0
Tajikistan	2000	0,3	2,7	4,7	4,4	4,1	3,9	3,8	3,6	2,5	2,1	1,5	1,3
	2010	0,2	1,9	3,8	5,0	4,9	4,2	3,5	2,9	2,4	1,7	1,2	0,8
Ukraine	1989	0,5	4,3	7,6	9,5	11,4	12,6	12,5	11,6	9,3	8,3	6,3	2,9
	2001	0,4	5,3	12,4	15,5	16,1	16,2	16,0	14,8	12,3	10,0	7,1	4,2
Republic of Estonia	1989	0,3	3,1	7,5	11,0	14,0	15,8	16,5	15,7	13,6	11,3	8,6	4,2
	2000	0,1	2,1	9,6	16,4	19,0	20,9	21,6	20,3	18,2	16,1	12,5	7,4
	2011	0,0	1,1	4,4	8,6	14,9	21,9	25,6	25,7	25,1	23,1	19,5	13,3

Comparison of census data from the late 1990s – early 2000s and 1989 shows an increase in the proportion of divorced men. For example, at the age of 25–29 it was in almost all countries in the post-Soviet space: in the Republic of Georgia – by 0.2 pp, in the Republic of Moldova – by 0.4 pp, in the Republic of Estonia – by 1, 1 pp, in the Republic of Kazakhstan – by 1.3 pp, in the Kyrgyz Republic – by 1.5 pp, in the Russian Federation – by 1.7 pp, in the Republic of Lithuania – by 1.9 percentage points, in the Republic of Armenia – by 2 percentage points, in Ukraine – by 2.2 percentage points. The only exceptions were the Republic of Azerbaijan, where the proportion of divorced people in 1999 was lower than in 1989 at all ages over 25, the Republic of Latvia, where it was lower at the age of up to 45 and the Republic of Tajikistan, where this took place in all ages over 30 years old (Table 2.1.4).

In the period between the censuses of the 2000s and 2010s rounds in the Republic of Armenia, Republic of Kazakhstan and the Republic of Tajikistan, the proportion of divorced men has decreased.

In the Republic of Georgia it increased in all ages, in the Republic of Azerbaijan – except for 20–24 and 50–54 years, in the Kyrgyz Republic – in the ages of 30–49 and over 55, in the Republic of Lithuania and the Republic of Moldova – in the ages over 35. In the Republic of Latvia the share of divorced persons decreased at the age of 30 and increased significantly among older men: 40–44 years – by 7.9 pp, 45–49 years – by 8 pp, 50–54 years – by 6.8 percentage points, 55–59 years old – by 8.1 percentage points, 60–64 years old – by 7.4 percentage points, 65–69 years old – by 6.7 percentage points. In 2021, the proportion of divorced men in the Republic of Latvia was significantly less than in 2011 at the age of up to 50 years and, conversely, higher at older ages. In the Republic of Estonia in 2011 the proportion of divorced men was lower than in 2000 at the age of up to 40 years and increased significantly at older ages: 45–49 years – by 5 pp, 50–54 years – by 6.1 pp, 55–59 years old – by 7 pp, 60–64 years old – by 6.4 pp, 65–69 years old – by 5.7 pp. The decline in the proportion of divorced people at young ages and the increase in older men in the Baltic countries is probably partly related to the rise in the age at first marriage.

In the Russian Federation, the 2010 census data showed a lower than in 2002 proportion of divorced men under the age of 40 (and at 55–59 years). At older ages it increased, but not as much as in the Republic of Latvia and the Republic of Estonia. The largest increase took place in the age groups of 40–44 years (by 0.9 pp) and 65–69 years (by 1 pp).

The 2019 census data of the Republic of Belarus also showed a decrease compared to 2009 in the proportion of divorced men aged 20–44 and an increase in older ages: 45–49 years – by 2.2 pp, 50 -54 years – by 4.8 pp, 55–59 years – by 4.3 pp, 60–64 years – by 5.8 pp, 65–69 years – by 5.6 pp.

According to the population censuses of the late 1990s – early 2000s, the increase in the proportion of divorced women in comparison with 1989 was somewhat greater than in men (except for the Republic of Armenia). At the same age of 25–29, for which the increase in this indicator among men was considered, the share of divorced women increased: in the Republic of Tajikistan – by 0.1 pp, in the Republic of Armenia – by 1.1 pp, in the Republic of Estonia – by 2.1 pp, in the Republic of Moldova – by 2.5 pp, in the Russian Federation – by 3.5 pp, in the Republic of Lithuania – by 3.6 pp, in the Republic of Kazakhstan – by 3.8 pp, in the Kyrgyz Republic – by 4.4 pp, in Ukraine – by 4.8 pp.

In the Republic of Azerbaijan and the Republic of Tajikistan the share of divorced women decreased in the 1990s in all ages over 30 years old, in Georgia – over 35 years old, in the Republic of Latvia – up to 45 years old.

In the period between the censuses of the 2000s and 2010s rounds the share of divorced women in the Republic of Kazakhstan has decreased.

In the Republic of Armenia, its decline occurred only at the age of 20-34 and 50-59 years, in the Kyrgyz Republic – at 20-29 years, in the Republic of Tajikistan – up to 30 years and over 45 years.

In most age groups in the 2000s the proportion of divorced women increased in the Republic of Azerbaijan (over 25), Republic of Georgia (except for 25–29 and 50–54), and the Republic of Moldova (over 35).

In the Baltic countries among women like among men the share of divorced people in the 2000s in young ages decreased and increased in relatively older ones. In the Republic of Latvia, a decrease in the proportion of divorced women took place at the age of up to 35 years. At older ages it increased, especially significantly after 60 years: 40–44 years – by 7.1 pp, 45–49 years – by 5.7 pp, 50–54 years – by 5.1 pp, 55–59 years old – by 7.7 pp, 60–64 years old – by 8.4 pp, 65–69 years old – by 9.7 pp. In the Republic of Estonia in 2011 the proportion of divorced women was lower than in 2000, in the age group under 40 (the most significant decrease was at 25–29 years (by 5.2 pp) and 30–34 years (by 7.8 pp), but increased significantly in older ages: 45–49 years – by 4.0 pp, 50–54 years – by 5.4 pp, 55–59 years – by 6.9 pp, 60–64 years – by 7.0 pp, 65–69 years – by 7.0 pp.

In the Russian Federation the results of the 2010 census also showed a lower than in 2002 the proportion of divorced women under 35 years old. At older ages it increased, but not as significantly as in the Republic of Latvia and the Republic of Estonia. The largest increase took place in 40–44 years (by 2.4 pp), 45–49 years (by 2.0 pp) and 60–64 years (by 2.0 pp).

The 2019 census of the Republic of Belarus showed a lower proportion of divorced women than in 2009. Among older ages the proportion of divorced people in 2019 was higher than in 2009. Among the age of 45 -49 years its growth was 2.3 pp, 50–54 years – 4.7 pp, 55–59 years – 3.9 pp, 60–64 years – 4.8 pp, 65–69 years old – 5.7 pp. In the Republic of Latvia, the share of divorced people in 2021was significantly less than in 2011 at the age of up to 50 years and higher at older ages.

The proportion of divorced people differs significantly in the countries of the post-Soviet space. For mature men it has the highest value, according to the census data of the round of the 2010s it exceeds 20% in the Republic of Latvia (45–49 years old – 21.1%, 50–54 years old – 20.4%) and the Republic of Estonia (45–49 years old and 50–54 years old – 22.5%, 55–59 years – 21.2%). In the Republic of Lithuania among 45–49-year-old men it is 17.1%, in the Russian

Federation and the Republic of Belarus among 40-44 year-olds – 13.0%. On the other hand, the highest value of this indicator in the Republic of Azerbaijan in the 35-44 age range is 1.7%, in the Republic of Armenia in the 40-44 age group is 2.3% and in the Republic of Tajikistan in the 35-39 years old 1,6%. In the Republic of Georgia at 40-44 years old it is 4.0%, in the Republic of Kazakhstan at 45-49 years old – 6.2%, in the Kyrgyz Republic at 35-39 years old – 7.8%, in the Republic of Moldova at 45-49 years – 10.1%.

In the Kyrgyz Republic and the Republic of Tajikistan the largest proportion of divorced men occurs at younger ages than in other countries. According to the population censuses of the 2010s round its maximum in the Kyrgyz Republic and the Republic of Tajikistan records at the age of 35–39 years and the second largest indicator at the age of 30–34 years. This may indicate that the increase in divorce rates began relatively recent and still affects the younger generations. If at the age of over 40 the share of divorced men in the Kyrgyz Republic is significantly lower than in many other countries in the post-Soviet space, then in 30–34 years it is higher than in the Kyrgyz Republic and at 25–29 years old – only in the Russian Federation.

To a greater extent, the shift in the largest share of divorced people to younger ages in the Kyrgyz Republic and the Republic of Tajikistan (compared to other countries) was observed among women. At the age of 20–24 in the Kyrgyz Republic it (4.5%) is the highest among the countries in the post-Soviet space for which there is relevant information from the population censuses of the 2010s round. In the Republic of Tajikistan at this age the proportion of divorced women (1.9%) is higher than in the Republic of Azerbaijan, Republic of Armenia, Republic of Latvia, Republic of Lithuania and the Republic of Estonia. At the age of 25–29, the highest value of this indicator is in the Kyrgyz Republic (10.4%) and in the Republic of Tajikistan (3.8%) it is almost the same as in the Republic of Latvia (4.2%) and the Republic of Estonia (4.4%). Among 30–34 years the share of divorced women in the Kyrgyz Republic (13.5%) is slightly less only in comparison with the Russian Federation (13.8%).

Let us pay attention to the differences between countries in the difference in the proportion of divorced women and men, which, apparently, can be considered as a conditional indirect characteristic of the differences in the probability of remarriage for divorced women and men. For example, at the age of 45-49, according to the 2010 census, the shares of divorced women and men in the Russian Federation are 18.4% and 12.3%, respectively. Approximately the same indicators in the Republic of Belarus - 17.5% and 12.5%. The proportion of divorced women and men is higher in the Baltic countries, but the difference between them is less than in the Russian Federation and the Republic of Belarus; Republic of Latvia - 24.1% for women and 21.1% for men; Republic of Lithuania - 20.8% and 17.1%, respectively; Republic of Estonia - 25.6% and 22.5%. In the Kyrgyz Republic and the Republic of Kazakhstan the proportion of divorced women aged 45-49 (12.9% and 11.8%) is less than in the listed countries, but the relative difference with this indicator for men (6.4% and 6.2%) significantly more. In the Republic of Armenia, Republic of Azerbaijan and the Republic of Tajikistan the proportion of divorced women aged 45-49 is relatively small (6.1%, 3.9% and 3.5%), but they are significantly higher than among men of this age (2.2%, 1.4% and 1.1%) (see Table 2.1.4).

A higher proportion of divorced women indicates that they are less likely to remarry (probably because it is more difficult for them to remarry).

Differing in the proportion of divorced people, countries in the post-Soviet space also differ significantly in the number of divorces per 1000 population (Table 2.1.5)

The highest value of the general divorce rate is in the Russian Federation. For almost the entire period under consideration it exceeded 4 per 1000 population and only in 2020 was it slightly below this threshold (3.9). In the Republic of Belarus, the number of divorces per 1000 population is 3.7.

#### General divorce rate, the number of divorces per 1000 population

Country	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Republic of Azerbaijan <sup>1</sup>	2,0	0,7	0,7	1,1	1,0	1,2	1,2	1,3	1,3	1,3	1,4	1,5	1,5	1,7	1,5
Republic of Armenia <sup>2</sup>	1,2	0,8	0,4	0,8	1,0	1,1	1,1	1,2	1,5	1,2	1,2	1,3	1,3	1,3	
Republic of Belarus <sup>3</sup>	3,4	4,1	4,4	3,2	3,9	4,1	4,1	3,8	3,7	3,5	3,4	3,4	3,5	3,7	3,7
Republic of Georgia⁴	1,4	0,6	0,5	0,5	1,2	1,6	1,9	2,2	2,5	2,4	2,6	2,7	2,8	3,0	2,1
Republic of Kazakhstan 5	2,6	2,4	1,8	2,1	2,6	2,7	2,9	3,0	3,1	3,0	2,9	3,0	3,0	3,2	2,6
Kyrgyz Republic <sup>6</sup>			1,1	1,2	1,5	1,6	1,6	1,6	1,6	1,4	1,5	1,5	1,7	1,7	1,4
Republic of Latvia <sup>7</sup>	4,0	3,1	2,6	2,8	2,4	4,0	3,6	3,5	3,1	2,6	3,1	3,1	3,1	3,1	2,7
Republic of Lithuania <sup>8</sup>	3,4	2,8	3,1	3,3	3,2	3,4	3,5	3,4	3,3	3,2	3,1	3,0	3,1	3,1	2,7
Republic of Moldova <sup>9</sup>	3,0	3,4	2,7	4,0	3,2	3,1	3,0	3,0	3,1	3,2	3,0	2,6	3,0		
Russian Federation 10	3,8	4,5	4,3	4,2	4,5	4,7	4,5	4,7	4,7	4,2	4,1	4,2	4,0	4,2	3,9
Republic of Tajikistan 11	1,4	0,7	0,4	0,4	0,8	0,9	0,9	1,0	1,1	1,0	1,0	1,1	1,2	1,3	
Republic of Uzbekistan <sup>12</sup>					0,6	0,6	0,6	0,8	0,9	0,9	0,9	1,0	1,0	0,9	
Ukraine <sup>13</sup>	3,7	3,8	4,0	3,9	2,714	4,0	3,7	3,6	3,0	3,3	3,3	3,3	3,9	3,6	3,1
Republic of Estonia 15	3,7	5,2	3,0	3,0	2,2	2,3	2,4	2,5	2,5	2,6	2,5	2,5	2,4	2,1	1,9

More than 3 per 1000 the value of this indicator is in Ukraine (3.1). The level is close to this in the Republic of Moldova (3). Throughout almost the entire period under review, the number of divorces exceeded 3 per 1000 in the Republic of Latvia and the Republic of Lithuania. In 2020, it is slightly lower – 2.7 each. Almost the same indicator in the Republic of Kazakhstan (2.6).

AZƏRBAYCANIN DEMOQRAFİK GÖSTƏRİCİLƏRİ. Bakı, 2021. P. 358–360. URL: <a href="https://www.stat.gov.az/menu/6/statistical\_yearbooks/">https://www.stat.gov.az/menu/6/statistical\_yearbooks/</a>

² ՀԱՅԱՍՏԱՆԻ ԺՈՂՈՎՐԴԱԳՐԱԿԱՆ ԺՈՂՈՎԱԾՈՒ. 2020. ԵՐԵՎԱՆ, 2020. P. 113. URL: <a href="https://www.armstat.am/file/article/demog\_2020\_6.pdf">https://www.armstat.am/file/article/demog\_2020\_6.pdf</a>; ՀԱՅԱՍՏԱՆԻ ԺՈՂՈՎՐԴԱԳՐԱԿԱՆ ԺՈՂՈՎԱԾՈՒ. 2013. ԵՐԵՎԱՆ, 2013. P. 110. URL: <a href="https://www.armstat.am/file/article/demos\_13\_7.pdf">https://www.armstat.am/file/article/demos\_13\_7.pdf</a>; ՀԱՅԱՍՏԱՆԻ ԺՈՂՈՎՐԴԱԳՐԱԿԱՆ ԺՈՂՈՎԱԾՈՒ. 2006. ԵՐԵՎԱՆ, 2006. P. 82. URL: <a href="https://www.armstat.am/file/article/demos\_06\_6.pdf">https://www.armstat.am/file/article/demos\_06\_6.pdf</a>

<sup>&</sup>lt;sup>3</sup> Demographic Yearbook of the Republic of Belarus. Minsk, 2019. P. 181. URL: <a href="https://www.belstat.gov.by/upload/iblock/91b/91b911b6266ed52902eb6f89f5dfab3a.pdf">https://www.belstat.gov.by/ofitsialnaya-statistika/solialnaya-sfera/naselenie-imigratsiya/estestvennoe-dvizhenie-naseleniya/</a>

<sup>&</sup>lt;sup>4</sup> დემოგრაფიული ვითარება საქართველოში 2020. თბილისი 2021. P. 21. URL: https://www.geostat.ge/media/41098/%E1%83%93%E1%83%94%E1%83%9B%E1%83%9D%E1%83%92%E1%83%A0%E1%83%90%E1%83%A44%E1%83%98%E1%83%A3%E1%83%9A%E1%83%98-%E1%83%95%E1%83%98%E1%83%97%E1%83%90%E1%83%A0%E1%83%90%E1%83%A0%E1%83%90%E1%83%A0%E1%83%90%E1%83%A0%E1%83%90%E1%83%A0%E1%83%90%E1%83%A0%E1%83%90%E1%83%A0%E1%83%90%E1%83%90%E1%83%A0%E1%83%97%E1 %83%95%E1%83%94%E1%83%9A%E1%83%9D%E1%83%A8%E1%83%98-2020.pdf; URL: https://www.geostat.ge/en/modules/categories/324/divorces

<sup>&</sup>lt;sup>5</sup> Statistical Yearbook of Kazakhstan. Almaty, 1993.S. 17; Kazakhstani demographics zhylnamalygy. Astana, 2011. P. 7. URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>; URL: <a href="https://stat.gov.kz/edition/publication/collection/">https://stat.gov.kz/edition/publication/collection/</a>; URL: <a href="https://stat.gov.kz/edition/">https://stat.gov.kz/edition/</a>; URL: <a href="https://stat.gov.kz/edi

<sup>&</sup>lt;sup>6</sup> Demographic Yearbook of the Kyrgyz Republic. 2016–2020. Bishkek. 2021. URL: http://www.stat.kg/ru/publications/demograficheskij-ezhegodnik-kyrgyzskoj-respubliki/; Demographic Yearbook of the Kyrgyz Republic. 2011–2015. Bishkek. 2016. P. 216. URL: http://www.stat.kg/media/publicationarchive/dd6e5a2a-2788-4818-b522-7edf2e73c391.pdf; Demographic Yearbook of the Kyrgyz Republic. 2010–2014. Bishkek 2015. P. 212. URL: http://www.stat.kg/ru/publications/demograficheskij-ezhegodnik-kyrgyzskoj-respubliki/; Women and men of the Kyrgyz Republic. 2005–2009. Bishkek 2010. P. 52.URL: http://www.stat.kg/media/publicationarchive/b025ee77-203b-4a2f-9304-ba77c2367d93.pdf

<sup>&</sup>lt;sup>7</sup> URL: https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START\_POP\_IL\_ILN/ILN010

<sup>&</sup>lt;sup>8</sup> Demografijos metraštis. 2013. Vilnius 2014. P. 106. URL: <a href="https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=2992">https://osp.stat.gov.lt/statistiniu-rodikliu-analize?hash=0c28ef00-1a1c-4add-8bf2-b1af764353c5#/</a>

<sup>9</sup> URL: https://statbank.statistica.md/PxWeb/pxweb/en/20%20Populatia%20si%20procesele%20demografice/20%20Populatia%20si%20procesele%20demografice\_\_POP\_\_POP020/POP020600.px/?rxid=9a62a0d7-86c4-45da-b7e4-fecc26003802

<sup>10</sup> URL: https://rosstat.gov.ru/folder/12781

<sup>&</sup>lt;sup>11</sup> Demographic Yearbook of the Republic of Tajikistan. Dushanbe, 2020. P. 230.URL: https://stat.tj/ru/publications

Demographic Yearbook 2019. NY, 2020. P. 856–862. URL: <a href="https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2019.pdf">https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2019.pdf</a>; Demographic Yearbook 2015. NY, 2016. P. 840–846. URL: <a href="https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2015.pdf">https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2015.pdf</a>; Demographic Yearbook 2012. NY, 2013. P. 612–618. URL: <a href="https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2012.pdf">https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2012.pdf</a>

demographic-social/products/dyb/dybsets/2012.pdf

13 Population of Ukraine. 2020. 2021. P. 77. URL: http://database.ukrcensus.gov.ua/PXWEB2007/ukr/publ\_new1/2021/dem\_2020.pdf; URL: http://database.ukrcensus.gov.ua/MULT/Dialog/view.asp?ma=000\_0311&ti=Number+of+registered+m arriages+and+divorces&path=../Quicktables/POPULATION/03/03/&lang=2&multilang=en

According to the data of the state registration of civil status acts, excluding divorces of marriages committed in court

<sup>15</sup> URL: <a href="https://andmed.stat.ee/en/stat/rahvastik">https://andmed.stat.ee/en/stat/rahvastik</a> rahvastikunaitajad-ja-koosseis demograafilised-pehinaitajad/RV047

On the other hand, the lowest gross divorce rate is now in the Kyrgyz Republic (1.4), Republic of Armenia (1.3), the Republic of Tajikistan (1.3) and the Republic of Uzbekistan (0.9) (Table 2.1.5).

The significantly higher mortality rate for men results in a much higher proportion of widowers among women.

The change in the proportion of widows among men, according to the population censuses of the late 1990s – early 2000s, compared to 1989, differed significantly across countries in the post-Soviet space.

In the Russian Federation, the proportion of widows among men, according to the 2002 census, was slightly higher than in 1989, at all ages over 30. Its greatest increase (slightly more than 2% points) is reordered in the age group over 60 (Table 2.1.6).

Table 2.1.6

Share of widows (% of the total population of the corresponding sex and age) 1

C							Α /						
Country	Year							years)					
		15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70
		19	24	29	34	39	44	49	54	59	64	69	and
					Mer								more
Republic of	1989	0.0	0.1	0.2			0.0	1.4	2.5	2.0	6.0	9,6	20.2
	$\vdash$	0,0	0,1	0,2	0,4	0,5	0,9	1,4	2,5	3,8	6,9 6,8	<del></del>	20,2
Azerbaijan	1999 2009	0,0	0,1	0,2	0,4	0,5	0,8	1,3 1,2	2,3	3,9 3,4	6,3	10,8 10,1	21,3
Republic of Armenia	1989	0,1	0,0	0,1	0,3	0,6	0,8	1,2	2,0	3,4	5,8	8,9	22,4
Republic of Affilefila	2001	0,1	0,0	0,3	0,4	0,6		,7	-	,4	-	,7	63,1
	2001	0,0	0,0	0,1	0,2	0,4	0,6	1,0	1,8	2,9		, <i>,</i> ,3	24,9
Republic of Belarus	1989	0,0	0,0	0,1	0,2	0,3	0,0	1,4	2,3	3,6	5,4	,3 7,8	23,2
nepublic of belalus	1999	0,0	_	,1		,3	-	,2		,7		,1	22,6
	2009	-	0,0	0,1	0,2	0,4	0,8	1,4	2,4	4,1	7,0	11,6	25,4
	2019	0,0	0,0	0,0	0,1	0,2	0,6	1,2	2,6	4,0	6,3	8,5	27,4
Republic of Georgia	1989	0,0	0,1	0,2	0,3	0,4	0,8	1,4	2,1	3,7	6,6	10,3	23,1
	2002	0,0	0,1	0,2	0,4	0,5	0,9	1,4	2,2	3,6	6,5	10,6	23,9
	2014	0,2	0,1	0,1	0,2	0,3	0,4	0,8	1,5	2,6	4,4	7,1	24,2
Republic of	1989	0,0	0,1	0,1	0,3	0,5	0,9	1,9	3,1	5,1	7,9	11,1	24,1
Kazakhstan	1999	0,0	0,1	0,3	0,5	0,7	1,2	2,0	3,3	6,2		,4	26,3
	2009	0,0	0,0	0,2	0,4	0,6	1,1	1,7	3,0	4,8	7,7	13,1	24,9
Kyrgyz Republic	1989	0,0	0,1	0,2	0,3	0,4	0,8	1,7	3,0	4,9	7,1	10,1	21,0
	1999		0,1	0,2	0,4	0,6	1,0	1,7	3,0	5,0	10	),5	23,5
	2009	0,0	0,1	0,2	0,3	0,5	0,9	1,5	2,8	4,6	10	),8	28,5
Latvian republic	1989	0,0	0,1	0,1	0,3	0,5	0,9	1,6	2,6	4,0	6,5	9,4	23,7
	2000	0,0	0,0	0,0	0,1	0,2	0,5	0,9	1,4	2,3	3,6	5,3	12,4
	2011	-	0,0	0,0	0,1	0,2	0,6	1,1	2,1	3,4	5,4	8,1	19,3
	2021	0,0	0,0	0,0	0,1	0,1	0,3	0,6	1,3	2,4	4,0	6,3	18,1
Republic of Lithuania	1989	0,0	0,1	0,1	0,3	0,5	1,0	1,6	2,4	3,6	5,5	7,8	21,5
	2001	-	0,0	0,1	0,2	0,5	0,9	1,6	2,7	4,3	6,3	8,9	19,5
	2011	_	0,0	0,0	0,1	0,3	0,7	1,3	2,2	3,7	5,7	8,7	20,1
Republic of Moldova	1989	0,0	0,1	0,2	0,3	0,5	0,9	1,9	3,3	5,3	8,8	13,5	28,8
	2004	0,0	0,0	0,1	0,3	0,6	1,1	1,9	3,4	5,2	10,0	16,3	32,8
	2014	0,0	0,1	0,1	0,3	0,6	1,0	1,8	3,3	6,0	9,7	14,3	33,3
Russian Federation	1989	0,0	0,1	0,1	0,2	0,4	0,8	1,6	2,5	4,2	6,5	9,4	22,4
	2002	0,0	0,0	0,1	0,3	0,6	1,1	1,8	3,1	4,8	8,6	11,9	24,7
	2010	0,0	0,0	0,1	0,3	0,5	1,0	1,7	2,8	4,3	7,3	11,9	25,8
Republic of Tajikistan	1989	0,0	0,2	0,4	0,4	0,6	0,8	1,7	3,2	5,4	8,2	11,3	22,1
	2000	_	0,3	1,0	1,4	1,4	1,5	2,0	2,9	4,6	8,9	14,2	26,2
	2010	0,1	0,2	0,5	0,9	1,0	1,2	1,5	2,1	3,2	5,4	9,0	25,3

<sup>&</sup>lt;sup>1</sup> Footnotes are similar to the table 2.1.1.

Country	Year						Age (	years)					
		15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70
		19	24	29	34	39	44	49	54	59	64	69	and
													more
Ukraine	1989	0,0	0,0	0,1	0,2	0,4	0,7	1,4	2,3	3,8	6,2	9,1	24,3
	2001	0,0	0,0	0,1	0,3	0,5	0,9	1,5	2,7	4,6	7,9	11,6	25,1
Estonian Republic	1989	0,0	0,1	0,1	0,2	0,4	0,9	1,4	2,5	4,1	6,4	9,4	22,9
	2000	0,0	0,0	0,1	0,2	0,5	0,9	1,3	2,5	4,1	6,4	10,0	21,1
	2011	0,0	0,1	0,1	0,1	0,2	0,4	0,9	1,7	2,9	4,8	7,1	18,8
					Wom	en							
Republic of	1989	0,1	0,4	1,0	2,1	4,2	7,1	11,6	17,0	26,1	40,6	56,0	78,9
Azerbaijan	1999	0,1	0,6	1,6	2,7	4,1	6,8	11,8	18,2	25,6	35,0	46,9	72,0
	2009	0,0	0,3	0,9	2,1	3,7	6,0	8,8	15,0	24,7	35,6	46,1	66,0
Republic of Armenia	1989	0,2	0,6	1,1	2,1	3,7	6,0	9,3	13,0	19,7	31,1	48,7	74,8
	2001	0,0	0,3	1,0	2,3	3,8	7	,2	18	3,0	34	1,4	21,5
	2011	0,0	0,2	0,5	1,3	2,9	5,2	8,2	12,0	18,7	32	2,9	61,5
Republic of Belarus	1989	0,1	0,2	0,5	1,0	2,1	4,2	8,0	12,0	19,1	29,2	43,6	75,4
	1999	0,0	0	,6	2	,2	6	,0	17	7,5	35	5,2	65,4
	2009	0,0	0,1	0,5	1,3	2,6	4,5	7,2	11,9	19,5	30,2	44,2	66,7
	2019	0,0	0,0	0,2	0,9	1,5	2,8	5,4	11,2	17,2	26,1	37,1	69,7
Republic of Georgia	1989	0,2	0,5	1,0	2,1	3,5	5,9	9,4	13,6	20,5	31,5	48,1	74,5
	2002	0,1	0,5	1,5	3,0	4,5	6,8	10,4	16,0	22,5	31,2	40,5	64,8
	2014	0,2	0,3	0,6	1,4	2,8	5,0	8,4	13,0	19,6	29,9	40,9	65,9
Republic of	1989	0,1	0,3	0,8	1,6	3,2	5,7	10,7	16,0	25,6	37,7	53,6	80,2
Kazakhstan	1999	0,1	0,8	1,7	2,7	4,2	6,6	10,7	17,0	27,3	42	2,1	73,2
	2009	0,0	0,3	0,9	2,1	3,7	6,2	9,5	15,1	23,3	33,6	46,7	66,0
Kyrgyz Republic	1989	0,1	0,4	0,9	1,9	3,7	6,0	10,6	15,4	24,5	37,5	54,1	79,7
	1999		0,4	1,1	2,3	3,9	7,0	11,8	17,2	26,6	<del>                                     </del>	),5	73,6
	2009	0,0	0,3	0,9	2,1	3,7	6,5	10,6	17,5	26,8	44	1,1	72,2
Republic of Latvia	1989	0,1	0,2	0,6	1,2	2,1	4,0	6,9	11,0	18,3	29,0	42,7	69,7
	2000	0,0	0,1	0,3	0,8	1,5	2,5	4,1	6,4	10,3	15,7	23,7	47,4
	2011	_	0,0	0,2	0,6	1,7	3,5	5,8	8,6	13,5	19,8	29,4	51,7
	2021	0,0	0,0	0,1	0,3	0,7	1,2	3,0	6,0	10,2	16,0	23,5	48,4
Republic of Lithuania	1989	0,1	0,2	0,6	1,3	2,5	4,4	7,5	11,8	18,5	28,2	41,4	67,9
	2001	0,0	0,2	0,9	1,9	3,1	4,8	7,9	12,5	19,2		37,6	61,6
	2011	0,0	0,1	0,3	0,9	2,2	3,9	6,3	9,7	15,5	23,8	34,1	59,6
Republic of Moldova	1989	0,1	0,5	0,9	1,7	3,3	5,9	10,3	15,5	23,8	34,5	48,1	74,1
	2004	0,0	0,2	0,8	1,7	3,0	5,2	8,9	15,0	22,8	35,7	46,1	69,4
	2014	0,1	0,4	0,7	1,3	2,7	4,8	8,5	14,4	22,5	33,8	45,7	70,8
Russian Federation	1989	0,1	0,3	0,7	1,3	2,5	4,3	8,5	12,8	21,5	31,9	45,7	75,6
	2002	0,0	0,3	1,1	2,2	3,7	5,6	8,7	13,7	20,6	32,6	42,8	66,3
	2010	0,0	0,2	0,7	1,6	2,9	5,1	8,1	12,9	20,3	30,5	44,0	66,8
Republic of Tajikistan	1989	0,1	0,5	1,1	1,8	3,0	5,2	8,8	13,3	21,6	36,5	53,0	76,5
	2000	0,2	1,7	3,4	4,7	5,7	7,7	11,2	17,1	23,6	32,3	42,9	72,0
	2010	0,2	0,8	2,0	3,7	5,2	7,2	10,1	14,7	22,4	33,0	43,4	64,8
Ukraine	1989	0,1	0,3	0,6	1,2	2,2	4,2	7,8	11,9	20,2	30,4	45,1	75,4
	2001	0,0	0,3	0,9	1,8	3,1	4,9	8,1	13,4	21,9	31,9	42,2	66,4
Republic of Estonia	1989	0,0	0,2	0,6	1,1	2,1	3,7	6,8	10,9	18,1	28,7	41,7	69,4
	2000	0,0	0,1	0,7	1,7	2,7	4,5	6,7	10,9	17,4	25,3	35,9	60,2
	2011	0,0	0,1	0,2	0,4	1,0	2,2	4,5	7,7	12,0	19,3	28,4	54,0

Proportion of male widows in the 1990s increased in all or individual ages in all countries in the post-Soviet space for which there are relevant data, except for the Republic of Latvia.

In all other countries, the proportion of male widows increased in the 1990s in certain age groups. In the Republic of Tajikistan this happened in all age groups up to 50 years old and at 60

years old and older, in the Republic of Kazakhstan – from 25–29 years old, Georgia – at 30–44 years old and 50–54 years old, at 65 years old and older, Ukraine – from 30–34 years old, Kyrgyz Republic – at 30–44 years old and from 55–59 years old, Republic of Moldova – at 35–44 years old and 60 years old and older, Republic of Belarus – from 50–59 years old, Azerbaijan Republic – at 55–59 years old and 65 years old and older, Republic of Estonia – from 65–69 years old, Republic of Armenia – 70 years old and older.

If we talk about relatively early widowhood, according to the population censuses of the late 1990s – early 2000s, the highest proportion of widows among men aged 50–54 was in the Republic of Moldova (3.4%), the Republic of Kazakhstan (3.3%), Russian Federation (3.1%), Kyrgyz Republic (3%). In the Republic of Belarus it is 3.7%, but it belongs to the age group 50–59 years old (Table 2.1.6).

Among women in the Russian Federation, the proportion of widows in 2002 was higher than in 1989. Moreover, starting not from the age of 30, as among men, but from the age group of 25–29 years. However, at the age of 55–59 and 65 and older the proportion of widowed women, on the contrary, in 2002 was less than in 1989. As noted above, the proportion of widowers in men aged 60 and older in 2002 increased in comparison with 1989. As a result of multidirectional trends in women and men, the differences between them in the proportion of widows decreased slightly, but were very significant: 55–59 years – 20.6% for women and 4.8 % among men, 60–64 years old – 32.6% and 8.6%, respectively, 65–69 years old – 42.8% and 11.9%, 70 years old and older – 66.3% and 24.7% (Table 2.1.6).

In the Republic of Kazakhstan and the Kyrgyz Republic the proportion of widowed women, according to the 1999 census was higher than in 1989 between the ages of 20 and 60. In Ukraine, its growth was at the age of 25 to 65 years, in the Republic of Lithuania – from 25 to 60 years, in the Republic of Estonia – from 25 to 45 years.

The relatively most significant increase in the proportion of widowed women in 2000 compared to 1989 was in the Republic of Tajikistan.

In the Republic of Latvia, the proportion of widowed women in 2000 was lower than in 1989 in all age groups. In the Republic of Moldova (2004 census) this was the case for all ages except 60–64 years.

Among those countries in the post-Soviet space for which there is data on the marital composition of the population according to the censuses of the late 1990s – early 2000s, in almost all age groups under 60 the largest share of widowed women is in the Republic of Azerbaijan, Republic of Kazakhstan, Kyrgyz Republic and Republic of Tajikistan. On the other hand, it is relatively lower in the Republic of Estonia and the Republic of Latvia (Table 2.1.6).

The proportion of widows among men and women has decreased in almost all countries in the post-Soviet space, according to the population censuses of the 2010s round compared to the late 1990s – early 2000s. (Table 2.1.6).

A slight increase took place only in older ages: in the Russian Federation at 65 years and older for women, in the Kyrgyz Republic at 65 years and older for men and at 50–69 years for women, in the Republic of Tajikistan – only for women at 60 -69 years old.

In the Republic of Latvia, there was an increase in the proportion of widows, according to the 2011 census compared to 2000 for men over 40 and women over 35. However, in the next decade, the proportion of widows in the Republic of Latvia has decreased at all ages for both men and women.

In the Republic of Belarus, there was also a decrease in the proportion of widows according to the results of the 2019 population census compared to 2009.

For men, the differences in the proportion of widows in post-Soviet countries are relatively small. Among women, they are more significant. Already in the 45-49 age group the proportion of widows among women in the Kyrgyz Republic (10.6%) and the Republic of Tajikistan (10.1%) exceeds 10%. At the same time, in the Republic of Lithuania among women of this age

widows account for 6.3% in the Republic of Latvia – 5.8%, in the Republic of Estonia – 4.5%. In the Russian Federation, according to the 2010 census, this figure is 8.1%. The relatively smaller increase in the proportion of widows at mature ages in the Baltic countries leads to an even greater differentiation. For example, at the age of 55–59 the proportion of widows among women in the Russian Federation, according to the 2010 census, is 20.3%. It is less in the Republic of Belarus (19.5%) and the Republic of Armenia (18.7%), even significantly less in the Republic of Lithuania (15.5%), Republic of Latvia (13.5%) and the Republic of Estonia (12%). At the same time, in the Republic of Tajikistan, the share of widows among 55–59 year-old women is 22.4%, in the Republic of Moldova – 22.5%, in the Republic of Kazakhstan – 23.3%, in the Republic of Azerbaijan – 24.7%, in The Kyrgyz Republic – 26.8% (Table 2.1.6).

The presented analysis of changes in the marriage composition of the population in the countries of the post-Soviet space has shown both general trends in its change and the continuing differentiation. The general trends include, first of all, a significant reduction in the proportion of never married, which indicates an increase in the age at first marriage.

Changes in the proportion of divorced and widowed people in many ways affect the formation of the so-called secondary marriage market. Its expansion creates more opportunities for remarriage. But it can also influence the behavior of spouses in marriage – an increase in opportunities for a new marriage can weaken the influence of factors that keep the marriage already existing. This necessitates a family-demographic policy, focused primarily on strengthening the family, but also on helping those whose marriage has broken up in creating a new family.

First of all, such help is in a demand for women. An analysis of the marital composition showed that there are significantly more divorced and widowed women. First, it indicates that they are less likely to remarry. Secondly, the problem of female widowhood at a comparatively young age is caused by a significantly higher mortality rate for men. Thus, solving the problem of reducing mortality and increasing life expectancy will also contribute to the reduction of widowhood, the preservation of marriages and families.

# 2.2. Family and family relations

Population censuses provide statistics on families, their size, types and other characteristics. This explains, firstly, that this study is limited to the 2010 round of censuses. (there are no more recent data, except for the Republic of Belarus) and secondly, that not all countries of the post-Soviet space provide relevant information. There was no population census in the Republic of Uzbekistan. For the Republic of Azerbaijan, Republic of Georgia and Turkmenistan, there is no available data on families from population censuses. For the Republic of Tajikistan, these data are not available for the 2000 census and for the Republic of Moldova – 2014.

The countries of the post-Soviet space differ significantly both in terms of family size and its dynamics (Table 2.2.1).

Table 2.2.1. Distribution of families by size (in %)

										`	
Country	Year					f famil	y men			-	Average
		2	3	4	5	6	7	8	9	10 and	family size,
										more	persons
Republic of Armenia	1989 <sup>1</sup>	12,5	13,9	26,3	20,7	12,9	6,2	3,2	1,5	2,7	4,67
	2001 <sup>2</sup>	13,3	14,7	25,1	21,3	13,6	6,7	2,6	1,3	1,5	4,54
	2011 <sup>3</sup>	14,8	17,1	24,7	19,0	13,4	7,0	1,8	1,0	1,2	4,40
Republic of Belarus	1989	34,8	27,4	26,7	7,6	2,4	0,7	0,2	0,1	0,1	3,20
	1999 <sup>4</sup>	35,5	30,1	25,2	6,4	1,9	0,6	0,2	0,1	0,0	3,12
	20095	39,8	31,5	19,7	6,2	2,0	0,6		0	,3	3,02
	2019 <sup>6</sup>	48,5	26,8	16,8				7,9			2,88
Republic of	1989	22,7	22,3	25,4	13,6	7,2	4,0	2,3	1,2	1,4	3,97
Kazakhstan	1999 <sup>7</sup>	22,6	22,7	23,5	14,1	8,5	4,0	2,1	1,1	1,3	3,98
	2009 <sup>8</sup>	30,1	26,7	22,9	11,7	5,6	1,9	0,6	0,2	0,2	3,46
Republic of Kyrgyzstan	1989	17,0	17,3	20,8	15,3	11,0	7,5	4,8	2,8	3,5	4,67
	1999 <sup>9</sup>	14,5	16,0	20,0	18,1	13,9			17,5		4,73
	200910	12,0	14,5	19,1	19,4	14,9			20,1		4,99
Republic of Latvia	1989	37,8	28,7	22,5	7,5	2,3	0,8	0,2	0,1	0,1	3,12
	200011	48,0	28,2	17,8	4,4	1,0	0,3	0,1	0,1	0,0	2,84
	201112	51,9	28,3	15,3	3,4	0,7	0,2	0,1	0,0	0,0	2,74
	202113	54,3	26,5	14,0	4,0	0,8	0,2	0,1	0,0	0,0	2,72

<sup>&</sup>lt;sup>1</sup> Calculated according to: Results of the All-Union Population Census of 1989. Volume III. The number and composition of families in the USSR, WITH, 8-49.

<sup>&</sup>lt;sup>2</sup> Calculated by URL: <a href="https://www.armstat.am/census2001/pdfs/73.pdf">https://www.armstat.am/census2001/pdfs/73.pdf</a>

<sup>&</sup>lt;sup>3</sup> Calculated by: Results of the 2011 Census Republic of Armenia. URL: https://www.armstat.am/file/doc/99484963.pdf

<sup>&</sup>lt;sup>4</sup> Calculated by URL: https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomika-i-okruzhayushchaya-sreda/perepisnaseleniya/perepis-naseleniya-1999/tablichnye-dannye/chislo-domokhozyaystv-respubliki-belarus-i-gruppirovka-ikh-porazmeru-v-1999-godu/

<sup>&</sup>lt;sup>5</sup> Calculated from: Population Census 2009. Volume V. Part I. Number and composition of households in the Republic of Belarus. Minsk, 2011. P. 150-151. URL: https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomika-i-okruzhayushchayasreda/perepis-naseleniya/perepis-naseleniya-2009/statisticheskie-izdaniya/statisticheskie-sborniki/index\_543/

<sup>&</sup>lt;sup>6</sup> Calculated from: Number and composition of households in the Republic of Belarus. Minsk, 2021. P. 11, 32 URL: https:// www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public\_bulletin/index\_21656/

Calculated by: Population of the Republic of Kazakhstan as of marriage. Results of the 1999 population census in the Republic of Kazakhstan. Almaty, 2000. URL: https://stat.gov.kz/search/item/WC16200032646

<sup>&</sup>lt;sup>8</sup> Calculated by: Marriage and Family. Results of the 2009 National Population Census in the Republic of Kazakhstan. Astana, 2010. P. 171. URL: https://stat.gov.kz/for\_users/national/2009/general

<sup>&</sup>lt;sup>9</sup> Calculated according to: 2009 Population and Housing Census of the Kyrgyz Republic. Book V. Households and families of Kyrgyzstan. Bishkek, 2011. P. 262. URL: http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf

<sup>10</sup> Calculated according to: 2009 Population and Housing Census of the Kyrgyz Republic. Book V. Households and families of Kyrgyzstan. Bishkek, 2011. P. 263. URL: <a href="http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf">http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf</a>

<sup>11</sup> Calculated by: LATVIJAS 2000. GADA TAUTAS SKAITĪŠANAS REZULTĀTI. Statistikas datu krājums. Rīga, 2002. P. 207. URL: <a href="https://istmat.info/files/uploads/52051/perepis\_naseleniya\_2000\_latviya.pdf">https://istmat.info/files/uploads/52051/perepis\_naseleniya\_2000\_latviya.pdf</a>

<sup>&</sup>lt;sup>12</sup> Calculated by URL: <a href="https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START">https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START</a> POP MV MVG/MVG010

<sup>13</sup> Calculated by URL: <a href="https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START">https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START</a> POP MV MVG/MVG010

Country	Year		The number of family members (people)							e)	Average
		2	3	4	5	6	7	8	9	10 and	family size,
										more	persons
Republic of Lithuania	1989	33,8	28,7	25,5	8,0	2,6	0,9	0,3	0,1	0,1	3,22
	2001 <sup>1</sup>	35,7	28,2	24,5	7,8	2,5	0,8	0,3	0,1	0,1	3,18
	2011 <sup>2</sup>	41,3	28,1	21,3				9,3			3,03
Republic of Moldova	1989	30,7	25,5	26,8	11,1	3,9	1,3	0,4	0,2	0,1	3,39
	2004³	28,6	26,7	26,2	11,4	4,5	1,5	0,6	0,2	0,3	3,47
Russian Federation	1989	34,2	28,0	25,2	8,3	2,7	0,9	0,3	0,1	0,1	3,23
	20024	35,5	30,6	21,8	7,4			4	,7		3,20
	20105	38,4	30,3	19,5	7,2			4	,6		3,13
Republic of Tajikistan	1989	11,2	11,4	14,4	12,9	11,9	10,0	8,1	6,1	14,0	6,10
	2010 <sup>6</sup>	5,6	7,7	13,2	16,7	17,6	11,9	8,2	5,0	14,1	6,46
Ukraine	1989	35,1	27,1	24,1	8,6	3,5	1,1	0,4	0,1	0,1	3,24
	2001 <sup>7</sup>	35,6	29,8	21,5				13,1			3,19
Republic of Estonia	1989	38,1	27,6	23,7	7,4	2,1	0,7	0,2	0,1	0,1	3,11
	20008	40,6	29,1	20,9	6,7	1,9	0,6	0,2	0,1	0,1	3,03
	2011 <sup>9</sup>	46,8	27,0	18,1	5,9	1,6	0,5	0,1	0,1	0,0	2,91

The smallest families are in the Republic of Latvia. In 2021, the average family size was 2.72, a significant (by 0.40) decrease compared to 1989 (3.12). Less than 3 people, are recordered in families in the Republic of Belarus (2019 - 2.88) and the Republic of Estonia (2011 - 2.91). Compared to 1989, the average family size in them decreased by 0.32 and 0.20 respectively. If in the Republic of Latvia greatest decline occurred between the 1989 and 2000 population censuses (by 0.28), then in the Republic of Belarus it was growing: between the population censuses of 1989 and 1999 for 0.08, 1999 and 2009 - 0.10, 2009 and 2019 - 0.14. In the Republic of Estonia, the decrease in the average family size between the 2000 and 2011 censuses (by 0.12) was also more significant than between 1989 and 2000 (by 0.08).

In the Republic of Latvia, the share of 2-person families has significantly increased (from 37.8% in 1989 to 54.3% in 2021). The shares of all other families have declined. Moreover, in large families in terms of the number of people, this reduction was relatively more significant: out of 3 people – from 28.7% to 26.5%, out of 4 people – from 22.5% to 14.0%, out of 5 or more people – from 11.0% to 5.1% (in 2021 the share of such families was slightly higher than in 2011 (4.4%)).

In the Republic of Belarus, the share of families of 2 people increased from 34.8% in 1989 to 48.5% in 2019 (over half of this increase (8.7% points) occurred between 2009 and 2019). The proportion of families of 3 increased between 1989 and 2009 (from 27.4% to 31.5%), but accord-

 $<sup>^1</sup>$  Calculated by: NAMŲ ŪKIAI. HOUSEHOLDS. Vilnius, 2003. P. 26–27, 66. URL:  $\underline{\text{https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=4235}}$ 

<sup>&</sup>lt;sup>2</sup> Calculated by: Lietuvos Respublikos 2011 metų gyventojų ir būstų surašymo rezultatai. Vilnius, 2013. P. 358. URL: <a href="https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=2348">https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=2348</a>

<sup>&</sup>lt;sup>3</sup> Calculated by: Recensămîntul populației din anul 2004. Vol. 3. Gospodării casnice. Caracteristici socioeconomice. Chișinău, 2007. P. 28–29, 91–94. URL: <a href="https://statistica.gov.md/pageview.php?l=r%D0%B3&idc=263&id=2208">https://statistica.gov.md/pageview.php?l=r%D0%B3&idc=263&id=2208</a>

<sup>&</sup>lt;sup>4</sup> Calculated according to: Results of the All-Russian Population Census of 2002 Vol. 6. Number and composition of households. URL: http://www.perepis2002.ru/ct/html/TOM 06 02.htm

<sup>&</sup>lt;sup>5</sup> Calculated by: Results of the All-Russian Population Census of 2010. Vol. 6. Number and composition of households. p. 21. URL: https://gks.ru/free\_doc/new\_site/perepis2010/croc/Documents/Vol6/pub-06-03.pdf

<sup>&</sup>lt;sup>6</sup> Calculated according to: 2010 Population and Housing Census of the Republic of Tajikistan. The number and composition of households in the Republic of Tajikistan. Volume V. Dushanbe, 2012. pp. 6–7. URL: <a href="http://oldstat.ww.tj/ru/img/526b8592e83">http://oldstat.ww.tj/ru/img/526b8592e83</a> 4fcaaccec26a22965ea2b 1355501252.pdf

<sup>&</sup>lt;sup>7</sup> Calculated by URL: <a href="http://2001.ukrcensus.gov.ua/eng/results/households/h72?data1=1&box=7.2W&k\_t=00&id=&botton=cens\_db2;">http://2001.ukrcensus.gov.ua/eng/results/households/h72?data1=1&box=7.2W&k\_t=00&id=&botton=cens\_db2;</a>
<a href="http://2001.ukrcensus.gov.ua/eng/results/households/househol

<sup>8</sup> Calculated by URL: <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2000\_leibkonnad-rahvastik-leibkondades\_leibkonnad/RL512">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2000\_leibkonnad-rahvastik-leibkondades\_leibkonnad/RL512</a>

<sup>&</sup>lt;sup>9</sup> Calculated by URL: <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0706">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0706</a>; <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0716">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0706</a>; <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0706">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0706</a>; <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0706">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0706</a>; <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0716">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0716</a>

ing to the 2019 census (26.8%) was already lower than in 1989. The share of families of 4 people decreased from 26.7% in 1989 to 16.8% in 2019 and out of 5 or more people – from 11.1% to 7.9%.

In the Republic of Estonia, the share of families of 2 people increased from 38.1% in 1989 to 46.8% in 2011 (the main increase in the 2000s). The share of families of 3 people increased in 2000 (from 27.6% in 1989 to 29.1%), but in 2011 (27.0%) decreased to a level lower than in 1989 share of families of 4 (from 23.7% in 1989 to 18.1% in 2011) and 5 or more (from 10.5% to 8.2%) people.

Slightly more than 3 people are the average family size in the Republic of Lithuania (3.03), the Russian Federation (3.13) and Ukraine (3.19; data refer to 2001). In these countries, the average family size in 1989 was practically the same: 3.22, 3.23 and 3.24, respectively. Its decline in the 1990s was also almost the same: Republic of Lithuania – by 0.04, Russian Federation – by 0.03, Ukraine – by 0.05. In the 2000s the decrease in the average family size was more significant in the Republic of Lithuania (by 0.15) it was twice as large as in the Russian Federation (by 0.07).

In the Russian Federation, the proportion of families of 2 people increased (from 34.2% in 1989 to 38.4% in 2010) and significantly decreased – of 4 people (from 25.2% to 19.5%). The share of families of 3 people in 2010 (30.3%) was slightly higher than in 1989 (28.0%) and of 5 or more people – slightly less (11.8% and 4%).

In the Republic of Lithuania, the main changes in the distribution of families by the number of people can be observed in a significant increase in the share of families of 2 people (from 33.8% in 1989 to 41.3% in 2011) and a decrease in families of 4 (from 25.5% to 21.3%) and 5 or more (from 12.0% to 9.3%) people. The share of families of 3 people during this period decreased very slightly (from 28.7% to 28.1%).

In Ukraine in 2001, in comparison with 1989, the share of families of 2 (from 35.1% to 35.6%) and 3 (from 27.1% to 29.8%) people, the share of families of 4 (from 24.1% to 21.5%) and 5 and more (from 13.7% to 13.1%) decreased.

In the Republic of Kazakhstan and the Republic of Moldova, the average family size, according to the latest available data, is practically the same – 3.46 and 3.47, respectively (it should be noted that the data for the Republic of Moldova refer to 2004). At the same time, in the Republic of Kazakhstan, the average family size decreased from 3.97 in 1989 and 3.98 in 1999 to 3.46 in 2009, and in the Republic of Moldova it increased from 3.39 in 1989 to 3.47 in 2004.

In the Republic of Kazakhstan, the share of families of 2 (from 22.7% in 1989 to 30.1% in 2009) and 3 (from 22.3% to 26.7%) people (an increase occurred in the 2000s) increased. However, it decreased for families of 4 (from 25.4% to 22.9%) and 5 or more (from 29.6% to 20.2%).

In the Republic of Moldova, the share of families of 2 people decreased from 30.7% in 1989 to 28.6% in 2004. The share of families consisting of 4 people also decreased (from 26.8% to 26.2%). The share of families of 3 people increased from 25.5% to 26.7%, and of 5 or more people – from 17.0% to 18.5%.

In the Republic of Armenia, the average family size decreased from 4.67 in 1989 to 4.40 in 2011. The share of families consisting of 2 (from 12.5% to 14.8%) and 3 (from 13.9% to 17.1%) people and the main decrease occurred in the share of families of 8 or more people (from 7.4% to 4.0%).

In the Kyrgyz Republic and the Republic of Tajikistan, in contrast to most countries in the post-Soviet space, the average family size has increased compared to the 1989 census data.

In the Kyrgyz Republic, it increased from 4.67 in 1989 to 4.99 in 2009 (the main increase (0.26) occurred in the 2000s). During this period, the share of families of 2 (from 17.0% to 12.0%), 3 (from 17.3% to 14.5%) and 4 (from 20.8% to 19.1%) people decreased. At the same time, increased the share of families of 5 (from 15.3% to 19.4%), 6 (from 11.0% to 14.9%) and

7 and more (from 18.6% to 20.1%) people. Moreover, the share of families of 7 or more people declined in the 1990s and increased significantly in the 2000s.

An even more significant increase in the average family size occurred in the Republic of Tajikistan – from 6.10 in 1989 to 6.46 in 2010. On average, the largest families among all countries in the post-Soviet space for which information is available. In 2010 it was significantly lower than in 1989 the share of families consisting of 2 (5.6% and 11.2% respectively), 3 (7.7% and 11.4%) and 4 (13, 2% and 14.4%) people and, conversely, the share of families of 5 (16.7% and 12.9%), 6 (17.6% and 11.9%) and 7 (11.9% and 10.0%) people. At the same time, the share of families of 8 (1999 – 8.1%, 2010 – 8.2%) and 10 or more (14.0% and 14.1%) people practically did not change, and out of 9 people it decreased (from 6.1% to 5.0%).

In a situation of multidirectional dynamics of the average family size (an increase in the Kyrgyz Republic and the Republic of Tajikistan and a decrease in most other countries), the differences in the value of this indicator in countries in the post-Soviet space increased (Table 2.2.1).

Differences in family size can be observed due to both different birth rates and the number of children in the family (Table 2.2.2) and the ratio of the number of parents with children and extended multigenerational families (Table 2.2.3).

One of the most important demographic characteristics of a family is the number of children. It should be noted that in the course of population censuses in the USSR and countries in the post-Soviet space, data are traditionally developed on the presence and number of minor children (under the age of 18). Therefore, the share of families without children does not indicate the level of childlessness from the point of view of assessing the birth rate. In some of these families children have not yet been born and in most cases all children are already at the age of 18 and older.

Among all countries in the post-Soviet space the average number of children in a family has decreased.

The largest decrease in the average number of children in a family took place in the Republic of Armenia. In all families it decreased from 1.68 in 1989 to 1.07 in 2011, and for families with children – from 2.23 to 1.82. A significantly greater decrease in the first indicator is due to the fact that the share of families without children under 18 years of age has significantly increased (from 24.9% to 41.5%).

Among the countries for which information is available, the highest average number of children under 18 in families is in the Republic of Tajikistan. This can be observed from the distribution of families by the number of children, but it is impossible to calculate correctly the average indicator from the available data.

In the Kyrgyz Republic the average number of children under 18 in a family in 2009 for all families was 1.90, and for families with children – 2.41. Compared to 1989, it decreased by 0.17 and 0.26 respectively. In contrast to the Republic of Armenia, the second indicator has decreased here more significantly. The proportion of families without children in 2009 was even less than in 1989, but the proportion of families with 1–2 children increased and decreased from 3 or more.

More than two children under 18 years old per family with children in 1999 was in the Republic of Kazakhstan (2.02). For all families this indicator was 1.45. Compared to 1989, the decrease was 0.13 and 0.09, respectively. The share of families with 1 child has increased and the share of families with 2 and 3 or more children has decreased.

In the Republic of Moldova, according to the 2004 census, the average number of children under the age of 18 in a family was 0.94 for all families and 1.62 for families with children. Compared to 1989 the decrease was 0.22 and 0.18 respectively. The proportion of families without children under 18 and with 1 child has increased, and the proportion of families with 2 and 3 or more children has significantly decreased.

### Distribution of families by the number of children under 18 (in %)

Country	Year	The presence	e of chil	dren under	Average number of children			
				age				
		No children	1 child	2 children	3 and	For all	For families with	
					more	families	children	
Republic of Armenia	1989¹	24,9	19,8	30,0	25,3	1,68	2,23	
	2011 <sup>2</sup>	41,5	23,2	25,4	9,9	1,07	1,82	
Republic of Belarus	1989	42,5	27,8	24,7	5,1	0,94	1,64	
	2009 <sup>3</sup>	55,4	29,7	12,6	2,3	0,63	1,40	
Republic of	1989	28,6	25,3	26,0	20,0	1,54	2,15	
Kazakhstan	1999 <sup>4</sup>	28,6	28,3	24,5	18,7	1,45	2,02	
Republic of	1989	22,6	20,8	22,5	34,0	2,07	2,67	
Kyrgyzstan	1999⁵	18,8	21,5	23,5	36,2	2,06	2,54	
	2009 <sup>6</sup>	21,3	22,5	23,8	32,4	1,90	2,41	
Republic of Lithuania	1989	42,5	29,0	22,8	5,7	0,94	1,63	
	2001 <sup>7</sup>	47,0	28,0	19,9	5,2	0,85	1,60	
	20118	54,3	27,1	15,0	3,6	0,69	1,51	
Republic of Moldova	1989	35,3	27,9	26,0	10,7	1,16	1,80	
	2004 <sup>9</sup>	41,9	30,8	20,8	6,5	0,94	1,62	
Russian Federation	1989	41,6	29,7	23,0	5,7	0,95	1,63	
	200210	48,3	33,8	14,6	3,4	0,75	1,44	
	201011	55,9	28,9	12,1	3,1	0,64	1,44	
Republic of Tajikistan	1989	14,4	15,0	17,3	53,2	3,09	3,61	
	2010 <sup>12</sup>	11,4	15,4	20,7	52,5	13		
Republic of Estonia	1989	43,3	28,7	22,1	5,9	0,93	1,63	
	200014	47,0	30,1	17,5	5,3	0,83	1,57	
	201115	56,9	24,6	14,3	4,2	0,67	1,56	

<sup>&</sup>lt;sup>1</sup> Calculated according to: Results of the All-Union Population Census of 1989 Volume III. The number and composition of families in the USSR. pp. 50-81.

<sup>&</sup>lt;sup>2</sup> Calculated by: Results of the 2011 Census Republic of Armenia. URL (https://www.armstat.am/file/doc/99484983.pdf)

<sup>&</sup>lt;sup>3</sup> Calculated according to: 2009 Population Census. Volume V. Part I. The number and composition of households in the Republic of Belarus. Minsk, 2011. pp. 150-151. URL: https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomikai-okruzhayushchaya-sreda/perepis-naseleniya/perepis-naseleniya-2009/statisticheskie-izdaniya/statisticheskie-sborniki/ index\_543/

<sup>&</sup>lt;sup>4</sup> Calculated by: Households of the Republic of Kazakhstan. Results of the National Population Census of the Republic of Kazakhstan 2009 Volume 1. Astana, 2011. pp. 5, 26. URL: https://stat.gov.kz/for\_users/national/2009/general

<sup>&</sup>lt;sup>5</sup> Calculated according to: Population and Housing Census of the Kyrgyz Republic 2009 Book V. Households and families of Kyrgyzstan. Bishkek, 2011. p. 98,270. URL: http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf

<sup>&</sup>lt;sup>6</sup> Calculated according to: Population and Housing Census of the Kyrgyz Republic 2009 Book V. Households and families of Kyrgyzstan. Bishkek, 2011. p. 271. URL: http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf

Calculated by: NAMU UKIAI. HOUSEHOLDS, Vilnius, 2003, P. 140, URL; (https://osp.stat.gov.lt/services-portlet/pubedition-file?id=4235

Calculated by: Lietuvos Respublikos 2011 metų gyventojų ir būstų surašymo rezultatai. Vilnius, 2013. P. 362. URL: https:// osp.stat.gov.lt/services-portlet/pub-edition-file?id=2348

Calculated by: Recensămîntul populației din anul 2004. Vol. 3. Gospodării casnice. Caracteristici socioeconomice. Chişinău, 2007. P. 91–96. URL: https://statistica.gov.md/pageview.php?l=r%D0%B3&idc=263&id=2208

<sup>&</sup>lt;sup>10</sup> Calculated according to: Results of the All-Russian Population Census of 2002 Vol. 6. Number and composition of households. URL: http://www.perepis2002.ru/ct/html/TOM 06 02.htm

<sup>11</sup> Calculated according to: Results of the All-Russian Population Census 2010 Vol. 6. Number and composition of households.

p. 21. URL: https://gks.ru/free\_doc/new\_site/perepis2010/croc/Documents/Vol6/pub-06-03.pdf

12 Calculated according to: Population and Housing Census of the Republic of Tajikistan 2010. Number and composition of households of the Republic of Tajikistan. Volume V. Dushanbe, 2012. p. 328. URL: http://oldstat.ww.tj/ru/img/526b8592e834 fcaaccec26a22965ea2b 1355501252.pdf

Based on the available data, the correct calculation of the average number of children is impossible

<sup>&</sup>lt;sup>14</sup> Calculated URL: https://andmed.stat.ee/en/stat/rahvaloendus rel2000 leibkonnad-rahvastik-leibkondades leibkonnad/RL515/table/tableViewLayout1; https://andmed.stat.ee/en/stat/rahvaloendus rel2000 leibkonnad-rahvastikleibkondades leibkonnad/RL512

<sup>&</sup>lt;sup>15</sup> Calculated by URL: <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0727">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2011\_leibkonnad/RL0727</a>

#### Distribution of families by type (in %)

Country	Year		Families consisting of:									
		one married couple with and without childrenv	one married couple with and without children, with one of the spouses' parents	one married couple with or without children, with one of the spouses' parents (or with- out him) and with other rela- tives	two or more married couples with children and without children, with one of the parents of the spouses (or without him) and with other relatives (or without them)	mothers with children	father with children	mothers with children, with one of the mother's (father's) parents	father with children, with one of the parents of the father (mother)	other families		
Republic of	1989¹	73,0	5,2	4,4	3,1	10,0	0,8	1,2	0,1	2,2		
Belarus	1999 <sup>2</sup>	68,2		9,0	2,5	13,1	1,2	1,5	0,1	4,3		
	2009³	62,2		9,8	3,3	15,9	1,8	2,9	0,3	3,8		
	2019 <sup>4</sup>	57,9		8,6		19,4	3,9	2,0	0,5	7,8		
Republic of	1989	63,7	5,9	8,9	5,1	10,4	0,9	1,4	0,2	3,5		
Kazakhstan	1999⁵	59,0		13,1 <sup>6</sup>	11,4 <sup>7</sup>	12,7	1,2			2,68		
Republic of	1989	59,9	5,9	10,9	8,8	8,3	0,9	1,3	0,3	3,7		
Kyrgyzstan	1999 <sup>9</sup>	57,8	6,6	8,7	8,6	9,4	1,1	3,2 <sup>10</sup>	0,411	4,2		
	200912	50,7	5,3	11,7	13,1	9,2	1,2	4,213	0,514	4,0		
Republic of	1989	74,1	4,4	4,4	3,6	9,2	1,0	1,1	0,1	2,0		
Moldova	200415	67,9	4,7	6,2	5,0	10,9	1,8	1,4	0,2	2,1		

<sup>&</sup>lt;sup>1</sup> Calculated according to: Results of the All-Union Population Census of 1989 Volume III. The number and composition of families in the USSR. pp. 82–129. URL:

<sup>&</sup>lt;sup>2</sup> URL: <a href="https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomika-i-okruzhayushchaya-sreda/perepis-naseleniya/perepis-naseleniya-1999/tablichnye-dannye/struktura-semey-respubliki-belarus-po-tipam/">https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomika-i-okruzhayushchaya-sreda/perepis-naseleniya/perepis-na

<sup>&</sup>lt;sup>3</sup> Calculated according to: 2009 Population Census. Volume V. Part I. The number and composition of households in the Republic of Belarus. Minsk, 2011. pp. 150–155. URL: <a href="https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomika-i-okruzhayushchaya-sreda/perepis-naseleniya/perepis-naseleniya-2009/statisticheskie-izdaniya/statisticheskie-sborniki/index\_543/">https://www.belstat.gov.by/ofitsialnaya-statistika/makroekonomika-i-okruzhayushchaya-sreda/perepis-naseleniya/perepis-naseleniya-2009/statisticheskie-izdaniya/statisticheskie-sborniki/index\_543/</a>

<sup>&</sup>lt;sup>4</sup> Calculated by: Number and composition of households of the Republic of Belarus. Minsk, 2021. p. 31. URL: <a href="https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public\_bulletin/index\_21656/">https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public\_bulletin/index\_21656/</a>

<sup>&</sup>lt;sup>5</sup> Calculated by: Households of the Republic of Kazakhstan. Results of the National Population Census of the Republic of Kazakhstan in 2009. Volume 1. Astana, 2011. pp. 4–5. URL: https://stat.gov.kz/for\_users/national/2009/general

<sup>&</sup>lt;sup>6</sup> Based on the available information, these families include households from the same nuclear family and other related and unrelated persons, i.e. they probably include mothers and fathers with children with one of the mother's (father's) parents.

<sup>&</sup>lt;sup>7</sup> Based on the available information, these families include households: from two or more related nuclear families without other persons; from two or more related nuclear families and other persons related and unrelated; from two or more nuclear families unrelated, and other persons or without them.

<sup>&</sup>lt;sup>8</sup> Based on the available information, these families include households: related persons who do not form a nuclear family; related persons who do not form a nuclear family, and other persons who are not related.

<sup>&</sup>lt;sup>9</sup> Calculated according to: Population and Housing Census of the Kyrgyz Republic 2009 Book V. Households and families of Kyrgyzstan. Bishkek, 2011. pp. 22–24, 270. URL: <a href="http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf">http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf</a>

<sup>&</sup>lt;sup>10</sup> Including families without parents of the mother (father), with other relatives

<sup>&</sup>lt;sup>11</sup> Including families without parents of the mother (father), with other relatives

<sup>&</sup>lt;sup>12</sup> Calculated according to: Population and Housing Census of the Kyrgyz Republic 2009 Book V. Households and families of Kyrgyzstan. Bishkek, 2011. pp. 23, 25, 271. URL: <a href="http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf">http://www.stat.kg/media/files/3a28b843-ebf7-41fd-a70b-50c8236d0ef2.pdf</a>

Including families without parents of the mother (father), with other relatives

<sup>&</sup>lt;sup>14</sup> Including families without parents of the mother (father), with other relatives

<sup>&</sup>lt;sup>15</sup> Calculated by: Recensămîntul populației din anul 2004. Vol. 3. Gospodării casnice. Caracteristici socioeconomice. Chişinău, 2007. P. 91–96. URL: <a href="https://statistica.gov.md/pageview.php?l=r%D0%B3&id=263&id=2208">https://statistica.gov.md/pageview.php?l=r%D0%B3&id=263&id=2208</a>

Country	Year		Families consisting of:									
		one married couple with and without childrenv	one married couple with and without children, with one of the spouses' parents	one married couple with or without children, with one of the spouses' parents (or with- out him) and with other rela- tives	two or more married couples with children and without children, with one of the parents of the spouses (or without him) and with other relatives (or without them)	mothers with children	father with children	mothers with children, with one of the mother's (father's) parents	father with children, with one of the parents of the father (mother)	other families		
Russian	1989	66,9	6,0	5,4	3,4	12,2	1,0	1,8	0,2	3,1		
Federation	2002 <sup>1</sup>	54,9	5,0	2,8	3,3	13,7	1,5	2	,8	16,1		
	2010 <sup>2</sup>	52,1	4,6	9,2	3,4	13,8	1,7	3	,1	12,1		
Republic of	1989	55,8	5,9	8,6	18,9	6,6	0,9	0,9	0,2	2,2		
Tajikistan	2010 <sup>3</sup>	45,2	3,8	10,8	24,0	5,2	0,6	0,0	0,0	10,4		
Ukraine	1989	65,3	7,2	5,7	5,4	10,6	1,0	1,7	0,2	2,8		
	20014	56,6	1,9	13,0	4,9	13,1	1,5	2,4	0,2	6,5		
Republic of	1989	66,1	4,4	4,7	1,9	15,8	1,5	1,8	0,2	3,6		
Estonia	20005	67,8	3,0	3,2	0,9	17,7	1,5	1,5	0,1	4,4		

In the Republic of Lithuania and the Republic of Estonia, the decrease in the average number of children under 18 in a family was relatively small. If in 1989 it was practically the same as in the Russian Federation and the Republic of Belarus – 0.93–0.95 for all families and 1.63–1.64 for families with children, then, according to the 2010 census in the Republic of Lithuania it was 0.69 and 1.51, in the Republic of Estonia – 0.67 and 1.56. Of course, the average number of children per all families has decreased more significantly, which indicates a significant increase in the share of families without children under 18 years of age: in the Republic of Lithuania – from 42.5% to 54,3%, in the Republic of Estonia – from 43.3% to 56.9%.

In the Republic of Belarus, the decrease in the average number of children under 18 years old per family was only slightly more than in the Republic of Lithuania and the Republic of Estonia. In 2009 it was 0.63. And the decline in this indicator per families with children was more significant than in the Baltic countries. According to the census round of the 2010s. in the Republic of Belarus, the average number of children under 18 years old per families with children (1.40) is the lowest among countries in the post-Soviet space. Here, in comparison with 1989, the share of families with 2 (from 24.7% to 12.6%) and 3 or more (from 5.1% to 2.3%) children have decreased significantly.

<sup>&</sup>lt;sup>1</sup> Calculated according to: Results of the All-Russian Population Census of 2002 Vol. 6. Number and composition of households. URL: <a href="http://www.perepis2002.ru/ct/html/TOM">http://www.perepis2002.ru/ct/html/TOM</a> 06 02.htm

<sup>&</sup>lt;sup>2</sup> Calculated by: Results of the All-Russian Population Census of 2010. Vol. 6. Number and composition of households. pp. 21–24. URL: <a href="https://gks.ru/free\_doc/new\_site/perepis2010/croc/Documents/Vol6/pub-06-03.pdf">https://gks.ru/free\_doc/new\_site/perepis2010/croc/Documents/Vol6/pub-06-03.pdf</a>

<sup>&</sup>lt;sup>3</sup> Calculated according to: 2010 Population and Housing Census of the Republic of Tajikistan. The number and composition of households in the Republic of Tajikistan. Volume V. Dushanbe, 2012. p.44–45. URL: <a href="http://oldstat.ww.tj/ru/img/526b8592e8346caaccec26a22965ea2b\_1355501252.pdf">http://oldstat.ww.tj/ru/img/526b8592e8346caaccec26a22965ea2b\_1355501252.pdf</a>

<sup>&</sup>lt;sup>4</sup> Calculated by URL: <a href="http://2001.ukrcensus.gov.ua/eng/results/households/households3/h73?data1=1&box=7.3W&out\_type=&id=&data=1&rz=1\_1&k\_t=00&id=&botton=cens\_db2</a>

<sup>&</sup>lt;sup>5</sup> Calculated by: <a href="https://andmed.stat.ee/en/stat/rahvaloendus\_rel2000\_leibkonnad-rahvastik-leibkondades\_leibkonnad/RL512">https://andmed.stat.ee/en/stat/rahvaloendus\_rel2000\_leibkonnad-rahvastik-leibkondades\_leibkonnad/RL512</a>

Slightly higher than in the Republic of Belarus, the average number of children under 18 in a family is in the Russian Federation. According to the 2010 census it was 0.64 for all families and 1.44 for families with children. Compared to 1989, it decreased by 0.31 and 0.19 respectively. Note that the overall decline in the average number of children per families with children occurred in the 1990s, and in the 2000s. it hasn't changed. The share of families without children under 18 increased in these two periods almost equally – by 6.7% points and 7.6% points respectively. The ratio of families with 1 and 2 children has changed: in 2002 there were 19.2% more for one-child, and in 2010 – by 16.8%.

According to the population censuses of the 2010s round, in the Republic of Belarus, Republic of Lithuania, Russian Federation and the Republic of Estonia more than half of the families did not have children under the age of 18.

On the other hand, in the Republic of Tajikistan more than half of the families have 3 or more children. In the Kyrgyz Republic there are almost a third of such families, in the Republic of Armenia – 10%. The smallest share of families with 3 or more children is in the Republic of Belarus (2.3%) and the Russian Federation (3.1%) (Table 2.2.2).

Another characteristic of the family composition is the distribution of families by type, depending on whether the family includes only spouses with or without children or representatives of the older generation, whether both parents live in a family with children or only one (Table 2.2.3).

When assessing the changes in the distribution of families by type in the countries of the post-Soviet space, it should be noted that the typologies of families in different countries according to the population censuses are not completely identical and are not identical in all countries to the typology used in the 1989 population census. For example, the typology of families in the Republic of Latvia and the Republic of Lithuania presented in the results of the population censuses is incomparable with the data of the 1989 population census.

In all countries for which information is available, the results of the population censuses of the late 1990s – early 2000s showed a decrease in the proportion of families from one married couple with and without children. The only exception was the Republic of Estonia, where the share of such families increased by 1.7% points (hereinafter referred to as pp) and, according to the 2000 census, amounted to 67.8%.

The largest decrease in the share of such families occurred in the Russian Federation (by 12.0 pp, from 66.9% in 1989 to 54.9% in 2002). In Ukraine, it decreased by 8.7 pp, in the Republic of Moldova – by 6.2 pp, in the Republic of Belarus – by 4.8 pp, in the Republic of Kazakhstan – by 4.7 pp, in the Kyrgyz Republic – by 2.1 pp.

The share of families that include not only one married couple with and without children, but also one of the spouses' parents and / or other relatives has also slightly decreased in most countries.

In the Russian Federation this decline was the largest (by 3.6 pp). In the Republic of Estonia, the share of such families decreased by 2.9 pp, in the Republic of Kazakhstan – by 1.7 pp, in the Kyrgyz Republic – by 1.5 pp, in the Republic of Belarus – by 0.6 pp. Only in the Republic of Moldova and Ukraine it did slightly increase: by 2.1 pp and 2.0 pp.

In all countries, compared with 1989, the proportion of families consisting of a mother or father with children, as well as with one parent of a mother or father has increased.

In the Russian Federation, according to the 2002 census, it increased by 2.8 pp. The largest increase took place in the Republic of Belarus (by 3.8 pp). In Ukraine the share of such families increased by 3.7 pp, in the Kyrgyz Republic – by 3.3 pp, in the Republic of Moldova – by 2.9 pp, in the Republic of Estonia – by 1.5 pp, in the Republic of Kazakhstan – by 1.0 pp.

In the Russian Federation in the 2000s the share of families consisting of one married couple with and without children continued to decline (from 54.9% in 2002 to 52.1% in 2010). The share of families from one married couple with and without children, with one of the spouses'

parents also slightly decreased (from 5.0% to 4.6%), as well as the category of «other families» (from 16.1% to 12.1 %).

The share of families with only one parent with children increased quite a bit: mothers with children (from 13.7% to 13.8%), fathers with children (from 1.5% to 1.7%), mothers / fathers with children with one of the mother's (father's) parents (from 2.8% to 3.1%). The share of families including two or more married couples with and without children, with one of the spouses' parents (or without him) and with other relatives (or without them) (from 3.3% to 3, 4%).

The share of families from one married couple with and without children, with one of the spouses' parents (or without him) and with other relatives increased to a greater extent (from 2.8% in 2002 to 9.2% in 2010). It is difficult to say whether this reflects real changes in the composition of families or is associated with some census differences (between 2002 and 2010) in the identification of this type of families.

The share of families from one married couple with and without children in the Republic of Belarus decreased even more than in the Russian Federation: from 68.2% in 1999 to 62.2% in 2009, couples with children and without children with one of the parents of the spouses, as well as with him (or without him) and with other relatives (from 9.0% to 9.8%) and families consisting of two or more married couples with children and without children, with one of the spouses' parents (or without him) and with other relatives (or without them) (from 2.5% to 3.3%).

However, the main increase in the 2000s in the Republic of Belarus took place in the share of families consisting of a mother with children (from 13.1% in 1999 to 15.9% in 2009) and a mother with children with one of the mother's (father's) parents (from 1.5 % to 2.9%). The share of families consisting of a father with children (from 1.2% to 1.8%) and a father with children with one of the father's (mother's) parents (from 0.1% to 0.3%) also increased.

An even more significant increase in the share of families consisting of one parent with children in the Republic of Belarus is recordered by the 2019 census. The share of families consisting of mothers with children increased from 15.9% in 2009 to 19.4% in 2019 from a father with children – from 1.8% to 3.9%. At the same time, the share of families consisting of a mother with children and one of the mother's parents (father) decreased from 2.9% to 2.0%. The share of families consisting of a father with children and one of the father's (mother's) parents increased from 0.3% in 2009 to 0.5% in 2019.

At the same time, in the Republic of Belarus the share of families from one married couple with and without children continued to decrease: from 62.2% in 2009 to 57.9% in 2019.

Even more significant than in the Republic of Belarus and the Russian Federation in the 2000s a decrease in the share of families from one married couple with children and without children was in the Kyrgyz Republic: from 57.8% in 1999 to 50.7% in 2009. The share of families from one married couple with and without children also decreased, with one of the spouses' parents (from 6.6% to 5.3%).

At the same time, in the Kyrgyz Republic in the period between the 1999 and 2009 population censuses the share of families with more extended composition increased. The share of families of one married couple with or without children, with one of the spouses' parents (or without him) and with other relatives increased from 8.7% to 11.7%. Even more significant was the increase in the share of families of two or more married couples with and without children, with one of the spouses' parents (or without him) and with other relatives (or without them): from 8.6% to 13.1%.

The share of families consisting of a mother with children in the Kyrgyz Republic decreased from 9.4% in 1999 to 9.2% in 2009, and from a mother with children and one of the mother's (father's) parents – on the contrary, increased from 3.2% to 4.2%. The share of families consisting of a father with children (from 1.1% to 1.2%) and a father with children with one of the father's (mother's) parents (from 0.4% to 0, 5%).

The share of families of one married couple with and without children has significantly decreased in the Republic of Tajikistan. If according to the 1989 census there were 55.8%, then according to the 2010 census - 45.2%. The share of families of one married couple with and without children with one of the spouses' parents also decreased (from 5.9% to 3.8%). The share of families consisting only of a mother with children (from 6.6% to 5.2%) and one more of the mother's (father's) parents (from 0.9% to 0.0%) has significantly decreased. The share of paternal families in these categories also decreased (from 0.9% to 0.6% and from 0.2% to 0.0%).

At the same time, in the Republic of Tajikistan, the share of families of one married couple with children and without children with one of the spouses' parents (or without him) and with other relatives has increased (from 8.6% in 1989 to 10.8% in 2010 g) and two or more married couples with children and without children, with one of the spouses' parents (or without him) and with other relatives (or without them) (from 18.9% to 24.0%).

The main differences in the distribution of families by type between countries in the post-Soviet space are expressed in the proportion of families of two or more married couples with and without children with one of the spouses' parents (or without him) and with other relatives (or without them). If in the Russian Federation and the Republic of Belarus it is 3.4% and 3.3%, then in the Kyrgyz Republic – 13.1% and in the Republic of Tajikistan – 24.0%. These countries also differ significantly in the proportion of families consisting of a mother with children: Republic of Tajikistan - 5.2%, Kyrgyz Republic - 9.2%, Russian Federation - 13.8%, Republic of Belarus - 15.9%.

In the USSR family relations were regulated by the «Fundamentals of Legislation of the USSR and the Union Republics on Marriage and Family<sup>1</sup>, approved by the Law of the USSR (1968), and the Code of Marriage and Family of the RSFSR (1969)<sup>2</sup>.

After the collapse of the USSR, the Convention on Legal Assistance and Legal Relations in Civil, Family and Criminal Matters was adopted in Minsk in 1993<sup>3</sup>. Family Codes have been adopted in almost all countries of the post-Soviet space. They establish the principles of creating and strengthening family relations, their termination, the rights and obligations of participants in family relations, the duties of state bodies in this area, as well as the rules governing the rules for registering acts of civil status.

In the Republic of Azerbaijan the tasks of the Family Code include elimination of harmful traditions in family relations, fostering in children a sense of responsibility towards family and

Among the priority tasks of the family legislation of the Republic of Belarus, it should be noted «strengthening the family in the Republic of Belarus as a natural and basic unit of society on the principles of universal human morality, preventing the weakening and destruction of family ties»5.

In the Republic of Kazakhstan, marriage and family legislation since 2011 establishes rights and obligations, property and personal non-property relations between family members: spouses, parents and children, and in cases and within the limits provided for by the marriage and family legislation of the Republic of Kazakhstan between other relatives and by other persons6.

<sup>&</sup>lt;sup>1</sup> Fundamentals of the legislation of the USSR and the Union Republics on marriage and family, approved by the Law of the USSR of June 27, 1968 // Vedomosti of the Supreme Soviet of the USSR. 1968. No. 27. St. 241.

<sup>&</sup>lt;sup>2</sup> The Marriage and Family Code of the RSFSR // Vedomosti of the Supreme Soviet of the RSFSR. 1969. No. 32. St. 1086.

<sup>&</sup>lt;sup>3</sup> Convention on Legal Assistance and Legal Relations in Civil, Family and Criminal Cases. Concluded in Minsk on January

<sup>&</sup>lt;sup>4</sup> Family Code of the Republic of Azerbaijan No. 781 dated December 28, 1999 // Collection of Legislation of the Republic of Azerbaijan. 2000. No. 3. Book 1. Article 126.

<sup>&</sup>lt;sup>5</sup> Code on Marriage and Family of the Republic of Belarus No. 278-Z of July 9, 1999 // National Register of Legal Acts of the Republic of Belarus. 2004. № 195. 2/1097.

<sup>&</sup>lt;sup>6</sup> Code of the Republic of Kazakhstan dated December 26, 2011 No. 518-iv «On Marriage (Matrimony) and family» (with amendments and additions as of 01.07.2021)

In the Republic of Moldova Family Code regulates family relations in accordance with the principles of monogamy, voluntariness of the marriage of a man and a woman, equality of spouses in the family, provision of mutual moral and material support, preservation of marital fidelity, the priority of raising children in the family, manifestation of care for maintenance, education of minors and disabled family members, protection of their rights and interests, resolution of intra-family problems by mutual consent, inadmissibility of arbitrary interference by anyone in family affairs, unhindered access to judicial protection of the rights and interests of family members<sup>1</sup>.

The Family Code of the Russian Federation regulates the property relations of spouses through a marriage contract – an agreement between persons entering into marriage, or an agreement between spouses, which determines the property rights and obligations of spouses in marriage and (or) in the event of its dissolution (Article 40 of the RFIC). There is also a provision on alimony obligations. Alimony payments under the new Family Code can be provided for by agreement of the parties and through the courts (chapters 16–17)². In 1996, the Government of the Russian Federation approved the «List of types of wages and other incomes from which alimony for minor children is withheld»³.

The Family Code of the Republic of Tajikistan, adopted in 2006, notes that family legislation «is based on the need to strengthen the family, build family relations on feelings of mutual love and respect, mutual assistance and responsibility to the family of all its members, the inadmissibility of arbitrary interference by anyone in family affairs, ensuring the unimpeded exercise by family members of their rights and fulfillment of duties, the possibility of their judicial protection»<sup>4</sup>.

The Family Code of Turkmenistan also considers as the main tasks as «legal and other protection of the child before and after birth, ensuring favorable conditions for the development and formation of each child»<sup>5</sup>.

In the Republic of Uzbekistan, special attention in family legislation is paid to mother-hood and fatherhood, which traditionally enjoy honor and respect<sup>6</sup>.

The Family Code of Ukraine contains a wide range of regulation of family relations, including regulating relations between members of a multigenerational family «grandmother, grandfather, great-grandfather and grandchildren, great-grandchildren, siblings, stepmother, stepfather and stepdaughter, stepson ... as well as between cousins and sisters, aunt, uncle and niece, nephew and between other relatives by descent»<sup>7</sup>.

In addition to family codes, a number of countries of the former USSR have also adopted policy documents and other regulations on family policy.

In the Republic of Azerbaijan in 2004, the State Program in the field of demography and population development was approved, where special attention was paid to support of a young family<sup>8</sup>.

In the Republic of Belarus, the Main Directions of the State Family Policy of the Republic of Belarus were adopted. The main goals of family policy were defined as «ensuring the im-

<sup>&</sup>lt;sup>1</sup> Family Code of the Republic of Moldova No. 1316-XIV of October 26, 2000.

<sup>&</sup>lt;sup>2</sup> Family Code of the Russian Federation No. 223-FZ of December 29, 1995 // Collection of Legislation of the Russian Federation. 01.01.1996 No. 1. Article 16.

<sup>&</sup>lt;sup>3</sup> «On the list of types of wages and other income from which alimony is withheld for minor children.» Resolution of the Government of the Russian Federation No. 841 of July 18, 1996 // Collection of Legislation of the Russian Federation. 29.07.1996 No. 31. St. 3743.

<sup>&</sup>lt;sup>4</sup> URL: https://sud.tj/upload/iblock/eca/eca043bf1ee1607c285078b630f244cb.pdf

<sup>&</sup>lt;sup>5</sup> The Family Code of Turkmenistan dated January 10, 2012 No. 258-GU (with amendments and additions) // Vedomosti Mejlis of Turkmenistan. 2012. № 1 (1007).

<sup>&</sup>lt;sup>6</sup> Family Code of the Republic of Uzbekistan. Resolution of the Oliy Majlis of the Republic of Uzbekistan No. 608-i dated April 30, 1998.

<sup>&</sup>lt;sup>7</sup> Family Code of Ukraine No. 2947-sh dated January 10, 2002 // Vedomosti of the Verkhovna Rada. 2002. No. 21–22. p. 135. 
<sup>8</sup> On the approval of the State Program in the field of demography and population development in the Republic of Azerbaijan. Decree of the President of the Republic of Azerbaijan dated November 11, 2004 No. 517. Collection of Legislation of the Republic of Azerbaijan (November 30, 2004, No. 11, article 940. («Legalacts» LLC).

provement of the socio-economic conditions for the life of the family and the fulfillment of its reproductive, economic and educational functions; strengthening the moral foundations of the family and increasing its prestige in society»<sup>1</sup>.

In 1992, Russian Federation adopted a law «On additional measures for the protection of mothers and children», which established the duration of maternity leave 70 calendar days before childbirth and 70 calendar days after childbirth. In the case of complicated childbirth, leave is granted for 86 calendar days, for the birth of two or more children – for 110 calendar days. A norm was also introduced whereby maternity leave was calculated in total and granted to a woman regardless of the number of days actually used before childbirth. In 1992, the Decree «On measures for social support of large families» was signed, aimed at pursuing a targeted and targeted policy to strengthen social support for large families in the context of liberalization². In 1996, the Decree «On the Main Directions of State Family Policy», whereas the responsibility of the state was proclaimed the creation of favorable conditions for the functioning of the family, self-realization of its interests³.

In the Republic of Uzbekistan, State Program of Measures for 1998 was adopted to ensure the realization of the interests of the family<sup>4</sup>.

In Ukraine in 1999, the Concept of State Family Policy was approved<sup>5</sup>. In the 1990s, as a result of the ongoing socio-economic reforms, many families in the countries of the former USSR, have lost their previous state support and were unable to adapt to new living conditions. This led to an increase in divorce, an increase in the number of illegitimate children and finally, the reluctance of young people to have families.

<sup>5</sup> URL: http://search.ligazakon.ua/l\_doc2.nsf/link1/T991063.html

Decree of the President of the Republic of Belarus No. 46 dated January 21, 1998 «On approval of the Main directions of the State Family Policy of the Republic of Belarus». URL: https://pravo.by/document/?guid=3871&p0=P39800046

<sup>&</sup>lt;sup>2</sup> Decree of the President of the Russian Federation No. 431 of May 5, 1992 «On measures for social support of large families» // Vedomosti SND and the Armed Forces of the Russian Federation. May 14, 1992 No. 19. St. 1044.

<sup>&</sup>lt;sup>3</sup> Decree of the President of the Russian Federation No. 712 of May 14, 1996 «On the main directions of state family policy» // Collection of Legislation of the Russian Federation. 05/20/1996 No. 21. St. 2460.

<sup>&</sup>lt;sup>4</sup> Decree of the President of the Republic of Uzbekistan dated December 9, 1997 No. F-796 «On the State program of measures for 1998 to ensure the realization of the interests of the family». URL: https://lex.uz/docs/693437

# 2.3. Trends and peculiarities of fertility

The dynamics of the birth rate, which is determined by the reproductive behavior of families is associated with the processes in the family, changes in its composition, transformation of its functions, its socio-economic position and significance in human life.

While maintaining the general historical trend of declining fertility, the transition from large families to average children and then to few children, as well as the dynamics of fertility were ambiguous, periods of a significant decrease in its indicators were replaced by periods of some increase.

The increase in the total fertility rate in most of the Union republics took place in the 1980s: in the Armenian SSR – in 1981–1990, in the Belorussian SSR – in 1983–1984, in the Georgian SSR – in 1984–1986 and 1989–1990 in the Kazakh SSR in 1983–1987, in the Kirghiz SSR in 1984–1987, in the Latvian SSR in 1982–1987, in the Lithuanian SSR in 1983–1986. and in 1990, in the Moldavian SSR – in 1980–1986, in the RSFSR – in 1981–1987, in the Tajik SSR – in 1985–1987, in the Turkmen SSR – in 1986–1987, in Uzbek SSR – in 1985–1986, in the Ukrainian SSR – in 1982–1986, in the Estonian SSR – in 1980–1988. This was partly due to the implementation of additional measures of state assistance to families with children provided for by the Decree of the Central Committee of the CPSU and the Council of Ministers of the USSR of January 22, 1981 No. 235 «On measures to strengthen state assistance to families with children»¹.

In the 1990s in all countries in the post-Soviet space there was a significant decrease in the birth rate (Table 2.3.1). In the Russian Federation, the minimum value of the total fertility rate was reached in 1999 (1.16), when it was 0.73 lower than in 1990 (1.89).

The decrease in the total fertility rate in Ukraine was the same as in the Russian Federation (from 1.85 in 1990 to 1.12 in 2000). It decreased even more significantly in the Kyrgyz Republic (from 3.63 in 1990 to 2.40 in 2000), Republic of Moldova (from 2.39 in 1990 to 1.29 in 2000), Republic of Kazakhstan. (from 2.76 in 1990 to 1.80 in 1999), Republic of Azerbaijan (from 2.9 in 1991 to 2.0 in 1998), Republic of Latvia (from 2.00 in 1990 to 1.12 in 1998) and the Republic of Estonia (from 2.05 in 1990 to 1.28 in 1998). In the Republic of Armenia, it decreased by half: from 2.62 in 1990 to 1.31 in 2000. The largest decline in the total fertility rate among the countries of the post-Soviet space was in Turkmenistan (from 4.2 in 1990 to 2.2 in 1999). In the Republic of Uzbekistan it decreased from 4.20 in 1991 to 2.46 in 2001, in the Republic of Tajikistan – from 5.09 in 1990 and 1991. up to 3.49 in 2000

Slightly less than in the Russian Federation its decline was in the Republic of Belarus (from 1.91 in 1990 to 1.25 in 1997), Republic of Lithuania (from 2.03 in 1990 to 1.39 in 2000), Republic of Georgia (from 2.16 in 1990 to 1.53 in 1994).

In a number of countries in the post-Soviet space, the decline in the total fertility rate continued in the early 2000s (Republic of Azerbaijan, Republic of Armenia, Republic of Belarus, Kyrgyz Republic, Republic of Lithuania, Republic of Moldova, Republic of Tajikistan, Ukraine).

In the Russian Federation, the lowest birth rate after a significant decline since the late 1980s was in 1999. In the 2000s, the total fertility rate began to rise. The lowest point in the dynamics of the total fertility rate in 1999 was in the Republic of Kazakhstan and Turkmenistan, in the Republic of Latvia and the Republic of Estonia – a year earlier, in 1998.

At the same time, in a number of countries in the post-Soviet space the decline in the birth rate continued in the early 2000s. In the Kyrgyz Republic and Ukraine the lowest total fertility rate occurred in 2001, in the Republic of Azerbaijan – in 2001–2002, in the Republic of Armenia, Georgia, Republic of Lithuania and the Republic of Moldova – in 2002, in the Republic of Belarus – in 2003–2004.

 $<sup>^1\</sup> URL:\ https://legalacts.ru/doc/postanovlenie-tsk-kpss-sovmina-sssr-ot-22011981/$ 

#### Dynamics of the total fertility rate in 2000–2020

Years	Republic of Azerbaijan ¹	Republic of Armenia <sup>2</sup>	Republic of Belarus ³	Republic of Georgia <sup>4</sup>	Republic of Kazakhstan <sup>5</sup>	Republic of Kyrgyzstan <sup>6</sup>	Latvian Republic <sup>7</sup>	Lithuanian Republic <sup>8</sup>	Republic of Moldova <sup>9</sup>	Russian Federation <sup>10</sup>	Republic of Tajikistan <sup>11</sup>	Republic of Turkmenistan <sup>12</sup>	Republic of Uzbekistan <sup>13</sup>	Ukraine <sup>14</sup>	Estonian Republic <sup>15</sup>
1990	2,8	2,62	1,91	2,16	2,76	3,63	2,00	2,03	2,39	1,89	5,09	4,2	4,07	1,85	2,05
1991	2,9	2,58	1,81	2,07	2,72	3,58	1,86	2,01	2,26	1,73	5,09	4,1	4,20	1,78	1,80
1992	2,7	2,42	1,76	1,72	2,62	3,52	1,74	1,97	2,21	1,55	4,21	3,9	4,00	1,67	1,71
1993	2,7	2,11	1,62	1,54	2,45	3,15	1,52	1,74	2,10	1,37	4,32	3,7	3,80	1,56	1,49
1994	2,5	1,88	1,53	1,53	2,41	2,95	1,41	1,57	1,95	1,39	4,36	3,6	3,53	1,47	1,42
1995	2,3	1,84	1,41	1,57	2,22	3,12	1,27	1,55	1,76	1,34	4,39	3,4	3,59	1,40	1,38
1996	2,1	1,83	1,34	1,60	2,05	2,73	1,18	1,49	1,60	1,27	3,93	3,2	3,39	1,34	1,37
1997	2,1	1,68	1,25	1,63	1,90	2,59	1,13	1,47	1,70	1,22	4,06	2,9	3,17	1,27	1,32
1998	2,0	1,51	1,30	1,60	1,84	2,65	1,12	1,46	1,49	1,23	4,07	2,5	2,80	1,21	1,28

<sup>1</sup> Azərbaycanın demoqrafik göstəriciləri. Bakı, 2021. P. 119–120. URL: https://www.stat.gov.az/source/demoqraphy/?lang=en ² Հայաստանի ժողովրդագրական ժողովածու – 2020. ԵՐԵՎԱՆ, 2020. P. 69. URL: https://www.armstat.am/file/article/ demog 2020 3.pdf; Հայաստանի ժողովրդագրական ժողովածու – 2019. ԵՐԵՎԱՆ, 2019. P 69. URL: https://www. armstat.am/file/article/demog 2019 3.pdf; Հայաստանի ժողովրդագրական ժողովածու – 2018. ԵՐԵՎԱՆ, 2018. P. 69. URL: https://www.armstat.am/file/article/demog 2018\_3.pdf; Հայաստանի ժողովրդագրական ժողովրդագրական ժողովածու – 2014. ԵՐԵՎԱՆ, 2014. P. 78. URL: https://www.armstat.am/file/article/demos\_14\_4.pdf; Հայաստանի ժողովրդագրական ปกฤกปุ่นเงกา – 2009. ๒ՐԵՎԱՆ, 2009. P. 67. URL: https://www.armstat.am/file/article/demos 09 3.pdf

<sup>3</sup> Demographic Yearbook of the Republic of Belarus. Minsk, 2019. p. 272. URL: https://www.belstat.gov.by/upload/iblock/91 b/91b911b6266ed52902eb6f89f5dfab3a.pdf; Demographic Yearbook of the Republic of Belarus. Minsk, 2017. p. 273. URL: https://www.belstat.gov.by/ofitsialnaya-statistika/solialnaya-sfera/naselenie-i-migratsiya/naselenie/statisticheskie-izdaniya/ index\_8479/

<sup>4</sup> დემოგრაფიული ვითარება საქართველოში. თბილისი 2016. P. 24. URL: <u>https://www.geostat.ge/media/20699/</u> Demografiuli-Vitareba-SaqartveloSi-Krebuli-2016.pdf; დემოგრაფიული ვითარება საქართველოში. თბილისი 2020. P. 38. URL: <a href="https://www.geostat.ge/media/39628/%E1%83%93%E1%83%94%E1%83%9B%E1%83">https://www.geostat.ge/media/39628/%E1%83%93%E1%83%94%E1%83%9B%E1%83</a> %9D%E1%83%92%E1%83%A0%E1%83%90%E1%83%A4%E1%83%98%E1%83%A3%E1%83%9A%E1%83%98-%E1%83%95%E1%83%98%E1%83%97%E1%83%90%E1%83%A0%E1%83%94%E1%83%91%E1%83%90-%E1%83%A1%E1%83%90%E1%83%A5%E1%83%90%E1%83%A0%E1%83%97%E1%83%95%E1%83%94%E1%83 %9A%E1%83%9D%E1%83%A8%E1%83%98-2019.pdf); https://www.geostat.ge/en/modules/categories/319/births; https:// www.geostat.ge/en/modules/categories/319/births; http://www.demoscope.ru/weekly/ssp/sng tfr.php; Note: 2000–2013 based on the retro-projection; starting from 2014 based on the registered data

Demographic yearbook of Kazakhstan. Nur-Sultan, 2021. P. 146; demographic yearbook of Kazakhstan. Astana, 2017. P. 176; demographic yearbook of Kazakhstan. Astana, 2009. p. 285; demographic yearbook of Kazakhstan, 2007. Astana, 2008. p.218; demographic yearbook of Kazakhstan. Astana, 2007. p. 209; demographic yearbook of Kazakhstan. Almaty, 2005. p. 272. URL: https://stat.gov.kz/edition/publication/collection; URL: http://www.demoscope.ru/weekly/ssp/sng tfr.php

<sup>6</sup> URL: http://www.stat.kg/ru/statistics/naselenie/

https://stat.gov.lv/en/statistics-themes/population/fertility/tables/idk010-fertility-rates-age-specific-total-grossand?themeCode=ID;; https://data.stat.gov.lv/pxweb/en/OSP\_PUB/START\_\_POP\_\_ID\_\_IDK/IDK010

<sup>8</sup> URL: https://osp.stat.gov.lt/lietuvos-gyventojai-2020/gimstamumas; Demografijos metraštis. 2017. Vilnius, 2018. P. 45. URL: https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=30420); Demografijos metraštis. 2008. Vilnius, 2009. P. 77. URL: https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=13755; Demografijos metraštis. 2007. Vilnius, 2008. P. 72. URL: https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=12885; Demografijos metraštis. 2003. Vilnius 2004. P. 43. URL: https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=6447; URL: https://osp.stat.gov.lt/EN/statistiniu-rodikliuanalize?hash=53e99ff0-3b91-422f-a54e-09437d28c305#/

 $\underline{https://statbank.statistica.md/PxWeb/pxweb/en/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20Populatia\%20si\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20procesele\%20demografice/20\%20proceselewate/200$ 9 URL: Populatia%20si%20procesele%20demografice POP POP030/POP032300.px/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774

<sup>10</sup> Demographic Yearbook of Russia. 2013. Moscow, 2013. URL: https://gks.ru/bgd/regl/B13 16/Main.htm); https://rosstat.gov. ru/folder/12781

<sup>11</sup> Demographic Yearbook of the Republic of Tajikistan. Monday, 2020. C. 135

12 URL: http://www.demoscope.ru/weekly/ssp/sng\_tfr.php

<sup>13</sup> For 1990–2011 – http://www.demoscope.ru/weekly/ssp/sng\_tfr.php; for 2012–2018 – Demographic Yearbook 2019. NY, 2020. P. 100. URL: https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2019.pdf); Demographic Yearbook 2016. NY, 2017. P.97 (https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2016.pdf

14 Population of Ukraine in 2019. Kiev, 2020. P. 54. URL: http://database.ukrcensus.gov.ua/PXWEB2007/ukr/publ new1/2020/ zb nas 2019.pdf; population of Ukraine in 2013. Kiev, 2014, P. 73. URL: http://database.ukrcensus.gov.ua/PXWEB2007/eng/ publ\_new1/2014/publ2014.asp); http://ukrstat.gov.ua/

15 URL: https://andmed.stat.ee/en/stat/rahvastik\_rahvastikunaitajad-ja-koosseis\_demograafilised-pehinaitajad/RV033

Years	Republic of Azerbaijan	Republic of Armenia	Republic of Belarus	Republic of Georgia	Republic of Kazakhstan	Republic of Kyrgyzstan	Latvian Republic	Lithuanian Republic	Republic of Moldova	Russian Federation	Republic of Tajikistan	Republic of Turkmenistan	Republic of Uzbekistan	Ukraine	Estonian Republic
1999	2,0	1,39	1,31	1,55	1,80	2,63	1,18	1,46	1,37	1,16	3,85	2,2	2,70	1,13	1,32
2000	2,0	1,31	1,32	1,59	1,85	2,40	1,25	1,39	1,29	1,20	3,49	2,9	2,58	1,12	1,35
2001	1,8	1,24	1,29	1,57	1,84	2,39	1,22	1,30	1,25	1,22	3,49	2,8	2,46	1,08	1,32
2002	1,8	1,21	1,24	1,53	1,88	2,43	1,25	1,24	1,21	1,29	3,47	2,6	2,52	1,10	1,36
2003	1,9	1,35	1,23	1,56	2,03	2,49	1,32	1,26	1,22	1,32	3,42	2,6	2,36	1,17	1,37
2004	2,1	1,38	1,23	1,58	2,21	2,55	1,29	1,26	1,26	1,34	3,35	2,6	2,46	1,22	1,47
2005	2,3	1,37	1,25	1,59	2,22	2,50	1,39	1,29	1,22	1,29	3,27	2,4	2,20	1,21	1,52
2006	2,3	1,35	1,34	1,63	2,35	2,70	1,46	1,33	1,23	1,31	3,27	2,4	2,10	1,31	1,58
2007	2,3	1,42	1,43	1,69	2,47	2,71	1,54	1,36	1,26	1,42	2,35	2,3	2,10	1,35	1,69
2008	2,3	1,40	1,49	1,84	2,68	2,76	1,58	1,45	1,28	1,50	2,68	2,3	2,01	1,46	1,72
2009	2,3	1,49	1,51	2,01	2,55	2,88	1,46	1,50	1,33	1,54	2,66	2,2	1,95	1,47	1,70
2010	2,3	1,56	1,49	1,99	2,59	3,06	1,36	1,50	1,31	1,57	2,91	2,2	1,92	1,44	1,72
2011	2,4	1,52	1,52	1,89	2,59	3,09	1,33	1,55	1,27	1,58	2,77	2,2	1,89	1,46	1,61
2012	2,3	1,58	1,62	1,85	2,62	3,15	1,44	1,60	1,28	1,69	2,61	2,4	2,19	1,53	1,56
2013	2,2	1,57	1,67	1,86	2,64	3,11	1,52	1,59	1,24	1,71	2,62	2,5	2,35	1,51	1,52
2014	2,2	1,65	1,70	2,31	2,73	3,19	1,65	1,63	1,28	1,75	2,98	2,4	2,46	1,50	1,54
2015	2,1	1,65	1,72	2,30	2,74	3,19	1,70	1,70	1,30	1,78	3,06	2,3	2,49	1,51	1,58
2016	2,0	1,65	1,73	2,24	2,77	3,06	1,74	1,69	1,28	1,76	2,93	2,2	2,46	1,47	1,60
2017	1,9	1,58	1,54	2,14	2,75	2,95	1,69	1,63	1,19	1,62	2,83	3,2	2,42	1,37	1,59
2018	1,8	1,57	1,45	2,14	2,84	3,28	1,60	1,63	1,17	1,58	2,50	3,2	2,60	1,30	1,67
2019	1,8	1,60		2,01	2,90	3,34	1,61	1,61		1,50	2,43			1,23	1,66
2020	1,7	1		1,97	3,13	3,04	1,55	1,48		1,51				1,22	1,58

In the Republic of Tajikistan the decline in the total fertility rate continued at least until 2005–2006. According to the «Demographic Yearbook of the Republic of Tajikistan» in 2007, its value decreased by 0.92. Probably, there could not have been such a decrease in reality. Apparently, there is some discrepancy in the values of the total fertility rate in the periods up to 2006 and since 2007. In the 2000s, the total fertility rate increased to one degree or more in all post-Soviet countries.

In the Russian Federation, the increase in the total fertility rate continued until 2015. In subsequent years it declined. However, in 2020 its value was already slightly higher than in 2019. The most significant increase in the total fertility rate in Russia took place in 2007 and there is a reason to associate it with the beginning of the implementation of additional measures of state support for families with children. The main of these measures is the federal maternity (family) capital. Up to 2019 the right to obtain it only in the event of the birth of a second or subsequent (if previously not received) child, however, since 2020, maternal (family) capital has been provided at the birth of the first child. In 2007, in the Russian Federation, there was a significant increase in the total fertility rate for the second, third and subsequent births and the value of this indicator for the first births almost did not change compared to  $2006^2$ .

In the Republic of Belarus in 2007, there was a significant increase in the total fertility rate. However, unlike the Russian Federation, it was exactly the same in the previous 2006 compared to 2005. It should be noted that before that, the Decree of the President of the Republic of Belarus № 505 dated October 14, 2004 «On strengthening material support for families at the birth

No available data

<sup>&</sup>lt;sup>2</sup> Demographic situation in Russia: new challenges and ways of optimization: national demographic report / Edited by Corresponding Member of the Russian Academy of Sciences, Doctor of Economics S.V. Ryazantsev – M.: Publishing House «Ekon-Inform», 2019. pp. 16–18. URL: http://испи.pф/wp-content/uploads/2019/06/Нацдоклад23мая2019итог.pdf

of children» was signed<sup>1</sup> and in subsequent years, Resolutions of the Ministry of Labor and Social Protection of the Republic of Belarus «On the amount of state benefits to families raising children» were adopted <sup>2</sup>.

In Ukraine, a significant increase in the total fertility rate took place in 2006 and in 2008 and 2007 it was relatively small. At the beginning of 2008, the allowance for the birth of children increased significantly. Until that time, according to the Law of Ukraine «On State assistance to families with children», it amounted to UAH 8,500. Resolution of the Cabinet of Ministers of Ukraine «The issue of appointment and payment of assistance to families with children» dated February 22, 2008 provided for the appointment and payment of benefits at the birth of the first child in the amount of UAH 12,240, the second – UAH 25,000, the third and subsequent – UAH 50,000. The payment was made on a one-time basis at the birth of the first child in the amount of UAH 4800, second – UAH 4840, third and subsequent children – UAH 5000. The remaining amount for the first child was paid over the next 12 months, for the second – 24 months, for the third and subsequent children – 36 months.

In the Republic of Belarus, the increase in the total fertility rate continued until 2016, in Ukraine – until 2012.

In the Republic of Georgia, the total fertility rate increased until 2009, in the Republic of Azerbaijan – until 2011, in the Republic of Armenia – until 2014–2016.

In the Republic of Kazakhstan, the total fertility rate increased until 2008, then decreased slightly in 2009 and was almost steadily increasing in subsequent years. In the Kyrgyz Republic its increase continued until 2014–2015, in 2016–2017 it decreased, increased in 2018–2019 and decreased in 2020.

In the Republic of Tajikistan, the total fertility rate increased in 2008–2010, decreased slightly in 2011–2012, increased again in 2013–2015 and has been decreasing in recent years.

In the Republic of Latvia, the total fertility rate increased until 2008 and during 2009–2011 it declined, then increased until 2016 and has been declining in recent years. In the Republic of Estonia, it also increased until 2008, in 2011–2013 it decreased, in subsequent years its dynamics was unstable, but we can talk about its slight increase until 2018 and decrease in 2020. In the Republic of Lithuania, the total fertility rate increased until 2015.

In the Republic of Moldova, the total fertility rate in the 2000s changed relatively slightly in the range from 1.21 (2002) to 1.33 (2009) and decreased only in 2017–2018.

Thus, if in the 1990s the dynamics of the total fertility rate in the post-Soviet countries was similar – it decreased everywhere – then in the 2000s it differed significantly. If we talk only about the first period of increase in the total fertility rate in the 2000s (as shown above, in some countries this increase was replaced by a decrease, and then a new increase), its increase relative to the minimum level in the late 1990s or early 2000s in the Republic of Kazakhstan (0.88). In the Kyrgyz Republic it was 0.80, in the Russian Federation – 0.62, in the Republic of Azerbaijan – 0.6, in the Republic of Belarus – 0.50, in Georgia – 0.48, in the Republic of Latvia and the Republic of Lithuania – 0.46, in Ukraine – 0.45, in the Republic of Armenia and the Republic of Estonia – 0.44, in the Republic of Moldova – 0.12.

The Republic of Kazakhstan also has the largest increase in the total fertility rate in 2020 compared to 2000 (1.28). As a result, in 2020 the value of this indicator in the Republic of Kazakhstan was 3.13 and was one of the highest among countries in the post-Soviet space (only the value of this indicator in the Republic of Turkmenistan is higher, but given its sharp increase in 2017–2018 (from 2.2 in 2016 to 3.2), this data should be treated with some caution).

<sup>&</sup>lt;sup>1</sup> URL: https://belzakon.net/Законодательство/Указ\_Президента\_PБ/2004/4959

<sup>&</sup>lt;sup>2</sup> URL: https://belzakon.net/Законодательство/Постановление\_Министерства\_труда\_и\_социальной\_защиты\_ PБ/2005/77528; URL: https://belzakon.net/Законодательство/Постановление\_Министерства\_труда\_и\_социальной\_защиты\_ PБ/2006/75269

The total fertility rate in the Kyrgyz Republic in 2020 is slightly lower. It is equal to 3.04 (0.64 more than in 2000). Such a ratio between these two countries was formed in 2020, while in 2019 the total fertility rate in the Kyrgyz Republic (3.34) was significantly higher than in the Republic of Kazakhstan (2.90).

In the Republic of Tajikistan in 2019 the total fertility rate was 2.43. It was noted above that in 2007 the statistical data shows a sharp decline in the indicator, therefore, the correct assessment of its change in the 2000s seems impossible. The same applies to the Republic of Georgia (the total fertility rate in 2020 is 1.97), as for 2000–2013 the value of the indicator was determined on the basis of retro-projection and since 2014 – on the basis of registered data<sup>1</sup>.

In the Republic of Azerbaijan the total fertility rate in 2020 was 1.7, which is 0.3 less than in 2000. In the Republic of Belarus (2018 - 1.45), Republic of Lithuania (2020 - 1.48), Russian Federation (2020 - 1.51), Republic of Latvia (2020 - 1.55), Republic of Estonia (2020 - 1.58) and the Republic of Armenia (2019 - 1.60). In all these countries it is now higher than it was in 2000. The largest increase is in the Russian Federation (by 0.31). In the Republic of Latvia it is now higher than in 2000 by 0.30, in the Republic of Armenia – by 0.29, in the Republic of Estonia – by 0.23, in the Republic of Belarus – by 0.13, in the Republic of Lithuania – by 0.09.

The total fertility rate is significantly lower in the Republic of Moldova (2018 - 1.17) and Ukraine (2020 - 1.22). If in Ukraine its value is now higher than in 2000 by 0.10, in the Republic of Moldova it is lower by 0.12.

Simultaneously with the decline in the birth rate in the 1990s age model changed significantly (Table 2.3.2).

In the first half of the 1990s the decline in the birth rate in the Russian Federation followed the classical model. The number of births of an older order, which occur in women with respect to older ages, has decreased. Therefore, in these ages, the decline in fertility rates was more significant: at the age of 15–19, the fertility rate decreased in 1995, compared to 1990 by 18.5%, in 20–24 years – by 28.0%, at 25–29 years – by 28.6%, at 30–34 years – by 38.8%, at 35–39 years – by 45.4%, at 40–44 years – by 47.6%. At the same time, the age-related fertility model is shifting to younger ages due to an increase in the proportion of first births.

Similar changes in the age model of fertility in the first half of the 1990s were in the Republic of Kazakhstan (a decrease in the birth rate at 20–24 years by 16.1%, at 25–29 years – by 20.4%, at 30–34 years – 21.8%, at 35–39 years – by 28.6%, in 40–44 years – by 36.5%), Republic of Moldova (20–24 years – by 30.4%, 25–29 years – by 21.9%, 30–34 years – by 36.1%, 35–39 years – by 42.6%, 40–44 years – by 55.4%) and Ukraine (20–24 years – by 26.4%, 25–29 years – by 24.9%, 30–34 years – by 33.9%, 35–39 years – by 34.4%, 40–44 years – by 38.2%).

In the Republic of Azerbaijan, the smallest decrease in the birth rate in 1995, compared to 1990, was among 20–24 years and somewhat larger at older ages. There was no such tendency in the Republic of Armenia either.

In other countries in the post-Soviet space, the decline in fertility rates during this period varied slightly across age groups: Republic of Belarus – from 25.6% at 25–29 years to 34.3% at 40–44 years; Republic of Georgia – from 30.6% at 40–44 to 38.6% at 25–29; Republic of Lithuania – from 22.6% at 25–29 years to 32.7% at 40–44 years; Republic of Estonia – from 27.3% at 25–29 years to 37.5% at 40–44 years; Republic of Latvia – from 33.9% at 35–39 years to 41.7% at 30–34 years and only slightly less at 25–29 years (by 27.0%). In the Republic of Tajikistan in 1995 there was approximately the same decrease in fertility rates in the age range from 20 to 40 years (12.3% in 20–24 years to 19.6% in 30–34 years), compared to 1990, but much more significant in the age groups 40–44 years (32.5%) and 45–49 years (34.6%). A similar situation in the Kyrgyz Republic: a decrease in the birth rate from 14.5% in 20–24 years to 16.1% in 25–29 years and more significant in 35–39 years (by 21.1%), 40–44 years (by 33.7%) and 45–49 years (by 35.9%).

<sup>&</sup>lt;sup>1</sup> URL: https://www.geostat.ge/en/modules/categories/319/births

#### Age-specific fertility rates in 1990–2020<sup>1</sup>

Years											
	15–19	20–24	25–29	30–34	35–39	40–44	45–49				
			Republic	of Azerbaijan	2						
1990	26,7	200,6	189,9	93,9	35,2	8,8	0,9				
1995	40,0	167,2	131,6	66,0	27,3	5,8	0,7				
2000	29,0	131,2	98,5	51,7	22,3	6,1	0,8				
2005	41,1	184,8	140,2	65,2	26,4	7,4	0,9				
2010	60,0	172,9	127,2	57,8	29,4	5,1	0,7				
2015	52,4	166,6	118,3	58,6	23,1	4,6	0,5				
2020	42,2	131,8	95,6	45,3	17,3	4,1	0,8				
Republic of Armenia <sup>3</sup>											
1990	69,1	223,9	131,3	68,8	24,9	5,5	0,4				
1995	63,6	160,1	83,1	39,8	17,5	3,8	0,4				
2000	31,6	120,0	63,6	28,8	13,0	3,5	0,3				
2005	25,9	117,1	78,0	33,1	11,7	2,5	0,1				
2010	27,1	110,1	91,9	47,9	16,8	3,2	0,2				
2015	24,3	118,4	102,8	56,2	22,7	4,2	0,3				
2019	16,8	110,6	100,6	59,1	26,2	5,9	0,5				
	Republic of Belarus <sup>4</sup>										
1990	43,6	175,6	97,7	45,0	16,0	3,5	0,1				
1995	39,5	124,6	72,7	29,9	10,7	2,3	0,1				
2000	27,4	109,8	75,5	35,5	11,5	2,0	0,1				
2005	21,7	91,2	79,0	41,9	14,3	2,4	0,1				
2010	20,7	89,8	101,6	62,1	23,2	3,7	0,1				
2015	18,1	89,4	115,4	82,5	35,7	6,1	0,2				
2018	11,7	73,8	93,0	71,6	34,4	6,7	0,3				
				ic of Georgia <sup>5</sup>							
1990	58.1	167.3	110.5	64.0	24.7	6.2	0.3				
1995	65,7	116,0	67,9	42,7	16,9	4,3	0,3				
2000	43,7	120,6	80,8	46,3	20,5	5,3	0,5				
2005	45,1	111,7	86,3	49,9	20,8	4,8	0,3				
2010	52,2	132,6	111,0	67,0	29,1	6,8	0,3				
2015	48,4	144,1	128,0	87,7	41,5	10,6	0,7				
2020	27,3	103,3	121,8	81,6	44,4	13,3	1,7				
				of Kazakhstan							
1990	50,0	208,3	156,7	88,2	42,7	11,5	0,9				

<sup>&</sup>lt;sup>1</sup> For the Republic of Armenia and the Republic of Tajikistan, the latest data on age-related birth rates for 2019, for the Republic of Belarus and the Republic of Moldova – for 2018, for the Republic of Tajikistan and the Republic of Uzbekistan – for 2017, for the Republic of Turkmenistan – for 2015.

² Azərbaycanın demoqrafik göstəriciləri. Bakı, 2021. P. 219–220. URL: <a href="https://www.stat.gov.az/source/demoqraphy/?lang=en">https://www.stat.gov.az/source/demoqraphy/?lang=en</a> Հայաստանի ժողովրդագրական ժողովածու – 2020. ԵՐԵՎԱՆ, 2020. P. 67. URL: <a href="https://www.armstat.am/file/article/demog\_2020\_3.pdf">https://www.armstat.am/file/article/demog\_2020\_3.pdf</a>; Հայաստանի ժողովածու – 2019. ԵՐԵՎԱՆ, 2019. P. 67. URL: <a href="https://www.armstat.am/file/article/demog\_2019\_3.pdf">https://www.armstat.am/file/article/demog\_2019\_3.pdf</a>; Հայաստանի ժողովրդագրական հուրանան և ԵՐԵՎԱՆ, 2005. P. 39–40. URL: <a href="https://www.armstat.am/file/article/demog\_2016\_3.pdf">https://www.armstat.am/file/article/demog\_2016\_3.pdf</a>; Հայաստանի ժողովրդագրական ժողովրդագրական հուրանան և ԵՐԵՎԱՆ, 2005. P. 39–40. URL: <a href="https://www.armstat.am/file/article/demog\_2016\_3.pdf">https://www.armstat.am/file/article/demog\_2016\_3.pdf</a>; Հայաստանի հուրանան և ԵՐԵՎԱՆ, 2005. P. 39–40. URL: <a href="https://www.armstat.am/file/article/demog\_2016\_3.pdf">https://www.armstat.am/file/article/demog\_2016\_3.pdf</a>; Հայաստանի հուրանան և Ինանանան և Ինանանան և Ինանանան և Ինանանան և Ինանանան և Ինանանան և Ինանանան և Ինանանան և Ինանանան և Ինանան և Ինանան և Ինա

<sup>&</sup>lt;sup>4</sup> Demographic Yearbook of the Republic of Belarus. Minsk, 2019. p. 272. URL: <a href="https://www.belstat.gov.by/upload/iblock/91b/91b911b6266ed52902eb6f89f5dfab3a.pdf">https://www.belstat.gov.by/upload/iblock/91b/91b911b6266ed52902eb6f89f5dfab3a.pdf</a>

<sup>&</sup>lt;sup>5</sup> დემოგრაფიული ვითარება საქართველოში. თბილისი 2012. P. 20. URL: <a href="https://www.geostat.ge/media/20703/15.10.2012">https://www.geostat.ge/media/20703/15.10.2012</a> krebul-2011.pdf; დემოგრაფიულივითარებასაქართველოში.2019.თბილისი 2020. P. 38. URL: <a href="https://www.geostat.ge/media/39628/%E1/883%93%E1/883%94%E1/883%9B%E1/883%9D%E1/883%9D%E1/883%92%E1/883%A0/E1/883%90%E1/883%9A4%E1/883%9A3%E1/883%9A4%E1/883%9B%E1/883%9B%E1/883%9B%E1/883%98-%E1/883%95%E1/883%98%E1/883%96/E1/883%90%E1/883%A0%E1/883%94%E1/883%91%E1/883%90-%E1/883%A1/%E1/883%90%E1/883%A5%E1/883%90-%E1/883%A0/E1/883%97%E1/883%95%E1/883%94%E1/883%94/E1/883%9A/E1/883%9D/E1/883%A8/E1/883%98-2019.pdf; URL: <a href="https://www.geostat.ge/en/modules/categories/319/births">https://www.geostat.ge/en/modules/categories/319/births</a>; Note: 2000–2013 based on the retro-projection; starting from 2014 based on the registered data.

<sup>&</sup>lt;sup>6</sup> Demographic yearbook of Kazakhstan. Nur-Sultan, 2021. P. 137; demographic yearbook of Kazakhstan. Astana, 2017. P. 162; demographic yearbook of Kazakhstan. Astana, 2007. p. 207; demographic yearbook of Kazakhstan. Almaty, 2005. P. 269. URL: <a href="https://stat.gov.kz/edition/publication/collection">https://stat.gov.kz/edition/publication/collection</a>); <a href="https://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=5">https://stat.gov.kz/edition/publication/collection</a>); <a href="https://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=5">https://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=5</a>

Years		TI	he number of k	pirths per 1000	) women (years	5):	
	15–19	20-24	25-29	30–34	35–39	40–44	45-49
1995	47,9	174,8	124,8	69,0	30,5	7,3	0,6
2000	40,2	134,0	92,0	53,0	21,4	4,3	0,5
2005	26,0	140,2	133,2	87,2	46,1	10,6	0,5
2010	28,3	146,7	155,6	111,4	62,5	16,1	0,8
2015	31,0	161,2	159,7	116,0	66,8	16,4	0,9
2020	22,9	170,4	186,9	136,9	84,4	22,9	1,2
			Republic	of Kyrgyzstan	1		
1990	59,6	264,1	214,1	135,2	68,8	24,0	3,9
1995	65,7	225,9	179,7	115,5	54,3	15,9	2,5
2000	48,5	180,8	149,9	100,7	50,0	13,7	2,3
2005	32,1	167,3	150,4	102,9	56,3	16,4	2,5
2010	34,1	181,4	179,7	123,8	70,3	21,8	3,0
2015	42,3	200,8	173,3	128,7	72,5	21,4	2,3
2020	33,5	186,7	175,8	118,7	73,9	19,8	1,1
			Repub	lic of Latvia <sup>2</sup>			
1990	49,9	163,9	99,6	57,5	23,3	5,3	0,2
1995	29,9	98,9	72,7	33,5	15,4	3,4	0,3
2000	24,1	81,7	77,7	42,9	17,8	3,8	0,2
2005	21,6	74,1	90,0	59,9	26,1	4,9	0,3
2010	18,2	59,5	88,3	67,3	31,6	7,6	0,3
2015	18,1	64,4	103,2	93,8	50,0	11,3	0,7
2020	10,6	53,8	92,4	88,6	50,3	13,2	0,9
			Republic	of Lithuania			
1990	40,2	167,2	113,5	56,4	22,4	5,2	0,3
1995	40,8	120,2	87,9	41,6	15,9	3,5	0,2
2000	25,9	96,3	84,8	47,4	18,9	4,2	0,2
2005	19,4	70,2	89,8	53,6	21,0	4,4	0,2
2010	12,6	54,2	114,2	81,6	31,3	5,6	0,3
2015	13,7	53,2	117,6	102,3	45,2	8,2	0,3
2020		38,7	91,5	98,9	47,6	10,5	0,5
			·	c of Moldova <sup>4</sup>	1		
1990	58,7	203,8	115,7	62,3	25,1	6,5	0,3
1995	61,8	141,8	90,4	39,8	14,4	2,9	0,2
2000	36,3	103,7	67,8	34,7	12,2	2,6	0,1
2005	29,0	87,2	70,8	38,2	15,9	2,5	0,2
2010	26,7	85,3	79,4	47,0	19,6	3,7	0,1
2015	27,9	81,7	75,5	48,6	21,8	4,5	0,2
2018	23,9	69,4	66,1	46,4	22,4	4,7	0,2
		1		Federation 5			1
1990	55,0	156,5	93,1	48,2	19,4	4,2	0,1
1995	44,8	112,7	66,5	29,5	10,6	2,2	0,1

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<sup>&</sup>lt;sup>1</sup> For 1990 and 1995 – http://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=6; for 2000–2020 – Demographic Yearbook of the Kyrgyz Republic. 2016–2020. Bishkek, 2021; Demographic Yearbook of the Kyrgyz Republic. 2015–2019. Bishkek, 2020. URL: http://www.stat.kg/ru/publications/demograficheskij-ezhegodnik-kyrgyzskoj-respubliki /; Demographic Yearbook of the Kyrgyz Republic. 2009–2013. Bishkek, 2015. p. 141. URL: <a href="http://www.stat.kg/media/publicationarchive/81ef7693-ab21-4b1d-b189-32679e693e15.pdf">http://www.stat.kg/media/publicationarchive/81ef7693-ab21-4b1d-b189-32679e693e15.pdf</a>; Peжим доступа: <a href="http://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=6">http://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=6</a>

 $<sup>{}^2 \,</sup> URL: \qquad \underline{https://stat.gov.lv/en/statistics-themes/population/fertility/tables/idk010-fertility-rates-age-specific-total-gross-and?themeCode=ID; \\ \underline{https://stat.gov.lv/pxweb/en/OSP\_PUB/START\_POP\_ID\_IDK/IDK010}$ 

<sup>&</sup>lt;sup>3</sup> Demografijos metraštis. 2017. Vilnius, 2018. P. 45. URL: <a href="https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=30420">https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=30420</a>; Demografijos metraštis. 2008. Vilnius, 2009. P. 77. URL: <a href="https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=13755">https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=13755</a>; Demografijos metraštis. 2003. Vilnius 2004. P. 43. URL: <a href="https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=6447">https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=6447</a>; Режим доступа: <a href="https://osp.stat.gov.lt/statistiniu-rodikliu-analize?indicator=S3R178#/">https://osp.stat.gov.lt/statistiniu-rodikliu-analize?indicator=S3R178#/</a>

<sup>&</sup>lt;sup>4</sup> URL: <a href="https://statbank.statistica.md/PxWeb/pxweb/en/20%20Populatia%20si%20procesele%20demografice\_">https://statbank.statistica.md/PxWeb/pxweb/en/20%20Populatia%20si%20procesele%20demografice\_"POP\_"POP030/POP032100.px/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774</a>

<sup>&</sup>lt;sup>5</sup> Demographic Yearbook of Russia 2019. M., 2019. p. 63. URL: <a href="https://rosstat.gov.ru/storage/mediabank/Dem\_ejegod-2019.pdf">https://rosstat.gov.ru/storage/mediabank/Dem\_ejegod-2019.pdf</a>; Demographic Yearbook of Russia 2017. Moscow, 2017. URL: <a href="https://gks.ru/bgd/regl/B17\_16/Main">https://gks.ru/bgd/regl/B17\_16/Main</a> .htm; Rosstat data.

Years		T	he number of l	oirths per 1000	) women (years	5):	
	15–19	20-24	25-29	30–34	35–39	40–44	45–49
2000	27,4	93,6	67,3	35,2	11,8	2,4	0,1
2005	27,4	88,4	77,8	45,3	17,8	3,0	0,2
2010	27,0	87,5	99,2	67,3	30,0	5,9	0,3
2015	24,0	90,0	112,6	83,0	39,8	8,3	0,4
2020	14,1	73,6	92,6	70,8	39,2	9,2	0,6
			Republi	of Tajikistan			
1990	40,4	306,9	280,1	211,0	118,5	51,4	8,1
1995	60,7	269,3	237,5	169,7	98,9	34,7	5,3
2000	41,8	207,5	188,2	140,7	85,1	31,1	3,7
2005	34,4	186,7	182,8	138,2	82,7	27,3	2,6
2010	44,1	214,3	169,7	97,1	46,9	12,0	0,7
2015	46,4	244,3	171,3	101,1	42,9	9,2	0,5
2019	36,3	236,2	158,2	90,8	42,0	6,8	_
	,	,		menistan <sup>2</sup>	,	,	l
1990	24,3	231,7	279,8	185,5	98,1	33,8	4,8
1995	25,9	208,4	237,2	146,2	66,4	19,3	2,6
2000	24,9	181,9	198,9	113,5	46,8	11,0	1,5
2005	23,3	167,3	188,8	107,3	44,0	8,4	1,4
2010	24,3	169,8	195,7	117,9	47,4	8,6	1,2
2015	26,5	179,5	205,0	128,5	50,1	9,5	0,9
		,		of Uzbekistan		,	,
1990	51,8	299,2	242,0	146,7	67,9	23,6	3,7
1995	51,5	275,6	202,2	117,1	44,0	12,9	1,7
2000	30,2	220,3	171,6	95,8	33,7	9,0	0,7
2005	18,2	186,8	166,7	91,0	29,5	7,6	0,4
2010	17,8	178,6	163,9	91,5	27,6	7,1	0,5
2015	23,8	194,8	162,4	86,1	27,2	3,7	0,2
2017	19,0	182,8	159,2	86,8	30,8	4,7	0,3
			U	kraine 4			
1990	59,1	161,8	87,6	41,6	15,1	3,4	0,1
1995	55,1	119,1	65,8	27,5	9,9	2,1	0,1
2000	32,1	94,9	57,7	26,5	8,7	1,9	0,1
2005	28,6	88,8	71,7	37,7	13,3	2,3	0,1
2010	28,8	90,1	87,9	55,1	22,3	4,2	0,2
2015	27,3	92,3	91,8	58,8	27,3	5,6	0,4
2020	15,8	66,4	76,3	52,2	25,7	6,2	0,8
			Republ	ic of Estonia <sup>5</sup>			
1990	55,0	164,7	106,0	55,3	23,1	4,8	0,2
1995	37,9	106,6	77,1	36,5	14,5	3,0	0,1
2000	26,4	84,6	82,4	52,7	19,5	4,7	0,2
2005	22.6	74.3	97.8	69.7	32.8	5.8	0.2
2010	17.5	65.3	112.6	92.1	46.7	10.7	0.2
2015	12.6	53.6	98.8	89.1	50.5	12.9	0.6
2020	7.9	42.4	94.4	98.8	57.4	15.5	1.1

<sup>2</sup> URL: <a href="http://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=12">http://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=12</a>

<sup>&</sup>lt;sup>1</sup> Demographic Yearbook of the Republic of Tajikistan. Monday, 2020. C. 135.

<sup>&</sup>lt;sup>3</sup> For 1990–2010 – http://www.demoscope.ru/weekly/ssp/sng\_asfr.php?reg=13; for 2015 and 2017. – Demographic Yearbook 2018. NY, 2019. P. 391. URL: https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2018.pdf; Demographic Yearbook 2016. NY, 2017. P. 380. URL: https://unstats.un.org/unsd/demographic-social/products/dyb/dybsets/2016.pdf;

<sup>&</sup>lt;sup>4</sup> Population of Ukraine in 2019. Kiev, 2020. P. 101. URL: http://database.ukrcensus.gov.ua/PXWEB2007/ukr/publ\_new1/2020/ zb\_nas\_2019.pdf; population of Ukraine in 2013. Kiev, 2014. P. 177. URL: http://database.ukrcensus.gov.ua/PXWEB2007/ eng/publ\_new1/2014/publ2014.asp; URL: http://ukrstat.gov.ua/

5 URL: https://andmed.stat.ee/en/stat/rahvastik\_\_rahvastikusundmused\_\_sunnid/RV172

In the second half of the 1990s changes in the age model of fertility in many countries in the post-Soviet space had a different nature.

In the Russian Federation, in 2000 the birth rate decreased in the age groups 15–19 (by 38.8%) and 20–24 (by 16.9%) compared with 1995. Its value increased slightly among 25–29 year-old women (by 1.2%) and very significantly in 30–34 year-old women (by 19.3%). In the age groups 35–39 and 40–44, the increase in the birth rate was 11.3% and 9.1% respectively. As a result, there has been a significant shift in the age model of fertility to older ages.

Practically, the same situation is observed in the Republic of Belarus (15–19 years – -30.6%, 20-24 years – -11.9%, 25-29 years – + 3.9%, 30-34 years – +18.7%), Republic of Latvia (15–19 years – -19.4%, 20-24 years – -17.4%, 25-29 years – +6.9%, 30-34 years – +28.1 %) and the Republic of Estonia (15–19 years – -30.3%, 20-24 years – -20.6%, 25-29 years – +6.9%, 30-34 years – +44.4%).

In the Republic of Lithuania, the birth rate decreased in 2000 among women aged 25–29 compared to 1995, but at the same time there was a observed pattern – with an older age, there is less decrease or more increase in the birth rate (15- 19 years – -37.0%, 20–24 years – -20.0%, 25–29 years – -3.2%, 30–34 years – +14.4%, 35–39 years – +19, 5%, 40–44 years – +20.0%).

In the Republic of Georgia the decline in the birth rate in the second half of the 1990s is observed only in the 15–19 age group. In all other ages it increased, among 20–24 years only by 4.0%, among 25–29 years – by 19.0%, 35–39 years – by 21.3%, 40–44 years – by 23.3%.

In the Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, Republic of Tajikistan, Republic of Uzbekistan and Ukraine in 2000 fertility rates decreased in all age groups up to 45 years compared to 1995, but at younger ages their decline was more significant. For example, in the Republic of Kazakhstan, the fertility rate among 20–24 year-old women decreased by 23.9% and among 30–34 year-olds – by 7.2%, in the Republic of Moldova – by 26.9% and 12.8% respectively. In the Republic of Tajikistan – by 22.9% and 17.1%, in the Kyrgyz Republic – by 20.0% and 12.8%, in Ukraine – by 20.3% and 3.6%.

In the Republic of Azerbaijan and the Republic of Armenia, in most age groups, the decline in the birth rate in 2000 compared to 1995 was approximately the same. The exception is observed in the Republic of Azerbaijan for the age groups 40–44 and 45–49, where the birth rate increased, while in the Republic of Armenia at 15–19 years the decline was much more significant and relatively small among 40–44.

Thus, if in the first half of the 1990s the decline in fertility in a number of countries in the post-Soviet space was accompanied by a rejuvenation of the age-specific fertility model, then in the second half of the 1990s in many countries, on the contrary, its relative aging took place.

The aging pattern of fertility in most countries continued during the 2000s.

In the Russian Republic, the birth rate in the age group of 15–19 years in 2020 was almost half as much as in 2000. The birth rate among 20–24 year-old women has decreased by 21.4% over this period. At the same time, proportion was higher in 2020 than in 2000 in the birth rate in the age group of 25–29 years, 2.0 times higher among 30–34 years, 3.3 times higher among 35–39 years old. As a result of such differences in the dynamics of age-specific fertility rates, its largest value has shifted from the age group 20–24 to 25–29 years. Moreover, in 2020, the fertility rate among women aged 30–34 was only 3.8% lower than among 20–24 year-olds (in 2000, this indicator at the age of 20–24 was 2.7 times more than in 30–34 years).

The same situation is observed in the Republic of Belarus. In 2018 the birth rate at 15-19 years old was 2.3 times lower compared to 2000, among 20-24 years – by 32.8%. At older ages, the birth rate in 2018 was higher than in 2000: 25-29 years – by 23.2%, 30-34 years – 2.0 times, 35-39 years – 2.0 times. The maximum birth rate is recordered in the 25-29 age group, not in 20-24 years as in the early 2000s. The fertility rate among women aged 20-34 in 2018 was only 20-24 years among women aged 20-24.

A shift in the maximum value of the birth rate from the age group 20–24 to 25–29 years also observed in the Republic of Georgia, Ukraine (unlike the Russian Federation and the Republic of Belarus, in which this happened in 2008, in the Republic of Georgia and Ukraine such a shift happened only in recent years) and the Republic of Kazakhstan.

In the Republic of Latvia, there was not only a shift in the maximum birth rate to the 25–29 age group, but also the fact that almost the same birth rate as 25–29 year-old women occurs in 30–34-year-olds (in 2020 the difference in the value of the birth rate between them was only 4.3%). If in 2000 the birth rate at the age of 20–24 was 90.4% more than in 30–34 years, then in 2020 in 30–34 years there were 64.7% more than in 20–24 years old.

In the Republic of Lithuania and the Republic of Estonia, the shift in the age pattern of fertility was even more significant. If in 2000 the largest value of the indicator took place in 20-24 years, then in 2020 - in 30-34 years. Even the fertility rate of 35-39 year-old women in 2020 was higher than that among 20-24 year-olds by 23.0% in the Republic of Lithuania and by 35.4% in the Republic of Estonia. If in the age group 20-24 years the fertility rate in 2020 was less than in 2000 by 2.5 times in the Republic of Lithuania and 2.0 times in the Republic of Estonia, then among 35-39 years, on the contrary, 2.5 and 2.9 times.

In the Republic of Armenia, the birth rate at the age of 20–24 in 2019 was lower than in 2000 by 7.8%. At older ages, on the contrary, it increased: 25–29 years – by 58.2%, 30–34 years – 2.1 times, 35–39 years – 2.0 times. However, in 2019, the fertility rate in the 20–24 age group was still higher than in the 25–29 age group, although the difference between them decreased from 88.7% in 2000 to 9.9%.

The situation is similar in the Republic of Moldova, where the difference in fertility rates in the age groups 20–24 and 25–29 decreased from 52.9% in 2000 to 5.0% in 2018, but the largest value of this indicator remains in 20–24 year old women.

In the Kyrgyz Republic, the increase in fertility rates in the 2000s was more significant in older age groups, but in the Republic of Armenia and the Republic of Moldova the fertility rate among 20–24 year-old women remains higher than in other ages.

There is no reason to observe the aging of the age model of fertility in the Republic of Azerbaijan and the Republic of Tajikistan. In the Republic of Azerbaijan in 2020 fertility rates in the age groups 20–24 and 25–29 years old were almost the same as in 2000, and in the age range 30–34 years they were lower. The fertility rate among women aged 20–24 in 2020 was 37.9% higher than among women aged 25–29. In the Republic of Tajikistan the fertility rate among 20–24 year-old women in 2017 was 8.8% higher than in 2000, and at older ages it was lower (25–29 years – by 14.0%, 30–34 years – by 31.3%, 35–39 years – by 46.9%). The fertility rate among 20–24-year-old women in the Republic of Tajikistan in 2017 was 39.5% higher than among 25–29 year olds.

The aging of the age-related fertility model, which is taking place in many countries in the post-Soviet space, makes the task of maintaining reproductive health urgent so that women can fully realize their reproductive intentions at older ages.

# 2.4. State support for families and fertility

At the interstate level in the framework of the CIS, a number of documents were adopted that support family relations and fertility. The key goal of the conceptual documents adopted within the CIS was the coordination of demographic projects and programs in the field of family support and fertility, as well as more effective use of integration opportunities in the interests of the CIS development.

In 1994, CIS countries signed the Agreement «On guarantees of the rights of citizens in the area of social benefits, compensation payments to families with children and alimony». The Agreement established a guaranteed state social assistance to persons with children in the manner prescribed by national legislation in the territory where the child lives with one of the parents. The costs of payment of social benefits and compensation payments under this Agreement shall be borne by the Party where citizens with children permanently reside, without mutual settlements, unless otherwise provided bilaterally. The key goal of the conceptual documents adopted within the CIS was the coordination of demographic projects and programs in the field of family support and fertility, as well as more effective use of integration opportunities in the interests of the CIS development<sup>1</sup>.

In 1994, the Charter of Social Rights and Guarantees of Citizens of Independent States was adopted. The charter pays special role to the protection of the family and motherhood. In particular, attention is drawn to the fact that states:

- To take measures to provide workers with family responsibilities with such conditions of employment that would allow them to combine professional and family responsibilities; create public and private institutions and services for the care of children and assistance to families in their upbringing, and also contribute to their development;
- To ensure every woman the right to the widest possible range of family planning services, as well as measures to reduce maternal and child mortality;
- To take measures to protect children in especially difficult conditions, including those left without supervision, homeless, subjected to economic and sexual exploitation, suffering from socially determined diseases, including acquired immunodeficiency syndrome, refugee children, as well as those who are in prison<sup>2</sup>.

Art. 37 of this document establishes that the amount of cash benefits for childcare should not be lower than the level of the minimum wage established by national legislation and for pregnancy and childbirth should fully compensate the lost earnings.

In 2007, the Concept for the Formation of the Legal Basis and Mechanisms for the Implementation of the Welfare State in the CIS was adopted. The concept emphasizes increasing the birth rate as a priority in the field of demographic development. As policy instruments that stimulate an increase in the birth rate, it is proposed to make wider use of paid parental leave, to observe the relevant legal norms, and to expand the network of preschool institutions<sup>3</sup>.

In 2011 the Concept of Coordinated Social and Demographic Policy of the CIS Member States was adopted. Among the priorities of the Concept is the creation of socio-economic pre-

<sup>&</sup>lt;sup>1</sup> Agreement of the CIS countries «On guarantees of citizens' rights in the field of social benefits, compensation payments to families with children and alimony» dated September 9, 1994 // Information Bulletin of the Council of Heads of State and the Council of Heads of Government of the CIS «Commonwealth». № 2. 1994. Bulletin of International Treaties. No. 4. April 2008. <sup>2</sup> Charter of Social Rights and Guarantees of Citizens of Independent States Charter of Social Rights and Guarantees of Citizens of Independent States. Approved in St. Petersburg on October 29, 1994 at the V plenary session of the Interparliamentary Assembly of the CIS Member States // Newsletter. Interparliamentary Assembly of the Member States of the Commonwealth of Independent States. 1995. No. 6. pp. 99–117.

<sup>&</sup>lt;sup>3</sup> The concept of the formation of legal foundations and mechanisms for the implementation of the welfare state in the Commonwealth countries. Adopted in St. Petersburg on May 31, 2007 by Resolution 28-6 at the 28th plenary session of the Interparliamentary Assembly of the CIS Member States // Newsletter. Interparliamentary Assembly of the CIS Member States. 2007. No. 40. pp. 153–193.

requisites for solving demographic problems in terms of overcoming trends in depopulation and strengthening the institution of the family<sup>1</sup>.

The adoption of interstate documents in the field of family policy contributed to the development of state family policy and a policy to support the birth rate at the national level.

In 2016, Republic of Kazakhstan adopted the Concept of Family and Gender Policy until 2030², aimed at supporting, strengthening and protecting families, creating the necessary conditions conducive to the physical, intellectual, spiritual, moral development of families and their members, protecting motherhood, fatherhood and childhood. In order to strengthen the institution of the family, within the framework of the implementation of the three-stage period of the Concept, it is planned to improve the legislation of the Republic of Kazakhstan, ensuring equality of rights and opportunities for men and women in the field of family relations, protecting motherhood and childhood, increasing the responsibility of parents for raising children.

In 2002, the Republic of Latvia approved the Concept of State Family Policy, among the priorities of which were identified as increasing the role of the family, supporting family values, and fulfilling parental responsibilities.

In 1996, the Concept of Family Policy of the Republic of Lithuania was approved. The provision of financial support to families is considered as a priority area of family policy.

In 2014, the Concept of state family policy in the Russian Federation for the period up to 2025 was approved, in which the priority areas are «the approval of traditional family values and family lifestyle, the revival and preservation of spiritual and moral traditions in family relations and family education, the creation of conditions to ensure family well-being, responsible parenting, increase the authority of parents in the family and society and maintain the social stability of each family»<sup>3</sup>.

In 2015, the Concept of Family Development in the Republic of Tajikistan was adopted, which is aimed at protecting the family as an important social and cultural value, preserving moral and ethical traditions in family relations; strengthening the economic foundations of the family, ensuring their economic independence in order to fulfill its social tasks; improving the regulatory legal framework of family relations in order to protect the rights and interests of family members, and increasing the responsibility of the family in the performance of their duties<sup>4</sup>.

Since 2018, the Concept of Strengthening the Institution of the Family has been implemented in the Republic of Uzbekistan, which is focused on the formation of a model of a prosperous family with a conceptual idea «A prosperous family is the basis for the development of society». The roadmap for the implementation of the Concept of strengthening the institution of the family puts the end to the effective implementation of reforms in the field of strengthening the institution of the family, a full-fledged embodiment in society of the modern family model and the constitutional principle «The family is under the protection of society and the state»<sup>5</sup>.

Since 1999, Ukraine has been implementing the Concept of State Family Policy, which is aimed at promoting the revival of a traditionally strong, hard-working, economically wealthy family on the basis of new socio-economic relations, national traditions and the introduction of the best world experience; propaganda and ensuring the continuity of generations<sup>6</sup>.

<sup>&</sup>lt;sup>1</sup> Decision of the Council of CIS Heads of Government «On the Concept of coordinated social and demographic policy of the CIS member States». Adopted in St. Petersburg on October 18, 2011.

<sup>&</sup>lt;sup>2</sup> Decree of the President of the Republic of Kazakhstan dated December 6, 2016 No. 384 «On approval of the Concept of family and gender policy in the Republic of Kazakhstan until 2030»

<sup>&</sup>lt;sup>3</sup> On the approval of the Concept of State Family Policy in the Russian Federation for the period up to 2025. Decree of the Government of the Russian Federation No. 1618-r dated August 25, 2014.

<sup>&</sup>lt;sup>4</sup> About the concept of family development in the Republic of Tajikistan. Resolution of the Government of the Republic of Tajikistan No. 801 dated December 30, 2015.

<sup>&</sup>lt;sup>5</sup> On the approval of the concept of strengthening the institution of the family in the Republic of Uzbekistan. Resolution of the President of the Republic of Uzbekistan No. pp-3808 dated June 27, 2018.

<sup>&</sup>lt;sup>6</sup> About the Concept of the state family policy of Ukraine. Resolution of the Verkhovna Rada of September 17, 1999 No. 1063-XIV.

Since 2002, the Republic of Estonia has been implementing the Concept of a Policy for Family and Children, which contains a fairly detailed list of measures to improve the quality of life of families.

Also, in the countries of the former USSR, unique measures of socio-economic support for families, including young and large families with children were introduced.

In the Russian Federation, the Concept of State Policy in relation to a young family supports the institution of a prosperous child (large) young family<sup>1</sup>. The Fundamentals of State Youth Policy of the Russian Federation for the period up to 2025 promotes the value of the first registered marriage<sup>2</sup>. Since 2002, the subprogram «Provision of housing for a young family» has been implemented within the framework of the federal target program «Housing» for 2002–2010.<sup>3</sup>, «Housing» for 2011–2015 «,» Housing» for 2016–2020<sup>4</sup>. For 2011–2014 within the framework of the program, the housing conditions of 108.5 thousand young families were improved. The total amount of funds from the budgets of the constituent entities of the Russian Federation attracted as part of the implementation of the subprogram in 2011–2014 amounted to 39.02 billion rubles, and from extra-budgetary sources – 130.06 billion rubles<sup>5</sup>. Since 2012, measures have been taken to improve the living conditions of families with three or more children in terms of the priority provision of residential premises under social tenancy agreements to families with 3 or more children<sup>6</sup>.

Since 2014, the Republic of Uzbekistan has been implementing measures to provide housing for young families actively participating in the public life of the country. For distinguished young families, actively participating in the public life of the country, the following conditions have been established for the issuance of long-term preferential mortgage loans «... for houses, the construction of which is determined by state programs in 2019. For the construction and reconstruction of affordable apartment buildings in cities – for a period of 20 years , including a three-year grace period, with an interest rate of 7% per annum for the first five years and in the amount of the refinancing rate of the Central Bank of the Republic of Uzbekistan in the subsequent period, with an initial payment of 25% of the cost?.

An important socio-economic measure of family support in some countries of the former USSR is the payment of «family» or «maternity» capital. The measure has been actively implemented in the Russian Federation since 2007 and in the Republic of Belarus since 2015.

In the Russian Federation, maternity (family) capital can be obtained by:

- women who have given birth (adopted) a second child since January 1, 2007;
- women who have given birth (adopted) a third child or subsequent children starting from January 1, 2007, if they have not previously used the right to additional measures of state support;
- men who are the only adoptive parents of the second, third child or subsequent children who have not previously exercised the right to additional measures of state sup-

<sup>&</sup>lt;sup>1</sup> On the Concept of state policy in relation to a young family. Letter of the Ministry of Education and Science of the Russian Federation dated May 8, 2007 No. AF-163/06.

<sup>&</sup>lt;sup>2</sup> On the approval of the Fundamentals of the State Youth Policy of the Russian Federation for the period up to 2025, Decree of the Government of the Russian Federation No. 2403-r dated November 29, 2014 // Collection of Legislation of the Russian Federation. 15.12.2014 No. 50. St. 7185.

<sup>&</sup>lt;sup>3</sup> About the subprogram «Providing housing for young families», which is part of the federal target program «HOUSING» for 2002–2010. Resolution of the Government of the Russian Federation No. 638 of August 28, 2002.

<sup>&</sup>lt;sup>4</sup> «On the federal target program »Housing» for 2015–2020.» Decree of the Government of the Russian Federation dated December 17, 2010 No. 1050.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> On the approval of a set of measures to improve the living conditions of families with 3 or more children. Decree of the Government of the Russian Federation No. 1119-r of June 29, 2012.

<sup>&</sup>lt;sup>7</sup> On measures for further support in providing housing for young families actively participating in the public life of the country. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 250 dated September 8, 2014; On measures for further support in providing housing for young families actively Participating in the public life of the country. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 521 of August 27, 2020

port, if the court decision on adoption entered into legal force starting from January 1, 2007;

• women who gave birth (adopted) their first child starting from January 1, 2020<sup>1</sup>.

Expenditures on maternity (family) capital are carried out at the expense of interbudget-ary transfers transferred from the federal budget to the budget of the Pension Fund of the Russian Federation. The size of maternal (family) capital is revised annually according to the rate of inflation: in 2007 - 250 thousand rubles, in 2010 - 343.4 thousand, in 2019 - 453 thousand, in 2020 - 466.6 thousand rubles.

For the entire duration of the maternity capital program, more than 7.3 million Russian families received support in the amount of 2.7 trillion rubles. Near 99% of payments were spent by families to improve their living conditions, including for the repayment of the principal debt and the payment on loans and for the purchase or construction of housing. Only 1% funds were paid for the education of children and the formation of a funded pension of women. In 2020, more than 686 thousand certificates were issued for maternal capital. The amount of the payment for the first child in 2020 amounted to 466 thousand rubles. At the birth of a second child, the family receives another 150 thousand rubles. For families with a second child born in 2020 the size of the capital was 616 thousand rubles. If there were born two children in the family or more before the start of the program and in 2020 the child was born again, parents will receive 616 thousand rubles. In 2020 in maternity capital 428.1 billion rubles were paid, in 2021 – 522.1 billion rubles, and 582.1 billion is planned for 2022. The program for the payment of maternity (family) capital is valid in the Russian Federation until December 31, 2026<sup>2</sup>.

In the Republic of Belarus, since 2015, a one-time payment to families has been provided – family capital in the form of non-cash funds in the amount of USD 10 thousand at birth, adoption (adoption) of a third or subsequent children; also a monthly allowance to families for children aged 3 to 18 years during the period of raising a child under 3 years old in the amount of 50% of the highest average per capita wage budget approved by the Ministry of Labor and Social Protection for the last two quarters<sup>3</sup>.

Residents of the Republic of Belarus have the right to family capital. Family capital funds are provided to families for use in the country in full or in parts by bank transfer in accordance with the legislation in one or several areas: improving housing conditions; getting an education; receiving services in the field of social services, health care; the formation of a funded (additional) pension for a mother (stepmother) in a complete family, a parent in an incomplete family. In 2015–2019 family capital was paid in the amount of 10 thousand US dollars at the birth (adoption) of the third or subsequent children, and in 2020–2024 in the amount of 22.5 thousand Belarusian rubles.

Maternal (family) capital supported many families with children and stimulated an increase in the total number of births, primarily due to the cohort of women of older reproductive ages, somewhat increasing the average age of mothers who gave birth to a child. The measure turned out to be effective and helped, along with other measures, to extinguish the negative trends in declining fertility in countries with depopulation – Russian Federation and the Republic of Belarus.

In 2018, Russian Federation developed the Demography National Project, which was aimed at supporting families and increasing the birth rate. The project envisages achieving a total fertility rate of up to 1.7 children per woman by 2024. An increase in fertility is expected to be achieved both by measures implemented and for the first time included in the framework of the document. For example, it is planned to increase the number of in vitro fertilization proce-

<sup>&</sup>lt;sup>1</sup> On additional measures of state support for families with children. Federal Law No. 256-FZ of December 29, 2006.

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> About additional measures of state support for families raising children. Decree of the President of the Republic of Belarus No. 572 of December 9, 2014.

dures up to 450 thousand per year at the expense of the basic program of compulsory medical insurance, which should affect the increase in the birth rate and the reduction in the number of childless married couples. Special attention is paid to the information component: the creation of television programs, Internet content, periodicals implementing projects aimed at promoting family values, supporting motherhood and childhood. As already noted, to a large extent the proposed measures affect not only the regulation of demographic processes and the reproduction process, but also the functioning of the institution of the family.

Conceptual documents in the field of family policy and support for fertility, adopted at the interstate and national levels, made it possible in the 2000s to form positive vectors of demographic policy in the countries of the former USSR. Gradually, after the negative changes in the 1990s in society has grown an awareness of the need to strengthen the institution of the family, support for families with children, large families, parenting, family ties. This partly helped to neutralize the negative demographic trends of declining fertility in the 1990s

# SECTION 3. LIFE EXPECTATION AND MORTALITY OF POPULATION IN THE FORMER USSR COUNTRIES

# 3.1. Evolution of life expectancy

### Life expectancy dynamics in the context of post-Soviet trends in 1985–1999<sup>12</sup>

It is important to consider the changing situation in the «era of change» that began in the Soviet Union in the mid-1980s, with perestroika and the anti-alcohol campaign. The consequences of these shifts significantly affected the changes in mortality in the first half of the 1990s<sup>3</sup>.

At the beginning of the anti-alcohol campaign, its effect seemed undeniable: in 1985–1987 average life expectancy (ALE) – the most important integral indicator of both health and quality of life – increased in all union republics, but the spread of this gain was quite noticeable – from 2.8 and 2.2 years (respectively for men and women) – in the Moldavian SSR up to 0.4 years in the male population of the Georgian SSR and the Tajik SSR; and 0.2 years – in the female population of the Georgian SSR and the Uzbek SSR. In the RSFSR, during this period, life expectancy for men increased by 2.1 years, for women – by 1.1 years. The most pronounced positive effect of the anti-alcohol campaign was in the European part of the USSR, as well as in the Kazakh SSR and the Kirghiz SSR, the gain in the Soviet republics of Transcaucasia and Central Asia turned out to be significantly smaller (Tables 3.1.1–3.1.2).

Unfortunately, the results caused by the anti-alcohol campaign turned out to be exhausted very quickly and after 1987, negative trends began to form in the Soviet republics of the European part of the USSR, where the highest rates of growth in life expectancy were observed; in those republics where growth rates were minimal (Transcaucasia and Central Asia)<sup>4</sup>, positive trends in life expectancy persisted.

In general, in the last seven years of the existence of the USSR (1985–1991), the results were positive for women in all fifteen republics, whose life expectancy growth rates varied from 0.3 years in the Byelorussian SSR to 2.2 years in the Kirghiz SSR versus 0.9 years in the RSFSR. Among the male population, the picture did not look so unambiguous: the

<sup>&</sup>lt;sup>1</sup> The analysis was carried out on the basis of data from the European Health Information Portal. URL: https://gateway.euro.who.int/ru/datasets/european-health-for-all-database/

<sup>&</sup>lt;sup>2</sup> As a result of the Georgian-Abkhaz (1992–1993) and South Ossetian war (1991–1992), the comparability of data for the Republic of Georgia since 1985 has been violated. As a result of the conflict in Transnistria in 1990, the comparability of data for the Republic of Moldova was violated. As a result of the 1991–1994 Nagorno-Karabakh war, the comparability of data for the Republic of Armenia and the Republic of Azerbaijan was violated.

The health of the Russian population in the social context of the 90s: problems and prospects / Ed. In Starodubov.I., Mikhailova Yu.V., Ivanova A.E. M.: Medicine, 2003. 288 p.; Ivanova A.E., V. Semenova.G., Gavrilova N.S., Evdokushkina G.N., L. Gavrilov.A. Russian mortality in 1965–2002: the main problems and reserves of reduction // Public health and disease prevention. M. 2004. No. 1. pp. 20–30; V. Semenova.G. Reverse epidemiological transition in Russia. M.: CSP 2005, 287 p.; D. A. Barr, Field, M. G. (1996) The current state of healthcare in the former Soviet Union: implications for healthcare policy and reform// Am.Journ.Publ.Health. Volume 86. No. 3. pp.307–312; Becker Ch.M., Hemley D.D. (1998) Demographic changes in the former Soviet Union during the transition period// World Development. Volume 26. No. 11. Pages 1957–1975; Bobak M., Pichart H., Rose R., Hertzman S., Marmot M. (2000) Socio-economic factors, material inequality and perceived control in self-assessment of health: cross-sectional data from seven post-communist countries// Soc.Science and medicine.2000. No. 51. pp.1343–1350; Rosefield S. (2001) Premature Deaths: Russia's Radical Economic Transition in the Soviet Perspective// The Europe-Asia study. Volume 53. No. 8. pp.1159–1176; Shkolnikov V.M., Leon D.A., Adamets S., Andreev E.M., Deev A. (1998) The level of education and mortality of the adult population in Russia: analysis of routine data from 1979 to 1994// Soc. The science.Honey. Volume 47. No. 3. pp. 357–369.

<sup>&</sup>lt;sup>4</sup> The decrease in life expectancy in the male population of the Armenian SSR in 1987–1991 may be due to the delayed consequences of the 1988 Spitak earthquake, as well as the escalating Nagorno-Karabakh conflict.

results of 1985–1991 were positive only for nine republics, and in the European republics they were identified only for the RSFSR and the Moldavian SSR, where the indicators increased by 0.6 and 1.4 years. The last seven years of the Soviet Union turned out to be the most advantageous for the Kirghiz SSR, where life expectancy increased by 1.6 years for men and 2.2 years for women. Men in the Latvian SSR and women in the Byelorussian SSR lost the most and won the least (a decrease in indicators by 1.0 and an increase by 0.3 years, respectively).

Table 3.1.1. **Dynamics of male life expectancy in post-Soviet countries and the EU-15 in 1985–1999 (years)** 

	1985	1987	1991	1994	1998	1999
Republic of Azerbaijan	66	66,5	66,6	62,9	67,9	68,1
Republic of Armenia	69,9	70,5	69,1	68,6	72,5	72,6
Republic of Belarus	66,1	67,6	65,6	63,5	62,7	62,3
Republic of Georgia	67,8	68,2	69	-	69,8	70
Republic of Kazakhstan	62,6	64,2	63,4	60,8	59,4	60,8
Republic of Kyrgyzstan	63	64,7	64,6	61,1	63,2	64,5
Republic of Latvia	64,7	66,4	63,7	59,2	63,5	64,8
Republic of Lithuania	65,6	67,7	65,2	62,6	66	66,4
Republic of Moldova	62,8	65,6	64,2	62,3	64,2	63,8
Russian Federation	62,8	64,9	63,4	57,5	61,3	60
Republic of Tajikistan	66,4	66,8	67,4	63,2	68,8	69,9
Turkmenistan	61,2	62,1	62,2	61,6	62,5	64,1
Republic of Uzbekistan	64,8	65,7	65,8	64,7	66,1	67,2
Ukraine	65,2	66,7	64,7	62,5	63,3	62,8
Republic of Estonia	64,6	66,3	64,4	60,8	64,1	65
EU-15	71,8	72,2	73,1	73,6	74,9	75

Table 3.1.2. **Dynamics of life expectancy of women in post-Soviet countries and the EU-15 in 1985–1999 (years)** 

	-				
1985	1987	1991	1994	1998	1999
73,2	73,5	75,2	73,1	75,3	75,1
74,9	75,4	75,8	76,4	77,3	77,1
75,2	76,2	75,5	74,5	74,6	74
75,2	75,4	76,7	-	77,6	77,4
72,1	72,9	73,1	71,1	70,9	71,4
70,6	72,2	72,8	69,9	71,4	72,2
74	75,1	74,5	72,6	74,6	75,4
75,4	76,4	76	74,9	76,7	77,1
69,3	71,5	71	69,8	71,6	71,4
73,4	74,5	74,3	71,2	73,2	72,5
70,9	71,3	72,7	68,5	73,1	74
67,9	68,3	68,9	66,6	69,8	71,2
71	71,2	72,2	70,2	71,2	72,5
74	74,9	74,4	73	73,9	73,7
74,3	75	75	73	75,4	76,1
78,6	78,8	79,8	80,3	81,2	81,3
	73,2 74,9 75,2 75,2 72,1 70,6 74 75,4 69,3 73,4 70,9 67,9 71 74 74,3	73,2 73,5 74,9 75,4 75,2 76,2 75,2 75,4 72,1 72,9 70,6 72,2 74 75,1 75,4 76,4 69,3 71,5 73,4 74,5 70,9 71,3 67,9 68,3 71 71,2 74 74,9 74,3 75	73,2       73,5       75,2         74,9       75,4       75,8         75,2       76,2       75,5         75,2       75,4       76,7         72,1       72,9       73,1         70,6       72,2       72,8         74       75,1       74,5         75,4       76,4       76         69,3       71,5       71         73,4       74,5       74,3         70,9       71,3       72,7         67,9       68,3       68,9         71       71,2       72,2         74       74,9       74,4         74,3       75       75	73,2       73,5       75,2       73,1         74,9       75,4       75,8       76,4         75,2       76,2       75,5       74,5         75,2       75,4       76,7       -         72,1       72,9       73,1       71,1         70,6       72,2       72,8       69,9         74       75,1       74,5       72,6         75,4       76,4       76       74,9         69,3       71,5       71       69,8         73,4       74,5       74,3       71,2         70,9       71,3       72,7       68,5         67,9       68,3       68,9       66,6         71       71,2       72,2       70,2         74       74,9       74,4       73         74,3       75       75       73	73,2         73,5         75,2         73,1         75,3           74,9         75,4         75,8         76,4         77,3           75,2         76,2         75,5         74,5         74,6           75,2         75,4         76,7         -         77,6           72,1         72,9         73,1         71,1         70,9           70,6         72,2         72,8         69,9         71,4           74         75,1         74,5         72,6         74,6           75,4         76,4         76         74,9         76,7           69,3         71,5         71         69,8         71,6           73,4         74,5         74,3         71,2         73,2           70,9         71,3         72,7         68,5         73,1           67,9         68,3         68,9         66,6         69,8           71         71,2         72,2         70,2         71,2           74         74,9         74,4         73         73,9           74,3         75         75         73         75,4

While observing changes in life expectancy in the USSR in 1985–1991, it should be noted the universality of trends in all Union republics during this period, namely, an improvement in the situation during the anti-alcohol campaign and a deterioration (decrease in indicators or slowdown of positive trends) by its decay. Secondly, the short duration of the positive trends caused by the anti-alcohol campaign, their exhaustion in three years is due

to the bad-conceived nature of the activities, their opportunistic nature and their extreme unpopularity<sup>1</sup>;

Thirdly, the geographical vector of life expectancy trends (both positive and negative) during this period looks quite mature: the most visible trends are in the European republics (Baltic states, Byelorussian SSR, Ukrainian SSR, Moldavian SSR), as well as in Russian Federation, the least pronounced – in the Caucasus and Central Asia.

After 1991, during the period of formation of independent states in place of the former Soviet republics, negative trends in life expectancy turned out to be general and the decline in life expectancy turned into a catastrophic decline: for example, life expectancy in the Russian Federation in 1991–1994. decreased by 5.9 years for men and 3.1 years for women, and if in the male population Russian negative trends were most visible, then among women during this period the indicators of the Republic of Tajikistan decreased most significantly (by 4.2 years)<sup>2</sup>. The population of the Republic of Armenia suffered the least during this period, the life expectancy of men decreased by 0.5 years, women – by 0.6 years (the only case in the post-Soviet space during this period)<sup>3</sup>.

After 1994 life expectancy began to grow in the Russian Federation, decreased during 1998 default: Russian indicators increased by 3.8 - 2 years. Positive trends in this period were observed almost everywhere (the exception was the Republic of Kazakhstan, where life expectancy decreased by 1.4 - 0.2 years, and men in Belarus, whose indicators decreased by 0.8 years).

The most outstanding results during this period were demonstrated by the Republic of Tajikistan, where over five years the indicators in the male population increased by 5.6 years, in the female population – by 4.6 years.

The last year of this period is of particular interest due to the default of 1998: in 1998–1999 the life expectancy of the population of Russian Federation decreased by 1.3 years for men and 0.7 years for women, and this negative shift affected the population of the Republic of Belarus, Ukraine and the Republic of Moldova. In the countries of the South Caucasus during this period quite unexpected gender disparities were noted: against the background of an increase in the life expectancy of men in the Republic of Azerbaijan, Republic of Armenia and the Republic of Georgia, a decrease is observed among women.

On the whole, the results of the first decade of independence (1991–1999) were positive for men in the Baltic States, South Caucasus and Central Asia (except for the Republic of Kazakhstan and the Kyrgyz Republic), with the maximum (3.5 years) gains in the Republic of Armenia. Of the three Slavic states, the largest loss was in the Russian Federation and the Republic of Belarus (indicators decreased by 3.4 and 3.3 years, respectively). Among women there is a similar situation as with men, in 1991–1999. The highest losses among women were demonstrated by the Russian Federation and the Republic of Belarus, as well as the Republic of Kazakhstan, where the indicators decreased by 1.8, 1.5 and 1.7 years, respectively/ The greatest success was achieved by Turkmenistan, where the life expectancy of women increased by 2.3 years.

Paradoxically, the greatest similarity is characteristic of the dynamics of life expectancy in the Russian Federation and the Baltic countries: the only difference was noted during 1999, when Russian indicators decreased, the Baltic countries managed to maintain positive trends. In the Republic of Belarus and Ukraine, which should demonstrate the maximum similarity with the Russian Federation, the patterns of ALE dynamics differed: in the Republic of Belarus a gradual but stable decrease in indicators was noted, in Ukraine a minimum ALE was noted a year later than in Russia.

<sup>&</sup>lt;sup>1</sup> Nemtsov A.V. Alcoholic history of Russia. The newest period. Moscow: URSS; 2009.320 p.; Nemtsov A.V. Losses from alcohol-related harm in Russia in the 1980s and 1990s// Drug addiction. 2002. Volume 97. Pages 1413–1425.

<sup>&</sup>lt;sup>2</sup> The loss of life expectancy in the Republic of Tajikistan was caused by the civil war of 1992–1996.

<sup>&</sup>lt;sup>3</sup> Due to the lack of data on the Republic of Georgia in 1994, it is impossible to assess comparative trends in the country.

While characterizing the ratio of the life expectancy levels of the population of the Soviet republics and the post-Soviet countries, we note gender disparities: for example, in the male population. Russian Federation along with the Republic of Kazakhstan has always been among the outsiders and at the height of the crisis in 1994 and 1999 – the life expectancy of Russian men turned out to be minimal in the post-Soviet space. At the same time, the area of well-being stably included, on the one hand, Republic of Armenia, Republic of Georgia (with the highest indicators) and the Republic of Azerbaijan, on the other – Republic of Tajikistan and the Republic of Uzbekistan, Baltic and Slavic countries were in the middle of the list.

In the female population the area of well-being was steadily formed at the expense of the countries of the South Caucasus and the Baltic states (Republic of Georgia invariably showed the maximum indicators), the area of disadvantage was at the expense of the countries of Central Asia and the Republic of Moldova with a minimum of life expectancy in Turkmenistan. The Russian Federation, as a rule, had the middle position, completing the indicators of the Slavic states.

Note that if among men in 1991–1999 the spread in life expectancy increased from 6.9 to 12.6 years (the maximum was recorded in the Republic of Armenia and amounted to 69.1 and 72.6 years in 1991 and 1999, the minimum – in Turkmenistan in 1991 and the Russian Federation in 1999 and amounted to 62.2 and 60 years), then among women it decreased from 7.8 to 6.2 years (the maximum – in the Republic of Georgia, which amounted to 76.7 and 77.4 years, against the minimum in Turkmenistan, which amounted to 68.9 in 1991 and 71.2 years in 1999).

Not a single state in the post-Soviet space has been able to achieve Western European indicators. In the Russian Federation in 1991–1999 the general trend was a decrease in the life expectancy and in Western Europe – its growth; an increase in the loss to Russia from 9.7 to 15 years in the male population and from 5.5 to 8.8 years in the female population seems to be quite expected.

# Change in life expectancy of the population in the 2000s in the new socio-economic and geopolitical realities <sup>1</sup>

The Russian Federation emerged from the systemic crisis of the 1990s, aggravated by the default of 1998 for a long time: after the decline in life expectancy, which lasted until the early 2000s stagnation followed: the life expectancy of men in 2000–2005 ranged from 58.6 to 59.1 years, women – from 71.9 to 72.4 years. Stable positive trends in life expectancy were formed only after 2005 against the background of socio-economic recovery and the start of programs in the field of health protection and mortality reduction. It can be stated that in 2000–2019 the life expectancy of the Russian population increased by 9.2 years for men and 5.7 years for women. Comparing the trends in the life expectancy of the population of the post-Soviet countries in this period we note that higher growth rates of life expectancy were observed only among the population of the Republic of Kazakhstan (by 12.4 and 8.4 years), as well as among women in the Republic of Moldova (6.6 years), Republic of Estonia (6.4 years), Kyrgyz Republic and the Republic of Uzbekistan (7.1 and 7.0 years) (Table 3.1.3).

Due to similar dynamics in the 2000s the spread of indicators in the post-Soviet space among male population decreased from 10.9 to 8.2 years, among female – increased from 9.8 to 11.0 years.

Characterizing the situation in the countries of the former USSR, it should be noted that stagnation in life expectancy in the first half of the 2000s was observed throughout the region

<sup>&</sup>lt;sup>1</sup> The analysis was carried out on the basis of the data «The Global Health Observatory. Global Health Estimates». URL: https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates

(except for the Republic of Azerbaijan and the Republic of Uzbekistan), despite the previous trends in the second half of the 1990s.

Changes in the geographic contours of the life expectancy of the population of the post-Soviet space in the 2000s concerned primarily the area of well-being in the male population: if in the early 2000s The maximum indicators were noted in the Republic of Armenia, Republic of Georgia, Republic of Lithuania, Republic of Estonia, then by the end of the second decade, the maximum indicators were invariably noted in the Republic of Estonia, the second place was occupied by the Republic of Armenia, third – by the Republic of Lithuania, rank of the Republic of Georgia dropped to the middle positions.

Table 3.1.3. **Dynamics of life expectancy of the population of the post-Soviet countries and the EU-15 in the 2000s**(years)

		Men				Wor	men	
	2000	2005	2015	2019	2000	2005	2015	2019
Republic of Azerbaijan	63,8	66	67,9	68,8	69	71,3	73,4	74,1
Republic of Armenia	68,5	69,2	70,9	72,5	74,6	75,9	77,8	79,2
Republic of Belarus	62,8	62,5	68,6	69,7	74	74,5	78,8	79,6
Republic of Georgia	65,6	66,4	68,2	68,8	73,1	76,8	76,9	77,8
Republic of Kazakhstan	57,6	59	67,4	70,0	69,2	70,5	76,2	77,6
Republic of Kyrgyzstan	62,0	63,1	67,9	70,7	70,2	70,8	75,2	77,3
Republic of Latvia	64,6	65	69,9	70,6	75,6	76,5	79,2	79,8
Republic of Lithuania	66,7	64,9	69,1	71,2	77,2	77,3	79,5	80,4
Republic of Moldova	63,2	63,7	67,2	69,3	70,5	71,6	75,1	77,1
Russian Federation	59,0	58,9	65,9	68,2	72,3	72,4	76,6	78,0
Republic of Tajikistan	63,4	65,4	66,7	67,6	67,8	69,5	70,8	71,6
Turkmenistan	59,3	60,5	65,7	66,5	67,4	68,7	72,6	73,0
Republic of Uzbekistan	62,4	65,6	69,0	70,8	68,2	71,3	73,9	75,2
Ukraine	62,1	61,3	67,2	68,0	73,2	72,9	77,0	77,8
Republic of Estonia	65,5	67,5	73,0	74,7	76,2	78,4	81,7	82,6
EU-15	75,2	76,9	79,4	81,1	81,4	82,6	84,3	85,2

The positions of the three Slavic countries, especially the Russian Federation, among men were quite low. Moreover, the Russian Federation was a part of Turkmenistan during the 2000s in the area of maximum trouble and during 2002–2005.

Among women, as in the 1990s, the Russian Federation occupied the middle position, gradually increasing its rank from eighth to sixth place. It should be emphasized that the area of well-being in the female population in the 2000s was very stable and was formed exclusively from the Baltic countries (with the highest rates in the Republic of Estonia), followed by the Republic of Armenia, the Republic of Georgia and the Slavic countries, Central Asian countries with minimum life expectancy levels in Turkmenistan and the Republic of Tajikistan.

However, Russian Federation and the Republic of Tajikistan are gender antipodes: Russian men had a low life expectancy, while women had relatively high. In the Republic of Tajikistan everything was the other way. In the 2000s the loss of the Russian Federation in comparison with Western Europe decreased from 16.2 to 12.9 years and from 9.1 to 7.2 years respectively, while indicators close to Western European were not observed in any of the former Soviet republics.

### 3.2. Age characteristics and structure of mortality of the population

# Age dynamics of mortality

According to the WHO criteria, infant mortality, along with the average life expectancy is an integral indicator of the quality and standard of living of the population. In addition, the infant mortality rate largely determines the scale of all infant mortality.

The patterns of change in infant mortality in the post-Soviet space during the period of reforms starting in 1985 are fundamentally similar: a decline in indicators in the last years of the Soviet period with stagnation or some growth in the first half of the 1990s, the formation of positive trends in the second half of 1990s and, finally, a steady decline after 2000. At the same time, the general trends in infant mortality are positive in all post-Soviet countries. In general, this scheme is relevant for all post-Soviet states and the picture differs only in the levels of indicators and the rate of their decline (Table 3.2.1).

Table 3.2.1.

Dynamics of infant mortality in the post-Soviet countries and the EU-15 in 1985–2019,

(per 1000 live births) 1

	1985	1991	1995	2000	2019
Donublic of Assubation	80,44 [72,52–	75,94 [69,64–	75,03 [68,93–	61,06 [55,11–	18,24 [11,7–
Republic of Azerbaijan	89,48]	82,78]	81,81]	67,66]	28,01]
Domithia of Associa	50,15 [45,67–	40,11 [36,67–	33,82 [30,87–	27,02 [24,42–	10,51
Republic of Armenia	55,13]	43,95]	37,08]	29,62]	[7,79–13,59]
Danublia of Dalamia	14,18 [13,89–	12,12 [11,86–	12,37 [12,13–	9,94 [9,71–	2 42 [2 2 2 67]
Republic of Belarus	14,49]	12,37]	12,64]	10,16]	2,42 [2,2–2,67]
Donublic of Coordin	42,89 [37,86–	40,62 [36,92–	38,82 [34,97–	31,91 [28,35–	8,53 [7,33–
Republic of Georgia	48,66]	44,85]	43,2]	36,4]	10,05]
Danishlia of Karakhatan	49,95 [44,99–	43,91 [39,97–	44,8 [40,97–	36,43 [33,47–	0.2 [0.07, 0.65]
Republic of Kazakhstan	55,35]	48,04]	48,75]	39,54]	9,3 [8,97–9,65]
Down latin of Management on	64,74 [56,44–	53,82 [48,48–	52,13 [47,49–	42,41 [38,1–	16,36 [15,6–
Republic of Kyrgyzstan	74,59]	59,59]	57,63]	45,98]	17,29]
Danishia of Latvia	13,25 [12,82–	14,32 [13,81–	15,68 [15,05–	11,51 [10,94–	3,09 [2,45-
Republic of Latvia	13,7]	14,9]	16,33]	12,08]	3,93]
Dominalia of Litherania	13,71 [13,29–	12,99 [12,58–	11,91 [11,43–	8,56 [8,16–	2 00 [2 62 2 4]
Republic of Lithuania	14,15]	13,39]	12,4]	9,01]	2,99 [2,63–3,4]
Papublic of Maldaya	32,62 [28–	27,71 [23,86–	31,22 [27,41–	26,08 [21,92–	12,35 [9,14–
Republic of Moldova	38,32]	31,84]	35,52]	30,48]	16,44]
Russian Federation	21,08 [20,7–	18,35 [18,01–	18,58 [18,23–	16,5 [16,19–	4,93 [4,77–
Russian rederation	21,47]	18,68]	18,93]	16,82]	5,09]
Donublic of Tailkistan	92,62 [81,22–	82,52 [76,05-	87,12 [80,67–	67,6 [61,14–	29,6 [19,5–
Republic of Tajikistan	106,2]	89,57]	94,39]	74,54]	45,18]
Turkmenistan	75,12 [66,42–	64,2 [56.75-	65,03 [58–	57,56 [50,78–	36,32 [26,5–
Turkmenistan	88,6]	72,37]	73,04]	65,42]	49,19]
Republic of Uzbekistan	69,24 [61,57–	59,14 [53,1–	57,9 [52,1–	51,82 [45,76–	15,57 [12,67–
Republic of Ozbekistan	77,66]	65,9]	64,36]	59,03]	19,09]
Ukraine	18,07 [16,71–	16,53 [14,94–	17,29 [15,65–	15,72 [14,42–	7,18 [6,82–
UKIAIIIE	21,86]	18,81]	19,71]	17,5]	7,55]
Republic of Estonia	15,05 [14,52–	13,86 [13,35–	12,37 [11,82–	8,66 [8,21–	1 97 [1 6 2 21]
rehabile of Estolia	15,57]	14,38]	12,99]	9,11]	1,87 [1,6–2,21]
EU-15 <sup>1</sup>	9,5	7,4	5,6	4,8	3,3 (2015 г.)

<sup>&</sup>lt;sup>1</sup> Analysis based on data: THE GLOBAL HEALTH OBSERVATORY. Global Health Estimates. URL: https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates

<sup>&</sup>lt;sup>1</sup> Data from the European mortality database (MDB) ends 2015- 2016. URL: https://gateway.euro.who.int/en/datasets/europe-

The ratio of countries in terms of infant mortality rates is useful. In the 1980s – early 1990s the minimum indicators were recorded in the Baltic States and the Republic of Belarus, followed by Ukraine and the Russian Federation, then – the Republic of Georgia, Republic of Armenia, Republic of Kazakhstan and the Republic of Azerbaijan was closer to the Republic of Tajikistan and was ahead of other Central Asian countries. By 2019 this hierarchy has changed significantly. The leading positions were retained by the Baltic countries and the Republic of Belarus, Russian Federation moved up to the fourth position, Ukraine's indicators approached the Republic of Georgia, Republic of Kazakhstan and the Republic of Armenia surpassed the Republic of Moldova, followed by the Kyrgyz Republic and the Republic of Uzbekistan, and the mortality rates in the Republic of Azerbaijan were only lower in comparison with the Republic of Tajikistan and Turkmenistan.

At the same time, the spread of indicators in the post-Soviet space in the 1990s. increased from 6.8 to 7.9 and the minimum indicators were noted in 1991 in the Republic of Belarus, in 2000 – in the Republic of Lithuania and the Republic of Estonia, the maximum during this entire period – among children of the Republic of Tajikistan. At the end of the second decade of the 21st century the spread of infant mortality in the former Soviet Union more than doubled – up to 19.4 times from the minimum values in the Republic of Estonia to the maximum in Turkmenistan. Comparing the situation in the post-Soviet space with Western Europe, we note that infant mortality has been steadily decreasing and Western European indicators were several times or even tens of times lower than the mortality rates in individual post-Soviet countries.

Infant mortality in Russia decreased over the period under review, but until the early 2000s the pace was lower than in the EU-15. As a result, the lag from Western European levels increased from 2.5 times in 1991 to 3.4 times in 2000. But over the next two decades the rate of decline in infant mortality in the Russian Federation increased and the gap from the EU-15 narrowed to 1.5 – multiple.

Infant mortality trends in the 1990s were positive throughout the post-Soviet space. Therefore, the decrease in life expectancy during this period was in no way determined by children of the first year of life. As for the 2000s, the positive dynamics of infant mortality contributed to the increase in life expectancy, especially in those countries where it exceeded 10 per 1000 live births.

Dynamics of mortality in the population of working age<sup>1</sup> in the Soviet Union and in the post-Soviet space<sup>2</sup> during the period of reforms was determined by patterns, mirroring life expectancy (Fig. 3.2.1).

The first stage of the anti-alcohol campaign (1985–1987) looked quite successful – positive trends in mortality among men of working age were noted in all fifteen republics, but the rates of decline in indicators varied quite significantly – from 1.1% in the Azerbaijan SSR and 1.6% in the Tajik SSR to 18.6% in the Moldavian SSR and 16.1% in the RSFSR. The highest rates of decline were observed in the Baltic republics, the Byelorussian SSR, the Ukrainian SSR, the Moldavian SSR, the Kazakh SSR, and the Kyrgyz SSR.

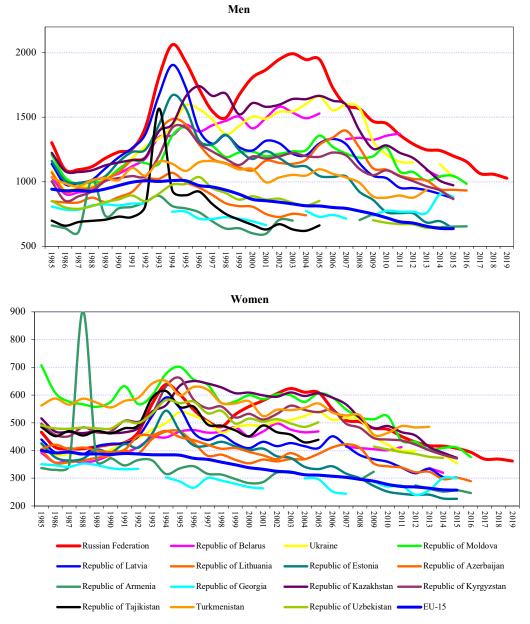
Among women, positive tendencies were noted in twelve republics of the USSR (Armenian SSR, Azerbaijan SSR and the Turkmen SSR were the exception, where an increase in indicators was observed). In general, the geographic vector of shifts was similar to men: the most pronounced positive shifts were noted in the European part of the USSR and the highest rates of decline in indicators were observed in the Moldavian SSR, followed by the

an-mortality-database/

<sup>&</sup>lt;sup>1</sup> We attributed the population of 25–64 years to the conditionally working age.

<sup>&</sup>lt;sup>2</sup> Analysis based on data from the European Mortality Database (MDB – European mortality database). URL: https://gateway.euro.who.int/en/datasets/european-mortality-database/

Estonian SSR and the RSFSR (18.6%, 14.6% and 12.9%), as well as in the Kazakh SSR and the Kyrgyz SSR.



Rice. 3.2.1. Dynamics of mortality among 25–64 year-old population of the post-Soviet countries and the EU-15 in 1985–2019 (standardized ratio per 100 thousand people).

In 1987–1991 the short-term positive developments from the anti-alcohol campaign have been exhausted. Geographic vector of negative trends in 1987–1991 was the mirror positive shifts of 1985–1987 – the most pronounced shifts, regardless of their direction were noted in the European republics, much less pronounced – in the Transcaucasian and Central Asian republics.

The Russian Federation turned out to be one of the three republics with positive results for men in 1985–1991 (a decrease in mortality by 3.8%) (except for the RSFSR, positive shifts were noted in the Moldavian SSR and the Kazakh SSR), in the other twelve republics an increase in mortality was noted. In the female population the results of 1985–1991 turned out to be more successful: a decrease in mortality during this period was noted in ten republics out of fifteen. The rate of decrease in mortality in the RSFSR amounted to 8.1% against the background of the

most pronounced positive shifts recorded in the Moldavian SSR and the most pronounced negative ones observed in the Uzbek SSR (10.6% decline and 3.2% growth).

Thus, the mortality rate of the population of the Soviet Union was determined by the patterns previously identified for life expectancy in relation to the universality of mortality trends (both positive and negative), the formation of the geographical vector of mortality trends and the reasons for the failure of the anti-alcohol campaign.

Considering the dynamics of mortality in the working-age population of the Russian Federation after 1991, let us point out a 64.4% increase in the male population and a 1.5 increase in the female population by 1994, when mortality reached its maximum, with a subsequent decline by 1998 and a sharp increase after 1998 – a consequence of the collapse of economic policy of the 1990s, which ended in 1998 with a default.

Paradoxically, the greatest similarity between the dynamics of mortality of the working-age population and the Russian in the 1990s was demonstrated by the Baltic countries – the Republics of Latvia, Lithuania and Estonia. In these countries, as in the Russian Federation, in the first half of the 1990s there was an increase in mortality to a maximum in 1994, then there was a decrease until 1998. However, after 1998, the trends turned out to be multidirectional: in the Russian Federation, due to the default of 1998, negative trends in mortality began to form again in both the male and female populations and in the Baltic countries the positive trends of the second half of the 1990s continued.

In Ukraine and the Republic of Belarus, as well as in the Republic of Moldova, where we expect the maximum similarity with the dynamics of Russian mortality, the patterns of change in indicators were distinctly national specific. So, in the Republic of Belarus in the 1990s there was a weak, but very consistent increase in mortality with an almost absent peak in the mid-1990s. The dynamics of mortality in Ukraine and the Republic of Moldova was close to that in Russia, but the maximum indicators were recorded in 1995. Moreover, in these three countries, as in Russia, there was an increase in mortality after 1998.

In the states of the South Caucasus, we should note a very weak increase in mortality in the first half of the 1990s with a maximum in 1994 in the Republic of Azerbaijan and in 1993 in the Republic of Armenia, with a subsequent decline in indicators. It is rather difficult to analyze the dynamics of mortality of the population of the Republic of Georgia, since there are no data during the period of the Georgian-Abkhaz conflict. Nevertheless, it should be noted that positive trends in mortality were formed in the Republic of Georgia after 1994.

In the countries of Central Asia in the 1990s negative tendencies were formed, but they looked much smoother than in the Russian Federation and for men the maximum indicators were in 1996–1997 (for women, with the exception of the Republic of Kazakhstan, as in the Russian Federation – in 1994). It should be noted that there was no growth in indicators at the end of the 1990s<sup>1</sup>.

Thus, for most countries of the post-Soviet space in the 1990s the growth of indicators was noted, which lasted until the middle – second half of the 1990s. Country specificity is expressed in the duration of these trends and in the trends of the last years of the century (1998–1999).

According to the results of the first decade of the formation of independent states, they turned out to be relatively successful for the population of the Republic of Lithuania, countries of the South Caucasus (Republic of Armenia and the Republic of Georgia, as well as men of the Azerbaijan Republic) and three Central Asian states (Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan), where there was a decrease in mortality in both the male and female populations. Leaders in the rate of positive trends in mortality of the working-age population in 1991–1999 were the Republic of Armenia and the Republic of Georgia, where the

<sup>&</sup>lt;sup>1</sup> The sharp peak in mortality among men in the Republic of Tajikistan in 1993 is explained by the civil war that began during this period.

mortality rate of the working-age population decreased by 20.6% and 14.1% among the male population and 14.2% and 15.7% among the female population.

The reforms carried out were the most painful for the Slavic states. The mortality rate of the population of the Republic of Belarus increased by 34.5% and 23.3% for men and women, in Russian Federation – by 33.4% and 23.7%, Ukraine – by 20.9% and 13.5%. This group includes the Republic of Kazakhstan with a significant share of the Russian population: 30.4% and a 30.3% increase in mortality. Losses were also noted among men in the Republic of Latvia, Republic of Estonia and the Republic of Moldova, and among women in the Republic of Azerbaijan.

Due to such multidirectional dynamics, the spread of indicators in the 1990s in the post-Soviet space increased among men from 1.7 in 1991 to 2.6 times in 1999, among women – from 1.9 to 2.2 times.

At the same time, geographical configuration of mortality in the working-age population had gender differences. In the male population, both in the Soviet and post-Soviet periods, republics and countries in the Transcaucasia (now in the South Caucasus) and in Central Asia (with the exception of the Republic of Kazakhstan) were included in the area of prosperity, followed by Baltic countries, the area of disadvantage was formed from the Slavic countries with a maximum mortality rate in the Russian Federation.

In the female population, the area of well-being was formed at the expense of the Christian republics of the Transcaucasus (the countries of the South Caucasus), followed by the Baltic countries, Slavic countries with the highest Russian indicators among them occupied the middle positions, the area of disadvantage was formed at the expense of the republics of Central Asia (countries of Central Asia), and also the Republic of Moldova.

Thus, the geographic vector of mortality of the working-age population is in many respects opposite to the vector of infant mortality.

Mortality rate for EU-15 men in the 1990s exceeded the indicators of the countries of the South Caucasus, as well as the Republic of Tajikistan and the Republic of Uzbekistan, or was close to it. For example, in 1999 the mortality rate of Western European men exceeded the indicators of the Republic of Armenia by 41.2%, Republic of Georgia – by 26.5%, Republic of Azerbaijan – by 11.3%, Republic of Tajikistan and the Republic of Uzbekistan – by 28% and 4.9% respectively.

In the female population, such impressive results during the reform period were recorded only in the Republic of Armenia and the Republic of Georgia. In 1999, Western Europe exceeded the death rates of these countries by 24.5% and 17.4%.

In the Russian Federation, such success was not achieved, moreover, in the 1990s the gap between Russian Federation and Western Europe has grown from 25.8% to 85.1% among male population and from 10.1% to 1.5 times among female population.

The dynamics of mortality in the working-age population of Russia differs from the situation in childhood by continuing negative trends – a consequence of the 1998 default, the consequences of which were finally exhausted only by the mid-2000s, after which stable positive mortality trends were formed among both men and women (Fig. 3.2.1). As a result of such trends, the mortality rate of the working-age population of Russia in 2000–2019 decreased by 43.2% for men and 35.2% for women.

Comparison based on the results of 2000–2015¹ shows that during this period the mortality rate among working-age population of the Russian Federation decreased by 32.6% and 26%. If among men, only the Republic of Estonia and the Republic of Kazakhstan were ahead of the Russian Federation in terms of the rate of positive trends (43.7% and a 40.3% decrease in indicators), then in the female population Russian Federation turned out to be a clear outsider, leaving ahead, in addition to the Republic of Estonia and The Republic of Kazakhstan (decrease

<sup>&</sup>lt;sup>1</sup> Data from the European mortality database (MDB) ends 2015–2016. URL: https://gateway.euro.who.int/en/datasets/european-mortality-database/

by 43.1% and 39.3%), Ukraine, Republic of Moldova, Kyrgyz Republic and, based on the results of 2000–2013, Republic of Belarus and the Republic of Uzbekistan. Growth in mortality in the 2000s was observed only in two states of the South Caucasus – Republic of Georgia and the Republic of Armenia. If in the Republic of Georgia negative trends were observed among the entire population (an increase of 28.7% and 11.9%), then in the Republic of Armenia they were observed only among men (8.6% growth versus 9.1% decline in women).

Similar trends were reflected in the positions of the Russian Federation in the post-Soviet space: in the 2000s Russian Federation turned out to be a clear outsider in terms of mortality of the working-age population not only in the male population, as was noted in the 1990s, but also in the female population, which was not observed in that extremely difficult decade for the country.

At the same time, it should be noted that the area of well-being in the male population of the post-Soviet countries raises a lot of questions: until 2005, the Republic of Tajikistan achieved the greatest success, the indicators of which were the lowest in the post-Soviet space, lower than Western European ones<sup>1</sup> (the same achievements are made by the Republic of Armenia throughout the entire period research). In 2009–2014, the leader was the Republic of Uzbekistan.

Among female population, the regional mortality profile of people of working age looks more convincing: firstly, consistently lower indicators than in Western Europe were achieved only in the Republic of Estonia after 2009. Secondly, leaders in addition to the Republic of Georgia and the Republic of Armenia turned out to be Baltic states.

The spread of mortality of the working-age population in the post-Soviet space in 2000–2015 decreased from three times to 1.9 times for men and from 2.3 times to 1.8 times for women. The gap between the Russian Federation and Western Europe during the study period decreased from 2.1 to 1.9 times for men and from 1.7 to 1.6 times for women.

The situation is special in the elderly age group – among people 65 years of age and older. First, the positive effect of the anti-alcohol campaign was exhausted already in 1986, that is a year earlier than in younger age groups. Secondly, in 1986–1991 stagnation processes or an increase in indicators were observed, which was most visible in the republics of Central Asia. The negative processes that formed during this period accelerated sharply in the first half of the 1990s. The greatest variety of trends was noted in the second half of the 1990s: stagnation of indicators, their decline or decline, followed by an increase in indicators after 1998 (Table 3.2.2 – Table 3.2.3).

The exception to these patterns was the Republic of Belarus, where mortality rose steadily throughout the entire study period and the Republic of Georgia, where after 1994, stable negative trends were formed in both men and women.

During 1985–1991, the mortality rate of the elderly population decreased in all European and Transcaucasian republics of the Soviet Union, with the exception of the Armenian SSR (it can be assumed that the consequences of the 1988 Spitak earthquake played a role), in the Central Asian republics there was an increase in mortality. During this period, the mortality rate of the older Russian population decreased by 6.6% and 7.7%. In the last Soviet years, the situation developed most favorably among men in the Georgian SSR and among women in the Azerbaijan SSR (a decrease by 13.2% and 12.4%), unfavorably – in the Turkmen SSR (11.5% – and 15.9% – growth).

In 1991–1994 data was absolutely similar: the mortality rate of older persons grew everywhere except for men in the Republic of Armenia, at rates varying from 7.4% for men in the Republic of Estonia and 1% for women in the Republic of Armenia to 26.5% for men in the Kyrgyz Republic and 37.6% among women in Turkmenistan, against the background of 19% and 15.7% growth in the indicators of men and women in the Russian Federation.

Positive trends 1994–1998 were also quite universal (the exception was men in the Republic of Belarus where there was a 5.3% increase in mortality), while the rates of these trends varied among men from 17.1% in the Republic of Latvia to 1.3% in the Republic of Kazakhstan,

<sup>&</sup>lt;sup>1</sup> After 2005, there is no information on mortality in the Republic of Tajikistan in the European Mortality Database.

women – from 32.7% in Turkmenistan to stagnation in the Republic of Uzbekistan, against the background of 11.9% – and 7.4% decrease in mortality for men and women in the Russian Federation.

Table 3.2.2.

Dynamics of mortality among men aged 65 and over in post-Soviet countries and the EU-15 in 1985–2019

(standardized ratio per 100 thousand people).

	1985	1991	1994	1998	1999	2005	2015	2019
Republic of Azerbaijan	7668,8	6730,7	7395,9	7070,4	7312,8			
Republic of Armenia	6312,2	6921,9	6443,9	5471,2	5554,8		6684,8	
Republic of Belarus	8260,9	8209,6	8899,9	9369,8	9710,2	9647,3		
Republic of Georgia	7738,2	6716,5	4824	7225,2	7381,4	7010,6	7971,3	
Republic of Kazakhstan	8297,4	8450,3	10439	10304	10135	9489,4	7662,7	
Republic of Kyrgyzstan	7734,7	7710,5	9754,2	8377,7	7650,8	8209,3	7353,1	
Republic of Latvia	9084,2	8544,2	9971,8	8267,6	8341,6	8524,8	6638,8	
Republic of Lithuania	7971,3	7309,1	7986,3	7406,8	7396,6	7505,1	6758,4	
Republic of Moldova	9790,9	9623,2	10627	10164	10392	10175	7516,7	
Russian Federation	9413,2	8789,7	10460	9210,4	9685,5	9702,3	7309,1	6620,2
Republic of Tajikistan	5816,3	6117,8	7488,9	6504,8	6600,5	6495,2		
Turkmenistan	8035,1	8962,5	8836,5	8279,4	7901,8	7747		
Republic of Uzbekistan	6878	6920,2	8307,3	7904,1	7230,5	7522,9		
Ukraine	9060,7	8692,6	9372,8	8787,1	8910,3	9385,5	7425,6	
Republic of Estonia	9376,8	8509,1	9139,2	8441,5	8183,3	7662,7	5756,2	
EU-15	7121,9	6327,3	5972,4	5739,2	5651,6	4875,2	4101	

Table 3.2.3. **Dynamics of mortality among women 65 years of age and older in the post-Soviet countries and the EU-15**in 1985–2019 (standardized ratio per 100 thousand people).

	1985	1991	1994	1998	1999	2005	2015	2019
Republic of Azerbaijan	4922,5	4310,8	4854,8	4748,4	4926,7			
Republic of Armenia	4957,6	5178,2	5229,5	4767,9	5005		5004,4	
Republic of Belarus	5500,3	5438,1	5779,9	5726,6	6113,7	5658,7		
Republic of Georgia	5301,3	4860,7	3307,9	4765	5039,3	4280,1	5291,8	
Republic of Kazakhstan	5348,2	5413,5	6565,1	6235,1	6145,7	6505,8	5104,2	
Republic of Kyrgyzstan	5198,8	5198	6817,1	6033,6	5936,8	6080,3	5329,1	
Republic of Latvia	6237,3	5567,3	5992,8	5452,5	5153	5021,7	3950,9	
Republic of Lithuania	5361,5	4804,7	5109,1	4773,5	4619,3	4509,7	3856,7	
Republic of Moldova	7401,3	7120	8063,7	7375,7	7479,1	7312,6	5521,9	
Russian Federation	6116	5645,4	6533,5	6048,4	6305	5984	4570,2	4186,1
Republic of Tajikistan	4371,8	4340,9	5839	5425,4	5471,4	4683,8		
Turkmenistan	5779,8	6696	9211,5	6195,2	5979,8	6029,7		
Republic of Uzbekistan	4952,9	5145,2	6462,9	6487,7	5917,8	6146		
Ukraine	6211,7	5950,3	6515,9	6112	6160,2	6167,5	4760,2	
Republic of Estonia	6190,3	5655,2	5814	5320,5	4940,1	4388,6	3242,6	
EU-15	4567,5	4043,7	3804,9	3658,2	3624,6	3251,3	2808,4	

Year 1999 showed that it was possible to maintain positive trends in the Baltic countries (with the exception of 0.9% growth among men in the Republic of Latvia) and in Central Asia (with the exception of the population of the Republic of Tajikistan). In the Russian Federation, the mortality rate of the older population increased by 5.2% and 4.2%, respectively and among

male population the Russian growth rates were the highest in the post-Soviet space, in the female population it was inferior only to the Belarusian ones (an increase of 6.8%).

The results of this multidirectional dynamics of 1991–1999 turned out to be beneficial only for the Baltic countries (except for Lithuanian men), Republic of Armenia and Turkmenistan and the situation developed most positively for men in the Republic of Armenia and for women in the Republic of Estonia (a decrease of 19.7% and 12.6%, respectively). In the Russian Federation the mortality rate of older persons in 1991–1999 increased by 10.2% and 11.7% respectively (note that the maximum rates of negative trends were noted among men in the Republic of Kazakhstan and among women in the Republic of Tajikistan, where the indicators increased by 19.9% and 26%).

The geographical features of the mortality rate of the older population draws special attention. In the Soviet period the republics of Transcaucasia and Central Asia were included in the area of well-being, increased rates were recorded in the European region of the USSR. This pattern was quite distinctly formed among men; among women, it was not so clearly expressed and turned out to be especially blurred in the second half of the 1990s.

A stable exception to this rule turned out to be, on the one hand, the Lithuanian SSR, on the other (especially in the second half of the 1990s) – the Kazakh SSR and among women in Turkmenistan.

It is interesting that if men 65 years and older were observed traditional in the 1990s an increase in the variability of mortality from 57.3% to 87.1%, and in 1991 the minimum indicator was observed in the Republic of Tajikistan, in 1999 – in the Republic of Armenia with a maximum in the early and late 1990s – in the Republic of Moldova, elderly women became the only age group in which in the 1990s there was a slight decrease in the spread of indicators from 65.2% to 61.9% (the minimum indicators were observed in the Republic of Azerbaijan and the Republic of Lithuania, the maximum in the Republic of Moldova).

The Russian Federation was characterized by gender differentiation. Among men, the RSFSR was an outsider, ranking last among the union republics in terms of the desired indicator. In the post-Soviet period the situation changed somewhat: Russian Federation was not an absolute outsider – even at the height of the crisis, in 1994, the mortality rate of elderly men in the Republic of Moldova was higher than in Russia and in the post-default 1999, Russian mortality was exceeded by the indicators of the Republic of Kazakhstan, Republic of Moldova and the Republic of Belarus.

Among women, Russian Federation has good results: its worst positions were observed in 1999, when it took the penultimate place (higher indicators were noted only in the Republic of Moldova), and at the height of the crisis, in 1994, Russia was ranked eleventh from fifteen countries.

The mortality rate of the elderly population in the EU-15 steadily decreased during the period under review and it was always significantly less than in the post-Soviet space (the Republic of Georgia became an exception in 1994, when the indicators of this country were lower than Western European ones, respectively, by 23.8% and 15%). The gap between the Russian Federation and Western European indicators in the post-Soviet period increased from 38.9% and 39.6% in 1991 to 71.3% and 74% in 1999.

Dynamics of mortality of the Russian population of older ages in the 2000s was characterized by the patterns noted for the population of working age: after some growth and stagnation in 2005, stable positive trends were formed, as a result of which the mortality rate of the elderly population of Russia in 2000–2019 decreased by more than a quarter in the male population and by a third in the female population. In 2000–2015 the rate of positive trends in the Russian Federation amounted to 25.8% and 27.7%, second only to women in the Republic of Estonia (decrease by 25.9% and 34.5%) and comparable to men in the Republic of Moldova (26% decrease). During this period, the mortality rate of the elderly population of the Republic of Arme-

nia increased by 28.6% and 10.9%, in the Republic of Georgia the situation was unfavorable only among men (7.1%) growth versus 1.1% decline in indicators) (tab. 3.2.2 - 3.2.3).

The area of well-being among older men, as well as among people of working age looks extremely ambiguous: along with the countries of the South Caucasus and the Baltic states, their number in different years included the Republic of Tajikistan, Republic of Uzbekistan, Turkmenistan, and the latter's indicators in 2008–2009 turned out to be minimal in the post-Soviet space. For women, the area of well-being included the Baltic countries and the South Caucasus.

If among men the positions of the Russian Federation in the 2000s have improved significantly and the country moved from an area of disadvantage to the middle of the list, then among women, in terms of mortality among the elderly population the country was quite steadily included in an area of disadvantage.

The spread of mortality among the elderly population in the post-Soviet space in 2000–2015 decreased by two times to 1.4 times among male population and from 2.3 times to 1.8 times among female population.

Throughout the entire period of the study, the mortality rate of the elderly population of the post-Soviet countries significantly exceeded the Western European one, while the loss to Russian Federation in the 2000s decreased slightly: from 80.8% and 80.2% to 78.2% and 62.7% for men and women, respectively.

Among the dynamics of life expectancy due to trends in age-related mortality, it can be noted that a decrease in life expectancy was observed in 1991–1999 in the Russian Federation, Republic of Belarus, Ukraine, Republic of Kazakhstan and the Kyrgyz Republic, as well as for men in the Republic of Moldova and for women in the Republic of Azerbaijan. Common to these countries it was also an increase in the mortality rate of the working-age population and older people, while in the Slavic countries the excess of the negative trends in the mortality rate of the working-age population over the elderly was close to a multiple. At the same time, the dynamics of infant mortality was relatively favorable. Thus, it can be stated that in the Slavic countries and the Republic of Kazakhstan the decline in life expectancy in the 1990s due primarily to the population of working age, to a lesser extent – by older people.

For men of the Republic of Moldova and for women of the Republic of Azerbaijan, the decrease in life expectancy is due to mature generation and is aggravated by negative trends among the working-age population.

In the Kyrgyz Republic, the decline in life expectancy has a certain gender specificity: this loss is noted against the background of a decrease in the mortality rate of older men and a maximum increase in indicators – among their peers, while both men and women have negative trends among working age.

An increase in life expectancy was noted in the Baltic countries, Republic of Armenia, Republic of Georgia, Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan, as well as among men of the Republic of Azerbaijan and women of the Republic of Moldova.

For the population of the Republic of Armenia, Turkmenistan, as well as for women in the Baltic countries the increase in life expectancy was due to all age groups.

The population of the Republic of Tajikistan, Republic of Uzbekistan, Republic of Georgia, men of the Republic of Lithuania and the Republic of Azerbaijan, as well as women of the Republic of Moldova, life expectancy increased due to a decrease in mortality in all age groups, except for the mature population, whose indicators in 1991–1999 have grown.

The growth in the life expectancy of men in the Republic of Latvia and the Republic of Estonia was determined by all age groups, except for the working-age population, whose mortality rate formally increased (however, the growth was 0.5% and 1.3% over 9 years).

Thus, the change in life expectancy in the post-Soviet space in 1991–1999 has a rather complex age configuration, however, it is obvious that regardless of the trends in life expectancy,

there was a decrease in infant mortality and the main age group that determines the trends in life expectancy is people of working age.

Life expectancy growth in the Russian Federation in the 2000s was determined by all age groups. Among adult male population, the maximum rate of mortality reduction was observed among the working age group, while among women, the rate of mortality reduction in older ages exceeded those in the working age, albeit extremely insignificantly (27.7% versus 26%).

In general, this situation (an increase in life expectancy due to all age groups) was noted throughout the post-Soviet space, with the exception of the Republic of Armenia and the Republic of Georgia, and the principal vector was a decrease in the rate of positive trends with age.

Thus, in the 2000s in the post-Soviet space, the typical trend for the 1990s has changed. The situation was developing most unfavorably for the population of working age: mature population was in the risk group.

### Nosological profile of mortality among working-age population.

Since the main losses in life expectancy in the 1990s, as well as the greatest gain in the 2000s were determined among the population of working age, it seems logical to analyze the reasons that caused these shifts (Tables 3.2.4 - 3.2.10).

Negative shifts in the Russian Federation in 1991–1994 were determined by all the leading causes of death among men and women, the leaders in the growth rate of mortality were «Symptoms, signs and ill-defined conditions.»¹. In 1991–1994, the mortality rate of the Russian working-age population from these vague causes has tripled in the male population and 2.5 times in the female population. This was followed by external causes, the mortality rate from which increased by 89.2% and doubled. Mortality from infectious diseases increased by more than 90% among men and women in the 1990s defined by tuberculosis. It should also be noted that there is a twofold increase in mortality from diseases of the digestive system in both men and women groups and respiratory diseases among men (among women, respiratory mortality increased by 60%). It should be emphasized the 68.5% – and 58.3% increase in diseases of the circulatory system leading among the population of working age.

A similar unidirectional negative trends of all leading causes of death during this period was observed only among men from the Republic of Belarus, Ukraine, Republic of Moldova and the Republic of Lithuania. The gender consistency of the trends noted in the Russian Federation was observed only in the Republic of Lithuania, where losses due to mortality of women of working age were determined, as in the Russian Federation, by all the leading causes of death. In Ukraine, during this period, mortality from ill-defined conditions slightly decreased, in the Republic of Belarus – from infectious diseases and respiratory diseases, in the Republic of Moldova – from external causes.

The next circumstance is a significant spread in the rate of mortality from the main causes in the post-Soviet space. The highest rates of growth in mortality in the Russian Federation in 1991–1994 were noted for cardiovascular diseases and diseases of the digestive system among both sexes, as well as for diseases of the respiratory system and external causes among men and infectious diseases among women (we emphasize that even in terms of the growth rate of mortality from external causes in the female population, Russian Federation was ahead of the Estonian Republic: twofold growth of the indicator against 2.1). It should be noted that during this period the best trends in

<sup>&</sup>lt;sup>1</sup> Mortality from these causes of the working-age population within the framework adopted in the Russian Federation in the 1990s. ICD-9 was determined by the diagnosis «Other inaccurately defined conditions» (799.89), the analogue of which in the ICD-10 is the diagnosis «Other inaccurately indicated and unspecified causes of death» (R99) corresponding to the diagnosis «Cause of death not established»

all countries of the post-Soviet space were recorded for neoplasms in both the male and female populations.

Table 3.2.4. Mortality from diseases of the circulatory system of the working-age population in 1991–2015 in the countries of the post-Soviet space and the EU-15 (standardized coefficient per 100 thousand people)

Countries	19	91	19	99	20	00	20	15
	Men	Women	Men	Women	Men	Women	Men	Women
Republic of Azerbaijan	453,6	198,7	406,2	194,1	415,9	194,8	312,0b)	143,5 b)
Republic of Armenia	328,2	125,0	282,5	103,1	264,5	96,7	242,8	63,4
Republic of Belarus	438,0	156,2	576,8	201,6	547,2	184,6	429,8 a)	117,8 a)
Republic of Georgia	416,9	162,1	394,1	148,1	386,4	138,2	232,9	66,2
Republic of Kazakhstan	415,7	182,0	596,3	255,9	639,5	260,9	263,7	87
Republic of Kyrgyzstan	355,4	202,3	426,1	228,9	473,1	236,8	354,9	139,3
Republic of Latvia	480,6	159,1	443,1	141,1	438,6	141,6	321,1	82,9
Republic of Lithuania	395,4	133,8	350,6	101,5	333,4	94,6	301,1	74,2
Republic of Moldova	349,3	217,0	411,7	216,1	405,5	234,7	338,7	130,4
Russian Federation	445,2	162,3	615,1	208,0	672,7	222,2	428,3	126,9
Republic of Tajikistan	276,7	195,2	302,8	214,9	270,3	194,8	305,9 c)	209,7c)
Turkmenistan	527,3	282,7	572,8	314,3	605,9	335,5	467,3 d)	232,1 d)
Republic of Uzbekistan	383,8	228,9	405,6	236,2	413,9	243,7	324,7	167,8
Ukraine	414,5	165,0	530,5	201,2	559,4	202,2	423,6	129
Republic of Estonia	457,5	136,9	436,6	132,1	412,8	124,3	187,9	46,4
EU-15	157,3	54,1	115,8	40,7	110,5	38,3	66,5	23,1

Note: a) 2014 г.; b) 2007 г.; c) 2005 г.; d) 2013 г.

Table 3.2.5.

Mortality from neoplasms of the working-age population in 1991–2015 in the countries of the post-Soviet space and the EU-15 (standardized coefficient per 100 thousand people)

Countries	19	91	19	99	20	00	2015		
	Men	Women	Men	Women	Men	Women	Men	Women	
Republic of Azerbaijan	161,9	84,7	132,3	89,6	128,3	77,6	93,5b)	69,7 b)	
Republic of Armenia	199,9	117,9	163,9	109,8	146,5	106,6	173	117,1	
Republic of Belarus	259,1	118,5	259,6	122,5	252,6	116,5	198,2a)	96,7 a)	
Republic of Georgia	135,5	89,3	110,6	77,2	108,6	80,3	149,9	101,2	
Republic of Kazakhstan	289,8	137,0	236,7	134,9	229	135,8	134,7	95,2	
Republic of Kyrgyzstan	185,4	112,6	143,4	96,2	136,5	98,2	107,9	90,9	
Republic of Latvia	260,8	133,1	239,0	119,5	213,2	118	178,9	118	
Republic of Lithuania	253,1	130,3	235,8	133,3	227,9	128,2	192,5	112,5	
Republic of Moldova	225,4	134,5	208,7	131,9	216,2	131	203,7	109	
Russian Federation	287,4	131,9	252,8	130,5	250,5	128,3	186,6	110,1	
Republic of Tajikistan	129,6	86,4	78,8	65,1	66,7	60	73,9c)	65,6 c)	
Turkmenistan	173,7	110,4	115,0	89,1	112,5	76,8	94,6d)	94,1 d)	
Republic of Uzbekistan	140,9	94,2	95,8	78,9	93,8	79,9	68,3a)	71,4 a)	
Ukraine	275,3	134,6	246,1	134,1	244,2	131,5	186,9	107,9	
Republic of Estonia	286,2	157,9	217,6	136,8	204,8	136	152,7	95,3	
EU-15	178,4	117,6	155,0	105,1	151,8	104,5	112,5	86,4	

Note: a) 2014 r.; b) 2007 r.; c) 2005 r.; d) 2013 r.

Mortality from external causes of the working-age population in 1991–2015 in the countries of the post-Soviet space and the EU-15 (standardized coefficient per 100 thousand people)

Countries	19	91	19	1999		00	2015	
	Men	Women	Men	Women	Men	Women	Men	Women
Republic of Azerbaijan	109,5	22,6	59,8	14,6	56,8	15,5	57,1b)	14,5 b)
Republic of Armenia	114,3	27,0	60,9	13,3	57,2	10,6	74,8	12,4
Republic of Belarus	260,8	52,3	422,9	80,5	390	76,1	233,7a)	44,8 a)
Republic of Georgia	122,1	23,8	77,9	13,8	62,9	10	81,2	16,1
Republic of Kazakhstan	256,3	52,0	297,5	65,3	363,6	75,2	208,3	41,6
Republic of Kyrgyzstan	235,0	53,8	218,1	45,2	201,3	39,9	139,3	33
Republic of Latvia	353,1	64,7	364,1	79,0	364,2	69,1	182,3	29,7
Republic of Lithuania	336,9	62,5	356,7	68,6	348,6	71,6	223,7	43,8
Republic of Moldova	252,9	69,9	229,9	47,0	222,8	47,9	171	30,6
Russian Federation	335,9	65,5	481,7	98,2	517,6	104,3	269,1	54,5
Republic of Tajikistan	103,9	31,1	83,8	16,1	69,5	16,1	65,8c)	17,9 c)
Turkmenistan	145,9	37,1	121,5	30,1	85,5	23,6	62,6d)	18,6 d)
Republic of Uzbekistan	142,8	30,8	100,1	23,6	104,7	25	69,3	15,8
Ukraine	282,4	52,1	350,8	63,3	363,2	66,1	179,4	30,3
Republic of Estonia	327,7	62,9	375,8	73,1	336,4	69,7	132	29,1
EU-15	72,5	22,2	59,2	17,9	58,4	17,5	43,3	13,5

Note: a) 2014 r.; b) 2007 r.; c) 2005 r.; d) 2013 r.

Table 3.2.7. Mortality from respiratory diseases of the working-age population in 1991–2015 in the countries of the post-Soviet space and the EU-15 (standardized coefficient per 100 thousand people).

Countries	19	1991		99				
	Men	Women	Men	Women	Men	Women	Men	Women
Republic of Azerbaijan	39,3	18,8	34,8	19,3	38,5	17,5	26,4b)	14,4 b)
Republic of Armenia	38,3	11,8	29,1	9,7	31,8	8,3	25,5	9,1
Republic of Belarus	57,0	13,4	77,8	14,7	71,7	11,5	30,9a)	4,4 a)
Republic of Georgia	21,5	11,8	10,4	4,7	14,5	6,5	29,4	10,6
Republic of Kazakhstan	72,8	23,3	92,8	27,3	102,3	28,6	93	28,5
Republic of Kyrgyzstan	95,5	40,5	102,5	36,3	99,3	38,2	26,9	9
Republic of Latvia	49,3	10,4	47,8	12,1	51,7	12,8	27,8	7,2
Republic of Lithuania	47,7	10,3	37,9	7,9	36,9	8,7	33,9	7
Republic of Moldova	87,0	26,6	94,7	24,2	94,4	25,7	76,4	15,6
Russian Federation	61,4	14,0	90,2	16,8	106,4	19,5	58,4	13,7
Republic of Tajikistan	54,9	46,4	52,5	40,6	55	46,7	33,5c)	36,0 c)
Turkmenistan	59,2	28,9	42,3	21,7	46,8	23,9	15,7d)	7,6 d)
Republic of Uzbekistan	55,6	33,7	50,4	30,9	52,9	33,7	21,3 a)	12,4 a)
Ukraine	71,1	15,4	84,1	14,3	93	16,3	41,6	9,3
Republic of Estonia	42,2	10,1	57,0	12,3	63,4	10,8	18,7	4,4
EU-15	20,8	9,0	18,8	9,4	17,1	8,7	13,5	7,9

Note: a) 2014 r.; b) 2007 r.; c) 2005 r.; d) 2013 r.

The positive trends in the mortality rate of the working-age population of the Russian Federation in 1994-1998, as well as the previous growth in indicators were determined by all the leading causes in both the male and female populations. It is interesting that such a unidirectional trend was observed in states belonging to different economic and geographical regions: for example, for men a similar situation developed in the Republic of Latvia and the Republic of Azerbaijan, for

women – in the Republic of Latvia, Republic of Moldova, Republic of Tajikistan and Turkmenistan. In the Republic of Belarus, during this period, the negative trends of the previous period continued among men due to all the main reasons, except for oncology, among women – except for oncology and respiratory diseases. In Ukraine, positive trends in overall mortality were formed against the background of growing losses from infectious diseases and diseases of the digestive system.

Table 3.2.8. Mortality from diseases of the digestive system of the working-age population in 1991–2015 in the countries of the post-Soviet space and the EU-15 (standardized coefficient per 100 thousand people)

Countries	1991		1999		2000		2015	
	Men	Women	Men	Women	Men	Women	Men	Women
Republic of Azerbaijan	62,4	29,1	60,8	30,2	60,3	30,3	58,3b)	28,5 b)
Republic of Armenia	49,6	14,3	31,9	11,4	32,9	10,4	50,2	13,7
Republic of Belarus	34,0	13,4	52,1	21,0	52	20,8	61,7a)	26,5 a)
Republic of Georgia	56,2	15,1	45,4	11,3	44,7	9,4	48,2	9,2
Republic of Kazakhstan	49,9	22,9	76,1	33,2	83,9	38	130,4	52,8
Republic of Kyrgyzstan	75,5	37,8	95,0	46,5	105,1	46,9	111,1	43,7
Republic of Latvia	38,1	14,6	46,4	21,8	53,9	17,9	57,7	25,3
Republic of Lithuania	35,8	14,3	54,0	23,3	55,9	21,3	86,8	35,6
Republic of Moldova	165,1	139,9	163,3	102,0	165,4	108,9	153,3	88,7
Russian Federation	41,3	16,0	69,8	25,7	74,5	29,3	99,1	44,8
Republic of Tajikistan	47,3	31,1	51,5	36,7	50,9	34,9	56,5c)	29,8 c)
Turkmenistan	83,1	54,1	81,2	44,8	79,9	45,1	107,4d)	53,0 d)
Republic of Uzbekistan	74,7	46,8	79,8	51,5	80,9	53,9	63,6	38,8
Ukraine	55,2	20,6	82,2	26,2	89,9	29,2	92,7	36,4
Republic of Estonia	36,3	12,0	54,3	25,2	66,5	24,8	59,4	24,1
EU-15	38,7	16,0	31,9	13,5	31,6	13,4	22,6	9,6

Note: a) 2014 r.; b) 2007 r.; c) 2005 r.; d) 2013 r.

Table 3.2.9.

Mortality from ill-defined conditions of the working-age population in 1991–2015 in the countries of the post-Soviet space and the EU-15 (standardized coefficient per 100 thousand people)

Countries	1991		1999		2000		2015	
	Men	Women	Men	Women	Men	Women	Men	Women
Republic of Azerbaijan	15,2	6,4	15,6	4,8	17,2	6,9	66,5b)	23,9 b)
Republic of Armenia	12,7	2,8	5,2	1,6	3,3	1,1	13,4	2,7
Republic of Belarus	16,4	4,0	29,9	6,3	29	7,7	15,6a)	2,8 a)
Republic of Georgia	21,9	6,3	27,7	5,6	32,6	6,1	266	63,3
Republic of Kazakhstan	10,8	2,8	60,7	15,8	41	9,2	44,2	8,9
Republic of Kyrgyzstan	17,3	5,5	5,7	1,1	26,6	6,9	44,4	9,4
Republic of Latvia	0,0	0,0	23,1	5,7	25	6,5	8,4	1,7
Republic of Lithuania	0,1	0,0	10,3	1,8	15,5	3,4	36,5	5,6
Republic of Moldova	3,7	1,1	9,7	2,3	11,2	3,1	16,3	3,9
Russian Federation	18,4	4,5	50,5	10,6	68,3	13,9	55,3	11,8
Republic of Tajikistan	34,4	15,2	27,9	14,4	49,4	23,8	22,5c)	6,7 c)
Turkmenistan	25,8	7,7	34,7	8,1	35,8	9,2	118,8d)	30,2 d)
Republic of Uzbekistan	14,6	5,1	15,3	4,0	15,9	4	7,5	2,9
Ukraine	11,9	3,2	14,6	3,1	17,4	3,4	17	2,7
Republic of Estonia	8,8	2,6	30,4	4,5	29,2	4,7	25,7	6,9
EU-15	15,1	5,4	15,9	5,5	16,3	5,7	16,5	6

Note: a) 2014 r.; b) 2007 r.; c) 2005 r.; d) 2013 r.

Mortality from infectious diseases of the working-age population in 1991–2015 in the countries of the post-Soviet space and the EU-15 (standardized coefficient per 100 thousand people)

Countries	1991		1999		2000		2015	
	Men	Women	Men	Women	Men	Women	Men	Women
Republic of Azerbaijan	28,4	6,3	51,2	12,1	43,7	10,0	11,8b)	2,4 b)
Republic of Armenia	13,7	2,4	15,6	3,0	16,1	3,0	20,5	2,9
Republic of Belarus	13,5	2,8	28,8	4,1	24,4	3,3	22,7a)	6,5 a)
Republic of Georgia	22,8	5,0	19,2	3,4	17,6	3,5	30,0	6,0
Republic of Kazakhstan	38,7	9,9	101,5	23,7	92,1	19,7	18,0	6,4
Republic of Kyrgyzstan	33,9	13,0	67,8	18,3	86,3	14,3	34,9	12,0
Republic of Latvia	20,0	5,2	36,2	10,3	37,2	7,8	30,2	10,1
Republic of Lithuania	24,8	5,6	29,8	5,3	32,3	6,1	29,0	8,2
Republic of Moldova	23,6	5,9	50,3	9,7	60,2	8,4	29,5	7,9
Russian Federation	28,1	4,0	66,8	8,7	68,2	9,7	52,7a)	17,2 a)
Republic of Tajikistan	21,5	20,1	40,6	26,7	38,7	26,0	35,8c)	18,4 c)
Turkmenistan	39,9	20,6	73,8	24,5	77,1	24,1	29,9d)	9,3 d)
Republic of Uzbekistan	28,8	19,3	45,5	20,3	51,1	20,9	21,0	9,4
Ukraine	30,7	3,9	68,0	8,1	75,6	8,9	57,5	18,1
Republic of Estonia	17,4	3,3	28,3	6,9	24,2	6,0	14,7	4,2
EU-15	4,4	1,9	8,9	3,3	8,9	3,4	6,3	2,9

Note: a) 2014 г.; b) 2007 г.; c) 2005 г.; d) 2013 г.

Special attention should be paid for rather complex configuration of mortality trends from the main causes in the post-Soviet space. Nevertheless, it should be noted that the highest (except for Russia) rates of decrease in cardiovascular mortality were observed in the Baltic countries, cancer mortality in Central Asian countries (Kyrgyz Republic, Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan).

The last shift in Russian mortality dates back to 1998–1999 – the increase in mortality due to default was determined by all the leading causes in both the male and female populations and a similar situation was observed only among Ukrainian women (in the male population of Ukraine, there was a decrease in cancer mortality).

In general, the shifts in 1998–1999 are characterized by chaos, the absence of any regularities, even within one economic and geographical region, especially in the female population. Nevertheless, it is necessary to point out a decrease in mortality from diseases of the respiratory system of the population of Central Asia, as well as from diseases of the digestive system among men from the countries of Central Asia, South Caucasus and the Baltic states (for women changes in indicators during this period in all regions were multidirectional).

Assessing the situation for the period 1991–1999, we note that the growth in the mortality rate of the working-age population of the Russian Federation was determined by all the leading causes, except for neoplasms. A similar nosological profile was formed only in the population of the Republic of Kazakhstan and Ukrainian men, a more unfavorable situation (an increase in mortality from all leading causes) was noted only in the Republic of Belarus.

Comparing the ratio of mortality from leading causes in the post-Soviet space we note that it looks quite unexpected both in the geographical and gender context: for example, the minimum mortality rates from diseases of the circulatory system leading at these ages in 1991 were observed among men in the Republic of Tajikistan, Republic of Armenia and the Republic of Moldova, in 1999 – in the Republic of Armenia, Republic of Tajikistan and the Republic of Lithuania, the maximum in 1991 was recorded in Turkmenistan, Republic of Latvia and the Republic of Estonia, in 1999 – in the Russian Federation. Among women, both in 1991 and in

1999 the minimum of cardiovascular mortality was noted in the Republic of Armenia, Republic of Lithuania and the Republic of Estonia, the maximum – in Turkmenistan and other countries of Central Asia.

The spread of cardiovascular mortality in the 1990s increased from 81.8% to 2.2 times for men and from 2.3 to 3.1 times for women.

The distribution of mortality of the working-age population from external causes in the post-Soviet space looks unexpected: both in 1991 and in 1999 the geographic vector looked quite mature – the minimum indicators were noted in the countries of the South Caucasus, followed by the states of Central Asia, Slavic countries and the Baltic countries were in the zone of increased or high mortality. If in 1991 the Russian Federation did not demonstrate maximum indicators, then in 1999 it turned out to be an absolute outsider in both men and women. At the same time, the spread of mortality from external causes increased from 3.4 to 8.1 times among men and from 3.1 to 7.4 times among women.

It should be noted the unexpected similarity of the geographical vector of completely exogenous injuries and poisoning and endogenous neoplasms. The area of well-being was formed at the expense of Central Asia (the exception was the Republic of Kazakhstan, where during the entire study period there was a high oncological mortality in the male and female population) and the South Caucasus, and a zone of disadvantage was formed in the Slavic countries and the Baltic countries.

The variability of cancer mortality in the 1990s increased in the post-Soviet space from 2.2 times and 86.3% to 3.3 and 2.1 times for men and women.

The vector of mortality from respiratory diseases significantly differed from the distribution of cancer mortality: the area of well-being among men was formed primarily in the countries of the South Caucasus, followed by the Baltic countries among female population in the 1990s there was a replacement. If in the early 1990s the Baltic states were in the lead, then by the end of the 1990s they began to be ousted by the countries of the South Caucasus, the area of disadvantage was formed at the expense of the countries of Central Asia, as well as the Republic of Moldova. The Russian Federation holds the middle position in the triad of Slavic states.

The spread of cardiovascular mortality in the 1990s increased from 81.8% to 2.2 times for men and from 2.3 to 3.1 times for women.

Distribution of mortality of able-bodied population from external causes in the post-Soviet space looks unexpected: both in 1991 and in 1999 the geographical vector looked quite formed – the minimum indicators were observed in the countries of South Caucasus, followed by the Central Asian states, the Slavic countries and the Baltic states appeared in the zone of increased or high mortality. If in 1991 the Russian Federation, entering the areal of disadvantage, but the maximum indicators did not show, then in 1999 it appeared the absolute outsider both in men and in women. At the same time, the spread of mortality from external causes increased from 3.4 to 8.1 times for men and from 3.1 to 7.4 times for women.

We should note an unexpected similarity between the geographical vector of completely exogenous injuries and poisonings and that of endogenous neoplasms. The area of well-being was formed due to Central Asia (the exception was the Republic of Kazakhstan, where a high cancer mortality in male and female population was observed throughout the study period) and the South Caucasus, and the zone of disadvantage was formed in the Slavic countries and the Baltic states.

The variability of cancer mortality in the 1990s increased in the post-Soviet countries from 2.2 and 86.3% to 3.3 and 2.1 for men and women.

The vector of mortality from respiratory diseases differed significantly from the distribution of cancer mortality: the areal of well-being among men was formed primarily due to the countries of the South Caucasus, followed by the Baltic States, in the female population in the 1990s there was substitution – if in the early 1990s the Baltic States were leading, by the end of

the 1990s they were replaced by the South Caucasus, the area of ill-being was formed due to the Central Asia, as well as the Republic of Moldova. The Russian Federation occupied the middle position in the triad of Slavic states.

The spread of mortality from respiratory diseases in the post-Soviet space in the 1990s increased from 4.4 and 4.6 times to 9.9 and 8.7 times respectively.

It should be noted that while for the first four causes the regional profile of mortality was quite stable, the distribution of mortality from diseases of the digestive organs has changed quite significantly, primarily due to the improvement of the positions of the Republic of Armenia and the Republic of Georgia at the expense of the Baltic countries. Slavic countries throughout the study period occupied the middle positions, the areal of disadvantage were the countries of Central Asia, but the maximum levels of mortality from digestive diseases were steadily observed in the Republic of Moldova. While in men the variability of mortality from digestive diseases in the 1990s increased from 4.9 to 5.1 times, in women it decreased from 11.7 to 9 times.

The regional profile of infectious mortality is generally determined by the same patterns as the distribution of mortality from respiratory and digestive diseases. There was formed quite a stable vector: from the areal of well-being, which included the Republic of Belarus, Republic of Armenia, Republic of Georgia and the Baltic countries to the areal of disadvantage, which included the countries of Central Asia. Russian Federation was in the middle in terms of infectious mortality rates. In the 1990s the spread of infectious mortality increased considerably (from 2.9 to 6.5 times) among men and negligibly (from 8.5 to 8.9 times) among women.

Particular attention should be paid to such a fuzzy class of causes as «Symptoms, signs and inaccurately labeled conditions», the mortality from which among the Russian population of working age was almost entirely formed by the diagnosis «Cause of death is unknown». The diagnostic criteria for the causes included in this class in the post-Soviet states require a special study.

It is possible that these changing criteria, as well as the fuzzy diagnosis explain the fact that the regional profile of mortality from inaccurately marked conditions is characterized by the least continuity: thus, in the male population the rank correlation coefficient between the 1991 and 1999 distributions was 0.25 and in the female population – 0.5. Let us point out at once that it was difficult to reveal the regularities of its formation both in 1991 and 1999. In 1999 the dispersion of the indicator was 11.7 for men and 14.6 for women (from 5.2 for men in the Republic of Armenia and 1.1 for women in the Kyrgyz Republic to 60.7 and 15.8 for the Republic of Kazakhstan per 100,000 inhabitants), with Russia and the Republic of Moldova scattered throughout the country. Russia ranked penultimate in both the male and female populations in 1999, yielding only to the Republic of Kazakhstan.

The Western European mortality rate from neoplasms was stably higher than that of the Republic of Georgia and the Republic of Azerbaijan, as well as that of all the countries of Central Asia except the Republic of Kazakhstan, both for men and women. The mortality rate of the population of the Republic of Georgia from respiratory diseases is steadily lower, as well as the mortality rate of women in the Republic of Armenia and the Republic of Georgia from digestive diseases after 1994.

The Russian Federation had consistently higher mortality rates than Western Europe and this gap increased substantially in the 1990s. The gap with Western Europe in mortality rates for the working-age population in 1999 was mainly due to external causes (8.1 and 5.5 times), circulatory system diseases (5.3 and 5.1 times), and infectious diseases (7.5 and 2.6 times).

The increase in infectious mortality was a fairly universal phenomenon in the countries of the former USSR (the only exception was the Republic of Georgia, where the indicators declined by 15.9% and 32%).

Reduction of cancer mortality also turned out to be a fairly universal phenomenon (exceptions were the Republic of Belarus and the female population of the Republic of Lithuania, where the mortality rate increased by 2.3%).

Trends in cardiovascular mortality are characterized by a clear geographical configuration: a decrease in losses in the Baltic and South Caucasus countries, and an increase in the Russian Federation, Republic of Belarus, Republic of Moldova, Ukraine and Central Asian countries.

In contrast to circulatory diseases, mortality trends from respiratory diseases do not have any pronounced geographical patterns. Nevertheless, we note that in the male population of the Slavic countries there are common negative and in the South Caucasus countries – positive trends in respiratory mortality (in the female population such a synchrony is not observed).

An increase in mortality from digestive diseases was observed practically in the entire post-Soviet space, except for the Republic of Moldova and Turkmenistan, where mortality decreased both in the male and female populations.

An increase in mortality from inaccurately defined conditions was observed in the European part of the post-Soviet space (Baltic States, Russian Federation, Ukraine, Republic of Belarus, Republic of Moldova). In the South Caucasus countries, unified trends were observed only in the female population (decrease of mortality). In Central Asia, all possible patterns of mortality changes were observed: growth of indicators in male and female populations in the Republic of Kazakhstan and Turkmenistan, reduction of losses in both sexes in the Kyrgyz Republic and the Republic of Tajikistan, multidirectional trends (growth of mortality in men and its reduction in women) in the Republic of Uzbekistan.

As for external causes, negative trends are observed in the European region except for the Republic of Moldova, where mortality has decreased in both male and female populations, while positive trends are observed in the countries of South Caucasus and Central Asia (except for the Republic of Kazakhstan).

The 2000s were marked by a decrease in mortality of the population aged 25–64 throughout the post-Soviet space. At the same time the Russian Federation retained the outsider position for men and a relative worsening of the position for women.

Leading at these ages are diseases of the circulatory system, the mortality from which in the Russian Federation in 2000–2019 decreased by 44.2% in men and by half in women. In 2000–2015 the rates decreased by 36.3% and 42.9%, i.e. slightly less than in Western Europe in the male population and exceeding them in the female population, where mortality decreased by 39.8% in both men and women. These trends resulted in an increase in the Russian Federation's loss in comparison with Western Europe, from 6.1 to 6.4 in the male population and a decrease from 5.8 to 5.5 in the female population.

In the post-Soviet space positive trends of cardiovascular mortality were formed everywhere in the 2000s, but higher rates of decrease than in the Russian Federation were observed in the populations of the Republic of Estonia, Republic of Georgia and the Republic of Kazakhstan.

While in the male population cardiovascular mortality in the Russian Federation was consistently the highest in the post-Soviet space, in the female population in the early 2000s the Russian Federation was ahead of the Republic of Moldova and all Central Asian countries, except the Republic of Tajikistan, by 2015 – compared to the same Central Asian countries, Ukraine and the Republic of Belarus.

External causes are the second most important source of loss of able-bodied population. Deaths from injuries and poisoning in the Russian Federation in 2000–2019 decreased by more than 2.5 times in the male and female populations, in 2000–2015 the rates of positive trends were approaching twofold, noticeably outstripping those in Western Europe (a decrease of 25.9% and 22.8%). As a consequence of these dynamics, Russia's loss compared to Western Europe decreased from 8.9 to 6.2 times in the male population and from 6 to 4 times in the female population.

In the post-Soviet space the situation was better than in the Russian Federation only in Ukraine (decrease by 2 and 2.2 times), in the Republic of Latvia (decrease by 2 and 2.3 times) and in the Republic of Estonia (decrease by 2.6 and 2.7 times respectively), while a notable in-

crease in mortality from external causes in Armenia (by 30.7% and 17.9%) and Georgia (by 29% and 60.2%) should be noted.

Despite the high rate of decline in mortality from external causes, Russian Federation showed the highest rates throughout the 2000s in both male and female populations.

Mortality from neoplasms decreased in the Russian Federation by 34.1% and 22.5%, from 2000 to 2019, and from 2000 to 2015 by 25.5% and 14.2%, respectively and by 25.5% and 14.2%, i.e. at rates similar to those in Western Europe for men, and somewhat less than in the EU-15 for women (a decrease of 25.8% and 17.4%), so that the Russian Federation's loss in the male population in the 2000s was virtually unchanged, being about 65%; in the female population, it increased from 22.7% to 27.5%.

Russian mortality rates in the post-Soviet period were second only to those in Kazakhstan (decreases of 41.2% and 29.9%) and to women in Estonia (decreases of 29.9%; in Estonian men the rates were close to those in Russia -25.4%). In the Republic of Armenia and the Republic of Georgia there was a marked increase in cancer mortality during this period (18.1% and 38.1% for men and 9.9% and 26% for women).

During the 2000s the Russian Federation was in a trouble zone in terms of cancer mortality. Nevertheless, the country was not an absolute outsider: thus, in 2000 higher levels of the index were observed among Belarusian men, residents of Ukraine, Republic of Moldova and the Republic of Estonia, by 2015 the excess of Russian indicators was noted in the male population of the Republic of Moldova and the Republic of Lithuania, as well as in the residents of Ukraine.

Mortality from respiratory diseases in the Russian Federation decreased by 2.6 times in the male population and by half in the female population; in 2000–2015 the rates of positive trends were 45.1% and 29.7%, exceeding the mortality rates of Western Europe, which were 21.3% and 8.5%. As a consequence of such trends, the Russian Federation's loss compared with Western Europe decreased from 6.2% to 4.3% in the male population and from 2.3% to 73% in the female population.

Positive trends in mortality from respiratory diseases in the post-Soviet space were observed everywhere (the only exception was the Republic of Georgia, where the indicators in the male population increased twice, in the female population – by 62.9%, as well as women of the Republic of Armenia, whose mortality increased by 9.3% against a 19.8% decrease in the male population). In addition to these countries, the population of the Republic of Lithuania (by 8.1% and 19.6%) and the Republic of Kazakhstan (by 9.3% and 0.5%), as well as men in the Republic of Moldova, showed lower rates of decline than in the Russian Federation.

If in the first half of the 2000s the Russian Federation was an absolute outsider in the level of mortality from respiratory diseases, then later our country was competed by the Republic of Moldova and the Republic of Kazakhstan.

Mortality from digestive diseases in the Russian Federation in 2000–2019 increased by 17.2% and 39.6%; in 2000–2015 the rates were 33% for men and 52.9% for women, against a 28.5% decrease for the population of Western Europe. The logical consequence of these multi-directional trends was an increase in the Russian Federation's loss compared to Western Europe, from 2.4 to 4.4 times for men and from 2.2 to 4.7 times for women.

Positive trends in mortality from digestive diseases in the 2000s were rather an exception in the post-Soviet space and were completely independent of the region: for example, decreases were recorded in the population of the Republic of Moldova, the Republic of Estonia and the Republic of Uzbekistan, as well as in the Republic of Georgia and the Kyrgyz Republic. On the other hand, the highest rates of mortality from digestive diseases were observed in the populations of the Republic of Lithuania and the Republic of Kazakhstan and were more than 1.5 times higher for men in both countries and 69.1% and 39.1%, respectively, in the female population.

The maximum levels of mortality from digestive diseases, significantly exceeding those of the other post-Soviet countries, were observed in the male and female populations of the Republic of Moldova during the entire study period. In the 2000s, the areal of disadvantage, except for the Republic of Moldova, included the countries of Central Asia (except for the Republic of Tajikistan), the Russian Federation maintained an average position in both the male and female populations. In the 2010s, such comparisons are no longer valid, since the figures for Turkmenistan, a country with a traditionally high mortality rate, are not presented in the European Mortality Database.

The mortality rate in the Russian Federation in the 2000s had a visible gender-specific pattern: in 2000–2019 the mortality rate of men of working age decreased by 26%, and that of their female peers increased 2.1. Between 2000 and 2015 the figures showed a 19.3% decrease in the male population, which was lower than the positive trends in Western Europe (29.9% decrease); in the female population, there was a 91.7% increase, compared to a 14.7% decrease in the EU-15. Such dynamics could not help but increase the Russian Federation's loss from 7.6- to 8.8 in the male population and from 2.8- to 6.4 in the female population.

The decline in infectious mortality in the male population in the 2000s was a phenomenon typical of the post-Soviet space (the only exceptions were the Republic of Armenia and the Republic of Georgia, where the figures increased by 27.3% and 70% in 2000–2015), with maximum declines in the Republic of Kazakhstan, Kyrgyz Republic and Republic of Uzbekistan (by 5.8, 2.5 and 2.3 times).

In the female population, negative trends were noted in four countries (Ukraine, Republic of Latvia, Republic of Lithuania and the Republic of Georgia), with a maximum (more than twofold) increase in Ukraine. In the other countries, infectious mortality rates declined, with the Republic of Kazakhstan and the Republic of Uzbekistan more than halving between 2000 and 2015.

In the 2000s, the areal of maximum ill health was formed at the expense of the Central Asian countries and Ukraine, which gradually improved their positions and the Russian Federation became the absolute outsider after 2015 in both male and female populations.

The mortality rate of the Russian working-age population from symptoms, signs, and ill-defined conditions in 2000–2019 in the male and female populations decreased at almost identical rates, by 31.8% and 30.2%; in 2000–2015 the rates of positive trends in men slightly exceeded those in women (19% vs. 15.1%). During the same period, Western European mortality from these minor causes increased by 1.5% for men and 5.3% for women, so the lag for the Russian Federation from 2000–2015 decreased from 4.2 to 3.3 times for men and from 2.4 to 2 times for women.

Positive trends in mortality from inaccurately defined conditions in the post-Soviet space are far from universal, especially in the male population: thus, in 2000–2015 an increase in indicators was observed in the population of the Republic of Georgia and the Republic of Armenia, men in the Republic of Moldova, Republic of Lithuania and the Republic of Estonia.

While in the first half of the 2000s the Russian Federation was an absolute outsider in terms of mortality from these causes, in the second half of the 2000s the situation changed, and the maximum rates were recorded in the Republic of Georgia, and this situation can hardly be explained by the military conflict of 2008 – the extreme growth of losses was recorded in 2008–2010, i.e. after the conflict resolution. It is also necessary to point out that the growth of indicators in Turkmenistan, unlike in the Republic of Georgia has an evolutionary nature.

Since inaccurately marked conditions in the Republic of Georgia are responsible for more than 30% of losses in the male population and 20% in the female population, the official mortality rates from other causes (especially circulatory diseases and injuries and poisonings) are purely estimative.

# The socio-economic context of mortality trends

First, the Russian Federation was among the nine Soviet republics for which the results of the reforms of the last Soviet seven-year period (1985–1991) were positive for both women and men: despite the negative shifts of 1987–1991, life expectancy for men increased by 0.7 year.

Secondly, the Russian Federation turned out to be an absolute outsider in the post-Soviet reforms of the 1990s, having lost 3.4 years of life expectancy for men and 1.8 years for women in 1991–1999. This loss was caused by both the maximum losses among post-Soviet states in the initial period of reform (in 1991–1994 the Russian Federation lost 5.9 and 3.1 years), and the default of 1998, when losses amounted to 1.4 and 0.7 years.

Thirdly, Russia's losses in 1991–1999 were formed primarily at the expense of the ablebodied population, whose mortality growth rate in the country was the highest in the post-Soviet space, on the one hand, and among the main age groups, on the other.

Fourth, common features for the post-Soviet space in 1991–1999 should be attributed to the reduction of infant mortality, the specificity was manifested in the mortality trends of the older and especially able-bodied population.

Fifthly, common for the post-Soviet space nosological trends in working age are positive trends in cancer and negative trends in infectious mortality, mortality trends from other causes were characterized by country specificity with Russia being among the countries with the maximum growth rate of losses from circulatory system diseases and external causes.

Sixth, we can state a fundamental similarity in the dynamics of life expectancy of the Soviet republics (after 1991 – independent states) in the Soviet period and in the first post-Soviet years and the divergence of trends in the second half of the 1990s. The consequences of the Russian default have affected Ukraine, Belarus and Moldova, without affecting the Baltic countries, Central Asia and the South Caucasus (at least, in the male population).

Seventh, during the 1990s the regional profile of life expectancy looked quite stable: the areal of well-being was formed at the expense of the Republic of Armenia, Republic of Georgia with maximum indicators and the Republic of Azerbaijan, as well as the Republic of Tajikistan and the Republic of Uzbekistan, Baltic States and the Slavic countries were in the middle of the list, Russian Federation was stably among the outsiders which was determined by the workingage population.

Among female population, Russian Federation tended to occupy the middle positions by life expectancy, the areal of well-being was stably formed at the expense of the countries of the South Caucasus and Baltic (the maximum indicators were invariably demonstrated by the Republic of Georgia), the areal of disadvantage – at the expense of Central Asia and the Republic of Moldova, with a minimum SPM in Turkmenistan.

In the late 1990s and early 2000s, numerous studies appeared devoted to the causes of this crisis, unprecedented in peacetime, ranging from the concept of social stress to the continuation of the negative trends of the Soviet period<sup>1</sup>. At the same time, all researchers agreed that the direct cause of the losses was the alcoholization of the Russian population during the period of reforms. At first glance, this approach seems convincing. A.G. Vishnevsky and E.M. Andreev showed by cohort analysis that a landslide drop in life expectancy in 1991–1994 was caused by the loss of lives saved during the anti-alcohol campaign, which led to a doubling of alcohol-associated deaths in the first half of the 1990s<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Andreev E.M., Vishnevsky A.G. Challenge of high mortality in Russia // Narodonaselenie. 2004. №3. P.75–84; Health of Russian population in the social context of the 90's: problems and prospects / Ed. by Starodubov V.I., Mikhailova Yu.V., Ivanova A.E. M.: Medicine, 2003. 288 p.

Ivanova A.E., Semenova V.G. New phenomena of Russian mortality //Narodonaselenie. – 2004. – № 3. – Pp. 85–93; Nemtsov A.V. Alcoholic history of Russia. The Newest Period. Moscow: URSS; 2009. 320 p.; Semenova V.G. Reverse epidemiological transition in Russia. Moscow: Central Publishing House, 2005; 287 p.; Kontorovich V. The Russian health crisis and the economy (in Russian) // Communist and Post-Communist Studies. 2001. № 34. Pp.221–240; Kopp M.S., Skrabski A., Szedmak S. Psychosocial risk factors, inequality and self-related morbidity in a changing society // Soc.Sci.&Med. 2000. № 51. Pp.1351–1361; Leon D.A., Shkolnikov V.M. – Social stress and the mortality crisis // JAMA. 1998. № 279. Pp.790–791; Lynch A.C. Roots of Russia's economic dilemmas: liberal economics and illiberal geography // Europe-Asia stud. 2000. Vol. 54. no. 1. Pp.31–49; Shapiro J. The Russian mortality crisis and its causes. In: Economic reform at Risk. London, 1995. Pp149–178; Shkolnikov V.M., Andreev E.M., Leon D.A., McKee M., Mesle F., Vallin J. Mortality reversal in Russia: the story so far // Journ.Hyg.Intern. 2004. V.4. Pp.29–80.

<sup>&</sup>lt;sup>2</sup> Vishnevsky A.G. The rise in mortality in the 1990s: fact or artifact? // Population and society. Information bulletin. INHP RAS CDEHR. 2000. No. 45; Leon D.A., Chenet L., Shkolnikov V.M., Zakharov S., Shapiro J., Rakhmanova G., Vassin S.,

But the question arises: how inevitable was this doubling and why did the increase in mortality, which was evolutionary in 1987- 1991, become catastrophic in 1991- 1994?

In the 1990s the Russian Federation was one of the three countries with the highest rates of growth of mortality of the able-bodied population from all leading causes, including infectious diseases and respiratory illnesses, the etiology of which is in no way connected with alcohol.

This situation is caused by the marginalization of the country's population, which, in turn, was determined by a general systemic crisis: economic degradation led to mass unemployment and impoverishment of even the working population. In turn, the existence of a huge stratum of the population, existing on the verge of poverty, turning into poverty, could not but form a subculture of the poor, which is organically inherent in all forms of deviant behavior, among which alcoholism is inevitable. That is why the sharp increase of risks of alcoholization was also inevitable, in connection with which the doubling of losses of the Russian population, noted by E.M. Andreev, was not an accidental excess, but a natural and predictable consequence of reforms as they were carried out in Russia. It is important to note that alcohol is a risk factor for both external causes and somatic pathologies, especially diseases of the circulatory system in those of working age, as well as diseases of the digestive organs.

On the other hand, the health care system could not be a kind of buffer mitigating the low standard of living of the population, due to the fact that it itself was in deep crisis due to the fatal underfunding.

The question arises: why such a catastrophe was not observed in other states of the post-Soviet space, implementing reforms similar in essence (from socialism to capitalism)?

The relevant estimates are based on current accounting data. Based on them, it is difficult to assess the achievements of the Republic of Georgia and the Republic of Armenia, as well as the Republic of Tajikistan, whose working-age population mortality in the 1990s was stably lower than in Western Europe (in the Republic of Tajikistan this gain was achieved only by men).

However, based on official sources, the most reliable in the Baltic countries, the Republic of Belarus and Ukraine (until the end of the 1990s), it is clear that the initial period of reforms in the first half of the 1990s led to losses absolutely everywhere. Particularly indicative in this regard are the Baltic countries, where, on the one hand, conducted a fairly tough privatization policy, on the other – in the 1990s the economy of these countries was actively supported by the European Union. It seems that in this context, the similarity of the mortality dynamics of the Baltic countries with Russia in the 1990s seems logical, except for 1999, when the consequences of economic policy became apparent.

In Ukraine and in the Republic of Belarus economic reforms were carried out in a less rigid form than in the Russian Federation, so the dynamics of mortality in Ukraine looks smoother than in Russia. The Republic of Belarus is the only country in the post-Soviet space, where there was no pronounced drop in life expectancy in the mid-1990s, but stable negative processes led to the minimum of the index was recorded in 1999.

When ascertaining changes in the situation among the working-age population of Russia in the 2000s, it should be noted that positive shifts in the country are due to all leading causes, except for digestive diseases in the whole population and infectious diseases in the female population. Mortality from external causes, circulatory system diseases and respiratory diseases in both male and female populations has declined at an advanced rate.

Positive trends for able-bodied population in the 2000s were noted in all post-Soviet countries, except the Republic of Georgia and the Republic of Armenia and in the male population of all these countries positive trends were determined, as in the Russian Federation, by the three leading causes, in the female population an increase in infectious mortality was

observed not only in the Russian Federation, but also in Ukraine, Latvian and Lithuanian Republics.

In the female population of European countries, i.e. countries with reliable statistics, there is a coincidence of negative trends in mortality from digestive diseases and infectious mortality. Thus, the growth factors of mortality from these causes were universal.

During the 2000s, despite positive mortality trends, the Russian Federation was among the outsiders in the post-Soviet space in terms of the mortality rate of the working-age population from the main causes, including the female population.

Observing the results in conceptual terms, it is necessary to point out the main thing – the Russian Federation, having emerged from the systemic crisis of the 1990s, has returned to the path of universal epidemiological development, as evidenced by the reduction of the lag between Russian indicators and those of Western Europe. In this context, special attention should be paid to the stability of positive trends in life expectancy. In the 1990s deterioration of the socio-economic situation in the country synchronously led to deterioration of health indicators, which was most vividly demonstrated by the 1998 crisis. In the 2000s economic problems in the Russian Federation were marked twice: the first time as consequences of the global economic crisis of 2008 and the second time as a four-year-long Russian crisis, caused by political factors, but the first time in Russia the deteriorating economic situation led to some slowdown in positive mortality trends, as a result, by the end of the second decade of the 21st century the Russian Federation, even though it was among the post-Soviet countries with the lowest life expectancy for men, was in last place and for women it ranked in the middle.

In this context, it is more revealing to compare the trends in life expectancy and such an economic indicator as GDP per capita<sup>1</sup>. The growth of this indicator was observed in the early 2000s, but the transition from quantity, i.e. improvement of the economic situation to improvement of the medical and demographic situation began only in 2005, when GDP per capita in the Russian Federation exceeded \$5,000 (Fig. 3.2.2). On the other hand, the high stability of the situation formed in that period is evidenced by the fact that against the background of a significant (almost twofold) decrease in the average per capita GDP, observed in the Russian Federation in 2013–2016, life expectancy continued to grow.

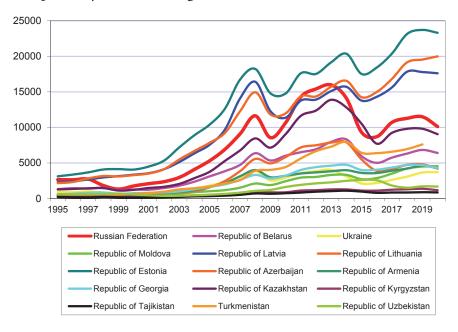


Fig. 3.2.2. GDP per capita in the post-Soviet countries in the 2000s (USD per capita)

<sup>&</sup>lt;sup>1</sup> World Bank data. URL: https://data.worldbank.org/indicator/NY.GDP.PCAP.CD

We can speak of the exhaustion of the negative consequences of the 1990s, as evidenced by the increase in mortality from digestive diseases and infectious diseases among women of working age. However, it is impossible not to point out that the growth of losses from diseases of the digestive organs is determined primarily by alcoholic cirrhosis of the liver, and that infectious mortality is not only due to HIV/AIDS among women, but also among men of working age by more than half.

Based on these illustrative examples, it can be stated that the current losses of the Russian population are attributable primarily to behavioral risk factors, which are traditional Russian alcohol abuse. The increase in mortality from HIV/AIDS can be explained by problems of sexual behavior on the one hand, and by injecting drug addiction on the other.

In contrast to the systemic crisis of the 1990s, the current problems of the Russian population are primarily a matter of personal motivation to preserve health and individual responsibility for it, which does not eliminate the responsibility of the state for creating incentives and opportunities for society to minimize behavioral risk factors.

But the question remains open: why is Russia, second only to the Baltic countries in terms of GDP per capita, the outsider in terms of mortality among the working-age population of post-Soviet states?

It is necessary to consider two aspects of this problem – the correctness of accounting in the post-Soviet space and internal problems of the country.

When talking about the successes of Central Asian states, it is common to refer to the religious factor: Muslims deny alcohol consumption as such. It should be noted that censuses have never been conducted in the Republic of Uzbekistan in the post-Soviet period, the data of the census in Turkmenistan conducted in 2012 have not yet been published, and the 2009 census in the Kyrgyz Republic can hardly be considered convincing in conditions of civil conflicts. Of particular interest is the Republic of Tajikistan, the poorest of the Central Asian countries, which has consistently demonstrated astonishing success in the medical and demographic sphere. From 2000 to 2005 the mortality rate of working-age males in the Republic of Tajikistan, which was the lowest in the post-Soviet space, was also lower than in Western Europe. The Republic of Uzbekistan made similar achievements in 2009–2014. Another characteristic feature of the Central Asian countries is the minimal gender gap: for some reason, women in these countries have not been able to achieve the same success as men.

Data from the countries of the South Caucasus also require verification: the mortality rate of their working-age populations (especially in the Republic of Armenia and the Republic of Georgia) is systematically lower than that of Western Europe, despite the incomparable level of socio-economic development.

Thus, only the data for the European countries of the post-Soviet space seem to be correct, except for Ukraine in recent years: the last census in this country was conducted in 2001 and at present the question of the number of its population is debatable.

Nevertheless, even against the background of countries with reliable statistics, Russia is a clear outsider, especially for men. To explain this phenomenon, it is necessary to point to a huge intra-Russian variation in life expectancy: the differences between the male figures of Moscow and Tuva are close to 15 years, a whole epidemiological epoch and this cannot but affect the country's performance as a whole. Unfortunately, the influence of the geographical size of the country, its ethnic, religious, economic heterogeneity on the variability of its indicators can be tested only on the example of two other countries – the USA and China, which should be the subject of a special study. However, this hypothesis is indirectly confirmed by the fact that the U.S.A. lags noticeably behind the comparable by the level of socio-economic development, but significantly more compact and homogeneous states of Northern and Western Europe in terms of life expectancy.

In conclusion, one more important circumstance should be noted: with the formation of stable positive trends in the post-Soviet countries, as it happened in the 2000s, the existing gap

in mortality by age groups and causes of death is significantly reduced. This gives the impression that in the long-term dynamics the demographic trends of the post-Soviet states have much more in common than might have been assumed at the end of the 1990s.

#### 3.3. The contribution of COVID-19 to the supermortality of the population <sup>1</sup>

The spread of coronavirus infection began around the same time in all post-Soviet countries. In March 2020, cases of the disease were registered in all countries of the former Soviet Union (except the Republic of Tajikistan)<sup>2</sup>. At the beginning of the pandemic, countries showed varying rates of increase in the number of detected COVID-19 cases (Figure 3.3.1).

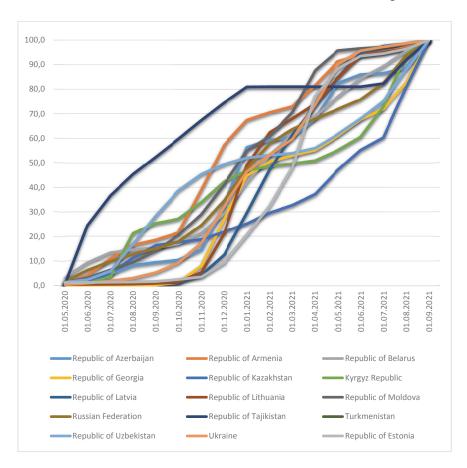


Figure 3.3.1 Evolution of SARS-CoV-2 infections from April 2020 to August 2021 (% to September 1, 2021).

The Republic of Tajikistan had the fastest growing pandemic rate, albeit with some delayed onset. By early June 2020, about 24% of all infections registered by 1 September 2021 had been detected. The Republic of Belarus and the Russian Federation were also among the countries with high rates of increasing infection (9% and 6.1% of all cases registered by 1 September 2021 had already been detected by early June 2020). In the Republic of Georgia, Baltic countries and Ukraine, the epidemic developed very slowly until the fall of 2020 and did not experience a spring peak like in the other countries. By early June 2020 there were between 0.14% (Republic of Georgia) and 1.3% (Republic of Estonia) of all infections reported by 1 September 2021.

In almost all countries, the rate of the pandemic accelerated sharply in December 2020. The exception is the Republic of Tajikistan, where the increase in infections gradually started to slow down from September 2020 and by early February 2021 there were practically no new cases. A similar situation occurred in the Republic of Uzbekistan, where a surge of infections occurred in July-September 2020, after which the increase in the number of new cases began to slow down and by February 2021 decreased to a minimum. In the Republic of Kazakhstan, the sharp increase in infections occurred in the spring of 2021, and before that the pandemic rate was relatively low.

<sup>&</sup>lt;sup>1</sup> URL: https://datalens.yandex/7o7is1q6ikh23?tab=0Ze&utm\_source=cbscenarios

<sup>&</sup>lt;sup>2</sup> Turkmenistan does not provide WHO with data on the spread of the epidemic.

In those countries where the pandemic wave emerged in the winter of 2020–2021, only the South Caucasus countries (except the Republic of Armenia, where another surge occurred in March-April 2020), Russian Federation, Kyrgyz Republic, limited the jump in infections to December-January, or December 2020 – February 2021, after which the rate of increase in new cases began to decline. In the remaining countries, the pandemic continued at high rates until May (Republic of Moldova, Ukraine, Republic of Estonia) and even June 2021 (Republic of Belarus, Republic of Latvia, Republic of Lithuania).

In countries where the previous wave was limited to the winter months of 2020–2021, a new wave of infections emerged in August 2021 (Republic of Azerbaijan) or July-August 2021 (Republic of Georgia, Kyrgyz Republic, Russian Federation). Also, the Republic of Kazakhstan, Republic of Uzbekistan and the Republic of Tajikistan saw a repeat peak of infections in these months.

The trajectories of the COVID-19 pandemic in the countries differ significantly. The extreme positions are held by the Republic of Tajikistan and the Republic of Uzbekistan, on the one hand (the maximum increase in cases of infection occurred in spring-summer of 2020), and the Republic of Kazakhstan, on the other hand (the level of virus transmission was kept at a low level for quite a long time, and its active spread began only in spring 2021).

By the beginning of September 2021 the highest number of detected infections per 100 thousand people was in the Republic of Georgia and the Republic of Estonia (Table 3.3.1). The lowest indicators were observed in the Republic of Tajikistan and the Republic of Uzbekistan. These countries also have the lowest mortality rates. As for the pole of highest mortality values, Republic of Georgia shares them with the Republic of Moldova and the Republic of Armenia, Republic of Estonia has moved to the seventh place out of fifteen in terms of mortality indicators.

The Russian Federation ranks in the middle in terms of both detected infections per population and coronavirus mortality rates (5 and 9).

The ratio of COVID-19 deaths to the number of registered SARS-CoV-2 infections was the lowest in the Republic of Tajikistan and the Republic of Uzbekistan. This group also includes the Republic of Belarus and the Republic of Estonia with high infection rates (seventh and thirteenth places).

The Russian Federation, Republic of Moldova and Ukraine, with low, high and average infection rates (5th, 10th, and 8th places), showed the worst results in terms of the ratio of deaths to infections. Apparently, this discrepancy is related to the coverage of the population by coronavirus tests.

If we calculate the ratio of deaths from COVID-19 to the total number of deaths from all causes in the last year with the available information, expressing this ratio as a percentage, we find that the greatest contribution of the pandemic to mortality is observed in the Republic of Estonia (38.7%), Republic of Lithuania (30.8%) and the Republic of Latvia (27.9%). All the countries of Central Asia and the Republic of Azerbaijan have a negligible effect of the pandemic on additional mortality, ranging from less than 1% in Tajikistan and Uzbekistan to 7.6% in Kazakhstan.

If in the group with minimum values there is a clear pattern: the lower the mortality rate from COVID-19, the less its contribution to total mortality from all causes is, in the group with average and, even more so, there is often an opposite relationship. The ranks of the Republic of Belarus, Republic of Latvia and the Republic of Estonia in terms of mortality from coronavirus infection (third, eighth, seventh) are much better than in terms of the contribution of losses from infection to total mortality (sixth, twelfth, fourteenth). In the Russian Federation, Republic of Moldova, Republic of Lithuania, Ukraine, as well as the Republic of Armenia and the Republic of Georgia the ratios are opposite. That is, mortality from COVID-19 is higher than its contribution to total mortality indicates.

Such discrepancies indicate differences in diagnosis and coding of causes of death in the presence of COVID-19 and comorbid somatic diseases.

Table 3.3.1. Indicators of the situation with infections and mortality from COVID-19 as of September 1, 2021.

Countries	Number, per 100,000.		Ratio of the nui	Vaccinated, %	
		Deaths	Number of	Infections	
	Infections		deaths from all		
			causes		
Republic of Azerbaijan	4355,7	57,8	5,8	1,3	27,12
Republic of Armenia	8020,8	160,5	18,6	2,0	3,27
Republic of Belarus	5069,5	39,8	11,5	0,8	13,38
Republic of Georgia	14778,3	199,1	21,9	1,3	10,31
Republic of Kazakhstan	4880,8	71,5	7,6	1,5	30,18
Kyrgyz Republic	3205,7	46,1	2,5	1,4	8,07
Republic of Latvia	6376,5	115,2	27,9	1,8	33,94
Republic of Lithuania	9054,1	138,2	30,8	1,5	45,47
Republic of Moldova	7513,9	179,8	19,1	2,4	19,17
Russian Federation	4643,7	122,6	14,9	2,6	24,75
Republic of Tajikistan	195,7	1,4	0,1	0,7	4,23
Turkmenistan					
Republic of Uzbekistan	495,3	3,4	0,3	0,7	3,90
Ukraine	5605,6	134	17,6	2,4	8,75
Republic of Estonia	10746,3	97,8	38,7	0,9	41,05

Note: \* last year with available information.

Coronavirus mortality and its contribution to overall human losses could be expected to be influenced by the level of vaccination achieved. As evidenced by the data by early September 2021, the Republic of Lithuania and the Republic of Estonia had the highest vaccination rates (45.5% and 41.1%). At the same time, in the Republic of Armenia, Republic of Tajikistan and the Republic of Uzbekistan the share of vaccinated persons was about 3–4%, and in the Kyrgyz Republic and Ukraine it was about 8–9%. In the Russian Federation about a quarter of the population had been vaccinated by this date.

Data on vaccination rates do not correlate with either the frequency of infection or mortality from COVID-19, indicating that the characteristics of the epidemic's development depend on the testing coverage of the population and the country's coding rules for causes of death in the presence of COVID-19. Thus, the heavy burden of the pandemic was experienced by all countries of the former USSR and different patterns of epidemic development were observed.

### 3.4. State policy of reducing mortality and increasing life expectancy

The first half of the 1990s proved to be extremely difficult in terms of public health in the former Soviet Union. The deterioration of the socio-economic situation of the population increased health risks. And at the same time there were no material conditions for the support and development of health care as a social institution. In most of the new states, health care functioned by inertia, using the capabilities of the Soviet health care system.

The Constitution of the Republic of Armenia (1995) reflected the issues of public health and the development of the health care system in a limited way. Article 34 stipulated that every citizen had the right to health care; the procedure for medical assistance and services was established by law. As proposed measures, it was declared that the state implements programs to protect public health (without specifying), promotes the development of physical education and sports.

The Constitution of the Republic of Moldova (1994) notes in Article 36 the right of citizens to health care, while noting that only the minimum level of state medical care is free.

In the Russian Federation, documents are adopted: Law «On the Sanitary and Epidemiological Welfare of the Population» of April 19, 1991; Law «On Medical Insurance of Citizens in the Russian Federation» (1991) (marking the country's transition from state to insurance medicine)¹; Law «Fundamentals of Legislation of the Russian Federation on the Protection of Citizens' Health» (1993)². Also in the second half of the 1990s, targeted programs aimed at preventing diseases such as diabetes mellitus were adopted ³ and tuberculosis⁴, But they did not lead to significant improvements in the situation, since they were not resourced and were of a declarative nature.

Article 38 of the Constitution of the Republic of Tajikistan states that everyone has the right to health care, and can enjoy free medical care in state health care facilities within the framework defined by law. It also notes the importance of sports: «The state shall take measures to improve the environment, creation and development of mass sports, physical culture and tourism.

In Turkmenistan, the Civil Code (1998) distinguished life insurance (\$5 of Chapter 22) and accident insurance (\$6 of Chapter 22).

In the Republic of Uzbekistan the problems of health care are reflected in the main normative legal documents. Article 4 of the Family Code (1998) singles out the protection of the interests of mother and child, which is ensured by special measures for the protection of work and health of women. Article 17 notes: «Persons who marry shall undergo a medical examination in public health institutions free of charge. The scope and procedure for medical examinations shall be established by the Cabinet of Ministers of the Republic of Uzbekistan». Article 27 describes in detail the procedure for death registration, which is extremely important for the completeness of mortality records.

In Ukraine, in 1992, the Fundamentals of Health Care Legislation, which reflects the organizational and legal aspects of the functioning of the sector, was adopted. And one of the postulates of the Constitution says: «The state creates conditions for effective and affordable medical care for all citizens. In state and municipal health care institutions medical assistance shall be provided free of charge», and «the existing network of such institutions cannot be reduced».

<sup>&</sup>lt;sup>1</sup> Law of the Russian Federation «On Medical Insurance of Citizens in the Russian Federation» №1499-1 on June 28, 1991. URL: http://www.consultant.ru/document/cons\_doc\_LAW\_90/

<sup>&</sup>lt;sup>2</sup> Russian Federation Law No. 5487-1 dated July 22, 1993 «Fundamentals of the Legislation of the Russian Federation on the Protection of Citizens' Health. URL: https://www.consultant.ru/document/cons\_doc\_LAW\_2413/

<sup>&</sup>lt;sup>3</sup> On the Federal Targeted Program «Diabetes Mellitus». Decree of the Government of the Russian Federation No 1171 of October 7, 1996. URL: http://pravo.gov.ru/proxy/ips/?doc itself=&nd=102043624&page=1&rdk=1#I0

<sup>&</sup>lt;sup>4</sup> On the Federal Targeted Program «Urgent Measures to Combat Tuberculosis in Russia for 1998–2004». Decree of the Government of the Russian Federation No. 582 of 11.06.1998. URL: https://docs.cntd.ru/document/901710748

At this time, regulations also address the prevention of infectious diseases. In the Republic of Azerbaijan – «prevention and gradual elimination of infectious diseases and sexually transmitted diseases. In the Republic of Belarus – «ensuring sanitary protection of the territory of the republic from the entry and spread of infectious diseases. In the Republic of Kazakhstan – «reduction of tuberculosis, diabetes and other socially significant diseases, and diseases that are dangerous to others» and «implementation of measures for the prevention of infection by human immunodeficiency virus or AIDS and sexually transmitted diseases». Ukraine adopted the Law on Protection of Population from Infectious Diseases (2000).

Provision of medical assistance to the population from the Chernobyl disaster zone is singled out in the Republic of Belarus: «provision of access to all types of medical assistance to the population affected by the Chernobyl NPP catastrophe». Also this category of population appears in the national legislation of the Russian Federation and Ukraine.In 2002, people of working age were identified as a risk group. It was specified that «increase of life expectancy (was to take place) at the expense of realization of reserves of premature and preventable mortality, especially at the working age», which should be accompanied by «prevention and elimination of habits harmful to health, prevention among groups at high risk, of mental disorders, alcoholism and drug addiction, reduction of spread of sexually transmitted diseases».

In the 2007 National Program, «measures to promote a healthy lifestyle and eliminate the influence of adverse environmental factors» were listed as the main tool for reducing morbidity and mortality. The program defined quantitative indicators of its implementation (infant mortality rate, total mortality rate, average life expectancy).

The main tasks of the 2011 National Program were to «improve the reproductive health of the population, protection of motherhood and childhood, reduction of overall mortality, especially from preventable causes, increase of life expectancy at birth». A fundamentally new task was to «improve the quality of life of patients with chronic diseases and the disabled by creating conditions for them to realize their (residual) health potential». In addition to infant mortality and average life expectancy, the program specified as indicators «reduction of the severity of primary disability of persons of working age to 55%», and «improvement of the quality of life of patients with chronic diseases and disabled people by creating conditions for them to realize the available (residual) health potential», as well as «reduction of mortality of able-bodied population to 5 people per 1,000 population».

The 2016 State Program «People's Health and Demographic Security of the Republic of Belarus» implemented, includes the following subprograms «Prevention and Control of Noncommunicable Diseases», «Preventing and Overcoming Drunkenness and Alcoholism», «Tuberculosis», «Prevention of HIV Infection», «Ensuring the Functioning of the Healthcare System of the Republic of Belarus».

The protection of public health and development of the health care system in the 2000s in the Republic of Belarus is based on a systematic approach, the development of coherent program, scientific evidence.

Republic of Kazakhstan. In 2001, the Program of demographic development for 2001–2005 has been approved, which set as its targets «reduction of mortality, improvement of population health».

Republic of Moldova. In 2011, the National Strategic Program on Demographic Security for 2011–2025, which includes a "Healthcare" section, was adopted. In this section special attention is paid to young people with a special focus on healthy lifestyles "The tasks of promoting a healthy lifestyle, prevention of infectious and noninfectious diseases, tobacco smoking, alcoholism, drug addiction, overweight are mainly focused on the younger generation and reproductive behavior ("reducing the number of abortions among adolescents and prevention of sexually transmitted infections and HIV among sexually active population", which seems quite logical. In the nosological context, external causes, primarily related to domestic violence, are

highlighted. Women's oncology is highlighted in the program «improvement of women's health and reduction of breast and cervical cancer through early detection and intervention measures».

Russian Federation. The country has adopted a set of measures aimed at improving public health. In 2001, the Concept of Demographic Development for the period up to 2015 was adopted. The first demographic document, which dealt with health problems in age and nosological aspects, as well as risk factors (smoking, alcoholism and drug addiction).

In 2007, the Concept of Demographic Policy for the period up to 2025 was adopted, which, in addition to traditional attention to maternal and child health, places special emphasis on the health problems of the working population, highlighting leading somatic pathologies (chronic non-infectious diseases, primarily cancer and circulatory diseases), infectious diseases (tuberculosis, HIV/AIDS), and external causes (traffic accidents, suicides). There is a need for qualitative improvements in health services and the formation of a healthy lifestyle among the Russian population.

By the middle of the first decade, against the background of the economic recovery of the situation in the country, programs were adopted in the field of health care: Priority National Project «Health», the program for the development of centers for high-tech medical care, the program for the modernization of health care, the program for the development of a network of perinatal centers.

In 2016, at the meeting of the Council for Strategic Development and Priority Projects, a list of eleven main areas of strategic development of the country until 2018 and until 2025 was approved, including health care.

In 2018 the President of the Russian Federation announced national projects, including demography and health care spheres. For the first time, a system of detailed monthly monitoring of target indicators was also developed, targeting regions to work vigorously throughout the year. A system of measures is in place to achieve the target indicators, which will become effective in 2019.

Republic of Tajikistan. In the Republic of Tajikistan, in 2002, a Program of Implementation of the State Demographic Policy Concept for 2003–2015 was adopted. The main tasks of the 2002 program were to increase the responsibility of the state and society for the health of the population; to support and develop activities to develop healthy lifestyles and to improve statistics on disease and mortality. The main problem of the Republic of Tajikistan was «insufficient funding for the development of health care and medical services to the population, weak human resources, poor real awareness of the health authorities about the real state of health of the population, which is connected with difficulties in financing and organizing work with the population in the field, insufficient access to health services for the majority of the population». The following were considered as priorities: «development of access to comprehensive reproductive health services, especially in rural areas» and «development of access to quality health care, focused on services for families in the community», «reduction of maternal and infant mortality and mortality of men in active working age».

In 2010, a national Healthy Lifestyle Development Program was adopted for the period 2011–2020, the goal of which was «the formation of a new attitude among citizens to health through the introduction of healthy lifestyle principles»; its characteristic feature was the sufficiently detailed specification of the actions required for its implementation and the reasoned justification thereof.

In 2012, the Government of the Republic of Tajikistan adopted a decree «On the prospects for prevention and control of noncommunicable diseases and injuries for 2013–2023».

Ukraine. In Ukraine, the Concept of Demographic Development for 2005–2015 was adopted in 2004. The section «Health, mortality and life expectancy» highlighted both medical and demographic aspects and oriented toward health care reforms, as well as shifts in the social and environmental spheres, as strategic directions. The objectives of the Concept were focused

on working-age people, including «improving the quality of life, reducing socially determined differences in morbidity and mortality,» «prevention of harmful and hazardous industrial factors, prevention of accidents at work and occupational diseases. The need to «improve the reproductive health of the population, to ensure the availability of high-quality medical-genetic and obstetric care, and to promote modern family planning methods» was noted. A number of measures are aimed at reorganizing healthcare: «synchronization of changes in healthcare management with an increase in the amount of funding for the sector, in particular, through the development of a system for providing paid medical services and the introduction of health insurance»; «increasing the role of primary health care, including on the basis of family medicine». A special emphasis is placed on the formation of a healthy lifestyle: «formation of a mechanism for encouraging the population to lead a healthy lifestyle», «promotion equal opportunities for a long healthy full life».

If in the 1990s in the countries of the former USSR normative-legal documents were aimed more at situational solution of medical and demographic problems and problems of the health-care system, which was determined by the difficult socio-economic situation, in the 2000s some countries began systematic work on the formation of national approaches to improve public health and development of healthcare systems. Particularly noteworthy is the systemic approach characteristic of the Russian Federation and the Republic of Belarus. Particular emphasis is placed on the formation of a healthy lifestyle as a significant factor in reducing premature and preventable mortality.

# SECTION 4. MIGRATION AND MIGRATION POLICY IN COUNTRIES OF THE FORMER USSR

#### 4.1. Trends and forms of international migration

The collapse of the USSR in 1991 has radically changed the direction and structure of migration processes in the region. The Russian Federation became the largest recipient of migrants in Eurasia and the world. Destructive socio-economic and political processes on the territory of the former USSR, on the one hand, spurred the desire of the population, primarily Russians, from post-Soviet countries to move to the Russian Federation, and on the other hand, deprived many newly independent states of their attractiveness for Russians, whose departures fell by almost three times in the first years after the collapse of the USSR. Migration on the scale of the former Soviet Union became one-way and was directed to the Russian Federation. In the first half of the 1990s the Russian Federation had the maximum degree of migration attractiveness, proof of which was a huge migration growth of the population, recorded by official statistics (Table 4.1.1.).

Table 4.1.1.

Migration increase (decrease) of the population of the CIS

and Baltic states in 1991–2000 (thousand people)

Countries	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Republic of	-40.1*	-14.2*	-12.2*	-11.0*	-9.8*	-7.4*	-8.2*	-5.1	-4.3	-5.5
Azerbaijan										
Republic of Armenia	4.4*	-214.3*	-138.6*	-122.9*	-35.6*	-26.0*	-27.8*	-22.3*	-17.6*	-21.9*
Republic of Belarus	3.0	53.8	32.4	-3.3	-0.2	09.3	14.8	19.9	17.6	12.1
Republic of Georgia**	-22.6	-139.3	-140.9	-142.6	-127.2	-123.1	-59.9	-39.3	-36.1	-35.2
Republic of	-48.9	-179.2	-203.3	-409.1	-243.3	-207.5	-291.0	-220.3	-123.6	-108.3
Kazakhstan										
Kyrgyz Republic	-36.6	-77.4	-120.6	-51.1	-18.9	-11.7	-6.7	-5.5	-9.9	-22.5
Republic of	-5,8	-23,2	-23,7	-25	-13,7	-7,4	-5	-3	-1,5	-1,4
Latvia****										
Republic of	-4,4	-11,7	-17	-6,9	-2,8	-1,8	-0,6	-0,6	-0,3	-0,6
Lithuania****										
Republic of Moldova	-33.7	-36.8	-15.1	-14.8	-17.1	-16.5	-9.9****	-7.1****	-3.0****	-4.7***
Russian Federation**	136.1	266.2	526.3	978.0	653.7	513.5	514.1	428.8	269.5	362.6
Republic of	-26.4	-94.7	-74.7	-45.6	-37.8	-27.6	-16.8	-15.4	-14.1	-13.7
Tajikistan*										
Turkmenistan	-4.8	342.7	07.8	-9.2		-17.4		•••	•••	
Republic of	-30.2	-74.7	-54.0	-138.9	-89.0	-50.3	-48.4	-50.0	-62.1	-66.6
Uzbekistan										
Ukraine	151.3	287.8	54.5	-142.9	-131.6	-169.2	-136.0	-152.0	-138.3	-133.6
Republic of	-4,2	-21,8	-12,8	-10,2	-7,7	-5	-2,8	-1,2	-0,3	-0,4
Estonia*****										

*Notes:* \* Information updated compared to previously published; \*\* Data are based on the results of the new population census; \*\*\* From 2012. – Estimate taking into account the results of the Comprehensive Survey of Living Conditions of Households for the previous year. Data updated compared to previously published; \*\*\*\* Without the territory of the left bank of the Nistru River and the city of Bender; \*\*\*\* Migration loss of countries in the interstate exchange with the Russian Federation.

*Source*: Migration of Population. Vol. 6: Migration Policy. Appendix to the journal «Migration in Russia». M. 2001. 176 p. P. 172–173.

The positive migration balance in the Russian Federation in 1991–1994 increased ninefold. Moreover, both due to an increase in the number of arrivals and a sharp decrease in the outflow from Russia. In separate countries the ratio was even more significant: in 1994 there were 25 arrivals for every one person leaving the Russian Federation for the Republic of Armenia, and 1:20 for the Republic of Latvia and 1:14 for the Republic of Georgia.

Table 4.1.2. **Key parameters of migration exchange of the RSFSR and the Russian Federation with the CIS and Baltic states in 1971–1994 (thousand people)** 

Years	Arrived migrants (immigrants)	Departed migrants (emigrants)	Migration growth
1971–1975 * [1]	898	817	81
1976–1980 * [1]	897	777	120
1981–1985 * [1]	886	719	167
1986–1990 * [1]	898	714	184
1991 [2]	692	587	105
1992 [2]	926	570	356
1993 [3]	923	369	554
1994 [3]	1146	232	914

Note: \* annual average.

Sources: [1] Population migration. Vol. 6: Migration policy. Supplement to the journal «Migration in Russia». M. 2001. 176 p. [2] Demographic Yearbook of Russia: Statistical Collection. Moscow: Goskomstat of Russia. 1999. [3] Demographic Yearbook of Russia. Statistical Digest. Moscow: Goskomstat of Russia. 2001.

In 1992–2000 the population of the Russian Federation in the migration exchange with the CIS and Baltic states increased by approximately 6 million people, which compensated the natural loss of population in the country by three quarters<sup>1</sup>. From the total number of arrivals, more than half were from Central Asian countries, a quarter from Ukraine and about 15% from South Caucasus states (Table 4.1.3).

Table 4.1.3. **Geographic Structure of Immigrants Who Arrived from the CIS and Baltic States to the Russian Federation**in 1989–2000 (%)

Countries	1989	1992	1995	1997	1999	2000	1989–2000
Republic of Azerbaijan	9	7	5	4	4	4	6
Republic of Armenia	3	2	4	3	4	5	3
Republic of Belarus	6	4	4	3	3	3	4
Baltic states	4	16	5	4	3	1	5
Republic of Georgia	4	6	6	4	5	6	5
Republic of Kazakhstan	18	19	29	40	38	36	26
Kyrgyz Republic	3	3	3	2	3	4	5
Republic of Moldova	4	3	2	2	2	3	3
Republic of Tajikistan	2	7	5	4	3	3	5
Turkmenistan	2	1	2	3	2	2	2
Republic of Uzbekistan	10	11	13	7	11	12	11
Ukraine	35	21	22	24	22	21	25
Total	100	100	100	100	100	100	100

Source: Vorobyeva O.D., Rybakovsky L.L., Rybakovsky O.L. Migration policy of Russia: history and modernity. Moscow: Econ-Inform Publishing House. 2016. 192 p. P.74.

<sup>&</sup>lt;sup>1</sup> Vorobyeva O.D., Rybakovsky L.L., Rybakovsky O.L. Migration Policy of Russia: History and Modernity. Moscow: Econ-Inform Publishing House. 2016. 192 p.

In the late 1980s and early 1990s the most significant problem in the migration field was forced migration, the reception of refugees and displaced persons, which appeared due to the emergence and development of armed and political conflicts. Among the causes of inter-republican and inter-state migration the first place was taken by push factors: armed conflicts and wars fomented on ethnic grounds; new national policies; growth of nationalism; displacement of the Russian language; collapse of economies and curtailment of production, which displaced the highly qualified, primarily Russian, population. This has put the Russian population in many countries of the former Soviet Union in difficult conditions. Migration became not only forced, but also ethnic in nature. If in 1989 the share of Russians did not exceed half of those arriving, in 1992 it was about 70%. Russians and representatives of other Russian nationalities (Tatars, Bashkirs, etc.) came to the Russian Federation from countries with the tensest situations and armed conflicts (Republic of Moldova, Central Asian and South Caucasus countries).

Table 4.1.4.

Shares of Russians and representatives of titular nationality among migrants who arrived in the Russian
Federation from the former Soviet Union in 1989–2000 (%)

Countried	1989	1991	1992	1995	1997	2000	1989– 2000
Chara of Durations are as a three arminisms							2000
Share of Russians among those arriving	16		66	61	F0	F 4	F0
from the CIS and Baltic countries, including	46	57	66	61	59	54	59
from the Republic of Azerbaijan:	22	4.5		20	20	1.5	20
- Russians	22	45	54	38	28	15	39
- Azerbaijanis	29	25	14	35	49	60	29
from the Republic of Armenia:	22	2.6	20		_	_	4.5
- Russians	23	36	38	8	7	5	15
- Armenians	57	49	47	84	84	81	74
from the Republic of Belarus:							
- Russians	43	47	56	60	54	51	51
- Belarusians	45	42	33	29	35	30	38
from the Republic of Georgia:							
- Russians	33	49	57	30	26	16	38
- Georgians	3	9	7	21	26	21	16
from the Republic of Kazakhstan:							
- Russians	60	65	72	73	71	70	70
- Kazakhs	9	7	6	3	4	4	4
from the Kyrgyz Republic:							
- Russians	59	70	77	72	68	71	72
- Kyrgyz	17	5	1	2	6	4	4
from the Republic of Moldova:							
- Russians	26	38	52	53	47	49	43
- Moldovans	51	37	26	21	25	21	32
from the Republic of Tajikistan:							
- Russians	55	69	68	57	48	37	61
- Tajiks	14	5	3	12	21	31	10
from Turkmenistan:	44	59	69	69	64	64	63
- Russians	28	14	4	3	6	4	8
- Turkmen							
from the Republic of Uzbekistan:							
- Russians	41	61	68	65	60	59	61
- Uzbeks	16	6	3	3	5	5	5
from Ukraine:	-						
- Russians	49	53	63	62	59	52	57
- Ukrainians	43	38	30	31	33	30	35

Source: Vorobyeva O.D., Rybakovsky L.L., Rybakovsky O.L. Migration policy of Russia: history and modernity. Moscow: Econ-Inform Publishing House. 2016. 192 p. P.74–75.

In 1989 asylum seekers claiming official refugee status appeared on the territory of the Russian Federation. These were the citizens of the USSR residing on the territory of the Soviet republics, victims of armed conflicts in the Uzbek SSR (over 20 thousand Meskhetian Turks); in 1990 – in the Azerbaijan SSR and Armenian SSR (Sumgait, Baku, Nagorno-Karabakh); in 1991 – in the Georgian SSR (100,000 Ossetians). In 1991 a large-scale sociological survey of forced migrants in the Russian Federation was carried out, which helped to identify the main reasons why the population left the republics: the adoption of laws on the status of the state language and citizenship in the newly independent countries, aggravation of interethnic relations at the official and household level, difficulties with employment, problems related to education, primarily of children, due to belonging to a non-indigenous ethnic group¹.

The first normative acts that ensured the reception and accommodation of forced migrants in Russia date back to the late 1980s: Decree of the USSR Council of Ministers No. 503 of June 26, 1989 «On Measures to Create the Conditions Required for the Accommodation of Meskhetian Turks Forced to Leave Permanent Residence in the Uzbek SSR», Decree of the USSR Council of Ministers No. 1100 of December 11, 1989. «Decree of the President of the RSFSR On Organizing Work to Provide Assistance to Refugees and Displaced Persons (No. 123-RP of December 14, 1991). The main document during this period was the RF Government Decree of March 3, 1992, No. 135 On Measures to Provide Assistance to Refugees and Displaced Persons.

A law on refugees had not been elaborated and adopted by the beginning of 1992. Therefore, those who had arrived were recognized as refugees on the basis of governmental resolutions on each specific case of mass entry. They were registered by the Ministry of Internal Affairs of the USSR and the RSFSR. As of mid-1992. (before the adoption of the Laws on Refugees and on Forced Migrants) there were 315,000 officially registered refugees in Russia. Before the new legislation came into force, there was no fundamental distinction between the status of a forced migrant and a refugee. For some time, there was no distinction between the citizenship of the USSR and the Russian Federation. In this connection, for the first half of the 1990s it is more correct to use the concept of «forced migrants» from the former republics of the USSR and «refugees» from the old (or far abroad) countries.

The Program «Migration», approved by the Russian Government's Decree No. 327 of May 18, 1992, for the first time formulated the main directions of Russia's migration policy and measures for its implementation. In 1992, two fundamental laws in the field of regulation of reception and settlement of forced migrants, «Law on Refugees» (FZ No 4528–1) and «Law on Forced Migrants» (FZ No 4530–1), necessary in that period for implementation of the state migration policy, oriented to support forced migrants, were developed and adopted on 19 February 1993.

During three years (1993–1995) more than 600,000 migrants with the status of forced migrants and refugees from the former Soviet republics were registered, and by 1997 their number increased to 1.2 million people. During the first few years of new legislation on forced migration, the regions where migrants with the corresponding statuses came to Russia changed almost every year (Table 4.1.5).

In the early 1990s a mass forced migration of the population from the regions of the North Caucasus began, caused by various armed conflicts. During the period 1992–1998 almost 1.8 million people applied to the territorial bodies of the FMS of the Russian Federation and underwent the corresponding procedure of determining legal status, and the issue was resolved positively in respect of 1.4 million people, which on average amounted to 200,000 people per year (Table 4.1.6).

The socio-demographic structure of migrants was characterized by an increased share of young people and a higher educational and professional qualification level compared to the permanent population of the country (Table 4.1.7).

<sup>&</sup>lt;sup>1</sup> Vitkovskaya G.S. Forced migration: problems and prospects. M. 1993.

## Number and proportion of countries and regions of origin of forced migrants (refugees and forced migrants) in the Russian Federation in 1992–1996.

	1992	1993	1994	1996	1992–1996
The number of forced migrants (migrants and	160,3	323,3	254,5	172,7	1 202,1
refugees), thousand people					
Share of forced migrants from individual countries	100,0	100,0	100,0	100,0	100,0
(regions) in their total number, %					
Republic of Tajikistan	40,8	21,2	9,6	11,6	15,9
Republic of Azerbaijan	20,5	13,	5,4	1,7	8,9
Chechen Republic	13,5	12,3	8,6	20,0	12,6
Republic of Georgia	15,5	20,4	6,9	6,0	9,7
Republic of Moldova	6,4	1,3	1,1	0,8	1,2
Republic of Uzbekistan	2,0	5,7	23,0	11,0	13,3
Republic of Kazakhstan	0,2	2,4	25,0	32,0	17,9
Republic of North Ossetia-Alania	0,1	12,8	0,2	0,1	3,3

Source: Vorobyeva O.D., Rybakovsky L.L., Rybakovsky O.L. Migration policy of Russia: history and modernity. Moscow: Econ-Inform Publishing House. 2016. 192 p. P.78.

Table 4.1.6.

The Number and Status of Migrants Who Arrived from Former Soviet Republics to the Russian Federation in 1992–2001, thousand people \*

	ļ.	Share of forced migrants among	
Years	Total	including forced migrants **	newcomers, %
1992	925,8	160,3	17,3
1993	922,9	323,2	35,0
1994	1146,3	354,5	30,9
1995	841,5	291,3	34,6
1996	631,2	172,7	27,4
1997	582,8	131,1	22,5
1998	494,8	118,2	23,9
1999	366,7	79,1	21,6
2000	350,3	49,2	14,1
2001	193,5	41,8	21,6
Total	6455,8	1721,4	26,7

Notes: \* – according to Rosstat and FMS of Russia; \*\* – forced migrants and refugees with the appropriate status.

Source: Vorobyeva O.D., Rybakovsky L.L., Rybakovsky O.L. Migration policy of Russia: history and modernity. Moscow: Econ-Inform Publishing House. 2016. 192 p. P.80.

Table 4.1.7. **Age Composition of the Permanent Population of the Russian Federation and Migrants from the Former Soviet Union in 1992–1996 (%)** 

Age groups				
	Permanent	Migrants		
	population	Total	including forced migrants	
Under working age	17	24	29	
Working-age	61	65	56	
Older than working age	22	11	15	
Total	100	100	100	

Source: Vorobyeva O.D., Rybakovsky L.L., Rybakovsky O.L. Migration policy of Russia: history and modernity. Moscow: Econ-Inform Publishing House. 2016. 192 p. P.79.

The settlement of forced migrants in the early years gravitated toward the southwestern and southern regions of the European part and the Southern Urals. The highest migration load was noted there, primarily in the Stavropol and Krasnodar territories, Rostov, Orenburg, and Kurgan regions.

In the early 1990s, many Western countries took steps to tighten the entry regime for asylum seekers and other categories of foreign nationals. As a consequence, transit migration flows were redirected to the territory of the Russian Federation. Russia's accession in 1992 to the 1951 Geneva Convention relating to the Status of Refugees and its Protocol of 1967 had also contributed to this. The lack of a proper immigration control system and experience of its implementation in the country had become an additional reason for illegal transit migration. Practice showed that, legally, organizationally and financially, Russian Federation was not ready for the implementation of the Geneva Convention. According to various expert estimates, between 500,000 and 700,000 foreign nationals and stateless persons entered the country illegally in the early 1990s. They can be divided into three main categories: economic, political, and transit immigrants.

The internal migration turnover in the Russian Federation dropped sharply. By 1993 it amounted to 3 million people or 60% of the 1989 volume. The migration outflow from Siberia and the Far East increased sharply. Another feature was the growth of the rural population, provided by the influx of migrants from the CIS and Baltic countries. The general economic downturn, rising unemployment, falling standards of living meant that housing and resettlement of migrants was mainly possible in rural areas.

There was a «pull» of the population to the central and southern regions of the Russian Federation. Between 1989–1995 the regions of Central Russia gained 229,000 people through migration exchange with other regions, and 180,000 people in the Volga region. The population of Krasnodar and Stavropol Krai and Rostov Oblast increased due to internal migration by 408,000 people, and the population of the Central Black Earth region increased by 110,000 people. The largest cities with regions – Moscow and St. Petersburg benefited most from the intra-Russian migration exchange of population.

During this period there also began active integration of the Russian Federation into the international labor market. This manifested in the attraction and use of foreign labor resources in the Russian labor market and in the departure of Russian citizens abroad for the purpose of employment.

In the first half of the 1990s there was an accelerated growth of labor migration to Russia: by 1996 the number of migrant workers had almost tripled. And in 1996–2000 experts recorded a downward trend in the documented use of foreign labor. Approximately 3 million people entered the Russian Federation annually from the former Soviet republics for the purpose of employment. The largest influx of foreign workers was from Central Asian states: Republic of Uzbekistan (26%), Republic of Tajikistan (16%) and the Kyrgyz Republic (8%). By the end of the 1990s, the number of foreign workers in the Russian Federation from the Republic of Uzbekistan increased more than six times, from the Kyrgyz Republic 5.6 times, and from the Republic of Tajikistan almost four times. The share of migrant workers from Ukraine remained stably high: by 2000 they accounted for over 10% of all foreign workers. By the end of the 1990s the scale of labor migration was growing and became comparable to the long-term migration for permanent residence to the Russian Federation. And forced migration remained an important component of migration growth.

Practically all the CIS countries (except Belarus) were losing their populations to international migration. Negative migration balance in the Republic of Kazakhstan only for four years (1993–1996) amounted to over 1 million people, in Ukraine for three years (1994–1996) – almost 450 thousand, in the Kyrgyz Republic – 200 thousand people. The population of the Republic of Armenia has decreased as a result of international migration by almost 500 thousand people during only three years (1992–1994) (Table 4.1.1).

Thus, migration processes in the post-Soviet space in the first decade of the existence of new independent states had a rather unilateral emigration direction to the Russian Federation, or other countries of the world, which led to a migration loss of population in all CIS countries, but it ensured a high migration gain in the host country – Russian Federation, compensating for the loss of population due to natural loss.

In the second half of the 1990s, migration for permanent residence to the Russian Federation from post-Soviet countries was replaced by international labor migration, which was certainly dictated by demand on the Russian labor market due to some revival of economic development, but did not lead to population stabilization or growth against the background of continuing natural population decline.

The role of migration processes in shaping the population of all countries has also changed. In a short period of time, in a number of countries migration losses have been reduced or replaced by migration gains. Such transformations can be viewed as quite positive for countries that have been losing population as a result of migration processes in recent decades (Table 4.1.8).

Table 4.1.8. Migration growth (loss) of population in the former Soviet Union in 2019 and 2020 (thousand people)

Countries	2019	2020
Republic of Azerbaijan [1]	0,4	1,1
Republic of Armenia [1]	-15,4	1,7
Republic of Belarus [1]	13,9	24,0
Republic of Georgia [1]	-8,2	15,7
Republic of Kazakhstan [1]	-32,9	-17,7
Kyrgyz Republic [1]	-6,16	-4,86
Republic of Latvia [2]	-3,4	-3,2
Republic of Lithuania [2]	-10,8	-10,9
Republic of Moldova [1]	-1,2	
Russian Federation [1]	285,1	106,5
Republic of Tajikistan [1]	-13,64	
Republic of Uzbekistan [1]	-10,7	-12,6
Ukraine [1]	21,5	9,3
Republic of Estonia [3]	-2,3	

Sources: [1] Data of the Interstate Statistical Committee of the CIS. Access mode: http://www.cisstat.com/; [2] Russia and the European Union member states 2019. Statistical collection. Moscow: Rosstat. 2019. 265 p. URL: http://www.cisstat.com/; [3] Statistical data of the Republic of Estonia. URL: https://lb-aps-frontend.statista.com/statistics/1264949/estonia-emigration-figures/

Migration loss decreased in the Republic of Kazakhstan, Kyrgyz Republic, Republic of Latvia, Republic of Lithuania and the Republic of Moldova. Migration loss was replaced by migration gain in the Republic of Armenia and the Republic of Georgia. The migratory growth of the population increased in the Republic of Azerbaijan. In Ukraine the migration increase decreased, which resulted from the expansion of Ukraine's migration relations with the countries of the West. Emigration to Europe aggravates the process of depopulation in Ukraine.

In the last decade, the directions and scale of migration relations in the post-Soviet space have changed significantly – the Russian Federation is no longer the only country of attraction for migrants, the geography of migration relations both within the region of the former USSR and the interaction of countries with new migration partners has diversified significantly (Table 4.1.9).

Currently, almost all countries of the former Soviet Union are actively developing migration relations with other states. For example, since 2005 the Republic of Azerbaijan has gradually become a country of immigration. The Republic of Azerbaijan employs highly qualified and skilled specialists from Great Britain, United States, People's Republic of China, Islamic Republic of Iran, Republic of Turkey, Russian Federation, Republic of Georgia, Pakistan, Central

Asian countries and the Balkan states. In 2020 the total migration increase of the country was 1.1 thousand people, and the balance of migration in exchange with other countries was 17.1 thousand people (Table 4.1.10).

Table 4.1.9. Migration ties of the Russian Federation with the countries of the former USSR in 2019 and 2020 (people)

Countries	Arrived in		Departed from		Migration		Migration
	the Ru	ussian	the Russian		balance		balance
	Fede	ation	Fede	ration			2020 to
	2019 г.	2020 г.	2019 г.	2020 г.	2019 г.	2020 г.	2019, %.
Total, including	701234	594146	416131	487672	285103	106474	37
CIS countries	617997	535923	361997	417059	256000	118864	46
Republic of Azerbaijan	34619	32135	17614	21242	17005	10893	64
Republic of Armenia	71984	56511	36875	58355	35109	-1844	-5
Republic of Belarus	18428	14536	12145	15940	6283	-1404	-22
Republic of Kazakhstan	86311	64493	47145	56056	39166	8437	22
Kyrgyz Republic	53810	45676	38704	44275	15106	1401	9
Republic of Moldova	26513	22132	21128	18639	5385	3493	65
Republic of Tadzhikistan	89553	93335	41179	53915	48374	39420	81
Turkmenistan	14632	12930	8434	12153	6198	777	13
Republic of Uzbekistan	60796	50188	41667	45266	19129	4922	26
Ukraine	161351	143987	97106	91218	64245	52769	82
Other countries of the former USSR	10057	8146	6567	6716	3490	1430	41
Republic of Georgia	6925	5764	4085	4495	2840	1269	45
Republic of Latvia	1462	1059	1034	959	428	100	23
Republic of Lithuania	899	725	652	541	247	184	74
Republic of Estonia	771	598	796	721	-25	-123	492

Source: Federal State Statistics Service.

The flows of migrants from the Republic of Kazakhstan, Kyrgyz Republic, the Republic of Tajikistan and the Republic of Uzbekistan are oriented to new migration directions. In the states of Central Asia, the spread of English is growing, recruiting firms, foreign universities are active, which redirects the flows of labor and educational migrants to the Republic of Turkey, Persian Gulf countries, Republic of Korea, Japan, Eastern European countries.

In 2020 many countries of the former Soviet Union were characterized by return migration, associated with the pandemic COVID-19, so the rate of migration growth in exchange with foreign countries became positive (Republic of Armenia, Republic of Georgia, Republic of Lithuania). However, this phenomenon is most likely temporary, and after the restrictions caused by the pandemic are lifted, migration processes will return to their previous dynamics and direction. It has become evident that the directions of emigration from the former Soviet Union now look significantly more diverse than before.

At present, stable migration flows involving former Soviet countries have formed in Eurasia: Eurasian (between Central Asian countries and the Russian Federation), East European-South European (from Romania, Moldova and Ukraine to Italy, Spain, Greece and Portugal), Caucasian (between South Caucasian countries and Russia), Slavic (between Ukraine, Moldova, Belarus and Russia). These migration flows are not only significant in scale, but are also accompanied by significant socio-economic and geopolitical processes in their development.

The migration corridor formed between the countries of Central Asia and the Russian Federation is one of the largest and most stable in Eurasia and the world. The main migration flow in this migration corridor is labor migration, in which from 2.7 to 4.2 million people are involved (from 10% to 16% of economically active population of Central Asia). This is not only a significant scale of migration, but also serious political, socio-economic, and demographic

consequences for the countries of origin of migrants as well as for the states that receive them. According to the World Bank, the Republic of Tajikistan and the Kyrgyz Republic traditionally rank high in the world ranking of countries in terms of the share of remittances in GNP<sup>1</sup>.

Table 4.1.10

Migration gain (loss) of the population of the former USSR countries in exchange with other countries

(except the Russian Federation) in 2019–2020 (thousand people)

Countries	2019	2020
Republic of Azerbaijan [1]	17,1	12,0
Republic of Armenia [1]	-20,0	0,1
Republic of Belarus [1]	н/д	22,6
Republic of Georgia [1]	-5,6	14,5
Republic of Kazakhstan [1]	-6,0	-9,3
Kyrgyz Republic [1]	-9,0	-3,46
Republic of Latvia [2]	-3,0	-3,1
Republic of Lithuania [2]	н/д	30,72
Republic of Moldova [1]	-4,2	н/д
Republic of Tajikistan [1]	-34,8	н/д
Republic of Uzbekistan [1]	8,4	-7,7
Ukraine [1]	85,7	62,1

Sources: [1] Data of the Interstate Statistical Committee of the CIS. Access mode: http://www.cisstat.com/; [2] Russia and the European Union member states 2019. Statistical collection. Moscow: Rosstat. 265 p. Access mode: file:///C:/Users/User/Documents/IDI%20RAN/Report%202%20UNFPA/Rus-Es2019.pdf

One of the most important forms of migration in the FSU region is also academic migration, which includes movements of students, graduate students, interns, and scholars. The centers are the universities of the Russian Federation and the Republic of Kazakhstan. In 2019 there were 256 thousand foreign students studying at universities in the Russian Federation, including 103 thousand from Central Asian countries (including 41 thousand from the Republic of Kazakhstan, 22 thousand from Turkmenistan, about 17 thousand from the Republic of Uzbekistan, and 16.3 thousand from the Republic of Tajikistan)<sup>2</sup>. The Russian Federation provides scholarships to Russian universities for almost all of the former Soviet states (about 11,000 per year), but they do not meet all the needs that exist in the region.

An increasingly active role in the educational market is played by Chinese universities, which are now attracting students from Central Asia and other states of the former Soviet Union to study in their country. In addition, the Chinese government is encouraging the opening of Confucius centers and classes in the Central Asian region in an effort to form a new elite oriented toward the People's Republic of China.

Some countries of the former Soviet Union treat students as a resource, giving them the opportunity to obtain citizenship after graduating from universities in a simplified procedure (e.g. Republic of Lithuania, Russian Federation). Also, governments of the former Soviet Union countries encourage young people to study abroad in an effort to ensure their return home (e.g. the Republic of Kazakhstan implements the Bolashak program, Russian Federation has the Global Education program and the Republic of Georgia has the Young Ambassadors program). These aspects testify to the growing importance of educational migration, the increased competition in the region for educated young people, and the increased attention paid to it by governments.

<sup>&</sup>lt;sup>1</sup> Ryazantsev S.V. Labor Migration from Central Asia to Russia in the Context of the Economic Crisis. Valdai notes. August 31, 2016. URL: https://globalaffairs.ru/articles/trudovaya-migracziya-iz-czentralnoj-azii-v-rossiyu-v-kontekste-ekonomicheskogo-krizisa/

<sup>&</sup>lt;sup>2</sup> Data from the Center for Sociological Research at the Ministry of Science and Higher Education of the Russian Federation. URL: http://www.socioprognoz.ru/files/File/Sbornik\_16\_15\_09\_19\_ispr-1.pdf

# 4.2. Typology of countries by migration parameters and contribution of international migration to demographic development

A significant problem in the countries of the former Soviet Union remains the divergence of national methodologies for recording interstate migration, so migration estimates are sometimes inaccurate. This is true for temporary forms of migration, such as labor migration, which is inaccurately recorded by statistical instruments.

Over the past thirty years, the role of migration in the demographic development of the countries of the former Soviet Union has been quite contradictory. On the one hand, large-scale migration processes in conditions of open borders enable free movement of population and labor resources from labor-surplus to relatively labor-deficient regions, relieving social tension, high unemployment, covering labor deficit, contributing to economic development of countries of the region.

On the other hand, migration leads to significant demographic losses of young, ablebodied and qualified population in a number of countries. In the 1990s, many countries of the former Soviet Union maintained natural population growth, which was the basis of labor surplus and allowed migrants to be sent to other countries. It was mainly at the expense of the countries of the former Soviet Union in 1991–2000 that the Russian Federation received 5.3 million people, managing to compensate for a significant part of its demographic losses (although not completely) as a result of natural population decline (Table 4.2.1).

Table 4.2.1

Contribution of migration growth to total population increase (decrease) in the former USSR countries in 1991–2000 (thousand people)

Countries	Total increase (decrease) in population	Natural increase (decrease)	Migration gain (loss)
Republic of Azerbaijan	814	980	-166
Republic of Armenia	-348	263	-611
Republic of Belarus	-187	-254	67
Repblic of Kazakhstan	-1 457	1 204	-2661
Kyrgyz Republic	450	775	-325
Republic of Moldova	-720	84	-804
Russian Federation	-1 384	-6 726	5342
Republic of Tajikistan	768	1 510	-742
Turkmenistan	973	774	199
Republic of Uzbekistan	3 875	4 927	-1052
Ukraine	-2 509	-2 511	2
Republic of Georgia	-1 018	93	-1111

Source: Data from the Interstate Statistical Committee of the CIS. URL: http://www.cisstat.com/

Gradually, the direction and efficiency of migration processes in the countries of the former Soviet Union are changing. In many countries the migration outflow of population for socio-economic reasons is increasing. Migration processes became more diverse and transformed into temporary forms of migration, primarily labor, education and commercial migration, which became a widespread phenomenon. Large migration corridors have been formed in the region, including the Caucasian corridor (between the South Caucasus countries on one side and the Russian Federation on the other), Slavic corridor (between Ukraine, Republic of Moldova and the Republic of Belarus on one side and the Russian Federation on the other), Eurasian corridor (between Central Asian countries on one side and the Russian Federation on the other). The corridors are not only significant in scale, but

are also accompanied by significant socio-economic and demographic consequences for the states<sup>1</sup>.

For example, the Eurasian migration corridor is a stable migration flow that has developed between Central Asian countries and the Russian Federation and is accompanied by significant volumes of remittances to migrant-sending countries. Temporary forms of migration, primarily labor migration, predominate in the migration flows that make up the Eurasian migration corridor. The total number of migrants in the Eurasian migration corridor can be given on the basis of the number of migrants who are citizens of Central Asian countries. Given that there is no single accurate source of information, it is partly possible to use data from the Ministry of Internal Affairs on the facts of registration at the place of residence and stay, whose number in 2019 was 9.6 million. But it should be noted that the same migrant could get temporary registration in the Russian Federation two or three times during the year. The largest number was accounted for citizens of the Republic of Uzbekistan – 4.8 million. The largest numbers were citizens of the Republic of Uzbekistan - 4.8 million (66,000 and 4,739,000), Republic of Tajikistan - 2.8 million (102,000 and 2,653,000), Kyrgyz Republic - 1.1 million (16,000 and 1,039,000), Republic of Kazakhstan – 831,000 (69,000 and 762,000), Turkmenistan – 126,000 (4,000 and 122,000)<sup>2</sup>. In 2020, the number of registered migrants decreased to 6.6 million. (i.e. by 1.5 times) due to restrictions of movement during the COVID-19 pandemic. In 2020 at the place of residence and stay in the Russian Federation there were: citizens of the Republic of Uzbekistan (57 thousand and 3405 thousand), Republic of Tajikistan (105 thousand and 1829 thousand), Kyrgyz Republic (15 thousand and 723 thousand), Republic of Kazakhstan (56 thousand and 369 thousand), Turkmenistan (4 thousand and 84 thousand)<sup>3</sup>.

Although many countries combine the features of both donors and recipients of migrants, we can distinguish several types of states on the territory of the former USSR in terms of the results of migration processes. Note that the data include data on so-called migration «for permanent residence,» which is accompanied by removal or placement on the migration register (Table 4.2.2). Temporary forms of migration are not included here.

The first group is countries with significant migratory population growth. These include the Russian Federation. Migration processes have played an exceptional role in the formation of the Russian population in the post-Soviet period: in 1992–2019 they compensated more than 75% of the natural decrease in population (the total migratory increase was about 9.8 million people). Russia is one of the four leading countries in receiving immigrants after the United States and Germany. Moreover, immigration has become a kind of «demographic security cushion» for the country. There is also emigration from the Russian Federation. However, in qualitative terms, the losses and gains of the country's population are not equal. While the age structure of the population is maintained under the influence of migration growth, since immigrants always represent younger age cohorts, their level of education is significantly lower than that of the permanent host population. Moreover, the level of education among emigrants is very high. Immigrant groups of reproductive age contribute to higher birth rates and natural population growth. However, the ethnic composition is changing and there are problems associated with the adaptation and integration of immigrants into Russian society.

The second group consists of countries with small but stable migratory population growth. These include the Republic of Azerbaijan, Republic of Belarus, Ukraine, and the Republic of Estonia.

<sup>&</sup>lt;sup>1</sup> Ryazantsev S.V., Pismennaya E.E., Vorobyeva O.D. Euro-Asian migration corridor: theoretical aspects, estimates of scale and key characteristics // Scientific Review. Series 1: Economics and Law. 2020. № 3–4. P. 5–18. DOI 10.26653/2076-4650-2020-3-4-01

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> Selected Indicators of the Migration Situation in the Russian Federation for January-December 2019 and 2020 with a Distribution by World Countries. Ministry of Internal Affairs of the Russian Federation. URL: https://xn--blaew.xn--plai/dejatelnost/statistics/migracionnaya/item/22689602/

Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Countries											
Republic of Azerbaijan	1,4	1,7	2,0	2,3	1,1	1,1	1,5	1,2	1,6	0,4	1,1
Republic of Armenia	-37,6	-28,5	-9,4	-24,4	-21,8	-25,9	-24,9	-24,0	-18,2	-15,4	
Republic of Belarus	10, 3	9, 9	9,3	11,6	15,7	18,5	7,9	3,9	9,4	н/д	н/д
Republic of Georgia [2]			-21,5	-2,6	-6,5	-3,4	-8,1	-2,2	-10,8	-8,2	15,7
Republic of Kazakhstan	15,5	5,0	-1,4	-0,2	-12,1	-13,4	-21,1	-22,1	-29,1	-32,9	-17,7
Kyrgyz Republic	н/д	-39,40	-7,48	-7,20	-7,75	-4,23	-3,97	-3,92	-5,39	-6,16	-4,86
Republic of Latvia [3]	-35,7	-19,9	-11,9	-14,3	-8,6	-10,6	-12,3	-7,8	-4,9	-3,4	-3,2
Republic of Lithuania [3]	-72,0	-38,2	-21,3	-16,8	-12,3	-22,4	-30,1	-27,5	-3,3	10,8	19,99
Russian Federation [5, 6]	158,1	319,8	294,9	295,9	270,0	245,4	261,9	211,9	124,9	285,1	106,5
Republic of Moldova	-0,5	-0,9	0,1	-1,7	-1,6	-0,8	-1,1	-0,4	-0,2	-1,2	н/д
Republic of Tajikistan	-6,50	-6,25	-5,11	-4,01	-5,70	-4,82	-4,27	-3,65	-2,96	-13,64	н/д
Ukraine [1]	16,1	17,1	61,8	31,9	22,6	14,2	10,6	12,0	18,6	21,5	9,3

-34,6

-2,6

-38,6

-0,7

-29,3

2,4

-26,2

1,0

-18,6

5,2

-14,7

7,0

-10,7

5,4

-12,6

3,8

Population growth in the former Soviet Union in 2010–2020 (thousand people)

Sources: [1] Ukrainian statistical data. URL: http://www.ukrstat.gov.ua/; [2] Statistical data of the Republic of Georgia: https://www.geostat.ge/en/modules/categories/322/migration; [3] Russia and the European Union member states. 2019: Static collection. Moscow: Rosstat. 2019. 265 p. P. 43–45; Rosstat data. URL: https://rosstat.gov.ru/storage/mediabank/Rus-Es2019.pdf; Eurostat. Population change – Demographic balance and crude rates at national level [demo\_gind]. URL: https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do. [4] Data from Statistics Estonia. URL: https://www.statista.com/statistics/1264960/estonia-immigration-figures/ https://lb-aps-frontend.statista.com/statistics/1264949/estonia-emigration-figures/; [5] Data from 2010 to 2018. Demographic Yearbook of Russia 2019. Statistical collection. Moscow: Rosstat. 2019. 252 p. C. 200 URL: https://rosstat.gov.ru/storage/mediabank/Dem\_ejegod-2019.pdf; [6] Data 2019–2020. Commonwealth of Independent States. Preliminary results. Statistical collection. CIS Statistical Committee. 2020. P. 151. URL: http://www.cisstat.com/

Since 2008 the migration balance of the Republic of Azerbaijan has been steadily positive due to return migrants – ethnic Azerbaijanis who lived in other republics of the USSR, labor and business migrants from different countries (mainly from the Republic of Turkey, India, and Pakistan), as well as young people who come to the country for higher education and then stay for permanent residence. The positive migration balance is ensured mainly at the expense of young age groups of the population, both those of working age and those below working age. As a result, the high share of these two age groups of the population has been maintained over the past decades. Among the incoming population, women slightly outnumber men, but among the outgoing population the proportion of women is twice as high as that of men. All these factors ensure an almost equal ratio of women to men in the country's population<sup>1</sup>.

For the Republic of Belarus, the maximum migration growth was in 2014 and amounted to 15.7 thousand people. The Russian Federation, Turkmenistan and Ukraine account for the migration inflow to the Republic of Belarus and the People's Republic of China from non-CIS countries. The demographic processes are positively influenced by the migration increase, because the largest share of migrants is represented by young people aged 15–24. However, the level of education of newcomers is lower than that of the permanent population of the country.

On the whole, Ukraine has a positive migration balance, which helps partially compensate for the decrease in the population as a result of natural decrease. Over the last decade there has been a noticeable reorientation of migrants from Ukraine to Western countries. These are

Republic of Uzbekistan

Republic of Estonia [4]

-44,1

-2.5

-47,6

-2,5

-40,9

-3,7

<sup>&</sup>lt;sup>1</sup> Population and social indicators of the CIS countries and individual countries of the world 2017–2020. Interstate Statistical Committee of the CIS. M. 2021. 46 p. P. 26. URL: http://www.cisstat.org/life\_quality/sb\_soc\_indicate2017-2020.pdf

mainly labor and educational migrants, who more often stay for permanent residence in European states. This intensifies negative trends in the demographic development of Ukraine, as it reduces not only the total population, but also the birth rate, deforms the age and sex structure of the population, and contributes to demographic aging.

The Republic of Estonia has become a new center of attraction for migrants in recent years. It was able to change its approach to development and staked on the development of new information technologies. Many companies registered their offices there, which required an influx of qualified specialists. A wave of migration to the country was also noted in 2020–2021 from the Republic of Belarus. The Republic of Estonia has maintained positive migration growth in recent years.

The third group is the countries with insignificant, but constant migration outflow of population. These include the Republic of Georgia and the Republic of Moldova. Note that a significant part of emigration in these countries is not included in the statistics on permanent migration, as it occurs in the form of temporary labor migration, while maintaining registration of permanent population at the place of residence. But in fact people are absent from their countries for long periods of time, working abroad. For example, quite a lot of Moldovan natives, first of all women, work in the countries of Southern Europe, where it is easier to adapt and learn Latin group languages. The predominance of emigration over immigration has a direct impact on the population of the Republic of Moldova (4.4 million people in 1990, 2.6 million in 2020) and the demographic composition of the country. The high level of emigration of women of fertile age leads to a deterioration of demographic indicators, including a decrease in the birth rate. The process of demographic aging is increasing – in 2020 the average age of the population was 39.3 years (men - 37.2, women - 41.2). The emigration of one of the spouses often leads to the breakup of family relations and many marriages break up. The active labor emigration of Moldovan women has a negative impact on the situation of migrants' children left at home. In 2015 about 40,000 children were left unattended due to the emigration of their parents, including 10,000 children with both parents working abroad. Migration processes have changed the ethnic structure of Moldova's population. On the one hand, there was a significant decrease in the number of ethnic groups traditionally residing on this territory: Ukrainians, Russians, and Jews. On the other hand, due to immigration, ethnic communities not typical for the region appeared: Turks, Syrians, etc.

Insignificant natural increase of population and high rates of migration loss led to an overall reduction in the population of the Republic of Georgia, which led to a certain decrease in the birth rate, as a result of the outflow of the most reproductively active age groups of the population as well as a demographic aging of the population.

The fourth group – countries with significant migration outflows due to permanent and temporary forms of migration. This group includes the Republic of Armenia, Republic of Kazakhstan, Kyrgyz Republic, Republic of Latvia, Republic of Lithuania, Republic of Tajikistan and the Republic of Uzbekistan.

The Republic of Armenia has a relatively high birth rate, which ensures natural population growth. However, in the context of an active emigration outflow of population, it does not compensate for the reduction in the number and share of the working-age population. As a result, the process of demographic aging of the population is increasing. Even the high proportion of children among newcomers, combined with a high birth rate, does not slow this process down. Practically equal shares of men and women in the composition of arrivals and departures keep their ratio in the population on average quite stable: in 2020 there are on average 1,119 women per 1,000 men.

In the Republic of Kazakhstan emigration has increased several times. The highest migration loss of population was registered in 1994, when about 480,000 people left the country for permanent residence and this affected the reduction of the population. Emigration had ethni-

cally pronounced features: Russians, Germans, Ukrainians, Poles, Belarusians and representatives of other non-titular nationalities were the most frequent departures. In 1999–2020 there were about 849 thousand immigrants in the Republic of Kazakhstan. The policy of attracting and accepting ethnic Kazakhs has yielded results. The country also actively attracts labor and educational immigrants, primarily from Central Asian countries.

In the Kyrgyz Republic there is an overall increase in the country's population due to a high level of natural increase, there is a decrease in migration due to high emigration. The processes of permanent and temporary labor emigration are closely intertwined in the country. Often labor migrants gradually become permanent residents and citizens of other countries, primarily of the Russian Federation. According to various estimates, from 12% to 26% of the economically active population is involved in labor migration. More than 60% of the total number of migrants are young people between the ages of 15 and 29. The share of women among those who leave the country is almost twice as high as the share of men. The problem of social vulnerability of children left home, especially in rural areas, remains acute. In 2019, the number of children living in their home country whose parents are migrant workers exceeded 277,000. Emigration also affects the change in the national composition of the population and in the near future it will also affect the reproduction processes and the age structure of the population.

In the Republic of Tajikistan and the Republic of Uzbekistan total population growth ensures high level of natural increase: 21,7‰ and 19,7‰. The countries have a high level of emigration, including for permanent residence. Citizens of the Republic of Tajikistan became the second largest group of immigrants to obtain Russian citizenship in 2020. Labor migrants send significant amounts of remittances back home, reducing poverty and ensuring the level of consumption. Despite the positive results of rising household living standards due to remittances, there are serious negative demographic consequences: the breakdown of family ties, the growth of the categories of «abandoned wives» and «abandoned children. In these countries men outnumber women. There are on average 972 women and 989 men per 1,000 men. In younger age groups this proportion is even more disrupted, including under the influence of emigration.

The Baltic states have been losing population both through natural and migration losses most intensively of all post-Soviet countries. But the directions of migration processes are different from all other countries. Accession to the EU was the main factor stimulating intensive outflow of mainly working-age population in the western direction. In general, migration processes in these countries quickly brought the Latvian and Lithuanian Republics closer to the developed European countries in terms of the share of people over the working age, the share of which in 2020 was 20% and 19% of the total population.

Thirty years after the collapse of the USSR have shaped the following features of migration's contribution to demographic development (Table 4.2.3).

In the Republic of Tajikistan, Republic of Uzbekistan and the Kyrgyz Republic population growth is entirely due to natural population increase. Negative migration increase (decrease) of the population is observed in the countries.

In the Republic of Azerbaijan, the natural increase has been combined with the migration growth since 2002, in the Republic of Kazakhstan – in 2002–2006 and 2010–2015.

In the Republic of Armenia, the natural increase of the population has been combined with a negative migration balance since the collapse of the USSR.

In the Republic of Belarus, natural decrease in population (since 1993) is combined with a migratory surplus (except for 1990–1995 and 2002–2004). In the Russian Federation, the migration increase is annual.

In the Republic of Moldova, the natural increase in 1990–1999 was combined with a negative migration balance. In subsequent years, as a rule, both natural and migration losses are observed.

In Ukraine, there has been a natural decrease in population since 1991, while there has been a migration surplus in 1990–1993 and since 2005.

Table 4.2.3.

Ratio of migration and natural increase (decrease) of population in the former USSR countries by five-year periods in 1990–2019 (thousand people)

		1990-	1995-	2000-	2005-	2010-	2015-
		1994	1999	2004	2009	2014	2019
Republic of Azerbaijan	Natural increase	659	483,1	385,4	438,3	556,8	522,8
	Migration rate	-114,3	-124,3	19,8	46,4	28,9	6,4
Republic of Armenia	Natural increase	185,2	90,3	68,7	78,3	78,8	64,8
	Migration rate	-472	-261,5	-156,9	-186,6	-42,6	-23,2
Republic of Belarus	Natural increase	25,5	-233,6	-305,2	-215,2	-75,1	-31,7
	Migration rate	-70	38,8	-3,5	52,7	83,7	46,9
Republic of Kazakhstan	Natural increase	949,1	419,3	416,9	818,6	1149,1	1265
	Migration rate	-1373,5	-1378,4	-62,1	2,7	140,6	-38,2
Kyrgyz Republic	Natural increase	475	389,4	334,4	420,2	592,7	601,8
	Migration rate	-275	-41,1	-168	-99	-69,3	-33,7
Republic of Moldova	Natural increase	128,4	31,8	-23,9	-27,3	-12,4	-25,6
	Migration rate	-135,4	-167,3	-26,6	-44,5	-7,4	-7,8
Russian Federation	Natural increase	-1386,8	-3949,4	-4479,9	-2614,8	-318,7	-647,9
	Migration rate	2181,6	2379,6	1390,8	1647,3	1482,4	1129,2
Republic of Tajikistan	Natural increase	730,6	687	718,1	863,2	1048,5	1165,5
	Migration rate	-225,5	-241,1	-160,2	-143	-141,1	-89,7
Republic of Uzbekistan	Natural increase	2699,8	2281,8	1956,1	2164,7	2468,9	2557
	Migration rate	-294,5	-254,5	-294,5	-126,7	-81,5	-9,4
Ukraine	Natural increase	-486,8	-1501	-1774,9	-1420,7	-1066,5	-1185,9
	Migration rate	69,9	-461,3	-234,4	248	201,5	32,9

The countries of Central Asia and the Republic of Azerbaijan with a high level of natural increase are characterized by a high, but declining share of children in the population and a fairly stable low share of the population above working age. The population of these countries has a high migration potential, as the large working-age population at home is relatively excessive in relation to the demand for labor from national labor markets. Directions of interstate labor migration of these countries have been changing in recent years due to the relative advantages of migration policies of migration-attractive countries in Europe, Persian Gulf, Republic of Turkey, Republic of Korea, and Japan.

In countries with a natural population decline (Republic of Belarus, Republic of Moldova, Russian Federation, Ukraine, Baltic states and the Republic of Georgia), due to low birth rates and migration losses, the share of older generations continues to increase, i.e. the process of demographic aging and the growing burden on working-age population continues. For this large group of countries the most relevant are the measures of effective demographic policy, aimed primarily at increasing the birth rate and reducing the migration loss of population. And these are, first of all, measures of socio-economic policy that lie in the plane of economic growth and labor market management.

A common challenge for all post-Soviet countries is the lack of qualified jobs for their permanent population, which should be created and developed in order to reduce the intensity of labor migration flows to reduce the threats of its negative social consequences for the demographic development of each country.

### 4.3. The impact of the COVID-19 pandemic on international migration

According to the World Health Organization, as of the end of October 2021, there were 243 million cases of COVID-19 infection worldwide with more than 4.9 million deaths<sup>1</sup>. The coronavirus pandemic has tested states on the sustainability of their national economies, health care systems and social support systems, exposing a range of problems related to undocumented migrants, labor exploitation issues and the need to revise several existing regulations governing migration processes, among others.

Each of the countries includes in its agenda some or other measures aimed at combating the spread of coronavirus infection. These are both direct measures related directly to the preservation of public health and support of the health care system and indirect measures aimed at reducing the negative effects of the pandemic on socio-economic development, support for the most vulnerable categories of the population, and maintaining the growth rate of national economies. One of the consequences of the COVID-19 pandemic, which the world experienced immediately was the unprecedented reduction of mobility, both domestic and international. During the entire period of the pandemic, 108,000 international travel restrictions were imposed in countries around the world. Civilian air travel dropped by 60%<sup>2</sup>.

First of all, the restrictions on mobility were felt by those citizens who were abroad for various purposes at the time the pandemic was announced. These include tourists, businessmen, and representatives of businesses and organizations attending various events abroad, as well as labor and educational migrants. According to the latest data given in the World Migration Report 2022, there are approximately 281 million international migrants in the world, of which about two-thirds are labor migrants. IOM experts estimate that if it were not for the pandemic, the number of international migrants could have increased by an additional 2 million people by 2020<sup>3</sup>.

Under the conditions of the pandemic, labor migrants turned out to be one of the most vulnerable categories of the population. This was due to several reasons. First, in the situation of the closure of businesses and organizations in the first months of the pandemic, the risks of dismissal for migrant workers increased manifold. In general, migrants are characterized by a higher level of unemployment than the citizens of their respective countries. Second, migrants often do not have a «safety cushion» in the form of savings, so a decrease in their employment immediately affects their standard of living and quality of life. Thirdly, migrant workers live in more modest conditions, often renting housing together, and as a consequence, the risk of contracting coronavirus infection is higher for them. Under conditions of decreased business activity and transition to part-time employment, migrant workers may agree to worsen working conditions so as not to lose their jobs<sup>45</sup>

The COVID-19 pandemic struck the economies of all post-Soviet countries without exception. The degree of negative impact depended on the current socio-economic situation, the speed of government response to changes in the epidemiological situation, the introduction of certain mobility restrictions and their duration. We can argue that the pandemic of coronavirus infection is long-term, its impact on all areas of society is multidimensional and will not be limited to the period of time for which restrictive measures are introduced in national economies. Conventionally the whole complex of state support measures during the pandemic can be di-

<sup>&</sup>lt;sup>1</sup> Weekly epidemiological update on COVID-19 – 26 October 2021. Edition 63. WHO. URL: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---26-october-2021

<sup>&</sup>lt;sup>2</sup> World Migration Report 2022. URL: https://publications.iom.int/books/world-migration-report-2022

World Migration Report 2022. URL: https://publications.iom.int/books/world-migration-report-2022

<sup>&</sup>lt;sup>4</sup> Pandemic COVID-19: Challenges, Consequences, Counteraction / A.V. Torkunov, S.V. Ryazantsev, V.K. Levashov [et al]; Edited by A.V. Torkunov, S.V. Ryazantsev, V.K. Levashov. Moscow: Aspect Press Publishing House, 2021. 248 p.

<sup>&</sup>lt;sup>5</sup> Khramova M.N., Ryazantsev S.V. Reaction of the Russian labor market to the «first» and «second» waves of the COVID-19 pandemic // Scientific Review. Series 1: Economics and Law. 2021. № 3. P. 61- 73 DOI: 10.26653/2076-4650-2021-3-05

vided into four main blocks: 1) support for the health care system; 2) support for the population; 3) support for the real sector of the economy; and 4) support for the financial sector.

Let us focus on certain aspects related to the regulation of migration processes during the pandemic in some post-Soviet countries.

Migration flows in the CIS countries form two of the five major global migration corridors (Russia-Kazakhstan and Russia-Ukraine) with a total migration turnover of about 6 million people<sup>1</sup>. A characteristic feature is the possibility of visa-free movement within the CIS.

Thus, migrants move almost freely between the CIS countries and Ukraine, partly the Republic of Georgia and most migrant workers also enter the territories of states for employment purposes under a simplified procedure. The main destination countries for migrants in the CIS are the Russian Federation and the Republic of Kazakhstan. Therefore, the introduction of restrictive measures by some countries has mirrored migration from or through other CIS countries.

Restrictive and quarantine regimes were introduced by the countries of the former Soviet Union as early as February 2020 (Republic of Georgia) and by the end of March 2020 all CIS countries (with the exception of the Republic of Belarus) had closed their borders for entry and exit. A state of emergency was declared in many CIS countries. The Republic of Kazakhstan imposed a state of emergency with a curfew throughout the country<sup>2</sup>. Ukraine<sup>34</sup>, and the Republic of Moldova – the state of emergency for one month with a further extension and 60 days of quarantine<sup>5</sup>, Kyrgyz Republic and the Republic of Georgia – state of emergency in some regions and cities of the country<sup>6</sup>, Republic of Azerbaijan and Republic of Armenia – special quarantine<sup>7</sup>.<sup>8</sup>, The Republic of Uzbekistan imposed quarantines of varying degrees of severity in various regions of the country.

The Russian Federation introduced a hybrid regime: first the President declared non-working days; then – a regime of self-isolation and high preparedness in the regions (at the discretion of regional authorities); in early May – a regime of restrictions. However, de facto, the measures taken in Moscow, St. Petersburg and in some regions were a regime of emergency situation. The basic freedoms of citizens to leave their homes, movement even within one locality were restricted, the technology of QR-codes through the portal of State Services was tested for the first time, in particular it was required to get a QR-code for going to work and some other purposes. In the Moscow subway, travel cards were blocked for certain categories of citizens.

The government of the Republic of Tajikistan also closed its borders, but denied any cases of coronavirus in the country and took no special measures until April 30, 2020. Turkmenistan closed its borders in denial of the epidemic, but the real situation in the country, due to its closedness to the international community remains poorly visible<sup>9</sup>.

The only post-Soviet country that did not impose restrictions on entry and exit during the first months of the pandemic was the Republic of Belarus<sup>10</sup>. For a long time, the country became

<sup>&</sup>lt;sup>1</sup> The World Bank Annual Report 2016. URL: http://pubdocs.worldbank.org/en/596391540568499043/worldbankannualreport2016.pdf

<sup>&</sup>lt;sup>2</sup> Quarantine measures in Kazakhstan will last until the end of June // Zakon.kz. URL: https://www.zakon.kz/5021739-karantinnye-mery-v-kazahstane.html?utm\_source=web&amp;utm\_medium=newsv1&amp;utm\_campaign=notification

<sup>&</sup>lt;sup>3</sup> In Ukraine, due to the coronavirus, a state of emergency was introduced for 30 days from March 28 to April 24 // DW. URL: https://www.dw.com/ru/в-украине-из-за-коронавируса-введен-режим-чрезвычайного-положения/а-52914514

<sup>&</sup>lt;sup>4</sup> Ukraine closes the border for foreigners from March 17, 2020 // BBC. URL: https://www.bbc.com/russian/news-51876682

Moldova closes the border due to coronavirus. March 15, 2020 // Ukrainian National News. URL: https://www.unn.com.ua/ru/news/1857908-moldova-zakrivaye-kordon-cherez-

<sup>&</sup>lt;sup>6</sup> Quarantine conditions in Georgia. May 25, 2020 // Caucasian Knot . URL: https://www.kavkaz-uzel.eu/articles/348370/

<sup>&</sup>lt;sup>7</sup> Quarantine conditions in Armenia. May 15, 2020 // Caucasian Knot. URL: https://www.kavkaz-uzel.eu/articles/348360/

<sup>&</sup>lt;sup>8</sup> A special quarantine has been declared in Azerbaijan due to the coronavirus. March 23, 2020 // Izvestia. URL: https://iz.ru/990476/2020-03-23/v-azerbaidzhane-obiavlen-spetcialnyi-karantin-iz-za-koronavirusa

<sup>&</sup>lt;sup>9</sup> Tajikistan closed border for foreigners because of coronavirus. April 10, 2020 // Lenta.ru. URL: https://lenta.ru/news/2020/04/10/tadjikistan/

Lukashenko says Belarus will not close borders in a pandemic. TASS. URL: https://tass.ru/mezhdunarodnaya-panorama/8315267

actually the main transit corridor to the European Union for the population of neighboring CIS countries (primarily, the Russian Federation and Ukraine). Nevertheless, some restrictions, primarily of an intra-country nature, were adopted. Among them we would like to mention the introduction of restrictions on cultural, sporting and scientific events with international participation from March 12 until April 6, 2020. Only on December 10, 2020, the authorities of the Republic of Belarus introduced a temporary ban on departures from the country through land checkpoints<sup>1</sup>. Road checkpoints, simplified checkpoints, checkpoints at railway stations and river ports were closed. However, this restriction does not apply to those who crossed the border through the international airport of Minsk. Also, the decree lists other categories of citizens, to whom the restrictions do not apply.

The Baltic States (part of the EU), Republics of Latvia, Lithuania and Estonia also closed their state borders with the beginning of the pandemic. For example, borders of the Republic of Lithuania were closed since midnight on March 16, 2020, Estonian and Latvian Republics – since March 17, 2020<sup>23</sup> Bans were imposed on public events, education and work were transferred to remote mode. In the Republic of Lithuania, the international communication was practically completely stopped, except for the entry into the country of foreigners with residence permits, diplomats, as well as military personnel and auxiliary personnel of NATO military bases. Until March 19, 2020, a transit corridor remained open for citizens of third countries returning to their country of residence. Since mid-May 2020. The Baltic states lifted restrictions on cross-border movement subject to a number of requirements, creating the so-called «Baltic bubble»<sup>4</sup>.

Practically all of the post-Soviet space was practically frozen international migration of the population and significantly limited internal migration. The expression «social distance» gradually came into use.

In the EAEU space, the member states reacted quickly to the pandemic, and a number of agreements were reached that are currently applied. They concerned both issues of customs regulation, cargo transportation, exchange of operational information and issues directly related to the regulation of labor migration and the crossing of state borders of participating countries. Noteworthy among them is the Eurasian Economic Commission's Instruction No. 11 of March 25, 2020. «On the implementation of measures aimed at preventing the spread of COVID-19 coronavirus infection»<sup>5</sup>, signed in Minsk. This decree laid the foundation for most of the subsequent documents, defining the vectors of interaction between the EAEU member states. Subsequently, a number of documents were adopted, a detailed overview of which can be found on the EEC website<sup>6</sup>. To date, the situation in the EAEU space has been continuously monitored, allowing a dynamic response to changes in the epidemiological situation. For more active interaction between EAEU member states, an EAEU thematic session «COVID-19 pandemic and sustainable development in the regional integration union: the EAEU experience» was held in March 2021 to discuss and coordinate the countries' efforts in combating coronavirus infection<sup>7</sup>.

The Russian Federation, as the largest country that attracts migrant workers in the entire post-Soviet space, has introduced a number of legal and regulatory acts aimed at maintaining

<sup>&</sup>lt;sup>1</sup> Decree of the Council of Ministers of the Republic of Belarus № 705 of December 7, 2020 «On Amendments to the Decree of the Council of Ministers of the Republic of Belarus № 208 of April 8, 2020 and № 624 of October 30, 2020. URL: https://www.alta.ru/tamdoc/20bl0705/

<sup>&</sup>lt;sup>2</sup> Estonia and Lithuania Close Borders Due to Coronavirus. URL: https://eadaily.com/ru/news/2020/03/15/latviya-zakryvaet-granicy-i-rezko-ogranichivaet-publichnye-meropriyatiyahttps://www.dw.com/ru/эстония-и-литва-закрывают-границы-из-за-коронавируса/а-52778634

<sup>&</sup>lt;sup>3</sup> Latvia closes borders and sharply restricts public events. URL: https://eadaily.com/ru/news/2020/03/15/latviya-zakryvaet-granicy-i-rezko-ogranichivaet-publichnye-meropriyatiya

<sup>&</sup>lt;sup>4</sup> Information site about COVID-19 distribution in Latvia. URL: https://covid19.gov.lv/ru/podderzhka-zhitelyam/vozvraschenie-v-latviyu/peremeschenie-zhiteley-stran-baltii

<sup>&</sup>lt;sup>5</sup> Order of the Eurasian Economic Commission No. 11 of 25.03.2020. «On implementation of measures aimed at preventing the spread of COVID-19 coronavirus infection». URL: https://docs.eaeunion.org/docs/ru-ru/01425272/err\_30032020\_11

Overview of key EEC measures and decisions. URL: http://www.eurasiancommission.org/ru/covid-19/Pages/measures.aspx
Official website of the Eurasian Economic Commission. URL: http://www.eurasiancommission.org/ru/nae/events/Pages/01-03-2021-3.aspx

employment, level and quality of life of the population and has established temporary provisions for foreign nationals staying in the country. In particular, Order No. 635-r of March 16, 2020¹ The document defined a set of temporary restrictions on the entry into the Russian Federation of foreign nationals and stateless persons. This document provided for the extension of permits for migrants engaged in labor activities and a special entry procedure for highly qualified specialists, representatives of delegations, diplomats, and a number of other categories. Later this decree was repeatedly supplemented, the validity of certain measures was extended. This made it possible in a rapidly changing epidemiological situation to avoid a sharp increase in the incidence of disease and reduce the risks for foreign nationals of «going into the shadows.

Most of the measures proposed by the Russian Government back in the first wave of the pandemic have not lost their relevance so far and have been extended at least until the end of 2021. In particular, these are measures aimed at facilitating access to digital services for people, businesses and organizations<sup>2</sup>. In the context of migration management, this will make it more convenient for migrants to receive various types of services and extend the validity of certain documents.

The Republic of Kazakhstan, along with the Russian Federation, is also a major recipient country of migrant workers in the post-Soviet space. During the pandemic, some legislative initiatives aimed at regulating migration in a restricted environment also came into effect. Thus, on May 14, 2020 the Law of the Republic of Kazakhstan of May 13, 2020 № 327-VI «On making amendments and additions to some legislative acts of the Republic of Kazakhstan on the regulation of migration processes» came into force. First of all, the changes affected the Law of the Republic of Kazakhstan «On Population Migration»: the concept of seasonal foreign workers was adjusted so that this category of migrant workers could be employed in Kazakhstan for no more than one year to perform certain seasonal work, and their employment could be carried out according to the list of professions approved by the authorized agency for population migration issues³.

It also provided for the right to extend and issue permits within the quota by local executive bodies to hire migrant workers to work within their territory and/or other administrative-territorial units.

Assistance to migrants through the legislative fixing of their status of stay in the country was only one component of a comprehensive program of support for the population in conditions of unprecedented restrictions on mobility. One of the most important tasks of the state was to support the employment of the population. Kazakhstan, in particular, has adopted the Roadmap for 2020–2021. The main goals of this Roadmap are to ensure employment and prevent the growth of unemployment, as well as to create additional jobs and provide income. A total of 300 billion tenge has been allocated to achieve the goals underlying the Employment Road Map in 2021. The Employment Roadmap provides for the creation of 35,600 jobs, including more than 20,000 permanent jobs<sup>4</sup>.

For many post-Soviet countries, migrant workers' remittances play an important role in shaping household budgets. Under the conditions of the pandemic, the volume of remittances decreased significantly. This was especially noticeable in the second and third quarters of 2020. Thus, already in March 2020, the largest money transfer systems began to record a significant

<sup>&</sup>lt;sup>1</sup> Decree of the Government of the Russian Federation of 16.03.2020 № 635-r (ed. from 23.10.2021) «On temporary restrictions on entry into the Russian Federation of foreign citizens and stateless persons and temporary suspension of issuance of visas and invitations». URL: http://www.consultant.ru/document/cons doc LAW 347693/

<sup>&</sup>lt;sup>2</sup> Aganbegyan A.G., Klepach A.N., Porfiriev B.N., Uzyakov M.N., Shirov A.A. Post-pandemic recovery of the Russian economy and transition to sustainable socio-economic development, Problems of Forecasting. No. 6. 2020. pp. 18–26. DOI 10.47711/0868-6351-183-18-26.

<sup>&</sup>lt;sup>3</sup> On amendments and additions to some legislative acts of the Republic of Kazakhstan on the regulation of migration processes. The Law of the Republic of Kazakhstan dated May 13 , 2020. № 327-VI 3PK. URL: https://adilet.zan.kz/rus/docs/Z2000000327 
<sup>4</sup> Eurasian Economic Commission. Monitoring of Member States' measures in 2021. URL: http://www.eurasiancommission.org/ru/covid-19/Pages/monitoring\_2021.aspx

drop in remittances: by 11% compared with January 2020¹. This drop can be regarded as a harbinger of the beginning of the global crisis. In April the decline relative to March levels was already more than a third. Under the conditions of the pandemic, migrant workers had to revise their spending patterns in favor of current consumption (paying for housing and buying food and basic necessities), which caused the volume of remittances to fall. In the fourth, the volume of remittances showed a growing dynamics. In 2021 the volume of migrants' remittances reached almost the pre-crisis level, which may indicate a partial recovery in the employment of migrant workers. Nevertheless, the economies of such countries as the Kyrgyz Republic, Republic of Tajikistan and the Republic of Uzbekistan are very dependent on migrant remittances. According to the World Bank's 2018 data, remittances account for 33.2%, 29%, and 15.1% of the GDP of these countries. Therefore, the decline in remittances leads to the deterioration of the socio-economic situation of a significant share of households with migrant workers working abroad.

Many labor migrants, mostly from Central Asian states, during the period of restrictive measures in the receiving countries decided to stay, not to leave for their countries of origin. This was largely due to the fact that upon returning home people could face the problem of finding a job. For Central Asian countries characterized by high population growth rates and an insufficiently diversified labor market, the return of migrant workers placed an additional burden on the social support system.

<sup>&</sup>lt;sup>1</sup> The border of the crown: transfers from the CIS to Russia increased by 47% in March. At the same time, the flow of money to the near abroad has decreased. News. April 17, 2020. URL: https://iz.ru/1000052/natalia-ilina/granitca-korony-perevody-iz-sng-v-rossiiu-v-marte-vyrosli-na-47

#### 4.4. Migration policies of the former USSR countries

Most post-Soviet countries have established mechanisms and instruments of state migration policy. First of all, international treaties in the field of migration within the framework of various international organizations, including the UN, OSCE, CIS, EAEU interstate treaties and national policies, etc. Fundamental norms of various legislative acts defining the basis of the legal status of foreigners and stateless persons on the territory of host countries have been created.

In the thirty years following the collapse of the USSR, new political and economic unions were formed: CIS and the EAEU. The three Baltic countries became members of the EU, while Ukraine, the Republic of Moldova, and the Republic of Georgia signed an association agreement with the EU. While the Republic of Moldova tries to take advantage of being in both unions, the Republic of Georgia and Ukraine have withdrawn from the CIS. The Republic of Uzbekistan and the Republic of Azerbaijan cooperate in certain areas with all countries. The situation of «simmering» conflicts in the territories of the countries, as a result of which some countries have lost control over part of their territory, affects the cooperation. The demarcation of borders between the Central Asian countries is not yet complete. This also affects the cooperation of countries in the field of migration and requires the development of a legal framework for cooperation.

The first decade of independence of the countries of the former Soviet Union was accompanied by forced displacement. Most countries ratified the 1951 Convention for the Protection of Refugees and its 1967 Protocol. The exceptions are the Republic of Uzbekistan and the Republic of Tajikistan .

Among the most recent global international instruments is the Global Compact for Safe, Order and Legal Migration, signed in Marrakech, Morocco, on December 10–11, 2018. Not all countries of the former post-Soviet space signed this treaty¹. The Russian Federation and other countries are among the signatories and this demonstrates their inclusion in the global migration management agenda.

#### Concepts and programs of migration management

Most post-Soviet countries have concepts or programs for migration development. They reflect the regulation of labor migration, fight against illegal migration, reception of asylum seekers, and the attraction of migrants to solve demographic problems. The state migration services and governments of member countries of the EU Eastern Partnership program have developed concepts and programs whose goals include the facilitation of readmission within the framework of cooperation and the prevention of irregular migration.

In 2019, the Republic of Azerbaijan launched a project called «Reintegration Support for Azerbaijani Returnees» (RESTART), co-funded by EU member states, aimed at supporting the implementation of the readmission agreement on reintegration<sup>2</sup>.

In 2010 The Republic of Armenia adopted the Migration Policy Concept, the main directions of implementation of which are programs to assist migrants' reintegration upon return<sup>3</sup>. Also, since 2003 the country has concluded readmission agreements with thirteen countries. The State Employment Agency opened seven migration resource centers in Yerevan and in the regions to solve this problem. According to the law «On Employment» returning migrants have the opportunity to get acquainted with the state programs aimed at regulating employment.

<sup>&</sup>lt;sup>1</sup> The Republic of Latvia has not signed the agreement. UN Global Compact for Safe, Orderly and Regular Migration (A/RES/73/195). URL: https://www.iom.int/gcm-development-process

<sup>&</sup>lt;sup>2</sup> Titel-Moser F. (2021) Interaction with the Diaspora: EECA. Regional Series. URL: https://diasporafordevelopment.eu/wp-content/uploads/2021/04/EUDiF\_Regional-Overview\_EECA\_RU-v.2.pdf

<sup>&</sup>lt;sup>3</sup> The Concept of State Regulation Policy (2010) and the National Action Program for the implementation of the Concept for 2012–2016. Chobanyan A. Migration cooperation of Armenia with the European Union and the Eurasian Economic Union. Analytical brief. 2020. URL: file:///C:/Users/Irina/Downloads/PB\_Haykanush%20Chobanyan\_RU.pdf

A forum composed of NGOs, government and international organizations was created. From 2013–2015 four migration resource centers were opened by the EU-funded program to support circular migration and reintegration in the Republic of Armenia. The new Concept of State Migration Policy of the Republic of Armenia was developed with the support of the IOM and adopted in 2020¹.

The Republic of Georgia has adopted a migration strategy for 2016–2020, which aims to promote circular migration<sup>2</sup>. The country also implements return migration and reintegration programs. In 2016, the State Commission on Migration was established in the country.

In 1998 the Concept of repatriation of ethnic Kazakhs to their historical homeland was approved<sup>3</sup>. Kazakhstan has a diaspora of about 5 million people in more than 40 countries<sup>4</sup>. For ethnic Kazakhs who returned to the country, employment support, university quotas, medical services and social benefits were introduced. In 2020 ethnic Kazakhs were given the opportunity to apply for citizenship and residence permits simultaneously with repatriation.

In 2007 the Republic of Kazakhstan adopted the Migration Policy Concept<sup>5</sup>. The main goal of the Migration Policy Concept was to ensure sustainable demographic development, manage migration processes, strengthen national security, and create conditions for the realization of migrants' rights. which reflected the government's desire to make Kazakhs the majority nation. A large section of the document is devoted to the program of return and repatriation of ethnic Kazakhs (Oralmans). Currently there is an Action Plan for the implementation of the Concept of Migration Policy of the Republic of Kazakhstan for 2017–2021<sup>6</sup>. A new Concept of Migration Policy of the Republic of Kazakhstan is currently being developed and is being discussed at the expert level.

In 2000 The Government of the Kyrgyz Republic adopted the National Concept of Demographic and Migration Policy<sup>7</sup>. Attempts have been made to institutionalize relations with the diaspora through the development of policies and programs aimed at increasing financial and social contributions and facilitating the repatriation of migrants working abroad. Significant attention in the country is paid to the management of migration, which plays an important role in socio-economic and demographic development. In 2000 the Law of the Kyrgyz Republic «On External Migration»<sup>8</sup>, in 2002 – the Law on Internal Migration »<sup>9</sup>, in 2006 – the Law «On External Labor Migration<sup>10</sup>.

The Cabinet of Ministers of the Republic of Latvia in 2018 approved a Migration Policy Concept aimed at attracting skilled labor, simplifying regulations for third-country nationals already working in the country, and simplifying procedures for students from non-EU countries studying in the country to stay and seek employment after graduation.

The Republic of Lithuania implements a migration program aimed at persons of Lithuanian origin, for those who have the right to restore Lithuanian citizenship, EU citizens, family members of EU citizens, family members of the Republic of Lithuania, family members of foreign citizens, highly qualified specialists, other persons who intend to come to work, entrepreneurs, students<sup>11</sup>.

<sup>&</sup>lt;sup>1</sup> URL: https://www.iom.int/news/armenia-elaborates-new-migration-concept-iom-support

<sup>&</sup>lt;sup>2</sup> Mesvirishvili N. Schemes of circular migration in Georgia: Lessons learned and further steps. 2018.

<sup>&</sup>lt;sup>3</sup> The concept of repatriation of ethnic Kazakhs to their historical homeland. Resolution of the Government of the Republic of Kazakhstan No. 900 dated September 16, 1998.

<sup>&</sup>lt;sup>4</sup> Kazakhstan's demographic policy has begun to bear fruit. URL: https://www.trtavaz.com.tr/haber/rus/avrasyadan/demograficheskaya-politika-kazakhstana-nachala-prinosit-plody/603be99001a30ada44bc3704

<sup>&</sup>lt;sup>5</sup> Decree of the President of the Republic of Kazakhstan dated August 28, 2007 No. 399. URL: http://www.demoscope.ru/weekly/knigi/zakon/zakon090.html

<sup>&</sup>lt;sup>6</sup> Resolution of the Government of the Republic of Kazakhstan dated September 29, 2017. № 602 URL: https://adilet.zan.kz/rus/docs/P170000602

Decree of the President of the Kyrgyz Republic dated April 28, 2000. URL: http://cbd.minjust.gov.kg/act/view/ky-kg/3396

<sup>8</sup> The Law of the Kyrgyz Republic «On External Migration» of July 17, 2000. № 61.

<sup>9</sup> The Law of the Kyrgyz Republic «On Internal Migration» of July 30, 2002. № 133.

The Law of the Kyrgyz Republic «On External Labor Migration» dated 13.01.2006. № 4.

Lithuanian immigration programs. URL: https://www.migration.lt/%D0%B8%D0%BC%D0%B8%D0%B8%D0%B3%D1

Since 2010, the EU project «Efficient investment of PARE 1+1» was launched in the Republic of Moldova to attract remittances to the economy and stimulate the development of small and medium businesses for returned citizens of the Republic of Moldova. The National Strategy on the Diaspora for 2015–2025 was developed and is in force<sup>1</sup> with an action plan for its implementation<sup>2</sup>.

Since 2007, the State Program to Assist the Return of Compatriots has been implemented, due to which many regions of the country received additional demographic resources and qualified specialists. In 2012 the Concept of State Migration Policy for the period until 2025 was adopted<sup>3</sup>. In 2018, a new State Migration Policy Concept for 2019–2025 was adopted<sup>4</sup>. In 2019, the decree «On the Working Group on the Implementation of the Concept of State Migration Policy of the Russian Federation for 2019–2025» was signed and in 2020 a list of instructions to the Government on the implementation of the Concept of State Migration Policy for 2019–2025 was approved. In the documents there is the idea that «punctual changes in migration legislation, as well as the tightening of legal responsibility will not lead to a qualitative improvement in the migration sphere»<sup>5</sup>. The instructions specify many of the provisions of the Concept of State Migration Policy of the Russian Federation for 2019–2025. The instructions are presented in the following six sections: improving the institutions of permanent residence (residence permits) and citizenship of the Russian Federation; creating a unified migration regime for long-term residence in the Russian Federation; modernizing mechanisms for regulating labor migration; improving mechanisms for ensuring security and law and order in the migration sphere; informatization of migration management sphere; additional measures to ensure the implementation of the reform.

In the Concept of State Migration Policy of the Republic of Tajikistan<sup>6</sup> and the National Strategy of Labor Migration of the Republic of Tajikistan for 2011–2015 notes the positive role of migration in the economy of the country. The National Development Strategy of the Republic of Tajikistan for the period up to 2030 includes the issue of return of migrants as one of the main directions of its activities to achieve its sustainable development goals. In order to reintegrate returned migrants to the Republic of Tajikistan, in 2010 work was started to establish the Center for Reintegration of Labor Migrants, funded by the European Commission, together with the Ministry of Labor, Migration and Employment to provide individual counseling to returning migrants, assistance in conducting skills assessment, employment of returned migrants<sup>7</sup>.

The Republic of Uzbekistan began comprehensive reforms by adopting a Strategy of Action on the Five Priority Development Areas of the Republic of Uzbekistan in 2017–2021. The main areas were educational and qualification programs, reintegration of returnees and organized recruitment of migrant workers<sup>8</sup>.

<sup>%80%</sup>D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%BD%D1%8B%D0%B5-%D0%BF%D1%80%D0%BE%D0%B3%D1%80%D0%BC%D0%BC%D1%8B

<sup>&</sup>lt;sup>1</sup> The program «Diaspora, migration and development».

<sup>&</sup>lt;sup>2</sup> One billion lei in the country's economy through pare 1+1. URL: https://www.odimm.md/en/press/press-releases/4548-one-billion-lei-in-the-country-s-economy-through-pare-1-1

<sup>&</sup>lt;sup>3</sup> The President approved the Concept of the State Migration Policy of the Russian Federation for the period up to 2025. URL: http://kremlin.ru/events/president/news/15635

<sup>&</sup>lt;sup>4</sup> On the Concept of the State Migration Policy of the Russian Federation for 2019–2025. URL: http://kremlin.ru/events/president/news/58986

<sup>&</sup>lt;sup>5</sup> Decree of the President of the Russian Federation No. 58-rp dated March 6, 2019 «On the Working Group on the Implementation of the Concept of the State Migration Policy of the Russian Federation for 2019–2025»; List of instructions on the implementation of the Concept of the State Migration Policy of the Russian Federation for 2019–2025 dated March 6, 2020. <sup>6</sup> Resolution of the Government of the Republic of Tajikistan No. 411 of October 8, 1998 was approved. URL: http://tajimigration.ru/koncepciya-gosudarstvennoy-migracionnoy-politiki-respubliki-tadzhikistan.html

<sup>&</sup>lt;sup>7</sup> Return migration: international approaches and regional features of Central Asia. Study guide / Under the general editorship of S.V. Ryazantsev. Almaty. MOM. The UN Agency for Migration. 2020.

<sup>&</sup>lt;sup>8</sup> On additional measures to further improve the system of external labor migration of the Republic of Uzbekistan dated July 5, 2018; http://ht.gov.uz / migration to migrants/

Sibagatullina Z. Return migration as the main direction of work of sending countries. Information report. Vienna. The Prague

Ukraine adopted a law «On External Labor Migration» only in 2015, which declared the rights of migrants and the state's obligations to protect them¹. In 2017, an Action Plan was developed to ensure the reintegration into society of migrant workers and their families upon their return to Ukraine, taking into account the level of education, professional experience, qualifications and labor market needs.

#### Citizenship laws and their consequences

In the USSR, about 10% of the population lived in a different republic from the one in which they were born<sup>2</sup>. After the declaration of independence, one of the first laws adopted by the new countries was the adoption of citizenship laws. All of the countries of the former Soviet Union except for the Republic of Estonia and the Republic of Latvia chose the zero option for citizenship, i.e. all the population permanently residing on the territory of these countries automatically had the right to become citizens of the country of residence, regardless of their nationality.

The governments of the Estonian and Latvian Republics chose the method of granting citizenship on ethnic grounds. This «loyalty test» left more than 25 percent of the population without citizenship in both EU countries. In the Republic of Latvia, people were granted the status of «non-citizens» (in English: Non-citizens or Aliens) (in Latvian: nepilsoni)», and in the Republic of Estonia – the status of aliens with permanent residence permits. After considerable international pressure, the Republics of Estonia and Latvia made some amendments to their citizenship legislation, according to which children of non-citizens born in these countries after independence automatically acquire citizenship (at the request of their parents). After accession to the Schengen Area, according to the EU regulation of 2008, these populations also enjoy the rights of EU citizens in terms of free movement and access to the labor market. Similarly, they also have rights in the Russian Federation<sup>3</sup>. This facilitated the possibility of migration for the Russian-speaking population from the Baltic states to both Europe and the Russian Federation. But the scale of migration of this category of population to the Russian Federation has not increased.

Given the importance of migration, the growth of diasporas and the role of remittances, the number of FSU countries that allow dual citizenship is growing. Currently only five countries of the former Soviet Union do not allow dual citizenship: Republic of Kazakhstan, Turkmenistan, Ukraine, Republic of Uzbekistan and the Republic of Estonia. Sometimes even political conflicts cannot break these ties. For example, in 2020 more than 600 thousand Ukrainians, without giving up their Ukrainian citizenship, obtained citizenship of the Russian Federation<sup>4</sup>.

#### The policy of countries in relation to compatriots and the diaspora

Strategies to attract compatriots and their investment in the country have several approaches of implementation: 1) relocation of citizens of other countries, ethnic compatriots to

Trial. February 2021. URL: https://www.icmpd.org/file/download/48108/file/Prague%2520Process%2520Policy%2520Bri ef\_Evaluating%2520the%2520future%2520of%2520Uzbek%2520Labour%2520migration%2520RU.pdf Resolution of the President of the Republic of Uzbekistan No. PP-3839. URL: www.lex.uz.

<sup>&</sup>lt;sup>1</sup> The reintegration of migrant workers and the issuance of passports to residents of the occupied territories: the agenda of the Rada. URL: https://www.unn.com.ua/ru/news/1945026-reintegratsiya-zarobitchan-ta-oformlennya-pasportiv-zhitelyam-okupovanikh-teritoriy-poryadok-denniy-radi

<sup>&</sup>lt;sup>2</sup> USSR Population Census 1989. Moscow: Goskomstat. 1990.

<sup>&</sup>lt;sup>3</sup> Patterns of East to West migration in the context of European migration systems (possibilities and the limits of migration control). Demográfia, 2009. Vol. 51. № 5. Pp. 5–35.

<sup>&</sup>lt;sup>4</sup> Migration statistics for 2020 of the Ministry of Internal Affairs of Russia. URL: https://xn--blaew.xn--plai/dejatelnost/statistics/migracionnaya

their historical homeland; 2) relocation (return) of their citizens from other countries; 3) government assistance in various diaspora issues (economic, social, cultural). Since 1994, bilateral agreements were concluded and ratified between the Russian Federation and the Republic of Latvia, Republic of Estonia, Republic of Georgia, Republic of Tajikistan, Kyrgyz Republic, Turkmenistan to regulate the resettlement process and protect the rights of migrants<sup>1</sup>.

In the late 1990s the governments of the former Soviet Union, given the political and economic potential of migrants living abroad, began to build relationships with diasporas. The term «compatriots» is used in the Russian Federation, «ethnic Ukrainians» in Ukraine, «oralmans» and «kandas» in the Republic of Kazakhstan, «kairylmans,» «kandas» and «coethnics» in the Kyrgyz Republic and «valiseestlased» («väliseestlased») in the Republic of Estonia.

The Republic of Azerbaijan, Republic of Armenia, Republic of Kazakhstan, the Kyrgyz Republic, Republic of Moldova, Russian Federation, Ukraine and the Baltic States have established various repatriation programs with initiatives targeting compatriots living in other countries<sup>2</sup>. Repatriation programs aim to attract citizens and non-citizens with ethnic, cultural and/or historical ties to voluntarily resettle to their country of citizenship or origin for permanent residence.

The Republic of Armenia has been working closely with the Diaspora since 2002. Article 19 of the Constitution «Relations with the Armenian Diaspora» states that the promotion of repatriation is a priority to solve the country's demographic problems. The 2019–2023 Action Program provides for the development and adoption of a law on repatriation by the government. One of the directions is the mechanism of grants for small and medium-sized businesses (1+1), which is implemented together with the readmission program<sup>3</sup>.

The Russian Federation, Republic of Kazakhstan and the Republic of Azerbaijan adopted special laws and opened programs to support compatriots living abroad and force them to resettle. The Russian Federation in 1993 adopted the Long-Term Migration Program and later the Federal Migration Program for the Admission and Resettlement of People Who Moved from Post-Soviet Countries, which remained in effect until 2001. In 1999 the Law on Compatriots was adopted, and in 2006 the State Program to Assist Voluntary Resettlement of Compatriots began operating. Within the framework of the Program about 1 million people moved to the territory of the Russian Federation<sup>4</sup>. In 2010, a special institution responsible for working with compatriots was approved – Rossotrudnichestvo as a subdivision of the Ministry of Foreign Affairs. Through a network structure – the World Coordination Council of Compatriots – communication with them around the world is carried out. This program was reflected in the 2020 amendments to the Constitution: «The Russian Federation shall support compatriots living abroad in exercising their rights, protecting their interests and preserving all-Russian cultural identity» (Part 3, Article 69, as amended)<sup>5</sup>.

In the Republic of Kazakhstan in 2008 the State program «Nurly Kosh» was adopted («bright rut,» «bright move») to assist in the resettlement of ethnic Kazakh compatriots from abroad. Since the program's inception, about one million people have used it, mainly from the Republic of Uzbekistan, People's Republic of China, Turkmenistan, Russian Federation, Kyrgyz Republic, Mongolia, Iran, Afghanistan, Pakistan, and others<sup>6</sup>. The national repatriation strategy

 $<sup>^1\</sup> Tittel-Mosser\ F.\ (2021)\ Interaction\ with\ the\ Diaspora:\ EECA.\ Regional\ Series.\ URL:\ https://diasporafordevelopment.eu/wp-content/uploads/2021/04/EUDiF\_Regional-Overview\_EECA\_RU-v.2.pdf$ 

<sup>&</sup>lt;sup>2</sup> Tittel-Mosser F. (2021) Interaction with the Diaspora: EECA. Regional Series. URL: https://diasporafordevelopment.eu/wp-content/uploads/2021/04/EUDiF\_Regional-Overview\_EECA\_RU-v.2.pdf

<sup>&</sup>lt;sup>3</sup> Tittel-Mosser F. (2021) Interaction with the Diaspora: EECA. Regional Series. URL: https://diasporafordevelopment.eu/wp-content/uploads/2021/04/EUDiF\_Regional-Overview\_EECA\_RU-v.2.pdf

<sup>&</sup>lt;sup>4</sup> Reports on the implementation of the program of voluntary resettlement of compatriots. Ministry of Internal Affairs of Russia. URL: https://xn--blaew.xn--plai/mvd/structure1/Glavnie\_upravlenija/guvm/compatriots

<sup>&</sup>lt;sup>5</sup> New: a compatriot in the Constitution. URL: http://council.gov.ru/services/discussions/blogs/115002/

<sup>&</sup>lt;sup>6</sup> For 24 years, almost 1 million ethnic Kazakhs have returned to their historical homeland. Inform.kz . May 28, 2015.URL: https://www.inform.kz/ru/za-24-goda-na-istoricheskuyu-rodinu-vernulsya-pochti-1-mln-etnicheskih-kazahov\_a2780983

was formed by the Kazakh government back in 1997 and is ideologically linked to the need to increase the share of ethnic Kazakhs in the country's population. The Law «On Population Migration» (2011, revised 2021) defines the legal status of ethnic Kazakhs or Kandas¹. The program includes housing, subsidies and integration programs².

In the Republic of Azerbaijan, the State Committee for Work with the Diaspora and Support of Azerbaijanis was established on the basis of the Law «On State Policy with regard to Azerbaijanis Living Abroad» (2002).

In 2015 The Republic of Tajikistan adopted the State Concept on Engaging Compatriots Living Abroad as Development Partners and Action Plan for 2015–2020 to encourage diaspora organizations and attract highly qualified specialists from the diaspora to implement investment projects.

The Kyrgyz Republic introduced the status of «kairilman» («returnee») and adopted a program in 2007. It is designed for foreign citizens – ethnic Kyrgyz, their descendants and those who are interested in moving to their historic homeland<sup>3</sup>. The issues of pensions and social benefits for those who resettled have not yet been resolved; as a result, there are cases of Kairilmans returning to Afghanistan<sup>4</sup>.

The Baltic states have their own migration strategy, which is related to demographic aging and population decline. There has been a partial return to the laws that existed during their first independence in the 1920s in order to homogenize the population and reduce the share of other ethnic groups. At the same time, their own population is actively migrating to more economically developed countries<sup>5</sup>. Since the 2000s, due to economic reasons, migration legislation has been liberalized, programs for the return of compatriots and the attraction of migrants through educational channels have been stepped up<sup>6</sup>.

The Republic of Latvia has had a Latvian Diaspora Support Program in place since 2004; the country has been a leader in the Baltic States in promoting diaspora involvement through dual citizenship since 2013 with EU and NATO member states, Australia, Brazil and New Zealand, thereby allowing descendants of Latvian emigrants to acquire Latvian citizenship in addition to their existing citizenship. The Cabinet of Ministers in 2018 approved a Migration Policy Concept aimed at attracting skilled labor, simplifying regulations for third-country nationals already working in Latvia, and simplifying procedures for non-EU students studying in Latvia to stay and seek employment after graduation. The Republic of Latvia adopted a new Diaspora Law in 2019.

Lithuania has developed an Action Plan for Integration of Foreigners in Lithuanian Society 2018–2020 (Action Plan for Integration of Foreigners in Lithuanian Society 2018–20). Since 2011, Lithuanian Department of Foreign Affairs has been coordinating the Global Lithuanian Diaspora program, encouraging young people and professionals to return and work in Lithuania or share their acquired knowledge and experience. The government maintains a website called «I Choose Lithuania,» dedicated to return migration<sup>7</sup>. The Global Lithuania diaspora

<sup>&</sup>lt;sup>1</sup> The Law of the Republic of Kazakhstan «On Population Migration»: the concept of readmission has been introduced, implying transfer (return) in accordance with an international agreement. June 12, 2021.

<sup>&</sup>lt;sup>2</sup> Tittel-Mosser F. (2021) Interaction with the Diaspora: EECA. Regional Series. URL: https://diasporafordevelopment.eu/wp-content/uploads/2021/04/EUDiF Regional-Overview EECA RU-v.2.pdf

<sup>&</sup>lt;sup>3</sup> Return migration: international approaches and regional features of Central Asia. Study guide / Under the general editorship of S.V. Ryazantsev. Almaty. MOM. The UN Agency for Migration. 2020.

<sup>&</sup>lt;sup>4</sup> Let's go home – what are the Pamir Kyrgyz dissatisfied with? Video topic. Sputnik Kyrgyzstan. July 13, 2018r. URL: https://ru.sputnik.kg/video/20180710/1040104513/kyrgyzstan-pamirskie-kyrgyzy-video-zhizn.html

<sup>&</sup>lt;sup>5</sup> Birka I. (2019) Latvia's population could shrink by 22 percent, Lithuania and Estonia could decline by 17 percent and 13 percent, respectively. UN Population Division forecast by 2050.

<sup>&</sup>lt;sup>6</sup> Birka I. (2019) Can Return Migration Revitalize the Baltics? Estonia, Latvia, and Lithuania Engage Their Diasporas, with Mixed Results. May 8, 2019. URL: https://www.migrationpolicy.org/article/can-return-migration-revitalize-baltics-estonia-latvia-and-lithuania-engage-their-diasporas

<sup>&</sup>lt;sup>7</sup> Birka I. (2019) Can Return Migration Revitalize the Baltics? Estonia, Latvia, and Lithuania Engage Their Diasporas, with Mixed Results. May 8, 2019. URL: https://www.migrationpolicy.org/article/can-return-migration-revitalize-baltics-estonia-latvia-and-lithuania-engage-their-diasporas

program to support the diaspora and its culture and education, and the government program «Create Lithuania»<sup>1</sup>, promote the return of compatriots. Despite this policy, the level of immigration to Lithuania remains very low.

Since 2004, the Return of Compatriots to the Republic of Estonia Program (Rahvuskaaslaste Programm) has been implemented, which focuses on supporting the culture and language of compatriots abroad. Special attention is paid to supporting secondary education in Estonian language in Finland and Sweden (2014–2020). The Estonian Language Development Plan 2011–2017 and the Cultural Policy Framework until 2020 were implemented. The Foundation for Integration of the Ministry of Culture and the Estonian Research Agency are the main institutions of interaction with the diaspora. The non-profit foundation «Enterprise Estonia» created the website «Global Estonian Network»². The most successful implementation of the program by the Special Education Scholarship Agency³. Returning Estonians can qualify for benefits under the Integration and Migration Foundation's Our People program. The «Bringing Talent Home» initiative supports efforts to bring back highly qualified specialists. International House Estonia is an agency that assists newcomers in settling in and the Career Hunt initiative provides an all-expenses-paid trip to Estonia for IT professionals who want to move to the country. Estonia is positioning itself as a «new digital nation,» offering e-residency as one means of encouraging return migration.

Only in the Republic of Belarus and Turkmenistan, there are no special laws<sup>4</sup> and government institutions that engage with the diaspora and assist in maintaining culture, language, and repatriation<sup>5</sup>.

### Cooperation in the field of labor migration

One of the important areas for regulating labor migration in the countries of the former Soviet Union are joint multilateral treaties. On November 13, 1992 by decision of the Council of Heads of Governments of CIS countries the Consultative Council on Labor, Migration and Social Protection of Population of CIS countries was established, which included the heads of ministries and departments that regulate labor, migration and social protection of population<sup>6</sup>.

The main legal document of cooperation is the Agreement of the CIS countries on cooperation in the field of labor migration and social protection of migrant workers (1994)<sup>7</sup>, which enshrines the fundamental rights of migrant workers and areas of cooperation between states in this area<sup>8</sup>. In the 1990s the Russian Federation established FMS and MFA representative offices in the Republic of Armenia, Kyrgyz Republic, Republic of Latvia, Republic of Tajikistan, Turkmenistan, Republic of Moldova and Ukraine.

In 2007 the CIS Council of Heads of State adopted the Declaration on Coordinated Migration Policy of the CIS Member States aimed at creating a common migration space, including free movement of citizens and functioning of common labor market. The implementation of this approach was confirmed in the Concept of further development of the CIS adopted in Oc-

<sup>&</sup>lt;sup>1</sup> Create Lithuania. URL: https://kurklt.lt/en/apie-mus/

<sup>&</sup>lt;sup>2</sup> Saar M. (2020) Diaspora Policies, Consular Services and Social Protection for Estonian Citizens / Editors Lafleur J.-M., Vintila D. Migration and Social Protection in Europe and Beyond. Volume 2. Comparing Consular Services and Diaspora Policies, IMISCOE Research Series. Springer. 2020. Pp. 61–182.

<sup>&</sup>lt;sup>3</sup> Compatriots Scholarship. URL: http://haridus.archimedes.ee/en/compatriots-scholarships.

<sup>&</sup>lt;sup>4</sup> International treaties of Kazakhstan in the field of migration. Astana. MOM. 2010.

<sup>&</sup>lt;sup>5</sup> Molodikova I. (2017): The refugee crisis: how did the EU countries react to the challenge of the massive inflow of asylum seekers? Policy and practice of regulation in the context of modern challenges. International Scientific Conference, IOM, Chisinau-Tiraspol. January 27, 2017.

<sup>&</sup>lt;sup>6</sup> Cooperation in the field of migration. Internet portal of the CIS countries. Integration space. URL: https://e-cis.info/cooperation/3127/77661/

<sup>&</sup>lt;sup>7</sup> URL: http://www.cis.minsk.by/reestr/ru/index.html#reestr/view/text?doc=337

<sup>8</sup> Cooperation in the field of migration. Internet portal of the CIS countries. Integration space. URL: https://e-cis.info/cooperation/3127/77661/

tober 2007 and the Strategy of economic development of the CIS countries for the period until 2020, which was extended until 2030¹. To coordinate interaction and resolve issues in the field of migration policy, the Agreement of the CIS Heads of State in 2007 established the Council of Heads of Migration Bodies of the CIS Member States. On November 14, 2008 the Convention on the Legal Status of Migrant Workers and Members of their Families of the CIS Member States was signed.

At the initiative of the Council of Heads of Migration Bodies of the CIS Member States in 2009, a Comprehensive Plan of Priority Measures was adopted aimed at the practical implementation of the principles laid down in the Declaration on Coordinated Migration Policy of the CIS Member States.

In 2015 the EAEU was established<sup>2</sup>, which seeks to create a single market for its citizens based on the freedom of movement of goods, services, capital and labor. An agreement was signed on mutual recognition of a medical report on the state of health of a migrant worker in the EAEU member states<sup>3</sup> and the Agreement on Pension Provision for Labor Migrants of EAEU Countries<sup>4</sup>.

The deepening of cooperation in the migration sphere in the Commonwealth was the adoption of a new version of the Concept for the Further Development of the CIS<sup>5</sup>, as well as the approval of the CIS Economic Development Strategy for the period until 2030 and the Action Plan for the implementation of its first phase (2021–2025).<sup>6</sup>, which contain specific measures to meet the objectives of migration policy of the CIS countries<sup>7</sup>.

#### **Combating Illegal Migration**

Illegal migration takes place in the countries of the former Soviet Union. The role of the Russian Federation and the Republic of Belarus as a transit corridor from Asia to Europe has increased<sup>8</sup>. The addition of the category of undocumented migrants is facilitated by the complexity of procedures for registration at the place of residence and permits for migrant workers in the Russian Federation and the Republic of Kazakhstan<sup>9</sup>. The COVID-19 pandemic, with the complete closure of borders, put migrants in difficult situations: many could not return home or could not leave to work officially and sought workarounds becoming irregular migrants.

After the collapse of the Soviet Union, a regional intergovernmental institution was created at Russia's initiative in 1992 to prevent illegal migration and strengthen border control: Council of Border Guard Commanders of the CIS countries. <sup>10</sup>

In 1994 IOM estimated the number of illegal migrants in the Russian Federation to be between 300,000 and 500,000. The Treaty on Cooperation in Protecting the Borders of CIS

<sup>&</sup>lt;sup>1</sup> Cooperation in the field of migration. Internet portal of the CIS countries. Integration space. URL: https://cis.minsk.by/page/18764

<sup>&</sup>lt;sup>2</sup> The Treaty on the Eurasian Economic Union. Signed in Astana on May 29, 2014.URL: https://www.consultant.ru/document/cons doc LAW 163855/

<sup>&</sup>lt;sup>3</sup> Resolution of the Government of the Republic of Kazakhstan dated January 25, 2013 No. 39 «On signing an Agreement on mutual recognition of a medical report on the health status of a migrant worker in the Member States of the Eurasian Economic Community». URL: https://adilet.zan.kz/rus/docs/P1300000039

<sup>&</sup>lt;sup>4</sup> Eurasian Economic Commission. URL: http://www.eurasiancommission.org/ru/act/finpol/migration/Pages/default.aspx

<sup>&</sup>lt;sup>5</sup> Decision of the Council of CIS Heads of State of December 18, 2020.

<sup>&</sup>lt;sup>6</sup> Decision of the Council of CIS Heads of Government of May 29 and November 6, 2020.

<sup>&</sup>lt;sup>7</sup> The CIS development Strategy until 2030 will be adapted to crisis situations. Ministry of Economic Development of the Russian Federation. September 16, 2020. URL: https://www.economy.gov.ru/material/news/strategiya\_razvitiya\_sng\_do\_2030\_goda\_budet\_adaptirovana\_k\_krizisnym\_situaciyam.html

<sup>&</sup>lt;sup>8</sup> Molodikova I.N. Countering illegal migration and human trafficking in the CIS countries. Analytical report. The Prague Trial. International Center for Migration Policy Development (ICMPD). Vienna. 2020. URL: https://www.pragueprocess.eu/ru/migration-observatory/publications/document?id=251

<sup>&</sup>lt;sup>9</sup> Decree «On the Concept of the State Migration Policy of the Russian Federation for 2019–2025»; Decree on the approval of the concept of migration Policy of the Republic of Kazakhstan for 2017–2021.

Website of the Council of Commanders of the CIS Border Troops. URL http://www.skpw.ru/

Member States with Non-Commonwealth States was signed in 1995<sup>1</sup>. In 2018 The Ministry of Internal Affairs estimated the number of illegal migrants in the Russian Federation to be about 2 million people. Experts called figures from 2.5 to 4 million people (up to 30% of all working migrants)<sup>2</sup>. The number of bans on entry to Russia for migrant lawbreakers in 2018–2019 reached 250,000 per year<sup>3</sup>.

The Russian Federation initiated the creation of a system of collective responsibility of CIS countries for combating illegal migration. The main document of cooperation in this area can be considered the Agreement on Cooperation of CIS Member States in Combating Illegal Migration, adopted by the Council of CIS Heads of Government in 1998, and a package of documents was signed in the same year: Agreement on Cooperation of CIS States in Combating Trafficking in Human Beings, Regulations on the Unified Database of Illegal Migrants, Agreement on Cooperation of CIS States in Combating Organized Crime, Interstate Program of Joint Measures to Combat Organized Crime and Other Types of Dangerous Crimes in the Territory of CIS Member States for the Period until 2000 were adopted. The work was coordinated by the Council of Heads of CIS Migration Services, which approved the Agreement on Cooperation of CIS Member States in Combating Illegal Migration<sup>4</sup> and the Regulation on the Procedure of Information Exchange on Illegal Migration (2000).

This direction of cooperation of CIS countries actively continues to develop. By the decision of the CIS Council of Heads of Government in 2004 a joint commission of the Commonwealth member states was established, the Concept of cooperation of the CIS member states in combating illegal migration was adopted, which was updated in 2004 and 2014.

In 2005, the Council of Heads of States of the Commonwealth approved the Program of Cooperation of CIS Member States in Combating Illegal Migration for 2006–2008, which was also regularly renewed in 2009–2011, 2012–2014 and 2015–2019<sup>5</sup>. In recent years, the Interstate Program of Joint Measures to Combat Crime for 2019–2023 has been implemented<sup>6</sup>, which comprehensively combined measures to counteract transborder crime, including in the area of combating illegal migration.

More active cooperation among the countries of the former Soviet Union has been noted since they signed the UN Convention against Transnational Organized Crime, adopted in Palermo in 2000 and its two protocols «On Combating Smuggling of Persons by Land, Sea and Air» and «On Combating Trafficking in Persons»<sup>7</sup>. Commonwealth countries signed a number of agreements in 2002, 2005 and a model law in 2006 on combating human trafficking. Programs of cooperation of CIS member states in combating human trafficking for 2007–2010, 2011–2013, 2014–2018 are adopted on a regular basis. Since 2006, joint border operations «Nelegal» and others have been firmly integrated into the system of multilateral cooperation between the countries of the former post-Soviet space and the EU bordering countries<sup>8</sup>.

The Baltic states, having signed the EU accession treaty in 2004, have acceded to international treaties and conventions on combating organized crime and two protocols<sup>9</sup>. A visa regime

<sup>&</sup>lt;sup>1</sup> Transit migration to Russia. MOM. Geneva. 1994.

 $<sup>^2\</sup> Chudinovskikh\ O.\ (2014)\ Naturalization\ Policies\ and\ Trends\ in\ Russia.\ January\ 2018.\ URL:\ www.hse.ru/data/misc/library/\ WP8\_2014\_04.pdf$ 

<sup>&</sup>lt;sup>3</sup> Migration statistics for 2019 The Ministry of Internal Affairs of Russia. URL: https://xn--blaew.xn--plai/dejatelnost/statistics/migracionnaya

<sup>&</sup>lt;sup>4</sup> Cooperation in the field of migration. Internet portal of the CIS countries. Integration space. URL: https://e-cis.info/cooperation/3127/77661

<sup>&</sup>lt;sup>5</sup> Register of documents. URL: http://cis.minsk.by/reestr/ru/index.html#reestr/view/text?doc=4992

<sup>&</sup>lt;sup>6</sup> Approved by the Decision of the Council of CIS Heads of State on September 28, 2018.

<sup>&</sup>lt;sup>7</sup> The Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children; and the Protocol against the Smuggling of Migrants by Land, Sea and Air. UNODE. 2008–2010.

<sup>&</sup>lt;sup>8</sup> Molodikova I.N. (2020) Countering illegal migration and human trafficking in the CIS countries. Analytical report. (2020) Prague Trial. International Center for Migration Policy Development (ICMPD), Vienna URL https://www.pragueprocess.eu/ru/migration-observatory/publications/document?id=251

<sup>&</sup>lt;sup>9</sup> Treaty of Maastricht on European Union (1992). URL: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:xy0026

was introduced with former Soviet countries and other restrictions on residence permits and access to their labor markets. However, the introduction of the visa regime has not stopped illegal migration. The Baltic states have been used to bring illegal migrants into the EU. Also in 2021 a crisis situation was created on the border of the Baltic states and Poland, Republic of Belarus and Poland due to the increase in illegal migrants trying to enter the EU.

A review of legislation, international documents, projects, programs and institutional structures in the field of migration shows the tremendous progress of these countries in creating the necessary apparatus, tools and mechanisms to work in this area. However, according to the number of violations in the area of migrant rights, the presence of illegal migrants, as well as unresolved demographic and economic problems, many instruments are used ineffectively or law enforcement practices are insufficiently functioning.

#### **EU** impact on migration policy

The EU's eastward expansion to include the former socialist countries and the Baltic states in its membership set the goal of creating a friendly eastern neighborhood of migrant origin and transit countries and using them to create a security buffer zone. The EU offered the countries of the former Soviet Union the Eastern Partnership program¹. In 2004, the EU launched the European Neighborhood Policy (ENP) to promote economic cooperation with the Republics of Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine, which were included in the ENP to reduce potential problems after EU enlargement. The EU's role in developing migration policy in these post-Soviet states has increased dramatically².

The action plan for all countries included the following items: 1) promotion of legal migration; 2) prevention of illegal migration; 3) reintegration of migrants (linked to readmission agreements); and 4) asylum policies.

The EU Association Agreement was signed with the Republic of Moldova (2014), Republic of Georgia (2017) and Ukraine (2017)<sup>34</sup> In 2006, an agreement on cooperation between the Russian Federation and the EU was signed separately, including readmission as a form of securitization and externalization of border control policy<sup>5</sup>. Since 2007, the Russian Federation has signed readmission agreements with countries of origin of transit and irregular migrants from the CIS<sup>6</sup>.

Cooperation between CIS and EU countries in border control, including illegal migration, shows its effectiveness. Data (2017) show that the number of cases along Eastern European land borders has been stable and showed a declining trend from 2008 to 2016<sup>7</sup>. Cooperation of the EU eastern border countries with the Republic of Belarus and the Russian Federation in joint border operations has become traditional in the cooperation of these countries<sup>8</sup>.

Changes in the political situation in the CIS countries and the countries bordering them, if border controls are loosened, can lead to the mass appearance of such migrants and asylum

<sup>&</sup>lt;sup>1</sup> Eastern Partnershipю URL: https://eeas.europa.eu/diplomatic-network/eastern-partnership\_en

<sup>&</sup>lt;sup>2</sup> Makaryan Sh., Chobanyan H. (2015) Institutionalization of Migration Policy Frameworks in Armenia, Azerbaijan and Georgia International Migration. Volume 52. Issue 5. Pp. 52–67. URL: https://doi.org/10.1111/imig.12163

<sup>&</sup>lt;sup>3</sup> Association agreements between the EU and Moldova, Georgia and Ukraine. European Implementation Assessment. EPRS European Parliamentary Research Service. June 2018 URL: https://www.europarl.europa.eu/RegData/etudes/STUD/2018/621833/EPRS\_STU(2018)621833\_EN.pdf

<sup>&</sup>lt;sup>4</sup> European Union external action. URL: https://eeas.europa.eu/diplomatic-network/eastern-partnership/26814/node/26814 ru

<sup>&</sup>lt;sup>5</sup> Since 2006, the Russian Border Service has established joint operational cooperation with Frontex, and Russia has signed a bilateral agreement on visa facilitation with the EU and special agreements on local border movement with Latvia (2010), Norway (2010) and Poland (2010).CARIMEast (2013) Migration Policy Centre – Migration Profile: Russia. European University Institute (EUI), Robert Schuman Centre for Advanced Studies, Florence.

<sup>&</sup>lt;sup>6</sup> Republic of Armenia, Republic of Kazakhstan, Kyrgyz Republic, Mongolia, Republic of Turkey, Socialist Republic of Vietnam, Ukraine (not ratified), Republic of Uzbekistan.

<sup>&</sup>lt;sup>7</sup> Frontex (2017) Danai A., Triandafyllidou A. 2016. P. 107.

<sup>&</sup>lt;sup>8</sup> Countering illegal migration and human trafficking in the CIS countries. Analytical report. The Prague Trial. Vienna. International Center for Migration Policy Development (ICMPD). 2020. URL: https://www.pragueprocess.eu/ru/migration-observatory/publications/document?id=251

seekers. An example is the situation with the influx of asylum seekers from Afghanistan, Iraq and Syria in the Republic of Lithuania and Poland.

The influence of the EU on migration policy making in the South Caucasus is uneven. Analysis of the migration policies of the Republic of Armenia, Republic of Azerbaijan and the Republic of Georgia shows that the EU was a weak player in migration cooperation with the countries of the former Soviet Union before moving eastward. For example, the Republic of Armenia and the Republic of Azerbaijan developed their migration policy programs around the issues of internal migration (internally displaced persons (IDPs), refugees, emigrant labor force) in the 1990s and early 2000s and focused on the welfare of refugees and IDPs. In the second half of the 2000s, the EU's role in migration policy issues in the South Caucasus increased¹.

Table 4.4.3. **EU Engagement with Eastern Partnership Countries on Migration Issues** 

Eastern Partnership	Mobility	Visa liberalization	Readmission	Association
countries	Partnerships	agreement (Visa	agreement	Agreement
		Facilitation		
		Agreement)		
Republic of Armenia	2011	2012	2013	Cancelled by the
				Republic of Armenia
Republic of	2013	2014	2014	Suspended
Azerbaijan				
Republic of Georgia	2009	2011	2011	2017
Republic of Moldova	2016	2014	2014	-
	(Suspended)		(Suspended)	
Republic of Moldova	2008	2007 (2013)	2007	2013 (2014)
Ukraine	2013	2007 (2013)	2007	2017

**Sources:** European Commission Migration and Home Affairs. Mobility partnerships, visa facilitation and readmission agreements. URL: https://ec.europa.eu/home-affairs/what-we-do/policies/international-affairs/eastern-partnership/mobility-partnerships-visa\_en; Makaryan Sh. and Chobanyan H. (2015) Institutionalization of Migration Policy Frameworks in Armenia, Azerbaijan and Georgia International Migration. Volume 52. Issue 5. Pp. 52–67. URL: https://doi.org/10.1111/imig.12163

The EU and the Republic of Azerbaijan signed a visa facilitation agreement in 2013 and a readmission agreement in 2014<sup>2</sup>. In 2006 the Republic of Armenia and the EU adopted the ENP Action Plan for five years<sup>3</sup>, which is reflected in the Concept for the Policy of State Regulation of Migration in the Republic of Armenia (2010), including border management, readmission and asylum, combating illegal migration and human trafficking<sup>4</sup>. Neighborhood Policy Development Plan for the Republic of Georgia <sup>5</sup> was initiated by the EU. In 2010, the Readmission Agreement between the Republic of Georgia and the EU came into force. In 2013 The Republic of Georgia adopted a migration policy<sup>6</sup>.

Similar migration policies were developed for Ukraine and the Republic of Moldova (Table 4.4.3)<sup>7</sup>. In 2007, Ukraine and the EU signed an agreement on visa facilitation and an agreement on readmission. Agreements on so-called «small border traffic» were reached with

<sup>&</sup>lt;sup>1</sup> Makaryan Sh., Chobanyan H. (2015) Institutionalization of Migration Policy Frameworks in Armenia, Azerbaijan and Georgia International Migration. Volume 52. Issue 5. Pp. 52–67. URL: https://doi.org/10.1111/imig.12163

<sup>&</sup>lt;sup>2</sup> The ENP Action Plan (2006).

<sup>&</sup>lt;sup>3</sup> ENP EU / Action Plan for Armenia (2006). URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4591550/#R16

<sup>&</sup>lt;sup>4</sup> Makaryan Sh., Chobanyan H. (2015) Institutionalization of Migration Policy Frameworks in Armenia, Azerbaijan and Georgia. International Migration. № 52(5). Pp. 52–67. DOI: 10.1111/imig.12163

<sup>&</sup>lt;sup>5</sup> ENP EU / Action Plan for Georgia (2006).

<sup>&</sup>lt;sup>6</sup> Action Plan for the Migration Strategy of Georgia, 2013–2015 (2013). Government of Georgia. URL: https://migration.commission.ge/files/migration\_strategy\_-eng.pdf

<sup>&</sup>lt;sup>7</sup> European Commission Migration and Home Affairs. Mobility partnerships, visa facilitation and readmission agreements. URL: https://ec.europa.eu/home-affairs/what-we-do/policies/international-affairs/eastern-partnership/mobility-partnerships-visa\_en

Ukraine's immediate neighbors after their accession to the EU, which led to the introduction of a visa regime for Ukrainians. Such agreements were signed with Hungary in 2007, Poland and Slovakia in 2008 and Romania in 2014. At the Ukraine-EU summit in 2010 Ukraine was given an Action Plan on visa liberalization<sup>1</sup>. Ukrainian migration legislation has been amended, including the development of a State Migration Policy Concept, the revision of laws on the legal status of foreigners and on refugees and the creation of a legislative framework.

The EU neighborhood policy led to the adoption of biometric passports by participating countries, readmission agreements, EU contributions to the modernization of the eastern border and staff trainings. The signing of the association agreement of the Republic of Georgia, Ukraine and the Republic of Moldova allowed citizens of these countries to enter without visas, which significantly increased the number of irregular migrants of these countries to the EU<sup>2</sup>. Although some EU countries are taking measures to liberalize access of Ukrainian citizens to their labor market<sup>3</sup>.

After the introduction of sanctions by EU countries against the Republic of Belarus in 2021, the country suspended the Eastern Partnership program<sup>4</sup>. Despite the efforts of the EU, Russian Federation, as a country receiving large numbers of migrants from all post-Soviet countries, continues to play a dominant role in shaping the migration policy of post-Soviet states<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Visa-free dialogue between Ukraine and the EU. Visa liberalization action plan. URL: http://www.kmu.gov.ua/document/244813925/План%20д\_й%20щодо%20л\_берал\_зац\_\_%20\_С%20в\_зового%20режиму%20для%20Укра\_ни.pdf

<sup>&</sup>lt;sup>2</sup> Molodikova I.N. Illegal migration and human trafficking in the CIS countries. Countering illegal migration and human trafficking in the CIS countries. Analytical report. 2020. The Prague Trial. International Center for Migration Policy Development (ICMPD). Vienna. 2020. URL: https://www.pragueprocess.eu/ru/migration-observatory/publications/document?id=251

<sup>&</sup>lt;sup>3</sup> Minich R., Kravchuk P. The impact of COVID-19 on Ukrainian labor migrants in the EU. Prague Process. (ICMPD) Vienna. 2020. URL: https://www.pragueprocess.eu/ru/resources/repository/41-webinars/231-covid-19

<sup>&</sup>lt;sup>4</sup> Without the Eastern Partnership. What has Belarus lost? June 29, 2021. URL: https://www.dw.com/ru/bez-vostochnogo-partnerstva-chego-lishilas-belarus/a-58095542

<sup>&</sup>lt;sup>5</sup> Makaryan Sh. and Chobanyan H. (2015) Institutionalization of Migration Policy Frameworks in Armenia, Azerbaijan and Georgia International Migration. Volume 52. Issue 5. Pp. 52–67. URL: https://doi.org/10.1111/imig.12163

## SECTION V. PROSPECTS OF DEMOGRAPHIC DEVELOPMENT OF THE FORMER USSR COUNTRIES

## 5.1. Forecast of demographic parameters of the former USSR countries until 2050

To assess future demographic situation in the post-Soviet space, it is necessary to use data from national statistical services, as well as data from international organizations, primarily the UN Department of Economic and Social Affairs, United Nations (DESA UN). The last revision of the data in 2019 does not take into account the consequences of the pandemic COVID-19 on the population of the world, nevertheless, the probability of the average variant of the population forecast until 2050 can still be considered quite high.

The quality of demographic statistics and the completeness of information on the dynamics of demographic and migration processes vary greatly among countries. This imposes certain restrictions on the comparability and interpretation of data on key demographic indicators, so it makes sense to also analyze several UN scenarios developed using a common methodology.

At the end of 2020, countries such as the Republic of Azerbaijan (5.1 ppm), Republic of Armenia (0.4 ppm), Republic of Kazakhstan (15.8 ppm), Kyrgyz Republic (17.9 ppm), Republic of Tajikistan (21.8 ppm), Turkmenistan (11.9 ppm) and Republic of Uzbekistan (19.5 ppm) had a natural population increase. The high rates of natural population growth in the present period have formed for these countries the prerequisites for further population growth for the period up to 2050. For the Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan and the Republic of Uzbekistan the values of total fertility rates indicate expanded reproduction. At the same time, Ukraine showed an extremely low total fertility rate in 2020 (1.22), which is partly caused by the demographic structure and the entry into reproductive age of the smallest cohort of women born in the late 1990s and early 2000s, and partly by the difficult socio-economic situation in the country, which results in postponing births.

In the Russian Federation in 2020 the total fertility rate was 1.51, which is the lowest value since 2008 (1.78 and 1.77). Of course, in the regional context we can observe a significant differentiation in the level of fertility. If the current tools of demographic policy are preserved and taking into account the increase in the proportion of women entering reproductive age, we can hope for an increase in the total fertility rate from about 2027. For the entire projected period up to 2050 it will remain for the Russian Federation below the level of simple reproduction. Therefore, the most likely scenario for the next thirty years will be a decline in the absolute number of population, and the ever-increasing compensatory role of international migration<sup>1</sup>.

In the Latvian, Lithuanian and Estonian Republics, the population has been steadily decreasing throughout the post-Soviet period. Accession to the EU led to a migration outflow of citizens of the Baltic states to other countries of the European Union. The single European labor market opened up opportunities for young citizens of the Baltic states to look for work in countries with a higher standard of living and a diversified, capacious labor market. Often such migration becomes irretrievable, which reduces the demographic potential of the sending countries and leads to distortion of the demographic structure of the population.

For the Republic of Belarus, Republic of Moldova and Ukraine the role of migration outflow in total population loss is also significant. In this case both traditionally strong migration

<sup>&</sup>lt;sup>1</sup> Demographic development of Russia: trends, forecast, measures. National Demographic Report – 2020 / Ed. S.V. Ryazantsev. M.: LLC «United Edition», 2020. pp. 129 – 148. DOI: 10.25629/HC.2020.13.01

ties with Russia and geographical proximity to some EU countries play a role, which forms prerequisites for labor and marriage migration<sup>1</sup>. Moreover, Moldovan experts note that a significant migration outflow significantly contributes to the aging of the population and the country, if current trends persist, has all chances to follow the low version of the forecast<sup>2</sup>.

The high rates of migration from some Central Asian countries predominantly to the Russian Federation, have an impact on changing the demographic structure of the population and allow these countries to address the problem of surplus labor, lower unemployment and higher household incomes through migrant remittances<sup>3</sup>. According to the results of 2019, the CIS countries account for 89.5% in the structure of migration growth of the population of the Russian Federation and in 2020 the migration increase was entirely provided by migration from the CIS countries. The largest contribution was made by Ukraine (52,800), Republic of Tajikistan (39,400), Republic of Azerbaijan (10,900), Republic of Kazakhstan (8,400) and the Republic of Uzbekistan (4,900)<sup>4</sup>. However, we must understand that the year 2020, as well as 2021, are out of the trends that were formed in previous years. The coronavirus pandemic led to a significant reduction in migration growth due to the partial closure of state borders and the introduction of restrictions on the entry of certain categories of citizens in order to prevent the spread of infection. It is most likely that migration flows will not fully recover during 2022 and even 2023.

The situation in Turkmenistan is the least predictable in terms of demographic prospects. Reliable statistical information on many demographic indicators for this state is not available on official statistical websites and the information that is available is irrelevant, unsystematic and fragmentary, making it impossible to analyze the dynamics series. The UN estimates and data published in The World Factbook give us an opportunity to partially fill in the gaps. But such projections should be treated with great caution, because incorrect assumptions about the main demographic parameters included in the projection may lead to significant errors by the end of the projection period.

Table 5.1.1 presents some variants of population projections for the countries of the former USSR for 2050 according to the UN Department of Economic and Social Relations. The middle version of the projection is the most realistic and relies on assumptions about the likely levels of fertility and mortality based on a historical analysis of the experience of the respective countries.

The raw data underlying the UN projections differ from the data provided by national statistical services. For most countries, such differences do not exceed 1.5% and do not significantly distort estimates of future population size. However, for the Russian Federation, the UN data do not take into account the Republic of Crimea and Sevastopol, whose population size is attributed to Ukraine in the statistics of international organizations (for the forecast for Ukraine, respectively, there are inflated estimates). The discrepancy between the UN and CIA data on Turkmenistan is about 10%, so there is a risk of inflated estimates based on the UN data. The largest discrepancies are recorded for the Republic of Moldova. The National Bureau of Statistics gives the population on January 1, 2021 as 2.6 million people, while according to UN estimates the average annual population was 4.0 million people. The UN also includes in this figure the population of the unrecognized Transnistrian Moldovan Republic (as of January 1, 2021, the population of the unrecognized TMR amounted to 465.8 thousand people<sup>5</sup>). But even adding this value to the above does not explain the additional

<sup>&</sup>lt;sup>1</sup> Tolstokorova A.V. Heroines of our time: female labor migration from Ukraine // Diasporas. 2012. No. 1, pp. 198–226.

<sup>&</sup>lt;sup>2</sup> Moldova's population decline follows the worst-case scenario. Sputnik Moldova. 03.07.2021. URL: https://ru.sputnik.md/20210703/Sokraschenie-naseleniya-Moldovy-idet-po-naikhudshemu-stsenariyu-35351763.html

<sup>&</sup>lt;sup>3</sup> Khramova M., Ryazantsev S., Rakhmonov A., Kasymov O. The impact of remittances from abroad on socio-economic development in Tajikistan // Central Asia and the Caucasus. 2020. Vol. 21.Issue 4. pp. 79–95. DOI: https://doi.org/10.37178/ca-c.20.4.09

<sup>&</sup>lt;sup>4</sup> The number and migration of the population of the Russian Federation in 2020 Statistical Bulletin. Moscow, 2021. URL: https://rosstat.gov.ru/storage/mediabank/q9wFke4y/bul-migr20.xlsx

<sup>&</sup>lt;sup>5</sup> Data from the Ministry of Economic Development of the Pridnestrovian Moldavian Republic. URL: http://mer.gospmr.org/gosudarstvennaya-sluzhba-statistiki/informacziya/o-soczialno-ekonomicheskom-polozhenii-pmr/socialno-ekonomicheskoe-razvitie-pmr-za-2020-god-okonchatelnye-dannye.html

difference of almost 1 million people. Therefore, in Table 5.1.2 the forecast options for Moldova should be adjusted downwards by this difference.

Table 5.1.1.

Population projection options for the countries of the former

Soviet Union in 2050, according to the UN

	t, 2019 people	rent on iple	n» 019,	average ; for the 2050.	at birth, nt of the period years		edian ag ulation,	
Country	Average UN forecast, 2019 revision, thousand people	UN projection at current fertility rates, revision 2019, thousand people	UN «Zero-migration» forecast, revision 2019, thousand people	Total fertility rate, average projection variant, for the period 2045 – 2050.	Life expectancy at birth, the average variant of the forecast, for the period 2045 – 2050, years	2020	2050 average forecast variant	2050 «Zero- migration» forecast
Republic of Azerbaijan	11065	11571	11065	1,77	76,19	32,3	40,3	40,3
Republic of Armenia	2816	2811	2996	1,77	78,91	35,4	43,2	42,5
Republic of Belarus	8634	8546	8516	1,79	78,72	40,3	44,0	44,3
Republic of Georgia	3517	3601	3890	1,88	77,79	38,3	40,9	40,2
Republic of Kazakhstan	24024	25948	24024	2,16	77,32	30,7	34,2	34,2
Kyrgyz Republic	9126	10000	9554	2,32	75,42	26,0	31,5	31,4
Republic of Latvia	1479	1465	1599	1,79	79,23	43,9	45,8	44,8
Republic of Lithuania	2121	2095	2325	1,77	80,29	45,1	48,1	46,3
Republic of Moldova	3360	3258	3412	1,50	75,47	37,6	48,9	48,5
Russian Federation	135824	135577	132075	1,83	76,58	39,6	41,7	42,2
Republic of Tajikistan	16208	18377	17045	2,68	75,86	22,4	26,9	27,1
Turkmenistan	7949	8692	8114	2,12	71,57	26,9	33,0	32,9
Republic of Uzbekistan	42942	46030	43249	1,94	74,70	27,8	35,4	35,4
Ukraine	35219	35027	35165	1,60	75,91	41,2	46,6	46,7
Republic of Estonia	1158	1137	1198	1,74	82,72	42,4	48,2	47,2

Source: Data from the UN Department of Economic and Social Relations (DESA UN). Revision 2019. URL: https://population.un.org/wpp/Download/Standard/Population/; https://population.un.org/wpp/Download/Standard/Fertility/

Figure 5.1.1 gives us a clear picture of future population trends in the post-Soviet countries. It can be seen that the population of the Russian Federation, Republic of Belarus, Republic of Armenia, Republic of Georgia, Republic of Moldova, Ukraine, Republic of Latvia, Republic of Lithuania and Republic of Estonia will decrease over the next thirty years. In absolute terms, the largest losses will be in the Russian Federation. However, in relative terms, considering the current population size, largest decrease will be in the Republic of Lithuania (22.1%), Republic of Latvia (21.6%), Ukraine (19.5%) and the Republic of Moldova (16.7%). The Russian Federation may suffer relative losses of around 7%, Republic of Belarus – 8.6%, Republic of Armenia – 5%, Republic of Georgia – 11.8% and the Republic of Estonia – 12.7%.

At the same time a number of post-Soviet countries will show significant population growth by 2050: Republic of Azerbaijan +9.3%, Republic of Kazakhstan +27.9%, Republic of Uzbekistan +28.3%, Turkmenistan +31.8%, Kyrgyz Republic +39.9% and for the Republic of Tajikistan the growth will be maximal and could reach +69.9% against the 2020 level.

The average variant of the UN forecast described above tends to gradually and smoothly decline in fertility, but if we turn to another variant of the forecast, based on the assumption that current fertility rates will be maintained over the forecast period, we see that population growth may be even more significant for countries with an expanded reproduction type, while for countries with low values of the total fertility rate there is no significant change (Table 5.1.1).

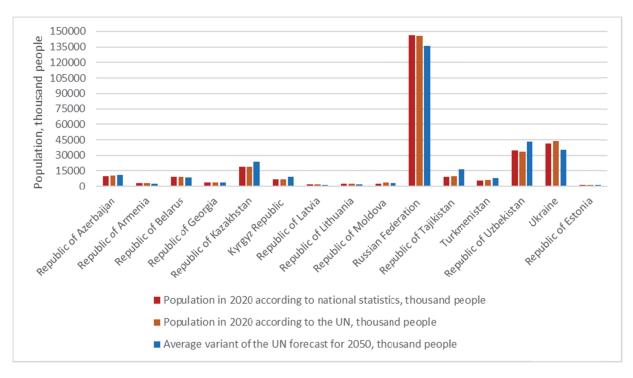


Figure 5.1.1. Current population of the former Soviet Union in 2020 and the UN forecast for 2050.

Source: Data from national statistical services. Data from the UN Department of Economic and Social Relations (DESA UN). Revision 2019. URL: https://population.un.org/wpp/Download/Files/1\_Indicators%20(Standard)/EXCEL\_FILES/1\_Population/WPP2019\_POP\_F01\_1\_TOTAL\_POPULATION\_BOTH\_SEXES.xlsx.

There is a UN forecast for the countries of the former Soviet Union, obtained under the assumption of zero migration growth «Zero-Migration» (Table 5.1.2). This scenario differs from the average, or inertial scenario, only by assuming zero net migration, while fertility and mortality trends are similar to the average scenario. This projection makes it possible to trace more clearly the impact of changes in fertility and mortality on population indicators. Thus, for the Russian Federation, the exclusion of migration growth during the projection period may lead to an additional loss of population of 3.8 million people, for the Republic of Belarus by 100,000 people. On the other hand, for other countries experiencing depopulation, the forecast «Zero-Migration» gives even a slight increase in population by 2050, which can be explained by the fact that part of the population, which could potentially leave the respective countries, according to this version of the forecast, remains in the country, contributing to demographic development.

Turning to the analysis of other indicators of demographic development of post-Soviet countries for the period up to 2050, attention should be paid to changes in the age-specific profiles of fertility. It has already been noted that despite significant differences both in absolute numbers and in the demographic structure, the countries of the former Soviet Union follow the global trend and show a decrease in the birth rate by the middle and then by the end of the 21st century. At the same time, the age pattern of fertility also undergoes qualitative and quantitative changes. The maximum of age-specific fertility rates will shift to the right, towards older ages. This indicates that in general, the age of mothers at first birth increases, the share of births to mothers aged 35 and older increases and may also indirectly indicate a later age of marriage. Figure. 5.1.2 presents several situations. Thus, for the Russian Federation, by 2050 the maximum of the age-specific fertility rate will shift from the age interval of 25–29 years to 30–34 years, the age-specific fertility profile will be characterized by a flat and broader peak.

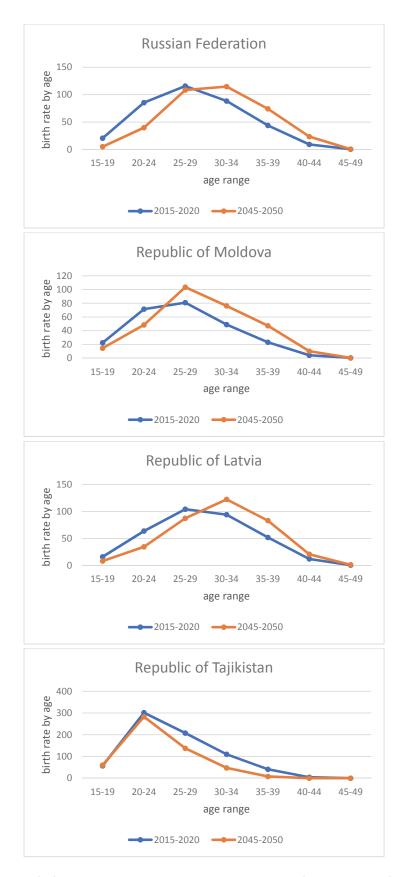


Figure 5.1.2. Age-specific fertility rates in 2015–2020 and projections for 2045–2050 for some countries of the former USSR

Source: Data from the UN Department of Economic and Social Affairs (DESA UN). Revision 2019. URL: https://population.un.org/wpp/Download/Files/1\_Indicators%20(Standard)/EXCEL\_FILES/2\_Fertility/WPP2019\_FERT\_F07\_AGE\_SPECIFIC\_FERTILITY.xlsx

For the Republic of Moldova there will be a shift of maximum from the interval of 20 – 24 years to the interval of 25 – 29 years, while in comparison with the Russian Federation the total fertility rate may be lower by 10–15% (Table 5.1.2). For the Latvian Republic it is already possible to see practically a two-top character of the age-specific profile of fertility – at ages 25–29 and 30–34, and by 2050 there will be a further shift to the right to ages 30–34, and the age-specific fertility rate for the interval 35–39 years will be almost the same, as for 25–29 years. For the Baltic States the demographic dynamics in this sense develops according to the scenario of other EU countries, where the birth of the first child for many couples occurs already at a mature age.

Finally, the bottom part of Fig. 5.1.2 represents the change in the age-specific profile of fertility by 2050 for the Republic of Tajikistan. As for most countries with a progressive demographic structure and high fertility, there will be no significant transformation in the shape of the fertility profile, the maximum will still be in the 20–24 interval, but in general we should expect a slight decline in fertility mainly at the expense of older ages.

For all post-Soviet countries by 2050 there will be processes of population aging, expressed both in a gradual increase in the share of the population in older age groups and at the expense of the share of young population. The maximum increase in the median age of the population will be shown by the following countries: Republic of Moldova (+11.3 years), Republic of Azerbaijan (+8.0 years), Republic of Armenia (+7.8 years), Republic of Uzbekistan (+7.6 years). For the Russian Federation the probable increase in the median age of the population could be 2.1 years.

The process of demographic aging will be accompanied by further growth of life expectancy. According to the UN forecast, it will reach its maximum value for the Baltic states, the lowest value will be characteristic of Turkmenistan. For the Russian Federation the average variant of the forecast gives the value of life expectancy of 76,6 years (Table 5.1.2).

This seems to be the probable demographic forecast for the former Soviet Union republics for the period up to 2050. The estimates given above can be adjusted in the next one or two years, taking into account the accumulated knowledge about changes in the structure of population mortality that occurred during the COVID-19 pandemic. It is already clear that life expectancy indicators need to be revised and clarified, international migration scenarios need to be adjusted, and the possible impact of the pandemic on fertility needs to be assessed.

#### 5.2. Demographic aging of the population and stability of pension systems

The sex and age structure of the population is decisive for the socio-economic development of countries, regions and the world. Of particular importance is the ratio of able-bodied and unable-bodied (children and older generations) cohorts in the demographic structure of the population. UN documents emphasize the importance of considering population dynamics and structure in the planning of socio-economic development, including the achievement of the Sustainable Development Goals (SDGs 6, 7, 9, 12, 13, 14, 15)<sup>1</sup>.

Current demographic dynamics are characterized by an increase in demographic aging. The fastest growing age group in the world is represented by people aged 65 and older. There are 7,794,799,000 people living on Earth, including 3,864,825,000 women and 3,929,974,000 men. Age 65+ has reached 326,816,000 men and 400,789,000 women. The life expectancy at birth in the world increased by 8 years from 1990 to 2019 and reached 75 years for women, 70.2 years for men and 72.6 years for both sexes². Demographic aging is characteristic of most post-Soviet countries (Table 5.2.1).

Table 5.2.1. **Dynamics of the total population and the population aged 65+ in the former Soviet Union in 1990–2019, thousand people** 

Countries	Total po	pulation	Population	n aged 65+
	1990	2019	1990	2019
Republic of Armenia	3 538	2 958	199	340
Republic of Belarus	10 151	9 452	1 083	1 437
Republic of Kazakhstan	16 384	18 552	961	1 420
Kyrgyz Republic	4 373	6 415	220	295
Republic of Latvia	2 664	1 907	316	388
Republic of Lithuania	3 696	2 760	402	556
Republic of Tajikistan	5 284	9 321	203	288
Turkmenistan	3 683	5 942	139	273
Republic of Uzbekistan	20 398	32 982	838	1 516
Republic of Estonia	1 565	1 325	183	265

Source: World Population Prospects 2019, Volume I: Comprehensive Tables. URL: https://un.org

According to UN data in the Republic of Azerbaijan, Republic of Georgia, Republic of Moldova, Russian Federation and Ukraine, the number of people aged 65+ increased from 1990 to 2019. The total population has increased in the Republic of Azerbaijan. In the Republic of Georgia, Republic of Moldova, Russian Federation and Ukraine the total population decreased during this period.

In addition to the total number of elderly and old people, two indicators are the most common measurement tools for assessing the status and dynamics of demographic aging:

Old-age demographic burden ratio (Old-age dependency ratio) per 100 people;

Old-age potential demographic support ratio (Old-age potential support ratio) per 100 people.

The old-age demographic dependency ratio shows the ratio of people aged 65+ per 100 people of working age (aged 15–64). If this indicator grows, additional measures are required to finance pensions, the social support system, health care, etc.

The coefficient of potential demographic support of the elderly is an inverse indicator. It characterizes the number of people of working age (aged 15–64) per one elderly person (aged 65+). As the population ages, the coefficient of potential support decreases, which means that

<sup>&</sup>lt;sup>1</sup> World Population Prospects 2019. Highlights United Nations New York. 2019. P. 38.

<sup>&</sup>lt;sup>2</sup> World Population Prospects 2019. Highlights United Nations New York. 2019. P. 40.

the number of potential workers who can support the elderly becomes smaller. Table 5.2.2 shows the dynamics of the demographic load factor of the elderly in the world and the former USSR countries for 1990–2019.

Table 5.2.2.

The demographic burden of the elderly in the world and the former Soviet Union from 1990 to 2019, per 100 people

Countries	1990	2019	Process Characteristics
World	14,6	18,4	load increased
Republic of Armenia	11,6	20,6	load increased
Republic of Belarus	20,3	26,1	load increased
Republic of Kazakhstan	12,8	14,9	load increased
Kyrgyz Republic	12,8	9,8	load decreased
Republic of Latvia	22,4	37,0	load increased
Republic of Lithuania	21,1	36,8	load increased
Republic of Tajikistan	11,4	7,3	load decreased
Turkmenistan	10,4	9,4	load decreased
Republic of Uzbekistan	11,4	9,2	load decreased
Republic of Estonia	22,2	36,8	load increased

Source: World Population Prospects 2019, Volume I: Comprehensive Tables. URL: https://un.org

The demographic burden of the elderly decreased in the Kyrgyz Republic, Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan, where the total population was growing and the number of children and youth was increasing. In all other post-Soviet countries (Table 5.2.2), as well as in the Republic of Azerbaijan, Georgia, Republic of Moldova, Russian Federation and Ukraine this indicator increased from 1990 to 2019. The population of most states in the former Soviet Union has become demographically «older». Demographic aging was most intense in the Baltic states. At the same time, the process of population aging in the post-Soviet space is currently not as dramatic as in Italy or Japan, where in 2019 this indicator was 42.5 and 55.9 respectively.

The demographic aging of the population of a significant number of countries in the post-Soviet space is also confirmed by the decrease in the coefficient of potential support for the elderly (Table 5.2.3).

Table 5.2.3.

Potential support for the elderly in the former Soviet Union in 1990–2019, per 100 people

	1990	2019	Process characteristic
World	6.8	5.4	
Republic of Armenia	8.6	4.9	Decreased
Republic of Belarus	4.9	3.8	Decreased
Republic of Kazakhstan	7.8	6.7	Decreased
Kyrgyz Republic	7.8	10.2	Increased
Republic of Latvia	4.5	2.7	Decreased
Republic of Lithuania	4.7	2.7	Decreased
Republic of Tajikistan	8.8	13.7	Increased
Turkmenistan	9.6	10.6	Increased
Republic of Uzbekistan	8.8	10.9	Increased
Republic of Estonia	4.5	2.7	Decreased

Source: World Population Prospects 2019, Volume I: Comprehensive Tables. URL: https://un.org

The heterogeneity of demographic dynamics in the countries of the former Soviet Union is confirmed by the multidirectional trends in the coefficient of potential support for the elderly: in four countries the indicator increased, i.e. there were more people of working age, while in other countries, as well as in the Republic of Azerbaijan, Georgia, Republic of Moldova, Russian Federation and Ukraine this indicator was declining (Table 5.2.3).

The demographic dynamics of most of the countries of the former Soviet Union show an increase in the intensity of the process of demographic aging of the population. Demographic ageing was not an acute problem for the Central Asian countries in 1990–2021: Kyrgyz Republic, Republics of Tajikistan, Turkmenistan and Uzbekistan.

However, in the nearest future all countries of the former Soviet Union expect an increase in the share of older people in the population. In this regard, it is necessary to implement policies that ensure the welfare of the elderly in terms of respect for their rights, paying particular attention to economic security<sup>1</sup>. In 1998, the CIS Inter-Parliamentary Assembly adopted a "Charter for the Elderly. The parliaments and governments of CIS member states pledged to consider the goal of their policies as "achieving conditions in which the rights of the elderly to a dignified existence would be established. Minimum pensions and a minimum subsistence level for pensioners have been established; targeted programs have been proposed that provide for measures to improve the situation of the elderly. For example, Russia has prepared and adopted a Strategy of Action for the Elderly until 2025; Uzbekistan has approved a set of measures to further improve the system of state support for the elderly and disabled for 2017–2020.

Pension systems in the states function to maintain the quality of life of citizens after retirement. The extent to which this goal is achieved is determined by the replacement rate, which shows the size of the pension relative to the salary. According to the ILO Social Security Convention of 1955, a country's pension system must ensure a replacement rate of at least 40% of the previous wage<sup>2</sup>.

The pension system in the Russian Federation and other former Soviet countries was formed on the basis of the Soviet pension system and is constantly being adjusted. In all countries of the former Soviet Union, the retirement age was the same: 55 for women and 60 for men. Over the past decades, most post-Soviet countries have revised their pension laws and raised the retirement age. Women have been disproportionately affected by this increase. At the same time in almost all countries there is still a 2.5–5 year gap in the retirement age for men and women. Only in the Republic of Armenia the retirement age for women and men is the same: 63 years. In CIS countries, as in most countries of the world, there is a distributive type of pension system based on the principle of intergenerational solidarity, when pensions for today's pensioners are formed at the expense of mandatory payments by working citizens and deductions from the payroll. Under these conditions, the sustainability of pension systems depends on the demographic structure of the population. To assess the situation, a potential support ratio is usually used, which is decreasing in most post-Soviet countries.

For an overwhelming number of people in the former Soviet Union, retirement leads to a significant drop in living standards. This is due to low wages, as well as low values of the replacement rate (the ratio of average pension to average wage). In the CIS countries, the indicator ranges from 24% to 43%. In the EU countries, the replacement rate is as high as 70%. The materials of the Interstate Statistical Committee of the CIS note that in terms of sustainability of the pension system the critical threshold is the value of the coefficient of potential support by the working-age population of persons in older age equal to  $3^3$ .

<sup>&</sup>lt;sup>1</sup> United Nations Principles on Older Persons To make the life of the elderly full-blooded – URL: https://www.un.org/ru/documents/decl conv/conventions/oldprinc.shtml.

<sup>&</sup>lt;sup>2</sup> The ILO Social Security Convention. [Electronic Resource]. URL: http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPU B:12100:0::NO::p12100\_instrument\_id:312247.

<sup>&</sup>lt;sup>3</sup> The older generation: an overview of the situation in the CIS member States. URL: http://www.cisstat.com/rus/elderly\_generation/starshee%20pokolenie.pdf

The existing pension systems of the CIS countries are characterized by features of both the former Soviet pension system and the new insurance institutions that are being formed. Their intermediate, transitional nature is associated with incomplete reforms in the sphere of income and employment of the population, first of all – wage systems, tariffing (for pension insurance), taxation. According to researchers' estimates, in recent years pension insurance in the CIS countries covers no more than 55–60% of the total economically active population, which indicates a growing tension in the field of pensions, the accumulation of problems that will sooner or later lead to an increase in government spending on financing social programs and benefits for need¹. Understated wages for 50–60% of employees, its differentiation, in which between the extreme deciles, it persistently remains at the level of 16 and more times, which hinders the application of the principle of personal responsibility of the employee for his pension insurance.

The functioning of pension systems to a large extent depends on existing conditions: the state of the labor market and the number of employees, the size of wages and the duration of the insurance period of workers. In the post-Soviet period the share of wage earners employed on a permanent basis in most CIS countries has declined from 85% to 50% or less of the total economically active population. At the same time half of the employed receive such low wages that even with a 35–40-year work (insurance) experience the right and the necessary amount of money for a decent pension, at 150–250% of the pensioner's minimum subsistence level, is almost impossible to save and reserve. Thus, many problems in the field of pensions in the CIS countries are largely due to the low level of the minimum wage, which in 2021 in Russia was only 12,792 rubles (about \$180).

A key problem for the sustainability of pension systems in the former Soviet Union is that pension liabilities, which have increased as a result of demographic changes, have significantly exceeded pension revenues, which have declined against the backdrop of deteriorating economic conditions. Simultaneous problems in both the pay-as-you-go and funded subsystems led to a profound crisis of the combined pension systems. Financial sustainability was improved by reducing pension liabilities and increasing the assets of the pension systems. To this end, most countries have carried out reforms to raise the retirement age, increase the minimum required work experience, limit early retirement, abolish the mandatory funded element, and transfer funds to the public pay-as-you-go subsystem<sup>2</sup>.

Financial sustainability of the pension system implies the ability to fulfill the assumed pension obligations under the influence of external and internal factors, with the importance not so much of the current, but medium and long-term balance of revenues and expenditures of the budget of pension systems related to pension obligations<sup>3</sup>. Undoubtedly, the institution of social pension insurance in the former Soviet Union needs to be reformed. At the same time, it is necessary to address fundamental issues affecting income systems throughout a person's life span, employment, medical and biological aspects of life in old age, not reducible only to the organization of leisure activities for the elderly and patronage care for them. What is required is not an increase in the retirement age, but the creation of a highly effective system of social pension insurance, which implies the implementation of a whole set of measures in the sphere of employment, regulation of wages in conjunction with insurance mechanisms. It is no coincidence that international standards of social security (first of all, ILO Conventions, European Code of Social Security) pay considerable attention to social protection of workers with low wages, non-permanent employment, short work record, including the ILO Convention of 1952

<sup>&</sup>lt;sup>1</sup> Roik V.D. Pension systems in the CIS countries: results of transformations and ways of improvement // ECO. 2019. No. 3. pp. 94–116.

<sup>&</sup>lt;sup>2</sup> Pudovkin A.V. World experience in the formation of pension systems and the possibility of its use in Russia. Abstract of the dissertation for the degree of Candidate of Economic Sciences. Specialty 08.00.14 «World Economy». M. 2017. p. 6.

<sup>&</sup>lt;sup>3</sup> Sedova M. L. The balance of the budget of the Pension Fund of Russia and the problems of financial stability of the pension system // Izvestiya SPbGEU. 2018. № 5 (113). URL: https://cyberleninka.ru/article/n/sbalansirovannost-byudzheta-pensionnogo-fonda-rossii-i-problemy-finansovoy-ustoychivosti-pensionnoy-sistemy

on minimum standards of social security (No. 102). It is important to use the best international experience, ratings of the quality of pension systems, such as the Global Pension Index (Mercer CFA Institute), which evaluates more than four dozen pension systems around the world, highlighting their strengths and weaknesses<sup>1</sup>.

The financial sustainability of national pension systems in post-Soviet countries can be ensured only on the basis of pension insurance, the involvement of employees themselves in this process and the establishment of strict legislative rules for linking the volume of contributions and the size of pensions. This can be achieved only by joint efforts of the state, employers and employees, based on a radical transformation of all basic institutions and mechanisms of the wage system and compulsory social insurance.

The main directions of successful modernization of the pension system for the CIS countries should be<sup>2</sup>:

- $\bullet$  introduction of normative and contractual regulation of wages in order to gradually increase the minimum wage to 40–50% of the average level in the economy (in most Western European countries this ratio is 50–60%);
- - equalization of wages in the outermost decile groups to a ratio of 1:10, which will significantly improve opportunities for financial participation of workers in pension insurance;
- - development of a state program to involve the elderly in the workforce through targeted job creation for them;
- - preparation and implementation of a state program for the formation of new institutions of social insurance and social support for senior citizens: compulsory social insurance for long-term care after serious illness, the financing of which should involve not only employers, but also the state and the workers themselves; wills and annuity purchase at the expense of savings and property of citizens, controlled by both government agencies and public organizations of pensioners; geriatric insurance of pensioners.

<sup>&</sup>lt;sup>1</sup> Global Pension Index 2020. Mercer CFA Institute. URL: https://www.mercer.com.au/our-thinking/global-pension-index.html <sup>2</sup> Roik V.D. Pension systems in the CIS countries: results of transformations and ways of improvement // ECO. 2019. No. 3. pp. 94–116.

#### 5.3. The role of demographic dividends in demographic development

#### The essence of demographic dividends

As populations gets older, there is a widespread perception that a shrinking labor force and declining demographic and economic support rates are leading to slower economic growth and fiscal strain. At the same time, a growing number of scholars see demographic aging not only as a threat, but also as a new opportunity for development. In this regard, they mark a second demographic dividend1.

The opportunities for a "second demographic dividend," which can be generated by low fertility and increased life expectancy with appropriate policies, provide opportunities for increased investment and savings and ultimately lead to higher productivity. Researchers in the Asia-Pacific region have shown that two demographic dividends offer opportunities to achieve sustainable growth. For example, sustained fertility declines led to an increase in the share of the working-age population. This accelerated economic growth, while the sharp decline in the share of dependent children freed up resources for investment in economic development and family welfare. And this is the "first demographic dividend.

As the population ages, the large cohorts of working-age people who have provided the demographic dividend in recent decades are changing. The number of workers relative to the number of consumers is shrinking while the birth rate remains low. This ultimately leads to lower economic growth. While an aging population certainly poses economic problems, researchers Lee and Mason have suggested that a "second demographic dividend," which is shaped by low fertility and rising life expectancy, may contribute to economic growth after the first dividend period. Rising life expectancy can lead to an increase in human capital and physical investment, which in turn increases labor productivity and per capita income. This problem was considered in terms of heterogeneity of mass cohorts of older and older people, including the formation of the "third" and "fourth" age, as well as from the perspective of preserving the resource potential of the older generation.

In order to better understand the economic consequences of the two demographic dividends, it is necessary to study more closely the coefficient of economic support. Moreover, the first demographic dividend can be expressed quantitatively as an increase in the coefficient of economic support, while the second demographic dividend cannot. The real longevity dividend can be created by second-order effects resulting from behavioral change, structural economic change, adjustment of institutional arrangements, etc. The second demographic dividend is not clearly demarcated and depends on investment in human capital.

#### Changes in age structure and the demographic dividend

According to the UNFPA definition, the demographic dividend is «the potential for economic growth that can result from shifts in the age structure of the population, mainly when the share of the working-age population (15 to 64 years) exceeds the share of the nonworking-age population (14 years and younger, 65 years and older)»<sup>2</sup>. It is the increase in economic productivity that occurs when the number of people in the labor force increases relative to the number of dependents. In East Asia, the demographic dividend has been one of the most significant fac-

<sup>&</sup>lt;sup>1</sup> Mehido M. Using the second demographic dividend: Population aging and social protection in the Asia-Pacific region. 2019. URL: https://repository.unescap.org/bitstream/handle/20.500.12870/1153/SDWP%202019-03 Demographic%20Dividend. pdf?sequence=1&isAllowed=y

Official website of UNFPA. URL: https://www.unfpa.org/demographic-dividend

tors that has contributed to the region's economic growth<sup>1</sup>. South Korea's greatest demographic dividend was from 1965 to 2000<sup>2</sup>.

In the early stage of the demographic transition, fertility rates decline and, consequently, the absolute and relative number of children decreases. The labor force has been growing faster than the economically inactive population for some period, freeing up resources to invest in economic development and social protection. Other things being equal per capita income also grows faster. Thus, the first demographic dividend is formed.

The period of this dividend is quite long – five decades or more. However, the downward trend in fertility results in a shrinking labor force, against the background of an accelerated growth of the elderly population. Because of this, income per capita grows more slowly and the first dividend takes on a negative value.

But a second demographic dividend is also possible. With an increase in the retirement period (as a consequence of increased life expectancy), people have a strong incentive to accumulate assets (unless their needs in old age are fully taken care of by the family or the state). Regardless of whether these assets are invested domestically or abroad, national income increases.

The logic of the process is as follows: the first dividend is formed first, which then comes to an end, and the second dividend begins somewhat later and continues indefinitely. Researchers note that while the first dividend produces a temporary benefit, the second dividend converts that benefit into more assets and sustainability. These results are not automatic, but are due to the implementation of effective public policies<sup>3</sup>.

There is a strategic need for policies that allow countries to take advantage of the demographic dividend. The urgency stems from the relatively small window of opportunity that countries have to consider when receiving a first demographic dividend. Countries have traditionally tried to implement projects and use investments to help young people become more productive during their working years.

#### Conditions for the realization of the demographic dividend

The increase in labor supply resulting from a change in demographic structure is not a purely demographic gift. The magnitude of the benefit depends on the economy's ability to make productive use of additional workers. For the demographic dividend to be realized, the young population must have access to quality education, adequate nutrition and health care, including access to sexual and reproductive health care.

The first condition is the economy's ability to create jobs for a growing working-age population, which depends on the quality of state institutions, state macroeconomic policies, education policies, and other factors<sup>4</sup>. The experience of nations around the world has shown that, as countries develop economically, the relationship between fertility and educational attainment is usually inversely proportional. Economists attribute this phenomenon to access to a demographic dividend<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Bloom D. E., Canning D., Evans D. K., Graham B. S., Lynch P., Murphy E. E. Population Change and Human Development in Latin America. Background paper for IPES 2000. Harvard Institute for International Development. 1999; Bloom David E., Canning D. Cumulative Causality, Economic Growth and the Demographic Transition. In Birdsall N., Kelley A.C. and Sinding S., Population Matters: Demographic Change, Economic Growth and Poverty in Developing World. Oxford. 2001: New York. Pp. 165–197.

<sup>&</sup>lt;sup>2</sup> Gribble J. South Korea's demographic dividend. Population Reference Bureau. November 27, 2012. 6 p.

<sup>&</sup>lt;sup>3</sup> Lee R., Mason E. What is a demographic dividend? //Finance and Development. September 2006. URL: https://ntaccounts.org/doc/repository/LM2006\_Russian.pdf

<sup>&</sup>lt;sup>4</sup> Bloom D. E., Canning D. Global demographic change: Dimensions and economic significance. National Bureau of Economic Research. Working Paper. 2004. № 10817. URL: https://www.kansascityfed.org/publicat/sympos/2004/pdf/BloomCanning2004.pdf

<sup>&</sup>lt;sup>5</sup> Kazbekova Z. G. Influence of demographic dividend on economic growth // Population and economy. 2018. No. 2 (4). pp. 85–135.

In the absence of the right state macroeconomic policies to realize the demographic dividend, the growth of the working-age population can lead to increased unemployment, political instability, increased crime and a decline in social capital. There are an unprecedented 1.8 billion young people in the world today. The term "youth bulge" or "youth bubble" has emerged in economic and demographic studies, referring to the significant increase in the population aged 15–29.

In a country with a "youth bulge," a significant contingent of young people are of working age, which will lead to a decrease in the ratio of the non-working-age population to the working-age population (dependency ratio). With an increase in the working-age population and their full involvement in economic activity, other things being equal, the level of average income per capita should increase. In this case the "youth bulge" would be a demographic dividend. However, if a large cohort of young people cannot find work and earn a decent income, youth bulge will become a demographic bomb, as a large mass of disillusioned youth is likely to become a potential source of social and political instability.

Therefore, one of the main indicators of a country's success in turning "youth bulge" into a demographic dividend is the level of youth employment. Unfortunately, in many countries around the world, the rate of increase in youth unemployment is about twice as high as for the labor force as a whole<sup>1</sup>.

UNFPA's focus on young people in Eastern Europe and Central Asia has included promoting young people's rights; preventing sexually transmitted infections, including HIV; involving young people in decision-making processes that affect them; supporting comprehensive age-appropriate sexuality education; combating practices that are harmful, such as early marriage and gender-based violence; and promoting youth leadership<sup>2</sup>.

Analysis of data on youth unemployment in the post-Soviet space shows that while its level is very significant, the situation is very differentiated by country (Figure 5.3.1). Significant unemployment contributes to the migration outflow of young people outside their countries. The highest level of youth unemployment is in the Republic of Armenia and the Republic of Georgia.

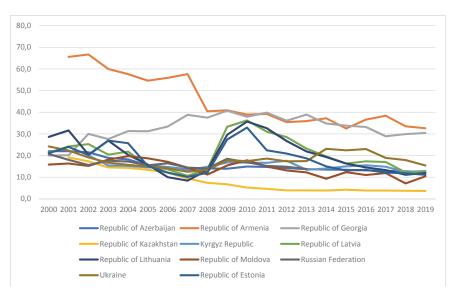


Figure 5.3.1. Youth unemployment rates in the former Soviet Union in 2000–2019 (15–24 years old), %

Source: UNECE data. URL: https://w3.unece.org/PXWeb2015/pxweb/ru/STAT/STAT\_30-GE\_03-WorkAndeconomy/013\_ru\_GEWEUnEmpYouth\_r.px

<sup>&</sup>lt;sup>1</sup> Macunovich D. J. The role of demographics in precipitating economic downturns. Journal of Population Economics, 2012, vol. 25, issue 3, 783–807. URL: https://link.springer.com/article/10.1007/s00148-010-0329-5

<sup>&</sup>lt;sup>2</sup> UNFPA Annual Report 2014 UNFPA – United Nations Population Fund. URL: https://www.unfpa.org/fr/annual-report-2014

At the same time, crisis phenomena in the economy affect the level of unemployment of young people in different ways. The economic crisis of 2008 primarily affected the economies of the Baltic states, which are more involved in global economic relations and led to an increase in youth unemployment. The Republic of Kazakhstan has seen a downward trend in youth unemployment for a number of years.

The second mechanism for the dividend is an increase in savings. As the number of dependents decreases, people can transfer more funds into savings. This increase in the national savings rate increases the capital stock in developing countries already facing capital shortages and leads to higher productivity as accumulated capital is invested.

The third mechanism is human capital. It requires investment in human capital, health, education, and professional skills. Lower fertility leads to healthier women and a lower economic burden at home. It also allows parents to invest more resources per child, leading to better health and education outcomes.

The fourth growth mechanism is the increase in domestic demand caused by an increase in GDP per capita and a decrease in the dependency ratio. An important condition for increasing domestic demand is an increase in the standard of living and the fight against poverty.

#### The demographic dividend in the former Soviet Union

The countries of the former Soviet Union differ significantly in the age structure of their populations and the intensity of their demographic processes. Several groups of countries are distinguished in the context of the stages of the demographic transition:

- ❖ Stage III of the demographic transition: Republic of Tajikistan, Kyrgyz Republic, Turkmenistan and the Republic of Uzbekistan;
- ❖ Stage IV Republic of Azerbaijan, Republic of Armenia, Republic of Georgia;
- ❖ Completion of the demographic transition Russian Federation, Republic of Belarus, Ukraine, Republic of Moldova¹.

This differentiation is reflected in the formation of the demographic dividend. From 1997 to 2011 the demographic dividend due to the increase in the working-age population provided the Russian Federation with about a third of GDP growth per capita from an annual average of 4.9%². The demographic aging of the population of the Georgian SSR was already noted in 1959. The population in the age group 25–34 years for the period between the last two censuses (2002–2014) in the Republic of Georgia decreased by 31% – more than twice as much as other population groups. Both natural and migratory population decline play a role³. The existing trends actualize the creation of mechanisms to take advantage of the second demographic dividend. The «window of opportunity» for the demographic dividend of the Kyrgyz Republic opened in the 1975–1980s due to the decline in fertility, mortality and total fertility rates and may close in 2030, when the country's population will begin to age rapidly⁴.

Some demographic indicators allow us to assess the situation with the demographic dividend in post-Soviet countries (Table 5.3.1.). The most common is the demographic support coefficient, which is the number of working-age population (25–64 years old) per one elderly person (aged 65 and older). As the population ages, the coefficient of potential support tends

<sup>&</sup>lt;sup>1</sup> Bezverbny V. A., Bardakova L. I. Demographic transition in the CIS countries: trends and preliminary results // DEMIS. Demographic research. 2021. Vol. 1. No. 3. pp. 11–22. DOI: 10.19181/demis.2021.1.3.2

<sup>&</sup>lt;sup>2</sup> The World Bank. In search of a new «silver age» in Russia: factors and consequences of population aging. Overview report. 2015. 49 p.

<sup>&</sup>lt;sup>3</sup> Sulaberidze A.V., Archvadze I. S. Features of demographic aging in Georgia // Demographic development of the post-Soviet space: Collection of articles and analytical materials / Edited by M. B. Denisenko, R. V. Dmitriev, V. V. Elizarov. Moscow: Faculty of Economics, Lomonosov Moscow State University, 2018. pp. 259–261.

<sup>&</sup>lt;sup>4</sup> Dzholdosheva D. S. Migration processes and demographic dividend of the Kyrgyz Republic // Innovations and investments. 2018. No. 10. pp. 87–91.

to decrease, meaning that there are fewer potential workers to support older people. To analyze changes in the age structure, one turns to load ratios (dependents); they show the ratio of the population aged 0–24 and over 65 to the population aged 25–64.

Table 5.3.1. Load factors and demographic support (estimate for 2020)

	Load factor. %	Youth load factor, %	Load factor of	Demographic
			elderly people, %	support coefficient
Republic of Armenia	79,7	58,5	21,2	4,7
Republic of Azerbaijan	77,4	65,5	11,9	8,4
Republic of Belarus	72,5	45,6	26,9	3,7
Republic of Estonia	85,0	47,3	37,7	2,7
Republic of Georgia	87,9	59,2	28,7	3,8
Republic of Kazakhstan	95,5	80,1	15,4	6,5
Kyrgyz Republic	112,4	102,4	10,0	10,0
Republic of Latvia	83,1	45,3	37,8	2,6
Republic of Lithuania	83,5	45,6	37,9	2,9
Republic of Moldova	65,0	44,3	20,7	4,9
Russian Federation	76,2	48,9	27,3	3,7
Republic of Tajikistan	136,4	128,9	7,5	13,3
Turkmenistan	105,3	95,3	10,0	10,2
Ukraine	73,5	44,1	29,4	3,4
Republic of Uzbekistan	97,9	88,5	9,4	10,6

Source: Department of Economic and Social Affairs Population Dynamics UN. URL: https://population.un.org/wpp/Download/Standard/Population/

European countries of the former Soviet Union are characterized by higher rates of population aging. Russian Federation, Republic of Moldova, Republic of Belarus, Ukraine, Republic of Lithuania, Republic of Latvia and the Republic of Estonia have practically exhausted their first demographic dividend. The gap in the value of the load factor for the totality of the countries of the former USSR is 39.6% for the Republic of Moldova and 67.9% for the Republic of Tajikistan. Significant values of the load factor are also observed in those countries where the number of young population is significant (Republic of Tajikistan, Kyrgyz Republic, Republic of Kazakhstan, Turkmenistan), and in countries with significant levels of aging (Latvian, Lithuanian and Estonian Republics). The structure of the load factor differs: in the first case we are talking about the prospect of growth of the absolute and relative number of labor force, in the second – the growth of the load of older people, increasing life expectancy in general and working life in particular (with the creation of favorable conditions).

The Republic of Azerbaijan, Republic of Armenia, Republic of Georgia are currently experiencing a downward trend in the demographic support ratio, which indicates the «closing of the demographic window» (Figure 5.3.2). After the rise of the demographic support coefficient there comes its long-term decline. In 2005–2020 the rise of the indicator was observed in the Republic of Tajikistan, Turkmenistan, Republic of Uzbekistan, Kyrgyz Republic, Republic of Azerbaijan, which is due to a significant excess of working-age population over the number of disabled.

The Republic of Uzbekistan is at the stage of an early demographic dividend and this provides a unique opportunity to achieve higher and longer economic growth that can increase prosperity, provided that proper investments are made in human capital, development of a flexible economic model, introduction of innovative technologies and increased opportunities for youth and women to participate in the socio-economic development of the country. The peak of the working-age population will occur in the country approximately by 2048.

<sup>&</sup>lt;sup>1</sup> Generation 2030. Uzbekistan. United Nations Children's Fund. July 2018. p.2. URL: https://www.unicef.org/publications

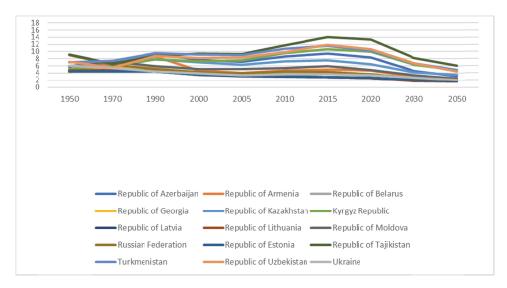


Fig. 5.3.2. Dynamics of the Demographic Support Ratio in the USSR Republics and Former USSR Countries in 1950–2050.

At present, the share of working-age population in the total population peaks in the Russian Federation, Republic of Moldova, Republic of Belarus, Ukraine, Republic of Armenia and the Republic of Azerbaijan. However, in the future its absolute and relative numbers will decrease (Fig. 5.3.3). In countries where the working-age population will dominate in the nearest future (Kyrgyz Republic, Turkmenistan, Uzbekistan or Tajikistan Republics) it is necessary to introduce institutions that motivate people to make savings and invest in the development of human potential, to promote the use of the demographic dividend in the economy.

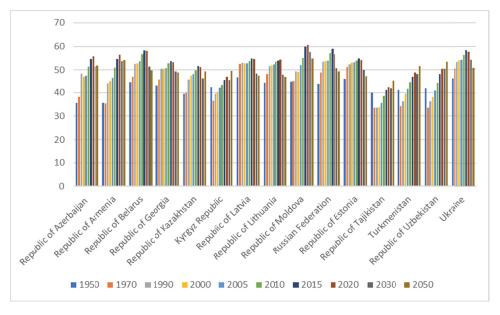


Figure 5.3.3 Proportion of the population aged 25–64 in the USSR republics and former USSR countries in 1950–2050, %

Source: World Population Prospects, 2019. URL: https://population.un.org/wpp/Publications/Files/WPP2019 Volume-II-Demographic-Profiles.pdf

Demographic aging of the population is increasing in all post-Soviet states, the only question is the rate of growth of this process. This actualizes the creation of mechanisms to monetize the second demographic dividend (Table 5.3.2). The highest level of demographic ageing is in the Baltic states, Belarus, Georgia, Armenia, Russian Federation and Ukraine.

Share of population aged 65 and older in the USSR republics and former USSR countries in 1950–2050, %

	1950	1970	1990	2000	2005	2010	2015	2020	2030	2050
Republic of Azerbaijan	7,1	5,2	4,6	5,9	6,6	5,9	5,7	6,7	11,8	17,5
Republic of Armenia	8,3	5,6	5,6	10,0	11,9	11,0	10,9	11,8	16,9	21,4
Republic of Belarus	8,6	9,0	10,7	13,5	14,7	14,0	14,3	15,6	20,5	24,0
Republic of Georgia	10,1	7,7	9,3	12,9	14,5	14,2	14,4	15,3	18,5	21,8
Republic of Kazakhstan	6,5	5,4	5,9	6,8	7,7	6,8	6,8	7,9	11,1	14,2
Kyrgyz Republic	8,2	6,2	5,0	5,5	5,6	4,5	4,3	4,7	7,2	10,1
Republic of Latvia	5,6	12,0	11,9	15,0	16,9	18,2	19,5	20,7	25,0	27,8
Republic of Lithuania	9,4	10,2	10,9	13,9	16,0	17,3	18,7	20,6	26,4	29,0
Republic of Moldova	7,7	6,3	8,3	9,4	9,9	10,2	10,1	12,5	17,0	23,0
Russian Federation	4,8	7,7	10,3	12,4	13,8	13,1	13,6	15,5	19,6	22,9
Republic of Tajikistan	4,4	5,1	3,8	3,6	3,8	3,3	2,9	3,2	5,1	7,5
Turkmenistan	5,9	4,7	3,8	4,3	4,6	4,1	4,1	4,8	7,1	10,6
Republic of Uzbekistan	5,9	5,9	4,1	4,6	4,8	4,5	4,1	4,8	7,6	12,2
Ukraine	7,6	9,3	12,0	13,8	15,9	15,7	15,7	17,0	20,0	25,5
Republic of Estonia	10,6	11,8	11,7	15,0	16,8	17,5	18,8	20,4	23,6	28,7

#### Demographic incentives for economic development

The urgency of appropriate policies is exacerbated by the fact that the «demographic dividend» is followed by a time when the load factor begins to increase. The very population that formed the first «demographic dividend» inevitably ages and retires. With each generation having fewer and fewer children, population growth slows, stops, or even reverses. This trend is considered a demographic tax or demographic burden. It is currently most visible in Japan. Other regions will face similar situations in the nearest future. The Republic of Armenia, Republic of Azerbaijan, Republic of Belarus, Republic of Georgia, Republic of Kazakhstan, Republic of Latvia, Republic of Lithuania, Russian Federation, Republic of Estonia, and Ukraine are projected to experience significant increases in the burden ratio by 2030.

After the first demographic dividend, the second dividend is possible. If the population and public authorities anticipate these trends and change their behavior, increase the amount of savings in order to maintain a stable level of consumption throughout life (life expectancy increases), with other things being equal, the savings rate will increase, which will also lead to an increase in economic growth.

The emergence of the second dividend is related to the impact of demographic changes on capital accumulation. Thus, if the aging of the population occurs from above, i.e. by increasing life expectancy and longevity, then middle-aged people can fundamentally change their behavior by starting to save more resources for retirement and build up their material resources and capital. This also contributes to the growth of investment in the economy. To do this, the population must actively participate in various kinds of savings projects and the state must stimulate this participation and guarantee the safety of assets¹.

In addition, the second demographic dividend is realized if demographic changes lead to an increase in worker productivity. This is important to consider when shaping education policy and labor market policy.

<sup>&</sup>lt;sup>1</sup> Lee K. F. Demographics and the long-horizon returns of dividend-yield strategies. The Quarterly Review of Economics and Finance. 2013. № 53. P. 202–218. URL: https://www.researchgate.net/publication/256059841\_Demographics\_and\_the\_Long-Horizon\_Returns\_of\_Dividend-Yield\_Strategies\_in\_the\_US; Mason A., Lee M., Abrigo M., Lee S. Support Ratios and Demographic Dividends: Estimates for the World. 2017. New York: Population Division. United Nations. 52 p. URL: https://www.un.org/en/development/desa/population/publications/pdf/technical/TP2017-1.pdf

Demography does not determine the fate of economic growth, but it is certainly a key factor determining the growth potential of the economy. An aging population combined with a declining birth rate indicates a very likely decline in future economic growth.

Productivity gains can reduce the impact of such demographic shifts, and technological advances are an ideal source of productivity gains. However, on the one hand, technological advances increase productivity, but at the same time they can eliminate jobs altogether, increasing unemployment.

It will be workers with computer and technological skills who will thrive in the economy of the future. As the age composition of the workforce changes in the future, so will the structure of the jobs that are in demand in the economy.

#### 5.4. Recommendations for improving demographic and migration policy

#### Recommendations for common approaches to population policy:

- ❖ Transition from the concept of "national demographic security", adopted by the practice of each state of the former Soviet Union, to the concept of "common demographic sustainability" (according to common interests in the context of regional security).
- ❖ The development and adoption of a common concept of sustainable demographic development of the CIS (former Soviet Union) countries, taking into account the interests of all countries in the region.
- Development of the idea of a common demographic space on the scale of the Eurasian Economic Union and synchronization of migration, labor and pension legislation in this context.

#### Recommendations to support the institution of family and fertility:

- ❖ Supplement the Strategy for International Youth Cooperation of CIS Member States for 2021–2030 with a demographic direction the creation of favorable conditions for young families aimed at increasing the birth rate, the formation of family culture values and the image of a successful young family, and all-round support for young families.
- To initiate the development and adoption of model laws "On state support for young children's families," as well as recommendations aimed at socio-economic support for the formation and development of student families in the CIS countries (former Soviet Union countries).
- To promote an information campaign in the media of the CIS (former Soviet Union) countries to raise the value of family life, positive fatherhood and motherhood, and promotion of cross-cultural marriages.

#### Recommendations for monitoring inequalities in access to health care:

- Develop national and cross-country monitoring of access to primary health care in order to develop and implement policies to reduce disparities in access based on place of residence (region, urban/rural settlement), gender (men/women), cultural and ethnic characteristics, health status (overcoming discrimination against people living with HIV, hepatitis C, other infections), migration status.
- Stimulate informational projects highlighting the benefits of healthy lifestyles in the CIS countries (former Soviet Union).

## Recommendations for reducing the negative effects of demographic aging and opportunities to use the demographic dividend:

❖ Parliaments of the CIS countries should initiate the preparation of legislative acts to overcome poverty, including the introduction of normative and contractual regulation

- of wages in order to gradually increase the minimum wage to 40–50% of the average level of the economy.
- ❖ Governments of the CIS to shape and make greater use of the second demographic dividend for inclusive growth for this purpose to transform social protection institutions to ensure greater intergenerational equality and create favorable conditions for active longevity, taking into account the increase in healthy life expectancy.

#### Recommendations in the field of migration policy:

- Mutual liberalization of migration policies for CIS citizens in order to preserve demographic resources in the region (changing the direction of migration flows).
- Transition to the idea of "managed migration" based on the channel of organized recruitment of labor force (organized recruitment system).
- The concept of migration management based on the mutual interests of donor and recipient countries, according to the demographic and socio-economic situation.
- Synchronization of pension, labor and social legislation in the CIS (former USSR) region.
- ❖ In order to streamline the process of attracting and using foreign labor and reducing illegal labor migration, promote the development of a mechanism for concluding bilateral labor contracts between employers and foreign workers before they enter the territory of the receiving state, defining the terms of employment, residence, employment, wages, social protection, rights and obligations of employers and foreign workers.
- To promote the use of remittances of migrant workers in the direction of investing in the development of entrepreneurial activity through banking mechanisms of increasing the interest rate on deposits and others for the development of small businesses and entrepreneurship of returned migrant workers.

## Recommendations for scientific and organizational support of demographic and migration policy:

- Create a register of scientific demographic centers and demographers-researchers in the CIS (former Soviet Union) countries.
- To create a database of dissertations, scientific articles and monographs on topical demographic problems in the CIS (former Soviet Union) countries.
- ❖ To create a unified system for monitoring risk factors of demographic processes in the CIS (former Soviet Union) countries (COVID-19 pandemic, climate change, conflicts).
- To develop the idea of a "community of practice" a network which could include practitioners, scientists and experts in the field of demography for the purpose of mutual consultation and exchange of best practices. The network could function both through traditional forms (seminars, conferences, forums) and electronic-digital platforms (social networks).
- Develop annual national reports on demographic development and implementation of demographic and migration policies in CIS (former Soviet Union) countries.

#### Recommendations for improving vital statistics:

- Synchronization of timing and unification of approaches to population censuses and current accounting of demographic events.
- Exchange of successful practices of population censuses in CIS countries (former USSR), including digitalization.
- ❖ Development of the system of demographic data and the extent of their accessibility on the website of Interstate Statistical Committee of the CIS, including the countries of the former USSR.
- To promote development of electronic resources, system of statistical registration of natural movement of population to ensure: full registration of deaths, especially in children and old age, verified diagnosis of causes of death in accordance with ICD, development and analysis of mortality statistics to make informed decisions in the field of public health protection.
- Encourage countries to provide regular and complete data on mortality to international organizations of the UN system to ensure monitoring and cross-country analysis on the achievement of the SDGs.

#### Recommendations for the development of demographic education:

- Development of mutual academic mobility in the region through a system of grant support for students, graduate students, scientists through a special Academic Mobility Fund.
- To stimulate the development of professional standards "Demographer" in the CIS (former USSR) countries.
- ❖ To develop demographic education of the countries in the region on the basis of Russian (presence of several demographic scientific and educational centers in the country).
- Development of the idea of "scientific and educational hub" on the basis of the Institute of Demographic Research FCTAS RAS in the form of an international scientific, educational and methodological center for training human resources in the field of demographic development for the CIS (former Soviet Union countries).
- ❖ Develop programs of professional training and advanced training for employees of medical and statistical organizations related to filling out medical death certificates (perinatal death certificates), registration and accounting of death records, and statistical recording of data on death events.

Provide a system of targeted training for specialists in the socio-demographic sphere in order to coordinate work to create favorable conditions for families with children, aimed at increasing the birth rate, formation of family culture values and the image of a young family.

#### **APPENDIX**

# Coefficients characterizing the age structure of the population of post-Soviet countries

Table 1.

#### Republic of Azerbaijan

Year	Potential support	Load factor, %	Youth load	Share of population	Share of the elderly,
	coefficient		factor, %	aged 25–64 years, %	65 and older, %
1950	5,0	181,2	161,4	35,6	7,1
1970	6,8	183,1	168,4	35,3	5,2
1990	9,4	128,3	117,7	43,8	4,6
2000	7,7	121,5	108,5	45,2	5,9
2005	7,1	114,3	100,2	46,7	6,6
2010	8,6	96,5	84,9	50,9	5,9
2015	9,5	83,1	72,6	54,6	5,7
2020	8,4	77,4	65,5	56,4	6,7
2030	4,6	86,4	64,5	53,6	11,8
2050	3,1	84,8	52,4	54,1	17,5

Table 2.

#### Republic of Armenia

Year	Potential support	Load factor, %	Youth load	Share of population	Share of the elderly,
	coefficient		factor, %	aged 25–64 years, %	65 and older, %
1950	4,3	180,7	157,3	35,6	8,3
1970	6,9	162,6	148,0	38,1	5,6
1990	8,6	106,4	94,8	48,5	5,6
2000	4,7	112,8	91,5	47,0	10,0
2005	4,0	110,5	85,4	47,5	11,9
2010	4,7	94,7	73,3	51,4	11,0
2015	5,0	82,9	63,0	54,7	10,9
2020	4,7	79,7	58,5	55,7	11,8
2030	3,0	94,6	61,7	51,4	16,9
2050	2,4	92,7	51,5	51,9	21,4

Table 3.

#### **Republic of Belarus**

Year	Potential support coefficient	Load factor, %	Youth load factor, %	Share of population aged 25–64 years, %	Share of the elderly, 65 and older, %
1950	5,2	123,8	104,5	44,7	8,6
1970	5,2	112,4	93,3	47,1	9,0
1990	4,9	90,0	69,7	52,6	10,7
2000	3,9	89,5	64,0	52,8	13,5
2005	3,7	86,0	58,6	53,8	14,7
2010	4,1	76,7	52,0	56,6	14,0
2015	4,1	71,9	47,3	58,2	14,3
2020	3,7	72,5	45,6	58,0	15,6
2030	2,5	94,5	54,6	51,4	20,5
2050	2,1	100,6	52,5	49,8	24,0

### Republic of Georgia

Year	Potential support	Load factor, %	Youth load factor,	Share of population aged	Share of the elderly, 65 and
	coefficient		,,,	25–64 years, %	older, %
1950	4,3	133,0	109,4	42,9	10,1
1970	5,9	117,5	100,6	46,0	7,7
1990	5,4	97,8	79,4	50,6	9,3
2000	3,9	97,6	72,1	50,6	12,9
2005	3,5	97,4	68,8	50,7	14,5
2010	3,7	89,9	62,8	52,7	14,2
2015	3,8	86,0	59,3	53,8	14,4
2020	3,5	87,9	59,2	53,2	15,3
2030	2,7	102,8	65,2	49,3	18,5
2050	2,3	104,5	59,9	48,9	21,8

#### Table 5.

#### Republic of Kazakhstan

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	6,0	153,4	136,9	39,5	6,5
1970	7,4	150,4	136,9	39,9	5,4
1990	7,8	117,5	104,7	46,0	5,9
2000	7,0	109,9	95,5	47,6	6,8
2005	6,3	107,3	91,4	48,2	7,7
2010	7,3	100,4	86,8	49,9	6,8
2015	7,6	93,7	80,6	51,6	6,8
2020	6,5	95,5	80,1	51,2	7,9
2030	4,2	115,3	91,5	46,4	11,1
2050	3,5	102,3	73,7	49,4	14,2

#### Table 6.

### Kyrgyz Republic

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	5,2	136,6	117,3	42,3	8,2
1970	5,9	173,8	156,8	36,5	6,2
1990	7,8	153,7	141,0	39,4	5,0
2000	7,3	149,5	135,7	40,1	5,5
2005	7,5	137,6	124,2	42,1	5,6
2010	9,6	131,4	120,9	43,2	4,5
2015	10,6	118,4	108,9	45,8	4,3
2020	10,0	112,4	102,4	47,1	4,7
2030	6,3	118,9	103,1	45,7	7,2
2050	4,9	101,1	80,8	49,7	10,1

#### Republic of Latvia

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	4,6	113,5	91,9	46,9	10,1
1970	4,4	90,5	67,6	52,5	12,0
1990	4,5	88,8	66,4	53,0	11,9
2000	3,5	88,9	60,6	52,9	15,0
2005	3,1	89,4	57,5	52,8	16,9
2010	3,0	86,2	52,3	53,7	18,2
2015	2,8	82,5	46,9	54,8	19,5
2020	2,6	83,1	45,3	54,6	20,7
2030	1,9	106,7	55,1	48,4	25,0
2050	1,7	110,4	51,9	47,5	27,8

Table 8.

### Republic of Lithuania

Year	Potential	Load factor, %	Youth load factor,		Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	4,7	124,1	103,0	44,6	9,4
1970	4,8	107,2	86,2	48,3	10,2
1990	4,7	94,0	72,9	51,6	10,9
2000	3,7	92,6	65,8	51,9	13,9
2005	3,3	91,0	60,4	52,4	16,0
2010	3,1	87,3	55,0	53,4	17,3
2015	2,9	85,6	50,9	53,9	18,7
2020	2,6	83,5	45,6	54,5	20,6
2030	1,8	108,2	53,3	48,0	26,4
2050	1,6	112,8	51,1	47,0	29,0

Table 9.

#### Republic of Moldova

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	5,8	122,0	104,8	45,1	7,7
1970	7,2	120,6	106,6	45,3	6,3
1990	6,0	102,9	86,0	49,3	8,3
2000	5,2	103,7	84,5	49,1	9,4
2005	5,2	92,5	73,4	52,0	9,9
2010	5,4	81,4	63,0	55,1	10,2
2015	6,0	66,6	49,9	60,0	10,1
2020	4,9	65,0	44,3	60,6	12,5
2030	3,4	73,3	44,0	57,7	17,0
2050	2,4	82,0	40,1	54,9	23,0

#### **Russian Federation**

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25–64 years, %	older, %
1950	9,0	129,3	118,3	43,6	4,8
1970	6,3	105,0	89,2	48,8	7,7
1990	5,2	86,9	67,6	53,5	10,3
2000	4,3	86,6	63,4	53,6	12,4
2005	3,9	85,2	59,6	54,0	13,8
2010	4,4	75,3	52,3	57,1	13,1
2015	4,3	69,9	46,8	58,9	13,6
2020	3,7	76,2	48,9	56,7	15,5
2030	2,6	97,1	58,5	50,7	19,6
2050	2,2	103,0	56,6	49,3	22,9

Table 11.

### Republic of Tajikistan

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	9,2	150,2	139,3	40,0	4,4
1970	6,6	197,9	182,8	33,6	5,1
1990	8,8	197,7	186,3	33,6	3,8
2000	9,4	195,9	185,2	33,8	3,6
2005	9,3	181,9	171,2	35,5	3,8
2010	11,7	159,8	151,2	38,5	3,3
2015	14,0	142,7	135,5	41,2	2,9
2020	13,3	136,4	128,9	42,3	3,2
2030	8,3	138,5	126,4	41,9	5,1
2050	6,1	119,9	103,4	45,5	7,5

#### Table 12.

#### Turkmenistan

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	7,0	142,7	128,5	41,2	5,9
1970	7,4	191,6	178,0	34,3	4,7
1990	9,6	176,3	165,8	36,2	3,8
2000	9,2	153,9	143,0	39,4	4,3
2005	9,0	140,8	129,7	41,5	4,6
2010	10,8	123,9	114,6	44,7	4,1
2015	11,6	112,1	103,5	47,1	4,1
2020	10,2	105,1	95,3	48,8	4,8
2030	6,8	107,5	92,8	48,2	7,1
2050	4,9	93,7	73,2	51,6	10,6

### Republic of Uzbekistan

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25–64 years, %	older, %
1950	7,1	139,9	125,7	41,7	5,9
1970	5,6	199,0	181,3	33,5	5,9
1990	8,8	176,4	165,0	36,2	4,1
2000	8,3	161,9	149,8	38,2	4,6
2005	8,4	144,8	133,0	40,9	4,8
2010	9,8	125,7	115,5	44,3	4,5
2015	11,9	107,3	98,9	48,2	4,1
2020	10,6	97,9	88,5	50,5	4,8
2030	6,7	97,5	82,6	50,6	7,6
2050	4,4	87,4	64,6	53,4	12,2

Table 14.

#### Ukraine

Year	Potential	Load factor, %	Youth load factor,	Share of	Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25-64 years, %	older, %
1950	6,1	115,4	99,0	46,4	7,6
1970	5,4	98,4	80,0	50,4	9,3
1990	4,4	87,9	65,4	53,2	12,0
2000	3,9	85,3	59,7	54,0	13,8
2005	3,4	84,7	55,4	54,1	15,9
2010	3,6	77,7	49,8	56,3	15,7
2015	3,7	72,0	45,0	58,2	15,7
2020	3,4	73,5	44,1	57,6	17,0
2030	2,7	84,4	47,5	54,2	20,0
2050	2,0	97,1	46,8	50,7	25,5

#### Table 15.

#### Republic of Estonia

Year	Potential	Load factor, %	Youth load factor,		Share of the
	support		%	population aged	elderly, 65 and
	coefficient			25–64 years, %	older, %
1950	4,4	116,2	93,3	46,2	10,6
1970	4,4	95,2	72,2	51,2	11,8
1990	4,5	90,8	68,5	52,4	11,7
2000	3,5	88,5	60,2	53,1	15,0
2005	3,2	88,0	56,5	53,2	16,8
2010	3,1	85,4	52,9	54,0	17,5
2015	2,9	82,4	48,1	54,8	18,8
2020	2,7	85,0	47,3	54,1	20,4
2030	2,1	100,2	53,1	50,0	23,6
2050	1,7	111,0	50,3	47,4	28,7

#### **ACCEPTED ABBREVIATIONS**

GDP – gross domestic product

WHO - World Health Organization

IDPs – internally displaced persons

EEC - Eurasian Economic Commission

EAEU - Eurasian Economic Union

ENP - European Neighbourhood Policy

EU – European Union

UNECE - United Nations Economic Commission for Europe

HDI - Human Development Index

MID - Ministry of Foreign Affairs

MVD – Ministry of Internal Affairs

IOM – International Organization for Migration

ILO - International Labour Organization

NATO – North Atlantic Alliance

NGOs – non-governmental organizations

OSCE - Organization for Security and Co-operation in Europe

UN - United Nations

PMR - Pridnestrovian Moldavian Republic

Rosstat - Federal State Statistics Service

RSFSR - Russian Soviet Federative Socialist Republic

RF - Russian Federation

TFR – total fertility rate

CIS - Commonwealth of Independent States

ALE – average life expectancy

SSR - Soviet Socialist Republic

USSR - Union of Soviet Socialist Republics

UNHCR - Office of the United Nations High Commissioner for Refugees

FL - Federal Law

FMS – Federal Migration Service

UNICEF – UN Children's Fund

UNFPA - United Nations Population Fund

CB – Central Bank

#### Scientific publication

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