Migration in the global world: economical and demographical roles and prospects for Russia

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2011

LOMONOSOV MOSCOW STATE UNIVERSITY

FACUTY OF ECONOMICS

Center for Population Studies

Chair of Population

INTERNATIONAL MIGRATION OF POPULATION:

CHALLENGES OF GLOBALIZATION

Scientific Series
'International Migration of Population:
Russia and Contemporary World'

Volume 24

Moscow
2011

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MIGRATION IN THE GLOBAL WORLD: ECONOMICAL AND DEMOGRAPHICAL ROLES AND PROSPECTS FOR RUSSIA

In accordance with the main objective for demographic development declared in the Demographic Policy Concept of the Russian Federation until 2025, population decline is to be compensated by net migration (Demographic Policy Concept 2007).

However, not every goal is achievable for the migration policy. As Russia is part-and-parcel of the global world, it is influenced by certain principles, which determine scale and direction of the world migration flows.

Additionally, according to Alfred Sauvy, the size of population is important for despotic regimes striving for strengthening of the power, while for a democratic country living standard of population will be most important (Sauvy 1977, v.1, p. 31).

Taking the above considerations into account the author of this paper has taken to the econometric analysis of the ROSSTAT and World Bank data to answer the following questions: (1) Provided that age structure of the population is influenced by migration, can migration influence upon living standards too, and to what extend? (2) What factors determine the volumes and direction of the world migration flows? (3) For what reasons net migration to Russia from various post-Soviet countries is that different? (4) What are the prospects of net migration to Russia? (5) What kind of migration policy does Russia need?

1. Influence of migration upon living standards improvement via influence upon the age structure of population

It is well known that younger labour-age people are the most inclined to migration. With the population ageing trend, this feature of the migration flows is getting more and more important.

The below equation shows the influence produced by the age structure of population upon growth of living standards (GLS) in the world countries:

$$\text{GLS}_{C,T} = b_0 + b_1 * \text{REDWAL}_S + b_2 * P_M(15\text{-}39) + b_3 * P_M(40\text{-}64) + \varepsilon_{C,T}, \qquad (1)$$

where $\text{GLS}_{C,T}$ – *growth of living standards* (i.e. GDP per capita growth, measured in constant price terms), *%* for 19 years, in the country *C* for the period of time *T* (totally, 7 periods: 1961-1979, 1966-1984, 1971-1989, 1976-1994, 1981-1999, 1986-2004 and 1991-2009);

REDWAL_S – *rate of economic development to the world average level*, i. e. GDP per capita rate at purchasing-power parity in the country to the world average level, *%*; at the beginning of the period (lettered with *S*);

$P_M(15\text{-}39)$ и $P_M(40\text{-}64)$ – average share of the specified age group of the population, *%*, within the period (lettered with *M*);

b_k – variable held constant;

$\varepsilon_{C,T}$ – random quantity, *the balance of equation*.

The Table 1 shows b_k and other factors of the equation (1) for two groups of observations satisfying the following conditions:

A) Migration balance is positive for the current period: $MB_T>0$; share of population of the 65+ age group at the beginning of period is bounded below: $P_S(65+)>3,5\%$; $20<REDWAL<450$;

B) $P_S(65+)>3,5\%$; Migration balance is positive for a long time: $MB_T>0$; $MB_{T-5}>0$; $MB_{T-10}>0$; $MB_{T-15}>0$; $MB_{T-20}>0$; $REDWAL>20$.

Table 1

Factors b_k and other parameters of the Model 1 for two groups of observations

Sample	A		B	
Factors	b_k	Std. Error [1]	b_k	Std. Error
Constant	–317,5	48,3	–418,7	54,9
REDWAL	–0,191	0,032	–0,035	0,033
$P_M(15-39)$	8,18	1,06	9,66	1,12
$P_M(40-64)$	4,46	0,74	3,99	0,82
Other parameters of the model and sample				
Number of observations	201		71	
R^2	0,336		0,553	
GLS, mean	60,5		48,8	
REDWAL, mean	247,3		306,2	
$P_S(65+)$, mean	9,50		10,83	

Estimated on the basis of World Bank data

Note: 1) *standard error* – standard deviation of the coefficient as a random variable

The sampling A does not include the most rich and most poor countries, and it is closer to Russia in terms of the mean parameters $P_S(65+)$ and REDWAL; age structure of population and the current level of economic development determine approximately one third of the variation of the dependent variable ($R^2=0,34$). Also, the REDWAL provides a considerable negative influence – it is easier to run after, than to go ahead.

Rich and aging countries being attractive for migrants for a long time predominate in the sampling *B*, and age structure of population here explains approx. 55% of the GLS variation, as the other risks influence was minimal in these countries during the given periods of time.

The probable increase in living standards in Russia for the future prospect may be calculated using the Model 1.A parameters and the average variant of the ROSSTAT demographic prognosis till 2030 (Table 2).

Table 2

Probable increase in living standards in Russia, %

Period	Probable increase in living standards, %				
	Mean	Spread of values with probability 50%		Spread of values with probability 95%	
		Min	Max	min	max
2010-2028, for the 19 years	83,4	57,2	109,6	6,4	160,5
Annual average:					
2010-2028	3,24	2,41	3,97	0,33	5,17
2010-2014	3,96	3,23	4,61	1,48	5,69

2015-2019	3,29	2,46	4,01	0,39	5,20
2020-2024	2,63	1,69	3,43	-0,76	4,73
2025-2029	2,14	1,11	3,01	-1,68	4,40

A considerable spread of the probable values for GLS in the Table is connected with the fact that increase in living standards is influenced not only by the variables included into equation 1, but also by many other factors. Among those are energy costs, peculiarities of taxation, level of corruption, and political risks. Thus, if the GDP per capita in constant prices will increase less than by 80% between 2010 and 2028, it will not be a result of poor demographic situation, but, rather, ineffective public administration system.

Nevertheless, the percentage of the labour-age population in Russia in 2011-2028 will be going down, and this may bring about a lower growth rate of living standards. Many other countries with low birth rate will be in a similar situation. Globally, percentage of children aged 0-14 in 2009 was lower in comparison with 2000. It means the number of youth in the world will not show any growth in the 2020s. Consequently, the global competition for the labor resources will gain strength.

An actual question within this context is: Could the net migration in Russia exceed the figures built into the ROSSTAT average forecast? And what will it be depending upon? To find an answer, let us consider the factors influencing volumes and directions of the world migration flows.

2. Net migration factors in the countries of the world

Migration balance in a certain country may be whether positive, or negative, depending first of all upon two following factors: comparative level of economic development, and economic growth:

$$\text{NMR}_{C,T} = -57,6 + 0,216 * \text{REDWAL}_M + 6,65 * \text{EG}_M + \varepsilon_{C,T}; \quad R^2 = 0,37; \quad (2)$$
$$\phantom{\text{NMR}_{C,T} = -57,6 +} (4,3) \quad (0,015) \phantom{* \text{REDWAL}_M +} (0,93)$$

where $\text{NMR}_{C,T}$ – *net migration rate* in a country C for the period of time T (in general, 3 periods of time: 1981-1995, 1986-2000 and 1991-2005) per 10,000 population annually; 163 countries, 421 observations;

EG_M – economic growth, %, annual average for the period;

the digits in brackets under the coefficients are – standard errors.

Net migration rate in the countries with positive migration balance (80 countries, 178 observations) for the same above-mentioned 3 periods of time is for 40% determined by factors in the empirically found formula:\

$$\text{NMR}_{C,T} = 62,9 + 0,183 * \text{REDWAL}_M + 3,92 * \text{EG}_M -$$
$$\phantom{\text{NMR}_{C,T} =} (13,1) \quad (0,019) \phantom{* \text{REDWAL}_M +} (1,24)$$

$$-3,17 * P_M(40\text{-}64) -1,64 * U - 0,132 * P_M + \varepsilon_{C,T}, \quad (3)$$
$$ (0,56) \phantom{P_M(40\text{-}64)} (0,56) \quad (0,075)$$

where U – change in the percent share of the urban population for the period; it enters into the equation with the minus sign, because in the countries with completed urbanization the influx of unskilled foreign workers is required (Massey, 2007, pp. 149-152);

P_M – the country population size, average for the period, M people. Influence is negative, as the countries with numerous populations have more possibilities to satisfy manpower demand due to the internal migration.

Share of the people aged 40-64 also enters into the equation with negative sign, as labour migrants partially return home after work.

Thus, REDWAL provides the most significant influence upon migratory attractiveness of a country, as compared with all other factors of the Model (3). NMR in the countries with a negative migration balance (108 countries, 239 observations) is determined, for 45%, by factors in the following equation:

$$\text{NMR}_{C,T} = 80{,}4 + 0{,}163*\text{REDWAL}_M + 6{,}49*\text{EG}_M -$$
$$(38{,}1) \quad (0{,}038) \quad\quad (0{,}95)$$

$$-3{,}65 * P_M(15\text{-}39) + 12{,}63* \text{LN}(P_M) - 7{,}86* \text{LN}(PD_M) + \varepsilon_{C,T}, \quad\quad (4)$$
$$(0{,}97) \quad\quad (1{,}22) \quad\quad (1{,}81)$$

where PD_M – population density in the country of origin, average for the period, people per km^2. The variable enters into the equation with minus sign, i.e. high density of population is one of the ejecting factors. Nevertheless, lower density of population is not a factor of attraction for migrants.

Population size, on the contrary, enters into the equation (4) with positive sign: the higher the population size, the lower migration loss is. It may be explained by the fact the countries with large size of population have more opportunities to improve their living standards due to the internal migration. The share of young labour-age people is with minus sign in the equation (4), as tendency for migration is higher among the younger aged people.

If net migration to Russia between 1991-2010 fits to the formula 2, it will be negative (see Table 3). In reality Russia has received a large inflow of migrants due to wide repatriation followed by labour migration from post-Soviet countries. In addition, outflow from the country is restrained by the possibility of people to improve their own living conditions via internal migration.

Table 3
Actual net migration to Russia compared to the calculations by Model 2

Period	Net migration to Russia		
	Calculated by Model 2		Actual, thous. people for the period
	CMG	thous. people for the period	
1991-1995	-84,8	-6228	2560,3
1996-2000	-24,3	-1774	2088,5
2001-2005	9,05	654	827,2
2006-2010	-3,39	-241	1075,5
2011-2015*	1,03	73	…
2016-2020*	-0,17	-12	…
2021-2025*	-2,23	-153	…
2026-2030*	-4,19	-281	…

* where economic growth meets the mean values from the Table 2.

As REDWAL in Russia is not so high in comparison with other countries receiving migrants, Russia in the future cannot expect big volumes of net migration from the countries other than post-Soviet ones. China may be an only exception.

3. Migration gain prospects in Russia

There are three indices characterizing the results of international migration of population in Russia, see Table 4:

1) Official data published by ROSSTAT; according to these data the main migration donors for Russia are the 11 post-Soviet countries, and China;

2) The balance of foreign citizens crossing the Russian borders (this index is the most changeable and sensitive to the economic situation);

3) The number of foreign citizens legally working in Russia.

Table 4

International migration to Russia: Results, thous. people

| Country of origin, or citizenship	Balance of migration (by source of data) per a year				Legal work of foreign citizens		
	RF Frontier services *		ROSSTAT				
	2007-2008	2009	2007-2009	2010	2008	2009	2010
Total	**1491,5**	**371,3**	**243,2**	**158,1**	**2425,9**	**2223,6**	**1640,8**
Uzbekistan	235,2	-111,8	45,5	23,3	642,7	666,3	511,5
Ukraine	526,3	427,5	40,4	21,2	245,3	205,3	167,3
Kazakhstan	175,2	84,5	31,4	20,5	10,4	11,2	8,3
Kyrgyz Rep.	96,2	21,6	23,3	20,3	184,6	156,1	117,7
Armenia	15,6	8,2	33,0	19,2	100,1	82,0	59,8
Tajikistan	115,8	-68,1	21,1	17,5	391,4	359,2	268,6
Azerbaijan	28,3	-27,4	21,1	13,4	76,3	60,7	40,3
Moldova	132,1	42,2	14,7	11,2	122,0	101,9	72,2
Georgia	-6,2	1,3	8,4	4,8	4,2	3,2	…
Turkmenistan	6,4	-2,3	4,0	2,2	3,1	2,4	1,2
Belarus	10,9	20,4	1,9	2,0	…	…	…
China	23,8	-17,2	1,2	1,1	281,7	269,9	186,5
Vietnam	10,6	-11,5	0,8	…	95,2	97,5	46,0
Turkey	0,9	-5,6	0,3	…	130,5	77,2	45,7
Korea, Dem. Rep.	1,8	-0,1	0,07	…	34,9	37,7	36,5
Other	**118,6**	**9,6**	**-4,0**	**1,4**	**103,5**	**93**	**79,2**

Sources of data: Size and Migration of the RF Population, ROSSTAT, 2008-2010; Labour and Employment in Russia, ROSSTAT, 2009; www.gks.ru
*The RF Frontier Service.

Dynamics of all the three indices is influenced upon by circumstances of 2 kinds – (1) objective laws and (2) regulations imposed by the government. Official data on migration of population published by ROSSTAT to a considerable degree depend upon changes in the rules of statistical account, and of granting the Russian citizenship. These indices also are under influence of *temporary residence permission* quotas. Only the migrants with such permission are registered by ROSSTAT as those "arrived to Russia", however, many of them have been actually staying in the RF for more than one year. The balance of citizens of the

Ukraine, Moldova and Kazakhstan crossing the Russian border might be exaggerated (Fig. 1): because they may avoid meeting with border services on the way home, if they stayed longer than it is legally permitted. As for the citizens of other countries, this index is closer to the reality, but it depends on the possibility of legal employment in Russia. The number of legally employed foreigners depends on their net inflow, on obtaining Russian citizenship, and on the State-established quotas for attracting foreign manpower; excluding the citizens of Belarus working on the equal terms with the Russians (but the number of them is unknown). Thus, net migration only from Belarus has increased in 2009, in accordance with the data of Frontier Service (FS).

Fig. 1. Balance of foreign citizens crossing the border of Russian Federation
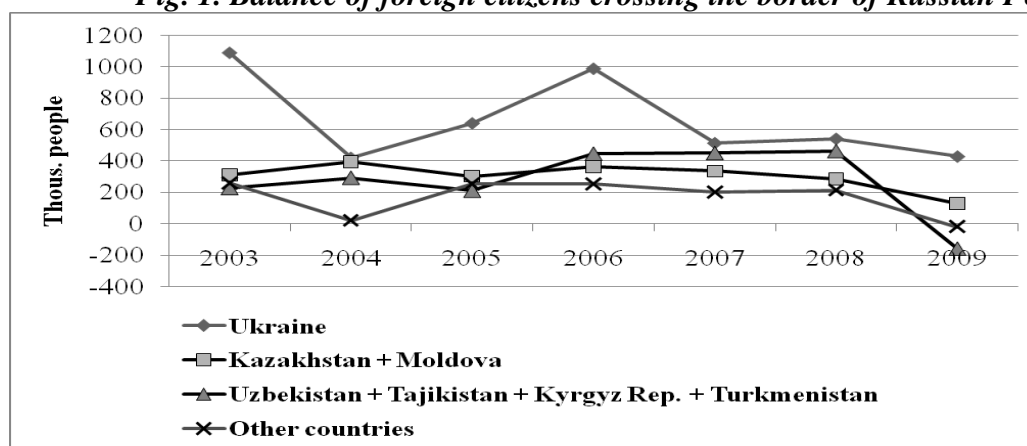
Source: Size and Migration of the RF population, Moscow, ROSSTAT, 2004-2010.

On the whole, the last data for the three indices are lower, as compared to the previous years. In addition to the economic crisis and restrictions from the part of the State, this decline has been caused by certain objective laws. These laws have been revealed by the author with the help of econometric analysis of factors of net migration from the post-Soviet countries (Lifshits 2010, 2011).

In the 1990-s, the major factors of the migration gain in Russia were as follows: (1) the share of non-titular ethnic group of population and (2) economic collapse in the countries of origin; most of the migrants were returning home at that time. In the 2000s, labour migration steps up and as a consequence, the influence of the share of youth in the population of countries of origin and ethnic-migration nets in Russia has increased.

Influence of the economic growth in the countries of origin remains high, that is why growth of net migration to Russia in 2008-2009 has been caused, first of all, by the economic crisis in the number of post-Soviet countries. Influence of the ethnic-migration nets, on the contrary, starts reducing as the cumulative net migration from certain post-Soviet countries (Kazakhstan, Armenia, Georgia, Kyrgyzstan) has already run a great value in comparison with size of population of the countries of origin.

Net migration from several countries is reducing (Azerbaijan, Kazakhstan, Turkmenistan) as living standards there grow faster than in Russia (Fig. 2).

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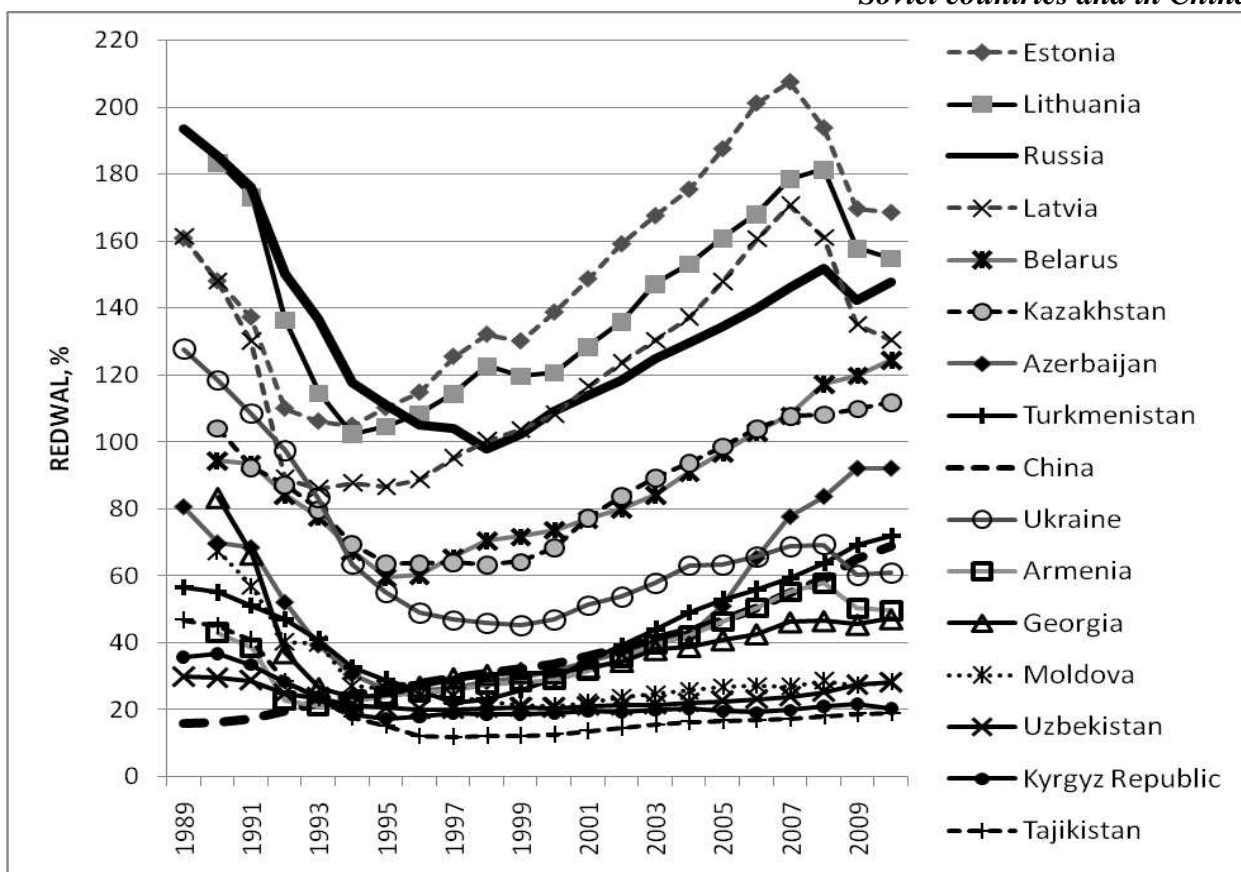
Sources: World Bank, IMF.

Demographic limitations will also provide negative influence upon the dynamics of net migration to Russia, as the number of youth in the countries of origin will go down (Fig. 3 and 4), and it has already started to reduce in some countries (Ukraine, Georgia, Moldova). One more fact to be taken into account - of late, the Ukraine, Belarus, Kazakhstan, Azerbaijan, and, probably, Turkmenistan, are the post-Soviet countries with a positive migration balance as well.

Fig. 3. Number of children of 0-14 in the 12 post-Soviet countries, 1960-2009.
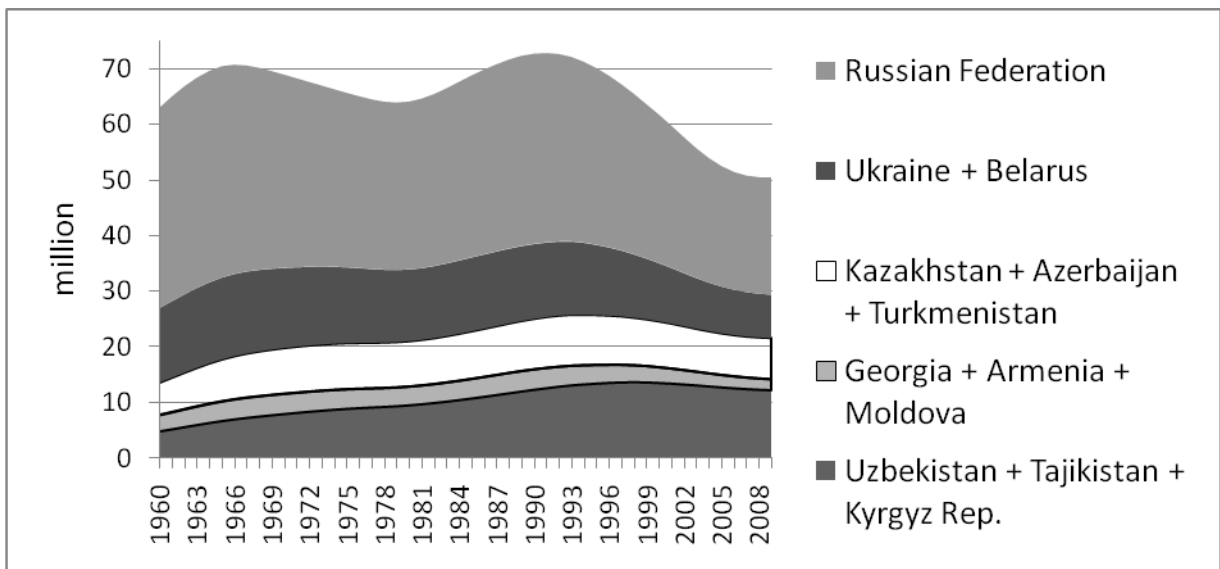
Source of data: World Bank, 2010.

Fig. 4. Number of people aged 15-44, born in the 12 post-Soviet countries.
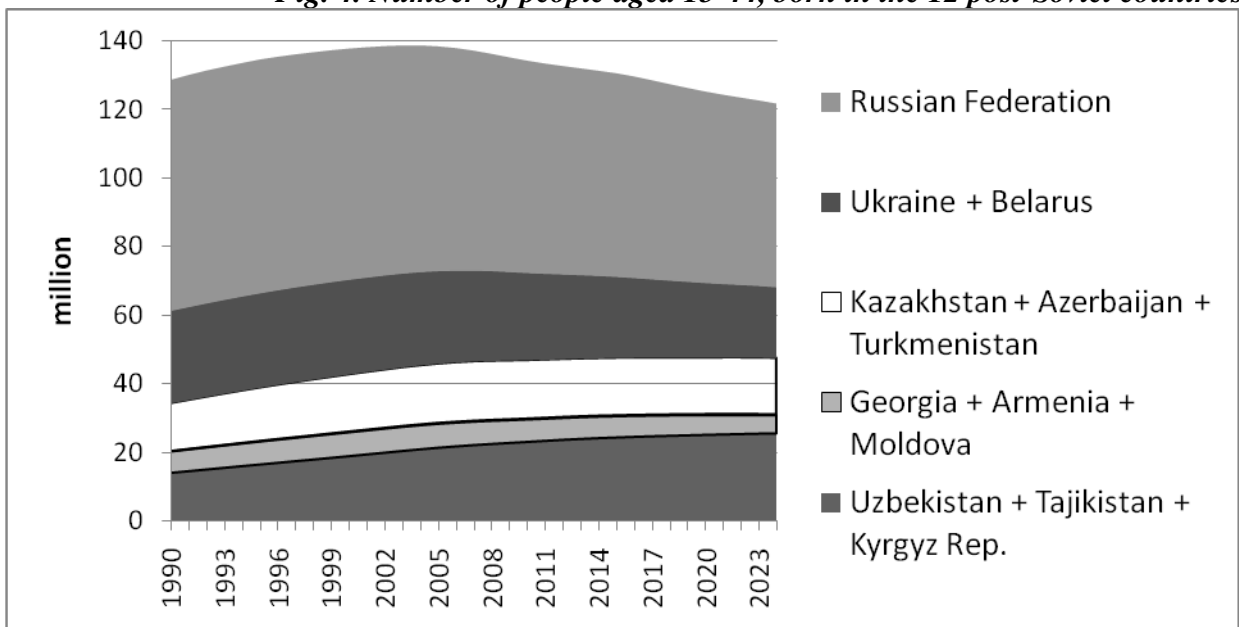
Calculated on the basis of World Bank data.

Econometric analysis has revealed a considerable influence upon labour migration of the difference between the death rates of adults, especially men, in the country of origin and in Russia. In this respect, the situation in Russia is very complicated, and the most vulnerable category of population (except homeless) is temporary labour migrants, who perish most often for various reasons, like violence, on-the-job traumatism, poor living conditions and lack of medical care.

Factor of ageing of population in the future may inhibit the growth of net migration: some part of the older-aged labour migrants will want to go home having finished their work in Russia, even those who has obtained Russian citizenship.

Visa system negatively influences upon the dynamics of net migration from Turkmenistan and Georgia; and from Uzbekistan – the migrants have certain problems after returning home if they have obtained Russian citizenship (as the

Uzbek migrants say). This circumstance proves again, that most migrants do not want to stay in Russia forever.

Thus, there are no factors able to promote increase of the migration gain of the resident population of Russia through the exchange with post-Soviet countries, considered in a long-term perspective.

For the last 20 years migration links of Russia with countries outside the post-Soviet territory have been also developing. But, Russia is only one direction for migration, and not the most attractive one. That is why other countries are unable to compensate for the reduced net migration from post-Soviet countries. China may be an only possible exception.

Dynamics of migration from China has shown a weak and unstable tendency for growth.

One of the deterring circumstances is migration policy of Russia, caused by the concerns of the territorial integrity of the country. But there are other deterring factors as well. Firstly, standard of living in China grows faster than in Russia. Secondly, the number of Chinese youth aged 15-39 goes down since 2006. Probably, for this reason the aggregate net migration outflow from China in the second half of the 2000s was less than in the first half, amounted at 1,731,080; while in the first half of the 2000s it was 2,058,276 (according to WB data). And it is expected that in 2012 number of population aged 35-49 will start to decrease in China. Thirdly, there are great opportunities for internal migration in China. Fourthly, Russia is not among the most attractive directions for migration, from the point of view of quality of life, especially for the youth. That is why people aged 35-49 are currently prevailing in the migration gain from China. On the other hand, there are several factors in favour of Russia, among those geographic neighborhood, various rates of men and women at the matrimonial market of China and Russia, and emerged migration ties.

5. Summary for policy making

If migration is to be considered only as a method of influence upon age structure of population, the temporary, non-resident migration will be an ideal variant of migration; the labour migrants are sui generis ever-young and non-aging community in the population of the receiving country. On the other hand, knowledge and experience play nowadays a considerable role in the world, so the competition for highly skilled migrants grows now, and Russia gives way to more developed countries.

High economic growth in Russia might improve the migration attractiveness of the country and attract an inflow of migrants (both permanent and temporary ones). This, in turn, will stimulate growth of living standards. At the same time, quite an opposite situation is equally possible as well. If the state will again restrict legal employment of the labour migrants, like in 2009-2010, soon it will lead to intensified reduction of the percentage of population aged 15-64, to negatively influence upon growth of living standards. Then Russia will quickly lose its migration attractiveness, and this vicious circle may result in a complicated economic situation, opening way to the political earthquakes.

The upcoming reduction in size of labour-age population shall not obligatory result in serious problems, as the competitive market economy is characterized by a higher adaptive capability. But, unfortunately, high level of corruption in Russia and ineffective judiciary system create noncompetitive market environment. This is the main threat to the future of Russia. It is necessary to start with introducing honest elections in the country – it is known, the best antidote for corruption is replacement of political authority, alternativeness as a matter of principle.

The regions shall be given the right to make a final decision (in the local legislative assemblies, via open discussion) regarding following issues: how many and what kind of migrants could be received and attracted to work in the region; on what terms; and, could only the migrants with permits for work in this region be able to work here. The level of xenophobia will decrease then, and migration policy will become a locomotive of movement towards democracy and developed civil society.

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