The Classification of the Regions of the Russian Federation as the Basis of Internal Migration Flow Management

E I Yangirova¹, A V Yangirov², S I Nasyrova³

¹Bashkir State University
²Academy of Sciences of the Republic of Bashkortostan
³Bashkir State University

E-mail: beglovaelena75@mail.ru

Abstract. The impact of migration processes on the sustainability of social and economic development of the constituents of the Russian Federation is on the increase nowadays. Besides, due to their uneven development, the proper management of labor migration can help unlock the potential of their populations and thus improve the situation in the regions of Russia. This article deals with the necessity of forming a uniform migration policy by grouping the constituents of the Russian Federation according to their migration dynamics in order to level out migrational, social and economic differentiation in Russia.

During the research, certain region categories were set according to their migration-based population increase/and decrease indices through the analysis of migrational exchange and a rating was drawn for the constituents of the Russian Federation. It was found that the group of regions with a migrational increase in population consists of only a few constituents and this number is decreasing. The migration-based population decrease group tends to expand, which allowed dividing it into decrease rate-based subgroups (low, medium, and high).

The results achieved helped identify the top priority aspects of the formation of a uniform migration policy at the region level that would promote efficient labor resource redistribution across territories: increasing life expectancy, decreasing mortality rates among people of active working age, increasing the level of wages in the regions of Russia, promoting affordability of housing, improving secondary vocational education, reducing unemployment levels, increasing citizens’ welfare and reducing the poverty level, improving the healthcare system.

1. Introduction

In the existing situation, due to the uneven development of the regions of the Russian Federation, migration directly influences the economy of regions and the changes in social and economic conditions of economic agents. The study of population migration processes is of special importance because the proper management of migration mobility helps economic agents fulfill their own potential by improving the redistribution of labor resources over the territories.

The study of the population’s migration activities is rationalized in a large number of works. The scientific foundation for this study can be found in the works of indigenous Russian and foreign researchers, such as T. I. Zaslavskaya, G. S. Vechkanov, L. L. Rybakovskiy, O. V. Skripko, V. G. Kostakov, E. G. Ravenstein, G. K. Zipf, S. A. Stouffer, E. Ravenstein, E. Лит, В. Алонсо, Dalbert, Umlauft, Balli and Tiezzi, Allen, Hung, Leiser, Fisher, Montalto, et al.
Nowadays, the urge to improve one’s material wellness drives labor-active citizens to move to more economically developed areas, because the wages for the same skills and competences in different regions vary significantly. The competition between regions, striving to attract more relevant labor resources has been escalating over recent years, and lower migration attractiveness of some territories leads to the increasing migration attractiveness of the other. The migration of populations in modern-day Russia is the result of the social and economic disproportions present. Thus, it seems relevant to identify more and less attractive territories in terms of migration activities.

The main hypothesis of this research is that grouping the regions of Russia according to their migration dynamics will help identify the specificities of economic behavior of the populations of the regions of the Russian Federation and thus the aspects of a migration policy striving to level out inter-region migration differentiation and decrease social and economic differentiation in Russia as well.

2. Main results and discussion

Inter-region migration is an important factor in the demographic development of the regions of Russia. The volume, the rates and the features of the populace migration between regions have a large influence on qualitative and quantitative indices of a region’s demographic potential, the population’s size, age and gender composition, marital and family situation, as well as the region’s labor and economic capacities.

All Russian regions can be divided into two categories according to the specificities of their inter-region exchange behavior. 1) regions attracting people and showing a migration-based increase in population; 2) regions with a significant migration-based decrease in population.

The first group, featuring regions with a migration-based increase in population, is quite small and is shrinking further (from 2012-2014 to 2015-2017 their average number decreased from 17 to 14).

Table 1. The rating of regions with a migration-based increase in population (the average for three years per 10,000 people).

| Place | Region of Russia           | Average, 2012-2014 | Place | Region of Russia        | Average, 2015-2017 |
|-------|---------------------------|--------------------|-------|-------------------------|-------------------|
| 1.    | Moskovskaya oblast        | 122.6              | 1.    | Sevastopol              | 186.0             |
| 2.    | St. Petersburg            | 105.4              | 2.    | Leningradskaya oblast   | 106.7             |
| 3.    | Leningradskaya oblast     | 83.3               | 3.    | Moskovskaya oblast      | 98.6              |
| 4.    | Krasnodar territory       | 77.2               | 4.    | St. Petersburg          | 89.9              |
| 5.    | Republic of Ingushetia    | 67.8               | 5.    | Krasnodar territory     | 67.5              |
| 6.    | Moscow                    | 67.4               | 6.    | Moscow                  | 59.4              |
| 7.    | Kaliningradskaya oblast   | 35.8               | 7.    | Kaliningradskaya oblast | 36.5              |
| 8.    | Novosibirskaya oblast     | 35.5               | 8.    | Republic of Ingushetia  | 31.3              |
| 9.    | Yaroslavskaya oblast      | 22.6               | 9.    | Republic of Adygeya     | 20.8              |
| 10.   | Republic of Adygeya       | 21.7               | 10.   | Yaroslavskaya oblast    | 10.4              |
| 11.   | Belgorodskaya oblast      | 16.6               | 11.   | Novosibirskaya oblast   | 9.0               |
| 12.   | Tomskaya oblast           | 12.0               | 12.   | Voronezhskaya oblast    | 8.9               |
| 13.   | Voronezhskaya oblast      | 9.7                | 13.   | Republic of Tatarstan   | 5.3               |
| 14.   | Republic of Tatarstan     | 9.0                | 14.   | Republic of Crimea      | 4.0               |
| 15.   | Sverdlovskaya oblast      | 5.4                |       |                         |                   |
| 16.   | Nizhegorodskaya oblast    | 2.7                |       |                         |                   |
| 17.   | Chelyabinskaya oblast     | 0.9                |       |                         |                   |
These regions are Federal-level recipients (i.e. attracting people from all over the country). These regions include Moscow and Moskovskaya oblast, St. Petersburg and Leningradskaya oblast, the Krasnodar territory and the Republic of Adygeya; over the last three years, they also included the Republic of Crimea and Sevastopol.

Local recipients, attracting people from the neighbor-regions are represented by Kaliningradskaya oblast, the Republic of Ingushetia, Novosibirskaya oblast, Yaroslavskaya oblast, the Republic of Tatarstan, etc.

The second group, comprising regions with a migration-based decrease in population, contains over 80% of all constituents of the Russian Federation. They can be divided into three subcategories, with low, medium and high migration-based population decrease.

The average number of regions with a low migration-based decrease in population (up to -25 people per 10,000) shows a little increase: from 26 in 2012-2014 to 29 in 2015-2017.

**Table 2.** The rating of regions with a low migration-based decrease in population (the average for three years per 10,000 people).

| Place | Region of Russia | Average, 2012-2014 | Place | Region of Russia | Average, 2015-2017 |
|-------|-----------------|------------------|-------|-----------------|------------------|
| 1.    | Ryazanskaya oblast | -1.4             | 1.    | Republic of Khakassia | -0.7             |
| 2.    | Samarskaya oblast  | -1.7             | 2.    | Tomskaya oblast  | -5.2             |
| 3.    | Rostovskaya oblast | -5.9             | 3.    | Belgorodskaya oblast | -5.4             |
| 4.    | Kurskaya oblast   | -10.1            | 4.    | Nizhegorodskaya oblast | -6.0             |
| 5.    | Khanty-Mansiysk Autonomous District | -12.1         | 5.    | Ryazanskaya oblast | -9.6             |
|       |                  |                  | 6.    | Kirovskaya oblast | -11.0            |
| 12.   | Ivanovskaya oblast | -17.8            | 12.   | Chelyabinskaya oblast | -13.3            |
| 13.   | Saratovskaya oblast | -19.8            | 13.   | Perm territory | -18.1            |
| 14.   | Vladimirskaya oblast | -20.5          | 14.   | Stavropol territory | -18.5            |
| 15.   | Pskovskaya oblast  | -20.8            | 15.   | Chechen Republic | -18.7            |
| 16.   | Novgorodskaya oblast | -21.1          | 16.   | Pskovskaya oblast | -18.8            |
| 17.   | Kaluzhskaya oblast | -22.3            | 17.   | Republic of Bashkortostan | -19.1          |
| 18.   | Tulskaya oblast    | -23.2            | 18.   | Lipetskaya oblast | -21.7            |
| 19.   | Republic of Bashkortostan | -24.5     | 19.   | Kaluzhskaya oblast | -21.9            |
|       |                  |                  | 26.   | Novgorodskaya oblast | -24.2            |
| 27.   | Khanty-Mansiysk Autonomous District | -24.5     | 27.   | Republic of Altai | -22.7            |
| 28.   | Kirovskaya oblast  | -24.8            | 28.   | Primorsky territory | -25.3            |
| 29.   |                  |                  | 29.   |                 |                  |

Regions with medium population decrease due to inter-region migration (between -25 and -50 people per 10,000) comprised in 2015-2017 a group of 27 constituents of the Russian Federation.
Their number also grew by 4 as compared with the data of 2012-2014. They include the Urals-Volga regions (Ulyanovskaya oblast, Saratovskaya oblast, and Orenburgskaya oblast); Central Russia regions (Bryanskaya oblast, Smolenskaya oblast, and Orlovskaya oblast); and Caucasian regions (the Republic of Dagestan, the Karachayevo-Cherkessian Republic, etc.).

Regions with a high migration-based decrease in population can be divided into two subgroups: with high (-50 to -100 people per 10,000) and extreme (over -100 people per 10,000) population decrease. Their numbers over the years decreased from 21 in 2012-2014 to 14 in 2015-2017. They mostly include the regions of the Far East and the North of Russia, and Siberia (the Yamalo-Nenets Autonomous District, the Republic of Sakha (Yakutia), Murmanskaya oblast and Arkhangelskaya oblast, the Kamchatka territory, etc.), and some of the Urals-Volga regions, such as the Republic of Mordovia and Kurganskaya oblast.

These trends in inter-regional exchange in Russia are set out in the Concept of migration policy of the Russian Federation for 2019-2025. “In 2012–2017, a general trend remained towards the migration of the population to the country's Central, North-Western, and South-Western regions, which is a constant growth factor for the disproportion of population location. Virtually all internal migration flows are channeled to such agglomerations as Moscow and St. Petersburg, and Krasnodar territory.”

3. Suggestions

As a result of the research, it was found out that the majority of the regions of Russia have migration-based population decrease for a long time, which calls for the increased regulatory functions of the state and the implementation of a uniform comprehensive migration policy at the regional level as the basis for the more balanced development of Russian regions in the following areas:

1. Increasing life expectancy and reducing mortality rates among people in active working age. Working in this strategic area contemplates developing and implementing actions to improve labor conditions and safety, creating efficient workplaces with safe working conditions, reducing the rates of occupational diseases, as well as the risk of injuries and dying at work, developing working condition evaluation systems to identify harmful or dangerous workplace factors that influence personnel's health, improving occupational risk management by the parties of the social partnership together.

2. Increasing wage levels for personnel in the regions of the Russian Federation. To this end, it is feasible to develop modern production enterprises, implement highly effective investment project, stimulate labor productivity increase, and provide for the incremental increase of average personnel salaries taking into account their workload and the quality of their labor.

3. Increasing the affordability of housing

Social, economic, and demographic development of the regions of the Russian Federation suggests creating conditions for favorable living conditions for the indigenous population and helping them with housing; encouraging employers to consider housing options for their employees, creating legal, organizational, information, social and economic conditions for the voluntary resettlement of compatriots living outside of the Russian Federation in order for them to stay in the country, and quickly adapt to their region's social and labor relationships. The temporary accommodation for the employable citizens returning from abroad can be provided via compatriots’ sponsoring dormitories or hotels for them (for a period of up to six months), or via the reimbursement of their expenditures for rent using the regional budgeted (for a period of up to six months). Then, at the permanent residence stage, residential lots can be given out in some of the regions. The anticipated results of these actions are, among others, increasing the number of qualified specialists, encouraging compatriots to develop small and medium businesses, reducing educational migration in the regions.

4. Improving secondary vocational education in order to improve the quality of labor resources and promote their professional mobility. This aspect of the state policy includes developing an official assignment for the vocational education system, based on the requirements of the modern economic system; in particular, attention must be paid to training for engineering and trade jobs, developing integrated connections between business, education and science, creating conditions for rapid inclusion of new knowledge into the education process. The implementation of these actions will lead
to the following results: labor resources will be trained according to the demands of the economy in the regions of Russia in skilled workers in order to implement investment projects and production development plans, as well as reducing the gap between the demand and supply of labor resources in terms of professional and qualification parameters.

5. Reducing unemployment levels.
This strategic area suggests implementing a policy on promoting population’s employment at the regional level; a migration policy as a basis of the protection of the regional labor market, preventing illegal migration, developing labor resources and increasing their mobility, and promoting the employment of pre-retirement age employees through increasing their competitiveness, including the development of a list of the most relevant jobs in the region’s labor market in order to train the people of pre-retirement age; organizing vocational education, and further vocational education for the jobs that are relevant for the existing labor market in the region of Russia in question. At the same time, it is necessary to promote further development of the Government Employment Service as an efficient intermediary between employers and employees seeking work.

The anticipated results of the employment policy and the social support program for the unemployed include the reduction of unemployment and maintaining social stability, promoting people’s labor mobility, increasing the level of social support for the unemployed and improving its target orientation, creating economic and social conditions to eliminate the discrimination of the people of pre-retirement age, improving the efficiency of the Government Employment Service.

6. Increasing people’s wellbeing and reducing poverty suggest creating conditions for balanced labor market development in every region of the Russian Federation as the basis for the increase of the employable people's and their families’ income. Besides, social support must be provided to some categories of citizens (e.g. financial support for families when they have children, and systematic support for the elderly as the basis of the improvement of their quality of life). Favorable conditions must be created for families with children (actions to reduce social orphanhood, child neglect, family and child disadvantages). Social service demands must be satisfied for the people recognized as needing social services, as well as the children's demands in recreation and health improvement.

7. Improving the healthcare system (notably the supply of qualified medical personnel), Some mechanism for voluntary resettlement of the compatriots living abroad and having higher or secondary vocational medical education to the regions of the Russian Federation (e.g. helping with housing), helping them adapt and integrate socially and culturally into the social environment of the region of Russia in question, and providing social and governmental control for the resettling process and the respect of the newcomers’ rights. The implementation of such actions will help induce incoming migration of active working-age people to the regions of Russia and thus increase the number of skilled professionals in them.

4. Conclusions
This research led to the following conclusions:

1. In order to overcome the existing social and economic disproportions in the regions of Russia, stimulate internal migration and provide for sustainable demographic development, it is necessary to implement a uniform comprehensive migration policy, taking into account the inter-region exchange-based ratings of the regions of Russia.

2. The results of migrational exchange feature analysis allow dividing regions into two groups according to the migration-based population increase or decrease values: those featuring the increase and those featuring the decrease. The latter group can be classified into subgroups according to the rates of migration-based decrease in population (low, medium, and high). The numbers of regions in the extreme groups (those with population increase and those with extreme population decrease) are evidently decreasing, while low- and medium-decrease groups are growing.

3. According to the indicated featured of inter-regional exchange, a number of top-priority strategic areas for the sustainable development of the regions of the Russian Federation were suggested: increasing life expectancy, wage levels, and housing affordability; improving secondary vocational
education; reducing unemployment; increasing citizens’ wellbeing and reducing poverty, improving healthcare.

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