THE PHENOMENON OF SPATIAL-TEMPORARY CHANGES OF WORKFORCE MOBILITY IN THE REGIONAL LABOR MARKET

^aIRINA GRIGORIEVNA MALGANOVA, ^bDZHAMILYA S. SARALINOVA, ^cDIBA MAZHITOVNA DOKHKILGOVA

^aCandidate of Sciences, Assistant Professor of Geography and Cartography Department, Institute of Economics, Management and Finance, Kazan Federal University. ID Scopus 56347447400, ORCID ID 0000-0002-7313-9404, Kremlyovskaya St, 18,Kazan, Republic of Tatarstan, 420008, Russia

^bCandidate of Sciences, Assistant Professor of Regional Economic Management Department, Chechen State University, ID Web of Science AAE-1339-2020, ORCID ID 0000-0001-7997-4120, Grozny, Chechen Republic, Russia ^cCandidate of Sciences, Assistant Professor of Regional Economic Management Department, Chechen State University, Grozny, ID Web of Science AAE-3260-2020, ORCID ID 0000-0001-9472-5309, Chechen Republic, Russia E-mail: ^airigrimmm@gmail.com, ^bpuma-i@mail.ru, ^cDibagrozny@mail.ru

Abstract: The aim of the work is to research the phenomenon of spatio-temporal changes and the intensity of labor mobility, as well as the development of measures on perfection of the regulation of these processes on the regional labor market. Macroeconomic strategies have a significant impact on labor mobility models. The use of such a strategies are in the labor market will allow to strengthen the potential of Modernization and the economy through the support of deep structural transformation. However, market forces that begin to work in such a process can play a positive or negative role for different regions. The issue of increasing labor mobility should be included in the general labor market policy; to solve it, it is necessary to use additional systems of programs and measures.

Keywords: Employment Policy, Labor Mobility, Virtual Labor Mobility, Forced Virtual Mobility, Spatial-Temporary Changes

1 Introduction

At present, mankind is facing a global problem - the problem of transforming labor mobility - and is undergoing a transition to a new economic reality.

The transformation of the forms of spatio-temporal changes in labor mobility at the current moment of time leads to the need to understand its causes and consequences, especially from the point of view of global trends.

Increasing mobility in the (domestic) labor market in a modern economy is an important task within the framework of labor market policy. Global trends make it necessary to realize the strategic nature of all activities related to human potential management, taking into account current standards and challenges of the time, including at the organization level. In the context of globalization, universal digitalization in terms of staff recruitment at the organization level, there has been an increase in demand for specialists with knowledge of geopolitical aspects, the national specifics of the peoples of the world, communicative, highly mobile, able to manage teams where people of different nationalities work (Agafonov, 2019).

This makes it necessary to actions that will alleviate sharpness effects. Alarm feelings due to coronavirus will change in the near future, and the unprecedented economic crisis will be protracted. Analysts and experts predict the collapse of economic ties between states, the massive closure of businesses and rising unemployment in the context of border crossing and isolation of states. Each country will have to build all the processes and production on its own.

Already today it is clear that business owners and employees are expecting significant changes. At the same time, many organizations and people are already switching to remote earnings. Many business owners have already realized that remote communication with employees is quite effective, and the transition of the economy to online is actually happening right now. However, part of the work cannot be transferred to distant, which retains the relevance of the traditional form of employment and traditional labor mobility. T Akim, the increased mobility in the (domestic) labor market in today's economy is an important issue in the framework of labor market policy.

2 Materials and Methods

It should be noted the limited methodological tools for studying labor mobility, which creates obstacles to organizing effective monitoring of its development under the influence of factors of the market environment, population demographics, economic conditions, etc., up to the quality factor of the labor itself (Glaz, 2015). Of particular difficulty is the consideration of labor mobility, which has gone beyond the traditional interpretation in a pandemic, and the emergence of the phenomenon of "forced virtual labor mobility".

In the course of this research, the scientific literature was analyzed, as well as the legislative framework on labor mobility in Russia. The main theoretical and methodological principle of reserach is the principle of objectivity, which allows us to analyze the process of labor mobility as a complex socioeconomic phenomenon.

Also, other general scientific methods were used during the study, such as: analysis and synthesis, comparison and analogy, the method of processing and analysis of various official statistics, which made it possible to identify factors that directly affect the activity of labor mobility processes (Khoshmukhamedova, 2018).

Mobility is a general concept related to movement, i.e. any movement, movement of people across borders or within the state, regardless of distances, motivation and other factors (Rakoti, 2019). Labor market mobility is a complex socioeconomic phenomenon that has many dimensions. In the long run, mobility means a change in the position of people in the economy and the labor market, as well as their ability to adapt to change. Adaptation, in turn, also requires mobility. Moreover, various types of labor mobility do not exist in isolation, but are closely intertwined with each other. However, for analytical purposes, they can be identified and investigated independently (Gimpelson & Kapelyushnikov, 2017).

The study of the problems of spatio-temporal changes in labor mobility is largely based on taking into account the laws of regional development, and is justified within the framework of the regional economy by such researchers as Granberg A., Druzhinin A., Kolesnikov Yu., Lexin V., Raizberg B., etc.

In the context of our study it is advisable to isolate and category of "virtual mobility", the appearance of which was made possible with the development of ICT. Virtual mobility refers to the use of information and telecommunication technologies (ICT) to achieve all the benefits of physical mobility without the need for geographical movement (Sakhapov et al., 2016).

First virtual mobility ideas voiced in the study of C. Fan de Bunt-Kokhyaus (1996), which provides as follows its definition of "exchange of information with their colleagues of the teacher using a computer. Increasingly, such meetings are interactive and go beyond the borders of individual states and time zones".

However, legged phenomenon of modern economic life can no longer be determined by conventional scientific instruments (Aldashov, 2012) which gives rise to the need to supplement I conceptual apparatus, its specification, taking into account the current situation in a pandemic.

3 Results and Discussion

The possession of the ability to work obliges a person to take care of enriching her labor potential. It is not only about the development of existing areas of knowledge. The introduction of new technologies involves mastering completely new knowledge, mobility when changing jobs and areas of work. We must not forget about the role of practical experience in revitalizing existing knowledge to make it applied. In other words, a person faces a serious task of increasing the use value of his labor potential (Rakoti, 2019).

Currently, even distance and geographical boundaries are not an obstacle to mobility, and, in fact, this is precisely what becomes the basis for the formation of virtual mobility and its mass distribution.

Increasing the virtual mobility of work resources, developing informational work, and reducing the employee's dependence on the employer (and location / location) are becoming the basis for increasing the prevalence of non-standard forms of employment.

It is labor mobility that largely determines the adaptive potential of the economy - the ability to quickly and efficiently adapt to the ongoing economic, technological and institutional changes. In this period of time, it is advisable to single out the phenomenon of "into the irregular labor mobility", which turned out to be a salvation for economics in the conditions of a sudden, forced and unprepared transition to a remote work format.

The intensity of labor mobility, especially virtual, currently depends on:

- firstly, the quality of human resource, namely the training of employees to the new format of the work and the level of interest and motivation to adapt to new about m in the format of the work;
- secondly, from the institutional and infrastructural conditions: in the format of traditional employment - a lack of e artificial barriers to the movement of workers, in line format - the connection and devices;
- thirdly, the frequency and magnitude of "shocks", forcing labor market participants to reconsider their previous decisions; their awareness of changes in the economy and many other factors (Gimpelson & Kapelyushnikov, 2017).

In general, the process of virtualization of business organizations determines a change in social and labor relations and traditional institutions of the world of work (Afanaskina, 2015). In fact, long-distance employment not only organically fit into the structure of global trends in the world of work, but also turned out to be the only way out in a pandemic.

The rate of the virtual labor market to some extent always been forced nature (Aldashov, 2012), however, today with the quarantine conditions, isolation and forced to move to a remote format of interaction , virtual reality suddenly invaded all spheres of life of society and gave rise to a new phenomenon "forced virtual mobility". The probability of approval of a virtual labor mobility in everyday practice is increasing in terms of global the total shock transition and labor market on a forced Distant and further development it requires decision-making on the interaction of workers and employers, and other aspects of social and labor relations.

All this only strengthens the position of "virtual labor mobility" and ensures its transition from the category of forced to more ordinary, while more gentle and more attractive form for all participants in social and labor relations. Most likely, the younger generation more readily when m is the ability to transition into the remote mode. At the same time, it is still quite difficult to predict what percentage of employees will remain in the distance. Moreover, he will not be able to completely replace the traditional spatio-temporal movements of the workforce.

Strengthening the intensity of information processes of the productive forces of society, the active use of information resources and the need for their application in the digital economy, set a development vector that takes into account a new segment of the labor resource, i.e. information workforce. In this regard, there are problems such as the formation of the work force, and the use it in the sectors of the economy in view of the preparation, the age and experience (Senokosova, 2018).

The forms of manifestation, the spatio-temporal parameters of the noted processes, their dynamics are largely determined by the level of development of national economies, the pace of digitalization of the economy, inclusion in international economic relations, state policy and have different projections at the regional and local levels (Sankova, 2019).

Among the factors determining changes in the structure of employment, scientific and technological progress is the most influential, causing these changes, when the number of workers with higher education in the economy is growing at a rapid pace, and workers are actively moving between sectors. Finally, it is important to remember that both the intensity of labor mobility and the nature of the relationship between its various forms are not the same for different groups of labor (Gimpelson & Kapelyushnikov, 2017).

High mobility, especially virtual, is often associated with the instability of labor relations and the social vulnerability of workers (Khoshmukhamedova, 2018). Overcoming the limitations of traditional labor relations, digitalization not only generates instability in the employment system, but also restricts workers' access to social programs, collective bargaining, strengthens structural unemployment with high spatial asymmetries, creates high risks of "digital precarization of employment", leads to instability of labor market institutions. In addition, in the context of digitalization, many countries to some extent reproduce the ways and types of farms that are characteristic of the previous stage of economic development, which creates a bizarre symbiosis of employment structures and labor relations. ILO Global Commission Report "Work for a Better Future" Geneva: ILO; 2019 emphasizes that "Without decisive action, we will move towards a world in which existing inequality will worsen and uncertainty will intensify" (Report of the ILO Global Commission "Work for a better future". Geneva: Office, 2019).

Employment policies and labor market programs that are implemented can provide a common infrastructure to facilitate labor mobility. These measures can affect the development of the labor market, creating additional opportunities for getting work in a new place.

There are various subsidies that encourage employers to recruit workers from a group of individuals, experiencing difficulties with finding a job. Employers can receive support for hiring such individuals for a fixed period of time. The only condition for receiving this subsidy is that the employer and the applicant must be from the same region.

Subsidies to employers cannot be called the main characteristic of active measures on the labor market in Russia. The insignificant role of subsidies is evident in the Russian context of high wage flexibility and a low tax burden. Subsidies should function much more efficiently in conditions with low levels of wage flexibility and high tax rates, such as in Sweden. However, Russia actively subsidizes the creation of new start-up companies, which provides good opportunities for those wishing to start and develop small and medium-sized enterprises and contributes to the diversification of industry. It can be concluded that the subsidized employment undermines traditional mobile s on the Russian labor market. The latter type of measure falls under the category of "job creation programs". Of all the active programs, these programs are most characteristic of the practice of the Russian Federation. Such programs can play a role in creating jobs in regions experiencing a decline, where else in the population almost so employment opportunities.

From the point of view of traditional labor mobility, such measures do not stimulate the structural transformation of the economy and can undermine interregional mobility. Of course, if the existing workforce is used for important projects, such investments can have a positive impact on the economy as a whole. Yet for individual participants, temporary jobs are not a solution to the employment problem.

Stimulating mobility on the labor market is facing a major problem of choice: what is the program you need to develop. The issue of choosing a priority type of programs, an effective combination of active and passive measures, their procedural justification and methodological support is being updated. Russia should develop a labor market strategy in such a way as to create an infrastructure of programs and measures that will stimulate and enhance mobility in the domestic Russian labor market.

Labor mobility, both within the region and between regions, is necessary in order to deal with problems in the labor market - to avoid structural unemployment, a situation in which people are unable to move out of their region, and industries are not able to withstand competition.

The regions of the Russian Federation differ from each other in terms of economic development, job opportunities and position in the economic cycle. Spatial mobility is also one of the causes of inequality in income and welfare of regions in the country. At the same time, in the context of the regions, there are significant differences from each other in terms of unemployment, regional GDP and poverty. Inequality between regions provokes labor mobility: the greater the gap, the more incentives. For example, in January 2020, the unemployment rate in Moscow was 1.5%, in Chechnya - 13.5%, and in Ingushetia - 26.3% (https://www.gks.ru).

In addition, macroeconomic strategies that affect production conditions and overall demand have a significant impact on domestic mobility models.

Labor market strategies can be used to strengthen economic modernization through support for structural transformation. However, market forces that begin to work in such a process can play a positive or negative role for different regions.

4 Conclusions

The issue of increasing labor mobility should be included in the general labor market policy; to solve it, it is necessary to use additional systems of programs and measures. Such programs and measures include passive and active measures that can be combined to encourage job seekers to make decisions in favor of moving to a new job in a new locality.

Firstly, various measures of financial support for mobility (to participate in an interview when hiring in another city / region, pay for travel to and from the workplace, and compensate for the costs of relocation) have a positive impact on mobility.

Second, care must be taken in creating job creation and employer sponsorship programs. Such measures cannot be used on a large scale, but mainly for categories of persons with weak job prospects.

In order to improve the regulation of spatio-temporal changes in labor mobility, it is advisable to propose the following:

 create systems for state statistical monitoring of migration processes in the form of regular sample surveys or a block of questions in existing surveys;

- to provide specialized training for personnel in the field of migration (in particular, the administration of this process) in accordance with the existing need in the regions;
- carry out the adjustment of measures to promote mobility, taking into account the impact of the unfolding crisis and the intensification of virtual labor mobility, which determine the uncertainty of the future of traditional employment (Denisenko & Chudinovsky, 2017);
- time work amb a set of measures supporting new forms of employment, especially in the expected surge in the transition of employment in remote mode;
- to reflect these aspects in the relevant regulatory legal acts, since today they are not regulated by the labor legislation of Russia.

In general, it is currently difficult to unambiguously assess the impact of non-standard forms of employment on the labor market. At the national level, it is important to assess where and how negative and positive impacts are reflected, and develop appropriate policies to properly regulate the labor market and employment.

Labor mobility largely determines the potential of the economy to adapt to economic, technological and institutional changes. The increase in traditional mobility remains important despite the active introduction of forced virtual labor mobility into society, which has become a solution to the common problem for humanity of existence in conditions of self-isolation. Meanwhile, however, this form of employment is not able to satisfy all consume of the economy and society.

Under the current conditions, it is advisable to build the architecture of all forms of spatio-temporal changes taking into account the development vector and the intensity of information processes in the digital economy.

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Literature:

1. Afanaskina, E.M.: *Virtual employment: opportunities, benefits, challenges.* Collection of articles of the international scientific-practical conference Economic and legal aspects of the implementation of the strategy of modernization of Russia: the search for a model of effective socio-economic development., 2015. S.23-26.

2. Agafonov, S.M.: Razrabotka and implementation of regional social and economic policy of labor market regulation: the dissertation Ph.D. diss ertatsii, Voronezh, 2019. 22 seconds.

3. Aldashov, B.A.: *Study of the features of the virtual labor market and employment in the Internet economy* / [Online] Available 2012 : http://www.rusnauka.com/36_PVMN_2012 /Psihologia/14_123536.doc.htm

4. Daukshene, E., & Teresyavichene, M.: Virtual mobility for continuing education. Scientific journal "Education Throughout Life: Continuing Education for Sustainable Development", 2011. 9, 47-51.

5. Denisenko, M., & Chudinovsky, O.: Reasons for the failure to implement the provisions of the Concept of State Migration Policy of the Russian Federation. Especially for the Demoscope. [Online] Available, 2017.: http://www.demoscope.ru/weekly/2017/0753/analit01.php#_ftn1

 Gimpelson, V.E., & Kapelyushnikov, R.I.: Mobility and stability in the Russian labor market: monograph.
2017. 529 p. [Online] Available: https://id.hse.ru/data/2017/0
1/07 /1115638803/%D0%9C%D0%BE%D0%B1%D0%B8%
D0%BB%D1%8C% D0% BD% D0% BE% D1% 81% D1%
82% D1% 8C_% D0% B8_% D1% 81% D1% 82% D0% B0%
D0% B1% D0% B8% D0% BB% D1% 8C% D0% BD% D0% BE% D1% 81% D1% 82% D1% 8C_% D1% 81% D0% B0% D0% B9% D1% 82.pdf

7. Glaz, O.V.: Labor mobility in the modern Russian labor market, 2015: Ph.D. thesis. Belgorod.

8. Khoshmukhamedova, P.S.: Labor mobility and its impact on the labor market (based on materials from the Republic of Tajikistan): 2018. Ph.D. thesis. Dushanbe.

9. Norwood, J.S.: Labor Exploitation of Migrant Farmworkers: Risks for Human Trafficking. *Journal of Human Trafficking*, 2020 6(2), 209-220.

10. Olkhovsky, V.V.: The impact of changes in the education system on employment. *Scientific and practical journal "Social and Labor Research"*, 2019. *3*(36), 44-54.

Rakoti, V.D.: Labor, wages and property. *Scientific and practical journal "Social and labor research"*, 2019. *3*(36), 63-75.
Report of the ILO Global Commission "Work for a better future". Geneva: Office, (2019). S.10. [Online] Available: https://www.ilo.org/global/topics/future-of-work/publications

/WCMS_663000/lang--en/index.htm //

13. Sakhapov, R.L., Absalyamova, S.G., & Absalyamov, T.B.: Virtual mobility as a factor in improving the quality and

accessibility of education. Bulletin of the Chuvash State Pedagogical University named after AND I. Yakovleva, 2016 14. Sankova, L.V.: The future of the world of work: the choice of human development strategies in global and local contexts. Scientific and practical journal "Social and Labor Research", 2019. 3(36), 86-97.

15. Senokosova, O.V.: Information work: problems of formation and use in Russia. Materials of the XI International scientific-practical conference "Interaction of power, business and society in the development of the digital economy". 2018. 134-137.

16. Zanyatost and unemployment in the Russian Federation in January 2020 (according to the Labor Force Survey). [Online] Available: https://www.gks.ru/bgd/free/B04_03/IssWWW.exe/St g/d05/34.htm

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