

# “Labor Productivity” National Project as a factor in balancing regional labor markets

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**Abstract.** The article is devoted to implementing the national project “Labor productivity increase” as a factor ensuring the balance of regional labor markets. For the research, the authors have reviewed the most significant publications on the topic of the research, analyzed the existing theoretical approaches to evaluating the effectiveness of state programs to stimulate labor productivity and employment support, and the best regional practices in the implementation of this program. It was substantiated that achieving a balance of regional labor markets to improve the quality of human capital requires the effective implementation of the “Labor productivity increase” national project. Based on the calculations made by the authors of the study, it is proved that the implementation of the national project through the organization of a system of training and retraining of employees contributes to the growth of investment in human capital. It was substantiated that the national project’s effectiveness can be evaluated using indicators of satisfaction with the quality of services provided by employment services. The study results allow to identify and analyze the program’s key economic and social effects. The conclusion is that the point nature of the program ensures the achievement of multiplier effects, which appear initially at the micro-level, and then projected to the regional level, contributing to the balance of the regional labor market by reducing the shortage of highly qualified specialists.

**Keywords:** national project, regional labor market, labor productivity, employment service

## 1 Introduction

The functions of labor markets are the most important issues for modern Russian economic science and form the basis and perspective research conducted abroad. Therefore, in 2021, the Nobel Prize in Economics was awarded to David Card, Joshua Angrist, and Guido Imbens for their empirical research in labor economics and the development of a causal research methodology for assessing the impact of education, wages, migration, and active employment policies on labor markets [1].

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Application of D. Card's approach in the research of problems of productivity management [2] proves that differences in management methods cause intercompany differences in labor productivity. Employees of well-managed firms have higher human capital.

Such foreign authors study the issues of increasing public labor productivity as Hidekatsu Asada (Japan) [3], Yonong Hin (China) [4], Alina Szwiec-Rogalska (Poland) [5].

A significant contribution to the study of the relationship between labor productivity and the improvement of human capital is made by D.A. Avdeeva, N.V. Akindinova, I.B. Voskoboinikova, V.E. Gimpelson, M.B. Denisenko, S.Yu. Roschina, Yu.V. Simacheva, P.V. Travkina, A.A. Fedyunina [6, 7].

E.N. Tumilevich, [8], A.A. Zaitsev [9] devoted to implementing economic policy in labor market regulation, employment support, and increasing labor productivity in the regions of Russia.

This article also has several joint publications on the dynamics of working time and public labor productivity relevant to the study presented.

The study aims to identify and justify the socio-economic effects in the labor market from the implementation of the national project "Labor Productivity" (until 2021, the national project was called "Labor Productivity and Employment Support").

## 2 Materials and methods

To achieve this goal, it is necessary to set and solve a number of tasks, such as substantiating the methodological foundations of the study, analyzing statistical data and information from the interim report on the implementation of the national project, identifying problems arising during the implementation of the national project and justifying the effectiveness of the national project in addressing issues of achieving balance in regional labor markets.

The methodological basis of the study was a comprehensive approach to the issues under study, including content analysis of publications from open sources, systematization of official statistical data, comparative analysis of the results, generalization, and argumentation of conclusions.

## 3 Results

The current state of the labor market is the result of the interaction of economic, political, and social institutions that contribute to the reproduction and effective use of the country's labor potential. The interaction of the labor market subjects should provide a balance of placement of the economically active population.

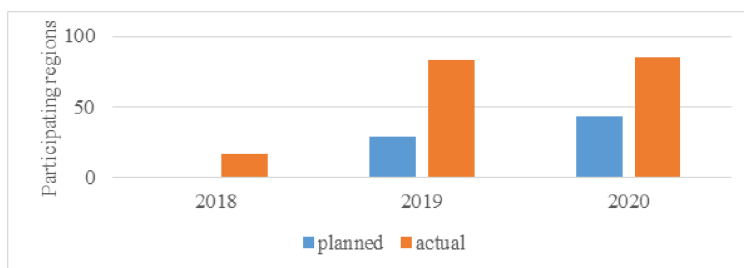
An efficient labor market presupposes a balance between the demand for labor and its supply, considering the possible options for structuring the market. The labor market is the most socially vulnerable, rapidly responding economy sector in times of crisis. The current challenges of the coronavirus pandemic have exacerbated existing problems and highlighted new trends in the Russian labor market. Labor market imbalances manifest themselves in various ways.

- In the negative trends of changes in the age and gender composition of the population.
- In violation of industry and professional qualification proportions.
- In the lag in the quality of human capital from the requirements of modern production.

- In the differences in the levels of development of the infrastructure of the regional labor markets.
- In the structural shifts associated with the constraints of the need to counter the spread of COVID-19 in Russia and the world.

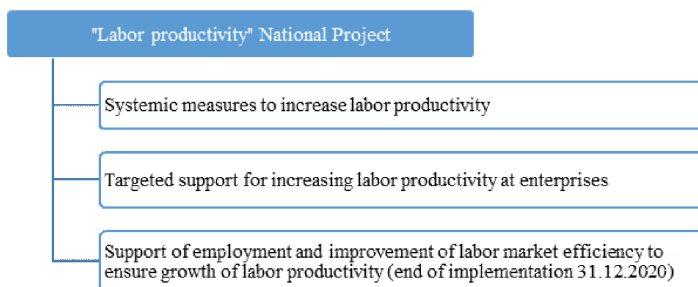
In this study, the authors analyzed scientific publications and statistical information. One of the most important factors in balancing the regional labor market and improving the quality of human capital in Russia is implementing the national project under consideration.

The dynamics of regional participation in the national project, which was officially launched in 2018, are shown in Fig. 1.



**Fig. 1.** Number of regions participating in the national project (cumulative total) for 2018-2020. *Source:* compiled by the authors based on data [10].

In the structure of the national project, there are three federal projects (Fig. 2).



**Fig. 2.** The structure of the “Labor Productivity” national project. *Source:* compiled by the authors based on data [11].

Measures provided by the federal project “Employment Support” affect the balance of the labor market in the region by modernizing the work of employment services in the field of analysis and forecasting of companies’ demand for personnel, obtaining current vacancies, retraining, and support in the employment of workers laid off as a result of increased labor productivity. The funding for this project in 2019-2020 was 2,650,542.2 thousand rubles, of which 86.91% was from the federal budget [11, p.12].

An indicator of the effectiveness of implementing the above project was the increase in the level of citizen satisfaction with the quality of services provided by employment centers in 16 participating regions – in 2019; it increased from 40% to 61.5% [12].

For example, in 2020, the Nizhny Novgorod region was allocated more than 174 RUB mln. for the retraining of citizens under the national projects “Demography” and “Productivity”. Thanks to the events held by the employment service in 2019, about 6,000 Nizhny Novgorod residents could get a sought-after profession. The organization of training for Nizhny Novgorod enterprises helped reduce production costs, increase productivity, and keep their jobs [13].

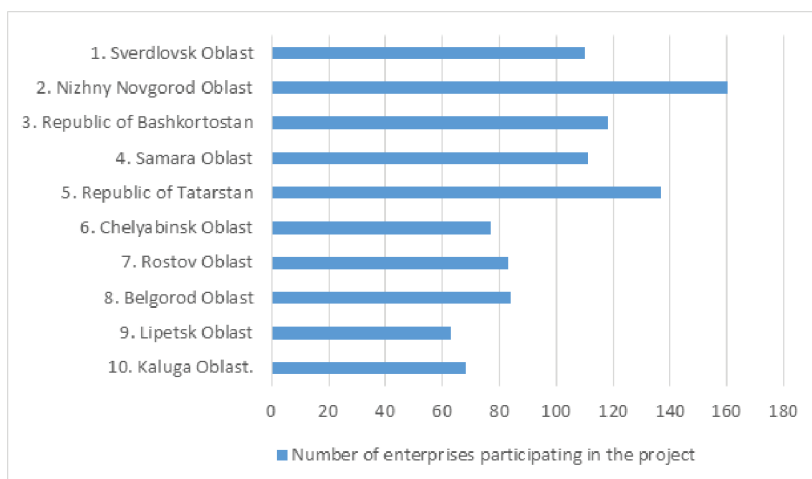
Rapid changes in technology and consumer demand, characteristic of today’s economy, directly impact the labor market, presenting it with the task of meeting employers’ demand for specific professional skills. The size and structure of this demand vary depending on market conditions and are often local. This raises the question of the system of training and retraining in production.

As a result, the problem of imbalanced supply and demand for specific professional skills is solved because the structure of training and retraining almost completely coincides with the needs of a particular employer. However, according to statistics, Russia’s amount of investment in human capital still lags behind developed countries. While 44% of adults aged 25 to 64 years old were involved in some form of re-education in OECD countries in 2016 [14], in Russia, the share of those participating in the development of additional educational programs in 2015 was 15.4% [15].

Federal projects “System measures on labor productivity increase” and “Targeted support on labor productivity increase at enterprises” involve various measures to improve the quality of human capital: training of managers, development of rationalization, advanced training of workers, etc. [11].

According to the authors’ calculations, as a result of implementing the national project, the number of employees of enterprises trained in various areas of increasing labor productivity in 2019 increased by 991.26% and in 2020 – by 130,12% [10]. The share of the employed population in additional education and vocational training in Russia was 32.3% in 2020 [15].

The top 10 leading regions of the project “Targeted support on labor productivity increase at enterprises” (in Q3 2021) are shown in Fig. 3.



**Fig. 3.** Rating of regional centers of competence of the members of the Russian Federation. *Source:* compiled by the authors based on data [10].

The authors’ analysis of the data reflecting organizations’ need for workers and their filling of vacant jobs in 2018 and 2020 (aggregated data of Rosstat on labor resources in 2018-2020) [15] showed that in the top 10 participating regions, there is a tendency for the share of vacancies of specialists of the highest qualification level to decrease: from 2.6% in the Lipetsk region to 28.3% in the Samara region.

The needs of organizations for qualified workers in areas such as industry, transport, construction confirm this trend. In 8 of the top 10 participating regions, the decrease in the share of vacancies ranges from 2.3% in the Belgorod region to 23.9% in the Chelyabinsk

region. The 30.9% increase in demand for skilled workers in Nizhny Novgorod Oblast can be explained by large-scale investments in the modernization of urban infrastructure as part of the celebration of the 800th anniversary of the formation of Nizhny Novgorod.

In regions not participating in the implementation of the national project, this trend was not detected. Moreover, there was a 24.8% increase in demand for highly qualified specialists in the Amur region, a 35.3% increase in the Republic of Ingushetia, and a 7.9% increase in the Republic of Kalmykia. The demand for skilled workers also increased: in the Republic of Kalmykia by 110%, in the Altai Republic by 148.1%, and in the Jewish Autonomous Region by 142.4%.

Thus, the "Labor Productivity" national project contributes to the balance of supply and demand in the regional labor markets through the training of personnel in enterprises.

## 4 Discussion

The authors' conclusions are consistent with the results of other works on the impact of employment policy on regional labor markets. In particular, the results of E.V. Vankevich, E.N. Korobova [16] show that the practice of active employment policy in the region reduces the number of repeated applications to the employment service.

The effects of this national project identified by the authors are consistent with the need to include active mechanisms to encourage companies to retrain employees [6].

## 5 Conclusion

As a result of the study based on the analysis of data on the current results of the implementation of the "Labor Productivity" national project and statistical indicators reflecting the development of regional labor markets, the impact of the program on the regional labor market in the direction of achieving balance through the compensatory effect of productivity growth in enterprises, which leads to optimization of the structure and filling the shortage of skilled workers in both the internal and regional labor markets.

It was found that the implementation of the "Labor Productivity" project contributes to the balance of regional labor markets through additional investment in human capital.

The study results are significant for determining the effectiveness of programs that optimize the structure of the regional labor market, which makes it advisable to continue such theoretical work.

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