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## Labor Market Regulation Policy: Methodological Aspects

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Morkovina S.S.<sup>1</sup>, Serebryakova N.A.<sup>2</sup>, Sirotkina N.V.<sup>3</sup>, Dorokhova N.V.<sup>4</sup>

**Abstract:**

*This article defines the exclusive role of the state as a labor market regulator. The modern position of the state is substantiated, consisting in the fact that the state acts as a full partner.*

*Labor market is regulated by means of the development and implementation of a labor market policy. Its effectiveness is largely determined by the peculiarities of the methodical approach to the development of such a policy.*

*A universal complex methodology is proposed, which assumes a simultaneous assessment of the state and potential of the labor market development.*

*It is proved that the main direction of increasing the effectiveness of labor market policy in the region is the improvement of organizational conditions, which consists in coordinating the interests of all stakeholders.*

**Keywords:** *Labor market, regulation policy of a labor market, methodology of labor market assessment.*

**JEL Classification Codes:** H89, J22, J23, Z22.

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<sup>1</sup>D.Sc. in Economics, Professor, Department of Management and Economics of Entrepreneurship, Voronezh State University of Forestry and Technologies named after G.F. Morozov, Voronezh, Russian Federation, e-mail: [tc-sveta@mail.ru](mailto:tc-sveta@mail.ru)

<sup>2</sup>D.Sc in Economics, Professor, Department of Economic Theory and Accounting Policy, Voronezh State University of Engineering Technologies, Voronezh, Russian Federation, e-mail: [nad.serebryakova@mail.ru](mailto:nad.serebryakova@mail.ru)

<sup>3</sup>D.Sc. in Economics, Professor, Department of Economics and Companies' management, Voronezh State University, Voronezh, Russian Federation, e-mail: [docsnat@yandex.ru](mailto:docsnat@yandex.ru)

<sup>4</sup>Ph.D. in Economics, Associate Professor, Department of Trade and Merchandizing, Voronezh State University of Engineering Technologies, Voronezh, Russian Federation, e-mail: [nv\\_dorohova@mail.ru](mailto:nv_dorohova@mail.ru)

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## 1. Introduction

The market of one of the most important factors of production – labor – plays a significant role in a modern market economy. The labor market is a key factor of social reproduction and the core of the market economy. Territorial differences in natural conditions and resources, socio-demographic basis and economic potential determine the heterogeneity of regional labor markets (Boitier, 2018). Industry characteristics and regional specialization also have an impact on labor resources (Morkovina, 2015). Competences and skills acquire a significant role, with a number of studies emphasizing the unevenness of their assessment in labor markets (Shy, 2018; Morkovina and Novikov, 2018; Sultanova and Chechina, 2016).

The development of regional employment issues and the formation of the labor market is particularly acute in the digital economy. The main task of the state in the regulation of the labor market is to develop certain “rules of the game” and to ensure guarantees of their compliance. These “rules of the game” should form the basis of the state labor market regulation policy at both the federal and regional levels.

The principle of genetic certainty suggests that the structure of a lower order system must project the structure of a higher order system onto itself, acting as an element of this system. Consequently, when developing and implementing a labor market regulation policy, it is necessary to take into account that it should contain elements similar to those of the regional socio-economic policy (Serebryakova *et al.*, 2016a).

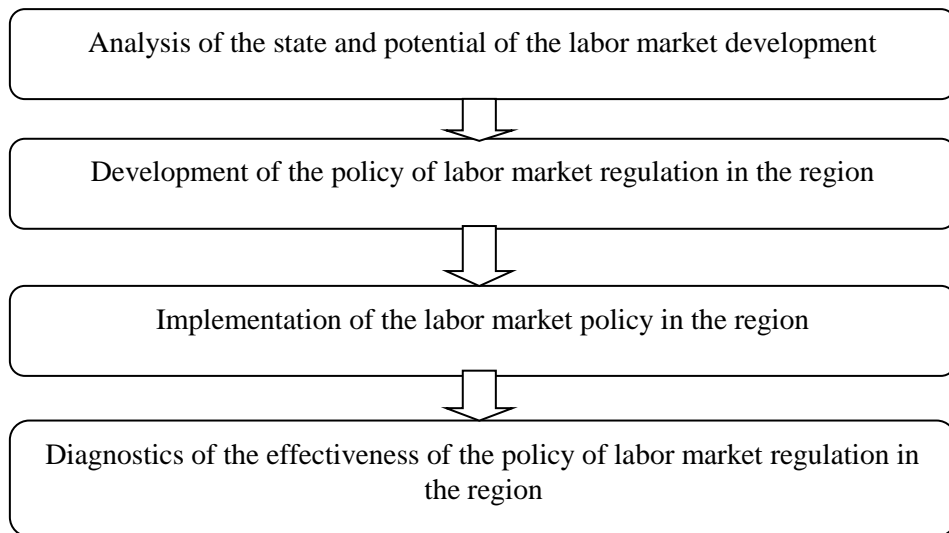
Resource factors should be taken into account among the factors affecting the effectiveness of the development and implementation of the labor market policy in the region, which should include the quantitative and qualitative characteristics of the labor resources of the region. The quantitative characteristics of labor resources include: the number of people of working age, their age and sex composition, the number of employed and unemployed. The qualitative characteristics are: the educational level of the population, the professional and qualification structure of labor resources, the moral and spiritual level of the population, its creative potential and labor mobility, as well as the structure of labor motives. Comprehensive and systematic analysis and consideration of these factors will allow developing and implementing labor market regulation policies in the region at a qualitatively new level, greatly contributing to increasing its efficiency (Serebryakova *et al.*, 2015). An analysis of the processes occurring in the regional labor market will help develop a scientifically-based program for its regulation and ensure the effective use of human potential.

## 2. Methods

To ensure the effectiveness of the labor market policy in the region, its development should be preceded by an analysis of the state and the potential of the labor market development. Today, the analysis requires the application of the most frequently used

system of interrelated socio-economic indicators presented in official statistics in terms of the management practice. These indicators allow us to give a quantitative description of the state of the labor market. Analysis of the experience gained, advantages and disadvantages of the current methodological approaches have allowed developing a methodology for assessing the state and potential of the labor market development in the region. It is based on the index approach and consists of four stages. Structurally, the process of building a policy of regulating the labor market in the region consists of the following stages (Figure 1).

**Figure 1.** Algorithm for building a labor market regulation policy in the region



At the first stage, it is necessary to assess the state of the labor market in the region. To conduct this assessment, it is proposed to use a system of indicators such as the level of employment (Y1), general unemployment (Y2), labor force participation (Y3), registered unemployment (Y4), tension coefficient (Y5), population with money incomes below the subsistence minimum (Y6), the proportion of the unemployed registered for more than one year (Y7), the proportion of vacancies to the total number of jobs (Y9), the level of working capacity of the population (Y9) (Serebryakova, 2015). There are indicators among those that have a positive effect on the state of the labor market and those that affect it negatively. A private index is calculated for each chosen indicator using the following formulas:

1) if there is a positive correlation between variables, then the following formula is used:

$$I_{yi} = \frac{Y_i - Y_{\min}}{Y_{\max} - Y_{\min}} \quad (1)$$

2) if there is a negative correlation between variables, the calculation is carried out according to the formula:

$$I_{yi} = \frac{Y_{\max} - Y_i}{Y_{\max} - Y_{\min}} \quad (2)$$

where

$I_{yi}$  – index of indicator  $Y$  in  $i$  region;

$Y_i$  – value of indicator  $Y$  in  $i$  region;

$Y_{\max}$  – maximum imputed value of indicator  $Y$ ;

$Y_{\min}$  – minimum imputed value of indicator  $Y$ .

Then, the aggregated index of the state of the labor market is calculated. It is defined as the average of disaggregated indices, including nine indicators ( $n = 9$ ), according to the formula:

$$I_{slm} = \sum_{i=1}^n \frac{I_{yi}}{9} \quad (3)$$

At the second stage, it is necessary to assess the potential for the development of the labor market in the region. As noted above, the assessment of the potential of the labor market development in the region should be carried out according to the HDI indicator (Serebryakova et al., 2016a).

$$I_{plm} = \text{HDI} \quad (4)$$

At the third stage, the overall index of the state and potential of the labor market development in the region is calculated. It is defined as the geometric average of the product of an aggregated index of the state of the market and an index of human development.

$$I_{splm} = \frac{I_{slm} + I_{plm}}{2} \quad (5)$$

where

– index of the state and potential of the labor market development;

– index of the state of the labor market;

– index of the potential of the labor market development.

The value of the general index will vary from 0 to 1. The closer the index value to 1 is, the more stable the state of the labor market and the higher its development potential is.

At the fourth stage, the regions are ranked by the total index value (Table 1).

**Table 1.** Ranking of regions by the value of the index of the state and potential of the labor market development

Index value	Situation on the labor market
0,00-0,25	Crisis with low potential for the development of the labor market
0,26-0,50	Medium tension with average potential for the development of the labor market
0,51-0,75	Low tension with potential for the development of the labor market above average
0,76-1,00	Favorable with high potential for the development of the labor market

It should be noted that this methodology is universal, because it is based on an index approach and can be used for interregional and intercountry comparisons of the state and potential of the labor market development.

### 3. Results

To test the proposed methodology, the labor markets of the following regions were assessed: Belgorod region (R1), Voronezh region (R2), Kursk region (R3), Lipetsk region (R4) and Tambov region (R5). The main indicators of the labor market for these regions are presented in the table (Table 2).

**Table 2.** Major indicators of the labor market in the studied regions, %

Symbol of the indicator	R1	R2	R3	R4	R5
Y1	67,3	63,0	64,9	65,9	61,8
Y2	4,0	4,5	4,3	4,0	4,5
Y3	70,0	65,9	67,8	68,6	64,7
Y4	0,7	1,0	1,0	0,6	0,9
Y5	1,7	1,7	3,9	3,0	2,4
Y6	8,2	9,4	10,3	9,0	10,4
Y7	18,9	30,0	34,8	22,3	40,7
Y8	1,6	1,5	1,7	1,1	1,0
Y9	56,2	56,0	55,2	55,2	55,1

The choice of the maximum and minimum values for each indicator was made on the basis of statistical data for all subjects of the Russian Federation (Serebryakova et al., 2016d). The calculation of the general index of the state and potential of the labor market development in the studied regions gave the following results (Table 3).

An economic interpretation of the results based on the ranking of regions should be conducted (Table 4).

**Table 3.** General index of the state and potential of the labor market development in the regions

Index of the state and potential of the labor market development	R1	R2	R3	R4	R5
<i>Isplm</i>	0,773778	0,726091	0,728003	0,742784	0,696397

**Table 4.** General index of the state and potential of the labor market development in the regions

Situation on the labor market	R1	R2	R3	R4	R5
Crisis with low potential for the development of the labor market					
Medium tension with average potential for the development of the labor market					
Low tension with potential for the development of the labor market above average		+	+	+	+
Favorable with high potential for the development of the labor market	+				

As a result, it was found that only the situation of the labor market in Belgorod region can be characterized as safe with high potential for the development of the labor market. Other regions have a slight lag in this indicator from the leading region and are included in the group of regions with a low-stress situation in the labor market with the potential for development above the average. To improve the labor market situation and increase its development potential, it is necessary to improve organizational conditions and optimize the tools of labor market regulation policy in the region.

#### 4. Conclusions and recommendations

The formation and development of regional labor markets is possible in case of appropriate legal, economic, social, organizational and other conditions. Organizational conditions become crucial in developing and implementing labor market policies in the region, since they form the infrastructure for the functioning of

the regional labor market, largely determine the effectiveness of this policy and affect the state of the labor market (Serebryakova *et al.*, 2016c).

The organizational conditions present at the regional level do not allow to fully realize the interests of all subjects of the labor market regulation policy in the region, namely government bodies and local authorities, representatives of employees and employers, educational organizations, research and development, civil society institutions. At the same time, all political subjects pursue their own interests in the labor market (Table 5).

**Table 5.** *The system of interests of subjects of the labor market regulation policy in the region*

No.	Subjects	Interests
1	Government bodies, local authorities	Increasing employment and reducing unemployment to ensure GRP growth, reducing the number of working poor
2	Representatives of workers' associations (trade unions)	Increasing the number of jobs, wages, improving working conditions and expanding the range of social guarantees
3	Representatives of employers' associations	Improving the quality of labor, increasing the labor supply and, as a result, increasing competition among employees
4	Organizations in education, research and development	Ensuring the demand for educational services (vocational training, retraining and advanced training of all categories of citizens), improving the quality of the workforce
5	Civil society institutions	Ensuring social justice and protecting the interests of socially vulnerable citizens

All subjects of the labor market policy in the region are interested in the formation and effective functioning of the labor market, they are ready to participate in the development and implementation of this policy (Khorev *et al.*, 2015). In view of the fact that their own interests often lie in different planes, they show opportunistic behavior. Consequently, the improvement of the organizational conditions for the formation and development of the labor market in the region should be aimed at leveling the opportunistic behavior of policy makers in order to harmonize their multidirectional interests and achieve the goals of the labor market regulation policy, which is to ensure effective employment and reduce unemployment. Coordination of multidirectional interests of the subjects of the labor market policy is possible only within the framework of the system of social partnership.

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