

Improvement of the Regional Management System Using the Labor Potential Index

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Abstract: In this article, the formation of the regional socio-economic policy based on the evaluation of labor potential was studied and a set of evaluative indicators of testing decisions, which are taken within the framework of regional management, for Pareto optimality was formed. The authors offered an integral index of efficiency of the socio-economic policy of a region in its function as the basic indicator of the evaluation of decisions taken at implementation of the socio-economic policy of a region. Finally, the mechanism of managing a region by means of implementation of the socio-economic policy based on the labor potential was formed.

Key words: Management • Regional management system • Labor potential • Pareto optimality
• Socio-economic policy

INTRODUCTION

The modern post-crisis development of national economic systems is greatly determined by the active intervention of government institutions in the processes of their functioning and development on all levels, which has allowed forming the prerequisites for transition to the growth stage based on the results of overcoming the phase of global recession. In the course of intensifying actions targeting the strengthening of government control of economic development, one of the basic problems of the pre-crisis management of all levels of socio-economic systems was revealed, which resided in the lack of attention to managing labor resources as well as to using and developing the labor potential.

The majority of managerial decisions in the sphere of government control in the circumstances of the pre-crisis regulation were perceived based on the extrapolation of statistic data, which allowed forecasting the strengthening of existing trends, where the probable threats to the development of socio-economic systems as to the management of the labor potential were not considered at all.

RESULTS

In the current context of development of the national socio-economic system and its mesoscale sub-systems,

the key task of the formation and the implementation of the socio-economic policy is to ensure the population's life level growth, which is the key indicator of the performance of government control bodies.

This circumstance states the necessity to develop an algorithm of forming the regional socio-economic policy in its function as the key tool of current mesoscale management with account of two basic components of the life quality: the social and the economic ones, each of which must include their own goals in terms of implementation of the mesoscale strategy.

Based on the fulfilled within the research analysis of the socio-economic policies and the programs of socio-economic development of various Russian mesoscale socio-economic systems, the goal indicators were selected, which were the most widely spread in terms of usage in the process of forming and implementing the regional socio-economic policy, namely: life duration; housing per capita; sufficiency of social infrastructure (the social indicators) and the GRP; the share of innovative products in the GRP; and the level of net salaries of the population (the economic indicators). Further, a correlation analysis of the dependence of the dynamics of life quality in the region on each of the mentioned parameters was carried out and it showed the following results: by the 'life duration' index, the correlation ratio equaled to 84.75%, which evidenced a very strong direct dependence; by the 'housing per capita'

index, the correlation ratio equaled to 47.54%, which evidenced moderate direct dependence; by the 'availability of social infrastructure' index, the correlation ratio equaled to 90.92%, which evidenced strong direct dependence; by the GRP index, the correlation ratio equaled to 91.44%, which evidenced strong direct dependence; by the 'share of innovative products in the GRP' index, the correlation ratio equaled to 40.86%, which evidenced moderate direct dependence; by the 'real salary' index, the correlation ratio equaled to -71.18%, which evidenced strong reverse dependence.

Thus, for the purposes of diagnosing the offered measures for Pareto optimality, the most important indexes were chosen, which had the largest correlation index: the life duration, the social infrastructure availability, the GRP and the real salary and the equation of linear regression was compiled for which of them; the equation is represented below in a respective sequence:

$$LQ = 7.9952 + 0.3333LL \quad (1)$$

$$LQ = 9.0667 - 0.1333SIA \quad (2)$$

$$LQ = -22.4 + 0.1GRP \quad (3)$$

$$LQ = 15.42 + 0.167RS \quad (4)$$

where: LQ is the life quality growth rate, in percentage; LL is the life duration in the region upon the results of implementation of the socio-economic policy, in years;

SIA is the availability of social infrastructure for population in the region upon the results of implementation of the socio-economic policy, in scores;

GRP is the gross regional product upon the results of implementation of socio-economic policy, in billion rubles;

RS is the real salary upon the results of implementation of socio-economic policy, in thousand rubles.

In case the total effect caused by an action, a procedure, or policy with respect to the quality of life is negative, the respective action, policy, or procedure are not included in the socio-economic policy of the mesoscale socio-economic system [3].

As it was revealed that in the circumstances of contemporary development, the priority is given to the regional labor resources, which form the labor potential of the region, the system of indexes of socio-economic policy efficiency evaluation is more reasonable to be built based on standalone indexes, which account for the status and the prospects of the regional labor potential development.

According to the structure of the evaluation of the integral index of the progressive dynamics of the region and the life quality by its social and economic components, as suggested in this research, it was offered to provide integral evaluation of the efficiency by way of systematization of private social and economic indexes grouped in the following categories [4, 5]:

- The singular social (g_{soc}) and singular economic (g_{ec}) indicators, which describe particular social and economic parameters within homogeneous groups - by strata of the population at the analysis of social indexes and by types of activity at the analysis of economic indexes; at that the selection of indexes is provided with account of their importance for forming, using and developing the labor potential of the region.
- The group social (G_{soc}) and the group economic (G_{ec}) indexes, which unite the standalone indexes into the averaged ones by calculation of the weighted mean value; at that, the weight coefficients are assigned to standalone indexes based on expert estimate, which should be preferably carried out by the Delphi method:

$$G_{soc} = \sum a_i g_{soc\ i} \quad (5)$$

$$G_{ec} = \sum b_i g_{ec\ i} \quad (6)$$

where a and b are the weight coefficients at singular social and economic indexes, accordingly, in percentage.

- The integral index of efficiency of the regional socio-economic policy is formed as a ratio of the amount of group social and economic indexes weighted in compliance with the results of the expert estimate of their importance and in fact is a complex characteristic of the efficiency of the socio-economic policy implemented in a mesoscale system.

Besides, it is reasonable to provide a comparative analysis of the efficiency of socio-economic policy of a region carried out by comparing it to the standard value. A region that has similar values, which reflect the level of development and usage of the labor potential, is taken as the standard one and the analysis similar to the above-mentioned one is carried out for this standard region [6].

Then, the ratio of the integral index of efficiency of the socio-economic policy of the considered region to the similar index of the standard region is determined and if

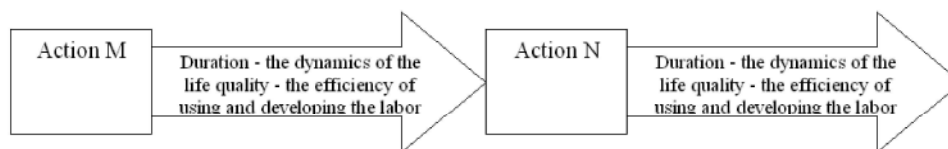


Fig. 1: A segment of the project network of the fulfillment of the action plan on implementation of the socio-economic policy of a region

this ratio is more than 1, it means that the considered region implements more efficient socio-economic policy, than the standard region; and if the ratio is less than 1, it evidences the availability of reserves for ensuring growth of the socio-economic policy implementation efficiency.

Thus, the algorithm of forming and implementing the socio-economic policy of a region in accordance with the methodology of program-based goal-oriented planning resides in the following:

- Determination of the general idea of development and implementation of the socio-economic policy of the region, which assumes the selection of a single integral index that would characterize the activity of the mesoscale socio-economic with reference to and meeting the requirements of the accounting of the priority of measures on development of those regions, which are included in the national development strategy.
- Determination of the sub-goals of first level, which assumes decomposition of the general idea into milestones by certain high-priority directions, which characterize the performance of the mesoscale socio-economic system.
- The formulation of the sub-goals of the second and subsequent levels, which assumes further decomposition of the sub-goals of the first level to the itemization extent necessary in the course of forming and implementing the socio-economic policy of a region.
- The development of an action plan, which would allow ensuring implementation of the formulated sub-goals of all levels and the general idea of the socio-economic policy of the region with account of the specificity of the mesoscale socio-economic system.
- The determination of the demand in the resources of the regional socio-economic system generated by every one of the formulated at the previous stage actions, which are carried out with the purpose of implementing the selected regional socio-economic policy.

- Compilation of a project network of the fulfillment of the action plan on implementation of the socio-economic policy of a region and the achievement of its general goal, of which the peculiar feature is the necessity to take into account not only the time characteristic, but also the dynamics of the indexes of the life quality and the efficiency of using and developing the labor potential of a region (Figure 1).

Then, it is necessary to optimize the project network of the fulfillment of the action plan on implementation of the socio-economic policy of a region by three

parameters: the period, the dynamics and the life quality in the region and efficiency of using and developing the labor potential of the region.

- Determination of the critical path of the project network of fulfillment of the action plan on implementation of the socio-economic policy of a region, which assumes identification of bottle necks in the implementation of the socio-economic policy of a region and its further optimization with account of the dynamics of the basic target index (life quality) and the efficiency of the management of the regional labor potential in its function as the key strategic resource.
- Fulfillment of the developed action plan on implementation of the socio-economic policy of the region, which includes the procedures of its monitoring and corrective actions with account of the changes in internal and external factors of the development of the mesoscale socio-economic system.

It can be seen on the provided figure (Figure 2) that managing a region with account of one of the key directions of the development of the sub-system of the national socio-economic system in the current context assumes building a system of mesoscale management based on the formation, usage and development of the region's labor potential.

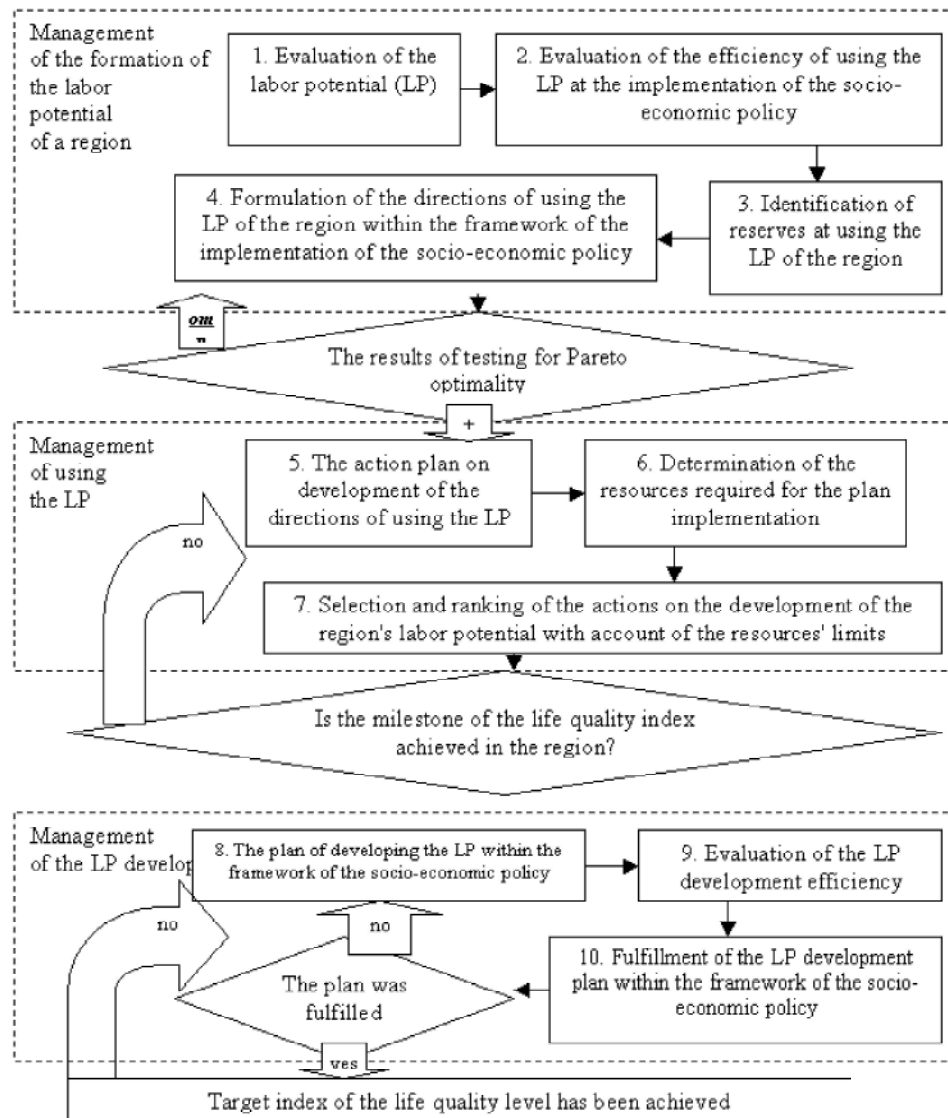


Fig. 2: The mechanism of managing a region by means of implementation of the socio-economic policy based on the labor potential

CONCLUSIONS

According to the research results, which were summarized in the course of the work, the most important resource of the socio-economic system is the labor resource; therefore, utilization of the labor potential can serve as the stable basis of forming strategic competitive advantage.

Therefore, the rational mechanism of regional management is reasonable to be built based on the labor potential management, which will allow releasing the internal hidden reserves of the regional socio-economic system and ensuring the achievement of the target value

of the unit development – the claimed level of the population's life quality. Application of this mechanism will allow increasing transparency and improving the efficiency of the processes of regional management in the current context.

REFERENCES

1. Beatty, R.W., M.A. Huselid and C.E. Schneier, 2003. Scoring on the Business Score-Card. *Organizational dynamics*, Y, 32(2): 107-121.
2. Corporate Metrics Technical Document, 1999. Risk Metrics Group.

3. Safiullin, L.N., G.N. Ismagilova and N.Z. Safiullin, 2013. Development of the Theory of Demand and Utility in the Conditions of Change of Quality of the Goods. In the Proceedengs of the 3rd Annual International Conference on Qualitative and Quantitative Economics Research (QQE 2013), pp: 37-42.
4. Bagautdinova, N.G., I.R. Gafurov, N.V. Kalenskaya and A.Z. Novenkova, 2012. The Regional Development Strategy Based on Territorial Marketing (the Case of Russia). *World Applied Sciences Journal*, 18: 179-184.
5. World Development Report. Date Views: 12/04/2013. www.worldbank.org.
6. Panasyuk, M.V., E.M. Pudovik and M.E. Sabirova, 2013. Optimization of Regional Passenger Bus Traffic Network. *Procedia Economics and Finance*, 5: 589-596.
7. Larionova, N.I. and Y.A. Varlamova, 2013. The Trends of Household Economic Behavior in International. *Procedia Economics and Finance*, 5: 737-746.
8. Safiullin, L.N., G.N. Ismagilova, D.Kh. Gallyamova and N.Z. Safiullin, 2013. Consumer Benefit in the Competitive. *Procedia Economics and Finance*, 5: 667-676.
9. Bagautdinova, N.G., I.V. Goncharova, E.Y. Shurkina, A.V. Sarkin, B.A. Averyanov and A.A. Svirina, 2013. Entrepreneurial Development in a Corrupted Environment. *Procedia Economics and Finance*, 5: 73-82.
10. Kamasheva, A., J. Kolesnikova, E. Karasik and E. Salyakhov, 2013. Discrimination and Inequality in the Labor Market. *Procedia Economics and Finance*, 5: 386-392.
11. Maslow, A., 1943. A theory of Human Motivation. *Psychological Review*, 50: 34-41.