

LABOR PRODUCTIVITY AS AN INTEGRAL PART OF INNOVATIVE ENTREPRENEURSHIP

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ABSTRACT

Aim of the study: Labor productivity is one of the main indicators of human labor activity, characterizing the productivity, efficiency and effectiveness of the process of production of tangible and intangible benefits. The level of labor productivity depends on the cost of working time for the production of goods and services, their volumes, cost, price, i.e., those indicators that determine the competitiveness of products in the markets. Labor productivity is the indicator by which enterprises, regions and industries can be compared with each other.

Methodology: In determining the economic essence of labor productivity should be primarily based on the fact that the labor spent on the production of goods and services, consists of live labor, carried out at the moment and the past labor, embodied in the previously created goods (materials, means of production), which are used to produce new products.

Conclusion: Productivity of live labor reflects the cost of individual labor and is determined by comparing the volume of production with the amount of labor spent. The function of live labor is not only the creation of new use value, but also the transfer of working time materialized in the material elements of production to the newly created product.

Keywords: Labor, Productivity, Innovative Entrepreneurship, Integral, Development.

INTRODUCTION

The costs of both living and past labor on the scale of the national economy takes into account the productivity of social labor, since from the social point of view, past labor is the living labor of people who participated in the previous stages of the production process and materialized in the objects and tools of labor (Audretsch, 2012). For the whole society, the economy of past labor is equivalent to the economy of living labor, for example, saving metal in the manufacture of machinery and equipment is equivalent to saving live labor, which is spent in metallurgical production (Scott, 2006). Therefore, increasing the productivity of social labor is a generalizing indicator of reducing the cost of both living and embodied labor per unit of production and characterizes the growth of production efficiency (Drolen, 1990).

LITURATURE REVIEW

The foundations of the doctrine of labor productivity were laid by A. Smith and D. Riccardo, but to date, the essence of labor productivity continues to be studied by scientists who give it as an economic category different interpretations (Lepoutre, 2013). The main issue of the scientific discussion is how to calculate the productivity of labor: taking into account the costs of living labor only or taking into account the costs of living and past labor (Koshkin, 2018). This issue has been actively debated in our country since the early 20s of the last century (Abramov,

2015). At the same time, there were radically opposite points of view: some scientists believed that labor productivity should be calculated by the cost of all total labor - living and materialized, others - that only by the cost of living labor (Baboshkina, 2018). Analysis of the economic literature shows that these disputes continue to the present time.

METHODOLOGY

The considered interpretations of the economic category "labor productivity", despite their differences, define it as an indicator of the process of productive use of working time required for the production of a given volume of production, reflecting only quantitative approaches to labor productivity (Rezazadeh, 2018). The dependence of labor productivity on the level of technological and information equipment of production, i.e., the conditions in which production processes take place do not determine the impact on productivity of personal qualities of performers, the most valuable of which in the conditions of innovative economy are the level of education, professionalism, innovative potential, learning and creativity of workers, which is crucial for the formation of quantitative and qualitative indicators of live labor, and to improve the efficiency of The transition to a post-industrial society gives new features to industrial production, which determine the widespread introduction of information technologies into production processes that change human labor functions, the development and development of innovations as the technological basis of the new economy, the improvement of methods of using production resources and technologies, the tightening of market requirements for quality indicators of products (Abramov, 2016).

Therefore, in the opinion of I. V. Zaikonnikova Krasnopevtseva, economic category "*Labor Productivity*" for the conditions of formation of post-industrial society should be clarified and expanded from the standpoint of the changes that have occurred in the industrial sector of the economy as a result of the introduction of scientific and technological achievements, innovative technologies, expanded investment in the human factor of production. In this regard, the author proposes the following interpretation of the economic category "*Productivity*" (Akhmetshin, 2018). Labor productivity in the transition to a post-industrial economy should be considered as an effective indicator of the quantity and quality of live labor, determined by the volume of production of the necessary complexity and quality produced per unit of working time, which depends on the technical, technological and information development of production, the level of intellectualization of production processes and the quality of the labor force employed in the production (level of its education, professionalism, learning and creativity) (Abramov, 2017).

Management of labor productivity must necessarily include the process of its measurement, which is carried out either through the production - the number of products produced per unit of working time, or through the labor intensity - the cost of working time for the production of a unit of production (Abramov, 2018). The development is considered to be a direct a measure of labor productivity, the complexity of reverse (Yeung, 2002). At the same time, it is almost indifferent which indicator will be adopted to calculate the level and dynamics of labor productivity, since one of them characterizes the growth of labor productivity through an increase in the volume of output, and the second - through saving labor costs for the production of a unit of output. Calculations of labor productivity can be made using hourly, daily or annual output.

RESULTS AND DISCUSSION

Production can be calculated in natural and cost indicators. The indicator of production in real terms (pieces, tons, meters, etc.) most objectively and reliably characterizes the level of productivity, since it is calculated by comparing the volume of production in real terms with the cost of working time for its production (Hossain, 2017). In assessing productivity in similar profile products industries are used conditionally indicators (Kraus, 2014). The indicator of production in real terms allows you to calculate and compare the production of individual workers and teams by type of work in the context of individual professions, to plan the number of teams, their professional and qualification composition, to compare the levels of productivity for different periods of time (Schmitz, 2017).

However, in the presence of several types of heterogeneous products at the enterprise, natural indicators do not allow to obtain generalizing indicators of production and compare its levels for workers of different professions (Morozov, 2018). Natural indicators are not applicable in manufacturing enterprises, in particular, in machine-building enterprises, where there is a diversified production (Ebrahimi, 2017). When inter-industry comparison of productivity applications and natural and semi-natural parameters are also not acceptable. The disadvantage of natural and conditionally-natural indicators is that they are influenced by the quality of the raw materials and the amount of their consumption, wear of the used means of production, i.e. they do not accurately (purely) reflect the result of live labor (Benz, 2009).

At the enterprises producing heterogeneous products, the indicator of output in value terms is used, which allows to summarize data on various types of work, to carry out a single planning and accounting of labor productivity at all levels of production, to include in the calculation of all the variety of products produced (Mazzei, 2017). The cost indicator also reflects the quality of the products produced, since when setting the price for the best products, it is necessary to take into account the additional labor costs associated with its production. However, this indicator also has its drawbacks: it depends on the material intensity of products, the cost of raw materials. The greater the material consumption of products, the more expensive the raw materials and materials used, the output indicator in value terms will be higher, which distorts the actual level of productivity. With the market growth of wholesale prices, there is an impression of an increase in labor productivity.

For an objective assessment of the level of labor productivity, it is necessary to choose the right indicator characterizing the volume of output. Most often, the level of labor productivity in enterprises is calculated in terms of gross, marketable or sold products. Gross output allows to take into account all labor costs, including those embodied in the work in progress. Therefore, in material-intensive industries and in those enterprises where the duration of the production cycle of production is large, the use of gross output is the most objective. Commodity products reflect only those labor costs that are embodied in the products ready for sale. The indicator of sold products cannot accurately reflect the level of labor productivity, since it largely depends on the solvency of consumers of manufactured products.

To eliminate the influence of such differences in the manufacture of products as its material and capital intensity in the calculation of labor productivity, it is possible to use indicators of conditionally clean products and net products. The indicator of shareware is used to eliminate the impact on the assessment of labor productivity differences in material consumption of products. Eliminating the influence of the range of products, possibly with the use of the net product, which contains only the profits and wages with deductions for social needs. In terms of net production, labor productivity is usually calculated in labor-intensive industries.

The reverse indicator of labor productivity labor intensity is used, as a rule, for in-production planning, calculation and analysis of labor productivity, and is defined as the ratio of labor costs to the unit of production results, reflecting the labor cost of manufactured products. This indicator is applicable for calculating the productivity of individual workers and teams. It shows the ratio of the actual costs of labor in the execution of a specific scope of work with regulatory measures, characterizing, thus, the degree of implementation of work standards. The advantages of the labor intensity index are that it completely eliminates all the distortions in the calculations of labor productivity that arise when changing the range of products, its material intensity. It allows you to most accurately determine the required number of employees, payroll, apply common methods of accounting, planning and analysis in all structural units of the enterprise.

Indicators of changes in the dynamics of labor productivity are the rates of its growth and growth. The growth rate gives an idea of how many times during the study period increased productivity. The indicator of the growth rate is the index of labor productivity, calculated as the ratio of the levels of labor productivity of the reporting and base periods. The long-term productivity index (for example, several years) is calculated as the product of productivity indices over shorter periods of time (years). The rate of labor productivity growth is calculated as a percentage and shows how labor productivity has changed during the study period.

Economic development in the modern world is based on the growth of labor productivity. The higher the level of productivity, the better the economic potential of the country, the higher the level of social welfare. It is no coincidence that the increase in labor productivity is one of the priorities of the economy of industrialized countries.

For modern Russia, the problem of increasing labor productivity is particularly relevant. The solution of the tasks set by the country's leadership to double GDP and overcome mass poverty involves maintaining high rates of economic growth, for which it is necessary to ensure a sustainable increase in social productivity.

Labour productivity and its improvement largely determine national competitiveness. In recent years, the accumulated backlog of Russia from developed countries has not decreased. In terms of labor productivity, Russia lags behind the countries of the Organization for economic cooperation and development by almost 2 times, from the United States of America by 2.6 times. This problem has become particularly acute in recent years, because extensive growth factors, the use of additional labor resources and other factors of production are limited or closed. Therefore, the intensification of their use, the solution of labor productivity problems both at the level of the structure of the economy, macroeconomic factors, and at the level of microeconomic factors of development, the corresponding work in companies comes to the fore.

In addition to the significant lag of Russia from the more developed countries, in recent years there has been a decline in the labor productivity index both in the economy as a whole and in some industries.

In retail trade, the share of modern formats has increased significantly in recent years, but the degree of their prevalence in Russia is still small. Modern formats account for only about 35% of food sales, while in Western countries more than 70%. The low penetration of modern formats explains more than half of the sector's performance lagging behind the US level. Another typical example is the use of outdated technologies in the retail banking sector. Making payments electronically via ATMs or the Internet requires about 12 times less labor than performing the same operations in a Bank branch. However, in Russia, two-thirds of payments

are made in Bank branches, while in the Netherlands - 10%, and in the US - 7%, despite the fact that the time of one banking transaction in the US is 5 times lower than in our country.

CONCLUSION

The first group technical factors. This group combines all the factors associated with the introduction and use of technology.

The second group socio-economic factors. In the Soviet and modern Russian literature, the factors of increasing the technical level of production, providing the greatest increase in labor productivity, were preferred. Some researchers are committed to the view that with the increase in the achievements of scientific and technological progress, the importance of labor in the growth of labor productivity is gradually reduced, as their share in the total cost of production decreases. The objection to this provision can be summarized as follows: the more means of production a person uses in his work (the main driving force), the more his activity has an impact on the effective functioning of the enterprise. This leads to an increased role of socio - economic factors in increasing productivity, although technical factors may still dominate in the degree of influence.

The third group the genetic and anthropological abilities of man. The selection of such a group of factors as an Autonomous object is due to the presence of individual human characteristics. Factors of this group characterize a set of physiological and socio-psychological characteristics (health, physical and mental abilities) of a person. Differences in the productivity of workers after training is primarily due to their different abilities to assimilate and practical testing of the theoretical foundations. The factors of this group are obvious, but the literature about them, there is no specific information.

REFERENCES

- Abramov, R.A. (2015). Management functions of integrative formations of differentiated nature. *Bioscience Biotech Research Asia*, 12(1), 991-997.
- Abramov, R.A. (2016). Regional economic policy based on industrial sector clustering in the context of sustainable development. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 7(2), 2100-2106.
- Abramov, R.A., & Sokolov, M.S. (2017). Current challenges and competitive advantages of national innovation systems (NIS) of the countries-participants of the union state up to 2030. *Journal of Advanced Research in Law and Economics*, 8(4), 1031-1039.
- Abramov, R.A., Tronin, S.A., Brovkin, A.V., & Pak, K.C. (2018). Regional features of energy resources extraction in eastern Siberia and the far east, *International Journal of Energy Economics and Policy*, 8(4), 280-287
- Akhmetshin, E., Morozov, I., Pavlyuk, A., Yumashev, A., Yumasheva, N., & Gubarkov, S. (2018). Motivation of personnel in an innovative business climate. *European Research Studies Journal*, 21(1), 352-361.
- Audretsch, D.B., & Albert, N.L. (2012). Entrepreneurship and innovation: Public policy frameworks. *The Journal of Technology Transfer*, 37(1), 1-17.
- Baboshkina, A.A., Savina, N.P., & Morozov, I.V. (2018). Management processes in the development of the socio-economic environment of the region. *Journal of Advanced Research in Law and Economics*, 9(2), 376-385.
- Benz, M. (2009). Entrepreneurship as a non-profit-seeking activity. *International Entrepreneurship and Management Journal*, 5(1), 23-44.
- Drolen, C.S. (1990). Current community mental health center operations: Entrepreneurship or business as usual?" *Community Mental Health Journal*, 26(6), 547-558.
- Ebrahimi, P., & Seyed Mozaffar, M. (2017). Green entrepreneurship and green innovation for sme development in market turbulence. *Eurasian Business Review*, 7(2), 203-228.
- Hossain, S.M., Abu, S., & Judy, Dr. (2017). A critical appraisal of the social entrepreneurship paradigm in an international setting: A proposed conceptual framework. *International Entrepreneurship and Management Journal*, 13(2), 347-368.

- Koshkin, A.P, Abramov R.A., Rozhina E.Y., & Novikov A.V. (2018). Role of social representations in student motivation for acquiring further education. *Interchange*, 49(3), 313-341.
- Kraus, S., Matthias, F., Michele, O.D., & Eleanor, S. (2014). Social entrepreneurship: An exploratory citation analysis." *Review of Managerial Science*, 8(2), 275-292.
- Lepoutre, J., Rachida, J., Siri, T., & Niels, B. (2013). Designing a global standardized methodology for measuring social entrepreneurship activity: The global entrepreneurship monitor social entrepreneurship study. *Small Business Economics*, 40(3), 693-714.
- Mazzei, M.J., David, J.K., & Christopher, L.S. (2017). Understanding strategic entrepreneurship: A theoretical Toolbox Approach. *International Entrepreneurship and Management Journal*, 13(2), 631-663.
- Morozov, I.V., Potanina, Y.M., Voronin, S.A., Kuchkovskaya, N.V., & Siliush, M.D. (2018). Prospects for the development of the oil and gas industry in the regional and global economy. *International Journal of Energy Economics and Policy*, 8(4), 55-62.
- Rezazadeh, A., & Niloofar, N. (2018). Antecedents and Consequences of Cooperative Entrepreneurship: A Conceptual Model and Empirical Investigation. *International Entrepreneurship and Management Journal* 14(2), 479-507.
- Schmitz, A., David, U., Gertrudes, A.D., Joao, A.S., & Maribel, G., (2017). Innovation and entrepreneurship in the academic setting: A systematic literature review. *International Entrepreneurship and Management Journal* 13(2), 369-395.
- Scott, A.J. (2006). Entrepreneurship, innovation and industrial development: Geography and the creative field revisited. *Small Business Economics*, 26(1), 1-24.
- Yeung, H.W.C. (2002). Entrepreneurship in international business: An institutional perspective. *Asia Pacific Journal of Management*, 19(1), 29-61.