



Article

The Impact of Value Added in Manufacturing Industries on Labor Market Development

Karimov Olimjon Akramovich^{*1}

1. Independent researcher at Karshi State Technical University

* Correspondence: olimkarimov103@gmail.com

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Abstract: This article analyzes the impact of value added created in production sectors on the development of the labor market based on economic theory and practical data. Value added is one of the important macroeconomic indicators determining the economic development of the country, and its growth is of great importance in increasing production efficiency, creating new jobs, increasing labor productivity and increasing incomes of the population. During the study, the development trends of production sectors, their share in gross domestic product and their impact on the labor market were studied using economic and statistical analysis methods. The results showed that an increase in the volume of value added contributes to an improvement in the employment rate, an increase in the demand for skilled labor, and a structural improvement of the labor market.

Keywords: Value Added, Production Sectors, Labor Market, Employment, Labor Productivity, Economic Growth, Industry, Innovation, Investment.

1. Introduction

The acceleration of globalization processes in the world economy, technological progress and increased international competition are further increasing the role of production sectors in economic development. The sustainable development of the country's economy largely depends on the volume of added value created in industrial and production sectors. Added value is new value created in the production process, which reflects the economic efficiency and competitiveness of the enterprise.

In economic theory, value added is interpreted as the difference between the value of the product created as a result of production and intermediate consumption costs. This indicator is important not only at the enterprise level, but also at the level of the entire economy, and is one of the main components of the formation of gross domestic product. In recent years, as a result of reforms aimed at modernizing industry in Uzbekistan, expanding the production of export-oriented products, increasing the level of localization and introducing innovative technologies, the volume of added value created in production sectors has been increasing significantly. This creates new opportunities in the labor market, contributes to an increase in the level of employment and the effective use of labor resources.

Analysis of literature on the topic. The impact of value added created in production sectors on the development of the labor market is one of the relevant areas of modern economics. In scientific research conducted in this area, the relationship between structural

changes in production, increased value added, labor productivity, employment, wages, and human capital has been studied based on various theoretical and practical approaches.

Foreign economists A. Smith argued that the division of labor and specialization are the main factors in increasing production efficiency and national wealth [1]. D. Ricardo highlighted the role of labor productivity and production costs in the formation of added value and explained the differences in efficiency between sectors [2]. M. Porter emphasizes that the competitiveness of countries and sectors is directly related to the creation of high added value and increasing labor productivity [3]. G. Becker scientifically substantiated in the theory of human capital that investments in education, skills and professional training increase added value by increasing labor productivity [4]. R. Solow showed that in the economic growth model, along with technological progress and capital accumulation, labor productivity is the main source of economic growth [5]. M. Todaro emphasizes that the expansion of industrial production in the process of economic development serves to increase employment in the labor market, increase incomes and increase the well-being of the population [6].

In recent years, R. Hausmann and C. Hidalgo, within the framework of the theory of economic complexity, have argued that the development of high-tech and high-value-added production sectors increases the demand for skilled labor and leads to a qualitative improvement in the labor market [7]. This approach shows that the diversification of the production structure and the increase in export potential are inextricably linked to the quality of employment.

Significant scientific research has also been carried out in this direction by scientists from the CIS countries. LI Abalkin emphasized that structural modernization of the economy is the main condition for increasing production efficiency and labor productivity [8]. AG Aganbegyan studied the issues of ensuring employment and accelerating economic growth through the creation of high added value in industrial sectors [9]. RI Kapelyushnikov deeply analyzed the relationship between the institutional development of the labor market, wage differentiation, and labor productivity [10]. In their scientific views, increasing production efficiency is recognized as the main factor ensuring labor market stability.

The issues of the interrelationship between production sectors, added value and the labor market have also been widely studied by Uzbek economists. QX Abdurakhmonov scientifically substantiated that the effective use of the labor market, labor resources and human capital is an important factor of economic growth [11]. B.Yu. Khodiev studied the issues of increasing production efficiency and forecasting economic processes using economic and mathematical modeling methods [12]. AV Vakhobov highlighted the role of economic growth, structural reforms and investments in creating added value [13]. Recent studies have deeply analyzed the relationship between economic growth and labor market indicators in the Uzbek economy, the quality of employment and the issues of increasing production efficiency.

The analysis shows that in existing scientific works, the issues of production efficiency, added value, labor productivity and employment have been widely studied in separate areas. However, the issues of assessing the impact of added value created in production sectors on the development of the labor market based on complex econometric models, determining the functional relationship between added value and employment across sectors, as well as developing medium and long-term forecasts of labor market development based on these factors have not been sufficiently studied. This situation determines the relevance of this research topic and creates the need to continue scientific research.

2. Materials and Methods

The research used a systematic approach, using methods of economic analysis, statistical observation, comparative analysis, economic-mathematical evaluation and scientific generalization. The information base of the research was formed by reports of international organizations, including the World Bank, International Labour Organization (ILO), OECD, UNIDO, as well as data from the Statistical Agency of the Republic of Uzbekistan [14], [15], [16].

The analysis was carried out in the following stages:

1. Study the theoretical foundations of added value;
2. Determine the role of production sectors in economic development;
3. Assess the relationship between value added and labor market indicators;
4. Scientifically summarize the results obtained.

The following indicators were used in the study:

- the volume of added value created in production sectors;
- employment rate;
- average salary;
- labor productivity;
- investment volume;
- export volume.

Based on these indicators, the impact of production sectors on the labor market was comprehensively assessed.

3. Results and Discussion

The results of the study show that there is a positive correlation between employment, labor productivity, and average wages as the share of value added increases in manufacturing sectors. In industries with high added value, labor productivity and the share of skilled jobs are higher, which improves labor market quality indicators.

Table 1. Table of value added, employment index, and labor productivity and evaluation indicators.

Network	Value Added Index	Employment index	Labor productivity	Evaluation
Food	72	68	70	Medium
Textile	78	75	76	Good
Mechanical engineering	88	84	90	High
Chemistry	85	80	87	High
Building materials	74	71	73	Medium

The results of the table show that in the mechanical engineering and chemical industries, high value added is accompanied by harmonious growth in labor productivity and skilled employment indicators. In sectors with low value added, although there are jobs, productivity and wages are formed at a relatively low level. Therefore, modernization of production, introduction of innovative technologies, and increased investment in human capital contribute to the sustainable development of the labor market.

The results confirm that the strategy of creating high added value in production sectors has a positive impact on the development of the labor market not only quantitatively, but also qualitatively. The introduction of digital technologies by

enterprises increases labor productivity and increases the demand for highly qualified specialists. This leads to an increase in average wages and a reduction in hidden employment. Also, directing investments in regions to high-value-added production sectors ensures labor market stability.

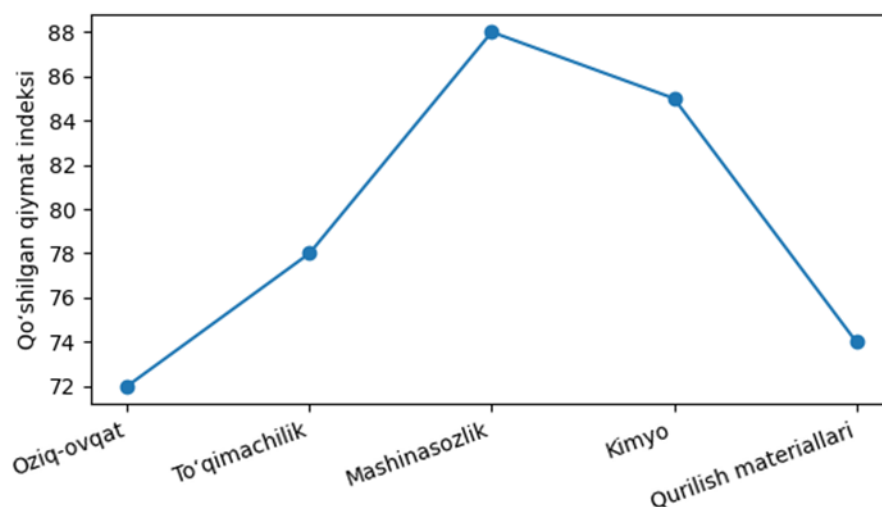


Figure 1. Value added index by industry (sample analytical indicator).

The results of the study showed that there is a direct positive correlation between the added value created in manufacturing sectors and labor market development.

First, an increase in value added strengthens the profitability and financial stability of enterprises. As a result, production capacities expand, new enterprises are established, and additional jobs are created. Second, labor productivity is relatively high in production sectors that create high value added. This allows for improved incomes and social protection of workers. Third, an increase in value added stimulates the introduction of innovative technologies. The widespread use of modern production technologies increases the demand for highly qualified specialists and serves the development of human capital. Fourth, high value added created in export-oriented production sectors provides the country with additional foreign exchange earnings. This creates the basis for the creation of new jobs in other sectors of the economy.

Analysis shows that an increase in the volume of added value in industrial enterprises leads to an increase in labor productivity and an increase in the demand for the quality of the workforce. This relationship is especially evident in the mechanical engineering, chemical industry, electrical engineering, pharmaceuticals and food industries. In addition, enterprises that create high added value usually invest more in the professional training of employees. As a result, the share of qualified personnel in the labor market increases.

The results of the study confirm the connection between economic growth and labor market development. An increase in value added contributes to an increase in the income of enterprises, an increase in investment attractiveness, and the creation of new production capacities.

However, in the modern economy, an increase in value added does not always mean an absolute increase in employment. The processes of digitization, robotization and automation can lead to a reduction in certain professions. Therefore, a structural transformation of the labor market is taking place.

Today, manufacturing enterprises need specialists with technical and digital skills, rather than simple manual labor. This requires strengthening the integration between the

education system and the labor market. There are also differences between value added and employment across regions. In industrialized regions, the number of jobs and wages are higher, and economic activity is also relatively high. Therefore, to ensure the development of the labor market, it is important to develop not only the volume of production, but also the production sectors that create high added value.

4. Conclusion and suggestions.

The results of the study confirmed that the value added created in production sectors has a significant impact on the development of the labor market. An increase in the volume of value added, along with increasing production efficiency, is an important factor in creating new jobs, increasing labor productivity, increasing population incomes, and ensuring sustainable development of the labor market. The analysis showed that in production sectors that create high value added, labor productivity and wage levels are higher than in other sectors, which contributes to an increase in demand for qualified labor resources. On the contrary, in sectors with low value added, labor productivity and incomes are relatively low, and their impact on labor market development is limited. The study revealed a positive relationship between the value added created in production sectors, the volume of investments, labor productivity, and employment indicators. It was substantiated that the introduction of modern technologies, the expansion of innovative activities, and the diversification of production contribute to the qualitative development of the labor market by increasing value added.

It was also determined that the development of high-tech sectors of the economy, expansion of the production of export-oriented and high-value-added products are important factors in creating stable and highly profitable jobs in the labor market. This, along with increasing the competitiveness of the country's economy, will also have a positive impact on the development of human capital.

It is necessary to further improve industrial policy aimed at increasing the share of high value-added products in manufacturing sectors. It is advisable to increase labor productivity and increase the number of qualified jobs through the widespread introduction of innovative technologies and digital production elements. It is necessary to create new jobs and ensure labor market stability by directing investments, first of all, to industries that create high added value. It is recommended to systematically improve the professional skills of employees at manufacturing enterprises, expand dual education and cooperation between enterprises and higher education institutions. It is advisable to introduce modern econometric models and digital information and analytical platforms to regularly monitor and evaluate value added and labor market indicators across sectors. It is necessary to increase employment and reduce labor market disparities between regions by developing high-value-added industrial clusters in the regions. It is recommended to increase production efficiency and export potential by targeting tax, credit, and investment incentives to high-value-added enterprises. It is advisable to implement a comprehensive system of indicators that integrate value added, labor productivity, wages, and employment indicators in production sectors. Based on the needs of the labor market, it is necessary to expand the scope of training highly qualified personnel in engineering, information technology, and industry. It is recommended to formulate the state's industrial and employment policy based on regular forecasting and assessment of the impact of value added on labor market development.

In conclusion, the added value created in the production sectors is an important factor in the country's economic development, and it directly affects the stability of the labor market, increased employment, and improved well-being of the population.

REFERENCES

- [1] Smith A. An Inquiry into the Nature and Causes of the Wealth of Nations. London, 1776.
- [2] Ricardo D. On the Principles of Political Economy and Taxation. London, 1817.
- [3] Porter M.E. The Competitive Advantage of Nations. New York: Free Press, 1990.
- [4] Becker G.S. Human Capital. 3rd ed. Chicago: University of Chicago Press, 1993.
- [5] Solow R.M. "A Contribution to the Theory of Economic Growth." Quarterly Journal of Economics, 1956.
- [6] Todaro M.P., Smith S.C. Economic Development. 13th ed. Pearson, 2020.
- [7] Hausmann R., Hidalgo C.A. The Atlas of Economic Complexity. MIT Press, 2014.
- [8] Абалкин Л.И. Стратегия экономического роста. Москва: Экономика.
- [9] Аганбегян А.Г. Социально-экономическое развитие России. Москва.
- [10] Капелюшников Р.И. Российский рынок труда. Москва: Издательский дом ВШЭ.
- [11] Abdurahmonov Q.X. Mehnat iqtisodiyoti. Toshkent: Iqtisodiyot, 2019.
- [12] Xodiyev B.Yu. Ekonometrika. Toshkent.
- [13] Vahobov A.V. Milliy iqtisodiyot. Toshkent. World Bank. World Development Report. Washington DC.
- [14] International Labour Organization. World Employment and Social Outlook. Geneva.
- [15] Organisation for Economic Co-operation and Development. Productivity and Jobs Report. Paris.
- [16] United Nations Industrial Development Organization. Industrial Development Report. Vienna