



WAYS TO ANALYZE AND INCREASE THE EFFICIENCY OF THE ECONOMY OF THE INDUSTRIAL SECTOR IN UZBEKISTAN

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ABSTRACT

This article provides a detailed overview of the indicators reflecting the economic efficiency of the industrial sector and the factors influencing it. An analysis of the role of the industrial sector in the national economy, its economic potential, and efficiency indicators has been conducted. Additionally, scientifically grounded proposals have been developed to further enhance the economic efficiency of the industrial sector.

KEY WORDS

Industry, industrial sector, industrial products, economic efficiency, economic potential, economic growth.

Introduction

In the context of global globalization, many scientific research works are being carried out to develop the infrastructure for the production of high-tech industrial products, achieve increased exports through high-quality and competitive finished products, and increase the efficiency of using the potential of the industrial sector. Among them, one of the priority areas is the effective use of existing potential, in-depth analysis of economic efficiency indicators, economic and statistical assessment of factors affecting its development, improvement of criteria, diversification of product production, and forecasting growth trends, as well as improving theoretical and methodological methods for increasing the efficiency of using the potential of the industrial sector.

Industrial sectors also play an important role in the sustainable development of the economy of Uzbekistan. The added value of industrial products in GDP is 26.7 percent, and the highest share of its additional growth is 1.4 percent, and if we include construction in the industry, these indicators are 33.4 and 2.7 percent, respectively [12]. Therefore, in recent years, our country has been implementing comprehensive reforms aimed at the effective use and further development of industrial potential, modernization of industrial production and diversification of products, digitalization of processes, increasing investment attractiveness, increasing efficiency based on the effective use of existing factors, sustainable development of the economy, raising the standard of living of the population, and ensuring employment.

The Strategy "Uzbekistan - 2030" [1] sets out such important tasks as "developing the "driver" sectors of industry and fully utilizing the industrial potential of the regions, increasing the value added in industry to \$45 billion and creating 2.5 million high-income jobs, increasing the share of technological

products produced in industry from 25 percent to 32 percent, and doubling labor productivity in the processing industry."

In order to ensure the effective implementation of these tasks, it is necessary to conduct a thorough analysis of the existing industrial potential in our country, ensure its effective use and further sustainable development, select the factors affecting it, economically assess its condition, and develop scientifically based proposals and practical recommendations by developing forecast indicators for the future. This reflects the relevance of the topic of this research.

LITERATURE REVIEW

A large database of economic indicators and the ability to use them are essential in assessing the economic efficiency of an industrial sector.

It should be noted that economic efficiency is the availability of resources and the potential for their effective use to ensure competitive and sustainable development in conditions of change and uncertainty [2].

When analyzing the economic efficiency of canoeing networks, it is necessary to study the economy of the region and study the localization features of existing enterprises, as well as take into account its development trends [3]. Typically, the idea of assessing the socio-economic development of countries is based on the concept of sustainable development. According to it, the main goal of economic activity should not be to increase production, but to ensure the improvement of the living standards of the population while protecting and preserving the environment.

However, when assessing the economic efficiency of an industrial sector, it is necessary to take into account the contribution of each of the various means to the production of products. That is, it is important to analyze all the factors that affect economic efficiency and participate in the process of production and sale of goods, especially the contribution of each factor to reducing total costs, since these are the basis for ensuring increased production efficiency.[4].

In other words, the efficiency of industrial production depends on the resources of the sector and their ability to transform into the necessary results to achieve specific goals in the production process.[5].

E. Nikolskaya believes that in determining production efficiency, each resource potential is related to other resources in the production process. She believes that in order to accelerate production, it is necessary to increase the contribution of resources, which will help to increase the efficiency of production by reducing the consumption of individual types of materials for production units and organizing production accordingly.[6].

K. Vinogradov and O. Lomovtseva believe that it is appropriate to use the following main methods to assess the economic efficiency of industry:[7]:

1. Resource assessment;
2. Index analysis;
3. Optimization models;
4. Correlation and regression methods.

In addition, there are many economic indicators that express industrial efficiency, such as the availability, condition and efficiency of fixed assets, that is, in a word, material and technical capabilities, etc.[8].

In our opinion, the components of industrial efficiency can be expressed and evaluated based on indicators and criteria such as the efficiency of factors such as innovation, infrastructure, financial,

material and technical, labor resources and investment, as well as internal and external market conditions, marketing activities, and logistical capabilities.

Ye. Zadorozhnyia believes that the main factors of structural changes in industrial sectors include changes in the forces of production, production relations, types, quantity and quality of social needs.[9]. Therefore, the development and implementation of development strategies aimed at expanding the scope of operating markets, using innovative changes that increase the competitiveness, efficiency, and economic potential of industrial products, as well as modern scientific and technological achievements, which are its main advantages, will serve to increase the efficiency of the industrial sector.

METHODOLOGY

This article deeply studies the research of foreign scientists on the topic. In practical analysis, official statistical data and methods such as statistical observation, comparative analysis, synthesis, logical thinking, statistical tables and graphs, comparative analysis are used.

DISCUSSION AND RESULTS

According to statistics, in 2023, the volume of GDP amounted to 1066569.0 billion soums, an increase of 106% compared to 2022. The gross value added of sectors in the formation of GDP accounts for 94.5% (Table 1).

According to the analysis, in the gross value added of all sectors (100%), the share of agriculture, forestry and fisheries is 24.3 percent, the share of industry (including construction) is 32.3 percent, of which the share of industry is 26.1 percent, the share of construction is 6.2 percent, the share of services is 43.4 percent, of which the share of trade, accommodation and catering services is 7.2 percent, the share of transportation and storage, information and communication services is 7.7 percent, and the share of other service sectors is 28.5 percent.

Table 1 **GDP structure by type of economic activity¹, billion soums**

| Indicators | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| I. GDP, total | 317,476.4 | 426,641.0 | 532 712.5 | 605,514.9 | 738,425.2 | 896,617.9 | 1,066,569.0 |
| Networks total added value | 282,684.4 | 381,065.2 | 487 449.8 | 561 153.4 | 686,432.4 | 836 839.7 | 1,008,423.1 |
| Pure to products taxes | 34,792.0 | 45,575.8 | 45,262.7 | 44,361.5 | 51,992.8 | 59,778.2 | 58 145.9 |
| II. Total of networks added value | 282,684.4 | 381,065.2 | 487 449.8 | 561 153.4 | 686,432.4 | 836 839.7 | 1,008,423.1 |
| Agriculture, forestry and fisheries | 90,983.9 | 113,327.4 | 129,885.0 | 150,493.7 | 181,787.7 | 208,809.2 | 245 222.5 |
| Industry (including construction) | 74,799.0 | 116 225.2 | 164,635.7 | 187,610.0 | 232,535.7 | 280,057.7 | 325 378.4 |
| industry | 59,570.4 | 94,266.7 | 134 185.8 | 150 275.1 | 186,978.2 | 225,771.2 | 262,824.2 |
| construction | 15,228.6 | 21,958.5 | 30,449.9 | 37,334.8 | 45,557.4 | 54,286.4 | 62,554.2 |
| Services | 116,901.5 | 151,512.6 | 192,929.1 | 223,049.8 | 272 109.1 | 347,972.9 | 437,822.2 |
| trade, accommodation and catering services | 21,540.6 | 26,510.1 | 32 179.7 | 36,662.8 | 46,750.0 | 58,020.3 | 72,382.4 |
| transportation and storage, information and communication | 25,305.6 | 30,095.3 | 36,028.6 | 38,313.1 | 47,934.3 | 60,027.1 | 77,833.1 |
| other service networks | 70,055.4 | 94,907.3 | 124,720.8 | 148,073.9 | 177,424.8 | 229,925.5 | 287,606.7 |

¹Data from the Statistical Agency under the President of the Republic of Uzbekistan.

In 2023 (compared to 2022), the gross value added of sectors increased by 105.9%, including the gross value added of sectors by 105.9%, agriculture, forestry and fisheries by 104.1%, industry (including construction) by 106.1%, of which industry by 106.0%, construction by 106.4%, services by 106.8%, of which trade, accommodation and catering services by 110.2%, transportation and storage, information and communication by 112.3%, and other service sectors by 104.5%.

In 2023, the volume of industrial output amounted to 655821.9 billion soums. Of this, 55240.5 billion soums were accounted for by the mining and open pit mining industry, 553333.4 billion soums by the manufacturing industry, 44247.7 billion soums by the electricity, gas, steam supply and air conditioning industry, and 3000.3 billion soums by the water supply; sewage system, waste collection and disposal industry (Table 2).

Table 2 **Production of industrial products by type of economic activity², billion soums**

| T/r | Indicators | 2021 | 2022 | 2023 |
|-----|---|------------------|------------------|------------------|
| | Industrial output, billion soums | 456,056.1 | 553 265.0 | 655,821.9 |
| I | Mining and open pit mining | 43,872.2 | 52,093.5 | 55 240.5 |
| II | Manufacturing industry | 378 186.4 | 460 491.8 | 553 333.4 |
| 1 | Food production | 48,643.3 | 57,547.3 | 65 174.7 |
| 2 | Beverage production | 10 135.4 | 16 111.3 | 17,968.3 |
| 3 | Tobacco products production | 2,089.4 | 2,888.9 | 3 199.6 |
| 4 | Textile production | 52,372.3 | 62,850.7 | 71 121.1 |
| 5 | Clothing production | 13,592.8 | 17,264.8 | 22,478.3 |
| 6 | Production of leather and related products | 2,083.9 | 2,220.6 | 2,794.7 |
| 7 | Manufacture of articles of wood and cork (except furniture), straw and plaiting materials | 2 209.0 | 2,537.0 | 2,207.5 |
| 8 | Paper and paper products production | 2,896.2 | 4 275.6 | 5 468.5 |
| 9 | Publishing and displaying written materials | 1,683.2 | 2,627.5 | 2 146.7 |
| 10 | Production of coke and petroleum products | 11,371.5 | 16,095.9 | 25,027.1 |
| 11 | Chemical production | 28,080.7 | 33,639.5 | 34,521.6 |
| 12 | Production of basic pharmaceutical products and preparations | 3,903.0 | 3,402.0 | 4,026.4 |
| 13 | Production of rubber and plastic products | 8,463.3 | 9,342.7 | 10,895.4 |
| 14 | Manufacture of other non-metallic mineral products | 20,714.8 | 22,442.4 | 27,965.3 |
| 15 | Metallurgical industry | 96,785.5 | 107,071.9 | 126,302.7 |
| 16 | Manufacture of fabricated metal products, except machinery and equipment | 11,064.1 | 12,584.3 | 13,910.7 |
| 17 | Manufacturing of computers, electronic and optical products | 6 232.9 | 6 261.7 | 3,923.8 |
| 18 | Electrical equipment manufacturing | 11,212.0 | 14,388.0 | 18,445.0 |
| 19 | Manufacture of machinery and equipment not elsewhere classified | 4,353.3 | 5,448.7 | 5,526.1 |
| 20 | Manufacture of vehicles, trailers and semi-trailers | 32 167.6 | 51,396.2 | 77,050.9 |
| 21 | Production of other transport spark plugs | 1,137.6 | 1,520.7 | 1,827.5 |
| 22 | Furniture production | 3,059.8 | 3,996.7 | 4,057.9 |
| 23 | Other manufactured goods manufacturing | 2,049.5 | 2,499.1 | 4,056.9 |
| 24 | Repair and installation of machinery and equipment | 1,885.3 | 2,078.4 | 3 236.8 |
| III | Electricity, gas, steam and air conditioning supply | 30,815.5 | 37,653.7 | 44,247.7 |
| IV | Water supply; sewage system, waste collection and disposal | 3 182.0 | 3,026.1 | 3,000.3 |

²Data from the Statistical Agency under the President of the Republic of Uzbekistan.

The most important component of the industrial sector is the manufacturing industry, which includes more than 24 types of production activities. In 2023, the following volumes of products were produced by manufacturing industry activities. The volume of food production was 65174.7 billion soums, the volume of beverage production was 17968.3 billion soums, the volume of tobacco products was 3199.6 billion soums, the volume of textile products was 71121.1 billion soums, the volume of clothing production was 22478.3 billion soums, the volume of leather and related products was 2 794.7 billion soums, the volume of wood and cork products (except furniture), straw and wickerwork products was 2207.5 billion soums, the volume of paper and paper products was 5468.5 billion soums. soums, the volume of publishing and reproduction of written materials 2146.7 billion soums, the volume of production of coke and oil refining products 25027.1 billion soums, the volume of production of chemical products 34521.6 billion soums, the volume of production of basic pharmaceutical products and preparations 4026.4 billion soums, the volume of production of rubber and plastic products 10895.4 billion soums, the volume of production of other non-metallic mineral products 27965.3 billion soums, the volume of the metallurgical industry 126302.7 billion soums, the volume of production of finished metal products, except for machinery and equipment 13910.7 billion soums, the volume of production of computers, electronic and optical products 3923.8 billion soums, the volume of production of electrical equipment 18445.0 billion soums soums, the volume of production of machinery and equipment not included in other categories was 5526.1 billion soums, the volume of production of motor vehicles, trailers and semi-trailers was 77050.9 billion soums, the volume of production of other transport equipment was 1827.5 billion soums, the volume of production of furniture was 4057.9 billion soums, the volume of production of other finished goods was 4 056.9 billion soums, and the volume of repair and installation of machinery and equipment was 3 236.8 billion soums.

The per capita industrial output in the republic is 15,520.2 thousand soums. In particular, industrial output per capita in the Republic of Karakalpakstan is 8981.4 thousand soums, in Andijan 16529.9 thousand soums, in Bukhara 13647.2 thousand soums, in Jizzakh 7812.5 thousand soums, in Kashkadarya 6566.7 thousand soums, in Navoi 80786.1 thousand soums, in Namangan 6112.9 thousand soums, in Samarkand 7163.2 thousand soums, in Surkhandarya 2605.5 thousand soums, in Syrdarya 13532.3 thousand soums, in Tashkent 31664.5 thousand soums, in Fergana 7698.4 thousand soums, in Khorezm 9439.5 thousand soums, in Tashkent city 37398.7 thousand soums.

The growth rate of industrial output per capita in the republic was 103.2 percent, while this indicator was 99.1 percent in the Republic of Karakalpakstan, 120.2 percent in Andijan, 104.3 percent in Bukhara, 105.8 percent in Jizzakh, 107.8 percent in Kashkadarya, 104.0 percent in Navoi, 106.7 percent in Namangan, 106.3 percent in Samarkand, 101.9 percent in Surkhandarya, 106.9 percent in Syrdarya, 103.8 percent in Tashkent, 102.4 percent in Fergana, 113.0 percent in Khorezm, and 103.1 percent in Tashkent city.

In addition, the volume of consumer goods produced per capita in the republic is 4067.8 thousand soums, in the Republic of Karakalpakstan 1219.6 thousand soums, in Andijan 11 119.9 thousand soums, in Bukhara 2458.1 thousand soums, in Jizzakh 2819.7 thousand soums, in Kashkadarya 871.7 thousand soums, in Navoi 3021.5 thousand soums, in Namangan 2596.2 thousand soums, in Samarkand 2428.8 thousand soums, in Surkhandarya 624.8 thousand soums, in Syrdarya 2307.5 thousand soums, in Tashkent 6165.6 thousand soums, in Fergana 1939.6 thousand soums, in Khorezm 5294.6 thousand soums, in Tashkent city 11446.6 thousand soums amounted to soums.

In general, achieving high profits in the main activities of industrial sectors allows creating favorable conditions for investment processes and increasing the economic interest of investors. As a result, the chances of an industrial enterprise to successfully implement its investment strategy in a competitive market increase.

After all, in the process of producing any product, technologies, energy and information resources, labor and a number of other resources are used simultaneously. They are interconnected, but often have a multifaceted nature. That is, each of these factors has its own significance for analyzing production potential. In this case, their use in combination with quantitative and qualitative indicators fully reflects production efficiency, which is useful for the effective use of production resources and their optimal organization. Therefore, the efficiency of the used production resources can be considered an integral sign of economic potential.

In our opinion, when analyzing and assessing the process of socio-economic development of the industry:

first, to conduct a morphological analysis of the country's regions, taking into account criteria such as the geographical location of the regions, the map of the region, and the ecological and geographical potential of the region;

secondly, it is necessary to analyze the economic potential of the regions, which includes assessing the state of financial, material and technical resources, innovation and investment potential, communication relations, trade and service provision, and logistics infrastructure;

thirdly, demographic analysis, which involves studying demographic changes, the source of income of the population (consumer), the state of scientific and technological development, and the labor potential of labor resources;

Fourth, it is advisable to develop a computerized model for increasing the efficiency of the country's economy, in particular industry, in which it is necessary to analyze information monitoring, data collection and processing systems, the state of information, and the use of innovations in informatization.

The imbalance between the dynamics of industrial products and resources determines the extensive or intensive form of economic growth [10]. In this case, the growth rate of industrial production is higher than the growth rate of resources, which characterizes intensive growth. That is, the growth of production is achieved due to the efficient use of production resources.

The extensiveness or intensity of production can be analyzed by comparing the following indicators:

- the dynamics of resource efficiency indicators are determined. It considers the levels of labor productivity, capital efficiency and fixed assets turnover, as well as the dynamics of material income;
- for a 1% increase in production volume, the change in the share of relevant resources is determined and the redistribution of the composition of resources is determined;
- quantitative and qualitative indicators of increasing production efficiency are evaluated using the method of resource exchange.

The achievement of high economic potential by regional industries is also one of the main factors of development.

According to V.N. Shukov, what is important is not the volume, quality or competitiveness of products, but the creation of an economic system that will operate effectively in the long term. Also, to achieve high economic efficiency and develop industrial production, the material and technical base should be of high importance [11].

According to foreign experience, it is advisable to implement comprehensive measures aimed at developing and increasing the competitiveness of industrial sectors that are capable of achieving competitive advantage in the world market and ensuring management efficiency, in particular, energy, fuel, chemical and petrochemical, construction materials production, textile industry, food, pharmaceutical and other industries.

In our opinion, the basis for achieving high economic efficiency lies in achieving production efficiency based on the rational use of available resources. In particular, it is necessary to analyze the levels of influence of technological and economic factors, model their impact, and implement an effective strategy for managing the income of industrial enterprises and ensuring intensive development by reducing costs.

CONCLUSION AND SUGGESTIONS

The implementation of programs to improve the economic efficiency of the industrial sector and reform production processes, its structural transformation and diversification, and the strengthening of its material and technical base will create a basis for the development of production. Therefore, for the more sustainable development of the industry, it is advisable to take into account the following:

- increasing the competitiveness of products through the development of advanced local technologies and the introduction of modern information and communication technologies;
- reduce imports by effectively continuing the implementation of the State Program on "... localization of production of finished products, components and materials";
- comprehensive support and encouragement of the production activities of small businesses, etc.

It is known that for the implementation of all types of production activities, factors such as labor resources, equipment, raw materials and initial capital are needed in the general economic sense. It follows that increasing the economic efficiency of industrial sectors is achieved by choosing and applying the most effective method of using production factors. Also, an increase in the volume of industrial products and a decrease in costs lead to an increase in efficiency.

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