



Article

Methodological Analysis of The Mechanism for Increasing The Efficiency of Regional Industrial Capacity

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Abstract: The article analyzes the main factors affecting the increase in production efficiency in industrial sectors based on a systematic approach. In traditional economic literature, material resources, intangible assets and labor resources are indicated as factors determining the economic potential of an enterprise. However, the study proves that investing only in material resources is a narrow approach, and their actual relevance to entrepreneurial ability is demonstrated. Because the ability of an enterprise to direct its existing funds to other areas in order to make a profit, assess risks in this process and make strategic decisions directly depends on management and entrepreneurial ability. The analysis develops methods for determining the rate of return, profitability coefficients and investment potential of each directed project when assessing the results of investment activities. The inclusion of entrepreneurial ability as an additional factor in assessing the potential of an enterprise is theoretically and practically justified. Also, risk management, effective use of resources and the implementation of innovative approaches are indicated as important areas ensuring stability and competitiveness in industrial sectors. As a result, the article is devoted to the study of economic potential, which is formed by the combination of four main factors - material resources, intangible assets, labor resources, and entrepreneurial ability - in increasing production efficiency in industrial enterprises. This approach serves to develop a theoretical basis and practical recommendations for the effective development of industrial sectors in the regional economy.

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Keywords: industrial sectors, production efficiency, economic potential of the enterprise, investment activity, entrepreneurial ability, material resources, intangible assets, labor resources, risk management, regional economy.

1. Introduction

The development of the economy in the world cannot be imagined without industry, which is one of the main sectors. Therefore, in the development of the regional industry, each region pays great attention to industry. Production processes in the region According to the results of January-September 2024, the volume of the regional GRP amounted to 36006.9 billion soums, which is an increase of 4.5% compared to January-September 2023. At the same time, we can see that the growth processes of the structure of the GRP sectors accounted for 103.6% in Agriculture, forestry and fisheries, 104.5% in industry, 101.8% in construction and 105.8% in the services sector. We can also see that the GRP per capita was 2.3% and amounted to 10482.7 soums [1].

Also, the development trends of the regional industrial sectors and the growth points of production and the main indicators of the development of the industry were analyzed based on regional characteristics [2]. From this, we can see that great importance is attached to the development of the industry in each country. Also, the analysis of the main

indicators of the development of the industry in the regions was carried out based on the development trends of the regional industries and the growth points of production and the regional characteristics [3].

To determine the level of specialization of regions, indicators such as the localization coefficient, the per capita production coefficient, and the interregional market coefficient are used [4].

According to economist A.A. Kushnarev, in order to improve the efficiency of industrial structures in the development of the regional economy, it is important to be able to correctly select and apply the features of qualitatively organizing production processes that realize high potential in important structural industrial sectors [5].

When developing a mechanism for business solutions that will allow the region to achieve a competitive advantage in the production of industrial products, it is proposed to use a methodological approach, which is implemented by introducing an information risk management structure to minimize the impact of existing information risks [6].

2. Materials and Methods

This study is a method of systematic production engineering technology for efficient utilization in regional industrial sectors. This research focuses on the production factor studied in industrial productivity, such as material resources, intangible asset, labor resources, and entrepreneurial ability. The specific elements of regional geographical as well as risk management practices and innovative strategies are analysed, and their influence on the growth and competitiveness of industrial enterprises is measured (and defined) in certain territories. Data collection included reviewing economic indicators, production growth rates, and industry structures in different regions, combined with statistical indicators characterising regions in terms of gross regional product (GRP) per capita, and sectoral shares in industrial output [7]. In addition, a comparative analysis method has been used in the study to assess the degree of regional specialization through localization and interregional market coefficients. It is also a study with two subjects of interest by applying a methodological framework that integrates risk management and production efficiency strategies to optimize resource consumption and achieve sustainable industrial development. The conclusions were based on the scoring of the sectors diagnosed with industry growth, which were divided by regions into high, medium and low levels of development according to industrial output and per capital productivity. Its aim was to identify the areas with the highest industrial potential, indicating where local policymakers and industry can take concrete steps to develop regional industrial capacity [8].

3. Results and Discussion

Regional specialization is often determined based on calculations based on production indicators such as the volume of goods shipped, the composition of gross domestic (regional) product, the structure of employment, and the composition of exports. The regions with the lowest specialization index indicate that the structure of their economies is highly diversified [9]. We consider the growth rates of consumer goods production in the regions of our republic in the following table 1.

Table 1. Growth rates of consumer goods production in the regions of our country. (in percent)

Regions of our country	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Republic of Karakalpakstan	107,9	109,4	109,4	109,7	106,0	106,7	114,7	110,3	105,7	113,9
Andijan region	109,6	105,5	112,0	118,8	104,3	106,4	122,2	102,2	113,6	105,3
Bukhara region	109,2	119,0	101,2	92,4	70,1	134,9	165,2	119,9	99,9	92,3
Jizzakh region	104,6	100,5	110,9	113,4	105,1	104,2	102,6	105,9	108,9	114,9

Kashkadarya region	109,6	108,3	113,3	113,9	120,5	109,5	106,7	101,3	116,7	136,6
Navoi region	108,1	102,7	105,8	110,1	112,7	91,2	100,7	110,2	110,9	95,7
Namangan region	107,8	103,5	105,1	113,7	111,5	92,9	100,1	101,1	102,3	107,0
Samarkand region	111,4	106,4	113,7	119,4	122,2	113,2	111,6	111,7	96,4	120,1
Surkhandarya region	107,3	108,10	115,9	120,1	106,1	102,1	110,9	102,8	118,8	111,10
Sirdarya region	105,8	104,1	114,0	116,0	119,4	97,0	101,5	108,9	121,2	112,5
Tashkent region	107,1	105,1	110,8	108,7	111,8	96,6	104,4	101,8	86,3	118,3
Fergana region	112,3	111,6	109,5	122,6	114,5	94,6	111,7	100,0	115,0	127,0
Khorezm region	103,2	103,0	107,0	113,1	112,5	106,5	101,3	102,4	111,4	111,2
Tashkent region, General information of the Republic of Uzbekistan	111,6	107,3	186,7	124,8	93,8	110,8	130,4	124,1	100,1	117,7
	107,4	107,5	114,9	114,6	119,4	107,4	101,7	106,2	107,0	129,2

From this table, we can see that the share of consumer goods in the production rate of the Republic of Uzbekistan was 107.4% in 2012, and by 2021 it will be 129.2%. That is, we can see an increase of 22.4% over the past 10 years. In Kashkadarya region, the share of consumer goods in the production rate of the Republic of Uzbekistan was 109.6% in 2012, and by 2021 it showed 136.6%. This means that this region has increased by 27% over the past 10 years. We can see the next indicator in Fergana region [10]. The share of consumer goods production in this region was 112.3% in 2012, and by 2021 it was 127.0%. So, it can be seen that the production rate of consumer goods in Fergana region has increased by 14.7% over the past 10 years. Also here we can see the regions with high growth rates in the production of consumer goods in the Republic of Uzbekistan from 2012 to 2021, except for these regions, that is, in Samarkand region, the growth rate of gross regional consumer goods production in 2012 was 111.4, and by 2021 it had an indicator of 120.1. At the same time, we can see three of our regions that stand out with high indicators within these regions [11].

Currently, we can see that products manufactured in industrial structures in our region are making a significant contribution to the development of all regions. Let's take an analytical look at some of these structural production processes see Table 2.

Table 2. The share of regions in the structure of manufacturing industry in the republic. (as of 2024. In percent)

Indicators	public of Karakalpakstan	Andijjan	Bukhara	Djizzakh	Kashkadarya	Navoi	Namangan	Samarkand	Surkhandarya	Syrdarya	Tashkent	Fergana	Khorezm	Tashkent city
	Manufacturing industry	3,8	9,3	5,2	2,1	3,2	15,9	3,3	5,7	1,6	1,5	19,4	6,9	3,5
Food production	4,4	5,3	7,1	2,3	5,6	3,8	5,1	12,5	2,8	3,0	15,8	8,6	6,6	17,3

Beverage production	1,7	0,2	1,7	0,2	1,1	0,1	5,6	2,2	0,4	0,5	36,8	0,7	2,9	45,9
Tobacco products production	0,0	0,0	0,0	0,0	0,0	0,0	0,0	85,9	0,0	0,0	0,0	0,0	0,0	14,1
Textile production	3,7	9,9	8,3	5,0	8,0	2,7	7,7	8,4	4,7	2,4	8,5	15,3	5,9	9,4
Clothing production	1,0	27,4	5,2	2,3	3,2	6,8	10,5	4,8	2,5	3,5	13,9	8,4	0,7	9,8
Production of leather and related products	0,1	27,4	1,4	0,1	2,0	2,1	11,5	13,2	0,0	12,0	3,0	19,8	0,4	7,0
Paper and paper products production	0,4	1,1	0,8	1,5	0,5	0,7	3,3	3,9	0,1	0,2	26,0	8,2	5,0	48,3
Publishing and displaying written materials	0,3	0,3	0,2	0,3	0,5	0,7	0,2	1,3	1,2	0,1	9,2	0,6	0,1	85,0
Production of coke and petroleum products	0,1	0,1	73,3	0,1	0,0	0,0	0,1	0,5	4,0	0,0	0,6	19,8	0,0	1,5
Chemical production	31,2	1,1	1,2	0,3	13,2	16,0	0,8	0,9	0,1	0,3	14,2	10,1	0,2	10,5
Production of rubber and plastic products	0,9	3,0	2,5	3,4	0,8	0,7	2,6	5,9	0,4	5,3	23,1	8,8	1,4	41,2
Metallurgical industry	0,0	0,1	0,1	0,2	0,1	46,4	0,2	2,0	0,1	0,0	39,9	0,2	0,0	10,6
Manufacturing of computers, electronic and optical products	1,6	0,0	0,0	0,0	0,1	2,6	0,1	0,1	0,0	0,0	13,8	1,2	0,0	80,4
Electrical equipment manufacturing	0,7	4,9	0,1	3,7	0,0	1,6	2,7	3,3	0,0	0,0	11,6	1,6	0,3	69,4
Manufacture of machinery and equipment not elsewhere classified	0,0	9,6	0,6	2,5	0,5	5,6	3,0	1,0	0,0	3,9	10,9	3,1	6,3	53,0
Manufacture of vehicles, trailers and semi-trailers	0,0	61,3	0,0	3,5	0,0	1,1	0,1	9,3	0,0	0,0	6,3	1,1	15,7	1,6
Production of other transport tools	0,0	18,0	4,8	0,0	0,0	0,0	0,9	5,3	0,0	0,0	4,3	10,3	0,0	56,4
Furniture production	3,6	7,6	6,2	3,8	3,5	1,5	9,2	7,8	4,6	1,1	9,8	10,2	1,7	29,5

Production of other finished items	3,3	6,4	0,8	2,4	0,4	1,3	15,0	1,9	0,0	3,2	5,1	17,4	4,5	38,3
Repair and installation of machinery and equipment	0,6	0,7	3,9	1,8	1,1	2,0	1,1	0,9	5,0	0,5	8,3	0,8	0,8	72,3

We have analyzed the share of regions in the structure of manufacturing industry in our region in percentage terms using the table below [12]. As a result of the analysis, we have identified regions that have recorded high percentages of 3 different types of indicators across 3 regions, see Table 3.

Table 3. The share of the regions of Tashkent city, the Republic of Karakalpakstan and Kashkadarya region in the manufacturing industry in our republic. (as of 2024, in percent)

Tashkent city			
high level (%)	repair and installation of machinery and equipment	furniture production	manufacturing of computers, electronic and optical products
	72,3	29,5	80,4
Republic of Karakalpakstan			
middle level (%)	Chemical production	Food production	Textile production
	31,2	4,4	3,7
Kashkadarya region			
lower level (%)	production of chemical products	textile production	furniture production
	13,2	8,1	3,5

The first of these is the city of Tashkent, which stands out in almost all indicators. That is, repair and installation of machinery and equipment accounts for 72.3%, furniture production for 29.5%, computer, electronic and optical products for 80.4%, electrical equipment for 69.4%, paper and paper products for 48.3%, and a number of similar structural industries are being carried out at a high level [13].

The second region was selected as the Kashkadarya region, and we can see that the region's share in the manufacturing industry, expressed in percentage terms, is 13.2% in chemical production, 8.0% in textile production, and 3.5% in furniture production.

The Republic of Karakalpakstan was taken as the third region and we can see the following indicators. We can see that the production of chemical products accounted for 31.2%, the production of food products for 4.4%, and the production of textile products for 3.7% [14]. As a result of this analysis, we can see that the share of the studied regions in the structure of the manufacturing industry was studied in percentage terms. We divided these indicators into levels and got the following form. In addition, the share of production volume in total industrial structures in our Republic by region is given in Table 4

Table 4. Share of regions in the total industrial production volume of the republic (in percent)

Areas	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Republic of Uzbekistan	100	100	100	100	100	100	100	100	100	100
Republic of Karakalpakstan	1,8	1,9	2,0	2,4	3,8	4,6	4,6	3,9	3,8	3,6
Andijan region	12,0	13,1	12,5	10,0	7,1	8,9	11,7	10,3	9,9	7,9
Bukhara region	4,3	4,4	4,7	5,3	5,0	4,3	3,7	4,6	4,8	4,6
Jizzakh region	1,4	1,3	1,4	1,5	1,8	1,7	1,5	1,4	1,6	1,9

Kashkadaryo region	10,6	9,7	8,6	8,9	8,6	7,4	6,2	6,3	4,0	4,1
Navoi region	10,0	10,0	9,8	9,5	9,5	8,8	9,7	13,8	17,7	16,1
Namangan region	2,8	2,7	2,8	2,9	3,1	3,1	2,8	2,7	3,0	3,2
Samarkand region	5,6	5,5	5,9	6,2	6,7	6,2	5,7	4,9	5,0	5,0
Surkhandarya region	1,9	1,9	1,9	2,0	2,0	1,6	1,4	1,3	1,4	1,5
Sirdarya region	2,7	2,7	2,8	2,9	3,1	2,6	2,2	2,3	2,2	2,2
Tashkent region	14,1	14,7	14,8	14,8	15,1	14,6	16,0	16,6	17,9	18,3
Fergana region	8,0	7,5	7,9	7,3	7,2	6,5	5,8	5,8	5,9	6,1
Khorezm region	1,8	1,8	2,3	2,7	2,5	2,7	2,7	2,6	2,6	3,0
Tashkent city	21,7	22,0	18,4	19,5	21,0	20,5	18,4	16,4	17,9	19,8

In this table, we can see the share of regions in the total industrial production volume of the Republic, and these indicators were also analyzed in the following form. Also, based on the analysis of the total industrial production volume of the regions of our republic, the following three regions with the highest indicators of our republic for 2015-2024 were noted [15]. These are Navoi region 6.1, Tashkent region 18.3 and the Republic of Karakalpakstan 1.8 percent, which accounted for the share of regions in the volume of industrial production. Then, taking the years 2015, 2020 and 2024, the highest indicators of the regions were reflected in the following graphic form and analyzed in the form of a graphic table.

We can currently see several types of industries that play an important role in the development of the regions. At the same time, there are also key industrial sectors that make a significant contribution to this development. The table below reflects the main indicators of the republic's industry, see Table 5.

Table 5. Main indicators of industry in our republic

Indicators	2020	2021	2022	2023	2024
Industrial production volume, billion soums	148816,0	235340,7	322535,8	368740,2	456056,1
Index of physical volume of industrial production, % compared to the previous year	105,2	110,8	105,0	100,9	108,8
Mining and quarrying	117,6	126,5	99,4	78,0	110,8
Manufacturing industry	104,2	107,9	106,6	107,9	108,3

The table above shows the main indicators of industry in our Republic over the past five years [16]. Taking into account the main indicators of the industry of our Republic, the volume of industrial production (billion soums), the index of the physical volume of industrial production (in percent), indicators of mining and quarrying, and the manufacturing industry are presented in the following graphic form, see Figure 1.

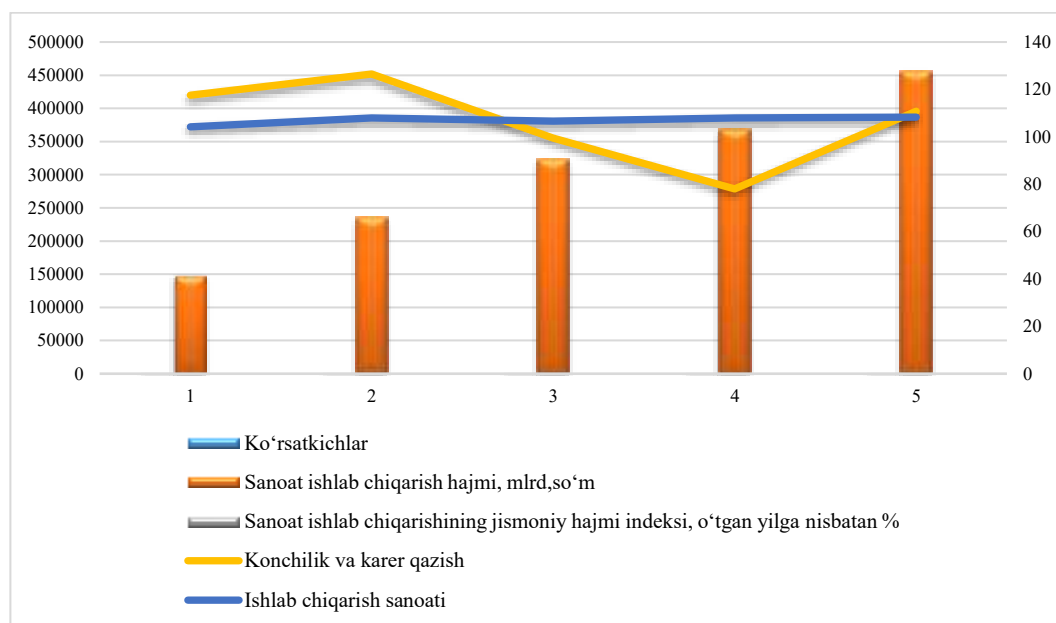


Figure 1. Shows the main indicators of the republic's industry.

In the analytical study of these indicators, the following graphic presentation was presented. We can see the total production volume, index, mining and quarrying, and manufacturing industries developed in the period from 2020 to 2024 [17].

It is important to analyze the volume of industrial output produced by regions by comparing interregional and regional indicators with national indicators, analyze the dynamics of industrial output per capita, and identify priority tasks and growth points in the regions.

The indicators of industrial production per capita in the regions are also presented in Table 6 below.

Table 6. Industrial output per capita in the regions.
(thousand soums)

Areas	2020	2021	2022	2023	2024
Republic of Uzbekistan	4595,7	7143,0	9606,9	10780,8	13162,9
Republic of Karakalpakstan	3701,4	5879,3	6759,9	7316,1	8589,6
Andijan region	4442,4	9033,2	10694,0	11519,2	11157,2
Bukhara region	3458,6	4575,1	7750,3	9080,0	10587,4
Jizzakh region	1941,2	2675,6	3354,4	4170,9	6119,1
Kashkadaryo region	3509,9	4568,0	6270,9	4417,4	5567,2
Navoi region	13755,1	23568,9	44963,4	64737,5	71925,7
Namangan region	1724,8	2416,0	3169,9	3878,6	5068,6
Samarkand region	2507,4	3587,7	4112,3	4698,6	5723,6
Surkhandarya region	948,0	1274,4	1628,7	2003,8	2461,4
Sirdarya region	4712,3	6267,3	8703,0	9366,5	11282,8
Tashkent region	7634,6	13109,2	18335,4	22366,3	28622,6
Fergana region	2728,0	3730,0	5020,6	5742,0	7195,5
Khorezm region	2262,9	3549,3	4611,7	5215,1	7155,5
Tashkent city	12440,5	17387,3	20770,0	24952,6	31976,2

4. Conclusion

Based on the analysis of regional industrial sectors, the study highlights the significant role of specialized production in fostering economic growth in various regions of Uzbekistan. The findings reveal that industries such as textile production, food production, and heavy industry play a crucial part in regional economic development. It is evident that the industrial capacity of each region is determined by the efficient utilization of material resources, intangible assets, labor resources, and entrepreneurial ability. The study suggests that further efforts should focus on enhancing the information base for assessing industrial potential, standardizing indicators, and improving the integration of technology in production. Additionally, it is imperative to support innovation and digital transformation to maintain competitiveness. The implementation of these measures will not only increase industrial efficiency but also stimulate sustainable development in regional economies. Future research could explore more deeply the effects of digitization and innovation in specific industries and their potential to further enhance industrial competitiveness at the national level.

REFERENCES

- [1] M. Q. Pardayev, *Korxonalar iqtisodiy salohiyatini baholash va uni rivojlantirish yo'llari*, Toshkent: Iqtisodiyot, 2015.
- [2] B. A. Hasanov, *Korxonalar resurslaridan samarali foydalanish nazariyalari*, Samarqand: SamDU nashriyoti, 2016.
- [3] J. I. Isroilov, *Korxonalar iqtisodiy salohiyatini shakllantirishning ilmiy asoslari*, Toshkent: Fan va texnologiya, 2017.
- [4] A. N. Xolliqulov, *Korxonalar iqtisodiy salohiyatini boshqarish mexanizmlari*, Qarshi: QDPI nashriyoti, 2018.
- [5] Y. Brexova, *Iqtisodiy salohiyatni baholashda resursli va natijaviy yondashuvlar*, Moskva: Ekonomika, 2019.
- [6] A. Kurbanova, *Korxonalar iqtisodiy salohiyatini baholashning metodologik asoslari*, Toshkent: TDYU nashriyoti, 2020.
- [7] M. Q. Pardayev, B. A. Hasanov, J. I. Isroilov, and A. N. Xolliqulov, *Korxonalar iqtisodiy salohiyatini baholashning nazariy asoslari*, Toshkent: Iqtisodiyot, 2019.
- [8] Y. Brexova and A. Kurbanova, "Iqtisodiy salohiyatni resursli va natijaviy yondashuv asosida baholash," *O'zbekiston iqtisodiyoti jurnali*, vol. 4, no. 2, pp. 45–56, 2020.
- [9] S. S. Safarov, "Mintaqaviy sanoat korxonalarining barqarorligini ta'minlashda iqtisodiy salohiyatni baholash," *Ilmiy axborotlar to'plami*, vol. 12, no. 3, pp. 77–85, 2018.
- [10] A. A. Shodiev, "Hududiy sanoat salohiyatini kompleks tahlil qilish metodlari," *Iqtisodiyot va innovatsiya*, vol. 5, no. 1, pp. 90–101, 2021.
- [11] M. E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance*, New York: Free Press, 1985.
- [12] L. Trigeorgis, *Real Options: Managerial Flexibility and Strategy in Resource Allocation*, Cambridge: MIT Press, 1996.
- [13] OECD, *Industrial Policy for the Sustainable Growth*, Paris: OECD Publishing, 2019.
- [14] UNIDO, *Industrial Development Report: Industrialization in the Digital Age*, Vienna: United Nations Industrial Development Organization, 2020.
- [15] World Economic Forum (WEF), *Travel and Tourism Development Index 2022*, Geneva: WEF, 2022.
- [16] O'zbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi PF-60-sonli Farmoni — "2022–2026 yillarga mo'ljallangan Yangi O'zbekiston taraqqiyot strategiyasi."
- [17] M. T. Romanov and O. S. Kornenko, "Analiz specializatsii i kontsentratsii vidov ekonomicheskoy deyatel'nosti malykh territoriy (na primere munitsipal'nykh obrazovaniy Primorskogo kraya)," *Tamozhennaya politika Rossii na Dal'nem Vostoke*, no. 3(72), pp. 17–28, 2015.