

# Analysis of The Cyclical Dynamics of The Industrial Sector in Ensuring Financial Security in The Industry: In Case of Textiles

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**Abstract-** In this paper have been investigated ways of identifying internal and external threats to the financial security of textile enterprises are outlined, the problems of financial security of enterprises are studied, and have been proposed scientific recommendations for improving the efficiency of managing this process.

**Keywords:** Financial security, multivariate analysis, dispersion, digital economy, textile industry.

## 1. INTRODUCTION

The recession in the world economy caused by the Covid-19 pandemic, which began in early 2020, continues to threaten the financial security of enterprises. This crisis, in stark contrast to the previous economic, financial and financial crises of 1975, 1982, 1991 and 2009, has completely changed the approach to ensuring the financial security of business entities. Research around the world shows the need to pay special attention to ensuring financial stability and financial security in order to increase the competitiveness of business entities. These studies have shown that ensuring the growth of value of enterprises is an effective way to focus on the internal (fundamental) factors of attracting investment in their innovative development. The research also includes methods of assessing the value of the enterprise in the process of restructuring by joining, methods of analyzing the share of investment and innovative projects in the value of the enterprise, conceptual aspects of strategic management of enterprise value, mergers and acquisitions. Management, value management of joint-stock companies, development of organizational and economic methods and models of enterprise value management are widely studied. However, the issues of complex assessment of their financial condition based on the factors that shape the value of the enterprise, the analysis of approaches to identifying drivers, the assessment of the value of assets, liquidity ratio, solvency, financial stability and profitability have not been sufficiently studied.

## 2. LITERATURE REVIEW

The methodological foundations for ensuring the financial stability of enterprises, its gradual increase through the improvement of financial management, the development of the financial strategy of enterprises and the assessment of financial stability are widely studied in the scientific works of foreign authors. A. Marshall [1], J. Mill [2], D. Ricardo [3], A. Smith [4] and many other representatives of the classical school of economic theory dealt with the issues of the theory of financial security.

Factors Affecting Network Growth Amade S.M. [5], Amirsele A. [6], Amore L. [7], Ahmad S. [8], de Derian [9], V. Delas [10] and studied by other scientists.

The issues of ensuring the economic security of the production network at the macro-, meso- and micro levels, their assessment and management are discussed by scientists of our country - Burkhanov A. [11], Tursunov B. O. [12], Pardaev M.K. [13], A.E. Ishmukhamedov [14] and other works. The works of these authors undoubtedly make a great contribution to the theory of ensuring the financial security of an enterprise. But due to the complexity and versatility of the problem of ensuring the financial security of an enterprise, all its aspects in these studies have not been studied enough. It is necessary to scientifically substantiate the use of generally accepted management methods in order to ensure the financial security of enterprises and its assessment, adapt the experience of foreign specialists to the conditions of Uzbekistan, and develop a methodology for ensuring financial security. enterprises in accordance with the enterprises of our country.

### 3. ANALYSIS AND RESULTS

At present, the post-industrial stage is typical for the development of the world's leading countries, at which stage the role and place of economic growth factors is changing. The main focus is on the development of modern industries based on human capital, the effective introduction of scientific and technological innovations in the production process.

The development of industrial production also affects the change in the GDP structure of countries. At the same time, the main criterion for recognizing a country as industrialized is the fact that the share of industry in GDP is higher than the development of other sectors.

As a result of the ongoing reforms in the country to radically restructure the industrial sector and the implementation of economic programs aimed at ensuring macroeconomic balance, "by 2030 the volume of petrochemical production will increase 3.2 times, non-ferrous metal products 2.2 times. The production of ferrous metals will increase 2.3 times, the production of chemical products, including mineral fertilizers, 3.2 times, the production of light industry products will increase 5.6 times.

In our study, we will consider the issues of ensuring the successful development of the industrial sector through the development of the textile industry. The share of the textile industry in the structure of GDP in 2018 was 9.0%, and if we analyze the growth in weight, we can see that this figure increased by 3.5% compared to 2010 (Table 1).

The development of the general industrial production sector is also the basis for the development of the textile industry. When analyzing the development of industry in the country in 2019 increased by 3.5 times compared to 2015 (Table 2.1.2), compared to 2000 by 157 times, and by regions in the Republic of Karakalpakstan by 4.8 and 261 times, respectively, in Andijan region 3 , 2 and 200 times, Bukhara region 2.6 and 105 times, Jizzakh region 2.9 and 209 times, Kashkadarya region 2.1 and 115 times, Navoi region 4.3 and 191 times, Namangan region 2.8 and 117 times. , In Samarkand region 2.4 and 147 times, in Surkhandarya region 2.1 and 91 times, in Syrdarya region 2.3 and 104 times, in Tashkent region 3.3 and 155 times, in Fergana region 2.5 and 71 times, in Khorezm region 3, 0 and 158 times, in Tashkent 2.6 and 169 times.

Table 1: Analysis of the general industrial and textile industry in our country

Indicators	2000	2005	2010	2015	2018	2019	In 2019, compared to 2000, in%
Gross industrial output, billion soums	11,1	11,5	38119,0	97598,2	148816,0	235340,7	158,1
The share of light industry in GDP	11,1	11,5	8,8	9,2	9,6	9,5	99,0
The share of the textile industry in GDP	10,3	10,9	8,7	8,6	9	9,2	102,2
The share of the textile industry in the industry	17,7	15,7	12,7	13,6	10,6	9,6	90,6
The share of the textile industry in the light industry	92,3	94,3	88,1	85,0	72,6	74,4	102,5

The general industrial sector is summarized by 25 industries, and the analysis of the composition of industrial products produced in these industries and the affiliation of regions shows that there are differences in the specialization and level of development of the region by type of industry. In particular, the tobacco industry accounts for Samarkand region (93.9%) and Tashkent (6.1%). In the production of chemical products, the Republic of Karakalpakstan accounts for 37.9%, Tashkent region - 14.4%, Kashkadarya region - 12.8%, Fergana region - 11%, Navoi region - 9.6% and Tashkent city - 8.4% (1 -application). Taking into account that the share of textile production in the total industrial sector in 2019 will be 9.6%, in the analysis of the production of these products by region, Fergana region - 16.8%, Tashkent region - 11.2%, Andijan region - 9%. 5%, in Tashkent 9.4%, Namangan region 9.3%, Kashkadarya region 7.7%, Bukhara region 7.6%, Samarkand region 6.8%, Khorezm region 5.3%, Jizzakh region 4.2%. Surkhandarya region - 2.6 percent, Navoi region - 2.5 percent.

Table 2: Regional analysis of the general industrial sector in our country

	2000	2005	2010	2015	2016	2017	2018	2019
Republic of Uzbekistan	1888,9	11028,6	38119,0	97598,2	111869,4	148816,0	235340,7	297815,5
The Republic of Karakalpakstan	44,2	198,8	697,2	2387,6	4265,7	6773,3	10911,9	11569,9
regions:								
Andijon	155,7	1177,5	4701,4	9744,6	7965,7	13269,8	27454,7	31168,2
Bukhara	126,1	517,0	1674,8	5143,9	5569,6	6422,3	8601,2	13241,8
Jizzax	20,5	192,6	522,7	1474,5	2001,2	2548,8	3581,8	4293,1
Qashqadaryo	159,8	1436,3	4957,5	8721,9	9632,2	10945,9	14529,5	18524,2
Navoi	210,8	1714,8	4038,5	9286,9	10657,9	13072,9	22892,4	40298,1
Namangan	67,8	330,5	1007,0	2861,8	3475,7	4615,5	6586,6	7975,9
Samarkand	97,8	383,6	2011,2	6095,5	7446,0	9242,0	13488,1	14390,2
Surxondaryo	43,1	219,1	756,4	1910,7	2200,7	2356,4	3234,7	3922,1
Sirdaryo	62,1	296,6	926,8	2820,6	3522,3	3806,5	5163,1	6508,3
Tashkent	310,4	1795,4	5471,2	14401,0	16864,7	21693,4	37724,4	48322,0
Fergana	248,4	1033,2	3265,5	7170,2	8040,7	9728,5	13613,8	17797,9
Khorezm	50,0	214,8	628,6	2616,0	2802,7	4070,4	6457,2	7947,3
Tashkent	292,2	1247,4	6984,4	18986,1	23511,9	30459,6	43274,1	49515,4

From the first years of independence, the leadership of Uzbekistan has focused on further increasing the volume of production of raw cotton and its deep processing. More than 300 projects (from spinning to the production of finished products in high demand in the domestic and foreign markets) have been implemented to build and modernize new textile enterprises operating in the full technological process. The share of the textile industry in GDP, industrial output and non-food consumer goods has increased.

The reorientation of exports of raw cotton to the finished product has allowed to formulate a new strategy for the development of light industry in the future. The choice of the textile sector as a strategic direction of economic policy has opened new directions for development.

At the end of 2019, the share of production of textiles, clothing, leather and related products in GDP amounted to 9.5%. Positive results have been achieved in the industry - more than 80% of cotton fiber and more than 45% of yarn are processed. One third of the population employed in the industry of the republic is concentrated in this sphere.

The textile industry of Uzbekistan is not only one of the fastest growing segments of the economy, but also a leading sector in attracting foreign investment and exports. Uzbek textiles are exported to more than 50 countries. The main export markets are the CIS countries, primarily Russia, as well as Latin American countries, the EU, the Republic of Korea, China, Singapore, Iran, Israel, the United States, Pakistan, Georgia, Croatia, Nigeria and a number of other countries. 51% of exports are to Russia and the CIS, 21% to South Asia, 12% to Europe, 8% to the Middle East and Africa. Exports of textiles and garments in 2019 will amount to 1626.9 million. USD (Table 3).

When we analyzed the dynamics of exports, we found that there was a growth trend. According to the analysis of exports by regions in 2019 compared to 2010 in Jizzakh region increased by 13.9 times, in the Republic of Karakalpakstan by 7.9 times, in Surkhandarya region by 6.1 times, in Samarkand region by 5.7 times, in Namangan region by 5.2 times, in Kashkadarya region 4.8 times, Andijan region 2.8 times, Syrdarya region 2.7 times, Khorezm region 2.6 times, Tashkent, Navoi and Fergana regions 2.3 times, Bukhara region 1.5 times and Tashkent region 1.3 times. Times.

Table 3: Information on the total export of textile products in the country (thousand US dollars)

Name of regions	Years					
	2010 й	2015 й	2016 й	2017 й	2018 й	2019 й

Republic of Uzbekistan	<b>637199,5</b>	<b>883733,8</b>	<b>922904,6</b>	<b>1133639,9</b>	<b>1300262,1</b>	<b>1626918,9</b>
The Republic of Karakalpakstan	3 697,7	7 350,1	5 425,8	11 694,4	9 785,5	29 151,0
regions:						
Andijon	64 909,2	106 467,8	130 950,6	150 214,3	209 814,3	183 091,3
Bukhara	41 661,7	67 672,4	38 150,6	25 839,8	32 377,2	60 204,9
Jizzax	3 837,9	22 761,4	31 288,4	30 771,7	28 371,9	53 509,2
Qashqadaryo	17 388,6	13 182,5	11 000,8	24 643,3	72 337,2	84 190,0
Navoi	17 566,3	30 235,7	27 262,3	23 018,2	24 415,7	40 261,0
Namangan	35 399,6	51 213,5	62 122,7	103 146,8	128 000,8	183 483,6
Samarkand	13 006,4	25 568,8	33 584,7	55 954,4	61 601,5	74 063,1
Surxondaryo	12 458,9	14 075,1	10 346,5	14 294,6	24 521,1	76 130,8
Sirdaryo	11 538,6	15 576,5	18 191,9	33 870,9	32 359,7	30 593,9
Tashkent	154 366,4	109 934,4	113 240,0	161 329,4	154 094,0	198 983,7
Fergana	118 015,9	203 330,4	216 753,2	266 244,8	281 904,1	273 397,2
Khorezm	16 209,4	14 501,0	23 673,9	42 529,2	46 158,0	41 881,6
Tashkent	127 143,0	201 864,1	200 913,2	190 087,9	194 521,0	297 975,3

As a result of radical reforms in the development of the textile industry, exports in 2019 increased by 1.8 times compared to 2016, if we analyze by regions, in Kashkadarya region by 7.6 times, in Surkhandarya region by 7.4 times, in Karakalpakstan. 5.4 times in the Republic of Pakistan, 3.0 times in Namangan region, 2.2 times in Samarkand region, 1.8 times in Khorezm region, 1.7 times in Tashkent, Syrdarya, Jizzakh regions, 1.6 times in Bukhara region, Tashkent city. and in Navoi oblasts it increased 1.5 times, in Andijan oblast 1.4 times, and in Fergana oblast 1.3 times. It should be noted that the data presented in Annex 1 and Table 3 revealed various differences in the production and export potential of the regions.

Accelerate the development of the textile industry of the country, increase the production of high quality and competitive finished products, its subsequent export to major foreign markets, as well as the tasks set out in the Action Strategy for the five priority areas of development of the Republic of Uzbekistan in 2017-2021 In order to achieve this goal, measures are being taken to further improve the system of standardization and certification in the textile industry. To this end, work is underway to harmonize the system of standardization and certification with international requirements and standards, modernization and accreditation of product testing laboratories.

In accordance with the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On measures to introduce modern forms of organization of cotton and textile production" in the country in 2018, 13 in June 2018 In accordance with Resolution No. 21, in 2020, 21 textile clusters appeared. These clusters have been independently concluding direct contracts with farms for the cultivation and supply of cotton.

While progress is being made in the textile sector, its contribution to economic growth is far below its potential. Although the volume of cotton fiber supplied to textile enterprises is sufficient to fully utilize the existing capacity, only 50% of the yarn produced in the country is left for domestic needs. Therefore, the capabilities of modern equipment are not fully used. In the domestic cotton market, the seller maintained a monopolistic position. Therefore, the processing of raw cotton and cotton fiber is very low. As a result of the implemented reforms, the introduction of effective mechanisms for managing the production capacity of textile enterprises of the republic has been recognized as a key problem.

Table 4: Level of activity of textile enterprises in Uzbekistan (units)

Indicators	2010 y	2015 y	2016 y	2017 y	2020 y
Registered businesses	2538	3584	3705	3841	15987
In operation	2046	3261	3476	3651	14836
Not working	492	323	229	190	1151
Finished	294	264	303	361	378
Activity level (in percent)	80,6	91,0	93,8	95,1	92,8
Bankruptcy rate (in percent)	11,6	7,4	8,2	9,4	8,2

Share of inactive enterprises in relation to registered enterprises (in percent)	19,4	9,0	6,2	4,9	7,2
The share of liquidated enterprises in the list of listed enterprises (in percent)	11,6	7,4	8,2	9,4	2,4

In 2020, the number of textile enterprises in the Republic of Uzbekistan reached 15,987, of which 14,836 or 92.8% are operating effectively (Table 2.1.4). If in 2010 the level of activity of enterprises in the country was 80.6%, in 2020 this figure was 92.8%. <sup>1</sup>If we analyze the dynamic change of registered enterprises of the textile industry, in 2020 compared to 2010 increased by 6.3 times (13449), the analysis period increased by 4.2 times compared to 2017 (12146).

In the analysis of enterprises operating in the network in 2020 increased by 7.3 times (12,790) compared to 2010, the analysis period increased by 4.1 times (11,185) compared to 2017, 7.2% (1151) of the total registered enterprises are not operating. , the analysis of inactive enterprises revealed that in 2020 it decreased by 62.9 points compared to 2010, in 2015 by 53.5 points, in 2016 by 31.4 points compared to 2015, and in 2017 by 20 points compared to 2016. When analyzing the liquidation of listed textile enterprises, the number of liquidated enterprises decreased by 16 points in 2020 compared to 2010, if the analysis of liquidated enterprises compared to registered enterprises, 2.4% in 2020, 9.4% in 2017, 8.2% in 2016, 2015 7.4 percent in 2010 and 11.6 percent in 2010. It should be noted that in this process, the increase in the number of enterprises operating in the industry shows a positive result of liquidated or inactive enterprises for 2016-2020. This positive trend is primarily the result of the implementation of the tasks set out in the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021, adopted by President Sh.M. Mirziyoyev, as well as effective economic reforms to this end.

According to statistics, during 2009-2019, the volume of textile production in the country increased year by year. However, in Samarkand and Surkhandarya regions, the volume of textile products has decreased. In Namangan region, the volume of textile production has grown rapidly over the past 4 years (Table 5).

Among the factors hindering the development of the textile industry, the Strategy for the Development of the Textile Industry of the Republic of Uzbekistan until 2030 states:

- Technological backwardness, deterioration of fixed assets, insufficient investment activity, which is characteristic of a number of sectors of the textile industry;

Table 5: Growth of textile production in the regions of the Republic of Uzbekistan in 2008-2019

Regions / Years	Percentage compared to last year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Republic of Uzbekistan	117,0	101,5	108,7	110,1	112,5	115,8	108,8	125,7	136,1	104,5
Republic of Karakalpakstan	105,0	104,3	110,9	112,8	103,2	107,9	113,2	153,7	124,0	104,0
Andijon	124,6	106,1	108,3	107,1	121,0	109,0	111,4	143,4	115,8	102,1
Bukhara	122,9	107,0	104,5	106,3	114,5	113,2	106,2	101,5	106,3	101,1
Jizzax	106,6	119,5	107,8	112,1	124,1	109,2	117,2	133,0	114,1	103,2
Qashqadaryo	106,0	105,9	102,8	108,7	110,3	121,9	107,7	118,3	119,6	109,7
Navoi	115,4	110,3	121,0	97,7	113,6	121,6	119,7	143,1	132,5	102,4
Namangan	118,4	103,2	107,0	112,0	109,5	108,2	114,3	172,8	142,8	115,9
Samarkand	127,9	107,7	130,4	107,2	127,1	122,5	96,2	144,4	128,0	112,2
Surxondaryo	120,3	101,7	108,3	106,0	111,9	107,8	89,7	92,7	94,6	96,7
Sirdaryo	107,1	112,2	103,2	98,7	109,3	109,2	104,6	81,3	101,6	100,9
Tashkent	121,6	65,9	99,2	114,3	116,8	115,9	139,3	138,0	135,7	136,3
Fergana	106,5	102,1	118,5	108,0	103,6	116,1	110,1	120,6	118,8	103,4
Khorezm	98,6	121,3	104,4	113,8	102,8	117,2	103,4	143,9	122,5	103,6
Tashkent	160,2	111,0	97,7	123,3	107,4	125,0	101,5	133,2	134,6	115,5

<sup>1</sup> Statistical collection of the State Statistics Committee of the Republic of Uzbekistan for 2010-2020. Tashkent, 2021.

- limited access of domestic products to foreign markets, increased competition;
- Insufficient pace of development of innovative activities and the introduction of innovative technologies using chemicals in a number of industries.

In this regard, the above forecast envisages an innovative development scenario for the development of the textile industry, namely:

- Innovative and technological renewal of production capacity of the industry at the expense of resource and energy-saving technologies, increase in investment;
- others.

In all developed scenarios, a key factor in the development of the textile industry is the growth of domestic demand for products.

It should be noted that in comparison with the innovative scenario of economic development of the country, the inertial scenario does not involve the increase of innovation and investment activity, the use of advanced technologies and the implementation of large investment projects.

At the same time, the textile industry has been and remains one of the priorities of the economy and local industry, the competitiveness of other segments contributes to the ongoing positive structural changes due to the supply of necessary and high quality textile products.

#### 4. DISCUSSION OF RESULTS

In this section, the level of profitability of sales in the textile industry of Uzbekistan varies by region. The profitability of sales on net profit, defined as the ratio of net profit to loss, indicates the success of business tactics and strategies, as well as the implementation of financial, production, innovation, marketing policies, as well as general economic and regional factors and conditions.

In the Republic of Uzbekistan (2012-2019), the profitability of sales of net profit of small businesses operating in the textile industry has an upward trend, with an average annual growth rate of 0.34 percentage points. This is exactly what the linear trend parameters are. As can be seen from Figure 1, the difference between the values of the studied profitability in the regions of the Republic of Uzbekistan is significant, which indicates that the factors of production efficiency in small enterprises operating in the textile industry have specific regional characteristics.

The study conducted in this section is devoted to the identification and quantitative assessment of factors of production efficiency, measured by the rate of return on net profit in small businesses operating in the textile industry of the Republic of Uzbekistan.

The following is a preliminary analysis of the regional differences in the results and factors of production efficiency in small businesses operating in the textile industry in the Republic of Uzbekistan.

For the purpose of the preliminary analysis, the following generalization indicators of operational efficiency (profitability of sales on net profit) and the difference in the values of factor indicators of production efficiency by region were dynamically assessed:

- labor productivity (on average per one employee included in the monthly list), thousand soums / person;
- The share of innovative goods in total production, %.

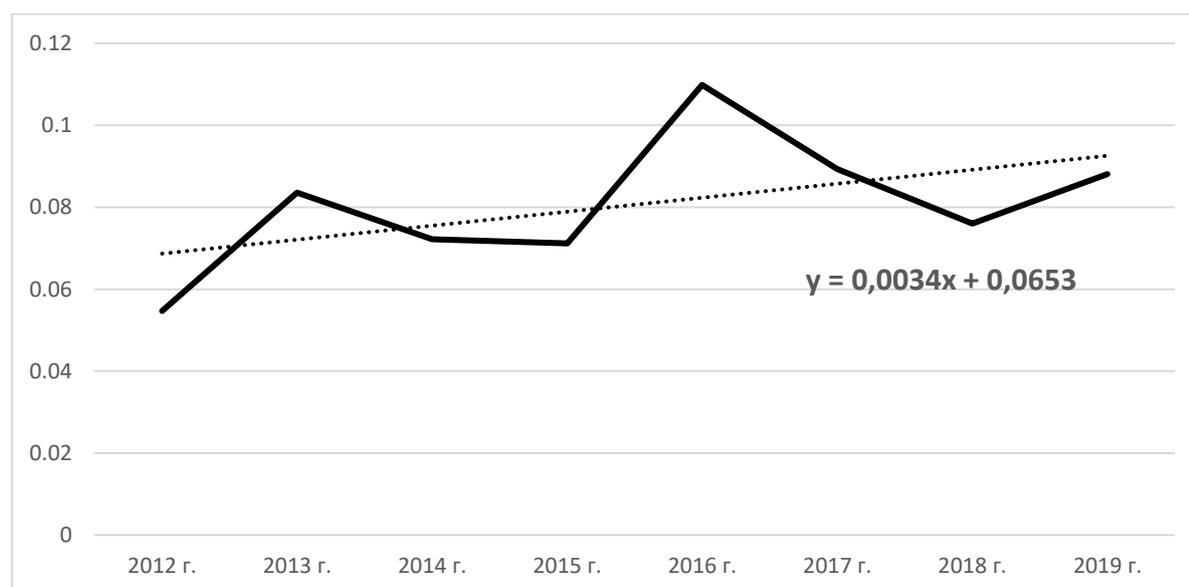


Figure 1. Indicators of sales profitability of net profit of small businesses operating in the textile industry of the Republic of Uzbekistan, 2012-2019 yy.

As can be seen from Figure 2, the results of the study in the regions of the Republic of Uzbekistan in the studied years - the profitability of net profit of small businesses operating in the textile industry - varied. This is evidenced by the value of the coefficient of variation (percentage of standard deviation to the average value), which is much higher than 33%.

However, it should be noted that in 2014 compared to 2012, the difference between the regions on this indicator decreased significantly (from 1079.9% to 76.2%), but since 2015 the coefficient of variation of this indicator has consistently exceeded 50% and this indicates that high variation across regions has been maintained.

The results of the regions on the indicator under study can be statistically differentiated by analyzing the ratio of the mean value and the median. As can be seen from Figure 2.2.2, at the beginning of 2012, there was a significant macro-space asymmetry in the net profitability of small businesses operating in the textile industry in the Republic of Uzbekistan. This means that the share of regions with relatively high profitability is much higher, and the share of regions with relatively low profitability is low. From 2013 to 2018, the asymmetry decreased, and by 2019 the asymmetry rate shifted to the right, ie the share of low-profit regions began to dominate the national value, the share of regions with relatively high profitability was significantly higher.

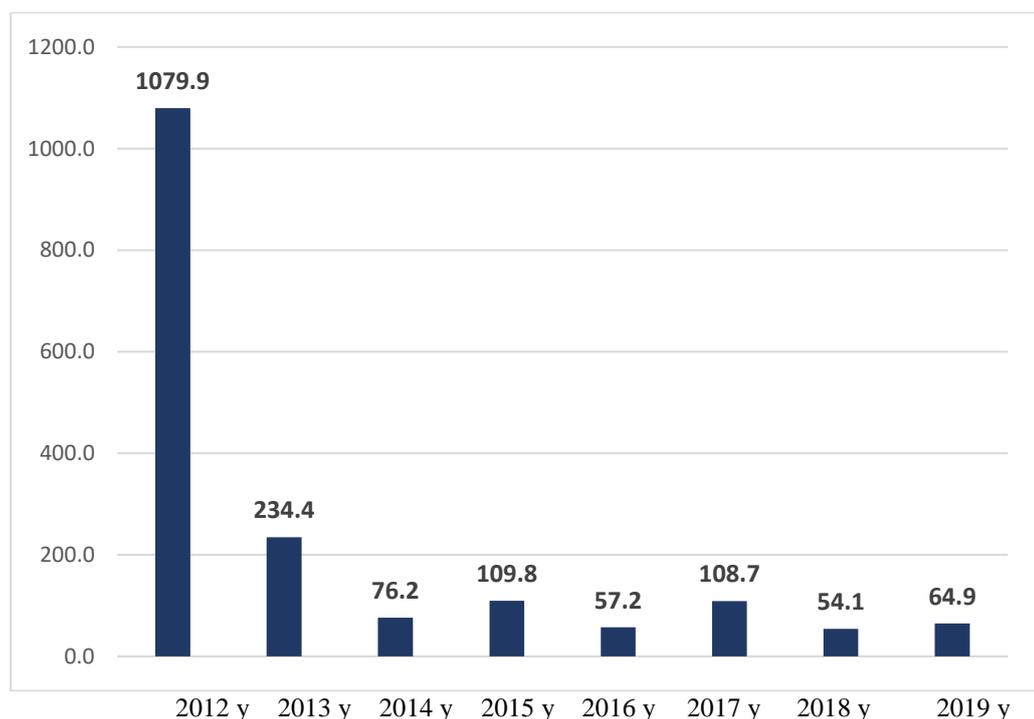


Figure 2. Coefficient of regional variation of the indicator "Profitability on net profit in small businesses operating in the textile industry" in the Republic of Uzbekistan, 2012-2019, %

The differences between the regions were also significant in terms of the factors studied at this stage (labor productivity and the share of innovative goods in total production); the coefficients of variation were much higher than the criterion value of statistical uniformity (33%).

Difference in labor productivity of the regions, which is reflected in the high value of the coefficient of variation, is not due to the asymmetry of the distribution, but due to the high value of the excess. This is confirmed by the closeness of the mean and median values at a time when the coefficients of variation are high (33%). It can be concluded that in all regions of Uzbekistan there is a "core" and scattered components that do not change significantly in terms of the value of this indicator.

The high difference between the regions on the indicator "Share of innovative goods in total production" is due to the asymmetry of the right side in the distribution of this indicator, as evidenced by the ratio of average and median values (Figure 6). During the study period, the share of regions with a relatively low share of innovative goods was significantly higher, while the share of regions with a relatively high share of innovative goods was significantly lower. Based on the preliminary analysis, it can be concluded that it is necessary to create performance factor models for all regions of the Republic of Uzbekistan, as well as for the same groups of regions, ie descriptions of production activities and their impact on results.

Data for 2012-2019 by regions of the Republic of Uzbekistan were used as a database for the study. The data included the "Sales Profit on Net Profit,%" result indicator and the factor indicators below:

- A. Information on the financial performance of small businesses and micro-firms
  - 1) Sales profitability on net profit.
  - 2) The share of material costs associated with production at cost.
  - 3) The share of depreciation in the structure of material costs associated with production.
- B. Information on investments in intangible assets of small enterprises and micro-firms
  - 1) Depreciation rate of fixed assets.
  - 2) Share of intangible assets in fixed assets.
  - 3) Depreciation ratio.
  - 4) Depreciation rate of fixed assets.
  - 5) Renewal ratio (relative to outgoing fixed assets).
  - 6) Fixed assets input ratio.
  - 7) The share of non-residential buildings and structures in investments.
  - 8) Share of fixed assets (funds) in investments.
  - 9) The share of capital repairs in the amount of annual depreciation.
  - 10) Share of fixed assets sold in outflows.
- C. Information on the number of employees in small businesses, the number of jobs per pay cycle
  - 1) The average salary of one employee included in the average annual list number (OYRS).
  - 2) Average salary per employee, including external partners.
  - 3) Average salary per job.
  - 4) Recruitment turnover ratio.
  - 5) Dismissal turnover ratio.
  - 6) Percentage of redundancies on redundancy.
  - 7) Job entry ratio.
  - 8) OYRS employee working hours per year.
- D. Information on production in small enterprises and micro-firms
  - 1) Work productivity per employee on the list.
  - 2) Work productivity per employee, including external partners.
  - 3) Fund return.
  - 4) The share of innovative goods in total production.
  - 5) The share of costs for technological and marketing innovations in the cost.
  - 6) Costs of technological and marketing innovations corresponding to one innovative product.

The initial data and calculation algorithms for calculating the results and factor indicators of the study are not presented here due to their large size.

Important indicators of the efficiency of small businesses in the textile industry, the division of the regions of the Republic of Uzbekistan into multidimensional groups and the use of the "random forest" method were identified.

## **5. CONCLUSIONS**

In studying the financial sustainability of textile enterprises in the regions of the Republic of Uzbekistan, it is necessary to take into account the cyclical factor, as crises aggravate the financial situation of the enterprise. The conducted research allowed to identify the trends of progressive and cyclical development of industrial production in the regions of the Republic of Uzbekistan, as well as to divide the regions into groups by types of progressive and cyclical development. The obtained data are of great predictive value, as they allow to forecast the dynamics of the cycle at the regional level and, therefore, to take preventive measures to mitigate the effects of the crisis for industry in different regions of Uzbekistan.

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