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APPROACH TO RISK AND INVESTMENT ATTRACTIVENESS ESTIMATION FOR REGIONAL ECONOMIC ACTIVITY OF RUSSIA

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ARTICLEINFO	A B S T R A C T
Article history: Received 20 July 2018 Received in revised form 26 October 2018 Accepted 05 November 2018 Available online 09 November 2018 Keywords: Investment competitiveness; Investment risk; Processing industries; Localization coefficients; Types of economic activity.	Vigorous economic and political activity aimed at increasing an investment attractiveness of the region creates the conditions for attraction of investments proposals to the economy of the Federal subject. Increasing the investment attractiveness of the territories contributes to the additional inflow of capital, to the growth of the regional economy and development of small businesses as a highly dynamic sector that adapts to changes in the external environment. Development of an effective investment policy is impossible without identifying the types of economic activity which are the most attractive for investment. We carried out structural and dynamic analysis of the types of economic activity that are attractive and competitive types. The paper reveals the approach proposed by the authors to determine the types of economic activity that are attractive for investment from the point of view of minimizing the risk of outperformance stability loss. Mathematical, statistical and graphical tools were used to identify the above types of economic activity. A structural and dynamic comparative analysis of the shipping volume for 14 types of economic activity in the Republic of Tatarstan was carried out; localization coefficients have been calculated and risk diagrams have been constructed, taking into account the frequencies of outperformance for a type of economic activity.

1. INTRODUCTION

Attraction of investments is an urgent task for the regions of Russia. Finding of a solution of this task will help the effective growth of the regional economy, raising the standards of living of its population. Attraction of investments is the goal of investment policy, and in turn, increasing the investment attractiveness of the territory will increase the amount of funds invested in the regional economy.

Development of an effective investment policy is impossible without an analysis aimed at identifying the sectors in the economy which are the most attractive to investment. Undoubtedly,

when choosing the types of economic activity for investment, the most preferable should be competitive sectors of the economy (Ravzieva and Safiullin, 2016).

There are a number of approaches to the definition of "investment attractiveness". Some economists define investment attractiveness in describing the volume of investments, analyzing their structure horizontally and vertically. As a result, a conclusion is drawn about the level of favorability of the situation in the region. The main disadvantage of this approach is a superficial consideration of the investment process. Separately taken characteristics of investment do not yet indicate a real state of the investment sphere; they do not reflect the internal opportunities and prospects of the region.

The most widely used approach is to identify investment attractiveness as a combination of natural, economic, socio-political, and psychological characteristics. Supporters of this approach are A. Privalov, M. Knysh, B. Perekatov, Yu. Tyutikov, K. Guseva, and others. In their analysis, they evaluate a set of factors. As a result, the valuation technique assumes the use of an integral indicator of investment climate reliability, for the assessment of which a certain set of individual indicators is formed.

This technique is used by the London financial magazine, Euromoney, which calculates an integral reliability index (IPI) measured with the use of a 100-point scale.

The integral reliability index used by Euromoney contains nine different indicators:

- Economic efficiency,
- Creditworthiness,Availability of bank loans,

Political risk,Indebtedness,

- Availability of short-term financing,
- Debt service, Availability of long-term loan capital,
- Probability of occurrence of force majeure circumstances.

The values of these indicators are determined expertly or by calculation and analysis. They are measured with regard to a 10-point scale and then weighted according to the significance of each indicator and its contribution to the final score.

This approach has several advantages. It allows us to draw conclusions about investment prospects for the development of Russian regions; determine the degree of realization of their investment attractiveness; to estimate the majority of indicators by statistical methods; this approach makes it possible to justify the reliability of the obtained results, namely, use of the closeness degree criterion for the correlation between the categories considered. However, there are certain drawbacks, the main of which is the "opacity" of the methodology for identifying factorial features of investment attractiveness, the blurring of the component indicators assessment and the ambiguity of the characteristics being evaluated (Sayfudinova et al, 2016).

When assessing the investment attractiveness, G. Marchenko, O. Machulskaya, A. Kaminsky, E. Anankina and a number of other researchers also use a combination of certain factors, but considering the investment attractiveness of the region as an aggregated indicator. This indicator is determined by the investment potential and investment risk. This method is used by the Rating Agency "Expert". According to the supporters of this methodology, the aggregate potential of the region includes resource and raw materials, manufacturing, consumer, infrastructure, innovative, labor, institutional

and financial indicators. The aggregate risk of the region is calculated taking into account economic, criminal, political, financial, legislative, environmental, and social risks. The main advantages of this approach are its impartiality; the importance of factors that determine investment potential and investment risk; accessibility and awareness of foreign investors in the final results due to the fact that the methodology belongs to the mainstream of the generally accepted monitoring and evaluation system in the world practice. The shortcomings of the methodology include: Federal subjectivity of experts' opinions, lack of clarity in the methodology for assessing investment potential and risks when reducing to an integral indicator, lack of interrelation between the investment attractiveness and the investment activity (Safiullin and Gataullina, 2015).

An analysis of existing methods has shown that they do not place enough emphasis on risks. When assessing investment attractiveness, a key emphasis should be placed on investment risk. After all, investment activity in all forms and types is fraught with risk. Investment risk is the probability of unforeseen financial losses in a situation of uncertainty of investment conditions. Certainly, the method of the Rating Agency "Expert" considers the risks in the course of analysis; however, they are based on expert assessments which do not exclude "Federal subjectivity". However, in the works of the regional scientists such a notion as investment risk is more typical for works in the field of enterprise management. In the paper, the types of economic activity are highlighted with the help of the managerial approach which are the most attractive for investment from the point of view of risk minimization (Chebotareva, 2016).

Analysis of manufacturing sectors in the Republic of Tatarstan in order to identify the types of economic activity most attractive for investment and the formation of sustainable prerequisites for economic growth requires the study of one of such important factors of investment attractiveness as investment risk (Safiullin et al, 2015).

The work is devoted to the study of types of economic activity at the sectoral and regional levels with the goal of forming sectoral priorities for economic development in the capacity of strategic guidelines for sustainable economic growth and investment attractiveness of the territories (Safiullin et al, 2017).

The theoretical and methodological basis of the study was the fundamental provisions and concepts of economic theory, the scientific works of domestic and foreign scientists in the field of social and economic development of the region and regional economic systems, investment activity, strategic territorial and sectoral planning, materials in periodicals, regulatory documents at the federal and regional levels, modern methods of assessing competitiveness and investment attractiveness. The study was carried out on the basis of information from the Federal State Statistics Service (ROSSTAT), the Territorial Body of the Federal State Statistics Service for the Republic of Tatarstan (Tatarstanstat), as well as the analytical information of the Center for Advanced Economic Research at the Academy of Sciences in the Republic of Tatarstan (Safiullin et al, 2011).

2. METHODS AND RESULTS

The process of formation of a region's economy investment attractiveness is a complex socio-

economic system of relations between economic entities. Therefore, an objective assessment of the level of regional investment attractiveness requires the creation of an appropriate methodological toolkit.

The methodological approach is a multilevel study consisting of a structural and dynamic analysis of the types of economic activity, an assessment of the level of localization and structural decomposition of the dynamics of key indicators, an analysis of the overall risk arising from the conduct of entrepreneurial activities. The presented methodology made it possible to conduct comprehensive monitoring and diagnostics of economic activities, to determine the competitive positions of the Republic of Tatarstan for each type of activity and to identify industry priorities ensuring an increase in the region's investment attractiveness (Safiullin et al, 2017).

The methodology proposed in the theses of G.S. Chebytareva was modified for the work to analyze the investment attractiveness of the type of economic activity from the point of view of minimizing the risk. The development of methodological tools is based on the system for estimating the rate of growth in the shipping volume, the components of which are the ranking of the type of economic activity in terms of the frequency of growth anticipation in the Republic of Tatarstan in comparison with the Russian Federation with a specification for the localization coefficient. Calculation and assessment of these boundaries are based on the analysis of statistical data for each type of economic activity.

The frequency of advances in terms of the growth rate of the shipping volume is calculated on the basis of statistical data. Periods of time have been identified where the growth rate of the shipping volume in the Republic of Tatarstan was higher than the rate of growth in the Russian Federation.

The graphical illustration for the frequency of advances in the growth rate of the shipping volume for each type of economic activity and the level of aggregate risk is presented as the length of the vector corresponding to each type of economic activity (Voon et al, 2016).

Degree equivalent characterizes the level of influence for a type of economic activity on the aggregate investment risk. The necessity of this indicator is conditioned by the fact that at subsequent stages, including for risk ranking and calculation of their aggregate value, not the normalized values of the indicator for each risk, but their degree equivalent will be required. Its value ranges from 0 to 90 degrees. This methodology provides for a direct correspondence between the normalized and the degree value of the risk index. The latter is calculated by the formula. To assess the investment attractiveness, it is important to determine the boundaries of the change in the risks condition, exceeding the permissible level of which leads to the development of negative processes.

In accordance with the frequency of advances in terms of the growth rate of the shipping volume and localization indicators converted into a degree equivalent, a graphic illustration of the total risk is compiled (Jayantilal et al, 2016).

First of all, let's consider the structural and dynamic changes in the types of economic activity of the Republic of Tatarstan for 2014-2016, that relate to the manufacturing sector and form the basis of the industrial profile of the region. The analysis was carried out for 14 types of activity in terms of the "shipping volume".

At the beginning of 2017 (Figure 1), the largest shares in the structure of shipping volume were

occupied by the types of activity "Production of petroleum products" and "Chemical production" - 17.51% and 14.12% of the total turnover of enterprises, respectively.

Also, a significant share (more than 5%) was occupied by the production of vehicles (11.81%), food production (8.85%). The share of the other types of economic activity considered was less than 5% (production of rubber and plastic products - 4.07%, production of electrical equipment, metallurgical production and production of finished metal products, production of machinery and equipment - about 3%).

Despite the fact that "Production of oil products" ranks first in the structure of the shipping volume in the manufacturing sector, what at first glance indicates the attractiveness of this sector to investors, the shipping volume in the production of petroleum products in 2016 showed a negative trend relative to 2015.



Figure 1: Structure of the processing sector in the industrial profile of the republic of tatarstan by the shipping volume for the beginning of 2017

2.1 Other productions

In 2016, chemical production (106%), production of vehicles and transport equipment (113%), food production (111%), and metallurgical production (114%) showed positive dynamics in the manufacturing sector.



Figure 2: Dynamics of changes in the structure of the processing sector in the industrial profile of the republic of tatarstan by the shipping volume for 2014-2016

To assess the investment attractiveness of the types of economic activity, the determination of risks, the excess of the permissible level of which leads to the development of negative processes, is of fundamental importance.

Calculation and assessment of these boundaries is carried out on the basis of an analysis of statistical data for risks. The level of investment risk varies significantly under the influence of numerous objective and subjective factors that are in constant dynamics. Investors are attracted to the type of economic activity, where operations are associated with the lowest risk value.

Let us distinguish the most attractive types of economic activity for investing in the Republic of Tatarstan in terms of the minimum risk. The permanent dynamical growth in the shipping volume indicates an insignificant risk that may be present in the industry. To do this, let us find out how many times during the period under consideration (2012-2016) the growth rate of the shipping volume in the Republic of Tatarstan had a positive dynamics in comparison with the rate of growth in the Russian Federation. This analysis is required for further ranking by the type of economic activity.

$$GR SV j TEA RT \ge GR SV j TEA RF + D dev$$
 (1)

Where

GR SV j TEA RT - rate of growth in the shipping volume j for the type of economic activity in the Republic of Tatarstan

GR SV j TEA RF - rate of growth in the shipping volume j for the type of economic activity in the Russian Federation

D dev – the degree of deviation of the growth rate indicator of the shipping volume j for the type of economic activity in the Republic of Tatarstan from the average growth rate of the shipping volume j for the type of economic activity in the Russian Federation.

Growth rates by shipping volume by the types of economic activity in the Republic of Tatarstan are shown in Table 1 and growth rates by the shipping volume by the types of economic activity in the Russian Federation are shown in Table 2. Table 4 shows the frequency of advances in the dynamics of growth rates in the Republic of Tatarstan in comparison with the Russian Federation, taking into account D dev (Table 3).

Type of economic activity	2013/2012	2014/2013	2015/2014	2016/2015
Food production	116.7067	116.9562	129.3978	111.0684
Textile and clothing manufacture	96.19682	110.5083	133.6645	114.0344
Leather production	57.20557	95.35091	159.8157	116.5316
Wood processing and woodwork production	135.128	176.6057	197.6158	125.9674
Pulp and paper industry	112.2171	103.9513	144.1339	137.3608
Production of petroleum products	109.8701	118.699	112.9814	97.87496
Chemical production	93.63425	111.455	116.8559	105.9385
Manufacture of rubber and plastic products	93.15908	101.6104	133.0735	95.55225
Manufacture of other non-metallic mineral				
products	100.5029	110.5967	136.9598	84.45228
Metallurgical production and production of				
finished metal products	108.0519	121.7833	116.9104	114.1728
Manufacture of machinery and equipment	116.7893	99.36037	132.1657	106.7258
Manufacture of electrical, electronic and				
optical equipment	114.7232	118.1444	137.7843	98.3212
Manufacture of vehicles and equipment	114.6525	101.96	88.81029	113.2434
Other production	86.49493	134.988	174.7381	82.01114

Table 1: Growth rates for shipping volumes by the types of economic activity in the republic of tatarstan (*GR SV j TEA RT*)

Table 2: Growth rates of the shipping volume j by the types of economic activity in the russian federation (GR SV j TEA RF)

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Type of economic activity	2013/2012	2014/2013	2015/2014	2016/2015
Food production	106.7733067	113.29588	121.09504	110.5784
Textile and clothing manufacture	114.6226415	108.64.198	107.19697	124.38163
Leather production	106.8686.869	94.89603	112.3506	123.22695
Wood processing and woodwork production	106.1971831	105.03979	113.38384	116.70379
Pulp and paper industry	103.095.58585	107.5718	121.23786	115.01502
Production of petroleum products	115.5585361	113.54668	102.84755	97.146.103
Chemical production	97.11637487	111.45281	127.02.188	103.78277
Manufacture of rubber and plastic products	105.345.9119	103.28.358	114.59538	113.36696
Manufacture of other non-metallic mineral products	105.0043141	103.04026	99.282297	104.01606
Metallurgical production and production of finished				
metal products	98.62842893	115.42.351	118.02848	104.51002
Manufacture of machinery and equipment	103.5222052	101.55325	106.333649	111.36986
Manufacture of electrical, electronic and optical				
equipment	103.6437247	111.71875	113.46154	121.67437
Manufacture of vehicles and equipment	112.9285.714	100.56926	95.691824	113.73644
Other production	110.2756.892	118.0303	118.74.198	145.83784

Table 3: the degree of deviation of the growth rate indicators for shipping products by the types of economic activities in the russian federation from the average values

Time of companie activity.			
Type of economic activity	D dev		
Food production	6.061808		
Textile and clothing manufacture	7.806428		
Leather production	11.78483		
Wood processing and woodwork production	5.627835		
Pulp and paper industry	8.021533		
Production of petroleum products	8.758763		
Chemical production	12.86337		
Manufacture of rubber and plastic products	5.666298		
Manufacture of other non-metallic mineral products	2.500978		
Metallurgical production and production of finished metal products	9.136323		
Manufacture of machinery and equipment	4.261873		
Manufacture of electrical, electronic and optical equipment	7.395.393		
Manufacture of vehicles and equipment	9.005939		
Other production	15.5575		

Table 4: Frequency of advances in growth rate dynamics.

	2012/2012	2014/2012	2015/2014	2016/2015
Type of economic activity	2013/2012	2014/2013	2015/2014	2016/2015
Food production	+	+	+	+
Textile and clothing manufacture	-	+	+	-
Leather production	-	+	+	+
Wood processing and woodwork production	+	+	+	+
Pulp and paper industry	+	+	+	+
Production of petroleum products	+	+	+	+
Chemical production	+	+	+	+
Manufacture of rubber and plastic products	-	+	+	-
Manufacture of other non-metallic mineral products	-	+	+	-
Metallurgical production and production of finished	+	+	+	+
metal products				
Manufacture of machinery and equipment	+	+	+	-
Manufacture of electrical, electronic and optical	+	+	+	-
equipment				
Manufacture of vehicles and equipment	+	+	+	+
Other production	-	+	+	-

Such types of economic activities as food production, wood processing and woodwork production, pulp and paper production, petroleum products production, vehicles production, chemical production, and metallurgical production had only a positive trend over the period under review. The positive growth rate can be observed for 2013 in relation to 2012, for 2014 in relation to 2013, for 2015 in relation to 2014, for 2016 in relation to 2015. This evidences that the risk in decreasing production volumes in these types of economic activity is close to zero.

The decrease in the growth rate for the shipping volume in the production of leather, the production of machinery and equipment, and the production of electrical equipment, electronic and optical equipment in the Republic of Tatarstan relative to the rate of growth in the Russian Federation was observed once.

The most risky were such kinds of economic activities as textile and clothing manufacture, production of rubber and plastic products, production of other non-metallic mineral products, and other industries. They showed a two-fold slowdown in the growth rate of shipping volume in the Republic of Tatarstan in relation to the rate of growth in Russia.

In order to compile the rating of types of economic activity on minimizing the risk, it is necessary to take into account not only the outstripping growth rate in the shipping volume, as well as the level of influence for the indicators of a relevant type of economic activity on the state of the industry. For this analysis, we took the localization level indicator for the shipping volume for 2016. As a result, having compared the frequency of the outstripping growth rate in terms of the shipping volume and the level of localization for the corresponding types of economic activity, we compiled a rating for the types of economic activity by the minimum risk given in Table 5.

Chemical production turned out in the first place, the second was occupied by the production of vehicles and transport equipment, the third – by the food production.

1		Number of advances in the	
		dynamics of growth rates in	Coefficient of
No.	Type of economic activity	the Republic of Tatarstan in	localization
		comparison with the Russian	localization
		Federation	
1	Chemical production	4	2.92
2	Manufacture of vehicles and transport		
	equipment	4	1.96
3	Food production	4	0.81
4	Wood processing and woodwork production	4	0.78
5	Pulp and paper industry	4	0.66
6	Production of petroleum products	4	1.47
7	Metallurgical production and production of	4	0.32
	finished metal products	4	0.52
8	Manufacture of machinery and equipment	3	1.09
9	Manufacture of electrical, electronic and optical	3	0.75
	equipment	5	0.75
10	Leather production	3	0.39
11	Manufacture of rubber and plastic products	2	2.73
12	Manufacture of other non-metallic mineral	2	0.72
	products	2 0.	
13	Textile and clothing manufacture	2	0.37
	Other production	2	0.14

Table 5: Rating of the types of economic activity by risk minimization

Graphical illustration of the cumulative risk is based on the use of data from the compiled rating, namely the final level of influence for each of the risks on investment attractiveness. The order of the risk vectors location on the diagram depends on the rating numbers they occupy in the order of decreasing influence on investment attractiveness; the more often the negative growth was repeated, the lower the rating.

$$R_{Max} = \frac{1}{2} \sum \left(p_{j,Max} p_{j+1,Max} \sin \gamma_{j+1} \right)$$
⁽²⁾

Where

 R_{Max} - the maximum likelihood of the realization of favorable conditions for the growth of the shipping volume;

n - the number of periods studied;

 $p_{j,Max}$ - the amount of positive changes in the growth of the shipping volume for the type of economic activity;

 $p_{j+1,Max}$ - the amount of positive changes in the growth of the shipping volume for the corresponding (j + 1) -th type of economic activity;

j - the serial number of each type of economic activity in accordance with the ranking;

 γ_{j+1} - localization of the (j + 1)-th type of economic activity.

In turn, the localization displays an angle reflecting the level of influence of (j + 1)-th type of economic activity on investment attractiveness. Let's represent the significance of localizations for selected economic activities as the sines of the angles: the larger the angle, the greater the degree of influence. Let's note that we will not be able to use localization in its original form when constructing the graph, since the maximum value of the sines of the angles is 1, thus, despite the fact that the localization by some types of economic activity is greater than 1, the angle of influence of such types vectors of a type of economic activity will be considered as 90 degrees. The sum of the angles formed between the 14 vectors makes 704 degrees. A graphic illustration of the cumulative risk should fit one circle. In order to place the graph within the coordinates of 1 circle, we reduced the sum of angles to 360 degrees.

	Investment auractiveness		
		The degree obtained	Sine for the
No.	Type of economic activity	by recalculating the	converted
		relation 360°/704°	angles
1	Chemical production	47 °	0.73
2	Manufacture of vehicles and equipment	47 °	0.73
3	Food production	28 °	0.47
4	Wood processing and woodwork production	25 °	0.42
5	Pulp and paper industry	21 °	0.36
6	Production of petroleum products	14°	0.24
7	Metallurgical production and production of finished metal	10°	0.17
/	products	10	0.17
8	Manufacture of machinery and equipment	47 °	0.73
9	Manufacture of electrical, electronic and optical equipment	25 °	
10	Leather production	11°	
11	Manufacture of rubber and plastic products	47 °	0.73
12	Manufacture of other non-metallic mineral products	23 °	0.39
13	Textile and clothing manufacture	11°	0.19
14	Other production	4°	0.07

Table 6: The angle values reflecting the level of influence of an economic activity type on the investment attractiveness

*Corresponding author (A.R. Safiullin). Email: safiullin.ar@gmail.com ©2018 International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies. Volume 9 No.5 ISSN 2228-9860 eISSN 1906-9642 http://TUENGR.COM/V09/455.pdf DOI: 10.14456/ITJEMAST.2018.41 Table 6 shows the angle values reflecting the level of influence of a type of economic activity on investment attractiveness, as well as the sines of the converted angles.

On the basis of the above, we constructed the graph. The graph shows 14 types of economic activity in the form of vectors arranged according to the ranking presented in Fig. 3. The angles under which the vectors of this chart are located have been determined through the values of the sines corresponding to the localization value for the shipping volume for 2016. The localization values and angles corresponding to the sines are given in Table 6.



Figure 3: Graphic illustration of the aggregate risk level

On the basis of Tables 5 and 6, as well as the graphic illustration for the level of aggregate risk (Fig. 3), we calculated the level of influence of each type of economic activity on the aggregate risk through the area of each triangle using Equation (2).

For example, let's calculate the maximum likelihood of the realization of favorable conditions for the growth of the shipping volume "Production of vehicles and transport equipment" according to Equation (2).

$$R_{Max} = \frac{1}{2}(4 \cdot 4 \cdot 0.73) = 5.84$$

Table 7 shows the degree of influence for each type of economic activity on aggregate risk through the calculated areas of each triangle. In addition, the calculation of each triangle's area made it possible to clarify the ranking of types of economic activity to minimize the risk, thus, of the lowest risk was the type of economic activity "Production of vehicles and transport equipment", the second was "Production of machinery and equipment, and the third was "Food production".

Table 7. The level of influence for each type of economic activity on the aggregate risk through the area of each triangle

No.	Type of economic activity	Area of a triangle
1	Production of vehicles and transport equipment	5.84
2	Production of machinery and equipment	4.38
3	Food production	3.76
4	Wood processing and woodwork production	3.36
5	Chemical production	2.92
6	Pulp and paper industry	2.88
7	Manufacture of rubber and plastic products	2.19
8	Production of petroleum products	1.92
9	Manufacture of electrical, electronic and optical equipment	1.89
10	Metallurgical production and production of finished metal products	1.36
11	Leather production	0.85
12	Production of other non-metallic mineral products	0.78
13	Textile and clothing manufacture	0.38
14	Other production	0.14

The sum of the areas of all triangles is 32.65, so, we can rank the types of economic activity by the level of risk through the ratio of each triangle to the total area.

Table 8 shows the likelihood of a favorable outcome from investing in the relevant type of economic activity, namely the likelihood of anticipating growth. The probability above 0.1 is high, below 0.1 to 0.02 (inclusive) is average, 0.01 and lower is low.

	ceonomie activity.			
No.	Type of economic activity	Probability of realization of outstripping growth		
1	Manufacture of vehicles and transport equipment	0.18		
2	Manufacture of machinery and equipment	0.14		
3	Food production	0.12		
4	Wood processing and woodwork production	0.1		
5	Chemical production	0.1		
6	Pulp and paper industry	0.1		
7	Manufacture of rubber and plastic products	0.07		
8	Production of petroleum products	0.06		
9	Manufacture of electrical, electronic and optical equipment	0.06		
10	Metallurgical production and production of finished metal products	0.046		
11	Leather production	0.026		
12	Manufacture of other non-metallic mineral products	0.02		
13	Textile and clothing manufacture	0.01		
14	Other production	0.004		

Table 8: Realization probability for the outstripping growth of the shipping volume by types of economic activity.

Thus, proceeding from the above analysis, such types of economic activity as "Production of vehicles and transport equipment", "Production of machinery and equipment", "Food production" turned out to be the most favorable for investment from the point of view of the probability of outstripping growth in the shipping volume.

3. CONCLUSION

The degree of investment attractiveness is the determining condition for vigorous investment activity, and, consequently, the effective socioeconomic development of the economy both for the state as a whole and for the regions. One of the tasks facing modern society is to create the necessary

and favorable conditions for intensifying economic growth and improving the quality of life of the population. Achieving this goal is possible by attraction of investments in the real sector of the economy. Investigation of investment opportunities and investment risks of the regions is necessary to develop a sound investment policy and a proportionate distribution of investment in selected regions of Russia.

The work contains the analysis of existing methods of an investment attractiveness assessment. The need to assess investment attractiveness through investment risk is indicated, since investment activity in all forms and types is fraught with risk.

The most attractive types of economic activity for investing in the Republic of Tatarstan from the point of view of the minimum risk are identified. The permanent dynamical growth in the shipping volume indicates an insignificant risk that may be present in the industry; a statistical analysis on the growth rate of the shipping volume is carried out in order to identify the type of economic activity with an outstripping growth. The food production, wood processing and woodwork production, pulp and paper production, production of petroleum products, vehicles, chemical production and metallurgical production had only positive dynamics over the considered period of time.

To compile the rating of the types of economic activity by the risk minimization, not only the outstripping growth rate in the shipping volume, but also the level of influence of the indicators for the relevant type of economic activity on the state of the industry have been taken into account. Analysis using the localization coefficient showed that the production of vehicles and transport equipment, the production of machinery and equipment, the food production, the wood processing and woodwork production, chemical production, pulp and paper production, and the production of rubber and plastic products not only have a frequent positive dynamics of growth, but also have a greater impact on the level of risk.

In addition, the probabilities of outstripping growth in the shipping volume are calculated. Such types of economic activity as "Production of vehicles and transport equipment", "Production of machinery and equipment", "Food production" have the greatest probabilities of favorable growth.

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