

Methodical Issues of Quantitative Justification of the Selection of Branch Priorities of the Regional Industrial Profile

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Abstract

Attracting investment into the economy of the region remains one of the most pressing tasks in economic policy. Activities that are aimed at improving the investment attractiveness of the region create the conditions for capital inflows and economic growth in the region, but it is important to develop an effective investment policy to realize the improvement of investment attractiveness. The development of an effective investment policy is impossible without identifying the most attractive for invested types of economic activity (hereinafter, referred to as TEA). There is no doubt that when choosing a foreign economic activity for investment, the greatest preference is given to competitive sectors of the economy with minimal riskiness. The paper studies the types of economic activity at the sectoral and regional levels in order to form the sectoral priorities of economic development as strategic guidelines for sustainable economic growth and investment attractiveness of the territories. The article exposes the approach proposed by the authors to the definition of foreign economic activity being attractive for investment of TEA in the economy of the Republic of Tatarstan (hereinafter – RT) in terms of growth in the shipping volume (hereinafter – SV), in terms of localization on fixed capital investments. To identify the above TEA, mathematical, statistical and graphical tools are used. A structural and dynamic comparative analysis of the shipping volume of products of 14 types of economic activities of the Republic of Tatarstan has been carried out, localization coefficients have been calculated, and the amount of investment received by each foreign economic activity has been analyzed.

Keywords: Investment attractiveness; Investment Risk; Manufacturing activity.



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1. Introduction

An important factor in the economic development of the national economy is investments that ensure the production of competitive products and the quality of economic growth, increase the production efficiency, its preferential intensification, social stability and environmental safety. Of course, one of the main tasks of economic systems is the ability to attract investments. Without a doubt, the territorial aspect of investments, their attribution to a particular country, region, or territory deserve special attention. Evaluation of the investment attractiveness of the territory is the most important aspect of making any investment decision. Depending on its correctness certain consequences for the investor and for the economy of the region and the country as a whole may arise. An effective investment policy cannot be justified without the analysis aimed at selecting the sectors of the economy that are most attractive for investment. There are many approaches to defining investment attractiveness.

The investment attractiveness of the territory is an essential element in generation of the flow of investment and a key factor for the investor to make a decision. Managing investment attractiveness requires not only the development of a methodology for its assessment but also the diagnosis of critical factors determining its strategic level. The term investment attractiveness is rather new, therefore, unified approaches to its understanding by domestic and foreign economists have not yet been developed. Nevertheless, investment attractiveness and processes that are inextricably linked with it play an important role in the development of both a separate company and the state economy. The analysis of economic literature have shown that the approaches of different authors in the definition, evaluation and analysis of the concept of investment attractiveness differ and complement each other. So, [Ravzieva and Safiullin \(2018\)](#) note that investment attractiveness is interpreted as an indicator of potential effective demand for fixed asset investments. According to [Safiullin and Gataullina \(2015\)](#), investment attractiveness is defined as a combination of advantages and disadvantages of investment activity from the point of view of a concrete investor. [Jarreau and Poncet \(2012\)](#) note that investment attractiveness is directly dependent on a number of factors that characterize its financial condition.

Of interest is [Chebotareva \(2016\)](#) point of view who argues that investment attractiveness is a combination of external and internal investment conditions that determine the possibility of a boundary transition of investment resources. Researchers ([Safiullin and Gubaidullina, n.d.](#)) understand the concept of investment attractiveness as the complex social and economic characteristics of the object by a number of parameters that allow the investor to evaluate the effectiveness of capital investments. The analysis of the sectors of the manufacturing industry of the Republic of Tatarstan in order to identify the most attractive for investment types of economic activity (hereinafter, referred to as TEA) and the formation of sustainable prerequisites for economic growth requires a multi-level study.

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According to the national rating agency, RT belongs to the regions with a favorable investment climate, with the most comfortable institutional conditions for investors.

An essential element destabilizing the processes associated with investment activities at the regional level are investment risks which cause instability of the processes and the indefiniteness of their results. Riskiness is one of the organic properties of investment activities of all types and forms, carried out at any time which necessitates the assessment and control of parameters of investment activity at all levels of decomposition of the investment potential and the associated investment process. A key factor in the investment attractiveness of economic systems is minimality of risks. The theoretical basis of the study is the concept of economic theory, scientific works by domestic and foreign scientists in the field of 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 data from the Center for Advanced Economic Research of the Academy of Sciences of the Republic of Tatarstan (Mollae *et al.*, 2018).

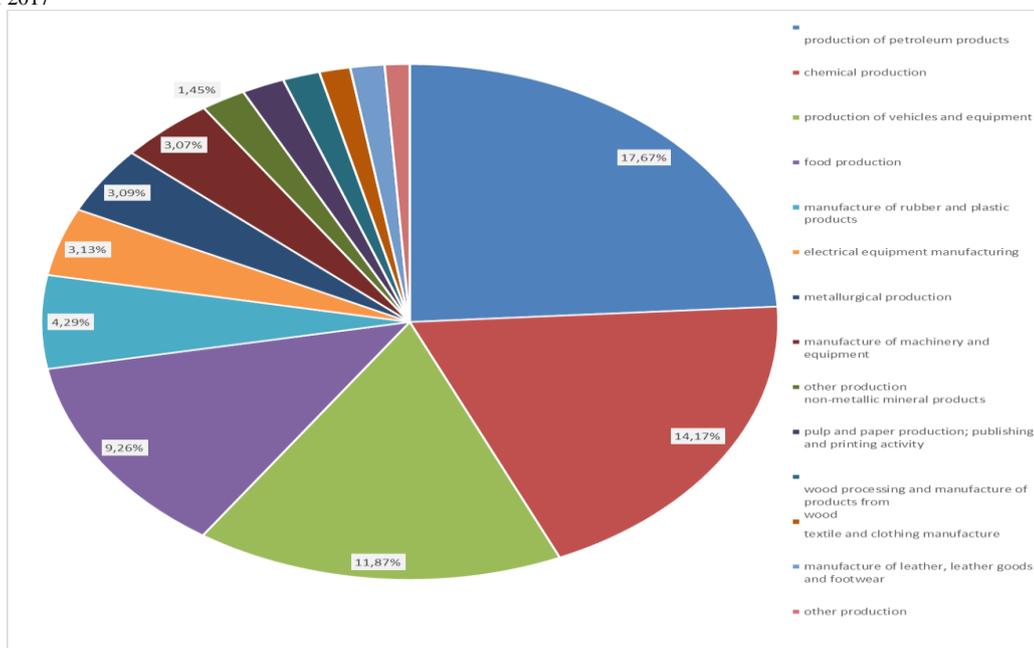
2. Methodology

The process of formation of the investment attractiveness of the regional economy is a complex socio-economic system of interconnections. Consequently, an appropriate methodical approach is required to objectively assess the level of investment attractiveness of a region. The methodical approach is a multi-level study consisting of structural and dynamic analysis of foreign economic activity, assessment of the level of localization and structural decomposition of the dynamics of key indicators. These methods allowed the study to identify the most attractive types of economic activity. A comprehensive analysis of the competitive position of the Republic of Tatarstan with the object of forming sustainable prerequisites for economic growth requires the study of the main factors of investment attractiveness by types of economic activity. The study has been carried out in the form of a dynamic and structural comparative analysis of economic indicators by types of economic activity (hereinafter referred to as TEA) for 2014-2016. The analysis of each TEA has been conducted in a single sequence. The paper identifies the main activities of the processing sector of the Republic of Tatarstan, being the object of study (14 TEA). This sampling allowed to cover the main foreign economic activities of the region which occupy the most noticeable share in the total shipping volume of goods of domestic manufacture, work performed and services (excluding VAT and excise):

- 1) Food production, including beverages and tobacco;
- 2) Textile and clothing manufacture;
- 3) Manufacture of leather, leather goods and shoemaking;
- 4) Woodworking and production of woodware;
- 5) Pulp and paper production;
- 6) Publishing and printing activities;
- 7) Production of petroleum products;
- 8) Chemical production;
- 9) Manufacture of rubber and plastic products;
- 10) Manufacture of other non-metallic mineral products;
- 11) Metallurgical production and production of finished metal products;
- 12) Manufacture of machinery and equipment;
- 13) Production of electrical, electronic and optical equipment;
- 14) Production of vehicles and equipment.

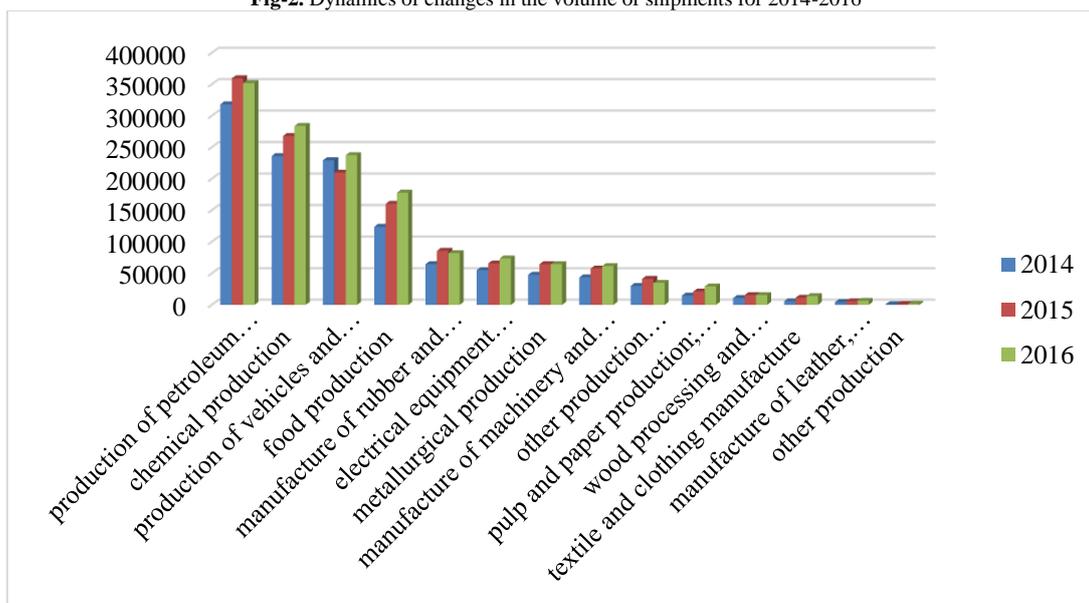
The research process includes structural analysis and dynamic analysis of OOP, localization studies by OOP. Consider the structure according to the types of economic activity of the RT at the beginning of 2017, belonging to the manufacturing sector and forming the basis of the industrial profile of the region. At the beginning of 2017, the largest shares in the structure of the volume of shipments were occupied by the activities, such as production of petroleum products and chemical production, manufacture of vehicles. The production of petroleum products is 19%. The production of petroleum products and chemical production of the total turnover of organizations have 14% each, respectively. Food production accounts for a significant proportion (more than 7%). The share of manufacture of rubber and plastic products is 4%. The share of the remaining considered types of economic activities is less than 4% (metallurgical production and production of finished metal products - 3%; machinery and equipment manufacture - 3%, electrical equipment, electronic and optical equipment - 3%, production of other non-metallic mineral products - about 2%). The smallest share corresponds to the following TEA: wood processing and production of products from wood; textile and clothing manufacture; manufacture of leather, leather goods and shoemaking – less than 1%.

Fig-1. The structure of the manufacturing sector of the industrial complex of the Republic Tatarstan in terms of turnover of organizations at the beginning of 2017



Compared to 2015 and 2014, the situation has not changed significantly – production of petroleum products (19, 26% in 2015 and 18, 95% in 2014), chemical production (14% each), production of vehicles and equipment (11, 26% and 14, 06%) and food production (8, 47% and 7, 37%).

Fig-2. Dynamics of changes in the volume of shipments for 2014-2016

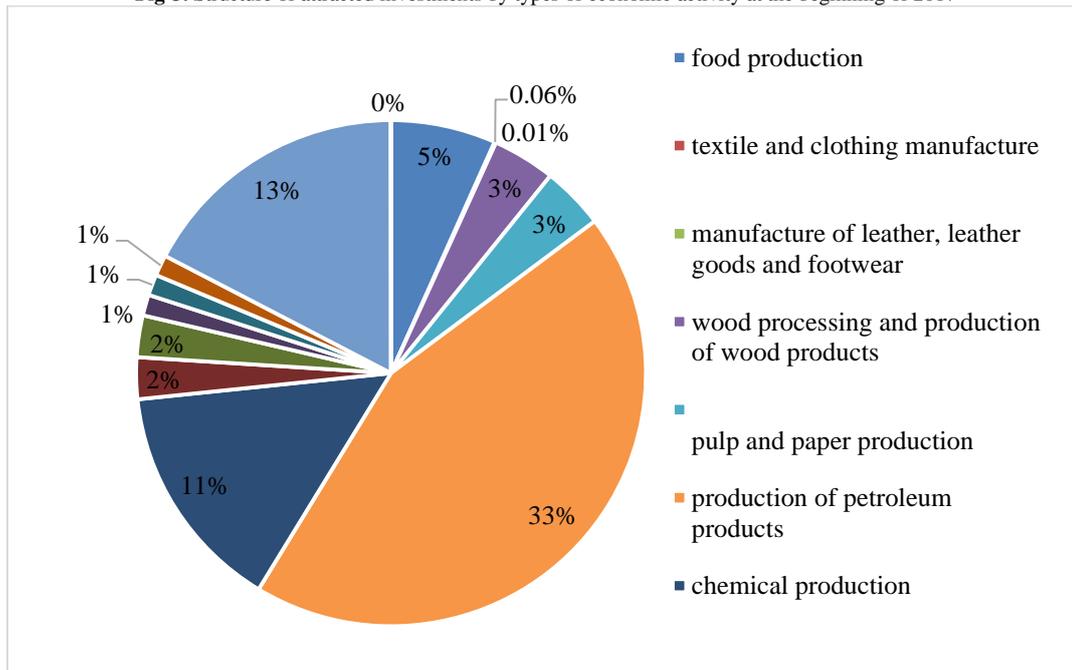


Despite the fact that the production of petroleum products occupies a leading position in the structure of the total turnover of organizations, the volume of products shipped in 2016 in relation to 2015 slightly decreased (by 3,43%). At the same time, in the processing industries, a positive trend was observed in the chemical industry (by 6, 53%), the manufacture of rubber and plastic products (by 8, 87%). The shipping volume for the production of vehicles and equipment in 2016 compared to 2015 increased by 10, 81%, without reaching, however, the level of 2014 (the ratio of the level of 2016 to 2014 was 98, 91%). The volume of food products shipped increased significantly in 2015, as well as in 2016 (by 27, 90% and 15, 06%, respectively). A sustainable positive dynamics for 2014-2016 was also observed in the manufacture of machinery and equipment; the manufacture of rubber and plastic products; electrical equipment manufacturing, 18,95% 14,06% 13,65% 7,37% 3,83% 3,28% 2,84% 2,59% 1,78% 18,95%, 14,06%, 13,65%, 7,37%, 3,83%, 3,28%, 2,84%, 2,59%, 1,78% production of petroleum products, manufacture of vehicles and machinery, chemical production, food production, including drinks and tobacco; manufacture of rubber and plastic products; metallurgical production and manufacture of finished metal products; electrical equipment manufacturing, electronic and optical equipment manufacturing; manufacture of machinery and equipment; production of other non-metallic mineral products; pulp and paper production; publishing and printing activities; wood processing and manufacture of products from wood; textile and clothing manufacture, manufacture of leather,

leather goods and shoemaking; other production of electronic and optical equipment (Safiullin and Gubaidullina, n.d.); (Mollae *et al.*, 2018).

At the same time, a higher growth occurred in 2015 (20, 06%, 20, 45% and 22, 95%, respectively), in 2016 the increase was only 15, 43%, 8, 87% and 5, 06%. However, the highest growth in both 2015 and 2016 (over 30%) was reached by 2 TEA: wood processing (and production of the products from wood) and pulp and paper production (publishing and printing activities). The volume of the first products shipped in 2015 almost doubled (from 5, 6 to 10, 7 billion rubles). The negative dynamics of the shipping volume in 2016 was observed in 4 TEA: textile and clothing manufacture; leather manufacture (leather goods and footwear production); manufacture of other non-metallic mineral products; production of petroleum products. According to TEA, the decline in production was 18, 61%, 9, 46%, 3, 43% and 2, 06%, respectively. In 2015, the reduction in the volume of products shipped occurred only in the manufacture of vehicles and equipment (by 10, 8%). The structure of the volume of investments in fixed assets in TEA at the beginning of 2017 has been analyzed. The leader in terms of the volume of investments in fixed capital is the production of petroleum products, followed by wood processing and the production of products from wood. The third place is occupied by chemical production (Antúnez and Ganga, 2017).

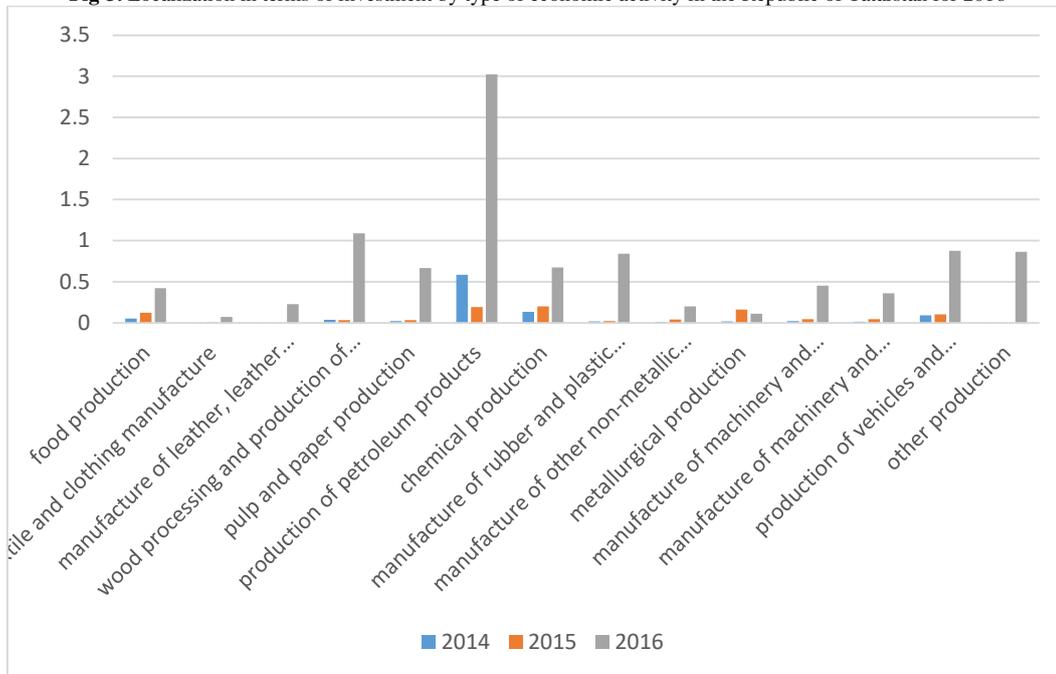
Fig-3. Structure of attracted investments by types of economic activity at the beginning of 2017



In 2016, investment in industry fell in relation to 2015. If in 2015 the volume of investments in fixed assets amounted to 232 576, 7 million rubles, in 2016 it was 208 438, 6. There was also observed a sharp drop in textile manufacture in 2015 and a slight increase in 2016. The expansion of volume of investment was observed in the manufacture of leather, the manufacture of electrical equipment. Dynamic decline occurred in the manufacture of vehicles and the production of other industries. In all other foreign economic activities, investment increased in 2015 and decreased in 2016.

3. Results and Discussion

A significant role in the analysis of the investment attractiveness of the region is played by the calculation of concentration and localization indices which make it possible to determine the structure of competition in the industry markets to which the selected TEA refer. The analysis of localization by investment has shown that the core TEA for investment for the RT is wood processing and production of petroleum products, since the localization index for these positions is more than 1.

Fig-3. Localization in terms of investment by type of economic activity in the Republic of Tatarstan for 2016

According to the analysis of the level of the indicator of localization in terms of investment, it can be noted that in the near future the structure of the industrial profile in the RT will have corrections upwards in the structure of TEA on the OOP wood processing and production of wood products.

4. Summary

The analysis has confirmed the significant impact on the economy of the region of the following foreign economic activities: chemical production; manufacture of rubber and plastic products; vehicle manufacturing; production of petroleum products; manufacture of machinery and equipment. The study of the dynamics of localization coefficients indicates a fairly strong position of the core TEA of the republic. Chemical industry, manufacture of vehicles, and production of petroleum products retain a steady position. However, the indices with annual dynamic changes indicate that there are expected changes in the profile of TEA of manufacturing industries in the RT (Sayfudinova *et al.*, 2016); (Safiullin *et al.*, 2017).

5. Conclusions

The study of investment opportunities and investment risks of the regions is necessary for the development of a sound investment policy and a proportionate distribution of investments in individual regions of Russia. The paper defines the term of investment attractiveness given by the theorists. It indicates the necessity of assessing investment attractiveness, presents methods for quantitative assessment of investment attractiveness. Thus, the investment attractiveness of the territory is an essential element of the formation of the flow of investment and a key factor for the investor to make a decision. Management of investment attractiveness requires not only the development of a methodology for assessing it but also diagnosing critical factors that determine its strategic level. To form the investment policy of the region, it is necessary to single out the core and priority economic activities that have unique competitive advantages that can act as anchor objects for industry clusters and locomotives for the growth of the national economy. The analysis of the manufacturing industries has shown that the greatest production and investments are concentrated in chemical production, petroleum refining industry, vehicles and equipment manufacture.

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