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AN ATTRACTIVE ASSESSMENT ON BUILDING ENTERPRISES INTO CONDITIONS FOR REGIONAL SUSTAINABLE DEVELOPMENT

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ABSTRACT

The priority task of the state is to increase the investment attractiveness of Russian manufacturing industries. Formation of an effective mechanism for managing the construction industry based on the self-organization mechanism. To achieve this goal, it began to function legally in the construction of self-regulatory organizations (SROs), which is a system of admission to the market for construction goods, works and services. However, there are a number of problems that are manifested in the absence of a specialization system for construction enterprises by type of work (services) or facilities being carried out, and insufficient liability of members. This problem can be solved by forming a building cluster. The work considers environmental objects that interact with construction companies, a rating analysis of the regions by the volume of housing commissioned, the leading developers and contractors in the Russian Federation are presented. Based on the proposed methodology for assessing the contribution of the construction cluster to the region's economy, the paper presents the development efficiency of the industry in the context of individual regions of the country. Proposed results can be used by executive bodies of state power, business entities, educational institutions for the development and adoption of managerial decisions on the effective development of the regional economy, the development of strategies and programs for economic development at different levels.

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1. INTRODUCTION

The construction complex is an important organizational and economic system, the effective

functioning of which plays an important role in ensuring the social, economic, technological development of the region.

The decrease in the financial stability of the construction industry in the regions is caused by a lack of investment, the slow commissioning of new housing and a reduction in local budgets for production activities. The situation is aggravated due to the uneven distribution of building complexes in the country. To increase the efficiency of the construction industry, it is proposed to integrate business, innovation and financial sectors in one territory, united by a desire to increase the effectiveness of financial and economic activities, which will increase their competitive position and ensure more rational use of resource potential. This type of integration is based on the formation of network models for the organization of joint activities based on horizontal and vertical connections. The network approach has long been used in international practices, positively influencing the final results of the financial and economic activities of construction companies and strengthening the competitiveness of the industry. The approach chosen by the cluster organization of regional economic entities seems to be the most acceptable, given the local characteristics of the geographical, economic and social development of the construction industry. To build effective cluster models, it is necessary to develop a number of measures to increase the attractiveness of the domestic construction services market.

The formation of the theoretical foundations of investment process management is associated with the works of many researchers such as Keynes (2015), Friedman (2017), Lylov et al. (2019) and several other scientists. The scientific approach to assessment, is devoted to the issues of attracting and efficient use of additional sources of financing. investment attractiveness is contained in the works: Bard et al. (2013), Grishina (2009) and others. The concept of "investment attractiveness" in modern economic and managerial literature is interpreted ambiguously. According to recent studies (Fedorova, (2003), quite often it is identified with the concept of "investment climate". Some scholars, such as V. Lapo (Svetovtsev, (2006), believe that investment attractiveness, along with investment activity, determines the investment climate. Fedorova (2016), on the contrary, believes that this economic category includes investment attractiveness and investment activity (Dunning, 1993). Bakiev (2008) reveals the main content of the study defined as the probability of timely achievement of the investor's economic desires based on the results of the proposed investment object" (Baryshnikova, 2016). Bey (2015) defines investment attractiveness as "a certain state of economic and economic development of the investment object, in which, with a high degree of probability and in term of acceptable to the investor, the investment can give a satisfactory level of profitability or a different positive effect can be achieved". The enterprises should take into account about construction workers (Ganeeva et al., 2019).

The stable functioning of the organizations of the construction complex largely depends on the level of socio-psychological culture of intra-company relations, aspects of which imply the satisfaction of individual needs.

2. MATERIALS AND METHOD

The solution of the issues of accelerated implementation of the achievements of scientific and technological progress in production, the orientation of the enterprise on the demand of consumers of

construction products and on obtaining the best final results of financial and economic, largely depends on a comprehensive assessment of the production and economic activities of organizations, which is one of the urgent methodological problems. A reliable assessment makes it possible to strengthen the efficiency of construction management while increasing the economic initiative and economic independence of construction organizations on the basis of increasing the effectiveness of economic levers and incentives.

Considering the general state of the Russian construction complex, it can be argued that clusters are not formed in many regions, but the volume of construction and the complexity of both horizontal and vertical connections necessitate the formation of this network of business structures. The main goal of the cluster is to increase the competitive advantages of organizations. The model of the construction cluster can be represented as follows see Figure 1.

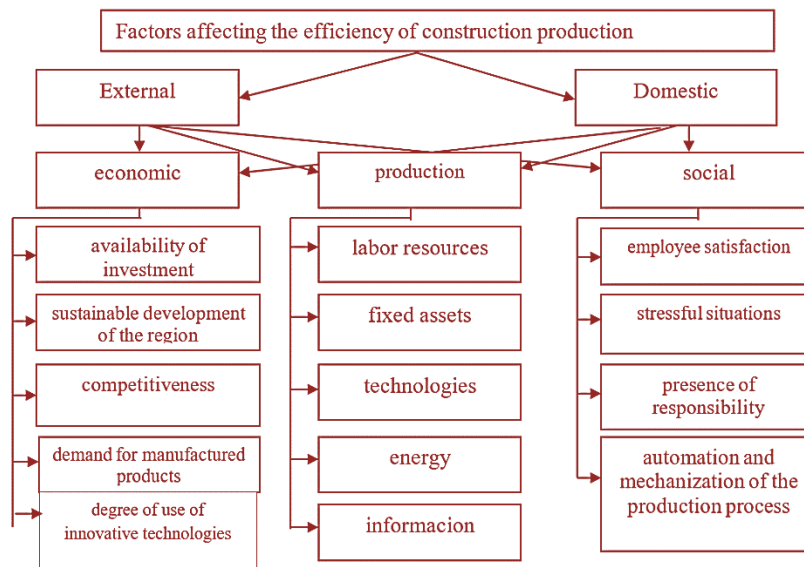


Figure 1: Factors determining the development of the construction industry in the region

To determine the contribution of the construction cluster to the economy of the regional system, it is proposed to use the following indicators:

Ek₁ - the proportion of work performed by construction organizations, in GRP, %;

Ek₂ - the specific weight of the introduced residential buildings, thousand m³ of the region in relation to the national average, %;

Ek₃ - the proportion of the total area of residential buildings in the region put into operation per 1000 population to the average value of this indicator for the country, %;

Ek₄ - the proportion of people employed in the construction of an economically active population in the total number of employed people in the whole country, %;

Ek₅ - the proportion of the average price for commissioned housing in the region in relation to the average value of the country, %;

Ek₆ - the proportion of construction organizations in the total size of organizations in the region, %.

The economic contribution to the industry as a whole can be calculated as follows:

$$E^B = K_d * \frac{\sum_{i=1}^n Ek_i}{n} \quad (1)$$

where K_d – population confidence coefficient calculated on the basis of subindexes as the arithmetic average of the values obtained by the heuristic method see Figure 2.

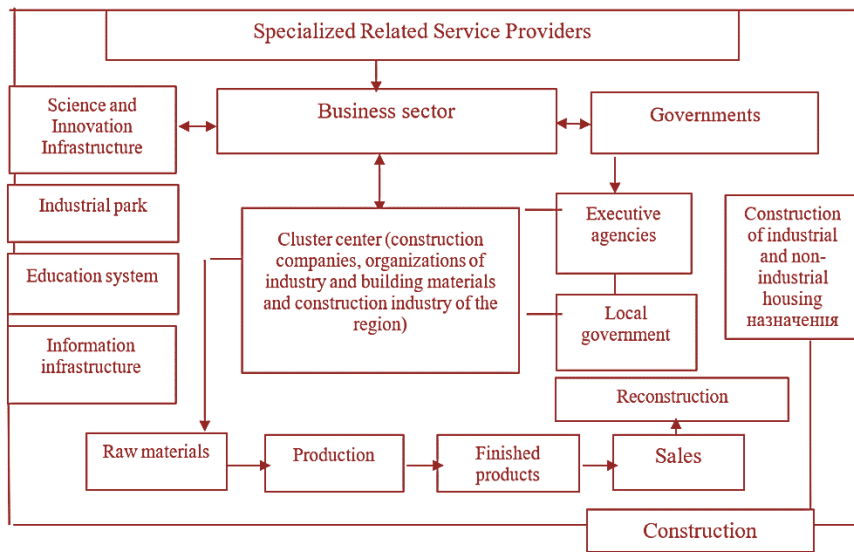


Figure 2: Model of a regional construction cluster

It should be noted that the indicator is within $0 \leq \kappa_i \leq 1$. The closer the value is to 1, the higher the level of contribution of the construction industry to the economy of the region. This indicator is adjusted by the coefficient of public confidence in contractors and manufacturers of products, local and executive authorities.

3. RESULT AND DISCUSSION

Construction represents a significant part of material production, which contributes to an increase in GRP, the socio-economic growth of the regions, and provides about 6-7% of Russia's GDP. Compared with the past decade, this industry is gradually emerging from a stagnant situation, but there are still a number of questions regarding options for the location and cost of facilities, reducing financial stability and production volumes on the periphery. As the results of the study on the volume of housing commissioning in the 1st half of 2018 show, the Moscow region (5.7 million m^2), the Leningrad region (2.9 million m^2) and the Krasnodar Territory (1.9 million m^2) are the leaders (Akhrameeva, (2014).

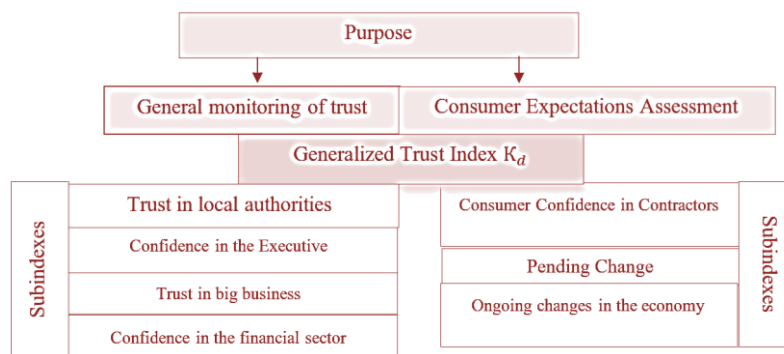


Figure 3: The system of indicators and indices of population confidence.

Over the past few years, return on assets does not reach 2% and is one of the lowest indicators

among all types of activities in the regional system. This indicator is associated with the high cost of material resources and a constantly changing regulatory framework. Despite this, the construction infrastructure is the basis of the social well-being of the population and economic security in the region. To assess the effectiveness of the contribution of the construction cluster to the economy of the region, we use a system of indicators of citizens' confidence in the activities of contractors based on the research objectives, see Figure 3.

The current situation is due to the beating and investment attractiveness of most regions of the country, which are associated with the sanctions and the consequences of the global financial crisis. The general trend of confidence in the economy of the countries over the past few years is reflected in Table 1.

Table 1: Dynamics of investor confidence in the economy of the Russian Federation for 2004-2017.

	Rating Levels	Moody's	S&P	Fitch	2004	2006	2016	2017	2017
Investment grade	First class	Aaa	AAA	AAA					
	Reliability above average	Aa1	AA+	AA+					
		Aa2	AA	AA					
		Aa3	AA-	AA-					
	Medium reliability	A1	A+	A+					
		A2	A	A					
		A3	A-	A-					
	Lower than average reliability	Baa1	BBB+	BBB+					
		Baa2	BBB	BBB					
		Baa3	BBB-	BBB-					
Non-investment level	Speculative category	Ba1	BB+	BB+					
		Ba2	BB	BB					
		Ba3	BB-	BB-					
	Highly risky	B1	B+	B+					
		B2	B	B					
		B3	B-	B-					
	High probability of default	Caa1	CCC+	CCC					
		Caa2	CCC						
		Caa3	CCC-						
		Ca	CC						
Default	C	D	DDD						
			DD						
			D						

Based on the data it is clear that by the middle of the study period, investors could consider the country's economic situation relatively reliable. These data are reflected in the reports of the Ministry of Economic Development, which indicates that the amount of borrowed funds for the period from 2007 to 2012 was close to \$ 263 billion. Given the present, it should be noted that reasoning about the possibility of attracting a significant amount of investment is not possible.

The analysis allows us to conclude that in general in Russia there are unstable dynamics of attracting investment by region, which is certainly associated with the instability of economic growth in most regions. In this regard, we propose in this work to single out groups of factors that form investment attractiveness and various types of influence, the result is shown in Figure 1.

A population confidence index of 0.4 is determined on the basis of the arithmetic average using official statistics from the RF State Statistics Committee for 2018. The results of the contribution of the construction cluster to the economy of the regional system are presented in Table 2.

Table 2: Contribution of the construction cluster to the economy of the regions, 2018

Regions	Ek 1	Ek 2	Ek 3	Ek 4	Ek 5	Ek 6	E ^B
Central	0.07	2.51	1.16	8.9	0.97	0.16	0.92
Northwestern	0.13	0.93	1.32	8.9	1.13	0.05	0.83
South	0.12	1.00	1.07	8.9	0.99	0.06	0.80
North Caucasian	0.16	0.52	0.70	8.9	0.77	0.09	0.74
Volga	0.12	1.63	1.00	8.9	0.89	0.08	0.84
Ural	0.08	0.66	0.94	8.9	1.05	0.09	0.78
Siberian	0.10	0.76	0.75	8.9	0.94	0.08	0.77
Far Eastern	0.13	0.21	0.54	8.9	1.28	0.07	0.74

The construction industry makes the largest contribution to the region's economy in the Central Federal District, the second position belongs to the North-West Federal District, the Southern Federal District, and the Volga Federal District. The third cluster includes North Caucasus Federal District, Ural Federal District, Siberian Federal District, Far Eastern Federal District.

It should be noted that Krasnodar developers have risen significantly in the monthly rating "TOP Developers of the Russian Federation" (Askerov, (2015)). If in a number of other regions the volume of housing construction at many companies increased or decreased slightly, then almost all of the large Krasnodar developers strengthened their positions. Experts believe (Bakiev, (2008)) that this is due to the relatively favorable situation in the region's construction market and the redistribution of forces in it: while less successful companies began to experience financial problems and spoiled their reputation as long-term construction, leaders began to implement new projects, occupying a vacant niche.

According to the Federal State Statistics Service, the Krasnodar Territory in 2017 increased the commissioning of residential buildings compared to 2010 by 31.14% and amounted to 4728.4 thousand m². But, in 2018, there is a tendency to decrease the commissioning of the total area of residential buildings per 1000 people by 7.2%. The share of unprofitable organizations also increased in the region.

To maintain unprofitable construction organizations, it is necessary to increase investment attractiveness. As options for increasing the investment attractiveness of construction industry companies, it is proposed to implement areas that include expanding the information base for investment market entities, in particular, companies that accept investment resources.

Improving the investment attractiveness of integrated enterprises will create additional opportunities to increase the competitiveness of the business sector engaged in construction.

4. CONCLUSION

From this study, among the main directions for increasing the efficiency of the construction industry are optimization or reduction of cost items. The bottom line is to stop the decline in profits and optimize costs. One of the ways to control costs is to create a control system that will reduce costs through the most detailed control. Also, it needs to carry out the reorganization of inventory. It

assumes the distribution of reserves in accordance with the level of their significance and stabilization of activity. A focus should also be put on the development of infrastructure construction as it is one of the key factors in the development of all sectors of the economy, as well as one of the main conditions for achieving goals as national projects. The emphasis is on technological developments of industrial construction and the reduction of dependence on foreign technologies in the construction of industrial facilities, especially in the design and construction of technically complex and unique large facilities.

Another point is to optimize the number and timing of administrative procedures by translating them into a seamless digital environment. Enterprise should reuse data contained in information systems and platforms existing or planned for implementation in the industry, through systems and information resources existing and planned in the industry to avoid duplication. Finally, it is suggested to do the large-scale use of standard design solutions in the field of industrial construction, mainly based on information modeling technologies.

5. AVAILABILITY OF DATA AND MATERIAL

Data can be made available by contacting the corresponding authors

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