

## Estimation of the Development Prospects of Construction Sector in the Russian Economy

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**Abstract:** The study presents an analysis of the scope of construction industry in the Russian economy and reveals the decrease of this scope which is due to the actual conditions of the global financial uncertainty and significant political and economic risks. The reduction of the number of new orders for construction products from other economic sectors is a priority problem in the construction sector in Russia, the problem which hinders the investment growth. It has been revealed that the slow industrial development and the decline of economic growth in trade and services sphere which is due to the latest economic and political events are the reason for reduction of production costs in construction. This hinders the expansion of construction at the expense of new units and what is more, blocks the already begun units. The Russian construction companies are not eager to invest into large-scale projects, preferring the more foreseeable perspective. Other limitations of the prospective growth of the construction industry, according to the researchers include the monopolistic position of some construction companies, the excessive administrative barriers as well as the defects in technical regulation and lack of balance between the Russian construction norms and rules and the international standards.

**Key words:** Construction, perspective, construction industry, economic growth, employment, industrial production

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### INTRODUCTION

Construction industry is one of the largest sectors of the Russian economy which together with machine building, ensures the formation and accelerated renovation of the capital assets. It is an important investment sector of economy providing more than 70% of the product value and the number of employees.

The significance of each economic sector at the given stage of the country's economic development is determined by its priority position in the long-term planning. In the "forecast of the long-term social economic development of the Russian Federation till 2030" construction takes the third position by the indicator "sector contribution into production growth", according to both the innovative-raw-material and the inward-oriented scenarios. By the share in production structure (excluding services, research and development and state administration) construction takes the significant second position following the

middle-technology sectors of the highest level 9.8 and 9.7% according to the respective scenarios (Banaitiene *et al.*, 2015).

**The main part of the study:** Construction, first of all residential construction is considered to be the modern Russian locomotive sector. According to Aganbegyan (2012), residential construction, alongside with automobile industry, firstly has a large share in the economy and secondly has the largest multiplicative effect on the economic development.

Residential construction and the accompanying housing and communal services, production of construction materials and other goods for residential construction, repair, maintenance and financing of the residential buildings amount to about 15% of the GDP (Zabortseva and Ignatova, 2014).

The long-term prospect of the construction sector development within the Russian economy is viewed by economists in the context of import

Table 1: Dynamics of the number of construction companies functioning on the territory of the Russian Federation in 2005-2015 (Taburchak and Mikitas, 2012)

Indicators (1)	2005 (2)	2010 (3)	2013 (4)	2014 (5)	2015 (6)	2015/2014		2015/2005	
						Absolute deviation (7)	Growth rate (%) (8)	Absolute deviation (9)	Growth rate (%) (10)
No. of construction companies-total	112846	196234	217961	226838	235351	8513	103.70	122505	208.56
Including small businesses (including micro-businesses)	102162	186495	208993	217698	227452	9754	104.40	125290	222.64
<b>Including by the forms of property</b>									
State	1877	1203	879	818	832	14	101.70	-1045	44.33
Municipal	685	530	403	395	461	66	116.70	-224	67.30
Private	106834	192165	214055	223022	233140	10118	104.50	126306	218.23
Mixed Russian	2004	757	522	405	293	-112	72.35	-1711	14.62
Other	1446	1561	2102	2198	625	-1573	28.43	-821	43.22

substitution. The focus here is first of all on improving the information-technical basis of construction which promotes the production and introduction of innovative materials and technologies, establishing professional standards for the whole nomenclature of engineering technical and blue-collar jobs and training programs; elaborating the measures of state support and economic stimulation of innovations (Aganbegyan, 2012).

The majority of Foreign research analyzes the cause and effect relation between construction activity and economic development of a country. Research by Chiang *et al.* (2015) revealed the close correlation between GDP and construction sector in Hong Kong (Jiang and Liu, 2015).

Basing on the analysis of the Baltic states, Banaitiene *et al.* (2015) also proved the close correlation between direct Foreign Investment into Construction (CFDI) and the share of construction in GDP.

The results obtained by Ramachandra *et al.* (2013) confirm the paramount importance of construction investments for stimulating the economic growth in Sri-Lanka (Ran *et al.*, 2012).

Other Foreign scholars focus on the importance of organizational-managerial level of construction sector development. The deficit of innovative style and creative thinking in the construction companies' management (the lack of organizational culture) is viewed by Matinaro and Liu (2017) as an obstacle for providing the sustainability of national economy at the global level (Ramachandra *et al.*, 2013).

The scholars Staniewski *et al.* (2016), stating the priority of construction sector in economy, highlight the priority of its development from the viewpoint of continuity of measures for improving its competitiveness. They connect this aspect, first of all with the stream of introduced innovative solutions (Zhivitsya and Myshenkov, 2016).

## MATERIALS AND METHODS

Thus having estimated the degree of innovativeness of small and medium-sized construction enterprises in

Poland the scholars describe it as standard for industry as a whole. In their opinion, this is due to the relatively high awareness of the construction companies' management about the significance of innovations for achieving the competitive positions in the sector. At the same time, the construction companies working in worse economically developed regions show the larger degree of innovativeness.

From the viewpoint of understanding the future trends of construction sector development and revealing the investment strategies of its participants' activities, scholars (Jiang and Liu, 2015) analyze the determinants of demand for construction works in Australia.

As such they highlight the consumer's expectations, income level, volume of industrial production and demographic factors including the workforce size. Econometric analysis showed that the key role in the future changes in demand for construction will be played by the following factors: national income, population size, unemployment rate, volume of import and export, household expenses and interest rates.

Revealing the factors of the added value prospective growth in China, Ran *et al.* (2012) make a conclusion about the high significance of two factors: personnel quality and effective use of current assets (Staniewski *et al.*, 2016). At the same time, the amount of labor input and the efficiency of using capital assets are secondary factors which indirectly influence the added value growth in the construction sector in China.

We analyze the functioning of the construction sector in the Russian economy and prospects of its further development. As for the number of construction companies functioning on the territory of the Russian Federation during 10 years, its dynamics is shown in Table 1.

## RESULTS AND DISCUSSION

Table 1 shows that the majority of construction companies are private ones. During the analyzed period the number of such companies changed. The total number of construction companies increased by 122505 (3.7%)

Table 2: Dynamics of the main indicators of “construction” as the type of economic activity in 2005-2015 (Taburchak and Mikitas, 2012)

Indicators (1)	2005 (2)	2010 (3)	2013 (4)	2014 (5)	2015 (6)	2014/2015		2005/2015	
						Absolute deviation (7)	Growth rate (%) (8)	Absolute deviation (9)	Growth rate (%) (10)
Volume of works performed in “construction” as the type of economic activity (bln.rub.)	1754.4	4454.2	6019.5	6125.2	6148.4	23.2	100.3	439.4	350.46
Mean annual number of employees, thousand people	4986.1	186495	5711.9	5664.1	5651.9	-12.2	99.78	665.8	113.35
Mean monthly nominal payroll of the employees (rub.)	9043	21172	27701	29354	29960	606	102.00	20917	331.31
Investments into capital assets aimed at construction development (bln.rub.)	129.5	1203	438.1	469.3	448.7	-20.6	95.61	319.2	346.49
Availability of capital assets in construction (bln.rub.)	604.9	1499.9	1676.9	1774.7	2047.9	273.2	115.30	1443	338.55
Ware rate of capital assets in construction (by the end of the year) (%)	44.6	48.3	50	51.2	50.4	-0.8	98.44	5.8	113.00

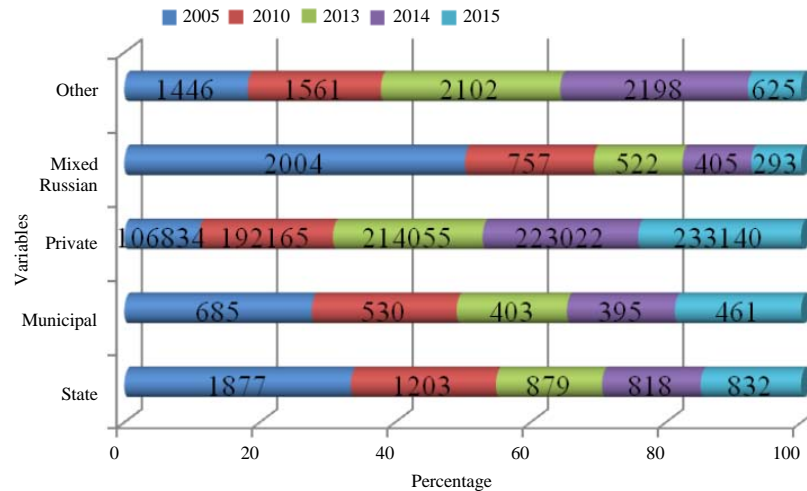


Fig. 1: Dynamics of the number of construction companies functioning on the territory of the Russian Federation in 2005-2015 (Taburchak and Mikitas, 2012)

in 2015 compared to 2005. The number of private construction companies in 2015 was 126306, increase of 118.23% compared to 2005. Figure 1 shows the data of Table 1.

At present, construction as one of the most important sectors in Russia is to transfer to the new level of development. However, one can agree with the expressed opinions that under economic uncertainty, currency rates fluctuations and unsteady oil prices, including due to the global financial uncertainty, many construction companies are not eager to invest into long-term and large-scale construction, preferring to focus on foreseeable prospects.

Table 2 shows that the volume of works grew by 4394 bln.rub. (250%) in 2015 compared to 2005. Analysis of capital assets in construction shows that the assets increased by 1443 bln.rub. (238.55%) in 2015 compared to

2005. The investment into capital assets intended for construction development showed the growth by 319.2 bln.rub. (246.49%) in 2015 compared to 2005. The largest growth is observed in the period from 2010-2013, then the dynamics remains very stable.

The main problem faced by initiators of investment projects is the deficit of resources and the inability to efficiently allocate them in the real sectors of economy: industry, construction, infrastructure which is first of all, due to the lack of reliable techniques of analysis of investment projects. This problem is especially acute for the choice of financial resources. At the same time, the investments into long-term construction projects promote the production development, formation of new units of industrial and civil construction, making profit and achieving other results.

Table 3: Dynamics of capital assets in construction sector in 2005-2015 (Taburchak and Mikitas, 2012)

Indicators	2005	2010	2013	2014	2015	2014/2015		2005/2015	
						Absolute deviation	Growth rate (%)	Absolute deviation	Growth rate (%)
Gross added value of construction (bln.rub.)	989.9	2587.8	4301.0	4396.4	4264.2	-132.2	96.99	3274.3	430.77
<b>Costs of construction companies for performed works by components in percent of the total costs (bln.rub.)</b>									
Material costs	57.4	56.3	56.1	58.3	60.0	1.7	102.90	2.6	104.53
Labor costs	21.1	20.2	18.9	20.1	18.2	-1.9	90.55	-2.9	86.26
Costs per one ruble of works performed by construction companies, copecks	88.0	90.0	95.0	90.0	88.0	-2.0	97.78	0.0	100.00

Table 4: Dynamics of investments into capital assets in construction in the Russian Federation (Taburchak and Mikitas, 2012)

Indicators	2005	2010	2013	2014	2015	2014/2015		2005/2015	
						Absolute deviation	Growth rate (%)	Absolute deviation	Growth rate (%)
Investments into the capital assets (in established prices) (bln.rub.)	172.7	770.1	941.1	949.2	920.0	-29.2	96.92	747.3	532.72
In percent of the general volume of investments	6.0	11.6	9.3	9.1	8.8	-0.3	96.70	2.8	146.67

Table 5: Dynamics of labor costs of construction companies in 2005-2015 (Taburchak and Mikitas, 2012)

Indicators	2005	2010	2013	2014	2015	2014/2015		2005/2015	
						Absolute deviation	Growth rate (%)	Absolute deviation	Growth rate (%)
Mean annual number of employees, thousand people	2816.2	3061.9	2825.8	2734.4	2619.0	-115.4	95.78	-197.2	93.00
Including those engaged in construction of buildings and structures	2286.3	2520.4	2123.1	2057.1	1964.7	-92.4	95.51	-321.6	85.93
Mean monthly nominal payroll of the employees (rub.)	9043	21172	27701	29354	29960	606	102.06	20917	331.31
Including those engaged in construction of buildings and structures	9090	20988	28738	30501	30960	459	101.50	21870	340.59

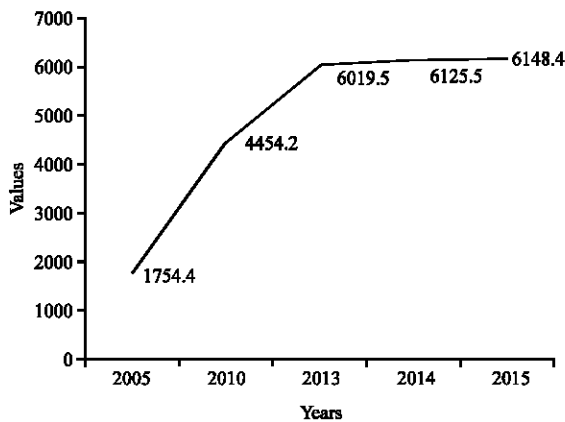


Fig. 2: Dynamics of the main indicators of "Construction" as the type of economic activity in 2005-2015 (Taburchak and Mikitas, 2012); Volume of works performed in "construction" as the type of economic activity (bln.rub.)

The dynamics of the indicators of "Construction" as the type of economic activity in 2005-2015 is shown in Fig. 2. The construction companies with significant

volumes of financial costs increase their role and priority of development. The additional sources for covering the costs as a rule are used by construction companies to acquire capital assets, expand their business and finance the needs in current assets.

Analysis shows that the volume of capital costs in construction sector increased by 665.8 bln.rub. (13.35%) in 2015 compared to 2005. We analyze the dynamics of material costs by the example of investment into construction in the Russian Federation (Table 3 and 4).

Investments into construction showed significant growth from 2005-2010, then the growth rate slowed down. Only during the period of 2014-2015 investments into construction decreased by 29.2 bln.rub. (3%) while the total volume of costs increased by 747.3 bln.rub. (432.72%) in 2015 compared to 2005.

The dynamics of labor costs of construction companies is shown in Table 5. The analysis has shown that the mean annual number of employees decreased by 197.2 thousand people (7%) in 2015 compared to 2005 while the payroll rate in construction sector has been growing.

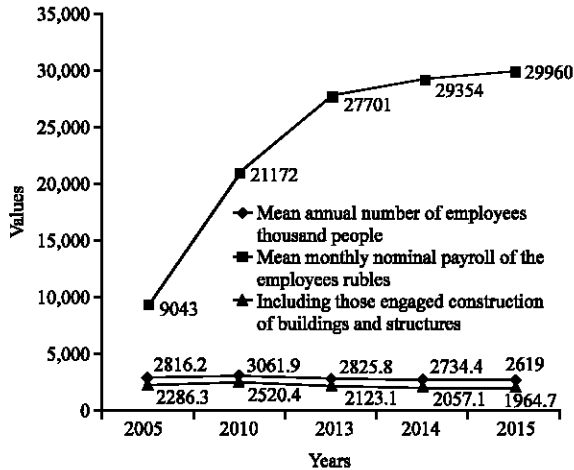


Fig. 3: Consolidated dynamics of costs in construction in 2005-2015

Consolidated dynamics of costs in construction in 2005-2015 is shown in Fig. 3 (Taburchak and Mikitas, 2012).

## CONCLUSION

Reduction of the number of new orders for construction production from other economic sectors is the priority problem in the Russian construction sector, the problem which hinders its investment growth. The retarded industrial development and the decline of economic growth in trade and services due to the recent economic and political events, caused the reduction of production costs which hinders the expansion of businesses at the expense of new unit's construction and blocks the already begun units. The second problem which negatively influences business activity in the sector is the monopolistic position of certain construction companies, excessive administrative barriers as well as the defects in technical regulation and lack of balance between the Russian construction norms and rules and the international standards.

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