

## **The Role of Business in the Development of Construction in a Digital Economy**

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### **Abstract**

It is known that today the construction industry is regarded as one of the main directions in the formation of small business and private entrepreneurship, socio-economic development, development of the property class and competition in the market, and today it serves as a locomotive for sustainable economic development. The article assesses the role of large and small businesses in ensuring the development of the country's construction industry, summarizes the best world and domestic experience in this area, and also develops proposals and recommendations for the further development of this industry.

**Keywords:** construction, large and small business, partial entrepreneurship, enterprise, locomotive, hosting entities, regression analysis, correlation analysis, microfirms.

**Introduction.** In our country, the construction industry is of particular importance in maintaining economic and social stability, serves to solve such important tasks as ensuring employment of the population, increasing its income, providing housing for the population. The sector is also of great importance in the construction of social facilities and the formation of infrastructure.

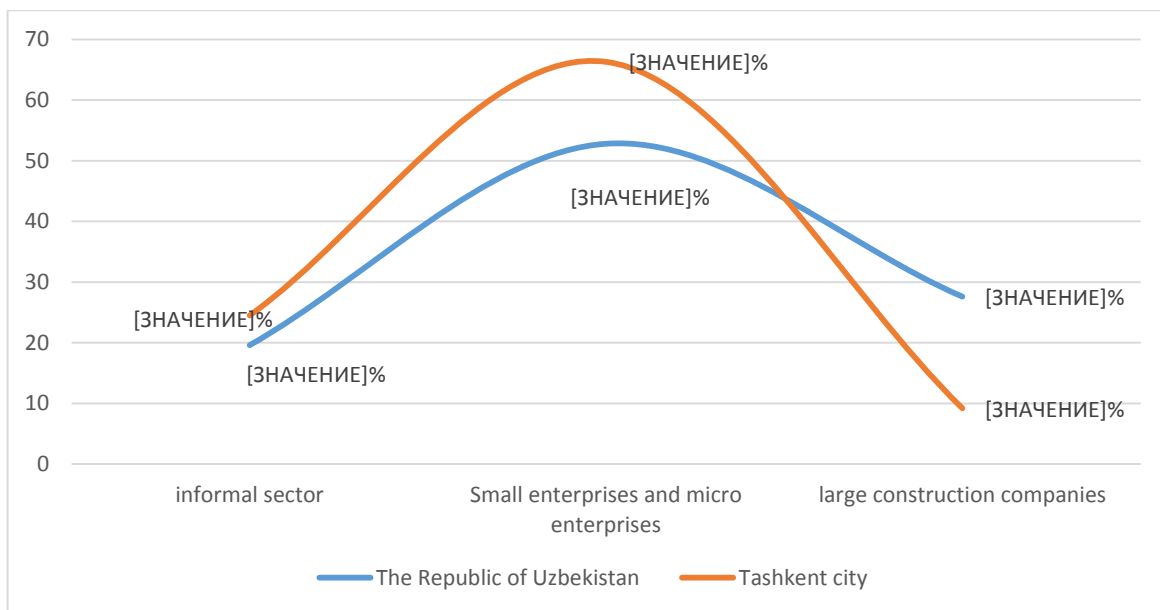
The construction sector is of particular importance in maintaining economic and social well-being in our country, which serves to eliminate such important problems as providing employment, increasing incomes, and providing housing for the population. Industry is also of great importance in the construction of social facilities and the formation of infrastructure.

It is known that small business and private entrepreneurship are considered as one of the main directions of the formation of a market economy, ensuring socio-economic development, the development of a class of owners and competition in the market and today perform the function of a locomotive. stable economic development. From this point of view, small business and private entrepreneurship is one of the important factors of economic development, increasing employment and income of the population.

**The main part:** In our country, a number of practical works are being carried out in such areas as providing housing for the population, improving housing conditions, carrying out construction

work in accordance with the requirements of the time. We will consider the results of these events on the data of the city of Tashkent, which is one of the important regional units in our country. That is, we will assess the importance of large and small businesses in ensuring the results of the implemented measures for the development of the construction industry, raising it to a new qualitative level, increasing its competitiveness based on statistical data.

According to the data received, special attention is paid to ensuring the sustainable development of the construction industry in our country and its territories in the coming years. As a result, the total volume of construction work carried out in Tashkent in 2020 amounted to \$18,758.9 billion. In total, an increase of 104.1% was provided compared to the previous year. These construction works were carried out by large construction organizations, small enterprises and microenterprises, as well as the informal sector (Figure 1)



**Figure 1. The share of entities engaged in construction activities in the performance of the total volume of construction work.<sup>1</sup>**

If we pay attention to the distribution of construction work between the subjects, the results for the city of Tashkent are quite positive. In particular, the share of the informal sector in the city is significantly lower than in the republic, and amounts to 9.2 percent. In addition, the share of small enterprises and microfirms is 66.3 percent and exceeds the country's figure by 13.5 units. As a result, the share of large businesses in the city remains relatively low. In general, the fact that the share of the informal sector in the implementation of construction works carried out in the republic and the city is quite large justifies the availability of opportunities for the development of business entities in this area, as well as the need to pay special attention to the creation of a favorable business environment for them.

Construction works are also divided into three types, depending on the direction of activity. That is, the construction of buildings and structures, civil facilities and specialized construction works. As of January 2022, the number of construction enterprises and organizations operating in the Republic of Uzbekistan is 40,950, of which 8,237, in other words, one of the five operating enterprises and organizations belongs to the city of Tashkent (table 1).

<sup>1</sup> "Source: figure: Statistical collection "Socio-economic situation of the Republic of Uzbekistan" of the State Statistics Committee of the Republic of Uzbekistan. January- 2023" Tashkent 2023. 217-233 pages. And it was compiled by the author based on the data of this collection for 2021-2022.

**Table 1. Number of enterprises and organizations carrying out construction work<sup>2</sup>**

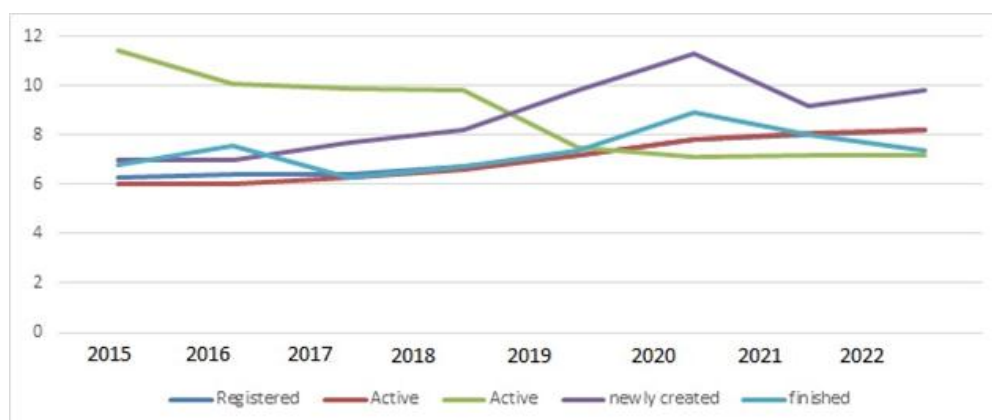
	Republic of Uzbekistan		Tashkent City	
	Number of enterprises	Fraction	Number of enterprises	Fraction
Construction of buildings and structures	23779	58.1	4137	50.2
Construction of civil facilities	3811	9.3	534	6.5
Specialized construction works	13360	32.6	3566	43.3
<b>Total:</b>	40950	100	8237	100

In Uzbekistan, 58.1 percent of the total number of construction enterprises are engaged in the construction of buildings and structures, while in Tashkent this indicator has a slightly lower value and is 50.2 percent. The same trend is observed in the construction of civil facilities, that is, the share of entities carrying out construction work in this direction in the city is somewhat smaller. As a result, the ratio of enterprises and organizations performing specialized construction work to the total number becomes much more important. Based on the above analysis, it can be noted that there is a correlation between the distribution of existing enterprises and organizations in the areas of activity and the share of the informal sector. In our opinion, the low share of enterprises and organizations engaged in the construction of buildings and structures, civil facilities, is the reason for the low share of the informal sector in the city.

According to the results of the conducted research, there are a number of problems in the development of the construction industry that are waiting to be solved. In particular, 9.2 percent of the construction work carried out falls on the informal sector, among them the need to ensure an optimal balance between the development of small and large businesses. After all, the development of small businesses in the construction sector serves to reduce the share of the informal sector and increase the volume of construction work performed. Taking into account the above, I would like to assess the impact of the activities of small and large businesses on the development of the construction industry on the example of the city of Tashkent.

I would like to draw attention to the dynamics of changes in the share of construction enterprises and organizations in the total number of operating enterprises and organizations. Data from 2015-2022 were used for the analysis.

Figure 2



**Figure 2. Dynamics of important indicators of development of enterprises in the field of construction in Tashkent.<sup>3</sup>**

<sup>2</sup> Source: Table: "Socio-economic situation of the Republic of Uzbekistan" statistical collection of the State Statistics Committee of the Republic of Uzbekistan. January-March 2022" Tashkent 2023. 217-233 pages and compiled by the author based on the data of 2021-2022 of this collection.

The share of registered enterprises and organizations in the city increased from 6.3% to 8.2% and amounted to 1.9 units with a change in the number of operating enterprises by 2.2 units. The change in the share of operating enterprises to a higher value than the share of registered enterprises indicates the achievement of positive results in the industry. In addition, there was a sharp decline in the share of inactive enterprises from 11.4 to 7.2 percent.

The share of newly created enterprises and organizations related to the construction industry increased by 2.8 units, which reflects the results of measures implemented in the industry. However, on the other hand, the increase in the share of enterprises and organizations indicates that the industry has not created a sufficiently favorable environment for business entities.

The construction industry differs from other industries in its specifics, in addition, it justifies the need to provide alternative and optimal proportions of small and large businesses in ensuring the development of the industry, such as a large amount of funds for construction work and a high need for long-term investments. Taking this into account, we will assess the impact of the development of small and large construction organizations on achieving these positive results. To do this, we have determined the share of small enterprises in enterprises and organizations in the field of general construction (2-table).

**2-table. The share of small construction companies in the total number of construction enterprises in Tashkent (as a percentage)**

Years	Registered	Active	In active	Newly founded	finished
2015	98.2	98.0	99.4	100.0	99.7
2016	98.4	98.3	99.5	99.6	98.6
2017	98.6	98.5	99.1	100.0	100.0
2018	98.8	98.7	99.3	100.0	99.7
2019	99.0	99.0	98.9	99.7	99.3
2020	99.3	99.3	98.6	99.7	99.4
2021	99.3	99.3	99.6	99.8	99.5
2022	99.0	99.0	100.0	99.8	97.7

The results show that the share of small businesses is very high in all indicators reflecting the development of entrepreneurship in the sector. In particular, the share of registered and operating enterprises exceeds 98.0 percent, and it can be noted that it has the same trend and has decreased over the past year. An increase in the share of small businesses is also observed among inactive enterprises, that is, by 2021, 100 percent of them are accounted for by the contribution of small construction enterprises. By 2022, the share of small construction enterprises in the composition of liquidated enterprises amounted to 97.7 percent with a sharp decline. An increase in the share of inactive enterprises is considered a negative result, and a decrease in the share of liquidated enterprises is considered a positive result.

The low share of large business entities does not reflect their role in the performance of construction work, since if we focus on the share of small businesses in the construction work performed, it is significantly lower than the figures given. That is, despite the fact that 99.0 percent of existing construction enterprises correspond to the contribution of small businesses, their share in the construction work performed in 2021 was 71.1 percent.

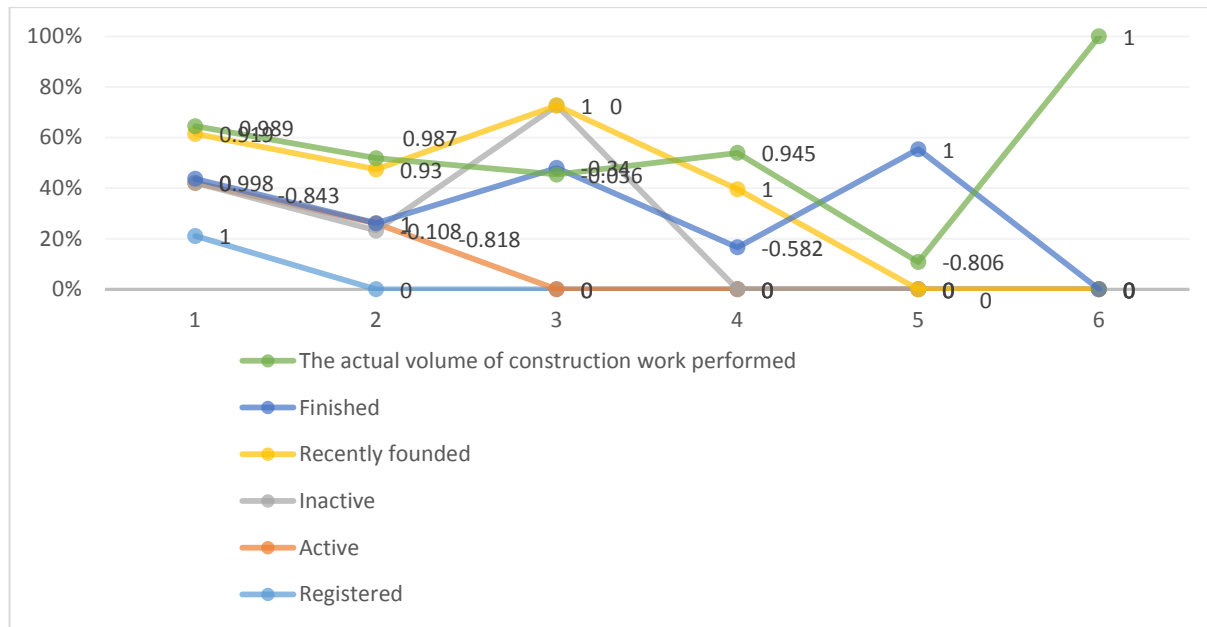
Taking into account that the number of small business entities in the construction sector in the city of Tashkent is quite large and the main change in the number of enterprises corresponds to

<sup>3</sup> Source: Figure: Statistical compilation "Socio-economic situation of the Republic of Uzbekistan". State Committee of the Republic of Uzbekistan on Statistics. January- 2023" Tashkent 2023. 217-233 pages and compiled by the author based on the data of 2015-2022 of this collection.

their contribution, let's consider the correlation between indicators reflecting the activities of small businesses and the real cost of construction work performed in the city (Table 3).

According to the results of the correlation analysis, it was found that the actual volume of construction work performed has a high correlation with all indicators reflecting the effectiveness of small businesses in the construction sector.

**3-table. Results of correlation analysis**



In particular, the correlation coefficient between the number of operating small business entities and the actual volume of construction work performed is 0.99, and with newly created business entities - 0.95. It is established that the correlation coefficient between the actual volume of construction work with inactive and liquidated small businesses is -0.04 and -0.81, respectively. It is established that the correlation coefficient between the actual volume of construction work with inactive and liquidated small businesses is -0.04 and -0.81, respectively.

According to the results of the study, it is important to ensure the development of the construction industry of the city of Tashkent by providing alternative proportions of large and small businesses. According to the results of the research, vaino will ensure the development of the construction industry of the city of Tashkent by providing alternative proportional subjects of large and logo business. It is determined that the change in the number of business entities in the construction sector in the city corresponds to the contribution of small businesses. In our opinion, ensuring the development of small businesses while maintaining the existing potential of large businesses, creating a favorable business environment for them and increasing their number is considered as one of the important areas of development of the construction industry.

Based on the above considerations, we will consider the interaction of small and large businesses in the construction sector based on regression analysis. First, we will consider the impact of the total number of newly created and liquidated enterprises in the construction sector on the number of operating small businesses in the construction sector. The results of the regression analysis are presented below.

$$\begin{aligned}
 Sac &= 4689.43 + 2.56T_{new} - 9.83T_{clo} \quad (1) \\
 se &= (681.48) \quad (0.28) \quad (1.78) \\
 t &= (6.88) \quad (9.21) \quad (-5.22) \\
 p &= (0.001) \quad (0.00) \quad (0.003) \quad R^2 = 0.98
 \end{aligned}$$

*Here: Sec - the number of active small enterprises in the construction sector; New - the number of newly formed enterprises and organizations in the construction sector; Tclo - the number of liquidated enterprises and organizations in the construction sector;*

All coefficients of the developed model are adequate to the Student's criterion, and the coefficient of determination is 0.98. That is, it shows that 98% of the change in the resulting factor corresponds to the contribution of the selected factors. The Fisher criterion (128.4) and Durbin-Watson statistics (2.3) show that the results of other criteria are also at the required level. Formula 1.

According to the results of the study, an increase in the number of newly created enterprises and organizations of the construction industry per unit provides an average increase in the number of operating small businesses by 2.56 units, while an increase in the number of closed enterprises and organizations per unit reduces the number of small businesses by an average of 9.83 units. As a result, the effect of liquidated enterprises and organizations is almost 4 times higher than that of newly created ones.

We want to conduct the above analysis for large business entities working in the construction sector. Unlike small business entities, the influence of large business entities on the number of newly created and liquidated enterprises is significantly lower. Because, according to available data, cases of creation and termination of new ones at large enterprises are rarely observed. In particular, a total of 7,767 new enterprises were created during the analyzed period, of which only 15 large enterprises. In addition, out of 2,123 liquidated enterprises, 13 turned out to be large. As a result, it was studied that the share of large enterprises in these processes is 0.2 and 0.6 percent, respectively.

Based on the results of the regression analysis, the following model was obtained for studying the impact of newly created and liquidated enterprises on the number of large enterprises operating in the industry.

$$\begin{aligned} Bac &= 115.07 - 0.01T_{new} - 0.19T_{clo} \quad (2) \\ se &= (11.46) (0.005) (0.03) \\ t &= (10.04) (-2.71) (-6.50) \quad R^2 = 0.90 \end{aligned}$$

*Here: Bac - the number of active subjects of large business in the construction sector; Tnew - the number of newly created enterprises and organizations in the field of construction; Tclo - number of closed enterprises and organizations in the construction sector;*

According to the results obtained, both coefficients reflecting the impact of the number of new and liquidated business entities in the industry have a negative value. These coefficients are adequate according to the Student's criterion, and the coefficient of determination has a sufficiently high value. The results for other criteria are also presented in formula 2, which also proves the adequacy of the results.

Based on the analysis presented above, we use the model and coefficients to draw conclusions. According to them, an increase in the number of newly created enterprises in the sphere by 100 units will reduce the number of large enterprises by one unit. To study the reasons for this, it is useful to focus on the data (Figure 3).

The number of active large business entities as of January 1, 2020 tended to decrease from 54 to 37. During this period, the total number of newly created enterprises tended to increase, increasing from 481 to 1,443 and reaching 1,739 on January 1, 2021, and decreasing to 1,465 on January 1, 2022. In the next two years, the number of active subjects of large business increased from 37 to 83.

**Figure 3. Dynamics of the total number of established enterprises and operating entities of large entrepreneurship in the city of Tashkent**

Years	20154	20165	20176	20187	20198	20209	20210	20221
<b>Registered</b>	98.2	98.4	98.6	98.8	99.0	99.3	99.3	99.0
<b>Active</b>	98.0	98.3	98.5	98.7	99.0	99.3	99.3	99.0
<b>Inactive</b>	99.4	99.5	99.1	99.3	98.9	98.6	99.6	100.0
<b>Newly founded</b>	100.0	99.6	100.0	100.0	99.7	99.7	99.8	99.8
<b>finished</b>	99.7	98.6	100.0	99.7	99.3	99.4	99.5	97.7

As a result, a change in the opposite direction relative to each other caused a negative correlation between them. It can be seen that the total number of newly created enterprises in the construction sector in Tashkent has a negative impact on the number of operating large business entities.

The second factor is that the total number of closed enterprises in the construction industry will increase to 10 units, and the number of active subjects of large business will decrease by an average of about 2 units.

**Conclusion/recommendations.** According to the results of our research, the total number of newly created enterprises in the construction industry positively affects the number of operating small businesses, but negatively affects the number of large businesses. This creates a contradictory situation. In this case, in order to get an answer to the question about the need to increase the number of newly created enterprises, we found it expedient to consider the ratio between the number of small and large businesses operating in the field of construction, and we received the following results. According to the results of the analysis, there is a direct relationship between the two indicators, and it was found that the free period of the model is not adequate. Therefore, to determine the relationship between the two indicators, we conducted a regression analysis using the Gretl program, the results of which are presented below.

$$Sac = 88.66Bac (3)$$

$$se = (11.23)$$

$$t = (7.89) R^2 = 0.90$$

With the exception of the analysis results mentioned above, all the results obtained on the basis of the program are given in the 3rd formula. The developed model and its coefficient are adequate to all criteria, which indicates that this model can be used for analysis. That is, an increase in the number of large operating construction enterprises in Tashkent by one unit serves to increase the number of small operating construction enterprises by an average of 88.66 units. In other words, an increase in the number of small construction enterprises by 88.66 units will serve to increase the number of large enterprises.

According to the results of the first model, with an increase in the total number of newly created construction enterprises by one unit, an increase in the number of operating small construction enterprises by 2.56 units was determined. If we consider this dependence, then an increase in the number of newly created enterprises by 34.63 units will increase the number of small operating construction enterprises by 88.66 units, which, in turn, will increase the number of large operating construction enterprises by one unit.

As a result of our research on the development of strategies and priorities for the activation of small business and private entrepreneurship in the construction sector, the following conclusions were made.

During the transition period, state support for small businesses should be incentive-based and selective.

They consider it expedient to solve the existing problems of the development of small business and private entrepreneurship in the field of construction in cooperation with state authorities and the leadership of local governments. Also, in the development of small business and private entrepreneurship, it is necessary to introduce and apply a strategic mechanism for regulating regional development, taking into account the viability of the subjects.

Based on the results obtained, it can be emphasized that the newly created construction enterprises serve to increase the number of small and large operating construction enterprises.

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