



RS Global Journals

Scholarly Publisher
RS Global Sp. z O.O.
ISNI: 0000 0004 8495 2390

Dolna 17, Warsaw, Poland 00-773
Tel: +48 226 0 227 03
Email: editorial_office@rsglobal.pl

JOURNAL	International Journal of Innovative Technologies in Economy
p-ISSN	2412-8368
e-ISSN	2414-1305
PUBLISHER	RS Global Sp. z O.O., Poland
ARTICLE TITLE	CURRENT STATE AND PROSPECTS OF CONSTRUCTION INDUSTRY DEVELOPMENT IN UKRAINE
AUTHOR(S)	Kalinichenko Liudmila, Zinenko Konstantin
ARTICLE INFO	Kalinichenko Liudmila, Zinenko Konstantin. (2021) Current State and Prospects of Construction Industry Development in Ukraine. International Journal of Innovative Technologies in Economy. 1(33). doi: 10.31435/rsglobal_ijite/30032021/7426
DOI	https://doi.org/10.31435/rsglobal_ijite/30032021/7426
RECEIVED	23 December 2020
ACCEPTED	07 February 2021
PUBLISHED	12 February 2021
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License .

© The author(s) 2021. This publication is an open access article.

CURRENT STATE AND PROSPECTS OF CONSTRUCTION INDUSTRY DEVELOPMENT IN UKRAINE

Kalinichenko Liudmila, Doctor of Sciences (Economics), Professor, Head of Department of Economics, Kharkiv National University of Civil Engineering and Architecture, Ukraine, ORCID ID: <https://orcid.org/0000-0001-9847-8448>

Zinenko Konstantin, Postgraduate Student (Economics), Department of Economics, Kharkiv National University of Civil Engineering and Architecture, Ukraine, ORCID ID: <https://orcid.org/0000-0002-7720-9916>

DOI: https://doi.org/10.31435/rsglobal_ijite/30032021/7426

ARTICLE INFO

Received 23 December 2020
Accepted 07 February 2021
Published 12 February 2021

KEYWORDS

construction industry,
construction, company,
analysis, development.

ABSTRACT

The article deals with the current state of the construction industry for the period 2018-2020, and its significance for the economy of Ukraine is determined. The general trends of construction development in the modern transformational economic environment have been revealed here. The contribution and share of construction in the total GDP of the country are studied. The volumes of the construction production are analyzed, and after a deep review of indicators and rates dealing with construction products output, it is determined that the construction industry is developing steadily. The role of the state in creating a conducive investment climate in Ukraine is determined, and capital investments in construction are analyzed, and their share in the total capital is allocated. The sales volumes of building materials, the number of construction companies, and the population engaged in the construction sector are analyzed. The authors noted the necessity of normative regulation of construction activity, development, and implementation of state programs on development and support of the construction industry. The main problems of construction companies that have arisen after the introduction of a quarantine regime caused by the COVID-19 pandemic have received much attention. It is noted that it is possible to minimize the negative factors influencing the activities of construction industry companies through strategic management and support of this industry by the state.

Citation: Kalinichenko Liudmila, Zinenko Konstantin. (2021) Current State and Prospects of Construction Industry Development in Ukraine. *International Journal of Innovative Technologies in Economy*. 1(33). doi: 10.31435/rsglobal_ijite/30032021/7426

Copyright: © 2021 Kalinichenko Liudmila, Zinenko Konstantin. This is an open-access article distributed under the terms of the **Creative Commons Attribution License (CC BY)**. The use, distribution or reproduction in other forums is permitted, provided the original author(s) or licensor are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

Introduction. The construction industry is one of the most important components of the country's economy, which has an impact on the functioning and development of other industries, such as mechanical engineering, metallurgy, metalworking, energy, and woodworking. Construction provides employment and consumes products of other industries, it promotes business development, which has a significant impact on the development of the entire economic system of Ukraine. The main production and non-production funds are forming, and the fixed assets of economic entities are restoring due to construction as a material branch of production. It contributes to the development of other industries. The importance of construction for the country's economy is sufficient, so it should be monitored, trends of its development should be determined considering the changes in the current unstable environment.

Analysis of recent research and publications. A number of modern national scientists have dealt with the problems of ensuring the development of the construction industry in Ukraine and its effective functioning. Among them, there are N. Bushuyeva, V. Zayats, O. Ivanilov, V. Gamaliy,

O. Latysheva, O. Nesterenko, T. Payanok, O. Romanenko, V. Fedorenko, L. Shutenko, and others. The authors have paid considerable attention to the economic aspects of the industry, but considering the changes in the current transformational economic environment, it is advisable to analyze the state and development of the construction industry, identify problems and prospects for construction development based on a comparative analysis of current and previous periods of its activity.

The purpose of the article. It is the analysis of the current state and elaboration of prospects for the development of the construction industry in Ukraine.

Materials and methods of research. General and special research methods – logical generalization, analysis, and comparison – form the methodological basis of this research. During the analysis of data on the development of the construction industry, statistical research methods have also been used. The results of the study are presented by graphical and tabular methods. Conclusions to the article are based on the methods of generalization.

Presentation of the main research material. The level of construction development is the measure of the level of a country's economic development and the standard of living for its population. The construction industry in Ukraine in recent years continues to be characterized by development, it can be proved by the growth of construction share in GDP, the most important indicator of economic development. Ukraine's GDP for the researched period also tends to increase, which indicates the growth in the level of economic development and labour productivity, resulting in increased production and formed consumer demand, which contributes to the development of construction. The contribution of the construction industry and its share in the GDP of Ukraine for the period 2017-2019 is shown in Table 1.

Table 1. The contribution and share of the construction industry in the GDP of Ukraine for the period 2017-2019 [1]

№	Name of indicator	Unit of measurement	Years		
			2017	2018	2019
1.	Total GDP of Ukraine	UAH million	2983882	3560596	3974564
2.	Increase on the previous year	%	125,2	!19,3	111,6
3.	The contribution of the construction industry to GDP	UAH million	64431	81259	106751
4.	Increase on the previous year	UAH million	77	1682889	89923
5.	The share of construction in GDP	%	2,16	2,28	2,69

According to the data, provided by the State Statistics Service of Ukraine, in 2018 the contribution of the construction industry to GDP was only 2.3%. For comparison, this figure in Slovakia is 7.9%, Poland – 7.7%, Sweden – 6.8%, Romania – 6.1% [2]. Thus, over the past few years and in 2019, the share of construction in the total has increased by 20% on average – a minor rate in comparison with other countries, but its growth indicates the potential of the construction industry.

The capacity of the construction industry and the identified upward trend indicate the need for additional investment resources. According to J. Krysko [3] and O. Latysheva [4], the research of fixed capital investment during the study of construction is an important element in the analysis showing the state of the industry because the essence of the industry functioning is the formation and reproduction of capital. Objects and subjects of construction are infrastructural elements of all branches of the national economy, and their operation involves the implementation of remediation engineering and construction work: repairs, reconstructions, modernization, etc.

Under market conditions, construction, like all other industries, acquires a new economic context associated with the free movement of capital and free activity of each property object. Horizontal investor relations have come to replace the vertical industry ties that prevailed in the administrative planned economy. Therefore, construction as an economic process is a continuous investment activity of the capital owners during the life cycles of buildings or structures in the construction of which this capital had been invested [5].

Construction activity is increasing due to the growth of capital investments, investment expenditures of companies for construction works, bank credits and other loans, amounts from local budgets and households given for housing construction, state budget funds, foreign investors, and other sources of financing.

Table 2. Capital investments in Ukraine in 2017-2019 [1]

Name of indicator	Unit of measurement	Years		
		2017	2018	2019
Capital investments	UAH million	412812725	526341837	584448604
Increase on the previous year	%	112,1	116,4	115,5
Capital investment in construction	UAH million	50640380	51902369	59681083
Increase on the previous year	%	110,5	86,1	109,8
The rate of investment in construction to total capital investment	%	12,3	9,9	10,2

Over the last period until 2020, capital investments in Ukraine tended to increase, but in the first half of 2020, along with a reduction of investment in the country's economy by 30%, capital investment in construction also declined. Thus, for the corresponding period, capital investment raised in construction were 22.9% less than in previous periods. Exchange rate fluctuations, significant policy impact on the economy, lack of legal security, corruption in public authorities, and limited access to finance were the main obstacles to investment attractiveness. But it is also necessary to mention a positive factor – the expansion of investment expenditures of enterprises for construction and improvement in doing business. Thus, in 2020, Ukraine climbed seven steps up and took 64th place in one of the most important international rankings Doing Business, which allows any country to assess the fluency of doing business by ten key indicators and allows for a comparison between countries [6; 7].

A significant step towards creating an attractive investment climate in Ukraine is the consistent application by the State Construction Committee, within the steps taken by the government, measures to regulate construction activities, simplify and ensure transparency for a number of pre-project procedures, eliminate artificial barriers during design and construction [8].

In recent years, the output of construction products has been gradually growing in the market of Ukrainian civil engineering. In the structure of manufactured construction products, one can observe the increase in the volume of performed construction work, which is mainly due to the growth in the building of engineering structures (Table 3).

Table 3. Volumes of construction products by types [1]

	Manufactured construction products					
	2017		2018		2019	
	UAH million	% to total volume	UAH million	% to total volume	UAH million	% to total volume
Construction	105682,8	100	141213,1	100	181697,9	100
Buildings	52809,6	50,0	66791,6	47,3	83589,3	46,0
among them:						
- residential buildings	23730,0	22,5	29344,8	20,8	33208,8	18,3
- non-residential buildings	29079,6	27,5	37446,8	26,5	50380,5	27,7
Engineering structures	52873,2	50,0	74421,5	52,7	98108,6	54,0

In the first half of 2020, the volume of engineering structures was about 55.3% of total construction [9], which is a consequence of the government program The Big Construction, proposed by the President. It provides for the remediation, overhaul, and building of social, educational, and sports infrastructure objects.

Products made in 2019 were distributed by the nature of construction from the total volume of construction: new construction, reconstruction, and technical re-equipment – 74.2%, overhaul – 18.1%, current repairs – 7.7%.

In 2019, the leading positions in the market by volumes of construction output were occupied by the following regions: Kyiv – UAH 10,294.8 million, Dnipro – UAH 1,984.5 million, Odesa – UAH 17,313.5 million, Kharkiv – UAH 14,731.3 UAH million.

The growth of construction output is reflected in the values of indicators of construction output by type (Fig. 1), which show the change in the volume of construction work performed over comparable periods of activity. According to the research, the manufacturing of construction products in November 2020 increased compared to the previous month, but the index of construction products compared to the previous period decreased by 21.3% and was 102.8%.

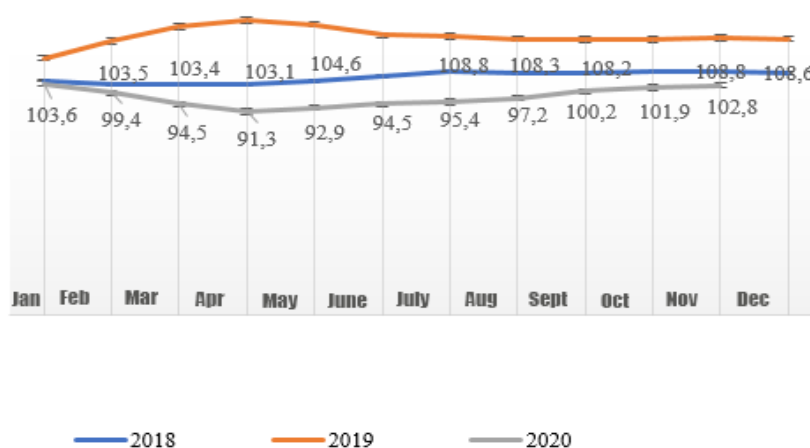


Fig. 1. Indicators of construction products by type (in % to the corresponding period of the previous year, increased total) [1]

It should be noted that the volume of construction work performed from January to June 2020 was UAH 64.59 billion or decreased by 5.5% compared to the corresponding period in 2019. In particular, the volume of construction work performed in residential construction decreased by 19.4%, in commercial construction – by 1.4%, in infrastructure construction – by 1.7%. At the same time, the volume of construction work performed in 2019 amounted to UAH 177.01 billion or reduced by 20.0% by 2018, which came from: 3% in residential construction; 27.4% in commercial construction; 23.3% in infrastructure construction [10].

According to the results of the analytical research "Review of the construction industry development in Ukraine" made by the Personal Analytical Unit (PAU), in the first half of 2020, the Ukrainian construction market reduced by 5.5% in comparison with the same period in 2019. The development of construction activity of national enterprises is constrained by insufficient demand for construction products and financial limitations.

The construction process is characterized by the level of material intensity, which, accordingly, brings to the first place the building materials industry, like the one that provides the supplement of the necessary materials to create construction products. This is relevant to the fact that the building materials industry is a multi-diversified field, which involves more than twenty industries that form their own, specific market of building materials [11].

Analysis of statistical information provided by the All-Ukrainian Union of Manufacturers of Building Materials on the production of building materials for 2018-2019 reveals a situation of stagnation. There was a slight increase for some items of building materials in comparison with the previous period: in the production of cement and concrete structures – by 1%; production of ready-mixed concrete – by 5%; dry mixes – by 13%; mineral wool – by 7%. The reduction of output occurred by the following items: ceramic refractory bricks – by 11%, blocks of cement, artificial stone or concrete – by 7%, cement – by 1%, ceramic tiles – by 4%, door and window plastic blocks – by 8%.

The volume of sales of construction materials for the first half of 2020 reduced by 1.3% compared to the same period in 2019. The analysis of the market of building materials according to 22 basic segments showed the range of growth dynamics from 18% to 61%. At the same time, 59% of segments showed positive dynamics (at the beginning of 2020 the share of growing segments was 77%).

It should be noted that the general trend in the modern market of building materials in Ukraine in 2019-2020 is a phase of growth intensification and transition to a new growth cycle.

The source of construction companies' development is labor resources because it is the staff who promotes the implementation of innovative processes in construction companies and ensures their operation and profit.

In the field of construction for the period 2017-2019, there is an increase in the number of construction companies and the employed population (Table 4). Thus, in 2019, the number of construction companies increased to 1,652, and it had reached 6.6% of the total quantity. The enterprises hire 669 thousand people, which is 4.04% of the total number of personnel employed in business entities for all types of economic activity. If we compare this indicator with the indicators of the EU countries, in Ukraine the share of people employed in construction is lower than in the EU countries where this indicator ranges from 4.5% to 6.5%, which shows insufficient development of the industry in comparison with them.

Table 4. The number of companies and the employed population in the construction industry in Ukraine [1]

Name of indicator	Unit of measurement	Years		
		2017	2018	2019
Number of companies by type of economic activity	units	22597	23793	25051
Number of companies in the construction industry	units	1462	1559	1652
The share of companies in the construction industry in relation to the total	%	6,5	6,6	6,6
Employed population by type of economic activity	thousand people	16156,4	16360,9	16578,3
Number of people employed in construction	thousand people	644,3	665,3	669,0
The share of population employed in construction	%	3,9	4,06	4,04

The reduction in the construction market observed in Ukraine in 2020 and the emergence of problems is explained by a quarantine regime caused by the COVID-19 pandemic.

Among the main problems of construction companies caused by pandemic and quarantine were identified the following:

- customers have been negatively affected by restrictions, and demand decreased – 38%;
- business partners have been negatively affected by restrictions and didn't conduct any business activities – 23%;
- insufficient cash flow for wages, salaries, and carrying out bank transactions – 21%;
- workers were absent due to illness or imposed restrictions – 9%.

Moreover, not all construction companies have access to financing for their reactivation after quarantine. However, they have their own "reserve fund". Only a few companies can count on access to bank financing. However, most companies see an opportunity to reactivate their business activity during a few months [12].

To stabilize and improve the situation on the construction market in Ukraine and increase the efficiency of enterprises operation, the quality of construction products should be improved through the introduction of smart innovative technologies, new energy-saving and energy-efficient measures, and the use of modern materials. Considering that the construction industry is attractive for investment, which in turn creates positive conditions for other industries, it needs to increase public funding, attract domestic and foreign investors, and improve mortgage loans, which subsequently will lead to the growth of residential construction. Public funding is provided in the budget proposal for 2021: it is aimed at the construction of roads, which will support the increase of transport facilities, highways, streets, and roads.

Construction companies are strongly influenced by the external environment, which is their feature, so it is advisable to minimize through strategic management the negative factors affecting their operation at the enterprise level and to support this industry by the state.

Managing this branch, it is important to develop civil engineering in Ukraine through establishing the Concept of public administration in the field of urban planning activities. This concept had been proposed by the Ministry of Regional Development in 2020. It deals with the modernization of urban planning legislation in Ukraine. The key points of the concept that will help solve the problems of modern construction are:

- providing the state registration of property rights for co-owners of joint construction objects;
- implementation of integrated development of cities and communities' territory as a modern approach to ensure balanced development;
- establishing of the Unified state electronic system for the construction sector as a part of the urban (town-planning) cadastre;
- reforming the system of technical regulation in construction through the implementation of Regulation (EU) No 305 that deals with obligatory requirements for construction products, the transition to the existing EU declarative principle of evaluation and conformity assessment for construction materials and products, as well as bringing into line with EU requirements for objects of construction and conditions for placing construction products or works on the market;

– at the state and local level there should be the implementation of new design technologies, in particular BIM-technologies, in the process of creating the construction and architectural objects.

In order to simplify and unify the conclusion of relevant agreements with global financial institutions, the development of international FIDIC contracts had been completed in association with the multinational law firm Baker & McKenzie [13].

Conclusions. As a result, this research has revealed the general trends that impact construction industry development in Ukraine: the share of construction in the total GDP of the country is constantly increasing; the investment attractiveness of the industry along with capital investments, investment expenditures of companies for construction works are also growing; the funding for the industry is increasing; the banks are implementing new mortgage loan programs; there is an increase in the number of construction companies and the percentage of the population engaged in the construction sector; construction volumes are growing; state programs for the development and support of the construction industry are being implemented recently.

But in 2020, there was a slight decline in the volume of construction products and building materials by some positions, which is explained by a global problem – the quarantine regime caused by the COVID-19 pandemic. Despite the recent destabilizing moments, the potential capacities of construction companies in Ukraine are quite high, which helps to improve their competitiveness and the ability to overcome negative situations in economic development that exist in the market.

REFERENCES

1. Derzhavna sluzhba statystyky Ukrainy [State Statistics Service of Ukraine] (2021). Retrieved from http://www.ukrstat.gov.ua/operativ/menu/menu_u/bud.htm
2. Rozvytok budivelnoyi haluzi ta detinizatsiya rynku pratsi u budivnytstvi [Development of the construction industry and de-shadowing of the labor market in construction] (2020). Retrieved from <https://www.minregion.gov.ua/press/news/rozvitok-budivelnoyi-galuzi-ta-detinizatsiya-rinku-pratsi-u-budivnytstvi/>
3. Krysko, J. (2012). Analiz seredovyscha restrukturyzatsiyi pidpryemstv budivelnoyi haluzi. [Analysis of the environment for restructuring the enterprises of the construction industry], *Ekonomichnyy analiz [Economic analysis]*, 10 (4), 203–206.
4. Latsheva, O.V., and Saiko, A.D. (2019). Budivelna haluz Ukrainy: suchasnyy stan ta yiyi rol u zabezpechenni staloho rozvytku natsionalnoyi ekonomiky. [Construction industry of Ukraine: current state and its role in ensuring sustainable development of the national economy], *Ekonomichnyi visnyk Donbasu [Donbass Economic Bulletin]*, 2 (56), 66–73.
5. Mohylova, A.Yu. (2017). Analiz rynkovykh umov hospodaryuvannya yak osnova planuvannya diyalnosti pidpryemstv budivelnoyi haluzi. [Analysis of market conditions of management as a basis for planning the activities of enterprises in the construction industry], *Skhidna Yevropa: ekonomika, biznes ta upravlinnya [Eastern Europe: economics, business, and management]*, 10, 53–57.
6. Doing Business, the official site (2020). Retrieved from <https://www.doingbusiness.org/en/reports/global-reports/doing-business-2020>
7. World Bank (2020). Doing Business 2020. Washington, DC: World Bank. Retrieved from <https://doi.org/10.1596/978-1-4648-1440-2>.
8. Romanenko, O.V., and Alaverdyan, L.M. (2020). Ohlyad stanu ta otsinka potentsialu rozvytku budivelnoyi haluzi Ukrainy. [Review of the state and assessment of the potential of the construction industry development of Ukraine], *Efektivna ekonomika [Efficient economy]*, 4. Retrieved from <http://www.economy.nayka.com.ua/?op=1&z=7770>
9. Budivelna haluz v Ukraini: vidnovlennya ta klyuchovi faktory zrostannya [Construction industry in Ukraine: recovery and key factors of growth] (2020). Retrieved from <https://www.businessz.com.ua/news/events/8137>
10. Ukrayinskyi rynek budivnytstva znyzysia [The Ukrainian construction market has declined] (2020). Retrieved from <http://www.business.ua/uk/node/7916>
11. Kalinichenko, L.L., and Sydorova, Yu.R. (2017). Analiz tendentsiy rozvytku budivelnoyi haluzi ta budivelnoyi produktsii Ukrainy. [Analysis of trends in the construction industry and construction products of Ukraine], *Molody vcheny [Young scientist]*, 4.4 (44.4), 64–69. Retrieved from <http://molodyvcheny.in.ua/files/journal/2017/4.4/15.pdf>
12. Grigorenko, Yu. (2020). *Khytka sporuda: kryza v buivelnii haluzi pohlyblyuyetsya [Unstable structure: the crisis in the construction industry is getting worse]*. Retrieved from <https://gmk.center.ua/posts/hitka-sporuda-kryza-v-budivelnij-galuzi-pogliblyuietsya/>
13. Rozvytok budivelnoyi haluzi ta detinizatsiya rynku pratsi u budivnytstvi [Development of the construction industry and de-shadowing of the labor market in construction] (2020). Retrieved from <https://www.minregion.gov.ua/press/news/rozvitok-budivelnoyi-galuzi-ta-detinizatsiya-rinku-pratsi-u-budivnytstvi/>