The article is dedicated to the issues of foreign investment in the construction industry of Ukraine and EU countries, as effective attraction of foreign investment in this sector is crucial for the country’s reconstruction and integration into the European socio-economic space, both in the current stage and in the post-war period. The research substantiates the necessity of attracting private capital, analyzes the volumes of foreign direct investment in the construction industry of Ukraine for the years 2010–2021. Using statistical methods, the structure and dynamics of foreign direct investment by types of economic activity and investor countries are determined, periods of significant fluctuations are identified, and the reasons influencing such changes are established. The impact of foreign investment on the development of countries’ economies is determined, current problems of the foreign investment process in Ukraine are outlined. The main directions for improving the investment climate in Ukraine are identified, and specific ways to stimulate the attraction of foreign investment in the construction industry are outlined.

**Keywords:** Foreign Direct Investment (FDI), private capital, investment climate, construction industry, reconstruction.

**Problem statement.** In modern times of war, Ukraine's interaction with the outside world is not only a condition for the state's survival but also for its further recovery and successful development. The most influential factor in current realities is the attraction of Foreign Direct Investments (FDI) into the domestic construction sector. The devastation of the country, the restoration of which is practically impossible without private capital inflows and external transfer flows from partner countries, has reached catastrophic proportions. FDI should ensure the reconstruction of the war-damaged infrastructure, restoration and construction of housing, creation of new jobs for the population, and contribute to the formation of revenues for local budgets. At the current stage, international capital in the form of foreign investments in the construction sector will become the driving force of the country's reconstruction, influencing both the scale and directions of socio-economic changes in Ukraine, and determining the effectiveness of the country's entire economic system.
Analysis of recent research and publications. The problems of foreign investment in Ukraine are studied in the works of: B. Veder di Mauro [1], N.V. Bench [2], N.I. Burlaka [3], Yu. O. Horodnichenko [1], N.A. Krasnykova [4], K.I. Markevich [5], O.H. Mykhaylenko [4], I.V. Sologub [1], I.I. Chunytska [6]. The current state and development prospects of the construction industry are reflected in scientific works: I.V. Volokhova [7], G.A. Zhovtyaka [7], O.V. Koby [8]. Along with this, in our opinion, a thorough study of the problem and prospects for the development of foreign investment activities of Ukraine is needed for the recovery of the country and the modernization of the entire construction industry, a study of the experience of European countries in attracting FDI in the construction industry. Despite the large number of publications on this issue, many issues are relevant and require further research.

Formulating the purposes of the article. To investigate the effectiveness of FDI attraction in the construction industry of Ukraine, to make a comparative analysis of their inflows to Ukraine and EU countries, to justify the importance of accelerating the pace of FDI inflows for the recovery of the construction industry destroyed by the war, to identify problems and prospects for the reconstruction of the industry in the post-war period.

Methodology. The research is based on general scientific research methods: analysis, synthesis, abstraction, economic-mathematical, economic-statistical and graphic methods.

Presentation of the main research material. The construction industry is one of the top priorities in the comprehensive transformation of the country. This sector of the economy must take a leap forward and reform to help Ukraine recover and rid itself of its post-Soviet legacy [9]. Despite the ongoing war causing death and destruction, Ukrainian authorities, experts, and partners are rapidly and actively developing plans for post-war recovery. They are also attempting to answer the question: who, how, and with whose funds?

The construction industry is one of the driving sectors of economic growth in any country. Capital construction creates a significant number of jobs. Worldwide, employment figures in this sector amount to about 100 million jobs. This segment of the economy utilizes the output of numerous industries, which determines the efficiency of the entire economic system of the country. Industry indicators represent 6% of the global GDP [10]. Construction creates favorable conditions for the development of small and medium-sized businesses. The precondition for the development of this industry and improving its performance is the effective attraction of FDI. Continuous investment activity by capital owners is directed towards building or structures. The construction industry of Ukraine is strategically important for the development of the national economy and social infrastructure of the country, especially given the events triggered by Russian aggression.

Attracting Foreign Direct Investment (FDI) into the construction sector of any country impacts business scaling, increasing productive potential, and developing new technologies. FDI is an effective resource for economic growth, one of the most profitable forms of investment attraction, but at the same time, the simplest, considering the costs and efforts involved in attracting them. The demand for them in the modern world of rapid development of productive forces, the establishment of a new type of production relations on a global scale, and the constantly growing demand for capital for the implementation of various projects, development programs, and strategies are constantly increasing. Along with this, competition for foreign investors, who prefer the most promising countries and enterprises, is growing. Therefore, the need to study FDI flows and their current distribution among countries and regions is relevant at the present stage.

In 2020, the movement of the FDI global market, according to the UN report, decreased by 35% compared to 2019 – to $1 trillion. A sharp decline in FDI was also observed in developed markets. For example, in Europe, the decline was 80%, in the USA – 40% [2]. The foreign investment indicator in 2020 was the lowest in 21st-century statistics. Even during the global financial crisis, their volume was 30% higher than the level in 2020 [11]. In 2021–2022, global Foreign Direct Investment has largely recovered, but the prospects for 2023 are pessimistic. This is primarily due to a decrease in the number of new FDI projects and project financing agreements. Due to Russia’s war against Ukraine, many companies are facing a compromise between efficiency and compliance with political initiatives that involve returning production to the country of origin of the parent companies.

The problem with FDI in Ukraine was very complex even before the start of the war, as evidenced by their dynamics from 2002 to 2022 (Fig. 1). An analysis of FDI movement trends provides grounds to conclude that they experience significant fluctuations in Ukraine.

The volume of investment in 2014–2016 decreased significantly. If in 2013, the total amount of FDI received in the Ukrainian economy amounted to 53,704 million dollars USA, in 2014 the volume of investments decreased to 40,725.4 million dollars USA, and in 2015 it amounted to only 36,154.5 million dollars USA. This demonstrates the fact that foreign direct investment decreased by 17,549.5 million dollars USA in 2013–2015. In 2016, foreign direct investments slightly increased by USD 1,501 million USA and amounted to 37,655.5 million dollars USA. In 2017, the flow of direct investments to Ukraine fell by 43% and amounted to slightly more than 2.5 billion dollars USA. In 2018, the situation improved slightly and investments increased by 14.3% to almost 2.9 billion dollars USA. During 2019, the amount of funds invested in the economy of Ukraine decreased by 11.8% and amounted to 2.5 billion dollars USA [13].

In 2022, there was a collapse of investment due to the aggression unleashed by Russia. This contributed to the strengthening of investment risks, and, accordingly, the concern of investors regarding their investments in Ukraine, including in the construction industry, increased [14]. It can be assumed that the process of foreign investment in our country in recent years is quite chaotic. In European countries, on the contrary, it has a clearly structured system.

European countries made the largest capital investments in Ukraine's economy in 2021 (Fig. 2).

Analysis of the structure of FDI by countries of the world makes it possible to state that in 2021 the most FDI came from Cyprus (31.7%) and the Netherlands (21.6%). A significant segment in the distribution of foreign capital also belongs to Switzerland (5.8%), Great Britain (4.6%), Germany (4.6%), Austria (3.0%),
Luxembourg (2.4%) and France (2.0%). According to the balance of payments data published on the website of the National Bank of Ukraine [16], the net inflow of foreign direct investments in 2022 is estimated at 587 million dollars USA (including reinvestment of income – 655 million USD). For 2021, the net inflow was 7.5 billion dollars USA (including reinvestment of income – 4.9 billion USD) [16].

In developing Asian countries, FDI increased by 4% in 2021. India was the leading country in terms of the number of FDI projects. Almost half of global FDI projects in 2021 were announced in Europe, which retained its place as the most sought-after region for investing companies. Positive dynamics of investments were also observed in China, which now demonstrates a stable position in the rating of reliability of the investment direction. Today, China accounts for about 20% of all global investments in construction. China joined India, the US and Indonesia in accounting for 58.3% of global construction growth. These four countries are leaders in the growth of construction volumes in the world. Projections for urban population growth of another 2.5 billion people suggest that construction will become an economic driver in the medium term, growing by an average of 4.4% between 2020 and 2025, higher than projected growth as an industry, as well as in the service sectors. In the period from 2020 to 2030, the growth of construction volumes is forecasted on average by about 3.5% per year. The largest contribution to the global growth of construction during 2020–2030 will be provided by three countries: China (26.1%), India (14.1%) and the USA (11.1%) [17–19].

In the global market, the construction sector accounted for more than 11 trillion dollars in 2020. USA. In 2021, it increased by another 9%. A significant part of the structure journals, books, and reports on the subject.
of the construction market was made up of infrastructural and logistics real estate. In a number of European countries, there was an increase in FDI for the purpose of realization of warehouse space. For example, in Great Britain, according to Knight Frank consulting company, their indicator increased by 54%, similar growth continued this year. The trend of investing in infrastructure projects will continue in the coming years. Thus, it is noted that in the next 20 years, the volume of global investments in infrastructure will be at the level of 3.7 trillion dollars USA per year [2].

The war in Ukraine is undoubtedly a disaster for the construction industry. World experts from various fields joined the reconstruction of the country and the modernization of this important sector of the economy. The effective application of the latest urbanism and architecture approaches will make Ukrainian cities more convenient and inclusive for their residents. For example, Ludwig Erhard, one of the main reformers of post-war Germany, once said one valuable thing: "No economic situation can be so hopeless that the determined will and honest work of the whole people cannot cope." But for this, the government must be just as honest, determined and strong-willed in achieving the goal [20]. The success of the plan's implementation in Germany was facilitated by the agreement of the elites, who, before receiving capital from the United States, concluded an informal agreement among themselves on limiting profits and sending them to the country's budget. Ukraine should take advantage of this experience so that external loans are effective.

There is no doubt that the future of Ukraine will be determined by its citizens, and it is Ukrainians who should be the owners of the recovery process. But no matter how persistent and selfless the efforts of the people and the authorities are, no budget will be able to fully realize the process of reconstruction of Ukraine. Significant coordination between governments, international and non-governmental organizations, businesses and investors, and other stakeholders is essential for the country's recovery to become a success story. In the process of recovery, mechanisms, institutions and alliances will be built. One of the decisive steps in the transformation of the construction industry should be the attraction of private foreign capital.

According to the UN analytical report on post-war recovery (UN, Crisis Prevention and Recovery Report, 2008), only half of the affected countries were able to recover quickly, effectively using international aid. It is worth noting that from this point of view, the experience of Poland (a strategic partner for Ukraine) in cooperation with the European Union and the USA is quite useful. After all, even in the early 90s, Polish companies gained a lot of experience with the flow of American and European investments. The volume of FDI to Poland in 2021, according to the data of the Polish Economic Institute (PIE), increased by 82% and amounted to 24.8 billion dollars. USA. The country ranked 14th in the world and 3rd in the EU after Germany and Sweden in terms of inflow of foreign direct investment. According to the results of 2021, the total value of foreign investments in Poland amounted to 269 billion dollars. USA [21]. Thus, during the reconstruction, Ukraine should take advantage of Poland's experience in order not to end up in the group of backward countries that, even if they had funds, could not dispose of them [22].

With the start of hostilities on February 24, 2022, the construction industry of Ukraine is operating under unprecedented challenges. Due to the military threat, the assessment of the current situation of the construction industry is very difficult. The main investors that enable the market to withstand the crisis are domestic investors and non-residents who have not suspended payment of contributions with the help of deferment programs from developers and the latter's financial cushion. Due to the general mobilization, the construction sector is unable to guarantee the fulfillment of obligations to citizens and real estate investors from other countries due to a catastrophic shortage of experienced personnel. Among the challenges in difficult times of war, it should also be noted physical destruction, destruction of logistics hubs and networks of counterparties, systemic delayed demand from the times of the COVID-19 pandemic.

According to the State Statistics Service of Ukraine, the volume of construction in 2018 amounted to 4.3 billion euros [15]. For comparison: in the Czech Republic, a similar indicator was 20 billion euros, in Poland – 50 billion euros (almost 12 times more than in Ukraine), in Germany – 351 billion euros [7]. The total volume of manufactured construction products in 2021 amounted to UAH 253.9 billion [23].

We will analyze the volume of involved capital investments in the construction industry and compare them with other branches of economic activity in Ukraine. The volume of capital investments by Ukrainian enterprises in 2021 by type of economic activity is presented in Fig. 3. The greatest interest among foreign investors in 2021 was caused by industry (36%). In 2021, the leading spheres of economic activity by the volume of capital investments were: public administration and defense (11%), agriculture, forestry and fishing (10.4%). Construction, in turn, accounted for only 8.3%.

Analyzing the dynamics of indicators presented in Figures 1–3, we can conclude that for the Ukrainian economy, the problem lies not only in the small volumes of Foreign Direct Investment (FDI) but also in their structure and significant disparities in investment distribution across sectors. Currently, Foreign Direct Investment is present in all sectors of the Ukrainian economy, but the sectoral priorities of foreign investors vary considerably. At the same time, most investors operating in the Ukrainian market are willing to invest in the manufacturing industry, wholesale and retail trade – where new goods quickly appear, the assortment changes rapidly, costs are quickly recouped, and commercial risks are low. Undoubtedly, after the victory, Ukraine will need a significant increase in investments, particularly in the construction industry. A precondition for attracting FDI should be addressing issues to improve the investment climate because nearly half of foreign investors consider Ukraine a risky direction for investment (48% according to data from the EBA business association). In addition to the devastation caused by the war, weak legislation, distrust of domestic courts, and corrupt practices are significant factors deterring foreign investors.

The construction industry is one of the most important sectors of the national economy, upon which the
efficiency of the entire economic system of the country depends. Table 1 presents the volumes of construction output (completed construction works) dynamics for the years 2017–2021.

Analyzing the data from Table 1, we observe that the volumes of construction output showed a tendency to increase, with their volume increasing by 144.20% over the past five years. Among the types of construction output, transportation facilities showed the highest growth rates over the five-year period. The volume of produced output for non-residential buildings exceeded the volumes for residential buildings.

From Figure 4, we can see that Foreign Direct Investments (FDI) in construction grew at the beginning of the analyzed period, reaching its peak in 2013 at $1.6 billion USD, and then decreased due to the political events in Ukraine. In 2019, it reached a level of $830 million USD, which is the minimum value since 2010. During the military conflict in Ukraine, the volumes of Foreign Direct Investments sharply decreased, questioning the stable functioning of this sector of the economy as a whole. This is why attracting FDI into the construction industry is a priority direction at this stage.

Undoubtedly, post-war urban planning issues will require immediate attention, including the absence of an electronic urban planning cadastre at the state level, complexity in obtaining urban planning conditions and restrictions (UPCR), technical conditions for connection to engineering networks (TC), duration of permit-registration procedures, inefficiency of the architectural and construction control system, regulation of the majority of building norms, lack of sustainable management of public and residential building life cycles, and absence of sustainable management of construction waste. For successful reconstruction and meeting the needs of the construction market, it is important to remove obstacles to the implementation of innovative and progressive technologies. The Government of Ukraine is currently seeking ways to attract private sector investment into the construction industry. Several global giants are discussing participation in Ukraine's transformation and reconstruction program, interested in making FDI in Ukraine through private funds with proper management and clear operating parameters. This topic has become one of the key issues at this year's Davos Forum.

Certain steps have already been taken, including the development of a plan, establishment of a reconstruction plan, and implementation of necessary infrastructure projects to facilitate reconstruction.

Table 1

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<tbody>
<tr>
<td>Construction</td>
<td>105,7</td>
<td>141,2</td>
<td>181,7</td>
<td>202,1</td>
<td>258,1</td>
<td>152390,8</td>
<td>144,20</td>
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<td>66,8</td>
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<td>80,6</td>
<td>102,9</td>
<td>50084,7</td>
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<tr>
<td>residential</td>
<td>23,7</td>
<td>29,3</td>
<td>33,2</td>
<td>29,1</td>
<td>39,1</td>
<td>15417,9</td>
<td>64,97</td>
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<tr>
<td>non-residential</td>
<td>29,1</td>
<td>37,4</td>
<td>50,4</td>
<td>51,5</td>
<td>63,7</td>
<td>34666,8</td>
<td>119,21</td>
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<tr>
<td>Engineering buildings</td>
<td>52,9</td>
<td>74,4</td>
<td>98,1</td>
<td>121,5</td>
<td>155,2</td>
<td>102306,1</td>
<td>193,49</td>
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<td>transport facilities</td>
<td>19,0</td>
<td>27,4</td>
<td>33,5</td>
<td>67,9</td>
<td>90,1</td>
<td>71092</td>
<td>374,15</td>
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<tr>
<td>complex industrial buildings</td>
<td>16,2</td>
<td>24,3</td>
<td>36,6</td>
<td>25,3</td>
<td>30,7</td>
<td>14559,6</td>
<td>89,95</td>
</tr>
<tr>
<td>other engineering structures</td>
<td>4,9</td>
<td>6,8</td>
<td>7,4</td>
<td>6,3</td>
<td>7,5</td>
<td>2655,1</td>
<td>54,41</td>
</tr>
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Source: compiled by the authors based on [15]
agency, project development, formation of a budget fund, partial funding, and negotiations with MIGA partners of the World Bank group. Therefore, the position of the Ukrainian government is as follows: "We are preparing for the Ukrainian Marshall Plan. We are building a coalition for the reconstruction of Ukraine. The Cabinet of Ministers operates a special office UkraineInvest, which supports 8 major projects totaling $1.35 billion. The key sources of funding for the reconstruction project are: confiscated Russian funds, funds from the state budget, international partners, and donors from around the world, raised on the United24 platform, the creation of which was initiated by President of Ukraine Volodymyr Zelensky" [24].

At the current stage, the government is creating the most favorable investment environment by abolishing unnecessary licenses and permits, minimizing requirements for investment projects with significant investments, developing projects for war risk insurance and obtaining investment guarantees. Laws enacted by the authorities over the past few years aim to improve the investment climate in construction: the Law of Ukraine "On providing construction products on the market" (Regulation (EU) 305/2011), the Law of Ukraine "On state support of investment projects with significant investments in Ukraine" No. 1116-IX dated 17.12.2020, "On industrial parks (Bill No. 4416-1), the Law of Ukraine of May 12, 2022, No. 2255-IX "On Amendments to Certain Legislative Acts of Ukraine to Improve the Mechanism of Counteracting Raidership", draft Law No. 7508 "On Amendments to Certain Legislative Acts of Ukraine to Improve the Mechanism of Attracting Private Investments Using the Mechanism of Public-Private Partnership to Accelerate the Reconstruction of War-Damaged Objects and Construction of New Objects Related to Post-War Reconstruction of the Economy of Ukraine" [25].

To fulfil the set tasks, coordinate financing of recovery works and reforms in Ukraine, the G7 countries have created a platform. Europe plays an important role in supporting Ukraine, as it is a candidate for EU membership. Post-war reconstruction will determine not only the fate of Ukraine but also the future of Europe. From a war-ravaged country, Ukraine will emerge as a full member of the EU and NATO after reconstruction [4].

Conclusions. In summary, it can be noted that the reconstruction of Ukraine will be a challenge not only for Ukraine itself but also for the entire world. It becomes clear that without the concerted efforts of leading countries worldwide, it will be difficult for Ukraine to rise from the ruins caused by Russia's full-scale aggression, which inflicted losses and destruction amounting to $600-750 billion as of the beginning of 2023.

The importance of allies' assistance is undeniable; however, for reconstruction to truly become a success story, Ukrainians themselves must be the owners of this process. The restoration and development of the construction market are impossible without global innovations at all stages of construction processes and asset lifecycle management. Ukraine must embrace "green" construction and carbon-neutral production.

Centralized coordination of FDI utilization in the construction sector should be maximally independent

![Figure 4. Dynamics of internationalization indicators in the construction sector of Ukraine 2010–2021, million USD](source: compiled by the author based on [15])
of the political system. This fund (bureau, agency) should oversee the effective use of funds, support the development of quality construction projects, evaluate them, prioritize their implementation, ensure transparency in contractor selection and cost estimation, and inform society, which should have high trust in the agency. An independent institution should connect all stakeholders in the reconstruction process: the state, project implementers, society, and communities. Priorities should be given to establishing an International Agency for the Reconstruction of Ukraine, affiliated with the EU but independent in decision-making, with clear operational timelines. It is important to document the damages to collect information on all destruction and hold the aggressor accountable. Some cities have suffered such devastating destruction that they need to be rebuilt practically from scratch. The reconstruction of Ukraine should be progressive and modernized, not just the restoration of what was destroyed. Project funding should be as open and objective as possible, taking into account not only government proposals but also society's input regarding the country's reconstruction.

Ensuring fair financing within regional, sectoral, and national projects, where there is no disproportionate provision of resources to individual regions, is a crucial factor in the successful revival of the construction industry as a whole. It is essential for Ukraine to assess projects for risks and alignment with reconstruction needs.

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