MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY STATE UNIVERSITY
Educational and Research Institute of Business, Economics and Management
Department of International Economic Relations

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QUALIFICATION PAPER
It is submitted for the Bachelor's degree
Specialty 292 "International Economic Relations"
on the topic " FOREIGN INVESTMENTS TO UKRAINE DURING THE WAR"

Student 4th Course ________________________ Olena Bilotserkivska
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Qualifying Bachelor's paper contains the results of own research. The use of the ideas, results and texts of other authors has a link to the corresponding source

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Sumy, 2023

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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TASKS FOR BACHELOR'S DEGREE QUALIFICATION PAPER

(specialty 292 " International Economic Relations ")
student 4th course, group ME-92a.ан
(course number) (group's code)
Olena Bilotserkivska
(student's full name)

1. The theme of the paper is Foreign Direct Investment to Ukraine During the War

approved by the order of the university from « 11 » May 2023 № 0484-VI

2. The term of completed paper submission by the student is «06» June 2023

3. The purpose of the qualification paper is to make Inferences for the future under four post-war scenarios; to shape future strategies and policies in attracting and maximizing the benefits of foreign direct investment; to contribute to the existing literature on foregin direct investments in high turbulent environment.

4. The object of the research is foreign direct investments in Ukraine during the war and after

5. The subject of research is the impact of post-war scenarios on further development of foreign direct investments in Ukraine
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6. The qualification paper is carried out on materials ____________________________
____

7. Approximate qualifying bachelor's paper plan, terms for submitting chapters to the research advisor and the content of tasks for the accomplished purpose is as follows:

Chapter 1 Theoretical overview on investments and FDI. 05.04.2023

Chapter 1 deals with main categories and definitions of FDI; high velocity or turbulent environments; impacts of legal and regulatory frameworks; systematizing of theoretical approaches to measuring investments

Chapter 2 Sectoral Analysis of Foreign Direct Investment in Ukraine 25.04.2023

Chapter 2 deals with patterns of development of FDI in Ukraine; outline of the investment problem situation in Ukraine during the war; analysis of the most significant aspects of the problem; identification of interested parties and sides which influence; work on the law basis to attract investments to Ukraine; work of international organizations and other countries' governments; macro data on FDI; the most prospective sectors to attract investments in Ukraine

Chapter 3 Foreign Direct Investments in post war period 06.05.2023

Chapter 3 deals with materials and substantiated proposals for identifying possible ways of further solving the problem; FDI during highly turbulent environments (Ukraine at war); scenarios and trajectories for the post-war period; underlying assumptions

8. Supervision on work:

Chapter	Full name and position of the advisor	Date, signature	
		task issued by	task accepted by
1	Yuriy Petrushenko, Head of the Chair of International Economic Relations, Doctor of Economics, Professor	05.04.2023 р.	05.04.2023р.
2	Yuriy Petrushenko, Head of the Chair of International Economic Relations, Doctor of Economics, Professor	24.04 2023 р.	24.04 2023 р.
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ABSTRACT

on bachelor's degree qualification paper on the topic
« FOREIGN DIRECT INVESTMENT TO UKRAINE DURING THE WAR »
student Olena Bilotserkivska
(full name)

The main content of the bachelor's degree qualification paper is presented on 27 pages, including references consisted of 31 used sources, which are placed on 4 pages. The paper contains 2 picture and 2 figures that are presented on 4 pages.

Foreign direct investment (FDI) plays a crucial role in the economic development of nations by facilitating the transfer of capital, technology, and expertise across borders. It serves as a catalyst for economic growth, job creation, and increased competitiveness in host countries. FDI in turbulent environment are always a topic to discuss and study. The war in Ukraine is an exact representation of such velocity.

The purpose of the bachelor's degree qualification paper is to study how the war in Ukraine effect FDI and make inferences for the future under four post-war scenarios.

The purpose of the work is realized by performing the following tasks:

– Gathering and summing up theoretical approaches to measure investments;
– Analyzing data on foreign direct investments patterns prior the war and after the war;
– Comparison of data and making logical conclusions;
– Identification of key stakeholders;
– Data based forecast of possible post-war scenarios.

In the process of research, we used relevant methods of studying economic processes, including systematization and generalization, quantitative analysis, methods of induction and deduction, simulation and synthesis.

According to the results of the study the following conclusions are formulated:

1. Foreign direct investments play a significant role in economic development of a country;
2. Legal and regulatory frameworks of Ukraine is effective in turbulent environment caused by the war;
3. Further development of foreign direct investments in Ukraine directly depend on a post-war scenario.

The obtained results can be used to contribute to the existing literature on foreign direct investments and provide valuable insights for policymakers, investors, and researchers interested in enhancing the effectiveness of foreign investments in Ukraine.

Keywords: FOREIGN DIRECT INVESTMENTS; TURBULENT ENVIRONMENT; RUSSIA-UKRAINE WAR; FOREGIN DIRECT INVESTMENTS IN UKRAINE; POST-WAR SCENARIOS; STRUCTURE ANALYSIS.

The year of qualifying paper fulfillment is 2023

The year of paper defense is 2023

CONTENT

INTRODUCTION

Relevance of the topic: Foreign direct investment (FDI) plays a crucial role in the economic development of nations by facilitating the transfer of capital, technology, and expertise across borders. It serves as a catalyst for economic growth, job creation, and increased competitiveness in host countries. Understanding the theoretical underpinnings and factors influencing FDI is essential for policymakers, investors, and researchers seeking to optimize the benefits of foreign investments.

In this paper, we provide a comprehensive analysis of FDI in the context of turbulent environment in Ukraine during the war and forecast the future of FDI in Ukraine based on possible post-war scenarios. The country has faced numerous challenges in maximizing the benefits of FDI due to high velocity environments and the impacts of legal and regulatory frameworks. Therefore, it is crucial to examine the theoretical approaches to measure investments, the sectoral analysis of FDI in Ukraine, and the specific dynamics of FDI during the post-war period.

Object: Foreign direct investments in Ukraine during the war and after

Subject: The impact of post-war scenarios on further development of foreign direct investments in Ukraine

Methods: All information was selected from sources by the method of abstraction, the rejection of all unnecessary. With the help of data analysis, certain conclusions were drawn and the synthesis method helped to integrate everything into logical text. The simulation method helped visualize certain numerical data using graphs. The logical assumptions were made using quantitative analysis, methods of induction and deduction. All the information was structured by using methods of systematization and generalization. To build figures there were used calculative methods.

Research questions: How did the war in Ukraine affects FDI? Inferences for the future under four post-war scenarios.

Theoretical and practical significance of work: The paper has contributed to the existing literature on FDI by providing a comprehensive analysis of FDI in Ukraine, as a place with unique conditions, with unpredictable and unmeasurable crisis. Our insights into the theoretical underpinnings, sectoral patterns, and dynamics during the post-war period have offered valuable knowledge for policymakers, investors, and researchers interested in optimizing the benefits of foreign investments in Ukraine. As Ukraine and its institutions continue journey towards the country's promotion and creation projects seek investments to ensure the country with further FDI flows after the end of the war. The forecasts of this study can serve as a valuable resource for shaping future strategies and policies in attracting and maximizing the benefits of foreign direct investment.

Information base: Normative legal documents, articles, academic publications, reports of international organizations and government issued documents were used in the paper.

Scientific approval: the work is based on gained scientific experience of the student, specifically Erasmus+ exchanges, scientific conferences and Mitacs Global Research Award Internship.

Structure of the work: The work consists of introduction, three chapters and conclusions. The first one referring to the theoretical approaches to measure foreign direct investments. The second part is annalistic and was aimed to demonstrate structure and analyze data of foreign direct investments in Ukraine in pre-war and during-the-war time to compare and make logical conclusions. In addition to this, there were highlighted topics according the most prospective sectors to renew foreign direct investments in Ukraine and importance of legal regulation on in high turbulent environment. The third chapter reveals possible post-war scenarios and their influence on foreign direct investments development.

1 THEORETICAL OVERVIEW ON FOREIGN DIRECT INVESTMENTS

1.1 Theoretical Approaches to Measure Investments

Within the framework of new institutional theory (economics), institutions exist and persist as long as the benefits they provide outweigh the transaction costs of creating and sustaining them. These institutions establish the political, social, and legal ground rules that form the basis for production, exchange, and distribution [1].

When evaluating investments in highly turbulent environments, various theoretical approaches can be employed. The following approaches are commonly used:

Net Present Value (NPV) is a widely used financial approach that calculates the present value of expected cash flows by discounting them appropriately. NPV takes into account the time value of money and provides a clear measure of the investment's value in monetary terms [2]. Furthermore, NPV considers the entire lifespan of an investment and incorporates discounted cash flows over time. However, it is important to note that accurate estimation of cash flows and the selection of an appropriate discount rate are crucial for reliable results.

In addition to NPV, Internal Rate of Return (IRR) measures the rate at which the present value of expected cash flows equals the initial investment. It provides a percentage return, offering valuable insights into the attractiveness of an investment. However, complex cash flow patterns can sometimes result in multiple IRRs, making interpretation challenging. Moreover, IRR does not consider project scale or absolute value, which may limit its effectiveness in certain contexts.

Another approach, the Payback Period, assesses the time required for an investment to recover its initial cost through expected cash flows. This simple measure of investment recovery time is often appreciated for its ease of understanding and calculation. However, limitations arise from the exclusion of the time value of money, the neglect of cash flows beyond the payback period, and the omission of profitability beyond the mere recovery of the investment.

In addition to the Payback Period, Return on Investment (ROI) provides a straightforward measure of profitability by comparing the net profit generated by an investment to its initial cost. ROI is widely used due to its simplicity in calculation and comparability [3].

In summary, evaluating investments in highly turbulent environments requires considering various theoretical approaches. NPV accounts for the time value of money and provides a clear measure of investment value. IRR offers insights into investment attractiveness, while the Payback Period assesses investment recovery time. Return on Investment compares net profit to the initial cost. Each approach has its limitations but provides valuable insights when evaluating investments in turbulent contexts.

1.2 High velocity or turbulent environments

Highly turbulent environments of foreign direct investments (FDI) are characterized by rapid and unpredictable changes, instability, and uncertainty that impact the investment climate [4]. These turbulent environments can be caused by various factors, including political instability, economic crises, armed conflicts, natural disasters, or rapid technological advancements [5] [6]. In such contexts, the traditional patterns of FDI may be disrupted, and investors face unique challenges and opportunities.

Political instability and frequent policy changes are common in highly turbulent environments, creating uncertainty and unpredictability for foreign investors. Economic crises, currency fluctuations, inflation, and market volatility further contribute to the turbulence, impacting the viability and profitability of investment projects. Heightened security risks, including armed violence, civil unrest, and terrorism, create an unsafe operating environment [7].

Legal and regulatory uncertainties are often prevalent, introducing unpredictability and inconsistency in the business environment. Market volatility and rapid technological advancements add to the complexity, necessitating adaptability to remain competitive.

However, turbulent environments also present opportunities for high returns on investments. Economic crises can create undervalued assets and distressed companies, while post-conflict or post-disaster reconstruction efforts can open up new markets and investment possibilities. In highly turbulent environments, successful FDI requires a comprehensive understanding of the local context. Building strong relationships with local stakeholders and implementing robust risk management strategies are crucial for achieving success [8].

1.3 Impacts of legal and regulatory frameworks

The impacts of legal and regulatory frameworks on foreign direct investments in highly turbulent environments can be significant. In turbulent environments, legal and regulatory frameworks may become uncertain and inconsistent, creating challenges for foreign investors who rely on stable and transparent legal frameworks. Contract enforcement can become more challenging, as weak rule of law or political interference may undermine the effectiveness of contractual agreements. Protection of property rights is crucial, but in turbulent environments, they may be at risk due to political instability or changes in government policies [9].

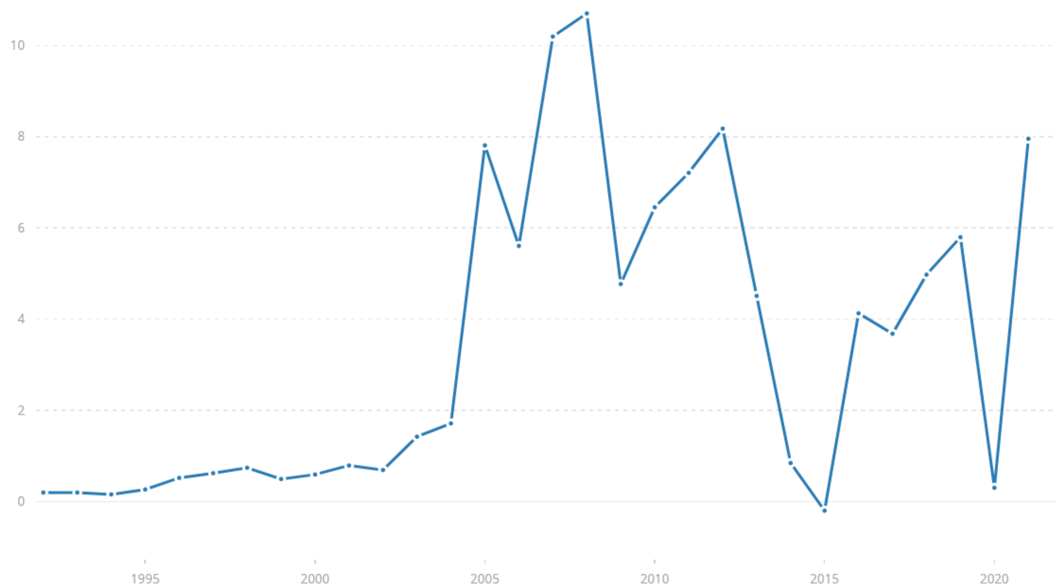
Regulatory burdens, lack of transparency, and cumbersome procedures can impede the ease of doing business [10]. Dispute resolution mechanisms may be compromised, undermining investor confidence in the fairness of resolving disputes. However, turbulent environments also present opportunities for regulatory reforms and incentives to attract foreign investment. Governments can introduce policy changes, streamline regulations, and provide incentives to create a more favorable investment climate [11].

To navigate these impacts, careful assessment, due diligence, and effective risk management strategies are necessary. Engaging with local legal advisors, understanding the local legal and regulatory landscape, and building strong relationships with stakeholders are important. Measures such as investment protection laws and guarantees against expropriation or political risks can enhance investor confidence.

2 SECTORAL ANALYSIS OF FOREIGN DIRECT INVESTMENT IN UKRAINE

2.1 Patterns of Development of Foreign Direct Investments in Ukraine

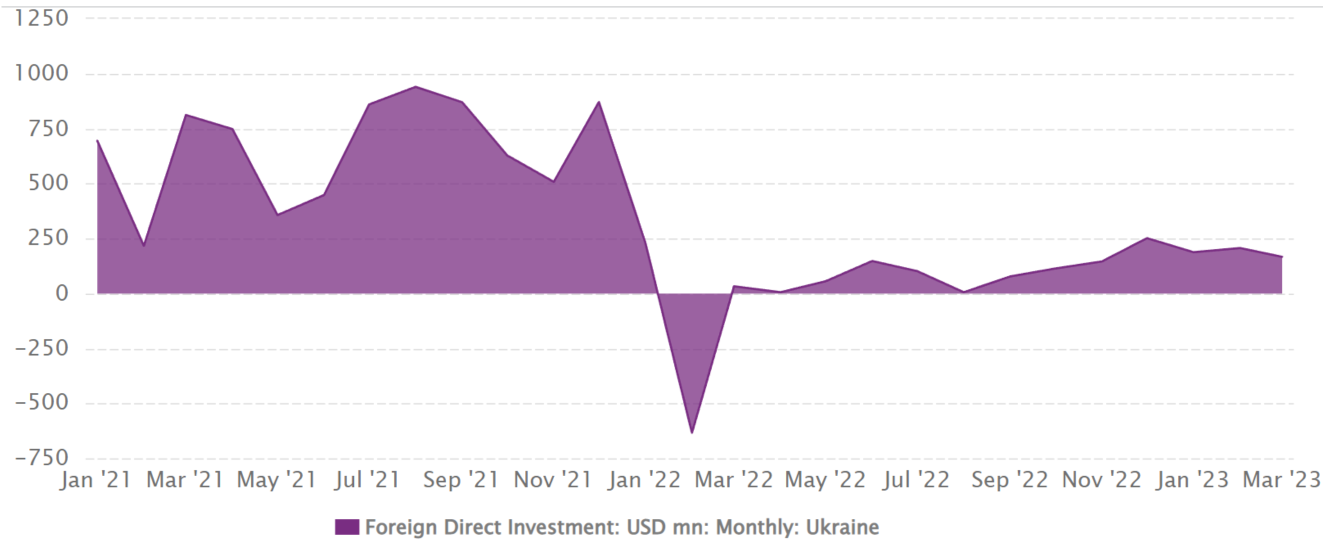
According to the data of World Bank and International Monetary Fund until russian invasion 2022 the pattern of development of FDI in Ukraine was positive. Significant valleys on the graph of FDI in Ukraine are presented by the years of 2006, 2009, 2015 and 2020. Those are referring to the national revolution 2005, subprime mortgage crisis 2008, russian military invasion 2014, and Covid-19 pandemic 2020. All these may be observed on the picture 2.1.



Picture 2.1 – Foreign Direct Investment, Net Inflows (BoP, current US$) – Ukraine

Source: The World Bank [12]

In 2021, Ukraine experienced a significant amount of investment, reaching a staggering 7,954,000 thousand USD. And it is possible to track in the picture 2.2, that investment starting February 2022 are far to achieve prewar conditions.



Picture 2.2 – Foreign Direct Investment: Ukraine January 2021 – March 2023

Source: CEIC Data [13]

According to data from CEIC, Ukraine's Foreign Direct Investment (FDI) witnessed a growth rate of 3.1% of the country's Nominal GDP in December 2021, compared to a growth rate of 4.7% in the previous quarter. The FDI as a percentage of Nominal GDP data is regularly updated on a quarterly basis, spanning from March 1996 to December 2021. The highest recorded FDI percentage was 25.5% in December 2005, while the lowest point was -18.3% in March 2015 [14].

The UNCTAD's World Investment Report 2022 sheds further light on Ukraine's investment landscape. Following a divestment of USD -36 million in 2020 due to the combined impact of the COVID-19 pandemic, macroeconomic challenges, and geopolitical tensions, FDI flows to Ukraine rebounded significantly, reaching USD 6.5 billion in 2021. The total stock of FDI in the country stood at approximately USD 62 billion in the same year. Major multinational corporations have invested in sectors such as steel, information and communication technology, pharmaceuticals, and agricultural commodities, with Arcelor Mittal being the largest investor, holding assets worth USD 6.5 billion [15].

However, the year 2022 brought new challenges for Ukraine's investment climate due to russia's invasion and the ensuing protracted war. This conflict led to heightened insecurity, political and economic uncertainty, supply chain disruptions, and infrastructure destruction, ultimately resulting in capital outflows. According to data from the National Bank of Ukraine, the stock of FDI as of September 2022 amounted to USD 53.7 billion [16]. The majority of investments in Ukraine are concentrated in manufacturing, wholesale and retail trade, vehicle repair, mining, financial services, and real estate sectors. Cyprus, the Netherlands, Switzerland, the UK, and Germany have emerged as the main investors in Ukraine (National Bank of Ukraine, 2021) [17].

The ongoing war and its direct implications for investment between the russian Federation and Ukraine, along with the subsequent sanctions, energy and commodity supply shortages, and broader macroeconomic impacts, have contributed to a cooling of Foreign Direct Investment (FDI) prospects for 2022. The conflict has created an environment of insecurity, leading to heightened political and economic uncertainty in the region. As a result, there has been a significant outflow of capital and a reluctance among investors to make long-term commitments in Ukraine. The disruptions in supply chains and the destruction of infrastructure caused by the conflict have further hindered investment activities and economic growth in the country. Moreover, the resurgence of COVID-19 in China and the resulting lockdowns in key areas of global value chains (GVCs) have added another layer of complexity to the investment landscape. The reduced investment in industries reliant on GVCs could have far-reaching implications for Ukraine's economic recovery and its ability to attract foreign capital [18].

Prior to the war, Ukraine had made significant progress in several areas related to its business environment. Efforts were made to streamline processes such as obtaining building permits, connecting to electricity, and enhancing the protection of minority investors. Cross-border trade facilitation measures were also implemented to improve the ease of doing business. Furthermore, the country took steps to simplify and reduce the costs associated with the registration procedure for representative offices of foreign business entities, aiming to attract more foreign investment. However, the conflict and its aftermath have severely worsened the business climate in Ukraine. The country's current ranking of 75th out of 82 countries in The Economist's latest Business Environment ranking indicates the challenges it faces. Unfortunately, forecasts suggest that Ukraine's ranking may decline further, potentially reaching the last place by 2026 [19].

According to the most recent reports on Ukraine's economic indicators, the country witnessed a range of trends in January 2023. The Current Account recorded a deficit of 762.0 USD million, reflecting a negative balance of payments and highlighting the challenges faced by the country in terms of its external transactions and trade. However, there was a positive development in Foreign Direct Investment (FDI), which experienced a significant increase of 188.0 USD million during the same period. This surge in FDI indicates growing investor confidence and inflows of capital from abroad, which can have positive effects on Ukraine's economic growth and development. Additionally, Ukraine's Direct Investment Abroad expanded by 5.0 USD million, signifying an upward trajectory in Ukrainian investments in foreign countries. On the other hand, Foreign Portfolio Investment witnessed a decline of 225.0 USD million in December 2022, indicating a decrease in the holdings of Ukrainian securities by foreign investors, possibly due to changing market conditions or investor sentiment [14].

The war in Ukraine, which unfolded during the first quarter of 2022, triggered a substantial increase in new investment policy measures, reaching a record number of 75. These policy measures were predominantly implemented as a response to the conflict and encompassed a range of economic and trade sanctions, as well as countersanctions, that directly impacted Foreign Direct Investment (FDI) flows to and from the russian federation, Belarus, and the non-government-controlled areas of eastern Ukraine. It is noteworthy that these measures constituted a significant 70 percent of all the policy actions adopted during Q1 2022. The imposition of these measures aimed to safeguard national interests, mitigate economic risks, and address geopolitical challenges arising from the conflict. Furthermore, the year 2021 witnessed notable developments that accelerated the reform of the international investment agreement (IIA) regime. These developments included the conclusion of new-generation megaregional economic agreements and the termination of outdated bilateral investment treaties (BITs). These changes reflect a shift towards modernizing and adapting investment governance frameworks to address evolving global economic dynamics and provide greater clarity and protection for investors. Moreover, international attention has increasingly focused on investment facilitation, climate change, and human rights, indicating the growing recognition of the multidimensional impact of investments on sustainable development and societal well-being, and their role in shaping the future of international investment governance [15].

The invasion of Ukraine by russia has had far-reaching implications for the country's economy, surpassing even the economic consequences of the collapse of the Soviet Union [20]. This military intervention has caused significant disruptions across various economic sectors, including trade, investment, and infrastructure. The adverse effects of the invasion have been evident in supply chain disruptions, increased political and economic uncertainty, and the destruction of critical infrastructure. These factors, combined with the imposition of economic sanctions and countersanctions, have further hampered Ukraine's economic prospects and posed substantial challenges for its recovery and development what is depicted on the figure 2.1 based on Bloomberg data.

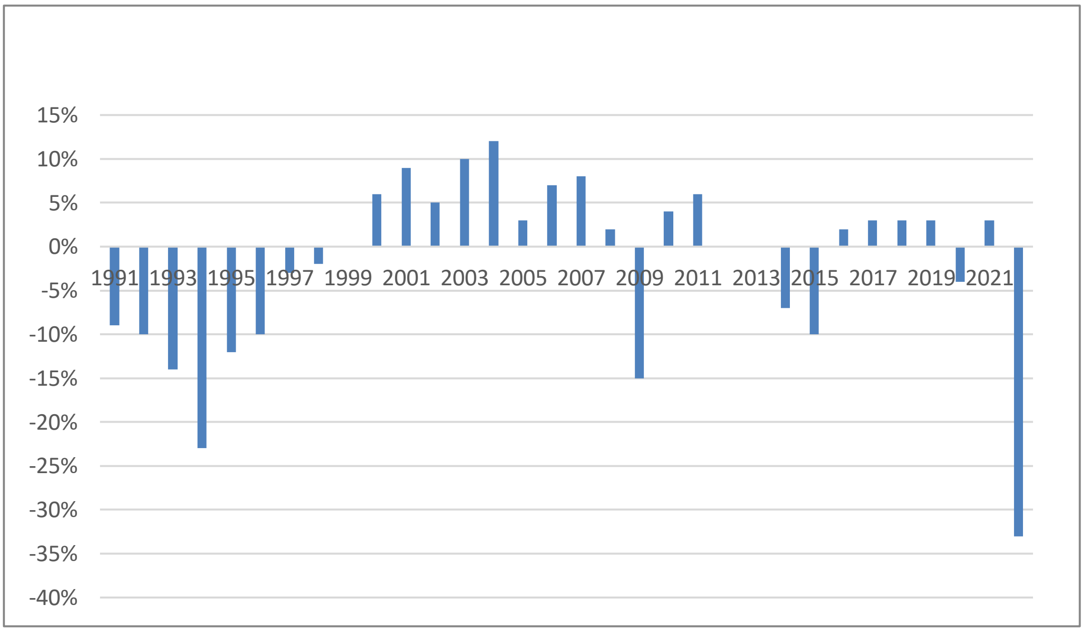


Figure 2.1 – Data for 2022 is the central bank's growth estimate of Ukrainian GDP

Source: Bloomberg [20]

These economic developments in Ukraine are interconnected. The negative balance of payments reflected in the Current Account deficit highlights the country's vulnerability in terms of its external transactions and trade. However, the surge in Foreign Direct Investment (FDI) signals a positive trend, demonstrating increased investor confidence and the inflow of capital from abroad. Despite the challenges posed by the ongoing conflict, Ukraine has made efforts to reform its investment governance framework, as evidenced by the reform of international investment agreements (IIAs) and the growing policy attention to investment facilitation, climate change, and human rights.

The aforementioned developments underscore the complex and dynamic economic landscape in Ukraine, shaped by geopolitical events, policy actions, and the interplay of domestic and international factors. The country continues to navigate the consequences of the conflict while striving to attract foreign investments, foster economic stability, and pursue sustainable development.

2.2 Foreign Direct Investment macro data analysis

The war revealed by the russian federation to Ukraine has had significant implications for investment flows and global FDI prospects in 2022. The direct effects of the war include the termination of existing investment projects and the cancellation of announced projects. Multinational enterprises (MNEs) from developed economies, which account for more than two-thirds of FDI stock in the russian federation, are particularly affected by the sanctions, while MNEs from China and India have a negligible share of FDI stock in the country. The energy sector attracts the largest share of FDI, with notable investments by companies such as ArcelorMittal in Ukraine, which holds assets worth $6.5 billion.

The wider effects on international investment flows are more complex to anticipate. The russian federation plays a relatively minor role in global investment and value chains (GVCs), and both inward and outward investments had already declined significantly after the international sanctions imposed in 2014. Inward FDI fell by more than three-quarters immediately following those sanctions and remained 43 percent lower than the pre-sanctions average in subsequent years. The broader impact on developing countries' investment flows will depend on their exposure to the triple crisis of food, fuel, and finance caused by the conflict and the subsequent economic uncertainties.

In terms of investment prospects, profit expectations of MNEs provide an early indication. Since the start of the war, the majority of the top 5,000 MNEs have revised their earnings forecasts for 2022. Extractive industries, benefiting from high commodity prices, have revised their forecasts upward. On the other hand, industries relying on commodities as production inputs or fuel-dependent industries have revised their earnings forecasts downward. Cross-border mergers and acquisitions (M&As), the dominant form of FDI in developed economies, have increased by 39 percent to $285 billion in the first four months of 2022 compared to the $205 billion average of the previous year. Approximately one-third of M&A sales ($87 billion) were observed in the extractive industries, reflecting the impact of higher commodity prices.

The energy price shock resulting from the war in Ukraine has implications for international investment in the energy transition. Higher oil and gas prices, initially observed after the war started (although mitigated since by policy actions), could temporarily divert investment back into extractive industries and fossil fuel-based energy generation. This may lead to a reversal of the trend towards renewables witnessed over the past decade. However, there are expectations that the fuel crisis will also stimulate investment in renewable energy, particularly in Europe. Nonetheless, it remains uncertain if the stimulus will generate sufficient capacity in the short term to replace supplies previously sourced from the russian Federation. [21].

Taking into account the fact that russia and Ukraine represent a quarter of global wheat exports and are quite representatives in global FDI network as it depictures on the figure 2.2, sunction that were put on russia had an impact on global trade and investments. The war between russia and Ukraine has resulted in extensive sanctions imposed by the United States, UK, EU, and other allies. These measures include freezing assets, banning transactions, and imposing export restrictions on russia. As a result, russia's economy has been disrupted, leading to the departure of foreign multinational corporations (MNCs) from the country.

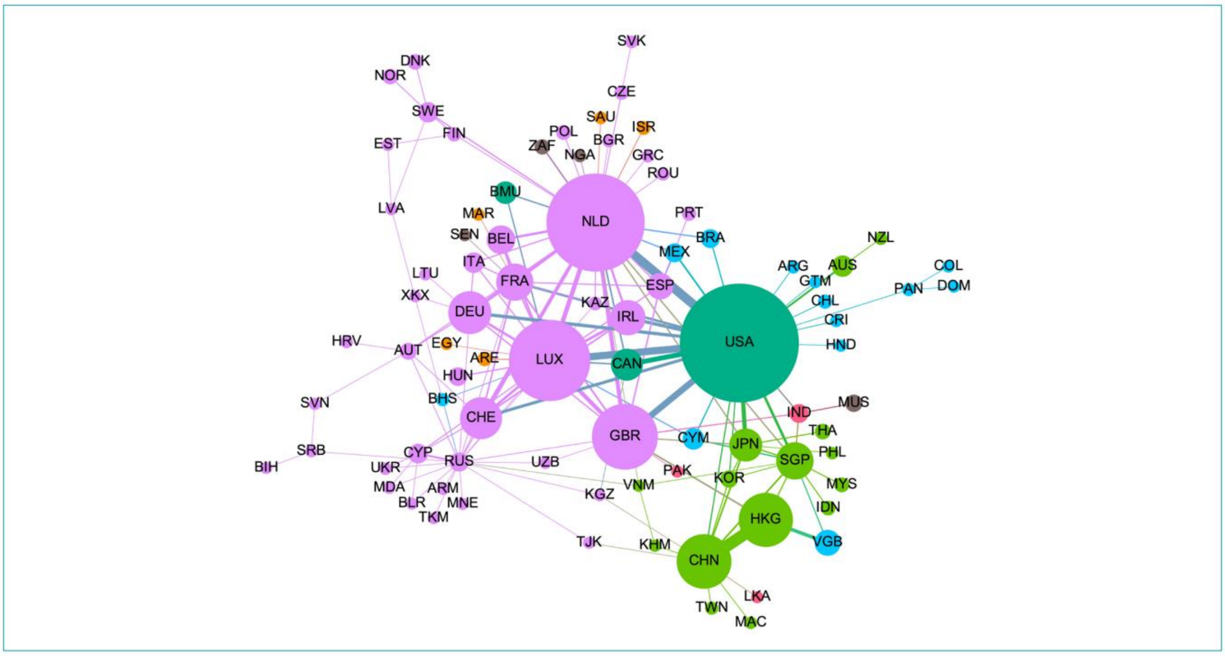


Figure 2.2 – russia and Ukraine in global FDI networks

Source: The Impact of the War in Ukraine on Global Trade and Investment. World Bank Group [22]

Neighboring Eastern European and Central Asian economies, such as Armenia, Belarus, Moldova, the Kyrgyz Republic, Tajikistan, and Montenegro, are also affected. These economies face complications in cross-border transactions, reduced investments, and depreciating currencies due to the conflict and Western sanctions. Furthermore, European countries reliant on energy investments with russia face risks of investment losses, disruptions in energy supplies, and higher energy prices.

The indirect effects of the war and sanctions extend to global value chains, investor confidence, and the potential fragmentation of the global financial system. The impact includes a ripple effect on MNCs with exposure to russia, tightened global financial conditions, and a dampened investment climate. In the longer term, the consequences may include the establishment of alternative banking networks, reduced reliance on the US dollar, and a decrease in foreign direct investment (FDI) flows into emerging market and developing economies [22].

The war in Ukraine and the subsequent sanctions imposed on russia have had significant and wide-ranging effects on the global economy, international trade, and investments. These consequences encompass disruptions in various sectors, economic decline in russia, challenges faced by neighboring economies, risks for European countries dependent on energy investments, indirect effects on FDI and MNCs, and potential long-term repercussions for the global financial system and value chains. As such, the war and sanctions represent a complex and multifaceted challenge with implications for multiple stakeholders in the international economic landscape.

2.3 The identification of key stakeholders involved in the revitalization of Foreign Direct Investment in Ukraine. Prospective sectors for investment attraction in Ukraine

In response to the ongoing conflict between russia and Ukraine, measures have been taken to mitigate the economic consequences and provide support for investment in Ukraine. The Ministry of Economy of Ukraine, in collaboration with the Multilateral Investment Guarantee Agency (MIGA) of the World Bank group, initiated a mechanism to insure investments during war, as early as September 16, 2022 [23]. This innovative mechanism aims to offer investors the opportunity to mitigate up to 90% of risks and receive compensation for potential losses. The project aims to mobilize significant funding of up to $1 billion, with a pilot project worth $30 million already launched.

Furthermore, the German Federal Ministry of Economy and Climate has launched a program of investment guarantees specifically designed to support German companies investing in Ukraine. These guarantees aim to provide a higher level of security and reassurance for German businesses operating in the country. By fostering a conducive investment climate, this program seeks to encourage and facilitate economic engagement between Germany and Ukraine [24].

Additionally, strategic partnerships have been established between prominent financial institutions and the Ministry of Economy of Ukraine. For instance, a memorandum of understanding was signed between JP Morgan, one of the largest banking holdings in the United States, and the Ministry of Economy of Ukraine. This agreement signifies the commitment to collaboration and mutual support in facilitating investment opportunities and strengthening economic ties between the two entities [25].

During discussions held within the framework of these partnerships, Prime Minister of Ukraine, Denys Shmyhal, identified several key sectors as particularly promising for investment. These sectors include energy, the agricultural sector, natural resources, digital technologies, and the restoration of transport and other critical infrastructure [26]. By highlighting these sectors, the Prime Minister aims to showcase the potential and opportunities that Ukraine offers to investors, emphasizing the country's economic strengths and the potential for profitable and mutually beneficial investment ventures.

Obviously, The IT industry in Ukraine has experienced remarkable growth, even in the face of the conflict. According to an interview conducted with Oleksandr Bornyakov, businesses and team members were relocated, leading to record-breaking export earnings of $2 billion in the first quarter of 2022. This represents a substantial increase of $500 million compared to the corresponding period in the previous peaceful year. The National Bank reported a nearly 30% increase in the actual volume of IT exports, coinciding with a rise in the number of industry specialists by 41,000 to a total of 285,000 [27].

Besides this, National Investment Council of Ukraine presented the strategy of increasing FDI to Ukraine. They highlighted three main approaches as operational, legal and communicational plans to engage investment in infrastructure, energetics, digital industry, high-tech production and agriculture [28]. While such a strategy is remaining to be the responsibility on government, another agency UkrInvest developed a guide on rebuilding Ukraine with the private sector [29]. Among projects seeking investments there are next:

1. Agro Food Tech Cluster:

The agro food tech cluster project aims to establish an industrial technopark equipped with state-of-the-art production and technology equipment. It encompasses production and logistics in Lviv (Hrushiv), corn clustering in Ivano-Frankivsk, and innovation and production in Vinnytsia. The project has a projected implementation period of 4 years, a payback period of 7 years, and requires a total investment amount of $150 million.

2. Corn Processing Plant:

The corn processing plant project involves the construction of a facility dedicated to value-added corn products. With an IRR of 15% and an NPV of $52.7 million, the project offers favorable financial prospects. The projected implementation period is 2 years, with an expected payback period of 7 years. The total investment required is $150 million.

3. Feed Soy Protein Concentrate Plant:

This project focuses on the production of feed soy protein concentrate. With an IRR of 35% and an NPV of $51 million, the project demonstrates attractive financial returns. The expected implementation period is 2 years, with a payback period of 9 years. The total investment required for this project is $62 million.

4. Cattle Growing and Slaughter House:

The cattle growing and slaughterhouse project aims to capitalize on the demand for meat production. With an IRR of 25.2% and an estimated EBITDA of USD 128.4 million for the entire period, the project presents favorable financial indicators. The implementation period is projected to be 2 years, with a payback period of 6 years. The total investment required for this project is $44 million.

5. Construction of Gypsum-based Mixed Production Plant:

This project focuses on the construction of a gypsum-based mixed production plant. With an IRR of 36% and an NPV of $1.7 million, the project offers potential returns. The estimated implementation period is 1 year, with a payback period of 8.5 years. The total investment required for this project is $5.7 million.

6. Float Glass Facility:

The float glass facility project entails the establishment of a manufacturing plant for float glass. With an IRR of 11.28% and an NPV of $237.7 million, the project exhibits moderate financial prospects. The projected implementation period is 3 years, with a payback period of 10 years. The total investment required for this project is $ 250 million.

7. Logistics Hubs Cluster:

The logistics hubs cluster project aims to develop a network of logistics hubs. This project has a projected implementation period of 3 years and a payback period of 7 years. The total investment required for this project is $450 million.

8. Construction of a Warehouse Complex:

The construction of a warehouse complex project involves the establishment of a facility for storage and distribution purposes. With an IRR of 15.5% and an NPV of $7.2 million, the project offers moderate financial returns. The projected implementation period is 1.5 years, with a payback period of 8.5 years. The total investment required for this project is $34 million.

These highlighted projects seeking investments in Ukraine demonstrate the country's diverse investment opportunities across sectors such as agro-food technology, corn processing, feed soy protein concentrate production, cattle farming and slaughterhouses, gypsum-based mixed production, float glass manufacturing, logistics hubs, warehouse complexes and IT. Investors interested in capitalizing on Ukraine's economic potential may consider these projects as potential avenues for investment, while conducting thorough due diligence to assess risks and potential returns.

These initiatives and collaborations reflect the concerted efforts to support and stimulate investment in Ukraine, despite the challenging circumstances posed by the ongoing conflict with russia. By implementing innovative mechanisms for investment insurance, providing targeted investment guarantees, and forging strategic partnerships with influential financial institutions, Ukraine seeks to mitigate risks and create an enabling environment for investment. These endeavors underscore the commitment to economic resilience, growth, and development, as well as the recognition of Ukraine's vast potential across various sectors.

3 FOREIGN DIRECT INVESTMENTS IN POST WAR PERIOD

3.1 Foreign Direct Investments in Ukraine during high turbulent environments

As it is possible to observe from the previous analysis, Foreign Direct Investment plays a significant role in shaping the economies of countries around the world. However, in highly turbulent environments characterized by political instability, armed conflict, or economic crises, FDI flows can face substantial challenges. These turbulent environments often introduce uncertainties, risks, and disruptions that affect investment decisions and the overall business climate. The russian war against Ukraine is a depicture of such unpredictable environment with high risks for investments.

During highly turbulent environments, several factors come into play that can influence FDI. They undermine investor confidence, as they raise concerns about property rights, safety, and the rule of law. Economic uncertainties arising from inflation, currency devaluation, or trade disruptions can also deter foreign investors. These factors significantly impact the investment climate, influencing the decisions of potential foreign investors.

Political instability is a common characteristic of war-affected environments. Despite the fact that the political power stays the same in Ukraine and received a huge trust credit from the population [30] the risk of political instability remains quiet high.

Security risks are heightened during times of war, posing physical threats to individuals and property. Concerns regarding employee safety, asset protection, and supply chain stability act as deterrents to foreign investors considering investments in war-affected regions. Many foreign investors already lost their actives in Ukraine due t the condition of their detriment and occupation of the territories by russian troops.

Economic disruptions are inevitable consequences of war. Trade disruptions, infrastructure damage severely hinder business operations and investment prospects. The destruction of critical infrastructure, disruptions in supply chains, high levels of inflation, currency instability, and reduced purchasing power of consumers all contribute to an unfavorable business climate for foreign investors in Ukraine. Even the governmental and international institutions are supportive toward Ukraine and economic connection they do not have power to force FDI from the private sector.

Legal and regulatory challenges also emerge during times of war. Despite this, Ukraine demonstrate tremendous achievements in overcoming the challenge. The numerous agreements listed in the previous chapters are the evidence of the constant Ukrainian efforts that the Ministry of Foreign Affairs put to strengthen connection and convince the world in the victory of Ukraine.

Furthermore, the war has already demonstrated the lead to a drain of human capital and skills. Population displacement, brain drain, and disruptions in educational systems may create in prospective a shortage of skilled workers, including professionals, technicians, and entrepreneurs.. Therefore, rebuilding human capital through education and skill development is crucial for sustainable investment in post-war periods in Ukraine. There also remains a huge possibility of return of human capital back to Ukraine, but its quantity certainly depend on the soonest of the war ending.

Despite these challenges, war can also create opportunities for rebuilding and reconstruction. Post-war periods often witness substantial investments in infrastructure, housing, and public services. These opportunities attract foreign investors who are willing to contribute to the rebuilding process and capitalize on emerging markets. This is where Ukraine bet to win in the post-war period. As it was mentioned in the previous chapter the legal improvement and constant negotiations on the international level with certain organizations create an image of Ukraine as a potentially attractive zone to invest.

Foreign investors, in turn, need to conduct thorough risk assessments, establish contingency plans, and carefully evaluate the long-term viability and sustainability of their investments in war-affected regions in Ukraine. Engaging with local communities, understanding social dynamics, and adopting responsible investment practices are essential for promoting sustainable economic development in post-war environments.

Overall, FDI during highly turbulent environments caused by a war represents a complex and dynamic phenomenon. It requires a nuanced understanding of the factors influencing investment decisions, the risks and opportunities at hand, and the strategies that can facilitate sustainable and responsible investment in challenging contexts. In the unique case of Ukraine it is possible to track the tendency of developing strategies of investment recovery back to Ukraine right after the war ending. Ukrainian government and investment institutions have already launched promotion to rapid attraction of FDI in a post-war period and created a strategical plan. The core issue is a post-war scenario and condition of ending of the war.

3.2 Scenarios and trajectories for the post-war period

Taking into account the fact of importance of conditions after the war ending the question of post-war scenarios appears to be not the least one. According to the current situation in Ukraine there may be highlighted four assumptions of post-war scenarios in Ukraine.

The first and the most promising to Ukraine is capitulation of russia and return to 1991 Borders. In the scenario of russia's capitulation and the return to 1991 borders, the immediate focus would be on stabilizing the situation and restoring Ukraine's territorial integrity. The post-war period would involve extensive reconstruction efforts, addressing infrastructure damage, and rebuilding the affected regions. Reestablishing security and a functioning governance system would be crucial for attracting FDI. The international community would likely play a significant role in providing financial aid, technical assistance, and support for Ukraine's economic recovery. Investors would have opportunities to participate in the reconstruction process, investing in infrastructure projects, revitalizing industries, and contributing to the country's overall development. In addition to this, it must be admitted that the Ministry of Foreign Affairs of Ukraine and UkrInvest Agency efforts the majority of the world community and a part of the private sector sees this scenario as the most probable one. In support of this it should be mentioned that the global company Kingspan plans to build a modern campus for the production of construction materials in Lviv region, which will be supplied not only to Ukrainian consumers, but also to Europe. The cost of the signed project is 220 million dollars [31].

Another scenario takes the place when Ukraine achieves a military victory but is compelled to cede control of certain regions to russia. Such the post-war period would involve a delicate balance between reconciliation and economic recovery. Ukraine would need to focus on rebuilding its economy, attracting investment, and ensuring stability in the regions under its control. Efforts would be directed towards integrating the affected regions back into Ukraine's legal and economic framework, addressing the needs of displaced populations, and fostering social cohesion. The challenge for FDI would lie in navigating the complex political and legal environment while contributing to the economic revitalization of the rest of Ukraine.

The next assumption of a scenario would be a peace treaty with russian occupation of certain regions. In the scenario where a peace treaty is reached, but certain regions remain under russian occupation, the post-war period would involve managing an intricate political and economic landscape. Reconciliation efforts, including dialogue and negotiation, would be necessary to address the concerns and aspirations of all parties involved. Special administrative arrangements or autonomous status for the occupied regions may be established to ensure a degree of self-governance. The challenge for FDI would be twofold. Firstly, attracting investment to the occupied regions would require efforts to restore stability, rebuild infrastructure, and create an enabling business environment. Secondly, the rest of Ukraine would need to focus on fostering economic growth, attracting investment, and ensuring that the peace treaty facilitates a conducive environment for business. In addition to this, it is possible to assume that the flow of foreign direct investment would barely recover as soon as Ukraine remains in such a position of uncertainty and military threat.

The last and the least possible scenario is capitulation of Ukraine. In the scenario where Ukraine capitulates and is annexed by russia, the immediate aftermath would involve significant political, economic, and legal transformations. Ukraine would become part of the russian Federation, and the integration process would entail aligning the annexed regions with russian systems and policies. FDI dynamics would be influenced by the political and economic strategies adopted by the russian government. Investors would need to navigate the new legal and regulatory framework, understand the economic priorities set by the russian government, and assess the opportunities and risks of investing in the annexed territories. The remaining parts of Ukraine would face the challenge of rebuilding their economy, attracting investment, and establishing a new trajectory for their future development.

In all post-war scenarios, the challenges and opportunities for FDI would vary depending on the specific circumstances and conditions. Factors such as stability, security, political governance, infrastructure development, and the commitment of the international community to support reconstruction efforts would significantly influence the investment climate in Ukraine. The most prosperities option for Ukraine is the scenario number one, which is already spread on the world level as the most possible.

CONCLUSION

In this paper, we have conducted a comprehensive analysis of foreign direct investment in the context of Ukraine, focusing on the turbulent environment during the war and providing insights into the future of FDI based on possible post-war scenarios. Our examination of theoretical approaches to measure investments has shed light on the complexities and challenges faced in crisis environments, emphasizing the significance of legal and regulatory frameworks in shaping investment patterns and Ukraine's image as a prospective destination for foreign investments.

Through a sectoral analysis of FDI in Ukraine, we have identified patterns of FDI development, considering both pre-war and war periods. By analyzing macro data, we have gained a comprehensive understanding of FDI trends and performance in the country. Moreover, we found out that on the background of total fall down of all FDI to Ukraine since the war had begun, the only sector that not lose but gained its flows of investment is Information Technologies (IT). In addition to this the quite analysis of legal part of FDI brought a clear understanding of the amount of efforts which the Ministry of Foreign Affairs of Ukraine and investment agencies put to create an image of Ukraine as a potential victor in the war and highly attractive country to invest in.

Looking towards the post-war period, we have examined four possible scenarios which would affect FDI. By doing this, we have presented insights into the potential shape of FDI inflows in the aftermath of the conflict. This understanding is essential for policymakers and investors as they navigate the complexities of rebuilding economies and fostering sustainable growth.

In conclusion, this paper has contributed to the existing literature on FDI by providing a comprehensive analysis of FDI in Ukraine, as a place with unique conditions, with unpredictable and unmeasurable crisis. Our insights into the theoretical underpinnings, sectoral patterns, and dynamics during the post-war period have offered valuable knowledge for policymakers, investors, and researchers interested in optimizing the benefits of foreign investments in Ukraine. As Ukraine and its institutions continue journey towards the country's promotion and creation projects seek investments to ensure the country with further FDI flows after the end of the war. The forecasts of this study can serve as a valuable resource for shaping future strategies and policies in attracting and maximizing the benefits of foreign direct investment.

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