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ROLE OF FOREIGN DIRECT INVESTMENT IN ECONOMIC DEVELOPMENT OF THE RUSSIAN FEDERATION

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CONTENTS

ABBREVIATIONS

BMD4	Benchmark Definition 4th Edition
BOP	Balance Of Payment
BPM6	Balance Of Payments and International Investment Position Manual 6th Edition
BRICS	Brazil, Russia, India, China, And South Africa
CAATSA	Countering America's Adversaries Through Sanctions Act
CBR	Central Bank of Russia
CIS	Commonwealth Of Independent States
EAEC	Eurasian Economic Community
EU	European Union
FDI	Foreign Direct Investment
FE	Fixed Effect
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GNI	Gross National Income
GUI	Graphical User Interface
GVC	Global Value Chain
IDP	Investment Development Path
IFDI	Inward Foreign Direct Investment
IMF	International Monetary Fund
IPP	Investment Policy and Promotion
LM	Lagrange Multiplier
M&A	Mergers And Acquisitions
MNCs	Multinational Corporations
MNEs	Multinational Enterprises
NOIP	Net Outward Investment Position
OBR	Bank Of Russia Bonds
OECD	Organization For Economic Co-Operation and Development

OFC	Offshore Financial Centers
OFDI	Outward Foreign Direct Investment
PCA	Principal Component Analysis
PFI	Policy Framework for Investment
PPP	Purchasing Power Parity
R&D	Research And Development
RE	Random Effects
SDN	Specially Designated Nationals and Blocked Persons List
SME	Small And Medium-Sized Enterprises
SPSS	Statistical Package for The Social Sciences
SPV	Special Purpose Vehicle
UNCTAD	United Nations Conference on Trade and Development
VAT	Value Added Tax
VIF	Variance Inflation Factor
WTO	World Trade Organization

1. INTRODUCTION

Foreign direct investment (FDI) is often viewed by developing countries as an opportunity to boost their economies. FDI, as well as other forms of participation of multinational enterprises (MNEs) in the local economy, can act as a shortcut to structural change and help break the cycle of poverty and underdevelopment. It can play the role of a significant catalyst for production and trade in developing countries and demonstrates the potential to make important contributions to economic development in terms of investment, employment and foreign exchange (Narula and Pineli, 2016). In addition, FDI's spill-over potential such as increasing productivity through the diffusion of knowledge and technology from foreign investors to local firms and workers is seen as the most promising aspect of FDI (Farole & Winkler, 2012).

Nowadays foreign direct investment has become a part of the international production process. Current investment policy debates are increasingly concentrated on how to enable countries to seize the opportunities offered by Global Value Chains (GVCs). Open trade and investment regimes encourage participation in global value chains. Many studies have shown how FDI can enhance productivity, increase investment in R&D, and create better paid jobs in host countries.

Arnold & Javorcik (2009) shows that a transfer from domestic to foreign ownership improved performance in the manufacturing sector of Indonesia. Kee (2015) detects evidence for improved productivity among local enterprises that share a supplier with foreign companies. Keller & Yeaple (2009) estimate international technology spillovers to U.S. manufacturing firms via imports and foreign direct investment (FDI) between the years of 1987 and 1996, accounting for about 14% of productivity growth in U.S. firms.

Many countries continued policy efforts aimed at attracting FDI. Different types of incentives for FDI attraction are used. Tax holidays are least prevalent in OECD countries and most prevalent in the rest (James, 2013).

A well-organized investment promotion agency can play an important role in boosting FDI. Using data from 156 countries, Harding & Javorcik (2011) find that countries with investment promotion intermediaries can handle investor inquiries in a more professional manner. Gómez-Mera et al. (2015) indicate that investment promotion agencies are a widely used and a helpful resource for investors once they have decided to enter a specific market.

The processes of world economy globalization form new trends in the cross-border movement of capital. At the beginning of the XXI century an increase in the role of a group of states with a dynamically developing economy, first, the BRICS countries, in the modern capital movement has

become one of the phenomena of the world economy. However, there are still many theoretical questions and practical problems associated with the birth and evolution of these processes, to which so far there are no definite answers.

Many researchers in the theoretical analysis of this phenomenon focus on companies, the home state, the host country, as well as the identification of differences in the investment expansion of multinational companies (MNCs) from developed countries and those from the developing world. Other experts concentrate on studying the applied aspects of this problem, primarily on the quantitative parameters of capital outflow from the country. However, outside the scope of the study, as a rule, there remains an analysis of the driving forces of these processes in Russia, or the impact of direct investment outflow on the national economy development. For Russia, this area of scientific analysis is associated with the search for a country's development strategy.

After the crisis of 2008–2009 under the influence of a changing situation on world markets and the economic situation of Russia, new trends in the foreign direct investment outflow from the country emerged. In this regard, it is necessary to rethink both the positive and negative impact of participation of domestic business in the cross-border movement of capital on the transformation of foreign economic relations and sectors of the country's economy. It is about developing a new paradigm in understanding the essence of the outflow of FDI from Russia and its role in the national economy development (Pakhomov, 2012).

Russia's outward foreign direct investment (OFDI) has garnered increasing attention due to its distinctive characteristics and the strategic motives driving Russian multinational corporations to expand abroad. Unlike other emerging markets, Russian OFDI is heavily influenced by geopolitical considerations, state ownership, and a strategic focus on sectors such as energy, mining, and technology. This unique context presents challenges to the applicability of traditional FDI theories, such as the Investment Development Path (IDP) and the OLI framework, which often emphasize economic factors and market-seeking behavior.

This dissertation seeks to address these challenges by critically analyzing the drivers of Russian OFDI, assessing the relevance of existing FDI theories, and developing a theoretical framework that better captures the nuances of Russia's investment behavior. By exploring the intersection of economic, geopolitical, and institutional factors, this study aims to provide a comprehensive understanding of Russian outward FDI and its implications for the country's economic development and global positioning.

Due to the unprecedented uncertainties and complexities introduced by the COVID-19 pandemic and the ongoing geopolitical conflict between Russia and Ukraine, this dissertation intentionally

focuses on the period preceding the COVID-19 outbreak. The pandemic disrupted global economic patterns, including FDI flows, and introduced significant volatility, making it challenging to distinguish between long-term trends and short-term fluctuations caused by the crisis. Similarly, the conflict between Russia and Ukraine has further impacted economic relations, trade, and investment strategies on a global scale, complicating the ability to isolate underlying economic conditions from the effects of sanctions and political instability.

By concentrating exclusively on the pre-pandemic period, this dissertation aims to provide a more accurate and coherent analysis of Russian FDI, shedding light on the fundamental economic factors, policy frameworks, and international trends that shaped Russia's FDI landscape before these significant external shocks occurred. This approach allows for a clearer understanding of Russia's FDI behavior, without the distorting effects of these recent, extraordinary events.

1.1 Problem statement

The application of traditional FDI theories to Russian OFDI presents several conceptual and empirical challenges. The IDP and OLI frameworks, which have long been used to explain the patterns and motivations behind FDI, often fall short when applied to the Russian context. Russia's geopolitical landscape, characterized by Western sanctions, political tensions, and strategic alliances, significantly influences the investment decisions of Russian MNCs. Additionally, the prevalence of state-owned enterprises and the dominance of the energy sector further complicate the applicability of traditional models that primarily focus on economic and market factors.

Moreover, Russian OFDI is marked by unique practices such as round-tripping, where capital is funneled through offshore jurisdictions before being reinvested in Russia, often for tax optimization or regulatory evasion. These practices challenge the conventional understanding of cross-border investments and highlight the need for a revised theoretical framework that accounts for the complex interplay of geopolitical, economic, and institutional factors.

This study seeks to address these gaps by providing a critical examination of existing FDI theories, exploring their limitations in the Russian context.

1.2 Significance of the study

A useful framework often used by policymakers to formulate FDI policies for developing countries is the Investment Development Program (IDP), built by John H. Dunning. This research will provide an overview of foreign direct investment, its types, sources, impact and define the stage

of development of Russia by IDP. The application of economic theories of FDI in the formation of a country's investment strategy can increase its predictability and effectiveness.

From the beginning of the XXI century internationalization of the Russian economy has been deepening and growing, albeit limited in scope and direction. Modern Russia is already becoming a full-fledged participant in international economic relations, although its position in the global economy is still rather unstable and depends primarily on the dynamics of prices and the situation of international commodity and financial markets, as well as political situation.

It is a noticeable strengthening of the investment aspect of the integration of the country into the world economy, which occurs against the background of global challenges and internal restrictions. First, there are the peculiarities of the circulation of Russian capital abroad and the offshore component of this movement.

The problem of the massive outflow of capital from the country, primarily offshore, is ambiguous. It is negatively perceived by the state and society. The lack of scientifically based answers to questions about the reasons for the expansion of domestic companies abroad, about the possibilities for its further development, as well as about the forms and extent of the impact of globalization of business on the national economy development can limit the assessment of the positive effects of these processes for the Russian economy (Kuznetsov, 2007). Typically, outward FDI of the country exceeds inward and Western sanctions only facilitate this ratio. However, the existing potential of OFDI must be converted into a competitive advantage of the country, which can be a factor in the implementation of the foreign economic strategy of Russia.

This research holds substantial significance for both academic inquiry and practical policymaking. Academically, it contributes to the FDI literature by challenging the assumptions of traditional theories and extending them to accommodate the distinctive characteristics of Russian OFDI. By offering a deeper understanding of the strategic motivations and constraints faced by Russian MNCs, this study enriches the discourse on FDI and highlights the need for a more nuanced theoretical approach.

For policymakers, the findings of this research provide valuable insights into the formulation of investment policies that leverage Russian OFDI for national economic development. Understanding the drivers and challenges of Russian OFDI can inform strategies that enhance the effectiveness of investment activities, mitigate potential risks, and align with national priorities. By developing policies that reflect the realities of the global market and Russia's strategic interests, policymakers can strengthen the country's economic resilience and global competitiveness.

Moreover, the study's focus on the role of geopolitical factors, state ownership, and sectoral specialization offers practical implications for managing the complexities of Russian OFDI. By addressing these factors, policymakers can create an enabling environment that fosters sustainable economic growth and enhances Russia's position in the global economy.

1.3 Objectives of the study

The primary objective of this study is to analyze the distinctive features and drivers of Russian outward foreign direct investment and evaluate the applicability of traditional FDI theories in explaining these phenomena. This research aims to provide a nuanced understanding of the factors influencing Russian OFDI and contribute to the development of more effective investment policies in Russia. To achieve this overarching goal, the study focuses on the following specific objectives:

- Identify and Analyze Key Trends: The study seeks to identify and analyze the key trends and characteristics of Russian OFDI, including sectoral and geographic patterns. By examining these trends, the research aims to provide insights into the strategic choices made by Russian MNCs in their international investment activities.
- Evaluate Traditional FDI Theories: The research assesses the relevance and limitations of traditional FDI theories, such as the Investment Development Path model and the OLI framework, in explaining Russian OFDI. This evaluation will help determine whether these theories can adequately capture the unique aspects of Russian investments abroad or if new theoretical approaches are needed.
- Explore Influential Factors: The study explores the impact of geopolitical factors, state involvement, and sectoral specialization on the motivations and destinations of Russian OFDI. Understanding these influences is crucial for developing a comprehensive picture of how Russian MNCs navigate the global investment landscape.
- Develop Policy Recommendations: A long-term goal of this research is to develop suggestions that assist in setting and refining Russia's investment policy. By identifying the main features of Russian OFDI and its implications, the study aims to offer practical guidance to policymakers for enhancing foreign investment management and optimizing the benefits of OFDI for national economic development.
- Review FDI Characteristics and Impact: The study provides a comprehensive review of the characteristics, impact, and sources of FDI in the Russian context.

The findings of this study will be valuable to Russian policymakers and business leaders by offering insights into better practices and tools for managing foreign investments. By aligning

investment strategies with national priorities and global market realities, Russia can strengthen its economic resilience and global competitiveness.

1.4 Research questions and hypotheses

This study is guided by several key research questions and hypotheses that address the complexities and unique characteristics of Russian foreign direct investment:

- What are the key characteristics and trends of Russian OFDI, and how do they differ from traditional FDI patterns? This question seeks to explore the distinctive features of Russian OFDI, including its sectoral focus and geographic distribution, and how these elements diverge from conventional FDI models.
- How applicable are traditional FDI theories, such as the Investment Development Path model and the OLI framework, in explaining the motivations and behavior of Russian OFDI? This question aims to assess the relevance of these theories in the Russian context and identify any theoretical gaps.
- What roles do geopolitical factors, state ownership, and sectoral specialization play in shaping the patterns and destinations of Russian OFDI? This question examines the impact of external political dynamics and internal structural factors on Russian investment decisions.
- How can Russian investment policies be optimized to enhance the benefits of OFDI and mitigate potential risks? This question focuses on identifying strategic policy measures that can improve the effectiveness of Russian OFDI and align it with national economic goals.

Based on these research questions, the study proposes the following hypotheses:

- H1: The IDP model is inadequate in identifying the development stage of the Russian economy due to its unique economic and geopolitical characteristics. Unlike other economies, Russia's FDI patterns do not align neatly with the sequential stages proposed by the IDP model, as they are influenced by non-traditional factors such as state involvement and geopolitical strategies.
- H2: Geopolitical considerations and state ownership significantly influence the patterns and destinations of Russian OFDI. This suggests that Russian OFDI is heavily shaped by political alliances, strategic interests, and state-directed investment strategies.
- H3: Russian investment is significantly attracted by locations where economic indicators reflect favorable conditions in the host economy. This suggests that Russian firms prioritize investing in countries with strong economic fundamentals, including stable political

environments, robust market growth, and favorable regulatory frameworks, which align with their strategic objectives.

Through this comprehensive investigation, the study aims to provide a robust theoretical and empirical foundation for understanding Russian outward FDI and its implications for economic policy and development. By addressing these research questions and testing these hypotheses, the study seeks to contribute valuable insights into the strategic management of Russian OFDI and its role in the global economy.

2. LITERATURE REVIEW

The initial section of the literature review is devoted to comprehending general definitions associated with foreign direct investment. The subsequent two sections delve into Dunning's FDI theory, specifically exploring the eclectic paradigm and its dynamic form, known as the investment development path. Additionally, global investment trends post the 2008 crisis are examined, drawing insights from the World Investment Reports by UNCTAD. The ending section of the literature review provides an overview of the Russian economy in relation to foreign direct investment before Covid-19.

2.1 Theoretical aspects of FDI

In this section, the focus will be on discussing the theoretical aspects of FDI. Beginning with its definition and different types, the discussion will then progress to the eclectic paradigm and its dynamic form, known as the Investment Development Path.

2.1.1 Foreign Direct Investment

The role of foreign direct investment (FDI) in the country's development has been debated by scholars and policy makers for many years. To answer such question is difficult, not only because of different existing ideological dogmas, but also because of evolution of basic characteristics of cross-border investment through the time. The FDI model has changed significantly over the past decades. Traditionally, FDI has been considered as the movement of capital mainly exercised by multinational corporations (MNCs) from developed countries to developing ones that traditionally seek to exploit natural resources in the latter (Echandi et al, 2015).

According to Echandi et al (2015) such model has been changed. Nowadays FDI is connected not only with capital, but also with technology and know-how. They move not only from developed countries to developing, but also between developing as well as from developing states to developed. FDI is currently executed not only by large MNEs, but also by relatively small companies from developing countries that invest in countries outside theirs.

Today FDI has become part of an international production process, whereby investors situate in one country to produce goods or services, which are part of a global value chain (GVC). The importance of understanding the influence of GVCs on the world economic processes and economies increased the relevancy of this topic on the international agenda. It contributed to the new international approaches development of assessing the participation of countries in GVCs and their possible consequences (UNCTAD, 2013a).

Current investment policy debates are more and more concentrated on how to let countries seize the opportunities offered by GVCs which would diversify the export structure towards goods and services with higher value added and increase exports. Investment regimes and open trade encourage participation in GVCs. As well as education, infrastructure, and labor market policies play a role in this process. However, it is necessary to better understand policies that could maximize the potential benefits of FDI for host countries (Echandi et al, 2015).

Foreign direct investment is widely regarded as an important catalyst for economic development. Policymakers and economists believe that FDI can improve the technological potential and management style in the host countries, both in companies receiving FDI and in companies operating in the same industry or upstream industries. To reinforce these positive spillovers, governments in many developing countries and countries with economies in transition introduce special policies aimed to attract FDI (Liebscher et al, 2007).

However, firstly it is important to define what is foreign direct investment. According to OECD (2009), FDI is a category of investment that represents a long-term relationship and lasting interest and control of a company operating in another country (non-resident), so called a parent company, in a local (resident) company (affiliate or foreign owned company etc.). Foreign investments are classified as FDI if they represent the acquisition of more than 10% of the shares in a domestic company that allows to influence significantly, to determine the business strategy, business decisions of a subsidiary. Most FDI is carried out by multinational corporations.

There are two broad categories of FDI which are brownfield investments and greenfield investments. Many companies believe that it is better to start from scratch, which means that they would prefer to choose to build their own factories and facilities in a foreign country. Moreover, they would choose to train people to work at these factories. These are so-called greenfield investments. Brownfield investment does not suggest that foreign companies take responsibility for creating something from scratch in a foreign country. They would enlarge their activities through cross-border mergers and acquisitions (M&A) that would allow them to start heads-up immediately, without creating something from scratch (Segal, 2019).

According to Moosa (2002) two types of FDI can be distinguished from the perspective of investors. They are horizontal and vertical FDI. Horizontal FDI is investment in companies abroad (in the host country) within the same industry to produce goods or provide services that have been done by the investor in the home country. The motive for horizontal investments can be avoidance of tariff and non-tariff barriers, reduction in transportation costs and the effect of scale production. Product differentiation is a crucial element of market structure for horizontal FDI. Vertical foreign

direct investment, on the other hand, is investment in industries belonging to various production stages of a single product. It allows multinational companies to replace parts of production and marketing systems in ineffective markets to more efficient. Vertical FDI can be undertaken to exploit raw materials (backward vertical FDI) or to be closer to the consumers through the acquisition of distribution outlets (forward vertical FDI).

Furthermore, Moosa (2002) classified FDI from the perspective of a host country. Import-substituting FDI, export-increasing FDI, government-initiated FDI can be distinguished. Government-initiated FDI may be caused, for instance, if the government wants to eliminate the deficit of balance of payment and offers incentives to foreign investors. Import-substituting FDI involves the production of goods that have been imported before by a host country. In this case, imports by the host country and exports by an investing country will decrease. Export-increasing FDI is triggered by the desire to find new sources of input to production, for example, raw materials. In case of this type of FDI, a host country will increase its export to an investing country.

Also, it is important to mention the other two types of foreign direct investment that can be identified: outward and inward FDI. Inward FDI is invested in local resources domestically, when outward is an investment made abroad to another country (Kenton, 2018; Chen, 2018). Both create not only positive but also negative impacts on the host and home economy, especially in the socio-economic development of developing countries.

Since FDI is a fundamental object of study, research approaches to FDI are divided into two main categories, namely macroeconomic and microeconomic theories. The microeconomic approach explains the structure of FDI in terms of enterprises, while the macroeconomic approach studies from a nations' outlook (Anh & Ngoc, 2016).

Nowadays, FDI has become the largest source of external financing in many developing countries. Achieving sustainable development goals will require a huge increase in capital flows to those countries on a scale that only private sector investment can provide. FDI supports development in ways other than providing capital. This helps emerging economies integrate into international markets. It also stimulates productivity growth through increased competition and the spread of knowledge across borders (The World Bank, 2018a).

The standard model states that foreign direct investment creates direct benefits, such as new capital and jobs, which, in turn, increase revenues from taxes and foreign exchange. However, the real impact of FDI on economic development is due to the indirect benefits, such as the transfer of new technologies, labor skills, managerial and organizational practices, and the promotion of competition and innovation (Hornberger, 2011).

However, Liebscher et al (2007) concluded that the exogenous component of foreign direct investment does not induce a robust, positive influence on economic growth and that there is no solid cross-country empirical evidence supporting the claim that FDI expedites economic growth. The researchers found that joint ventures produced positive upstream spillovers to suppliers whereas wholly owned foreign firms produced negative upstream spillovers. The reason can be that joint ventures tended to continue long-standing relationships with suppliers whereas wholly owned foreign firms required more sophisticated suppliers from abroad.

If to break FDI down by sectors, evidence to support the standard model becomes much more vague. Foreign direct investment can create economic transformations for host countries, but not under any circumstances. For instance, the track record of foreign direct investment in the extractive industry does not always demonstrate clear advantages, especially in that it is not able to create spillovers and linkages to local economies (Hornberger, 2011).

Another challenge to keep in mind, and even more a challenge to explore, are the consequences of industrial change. For example, when a state offers incentives to a large new foreign manufacturing operation, it might have impacts on agriculture and retail trade, as farm and retail workers shift to better paid manufacturing jobs (Liebscher et al, 2007). In addition, when economies compete for FDI by offering fiscal incentives to potential investors, the arguments for a clear increase in wealth for the host economy are also less clear (Hornberger, 2011).

But despite this, there is clear evidence that FDI in most cases is truly beneficial for the host economy. According to Hornberger (2011), in developing countries and countries with economies in transition, FDI is responsible for about 2 million new jobs per year. The case is particularly strong when FDI is supported by transparent and strong government institutions, concentrated in sectors that have great potential for linking with the local economy, and using local labor that can absorb knowledge and skills that can help stimulate an active local industry.

Thus, the role of foreign direct investment in economic development is ambiguous. Traditionally, Gross Domestic Product (GDP) growth is seen as a measurement of economic development. Although, infrastructure can be the window through which one can judge the level of development of an economy. It is relevant to mention that most of the infrastructure facilities have historically been under government control and regulation. The poor infrastructure system in the country falls squarely on inadequate policies and highly inefficient implementation (Lakhera, 2008).

At this point a comprehensive role of a government and its policies comes up. More generally, countries that provide reliable and predictable legal systems and efficient public administration may receive more investment and benefit more from it than countries with poor governance

(Liebscher et al, 2007). FDI is a powerful force in developing countries. However, this should not be taken for granted the benefits of FDI as a given. A positive developmental impact is not an automatic consequence of FDI in all cases. The challenge ahead will be for countries to use their potential and work to limit the potential risks associated with FDI (Hornberger, 2011).

Many governments in developing countries face difficulties in designing, coordinating, and implementing investment policies that undermine their competitiveness and jeopardize their ability to attract investment and achieve their growth goals. Attracting foreign direct investment helps link the country's domestic economy with global value chains. Supply chain spillovers lead to economic diversification, technological development, and better business practices. These benefits stem from a clear and effective implementation of investment policies and strategies (The World Bank, 2019a).

For the purposes mentioned above, there is a Policy Framework for Investment (PFI) developed by the OECD that aims to assist governments in designing and implementing good policy practices. It represents a comprehensive, multilaterally backed investment policy tool for identifying the most important issues governments should address to improve the investment climate and enhance the contribution of investment to development. The PFI contains 82 questions to governments in 10 policy areas, which are recognized to be critical for building a sound environment for all investors (Liebscher et al, 2007).

Also, the World Bank has its own strategy to face those issues of investment policy development. It has the Investment Policy and Promotion (IPP) team that works with countries to identify their value proposition as an attractive investment destination. Investment policy should be adapted to the needs of the country client and constantly reviewed in the light of economic and business changes. Especially in countries with a reputation for difficult investment opportunities, governments should offer opportunities for investors in sectors and subsectors with comparative advantages (The World Bank, 2019a).

The Investment Policy and Promotion Logical Framework of the World Bank helps policy makers focus on the right combination of variables that affect how developing countries fit into the international economy. The structure includes three key ideas:

1. Sound policy should link foreign and domestic investment, and not give preference to one over the other.

2. FDI comes in many forms that affect socio-economic development in different ways, and they require special policies based on the typology of FDI.

3. Investment is more than just transactions; they entail relationships between several stakeholders at different stages of the investment life cycle (The World Bank, 2019a).

The main source of data about foreign direct investment of a country is Balance of Payment (BOP). The financial position of a country on the global market is usually estimated according to its balance of payments. It is an important indicator that makes it possible to foresee the degree of a country's participation in world trade and establish its solvency.

The balance of payments is a table of the correspondence of external incomes and expenses in which all foreign exchange earnings received by a given country from other states are recorded, as well as all funds paid by a country to other countries during a certain period. In other words, it can be defined as a statistical summary of all transactions between residents and non-residents for a certain period, usually a year or a quarter. The balance of payments characterizes the level of production and consumption and the development of foreign trade. Its data allow us to trace the forms of attracting FDI, repaying the country's external debt, and changes in international reserves. (Frolova, 2005).

Usually, the Central Bank and statistical offices publish the balance of payments. The figures are mainly based on BOP statistics published by central banks and statistical offices in accordance with the recommendations of the 6th edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6) and 4th edition of the OECD's Benchmark Definition of FDI (BMD4).

As a conclusion to the literature on foreign direct investment, it can be stated that for many years, academics and decision-makers have been enthralled with the complex and ever-evolving subject of how FDI contributes to a nation's growth. The conventional perception of foreign direct investment (FDI) as the flow of money, mostly from industrialized to poor countries for the purpose of resource exploitation, has changed during the last years. These days, foreign direct investment (FDI) encompasses not just financial resources but also the transfer of technology and knowledge. Investments can flow in several directions, such as from developing to developed nations and back again. The topic is relevant on a worldwide scale due to the incorporation of FDI into Global Value Chains (GVCs) and the focus on increasing involvement in these chains. Although FDI is commonly perceived as a catalyst for economic growth, its actual effects extend beyond these apparent advantages and include the spread of technology, the enhancement of skills, and heightened competitiveness. The impact of foreign direct investment (FDI) on economic growth is subject to variation and depends on various factors, including the nature of the investment and the industry in question. The main obstacle facing nations is making the most of

FDI's potential while reducing the risks involved with it through thoughtful policy and open governance. In the end, nations hoping to capitalize on FDI's potential as a spur for economic growth and development must have a thorough awareness of the various forms and consequences of the investment. Various theories, one of which will be reviewed in the upcoming chapter, have been developed because of the importance of the causes and effects of foreign direct investment.

2.1.2 The eclectic paradigm

The importance of the causes and consequences of FDI allowed the development of various theories that try to explain why MNCs choose one country in preference to another and why they choose a specific entry mode. Among all, Dunning's eclectic paradigm is a common framework for analysis of multinational companies' international business (Nha, 2013). One of its applications is the investment development path (IDP), which summarizes the international investment development process. The inward and outward investment position of the country is consistently linked to its economic development compared with the rest of the world. This idea was considered by John Dunning in 1979 in his Investment Development Path (IDP) concept which was extended and revised in his further works (Dunning & Narula, 1996).

To summarize the arguments on FDI, Dunning came to an eclectic paradigm to give a more adequate explanation of the establishment and development of FDI. Dunning distinguishes three conditions that must be met for a company to be engaged in the process of foreign direct investment:

- Ownership-specific advantages (O-advantages);
- Location-specific advantages (L-advantages);
- Internalization advantages (I-advantages).

Two types of Ownership-specific advantages are identified by Dunning (1993). The first type of advantage involves the privileged ownership of assets by the firm (Oa). It includes, first, intangible assets, such as special technology which only this firm has. These advantages enable the company to create new assets, thus increasing their competitiveness. Another type of Ownership advantage derives from the joint management of existing assets (Ot) and additional assets that may arise from cross-border activities. It includes the advantages of branches of existing companies over new ones. These branches' advantages compared to new firms stem from its affiliation to the larger and more influential parent company. This gives branches market knowledge, access to cheaper resources, low marginal R&D costs, etc. Thus, a company operating in many countries is in a better position than a local company.

Dunning formulated the idea of the advantages of ownership in 1977, but the first conjectures that an investing company should have some advantages over a local firm were outlined in the book "American Investments in the British Manufacturing Industry" in 1958. Productivity in the American manufacturing industry was 2.5 times higher than in the UK in the 1950s. The question immediately arose: the reasons for the differences in productivity are that the US has more advanced resources or this was because US firms better managed the resources available at their disposal? Dunning hypothesized that the branches of American companies operating in the UK should work no worse than their parent companies, and better than their local British competitors if the reason for differences in productivity is in management. It was called the ownership-specific advantage (Dunning, 1993)

In contrast to the advantages of ownership, which are internal to the firm, the advantages of location play the role of an external factor. The country to which FDI is directed should have special advantages in terms of location, which can be used with other advantages. Location advantages include proximity to consumers, cost advantages in terms of production in the host country markets, government incentives, appropriate economic structure, infrastructure, etc. Recalling Dunning's previous example of the activities of US firms in the UK manufacturing industry, it is assumed that US subsidiaries in Great Britain work no better than the local competitors, therefore worse than the parent companies in the United States. In this case, according to Dunning, it may be due to specific territorial or location characteristics of the US economy which are not transmitted. If the US subsidiaries operate successfully in the UK market, it can mean that the market has certain qualities that make it attractive for foreign direct investment. The phenomenon is called the Location-specific advantages.

It can be observed well in Russian conditions, when Russia's attractiveness for foreign investors can be explained by the cheap resources and large sales markets. Minor inflows of FDI are motivated by an intricate taxation system, a contradictory legal base, a high degree of corruption, non-compliance with property rights, i.e. factors that shape the investment environment (Volgina, 2003).

To explain the activities of companies across national boundaries, Dunning added the notion of advantages of Internalization that are related to the way firms organize the use of the existing advantages of Ownership and Location. The advantages of internalization are tightly related to the Ownership advantages. According to Dunning, internationalization helps businesses to enlarge and acquire those assets that give them the Ownership advantages. The scholar distinguishes

between the advantages of ownership that a firm owned before it became multinational and the advantages that grow because of the direct participation of firms in international production.

In addition to OLI advantages, FDI patterns and multinational companies' strategies also relate to four main international investment motives (Anh & Ngoc, 2016):

1. Market seeking: such investments relate to the expansion of international markets. This motive is the basic feature of internationalization at the very first stage and the most popular for MNCs from developing countries.
2. Natural resources seeking: this FDI motive is aimed at increasing long-term supply of natural resources (such as gas and minerals) for MNCs. These enterprises mainly conduct business in the primary industries or in those that utilize large amounts of natural resources. Natural resources-seeking is a key motive for a large part of MNCs from developing countries, especially from countries with limited resources, because of its importance in ensuring the supply of resources. The choice of location for investment does not depend on the proximity or similarity in the region but depends on the availability of natural resources.
3. Efficiency seeking: those investments are usually made by MNCs from relatively more developed countries, focusing on certain industries (for example, electronics and textiles). MNCs are expanding their value chain through foreign direct investment in emerging markets, whose production costs are lower. This motive depends on the nature of products and forms of international production.
4. Strategic asset seeking: such investments are carried out with the aim of enhancing existing competitive advantages, acquiring new ones. This motive is relatively modest for MNCs from developing countries, since strategic asset seeking FDI requires excellent preconditions for absorption. Since almost all such FDI is aimed at promoting the development of MNCs, this is rarely a vital motive for MNCs from developing countries.

Thus, the eclectic theory of international production must undoubtedly be recognized as a successful and well-functioning theory. The OLI paradigm introduced into science is widely used by economists dealing with the problems of the activities of MNCs and international direct investment.

Dunning's approach is very attractive because he proposes to consider FDI because of the availability of the advantages of ownership, location and internalization at the same time. In this way, Dunning tries to combine macro and micro elements of analysis and explain international production and trade in the same analytical format.

The strength of the OLI framework is that it is a dynamic approach in which the advantages of ownership, internalization and location interact with each other. The paradigm states that the value of each set of advantages and their configuration will vary depending on countries, regions, or industries, and depending on the firms involved in international production. The advantages of the location of countries can create incentives for internalization, at the same time internalization creates additional advantages of ownership. Changes in inflows and outflows of country investments can be explained by changes in the advantages of ownership, location, and internalization.

However, it should be mentioned that according to Kalotay (2006), more than in other countries, the environment and factors in the home-country play a key role in determining outward FDI of Russia. The OLI paradigm does not have the fourth “home-country” factor. There may be sundry arguments in favor of the applicable "OLIH" theorem. One of them is the fact that the absence of home-country factors creates problems of theoretical interpretations of outward FDI. It may be needed to consider state-ownership as an additional factor, as in Russia (Kalotay, 2006).

Thus, Dunning's eclectic paradigm examines the rationale behind multinational firms' investment decisions regarding nations and entry points. Three conditions make up Dunning's paradigm: internalization advantages, ownership-specific advantages, and location-specific advantages. Home-country variables could be a significant fourth requirement to include in the case of Russia. This study presents the implementation of the Investment Development Path, a dynamic form of eclectic paradigm.

2.1.3 Investment development path

As a dynamic form of eclectic paradigm can be considered the Investment Development Path. It is determined by Dunning himself as “a dynamic approach” (Dunning & Narula, 2002). The investment development path model serves as a significant component of the research framework for this thesis.

The IDP studies the relationship between a country’s net outward investment position and its various stages of development. The model claims that a country tends to experience five different stages of economic development. These 5 stages can be classified by the country's trend towards a net FDI investor and/or net FDI recipient. In essence, the IDP model is a continuation of the Dunning conditions on the MNCs internationalization at the macro level to explain the structure of FDI in the country. However, Dunning stressed that not all countries must go through all five stages. Moreover, countries are moving not only forward, but also in the opposite direction on the

IDP (when economic growth or recession occurs). Furthermore, some countries may miss one of the stages of the IDP.

The hypothesis is that when a country develops, its OLI configuration changes (Anh & Ngoc, 2016). With that, changes in FDI flows have an impact on the country's structure of the economy. All conditions for changes and impacts on the national developmental trajectories are definable. Dunning proposed the estimate in the form of a function to quantify this relationship:

$NOIP = \alpha + \beta_1 GDP + \beta_2 GDP2 + \mu$

Thus, according to Dunning and Narula (1996) the investment development path suggests that countries typically go through 5 basic stages of development. These stages can be classified according to the tendency of these countries to inward and/or outward direct investment. The tendency depends on the extent of the ownership specific (O advantages) advantages of the local companies; the competitiveness of the location-related resources and capabilities of this country compared with other countries (L advantages); decision of local and foreign firms to use their Ownership advantages in conjunction with the location-based endowments through internalizing the market for these advantages (I advantages). Figure 1 presents the pattern of the IDP relating to the country's net outward investment (NOI) position.

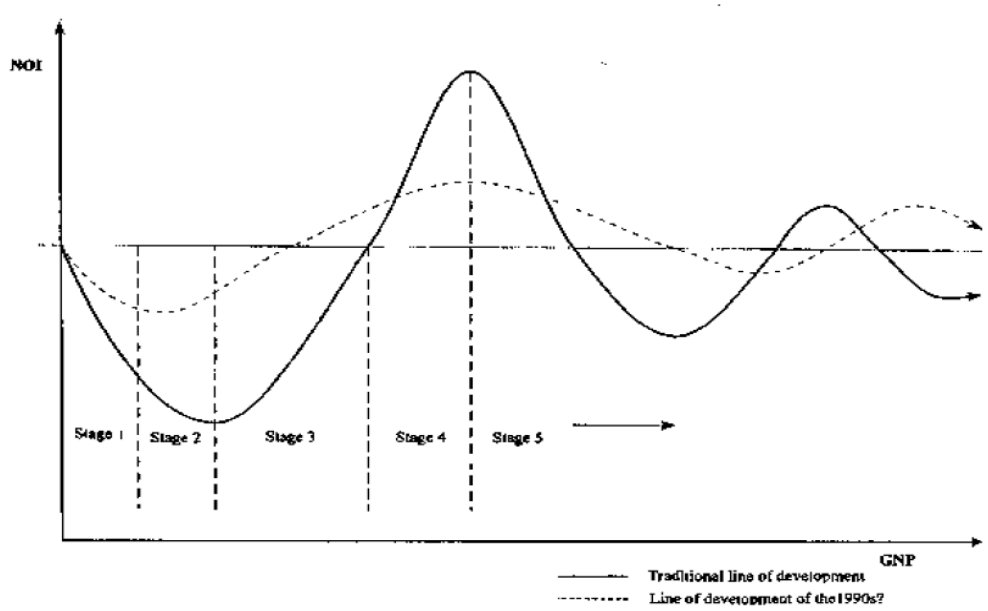

Figure 1. The Investment Development Path (IDP)
Source: Dunning & Narula, 1996.

Dunning and Narula (1996) described the main features of each stage. In Stage 1 of the IDP, the country's Location advantages are assumed to be insufficient to attract inward direct investment. This stage is characterized by low income, inadequate infrastructure, inappropriate government

policies or economic system, poorly educated or motivated labor force. There is most likely to be very little OFDI. Foreign companies prefer to import from and export to this market. Indigenous firms have few Ownership advantages. Labor-intensive manufacturing and the primary product sector will be dominant. Government intervention can be carried out by, first, upgrading of human capital through education and providing basic infrastructure, second, by diversity of economic and social policies, for example, export subsidies and import protection. However, government intervention is limited at this stage.

Scholars presume that during Stage 2 outward FDI remains low and inward FDI starts to rise. Domestic markets can increase their purchasing power or size, making some local production by foreign companies profitable. In that case, it takes the form of import-substituting production investment. Host governments stimulate such FDI by imposing tariff and non-tariff barriers. At this stage of IDP, inward direct investment of export-oriented industries will be in primary commodities and natural resources. However, the extent of the necessary infrastructure offered by the host country can be a decisive factor. The ownership advantages of indigenous companies will have increased compared to the first stage. Outward direct investment can be trade-related or market seeking or strategic asset seeking in developed countries. However, the rate of growth of outward FDI is lower than the growth rate of inward direct investment.

Stage 3 is associated with a less impressive growth in inward FDI. It is ultimately overcome by outward FDI. The net foreign direct investment stock will begin to grow for the first time, even though it has remained negative sometimes. Behind this change are growing O-specific advantages of indigenous firms. They become less specific to the country and more specific to firms. Stronger domestic companies will be more competitive in the domestic market. Companies participate in resource seeking investment in less developed countries, as well as in strategic asset and market seeking investment in more developed countries. Government policies continue to focus on diminishing structural market imperfections in resource-intensive industries. Inward direct investment in sectors where the comparative O advantages of firms are the weakest can be attracted by the government.

Stage 4 is achieved when OFDI stock is greater than or equal to inward direct investment stock. The location-bound advantages become based on the created assets. The O-specific advantages of companies arising from the management of geographically distributed assets become much more important than those based on the host country's specific characteristics. OFDI will continue growing. Enterprises seek to maintain their competitive advantage by moving activities that lose their competitiveness to offshore locations and reacting to trade barriers set by countries. Intra-

industry production has become comparatively more important. This is due to the growing trend of multinational enterprises (MNEs) towards the internalization of trade and production. The role of government may change at this stage. Continuing to perform its functions to maintain competition and reduce market imperfections, the government moves towards reducing the economic activity's transaction costs and facilitating effective market operation.

At Stage 5, the country's net outward investment position first falls and then fluctuates around zero. Both outward and inward FDI are likely to continue to grow. Cross-border transactions will be conducted by and within MNCs. Countries' positions of FDI become more evenly balanced since countries converge in the structure of their location-bound assets. In addition, the MNCs' ownership advantages are less dependent on the natural resources of their country. They depend more on the ability of companies to effectively organize their advantages, their ability to acquire assets and to exploit the gains of cross-border common governance. Stage 5 in the IDP corresponds to the current situation in the developed countries.

Thus, the Investment Development Path (IDP) reflects that there is a dynamic relationship between FDI and the level of development of a host (and later home) country. The concept became the base of many empirical and theoretical studies. Recently, numerous authors conducted an investment development study using the IDP model for countries that have been effective in terms of political implications. The IDP proposed by John H. Dunning is derived from an eclectic paradigm. It is an extension of Dunning's conditions for the MNCs' internationalization at the macro level to explain the country's patterns of FDI (Anh & Ngoc, 2016).

As it was written before, the IDP is widely used by many authors to examine the relationship between a country's economic development and its foreign direct investment position. However, the IDP model has been facing limitations. The limitations of the model in empirical research were pointed out by some authors (Duran & Ubeda, 2001; Narula & Dunning, 2010).

Anh & Ngoc (2016) consider the limitation of variables as one of problems of the IDP model. Only two variables are utilized by Dunning: NOIP and GDP, where NOIP is the Net Outward Investment Position and GDP is the Gross Domestic Product of a country. NOIP is not a complete indicator to analyze the effects of structural changes in FDI. Fluctuations in NOIP values at each stage can also be a constraint. NOIP for both countries in Stage I, where there is no or very little IFDI, and Stage V, with significant FDI, are 0. Also, GDP is also not a sufficient indicator for measuring the level of development of an economy.

Another limitation of the model is data selection. Dunning used data on FDI flows in his research. However, in recent studies, some authors used data on FDI stocks. The cause is that previous

databases on FDI flows were insufficient, which led to errors in calculating the NOIP. Conversely, the value from greenfield FDI or mergers and acquisitions, which is likely to be a structural change, rather than a quantitative change, can be included in data on FDI stocks. Therefore, care must be taken when selecting FDI data that corresponds to the objectives of a study.

The IDP measures the amount of FDI, but it is also important to measure the quality of FDI. The quality of FDI is related to how FDI is carried out in accordance with the goals and strategies of the host country to promote their advantages. In developed countries FDI quality means investing in intellectually intensive industries, as well as value-added activities in global value chains. For developing countries, the quality of FDI is important because investment contributes to the transfer and absorption of technology by the host country. In addition, there are other important factors, such as FDI forms, the natural structure of the host country, its policies and public administration.

When it comes to FDI and its quantity, as it was mentioned prior, traditionally it was considered that FDI went mainly from developed countries to developing ones. Developing countries and countries with transition economies have received more than half of global FDI inflows since 2010. FDI flows to developing countries for the first-time surpassed flows to developed countries in 2012 (UNCTAD, 2013b). Saying that it is important to review global investment trends.

2.2 Global investment trends

The fundamental idea behind international capital flows is that short-term flows can be easily reversed, while long-term flows are more stable. Crises are associated with withdrawals of short-term capital flows and an increase in foreign direct investment flows. Thus, it is generally accepted that foreign direct investment is least subject to cyclical fluctuations and is sufficiently resistant to crises. However, in recent years, despite the background of relatively stable growth of the world economy, there has been a drop in FDI.

Following the financial crisis in 2008, the flow of world FDI declined by more than 20% for two consecutive years and dropped from a record nearly $ 2 trillion to $ 1.19 trillion according to specialists of UNCTAD. The subsequent recovery growth in 2010–2011 again gave way to a fall in 2012 and 2014 (Table 1). The reduction in investments during this period fell on developed countries, mainly the United States and the EU.

Table 1. Growth rates of GDP, trade, GFCF and FDI, 2010-2019 (%).

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP	4.0	2.8	2.3	2.5	2.6	3.5	3.4	3.8	3.6	3.3

Table 1 continued

Trade	12.5	5.9	2.6	3.6	3.4	2.6	2.5	4.7	3.7	1.0
Gross fixed capital formation (GFCF)	5.6	4.8	3.7	3.1	2.9	2.2	2.8	4.1	4.0	3.7
FDI	5	17.3	-18.2	4.6	-16.3	44	-3	-23	-13	3
FDI (projection)	16	22	9.6	3.6	17.1	11.4	-11	5	1-10	5-15

Source: comprised by author based on UNCTAD's World Investment Reports 2009-2020 and IMF's World Economic Outlook Reports 2016-2020

Gonzalez A. (2017) claims that over the past two decades, FDI from developing countries has grown twenty times and in 2017 represents almost one fifth of the global FDI flows. While large developing countries account for most of these outward flows, in 9 out of 10 developing countries there are companies that have opened foreign affiliates. OFDI helps firms from developing countries gain access to technology, capital, and markets. OFDI tends to flow into large growing economies that are geographically close and culturally alike the investor's homeland.

There is growing evidence that outward foreign direct investment can increase the country's investment competitiveness, which is crucial for long-term sustainable growth. Thus, some countries use OFDI as a channel for new developments and catch-up strategies to acquire knowledge and technologies, modernize production processes, increase competitiveness, improve managerial skills and access to distribution networks. OFDI from developing countries accounted for only four percent of global FDI flows in 1995 and in 2014 this share reached a record 27 percent. Therefore, the number of developing countries involved in OFDI has increased markedly. In 1995, 87 developing countries were involved in OFDI whereas in 2018 this number has increased to 109 countries, with 26 of them representing OFDI to GDP ratio of 10 percent or more. The number of host countries, which are increasingly relying on OFDI from developing countries, has also risen sharply. Only 11 countries had at least half of their direct investment in the hands of investors from developing countries at the beginning of the XXI century. By 2012, this number reached 55 countries, many of which combine high risk in the host market and low financial development. Therefore, for these countries, attracting FDI from developing countries may be one of the best options for attracting investment in the context of a relative lack of FDI in advanced economies (Stephenson & Perea, 2018).

After crisis years significant outflow of FDI has been from developing and emerging countries. BRICS (Brazil, Russia, India, China, and South Africa) has started to play an important role in the global investment pattern. According to UNCTAD (2013b), as for FDI outflows, they account for almost one-tenth of the total outflow of investments. The growth of FDI outflow began somewhat

later than the inflow. Moreover, BRICS investors were resilient to the crisis, while the outflow decreased only by 26% in 2009 compared with 41% for the world at large. Thus, the role of BRICS as investors has increased significantly. The lion's share of flows falls on China and Russia. A significant part of BRICS outward stock goes to developed countries. Mostly these investments have market-seeking motives (UNCTAD, 2013b).

However, over the past decade, bilateral FDI between the BRICS countries has grown rapidly. Outward FDI can play an important role in improving the global competitiveness of companies from developing countries. It provides access to strategic assets, skills, technology, natural resources, and markets. Investment flows among developing countries contribute to the enhancement of South-South cooperation. For example, according to UNCTAD (2013b) Russian MNCs found their way to the BRICS countries, increasing their stock to $1,1 billion. The goals of Russian MNCs are to ensure the supply of raw materials to the country and to expand control over the value chains of their own natural resources. It would create sustainable competitive advantages and reinforce their market position in key developing countries.

Emerging multinational companies conduct their domestic activities in difficult conditions. It is usually characterized by ineffective or absent market mechanisms. For example, Russian companies encounter an adverse investment climate, administrative barriers and corruption which are more problematic than in other countries of BRICS. Moreover, a high level of political uncertainty in Russia remained, partly due to geopolitical factors. However, that drawback can switch to an advantage, since the ability of emerging multinational companies to “float” in such an environment makes them stronger than other companies in terms of investment in countries that have the same conditions. However, underdeveloped institutions in their home country prevent companies from finding resources, including skilled labor and knowledge. Despite that, this experience helps emerging multinational companies to develop concrete capabilities that allow them to be more successful than companies from developed market in such conditions.

The after-crisis maximum of world FDI was reached in 2015 and amounted to $ 1.76 billion, which was not much less than in 2007. The main factor behind the global recovery, as is commonly believed, was the sharp increase in the number of cross-border mergers and acquisitions (M&A) that related to corporate finance restructuring. Such operations were especially intensive in the United States and Europe and were accompanied by the transfer of taxpayers of MNCs to jurisdictions with a lower corporate tax rate. At the end of the year, FDI inflows to developed countries doubled, which increased their share in world FDI inflows to 55%.

After a two-year downturn, the outward FDI from developed countries increased and Europe topped that list in 2015 (Table 2). After a sharp spike in investment in 2015, the 3% drop in global flows in 2016 did not look so dramatic. Investment in developed countries continued to grow and the decline in FDI in Europe was offset by an inflow to North America and other developed countries. After two years of decline, capital inflows to transition economies increased significantly, while developing countries were weakening their positions (Table 2).

Table 2. FDI flows 2013–2019 (billions of dollars)

	FDI inflows							FDI outflows						
	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019
World	1425	1404	2042	1983	1700	1495	1540	1381	1367	1708	1543	1601	986	1314
Developed economies	693	670	1274	1265	950	761	800	890	848	1276	1104	1095	534	917
Europe	350	330	720	675	570	364	429	388	301	806	572	539	419	475
United Kingdom	52	25	39	259	101	65	59	40	-151	-67	-38	118	41	31
United States	201	202	468	472	277	254	246	303	333	264	289	300	-91	125
Japan	2	12	3	19	11	10	15	136	131	136	156	165	143	227
Developing economies	649	677	730	652	701	699	685	415	446	400	414	467	415	373
China and Hong Kong	198	242	310	251	247	243	210	188	247	217	256	245	225	176
Transition economies	84	57	37	66	50	35	55	76	72	32	25	38	38	24
Russia	53	29	12	37	26	13	32	71	64	27	27	34	36	22

Source: comprised by author based on UNCTAD's World Investment Reports 2018-2020, (2009-2020)

Contrary to the 5% growth in global direct investment projected in 2017 (to $ 1.8 trillion), their volume declined by 23% (Table 1). Both M&A deals (-22%) and investments in new projects (-14%) contributed to the decline in investment. The decline in investment was observed in all sectors: the reduction in M&A affected the primary sector, industry, and services. The sharp fall in FDI in that year was in opposition to other capital flows. According to UNCTAD, total capital inflows in 2017 increased from 5.6 to 6.9% of GDP due to an increase in portfolio and other investments, represented mainly by bank loans.

While FDI flows to developing countries remained flat, developed countries lost 37% of their capital. Thus, the upward trend in FDI in 2015 and 2016 ended, when the annual inflow of

investments to developed countries exceeded USD 1 trillion (Table 2). Key roles in this process were played by the United Kingdom, in which foreign direct investment declined after exceptionally large-scale mergers and acquisitions in 2016, and the United States, where the authorities took measures to combat tax evasion. Outflows of FDI from developed countries remained at the level of 2016. Due to an uncertain geopolitical situation and sluggish investment activity in the primary sector, investments in transition economies fell by 24% in 2017.

For 2018, UNCTAD again predicted an unstable growth of global investments by 10%, however, in 2018, international statistics recorded their fall by almost 13%. As a result, the aggregate volume of investments dropped to the minimum values of the 2008–2009 crisis period, and for Europe, where the inflow of investments fell by 73%, it returned to the level of the 90s (UNCTAD, 2019a). Transition economies also continued to fall, while developing countries stayed stable in terms of investment inflows. The trend of fall in FDI is associated with geopolitical and foreign trade risks. The global climate for international trade and investment is no longer as favorable as it was before, when the world economy was growing thanks to the export of goods and services as it was noted by UNCTAD experts.

The tax reform of US President Donald Trump, which stimulates the repatriation of foreign American capital to the country, also had a significant impact on the redistribution of global capital flows in 2018. The Tax Cuts and New Jobs Act, signed at the end of 2017, has made major amendments to the US tax code. This affected the investment activity of American multinational corporations and their foreign subsidiaries, and, possibly, intensified the development of returning of production capacity to the country.

In addition, protectionist tendencies have intensified. If in 2003 only 10% of the measures used by the countries limited foreign investment, now it is 34%, while two-thirds of the restrictive measures in 2018 were taken by developed countries. In total, national regulators banned $ 153 billion in international mergers and acquisitions in 2018, double the number in 2017, under the guise of national security or antitrust concerns. The United States, Germany and several other European countries have become more cautious about foreign, especially Chinese, investments, fearing that foreigners will gain access to important technologies and assets. As a result, in the spring of 2019, the European Commission adopted a regulation to check FDI inflow to the EU.

In 2018, the above-mentioned negative factors most of all affected the developed countries, especially Europe, and FDI flows in this group of states decreased by 27% to $ 557 billion, and their share in global capital flows fell to 43%. However, developed countries continue to determine the main trends in the global investment process (Figure 2). FDI inflows to developing countries

were able to remain stable and increased to $ 706 billion. As a result, the share of developing countries increased to 54% of global flows, compared to 46% in 2017. Some of this investment was generated by MNCs from developed countries operating in local markets.

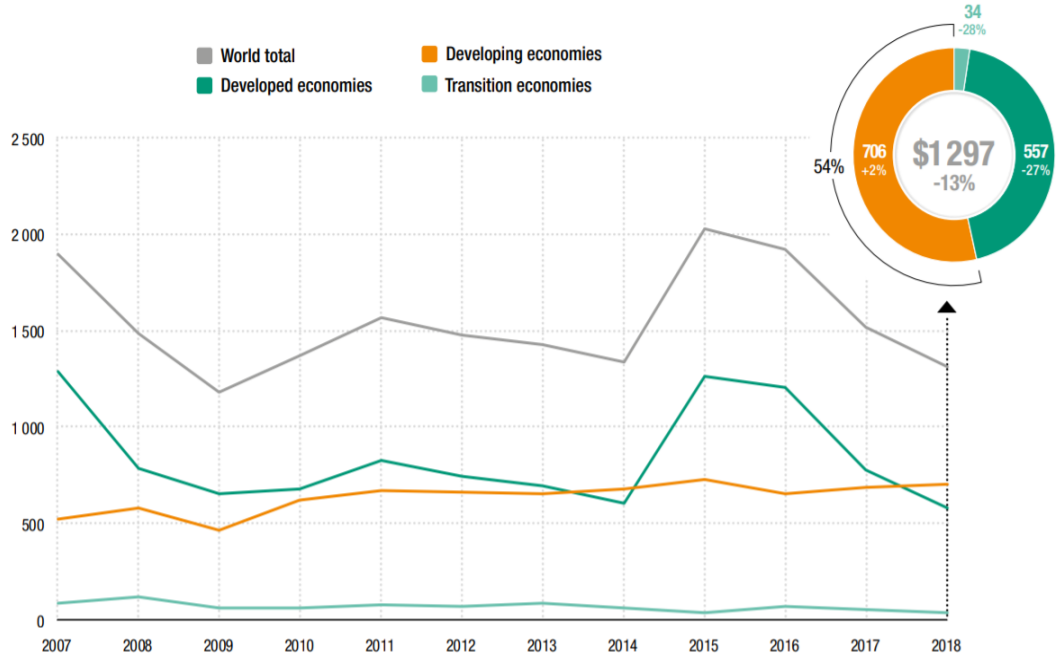

Figure 2. FDI inflows, global and by economic group, 2007–2018 (Billions of dollars, %)
Source: UNCTAD, 2019b

The dynamically developing states of Asia mainly tried to stimulate the inflow of investments. Investments in Vietnam, India, Indonesia, Thailand, as well as other countries of Southeast Asia have increased, since some companies are gradually moving production there from China due to the rise in the cost of labor in the country and the trade conflict with the United States. However, these host states lack the appropriate infrastructure, so it is difficult to count on a steady increase in such investments in the region. In countries with transition economies FDI inflows fell by 28%, and their share in total flows was only 2.6%. This was mainly due to a two-fold drop in FDI volumes to Russia and, in part, to Kazakhstan (-18.3%) and Ukraine (-9.5%).

Although investments in assets in the United States in 2018 decreased by 9% to $ 252 billion, the country is still confidently leading the list of FDI recipient countries, ahead of China by almost two times. The third and fourth places in the UNCTAD ranking are occupied by Hong Kong (China) and Singapore (Figure 3).

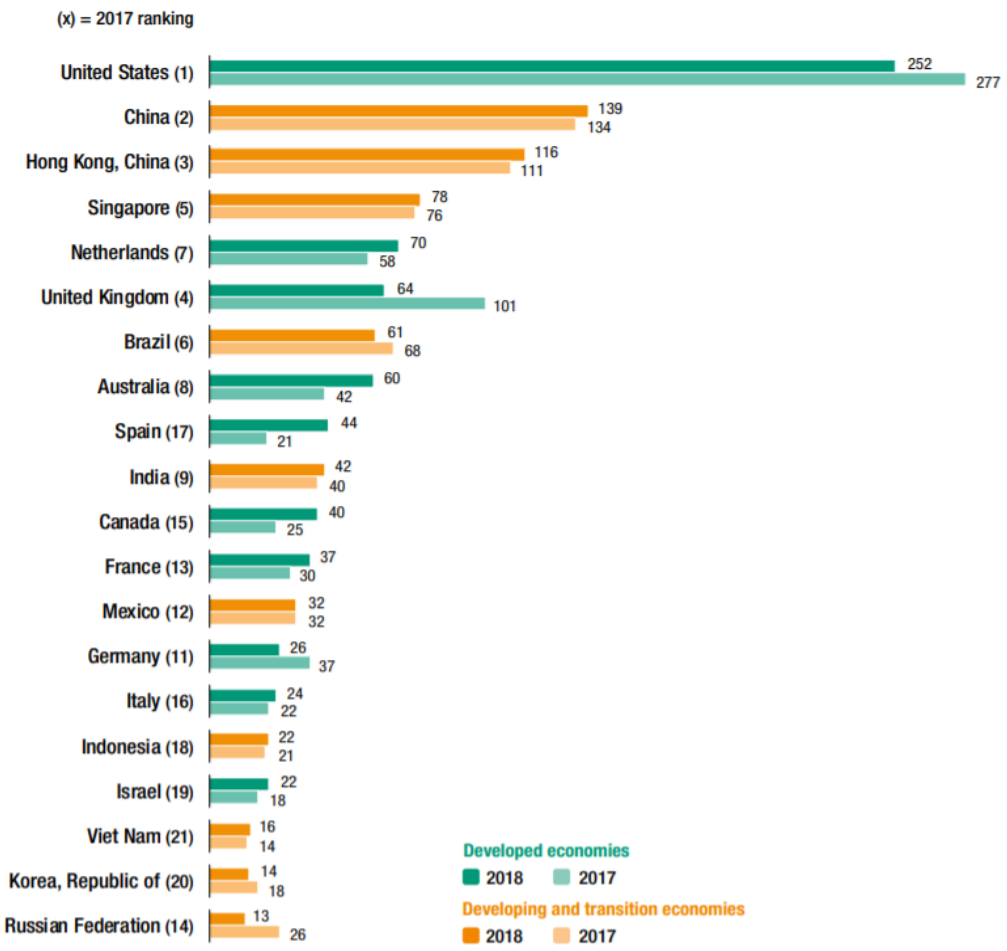

Figure 3. FDI inflows, top 20 host economies, 2017 and 2018 (Billions of dollars)
Source: UNCTAD, 2019b

In 2018 Japan topped the FDI outflow rankings, followed by China and France (Figure 4). In turn, the Chinese authorities are trying to limit the outflow of investments abroad to expand domestic investment, due to which the inflows of FDI from the country to abroad decreased for the second year in a row, by 18% - to $ 130 billion. In this list, one third of countries are also represented by Asian states. Particular attention should be paid to the recovery in 2018 of the positions of Switzerland and Ireland after a massive outflow of capital from those countries in the previous year. If the new tax model is successfully applied, these countries can turn into centers of attraction for capital, including those of Russian origin.

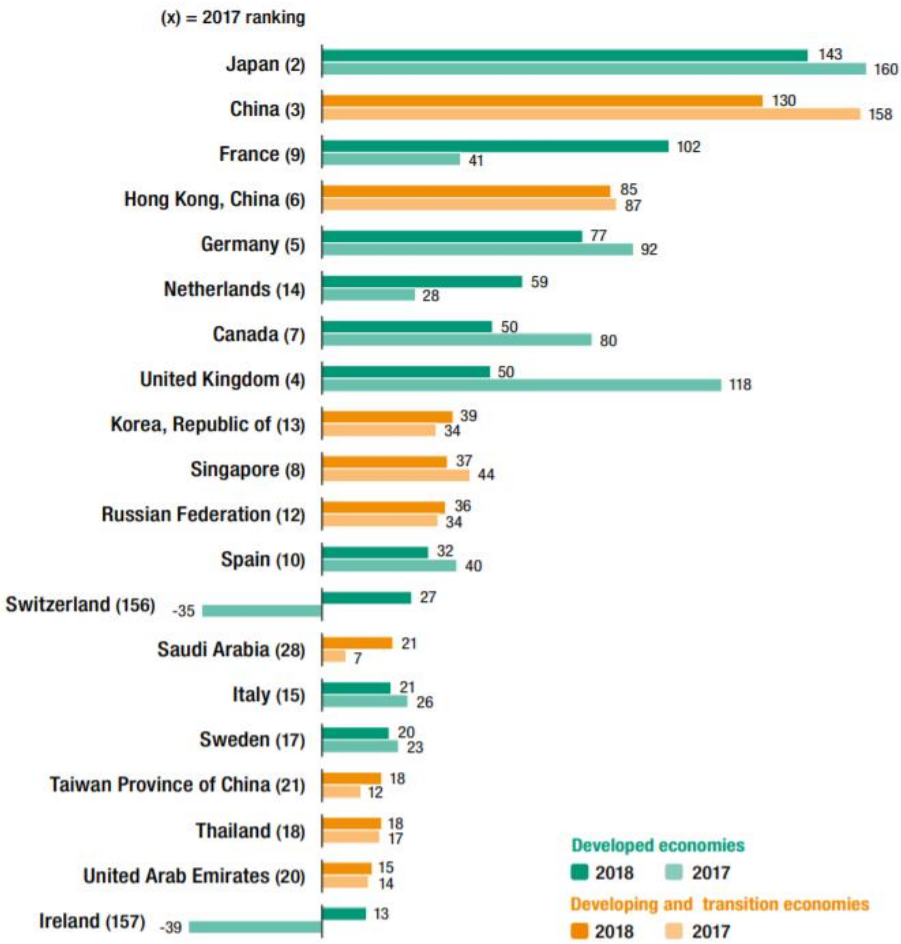

Figure 4. FDI outflows, top 20 home economies, 2017 and 2018 (Billions of dollars)
Source: UNCTAD, 2019b

The decline in the dynamics of global investment is associated with structural changes in international business. It should be noted that a significant part of the ongoing expansion of international production is due to non-equity or intangible assets. In particular, the rating of the 100 largest MNCs by the size of foreign assets in 2018 shows a decrease in the number of industrial companies in it. The assimilation of innovative technologies and digital transformation in general have had a significant impact on global production. This contributed to an increase in the share of intangible methods of international production, since when the efficiency of cross-border operations is achieved, the need for tangible assets decreases. The increase in the share of intangible assets leads to a decrease in FDI, a slowdown in world trade in goods, and an acceleration in trade in services (Figure 5). International investment in R&D is also on the rise. It should be noted that foreign value added in exports is a standard indicator of the importance of global value chains (GVC). Thus, the share of GVCs in trade gradually increased until 2010, but over the past eight years this indicator has also continued to decline for the reasons indicated above.

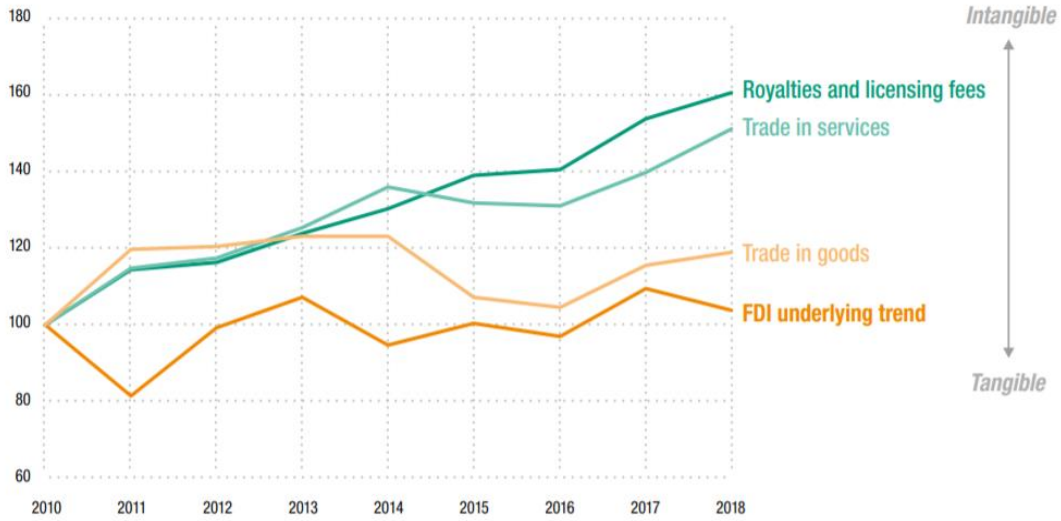

Figure 5. Indicators of international production, tangible and intangible, 2010–2018 (Indexed, 2010 = 100)

Source: UNCTAD, 2019b

According to UNCTAD's (2020) calculations, global foreign direct investment totaled US$1.39 trillion in 2019. In terms of inward FDI, the United States remained the largest recipient of FDI in 2019, attracting $251 billion in inflows. It is followed by China with flows of $140 billion and Singapore with $110 billion.

UNCTAD found that flows to developed economies as a group fell by 6% to an estimated $643 billion. It is only half of the recorded peak amount in 2007. Flows to developing economies in 2019 remained unchanged at an estimated $695 billion which means that these countries continued to absorb more than half of global FDI (Figure 6).

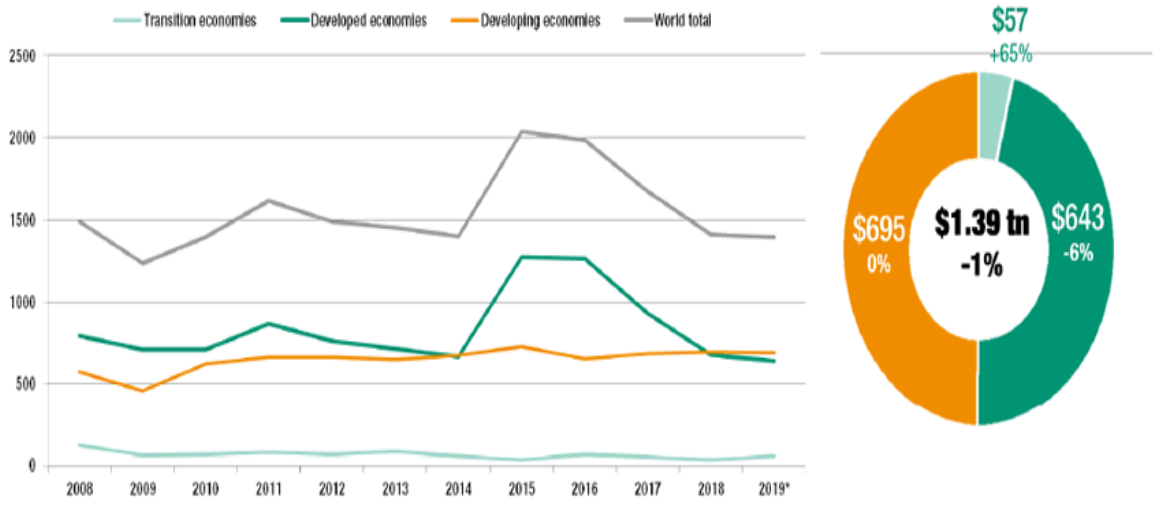

Figure 6. FDI inflows: global and by group of economies, 2008–2019* (Billions of US dollars)
Source: UNCTAD, 2020

Thus, the trend of 2018 has stayed in place in 2019. However, following was highlighted by the UNCTAD (2020):

- The UK FDI fell 6% with the deployment of Brexit.
- Hong Kong, China hardship causes a 48% FDI decline.
- Singapore grew 42% in a buoyant region of the Association of Southeast Asian Nations.
- Zero flow growth to both the United States and China.
- Inflows to Russia more than doubled to $33 billion.
- Brazil rose 26% at the start of a privatization program.
- Inflows into Germany triple as multinational enterprises provide loans to foreign affiliates in a year of slow growth.
- Cross-border mergers and acquisitions (M&A) declined by 40% in 2019 to $490 billion. The fall in the services sector was the deepest.

It can be stated that in the current decade, flows of foreign direct investment have been subject to unusually strong fluctuations. Such volatility is not typical for other macroeconomic indicators: for GDP growth, Gross fixed capital formation, and growth rate of trade. Almost all forecast values of foreign direct investment, as seen from Table 1, differ several times from the actual results, and in some cases even have the opposite directional vector. In this regard, the assumption arises that the existing model of movement of foreign direct investments is undergoing certain changes.

When it comes to Russia, the volume of foreign direct investment in the Russian economy and from the country increased sharply and reached its peak in 2013. In 2014 the volume of inflows to

Russia fell by almost 2 times. In 2015, when developed and developing countries showed steady growth, the inflow and outflow of capital from Russia continued to fall, and, on the contrary, in 2016 the opposite trend was observed. A noticeable reduction in FDI in 2017 did not particularly affect inward and outward FDI of the country. However, in 2018, as well as in the rest of the world and in Europe, inflows of foreign direct investment decreased twice (Table 2).

FDI inflows to Russia in 2018 decreased by half, according to UNCTAD (2019a), to about $ 13 billion, and the country formally dropped in the organization's ranking from 14th place in 2017 to 20th position in 2018. Foreign investors remain concerned about geopolitical risks and the slow growth of the Russian economy. Therefore, purchases of Russian assets by foreign companies fell by 79% to $ 2.7 billion (Nevelsky, 2019).

On the other hand, according to the Central Bank of the Russian Federation, the inflow of foreign direct investment into Russia fell to $ 8.8 billion (down to 0.5% of GDP) compared to $ 28.6 billion a year earlier (1.8% of GDP). This is the minimum value of FDI in Russia over the past ten years. As a result, in 2018, outgoing direct investments reached $ 31.9 billion, and the net outflow in 2018 amounted to $ 23.1 billion (1.4% of GDP) against $ 8.2 billion in 2017, which is significantly lower than the indicators observed before 2013 (CBR, 2019).

FDI inflows to Russia in the first quarter of 2019 (according to the balance of payments) showed that investments in the non-banking sector during this period, according to the Central Bank of the Russian Federation, increased to $ 11.5 billion, compared to $ 6.4 billion. for the same period in 2017. However, a significant share of such investments was associated with several intra-group transactions of large companies, so it is premature to talk about a steady increase in FDI. Net capital outflow from Russia in the first half of 2019, according to the Central Bank, increased 2.5 times - to $ 27.3 billion - compared to the same period in 2018, when it amounted to $ 11.1 billion. The Bank of Russia notes that the decisive role in the formation of the negative balance was played by banks' operations to place funds abroad and to pay off obligations to non-residents (Pakhomov, 2019).

Thus, if five years ago a large outflow of funds abroad was accompanied by an almost comparable inflow of them to Russia, which was largely due to Special Purpose Vehicle (SPV) transactions of domestic companies through offshore companies, then at the present stage there is a steady decline in the inflow of FDI to Russia with a slight decrease in their outflow abroad. This is also evidenced by changes in the geographical distribution of foreign direct investment. Thus, in 2018, the largest drop in FDI inflows was observed from traditional offshore zones - mainly from Cyprus and Ireland.

Traditionally, the dynamics of the inflow and outflow of FDI from Cyprus quite seriously affects the overall scale and trends in the movement of capital in Russia. The negative balance of operations with this country in 2018 was the largest in 12 years of calculations for all countries of the world. The tightening of banking regulations, the signing of bilateral agreements and the introduction of a system for the exchange of tax information, according to experts, make the work of business under traditional gray schemes through Cyprus ineffective (Tcyrempilova & Magda, 2023).

The sharp decline in FDI in the country last year was partly because a few companies with assets in Russia re-registered from foreign jurisdictions to Russian. These investments formally ceased to be foreign, becoming domestic. In addition, some foreign investors have sold their assets in Russia to domestic entrepreneurs. This is one of the results of the activities of the Russian government, which by various measures stimulates the repatriation of capital, primarily from offshore jurisdictions.

Outward FDI of Russia, according to UNCTAD (2019a) estimates, amounted to $ 36.4 billion in 2018 (+ 7% compared to the previous year). This volume was mainly ensured by the reinvestment of Russian companies in existing foreign projects, as well as by the provision of intra-corporate loans to foreign subsidiaries. At the same time, domestic companies have been rather restrained in investing in new foreign projects under the conditions of the official deoffshorization policy and international sanctions. As in previous years, the Russian Federation accounted for almost all outward FDI in 2019 (UNCTAD, 2020). Russian MNCs remain wary of external expansion, especially in developed economies, where they face growing restrictions on access to international finance and technology, as well as international sanctions.

Foreign direct investment inflows of Russia increased 140 % to $ 32 billion after a two-year decline (Table 2) according UNCTAD (2020). However, it was still about 40 percent below the level recorded in 2013. Equity investment rebounded to $ 11 billion in 2019 after a negative result in 2018. Reinvested earnings continued to rise in 2019 to $ 20 billion.

The developed countries, primarily Western Europe, have been and remain, despite the sanctions, the main source of FDI for Russia. However, more important is the fact that these investments bring the necessary technologies and managerial experience to the country's economy. The developed states, in turn, are the main destination for the outward FDI of Russia. The importance of offshore jurisdictions in the movement of investments for the country's economy also remains.

Under the influence of macroeconomic and geopolitical problems, the level of FDI inflows and, in part, the outflow of foreign direct investments from the country are steadily decreasing. Also,

under the influence of the ongoing deoffshorization policy, there has been a tendency to reduce the return to Russia of domestic capital from offshore jurisdictions, which previously formed a relatively balanced position with FDI in the country. As a result, Russia is gradually moving to the periphery of the world capital market and remains a passive participant in modern trends in the development of international economic relations. And this provision determines the degree of integration of the country into the world economy and the scale of positive effects for the development of the national economy (Pakhomov, 2019).

There are various factors, which are reflected in the cross-border movement of capital of Russia. These include a sharp aggravation of the geopolitical situation around Russia; the imposition of appropriate sanctions and Russian retaliatory actions leading to a certain degree of economic isolation; erecting direct and indirect barriers to external financing; the persistence of the threat of introducing new restrictive measures in relation to companies and individuals, and sectors of the economy. It should be noted that businesses are trying to adapt to this kind of external pressure, finding favorable ways for more intensive foreign economic exchange. Another specific feature of the movement of foreign direct investments of Russia, which also explains the volatility of their movement, is a very large share of the round-tripping of domestic capital using various kinds of legal schemes (Golovnin, 2018).

Thus, it can be noted that during the post-crisis period, despite the rather favorable macroeconomic conditions, the global flows of FDI experience serious fluctuations. They mostly affected developed countries and countries with economies in transition. The volatility of cross-border capital movements is based on both objective factors caused by the economic and technological transformation, and subjective factors associated with institutional constraints and geopolitical features. Both, most likely, will persist, exerting a negative external impact, including on Russia.

As noted earlier, numerous factors influence the flow of capital across Russia's borders. These factors include heightened geopolitical tensions surrounding the country. Developed states serve as the primary destination for Russia's outward foreign direct investment. Additionally, offshore jurisdictions continue to play a significant role in facilitating the movement of investments for the country's economy. Therefore, it is crucial to conduct a comprehensive analysis of the Russian economy and evaluate its characteristics concerning foreign direct investment and its impact on FDI flows.

2.3 Characteristics of Russian economy (before Covid-19)

This section will address the characteristics of the Russian economy before the onset of Covid-19. It will commence with a review of the macroeconomic performance, drawing insights from international reports. Following this, attention will be directed towards examining complex indicators of the Russian Federation alongside its corresponding rankings. Subsequently, an analysis of Russia's foreign trade and economy will be conducted using input-output tables. The section will conclude with an exploration of the monetary policy framework in place.

2.3.1 Macroeconomic performance by the international reports

After the collapse of the Soviet Union, significant economic changes took place in Russia, and over the past 25 years it has gone from a globally isolated, centrally planned economy to a market, globally integrated economic system. As it mentioned above, a macro analysis of the Russian economy is needed. To fulfill this task, the direction of the research was turned to international organizations.

Nowadays, most international organizations make reports. They are distinguished from each other by frequency of publishing, purposes, databases, methods of collecting data etc. Due to the diversity of information of the reports it was possible to analyze macroeconomic – foreign economic performance of the Russian Federation.

The OECD Economic Outlook is a perfect example of such reports. They analyze the main economic trends and prospects for the next two years and publish it twice in a year (OECD, 2018). Thereby in “OECD Economic Outlook, Volume 2018 Issue 2” they assess the prospects for economic development of the member countries of the organization in 2018, as well as for the largest non-member countries.

One of those non-member countries is the Russian Federation. Regarding Russia, in the report they consider that the economy rebounds from a deep recession due to stronger oil prices than previous years and higher wages, which raise business investment and household consumption. Unemployment in the country has declined and is at less than 5%. Falling unemployment and rising wages have also brought poverty rates down. However, in their view, uncertainty about future sanctions and the higher cost of funding for emerging markets, which are considered as obstacles for sustainable growth, remain in place. The international sanctions against Russia restrict access to financial markets. The depreciation of the Russian ruble was pushing up inflation. However, its level remained below the 4% target due to the quick reaction of the central bank of the country which raised its key interest rate.

Fiscal tightening weighs on the growth of the economy. The fiscal balance in 2018 became positive for the first time since 2009, following higher oil revenues and wise government spending along with the fiscal rules. The OECD experts expect that new pension reform and a planned raise of VAT from 18% to 20% will improve the sustainability of the public finances. The pension reform suggests the rise of the retirement age to 65 years for men and 60 years for women, as well as the planned rise in pensions.

Moreover, the Russian government plans to raise the share of investment in GDP from 21% to 25% for 2019-2024 years. According to OECD experts (2018), it should help to enhance transport infrastructure, accelerate the digitalization of the economy, and deepen financial markets. Better protection of entrepreneurs' rights, improvement of the business environment and governance of state-owned enterprises would further boost investment and productivity.

Thus, in 2018 OECD experts forecast the growth of the Russian economy to remain robust. Higher wages, household credits and employment will increase private consumption. Large infrastructure projects will boost investment. Nevertheless, substantial uncertainty about future sanctions remains. It could decrease exports and cause a new wave of capital outflows and further ruble depreciation (OECD, 2018).

Another example of the report is The World Economic Outlook of the International Monetary Fund. This report analyzes and forecasts by IMF staff about economic changes at the global level, in the main groups of countries and in many individual countries during the near and medium term. The World Economic Outlook is published twice a year.

The pace of economic activity accelerated in almost all regions of the world and, according to forecasts, the world economy grows by 3.9 percent in 2018 and 2019. However, much has changed in the year of 2019: increasing tensions in trade between the United States and China, macroeconomic difficulties in Argentina and Turkey, interruptions in the automotive industry in Germany, toughening financial conditions along with normalization of monetary policy in large, developed countries. All this contributes to a significant weakening of the global economic recovery (IMF, 2019).

According to the IMF (2019), in the beginning of October 2018, oil prices exceeded $80 mostly due to US sanctions against Iran's oil sector, which entered into force in November. Nevertheless, the US administration issued a waiver which allowed several large countries to continue importing crude oil from Iran. In addition, crude oil production in the United States in 2018 increased compared with the previous year. Russia, Iraq, Canada, and Saudi Arabia also produce at high levels. Therefore, oil prices plummeted from early October to late November.

According to the report, lower oil prices affect Russia's growth prospects. The forecast for Russia was a sluggish growth of about 1,5 percent over the medium term. It was expected that inflation would be stable and increase slightly because of a temporary acceleration of consumer price inflation due to a higher rate of value added tax in Russia.

The Central Bank of Russia (CBR) policy rate was raised above the neutral level. Based on efforts to strengthen financial stability, the structure and management of the banking system should focus on improving the efficiency of credit intermediation. The IMF experts also suggest that ongoing efforts to reform labor markets, invest in infrastructure and improve property rights would help increase private productivity and investment, as well as maintain convergence with the incomes of developed states.

The World Bank's assessment of the world economy growth is somewhat different from the International Monetary Fund. According to "Russia Economic Report: Preserving stability; Doubling growth; Halving poverty - How, 2018", the World Bank (2018b) suggests that, in general, the growth of the world economy is stable. However, amid growing trade tensions, the risks of a worsening situation are growing.

According to the report, the Russian economy's growth rate increased in the first half of 2018, helped by rising oil prices, steady growth of the world economy and macroeconomic policies. However, the growth rate in the third quarter of 2018 decreased.

They suggest that amid increased geopolitical risks, net capital outflow increased. The expansion of sanctions and increased geopolitical tensions led to an increase in net capital outflow from 1.1% of GDP from January to September 2017 to about 3.4% of GDP for the same period of 2018. This capital outflow was mainly due to the sell-off of federal loan bonds and a decrease in FDI inflows (due to the weakening of foreign investors' interest in Russian assets). Due mainly to the increase in oil prices, the current account surplus increased to about 6.3% of GDP in the period from January to September 2018. In general, thanks to a solid macroeconomic foundation with a comparatively high level of international reserves ($461 billion), a comfortable import cover (15.9 months) and insignificant external debt (about 29% of GDP), Russia can absorb external shocks.

The report emphasizes that monetary policy still corresponds to the inflation targeting regime. Since July, the level of inflation has increased, but it remained below the benchmark of the Central Bank of Russia (CBR), equal to 4% on an annualized basis, with non-food products making the main contribution to inflation. After a long period of monetary policy loosening, the CBR raised its key interest rate from 7.25% to 7.5% in September amid heightened inflation risks.

The banking sector is relatively weak, but stable. Herewith, credit growth resumed in sundry sectors of the economy. Despite the recent bailouts and a continuing clean-up of the Russian banking sector, it remains rather weak: the level of bank reserves in Russia is lower, and the ratio of problem loans is higher than in other BRICS countries. However, the volume of lending is growing, although in different segments there are different growth rates. To eliminate the risks associated with accelerated growth in consumer lending - mostly unsecured and mortgage loans - Central Bank of Russia has tightened requirements for assessing risks of unsecured consumer loans with an annual interest rate in the range from 10 to 30% and further plans to tighten the requirements for mortgage loans with a smaller initial size contribution (The World Bank, 2018b).

Thus, the World Bank's experts forecast in the report that economic growth of Russia for 2018-2020 years will remain low in medium-term prospects. The forecast growth rates range from 1.5% to 1.8%.

One more report of the World Bank, which can be found interesting, is “Doing Business 2019: Training for Reform”. It is the 16th edition in the series of the leading annual publications of the World Bank Group, which assesses the legal rules that promote business expansion, as well as the norms that limit it. The Doing Business uses quantitative indicators that assess the level of auspiciousness of legal norms for business activities and protection of property rights and allow comparing data for 190 countries (The World Bank, 2019b).

Russia climbed over the year from 35th to 31st place. The country has risen in the annual ranking of 190 countries thanks to four reforms that have improved the regulatory environment for medium and small enterprises, according to a World Bank study. Among them are changes in construction, power supply, regulation of small and medium businesses, and improvement of tax administration. Russia overtook Japan (39), Switzerland (38), Belarus (37), Netherlands (36), the Czech Republic (35), Portugal (34), Poland (33), France (32) (Table 3).

Table 3. Ease of doing business ranking 2019

Rank	Economy	EODB score	EODB score change	Rank	Economy	EODB score	EODB score change	Rank	Economy	EODB score	EODB score change
1	New Zealand	86.59	0.00	65	Colombia	69.24	+0.20	129	Barbados	56.78	0.00
2	Singapore	85.24	+0.27	66	Luxembourg	69.01	0.00	130	St. Vincent and the Grenadines	56.35	+0.01
3	Denmark	84.64	+0.59	67	Costa Rica	68.89	-0.47	131	Cabo Verde	55.95	+0.02
4	Hong Kong SAR, China	84.22	+0.04	68	Peru	68.83	+0.56	132	Nicaragua	55.64	+0.37
5	Korea, Rep.	84.14	-0.01	69	Vietnam	68.36	+1.59	133	Palau	55.59	+0.01
6	Georgia	83.28	+0.48	70	Kyrgyz Republic	68.33	+2.57	134	Guyana	55.57	-1.21
7	Norway	82.95	+0.25	71	Ukraine	68.25	+0.94	135	Mozambique	55.53	+1.78
8	United States	82.75	-0.01	72	Greece	68.08	-0.12	136	Pakistan	55.31	+2.53
9	United Kingdom	82.65	+0.33	73	Indonesia	67.96	+1.42	137	Togo	55.20	+6.32
10	Macedonia, FYR	81.55	+0.32	74	Mongolia	67.74	+0.27	138	Cambodia	54.80	+0.41
11	United Arab Emirates	81.28	+2.37	75	Jamaica	67.47	+0.55	139	Maldives	54.43	+0.10
12	Sweden	81.27	0.00	76	Uzbekistan	67.40	+1.08	140	St. Kitts and Nevis	54.36	+0.01
13	Taiwan, China	80.90	+0.24	77	India	67.23	+6.63	141	Senegal	54.15	+0.37
14	Lithuania	80.83	+0.29	78	Oman	67.19	-0.02	142	Lebanon	54.04	+0.07
15	Malaysia	80.60	+2.57	79	Panama	66.12	+0.41	143	Niger	53.72	+1.24
16	Estonia	80.50	+0.01	80	Tunisia	66.11	+1.51	144	Tanzania	53.63	+0.34
17	Finland	80.35	+0.05	81	Bhutan	66.08	+0.20	145	Mali	53.50	+0.23
18	Australia	80.13	-0.01	82	South Africa	66.03	+1.37	146	Nigeria	52.89	+1.37
19	Latvia	79.59	+0.33	83	Qatar	65.89	+0.64	147	Grenada	52.71	+0.07
20	Mauritius	79.58	+1.29	84	Malta	65.43	+0.28	148	Mauritania	51.99	+0.92
21	Iceland	79.35	+0.05	85	El Salvador	65.41	+0.21	149	Gambia, The	51.72	+0.23
22	Canada	79.26	+0.38	86	Botswana	65.40	+0.46	150	Marshall Islands	51.62	+0.01
23	Ireland	78.91	-0.51	87	Zambia	65.08	+1.48	151	Burkina Faso	51.57	+0.12
24	Germany	78.90	0.00	88	San Marino	64.74	+2.27	152	Guinea	51.51	+2.02
25	Azerbaijan	78.64	+7.10	89	Bosnia and Herzegovina	63.82	+0.27	153	Benin	51.42	+0.13
26	Austria	78.57	+0.03	90	Samoa	63.77	+0.01	154	Lao PDR	51.26	+0.11
27	Thailand	78.45	+1.06	91	Tonga	63.59	+0.03	155	Zimbabwe	50.44	+1.92
28	Kazakhstan	77.89	+0.73	92	Saudi Arabia	63.50	+1.62	156	Bolivia	50.32	+0.15
29	Rwanda	77.88	+4.15	93	St. Lucia	63.02	+0.06	157	Algeria	49.65	+2.06
30	Spain	77.68	+0.07	94	Vanuatu	62.87	-0.21	158	Kiribati	49.07	+0.33
31	Russian Federation	77.37	+0.61	95	Uruguay	62.60	+0.34	159	Ethiopia	49.06	+0.91
32	France	77.29	+0.99	96	Seychelles	62.41	-0.01	160	Micronesia, Fed. Sts.	48.99	0.00
33	Poland	76.95	-0.36	97	Kuwait	62.20	+0.75	161	Madagascar	48.89	+0.71
34	Portugal	76.55	-0.07	98	Guatemala	62.17	+1.01	162	Sudan	48.84	+3.75
35	Czech Republic	76.10	+0.05	99	Djibouti	62.02	+8.87	163	Sierra Leone	48.74	+0.15
36	Netherlands	76.04	+0.01	100	Sri Lanka	61.22	+1.80	164	Comoros	48.66	+0.14
37	Belarus	75.77	+0.72	101	Fiji	61.15	+0.04	165	Suriname	48.05	-0.05
38	Switzerland	75.69	+0.01	102	Dominican Republic	61.12	+0.55	166	Cameroon	47.78	+0.83
39	Japan	75.65	+0.05	103	Dominica	61.07	+0.04	167	Afghanistan	47.77	+10.64
40	Slovenia	75.61	+0.02	104	Jordan	60.98	+1.42	168	Burundi	47.41	+0.73
41	Armenia	75.37	+2.06	105	Trinidad and Tobago	60.81	-0.12	169	Gabon	45.58	-0.23
42	Slovak Republic	75.17	+0.29	106	Lesotho	60.60	+0.19	170	São Tomé and Príncipe	45.14	+0.30
43	Turkey	74.33	+4.34	107	Namibia	60.53	+0.24	171	Iraq	44.72	+0.04
44	Kosovo	74.15	+0.44	108	Papua New Guinea	60.12	+1.19	171	Myanmar	44.72	+0.51
45	Belgium	73.95	+2.24	109	Brazil	60.01	+2.96	173	Angola	43.86	+2.16
46	China	73.64	+8.64	110	Nepal	59.63	-0.32	174	Liberia	43.51	-0.04
47	Moldova	73.54	+0.38	111	Malawi	59.59	+0.84	175	Guinea-Bissau	42.85	+0.27
48	Serbia	73.49	+0.17	112	Antigua and Barbuda	59.48	+0.06	176	Bangladesh	41.97	+0.91
49	Israel	73.23	+0.64	113	Paraguay	59.40	+0.41	177	Equatorial Guinea	41.94	+0.28
50	Montenegro	72.73	+0.20	114	Ghana	59.22	+2.06	178	Timor-Leste	41.60	+1.71
51	Italy	72.56	-0.15	115	Solomon Islands	59.17	+0.33	179	Syrian Arab Republic	41.57	+0.02
52	Romania	72.30	-0.53	116	West Bank and Gaza	59.11	+0.39	180	Congo, Rep.	39.83	+0.36
53	Hungary	72.28	+0.34	117	Eswatini	58.95	+0.13	181	Chad	39.36	+1.15
54	Mexico	72.09	-0.18	118	Bahamas, The	58.90	+0.77	182	Haiti	38.52	+0.11
55	Brunei Darussalam	72.03	+1.85	119	Argentina	58.80	+0.87	183	Central African Republic	36.90	+2.67
56	Chile	71.81	+0.37	120	Egypt, Arab Rep.	58.56	+2.74	184	Congo, Dem. Rep.	36.85	+0.67
57	Cyprus	71.71	+0.44	121	Honduras	58.22	+0.09	185	South Sudan	35.34	+2.04
58	Croatia	71.40	+0.34	122	Côte d'Ivoire	58.00	+4.94	186	Libya	33.44	+0.23
59	Bulgaria	71.24	+0.11	123	Ecuador	57.94	+0.12	187	Yemen, Rep.	32.41	-0.59
60	Morocco	71.02	+2.46	124	Philippines	57.68	+1.36	188	Venezuela, RB	30.61	-0.24
61	Kenya	70.31	+5.25	125	Belize	57.13	+0.02	189	Eritrea	23.07	+0.13
62	Bahrain	69.85	+1.82	126	Tajikistan	57.11	+0.08	190	Somalia	20.04	+0.06
63	Albania	69.51	+0.50	127	Uganda	57.06	+0.65				
64	Puerto Rico (U.S.)	69.46	+0.20	128	Iran, Islamic Rep.	56.98	+2.34				

Source: The World Bank, 2019b.

Moreover, the report concluded that Russia, Brazil, China, and India conducted a total of 21 reforms. Connections to the power supply system and international trade were the most common areas of reform in these countries.

Speaking about foreign trade, the main international organization which regulates and controls it is the World Trade Organization (WTO). Like all international organizations, they publish different reports. One of them is "World Trade Report 2017: Trade, technology and jobs".

In this report, WTO experts analyzed the problems faced by workers and organizations in adapting to changes in the labor market and suggested possible policy options that would allow governments to make trade and technology more inclusive. Experts examined the role of technology and trade in transferring labor from industry to services, reducing the share of workers with medium qualifications, the growing value of skills in the labor market, and the increasing participation of women in the labor force. In recent years, the employment rate has remained constant in many high- and low-income countries. Russia has a low level of employment. In addition, they say that unofficial income varies significantly between and within regions. The level of informal employment in Russia is 19%. The demand for highly qualified personnel has increased in many countries. In Russia, there is also a decline in the number of low-skilled personnel and the growth of highly qualified personnel (WTO, 2017).

Thus, many international organizations in their reports talk about the restoration of the Russian economy due to the stabilization of oil prices, as well as due to new reforms of the government, in pre-Covid period. However, they point to the need to diversify the country's economy. Moreover, the problems remain the same: unhealthy dependence on oil, structural deficiencies in institutions, corruption, uneven distribution of revenue between regions of the country, and a weak banking system. In addition, there are geopolitical risks and sanctions which can worsen the pace of economic growth.

2.3.2 Complex indicators of the Russian Federation and its ranking

The state of the country’s economy and its development play an important role in the economy of the whole world. Some indicators were assessed to define the state of the country’s development in the period before Covid-19.

The first indicator is Gross National Income (GNI). In this analysis the data of the World Bank, namely GNI, PPP (constant 2011 international $) was used. It shows Gross National Income (GNI) converted to international dollars using purchasing power parity (PPP). The international dollar has the same purchasing power relative to GNI as the US dollar in the United States. Figures are in constant 2011 international dollars (The World Bank, 2018c).

According to data from The World Bank, GNI of Russia increased from 1990 to 2017. However, it is shown on Figure 7 that there was a decline from 1990 till almost 2000. It could be triggered by the collapse of the Soviet Union and the political state in the country. There was a decline in 2008 related to the global financial crisis. In 2014 GNI of Russia likewise started to decrease. It was a result of the fall in oil prices. Gross National Income of Russia in 2017 is among the largest,

like China, India, and Brazil. Nevertheless, there is no data of some countries, for example, Germany that makes the ranking incomplete.

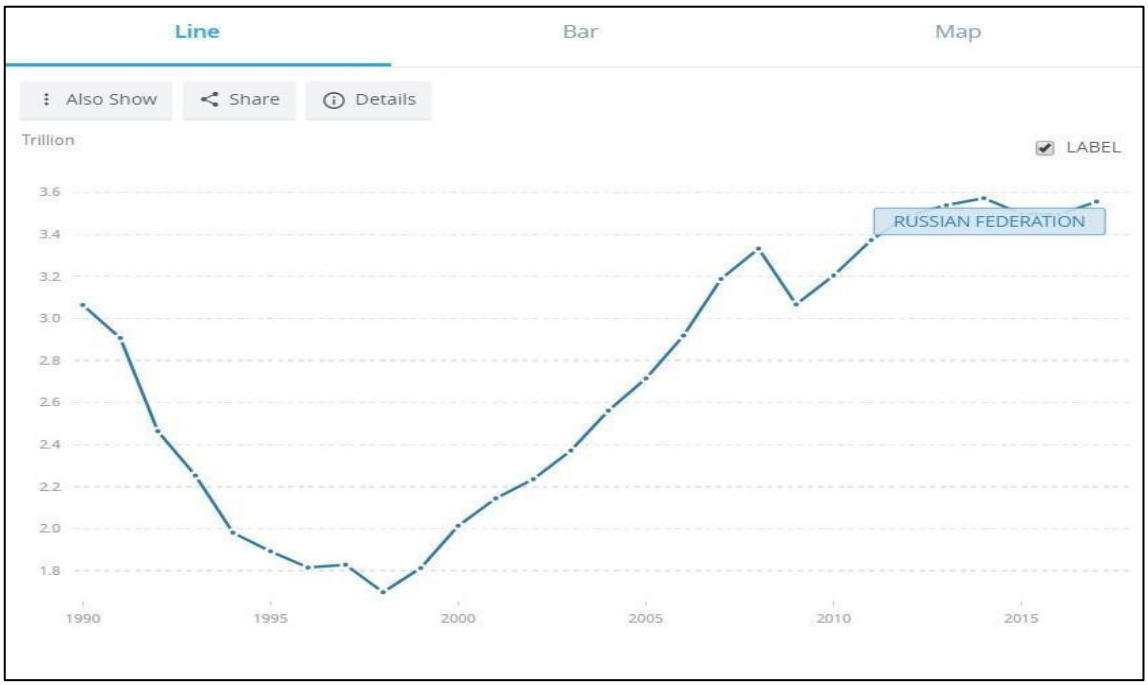

Figure 7. GNI, PPP (constant 2011 international $)
Source: The World Bank, 2018c

The World Bank counted GDP, PPP (constant 2011 international $) (The World Bank, 2018d). Comparing GDP and GNI of Russia, we can see that GDP exceeds GNI in 2017. It means that foreigners earn more in Russia than Russians receive abroad.

Also, The World Bank provides data such as GNI per capita, PPP (constant 2011 international $) (The World Bank, 2018e). The Figure 8 of GNI per capita of Russia during 1990-2017 is the same as GNI, PPP (constant 2011 international $). According to GNI per capita in 2017 which is 24,232.6 dollars, Russia belongs to a group of countries with high income per capita.

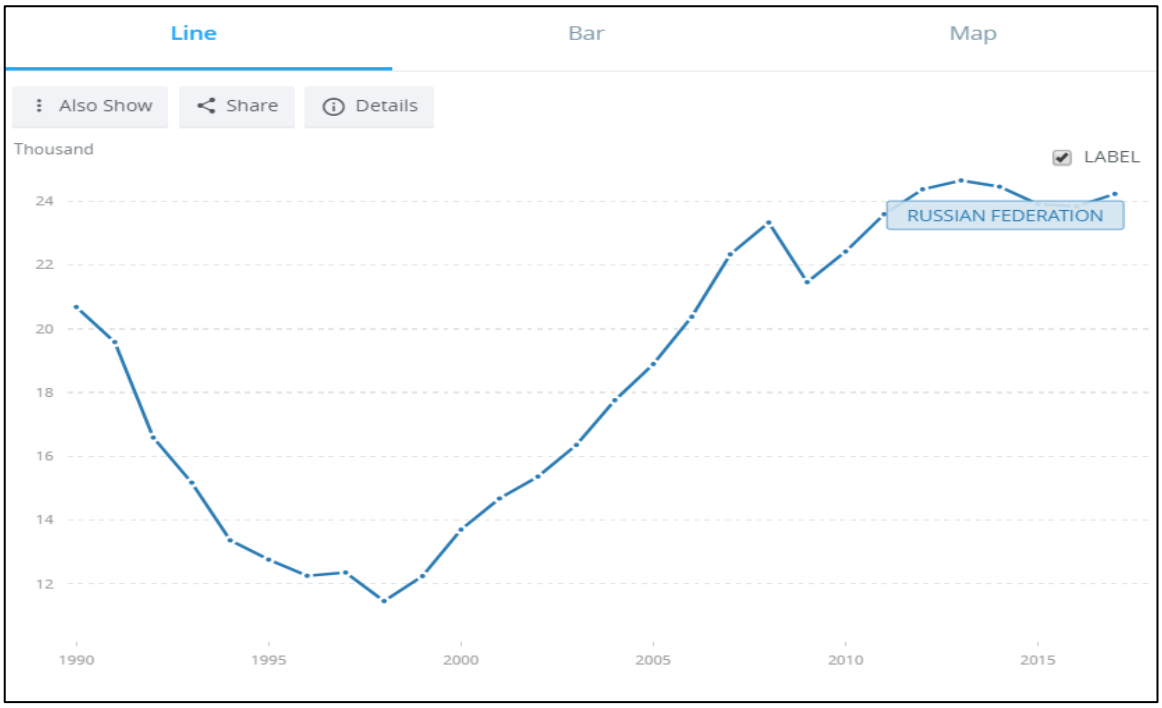

Figure 8.GNI per capita, PPP (constant 2011 international $)
Source: The World Bank, 2018d

GNI per capita is often understood as the index of the standard of living or welfare in a state. However, it is only an approximate measure of the welfare of the population of a country.

The next indicator is the Global Competitiveness Index. It assesses the ability of countries to ensure a high level of welfare of their citizens. It primarily depends on how effectively a country uses its existing resources. The Russian Federation is 38th in the Global Competitiveness Index 2017-2018 ranking (Figure 9).

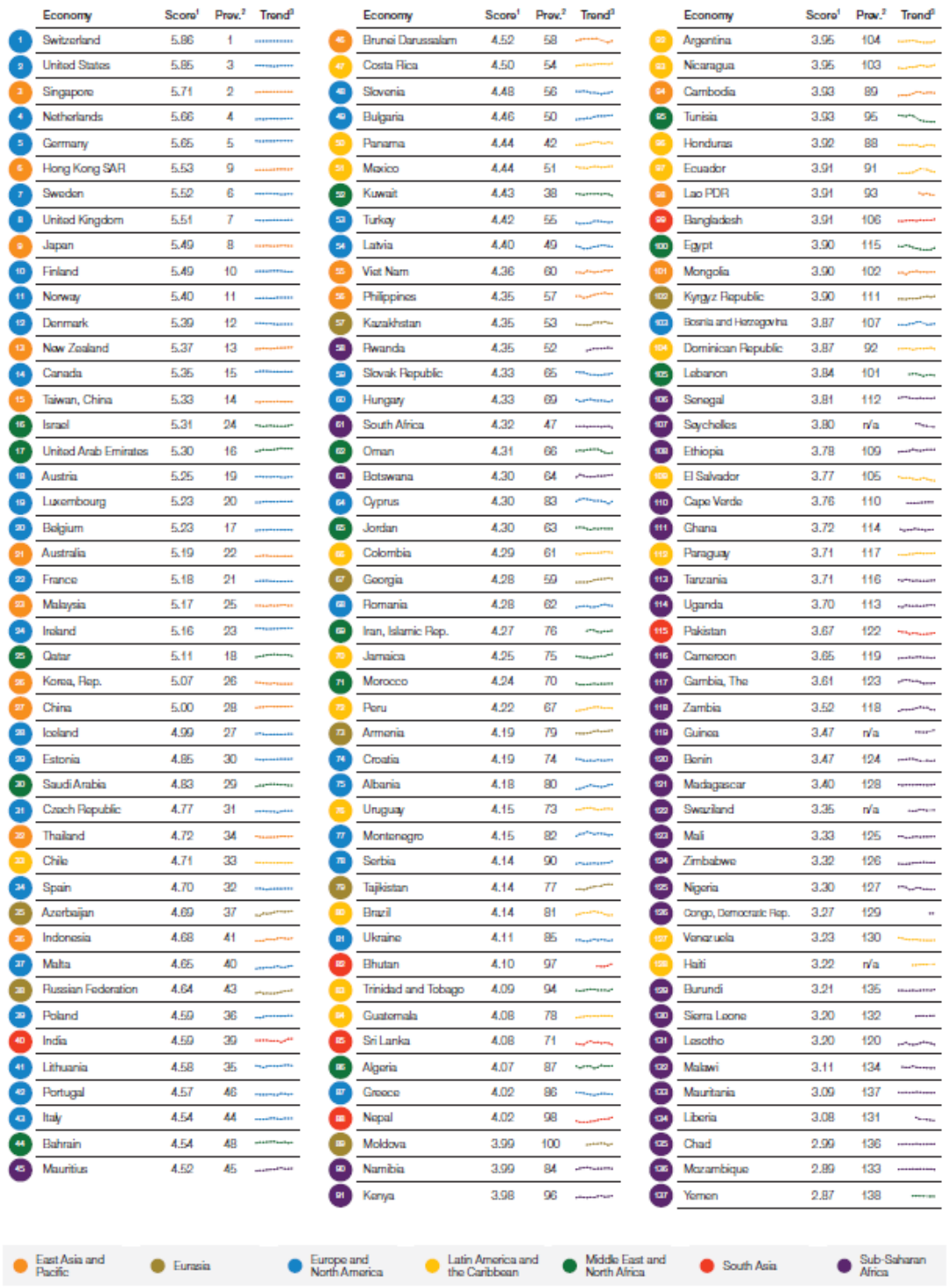

Figure 9. Global Competitiveness Index 2017-2018 ranking
Source: World Economic Forum, 2017

The country improved by five positions compared to the previous assessment, mostly driven by the macroeconomic environment, rebounding strongly from the 2015–2016 recession. Nevertheless, the compilers of the rating noted that its economy still depends heavily on mineral exports, and prospects remain uncertain. Weaknesses remain in the financial market, particularly

the banking sector. Moreover, such aspects as corruption, property rights and the independence of the judiciary remain one of the most problematic factors for doing business (Figure 10). At the same time, according to researchers, new adopted laws on increasing the minimum wage reduced the flexibility of the labor market. Thus, it can have a beneficial overall effect by restoring domestic purchasing power, which has suffered from inflation and a weak ruble.

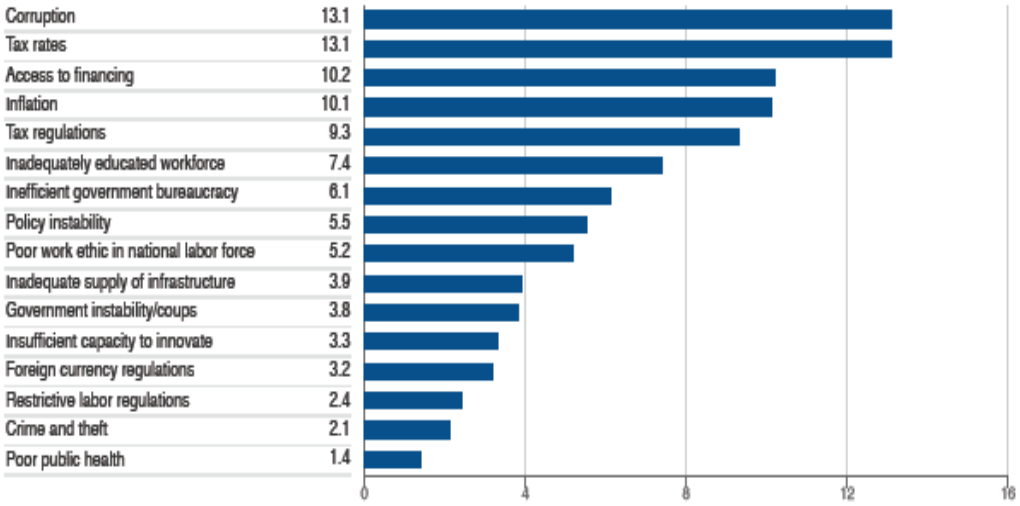

Figure 10. Most problematic factors for doing business in Russian Federation
Source: World Economic Forum, 2017

The last assessed indicator is the Happy Planet Index which is an index reflecting the well-being of people and the state of the environment. According to the Happy Planet Index 2016, the Russian Federation is on the 116th place (HPI, 2016). The main elements of the indicator which influenced the low rating of the country are Life Expectancy and Ecological Footprint. It denotes again that Russians live shorter lives than the leaders of the ranking. As one of the biggest exporters of oil and gas, Russia consumes a large amount of natural resources. The result of it is that the country has poor figures in Ecological Footprint.

The larger the index, the less resources the country spends on ensuring the prosperous life of its citizens. In other words, the Happy Planet Index does not show the “happiness” of citizens, but it illustrates the efficiency of using the natural resources by each country so that a person feels happy. Therefore, according to the Happy Planet Index 2016 of Russia, we can say that natural resources are used inefficiently.

As a conclusion of the analysis of different indicators, it can be said that according to GNI per capita, the Russian Federation is a country with high income per capita. However, it does not show how evenly or unequally income is distributed among the citizens of the country. The Happy Planet Index shows that the country utilizes a big number of natural resources and perhaps inefficiently.

The Global Competitiveness Index noted that the Russian Federation improved on some market efficiency aspects. Nevertheless, there is a necessity to remove structural deficiencies in institutions, increase the efficiency of the goods market and develop the financial market, in the World Economic Forum's opinion. It denotes that though Russia has good figures of some complex indicators, there are some problems which should be solved for further development of the country.

2.3.3 Analysis of foreign trade of Russia and its economy by input-output tables

Input-output tables are a system of macroeconomic indicators that comprehensively characterize the structure of the country's economy. They provide detailed information about economic activities and products. They show flows of final and intermediate goods and services determined according to industry outputs or according to product outputs. The input-output tables of 2014 from World Input-Output Database were utilized to analyze the data of Russia, including the foreign trade of the country (World Input-Output Database, 2016).

According to the calculations based on the input-output tables provided by World Input-Output Database it was revealed that it was supplied 44 % of domestic and only 5 % of imports in total amount of contributed sources. It shows that the Russian economy was not import-demanding. Also, there could be a protectionist policy of foreign trade (Tcyrempilova et al, 2024a).

"Wholesale trade, except of motor vehicles and motorcycles", is with the highest to the output. It is contributed mostly by "Administrative and support service activities" in 25636 million dollars which is 20 % of total consumption by the branch, "Public administration and defense; compulsory social security" in 10526 million dollars – 8 %, "Manufacture of coke and refined petroleum products" in 8797 – 7 %. Also, it is contributed by "Wholesale trade, except of motor vehicles and motorcycles" itself in 8451 million dollars. Probably it is capital expenditure, the source for which is net income. Talking about imports, "Manufacture of motor vehicles, trailers and semi-trailers" contributed the most to the industry "Wholesale trade, except of motor vehicles and motorcycles". It provides 2307 million dollars to the industry or 26 % of total import consumption by that branch.

Speaking about the industry in Russia which consumes the biggest amount of imports to the output, it is "Manufacture of motor vehicles, trailers and semi-trailers", utilizing 19762 million dollars which is 13 % of total imports to the economy. It is contributed mostly by imports in following industries:

- manufacture of motor vehicles, trailers and semi-trailers;

- manufacture of machinery and equipment n.e.c.;

- manufacture of chemicals and chemical products.

Despite that data is for 2014, the structure of Russian imports did not change dramatically. In the first half of 2017 imports of chemical products were 18,6 %, whereas mechanical equipment was 18,8 %, electrical equipment – 10,7% and cars – 3 % (Figure 11). They are more than 50 % of total imports.

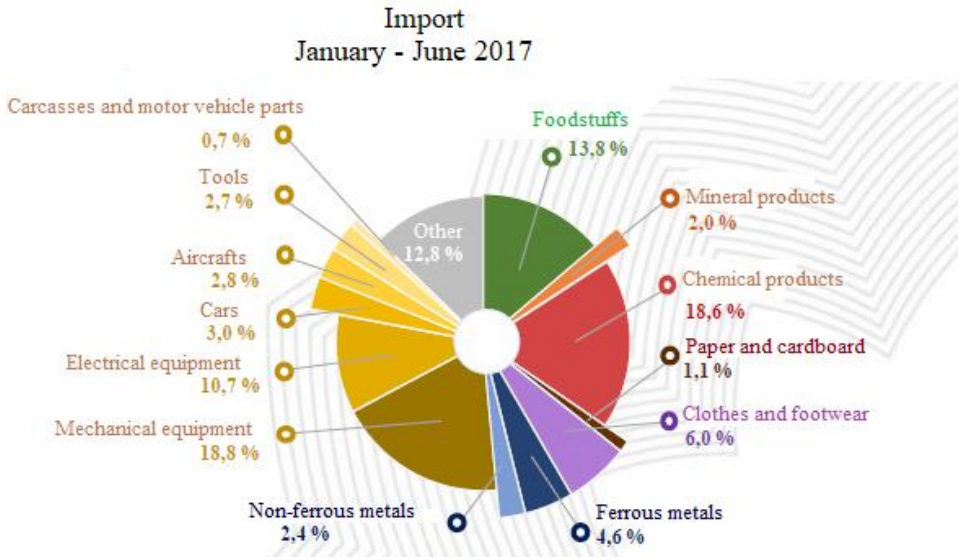

Figure 11. Russian import for January-June 2017
Source: Ministry of Economic Development of the Russian Federation, 2019

Analyzing added value, in other words GDP, we can see that “Wholesale trade, except of motor vehicles and motorcycles”, is in first place with 188689 million dollars. It can be supposed that it includes trade of oil and natural gas. On the second place is mining and quarrying with 170602 million dollars. The value added of those two industries are about 22 % of total. It shows again that raw material and natural resources play an important role in the economy of the country.

By inner square, we also can define the industry which was used by others the most. It is “Wholesale trade, except of motor vehicles and motorcycles”, which contributes 150182 million dollars to other industries. The main fields where this amount of money is contributed are “Manufacture of coke and refined petroleum products” in 17829 million dollars – 12 % of total amount and “Electricity, gas, steam and air conditioning supply” in 16080 – 11 %.

According to the input-output tables, there are different types of final consumption expenditure, which are following: Final consumption expenditure by households; Final consumption expenditure by non-profit organizations serving households; Final consumption expenditure by government.

Comparing them, it was revealed that Final consumption expenditure by households is the largest one which utilized 27 % of total use. It consists of the expenditure incurred by resident households on individual consumption goods and services. In the tables we can see that Russian households spent the most on the domestic industry "Wholesale trade, except of motor vehicles and motorcycles" of the amount 100897 million dollars – 11 % of total expenditure by households, whereas they bought import of "Manufacture of textiles, wearing apparel and leather products" industry and spent on it 75135 million dollars – 8 % of total expenditure by households.

Non-profit organizations serving households spent mostly on "Real estate activities" 1618 million dollars which is 22 % of their total expenditure, whereas Russian government's expenditure in 2014 was mostly in "Public administration and defense; compulsory social security" by the amount of 109342 million dollars – 30 % of its total expenditure. Moreover, the last field, which is "Public administration and defense; compulsory social security", was consumed the most by those three agents, i.e. households, non-profit organizations serving households, and the government in the amount of 143742 million dollars which is 11 % of their total expenditure.

Gross fixed capital formation is a measure of gross net investment in fixed capital assets by companies, government, and households within the domestic economy. In 2014 the "Construction" industry got the largest amount of gross net investment in 214663 million dollars – 66 % of the total amount of that year.

Absolute amount of foreign trade turnover of Russia in 2014 was 650324 million dollars. By that size the country was involved in the international environment. Almost 53 % of the amount is represented by 3 industries which are "Mining and quarrying", "Wholesale trade, except of motor vehicles and motorcycles", "Land transport and transport via pipelines". Analyzing Russian export structure in 2014, it was revealed that they are the main export producing industries. The largest export in 2014 was in the "Mining and quarrying" industry by amount of 187706 million dollars which is 38 % of total exports.

Comparing industries by exports and imports, it can be noticed that there are a lot of industries whose imports exceed exports. It shows that some products produced by industry are exported, whereas other kinds of products are imported much more intensively. For example, such industries are "Crop and animal production, hunting and related service activities", "Manufacture of food products, beverages and tobacco products", "Manufacture of textiles, wearing apparel and leather products" etc. The export industries which use the most import are "Manufacture of motor vehicles, trailers and semi-trailers" and "Construction". However, the trade balance of these industries is negative.

The trade balance of the country in 2014 was positive and was 337254 million. It means that Russia exported more than imported. The most export-oriented industry in 2014 was “Mining and quarrying”, whereas “Manufacture of motor vehicles, trailers and semi-trailers” consumed most of imports. Also, “Wholesale trade, except of motor vehicles and motorcycles” is the second export-oriented industry and has a positive trade balance of 60924 million.

Positive trade balance was 52 % of the whole foreign trade turnover of the country in 2014. Talking about 3 main industries, net export of “Mining and quarrying” is 93 % of total turnover in the branch, net export of “Wholesale trade, except of motor vehicles and motorcycles” is 77 % and net export of “Land transport and transport via pipelines” is 81 %. They were the main export-oriented branches in the country in 2014.

Continuing speaking about the main branches, we see that export earning covers much more than the whole cost of imports. For example, exports in “Mining and quarrying” are more than imports by almost 27 times.

As a result of calculations, it was revealed that exports in GDP was about 30 %, whereas imports were 10 % in 2014. Nowadays as in 2014, the three top Russian export companies are Rosneft Oil Company, Gazprom, LUKOIL. They export natural gas, oil and oil products. The export of these products in the first half of 2017 was more than 50 % of total export, where export of oil was 28 %, oil products – 18,5 %, natural gas – 11 % (Figure 12).

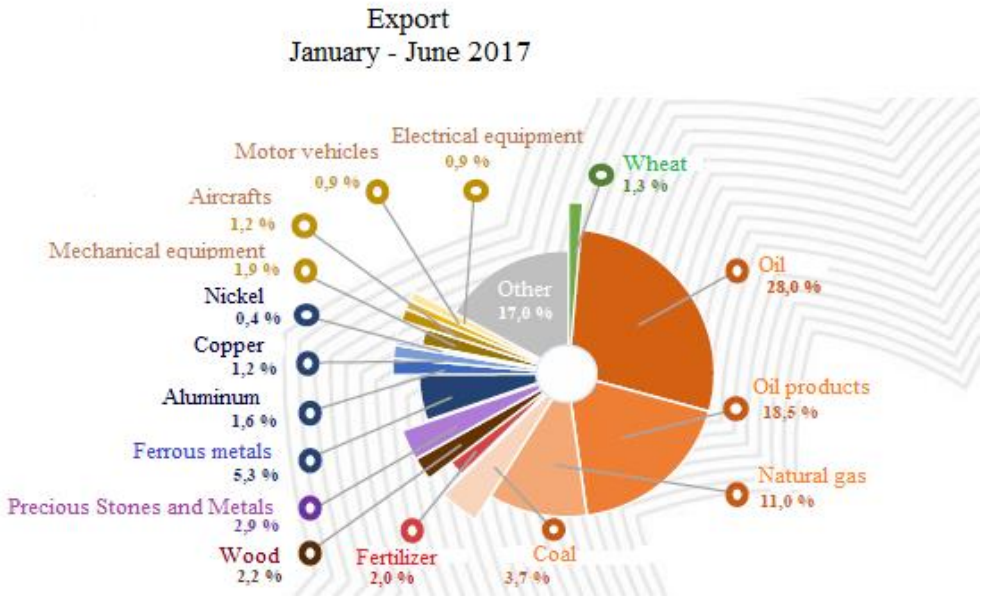

Figure 12. Russian export for January-June 2017
Source: Ministry of Economic Development of the Russian Federation, 2019

It is important to note that the export of raw material is a substantial part of state revenue since customs duties are applied to its export, i.e. customs duties fulfill fiscal function aimed at replenishing the state budget.

The main trading partner of Russia in the first half of 2017 was China. It was followed by Germany and the Netherlands. Notwithstanding sanctions, the EU remains the main trading partner for groups of countries (Figure 13).

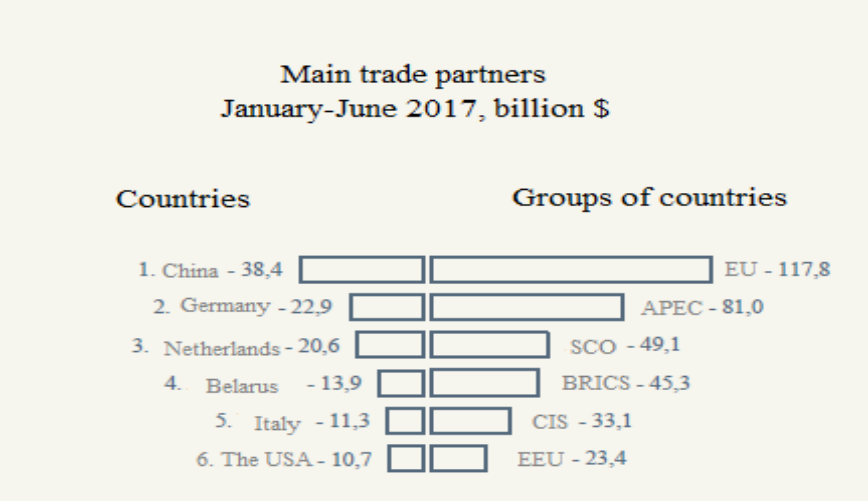

Figure 13. Russian main trade partners for January-June 2017
Source: Ministry of Economic Development of the Russian Federation, 2019

Thus, many of the structural economic problems facing Russia have remained unchanged since Soviet times. Abundant natural resources helped spur growth, but at the cost of unhealthy dependency. This problem is recognized by the Russian government. However, the continuing flow of money from oil and gas removed the incentive to undertake serious economic reforms. As a result, these reforms failed. Large swathes of the economy remain under state control. Moreover, there are many barriers to domestic and international competition. Business fights against widespread corruption.

In recent years, the Russian government has launched a large-scale anti-corruption campaign, simplified bureaucratic procedures, restructured the education system, privatized state-owned companies, and invested in innovations. However, such initiatives have brought tangible improvements in only a few areas. Due to these structural problems, the fall in oil prices and economic sanctions led to a rapid deterioration of the economic situation.

Although the worst dynamics for the Russian economy is probably over, there is still no visible growth factor. As Elvira Nabiullina, chairman of the Central Bank of Russia, rightly said, the economy is looking for a new development model, and the recovery may be delayed for a long

period. None of the factors listed below, which may be key growth factors, is an acceptable option for Russia.

Firstly, even if Western sanctions are somehow weakened, the inflow of Western capital is unlikely to return to the pre-crisis level. This is due to the new level of political risk in lending to Russia and the widely recognized weak prospects for the Russian economy.

Secondly, the price of oil is unlikely to return to around $ 100 per barrel. Structural reforms and de-monopolization of the Russian economy are not visible. Thus, although the restoration of the Russian economy is observed, there is still an unhealthy dependence on oil price.

2.3.4 Monetary policy of Russia

Monetary policy is part of the state economic policy aimed at improving the welfare of Russian citizens. Its priority is to ensure price stability (CBR, 2020a). The main actor that manages the monetary policy of the country is the Central Bank of Russia.

The Central Bank of Russia is a legal entity. The Constitution of the Russian Federation establishes the special legal status of the Central Bank of the Russian Federation. It also gives it the exclusive right to issue currency and protect the ruble and ensure its stability. A key element of the legal status of the Central Bank of Russia is its independence, which implies, first, that the Central Bank of Russia is a special public legal institution with the exclusive right to issue currency and organize its circulation. The Central Bank of Russia is not a body of state power. However, its powers, in fact, are the functions of a body of state power, since their implementation involves the use of state enforcement. The Central Bank of Russia is accountable to the State Duma, which appoints and dismisses the Governor and members of the Board of Directors of the CBR (CBR, 2020b).

Thus, the Central Bank of Russia develops and implements, in cooperation with the Russian Government, a unified state monetary policy. The Central Bank of Russia, acting as the main coordinating and regulatory body of the entire credit system of the country, acts as an economic management body. The CBR controls the activities of credit organizations, issues and withdraws licenses from them for banking operations.

The main goal of the monetary policy of the Central Bank of Russia is to maintain price stability, that is, consistently low inflation. Price stability is an important element of an enabling environment for people to live and do business, as it:

- protects national currency income and savings from unpredictable depreciation. This allows to maintain a standard of living, as well as more confidently plan daily and long-term expenses.

- protects low-income citizens. Such families mainly buy inexpensive necessities. Stable low inflation allows to maintain consumption.
- helps to increase the availability of borrowed finance for companies, as it reduces the inflation premium that banks put in interest rates.
- simplifies financial and investment planning for a business.
- increases confidence in the national currency and creates conditions for reducing the proportion of foreign currency-denominated assets and liabilities in the economy.

The Central Bank of Russia pursues a monetary policy as part of the inflation targeting regime. The main principles of the monetary policy:

- The Central Bank of Russia sets a constant public quantitative inflation target.
- Inflation targeting involves a floating exchange rate determined by supply and demand in the foreign exchange market.
- The key rate is the main instrument of the monetary policy of the CBR.
- The Central Bank of Russia makes decisions on monetary policy based on a macroeconomic forecast and analysis of a wide range of data.
- The Central Bank of Russia follows the principle of monetary policy transparency to improve understanding and credibility of its current monetary policy and create a predictable economic environment for all economic agents (CBR, 2020c).

The CBR uses the key rate to influence inflation. Through the chain of economic relationships, the key rate affects a wide range of economic processes that ultimately affect the rate of growth in consumer prices. A change in the key rate almost instantly leads to a change by the same amount in the overnight rates of the interbank lending market. The formation of interbank money market rates near the key rate is the operational goal of monetary policy. The operational goal is achieved using monetary policy instruments by the CBR, through which the Central Bank of Russia manages the liquidity of the banking sector.

The CBR seeks to maintain money market rates within the interest rate corridor and keep them close to the key rate. One of them is reserve requirements applied to the banks. The reserve requirements create the need for credit institutions to keep a certain amount of funds on correspondent accounts with the Central Bank of Russia. Then the CBR, either by providing insufficient liquidity or absorbing excess liquidity, ensures that actual funds in correspondent accounts meet the established demand for liquidity and maintains money market rates at the key rate.

Auction-based one-week operations are the main instrument used by the Central Bank of Russia to bring the volume of banking sector liquidity in line with its demand and to regulate money market interest rates. The CBR conducts these operations once a week in the form of auctions to provide liquidity (repo auctions) or auctions to absorb liquidity (deposit auctions). The Central Bank of Russia defines the maximum volume of provision (absorption) of liquidity based on the forecast of the banking sector liquidity.

Another tool is overnight standing facilities that are used to limit fluctuations in money market rates. Deposit operations are a standing facility instrument for absorbing liquidity. To provide liquidity a set of instruments differing in the form of transactions (repo, secured loans) and types of collateral (foreign currency, bonds, credit claims to non-financial institutions) is used (CBR, 2020d).

Interest rates on overnight standing facilities to provide and withdraw liquidity for a period of 1 day are fixed. They form the upper and lower borders of the Central Bank of Russia interest rate corridor. Its borders are symmetrical with respect to the key rate. The width of the interest rate corridor sets the acceptable range of fluctuations in money market rates and is currently 2 percentage points (Figure 14).

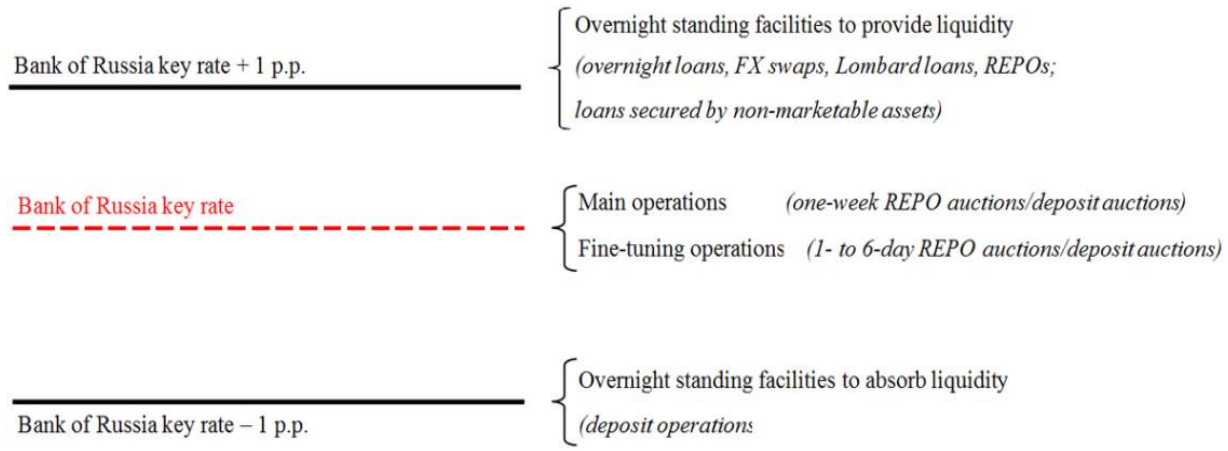

Figure 14. Interest rate corridor
Source: Central Bank of Russia, 2020d

On certain days, when the banking sector's demand for liquidity significantly deviates from its supply, the Bank of Russia may conduct "fine-tuning" auctions for periods of 1 to 6 days to prevent excessive fluctuations in money market rates within the interest rate corridor. Every morning, the CBR updates its assessment of the banking sector's liquidity and, if necessary, decides and announces a fine-tuning auction, as well as its timing and the maximum amount of funds provided (withdrawn).

In addition to short-term operations, the system of instruments of the Central Bank of Russia also includes operations to provide or absorb liquidity for long periods. In the context of a structural liquidity surplus, the Central Bank of Russia withdraws funds from the banking sector for long periods through the issuance of Central Bank of Russia bonds (OBR). The bonds are issued for a period of 3, 6, 12 months, the coupon period is set equal to 3 months. Coupon income is accrued for each day of the coupon period at the key rate effective on that day. The OBR issue allows the Central Bank of Russia to absorb medium-term liquidity surplus and increase the impact of underlying operations on money market interest rates (CBR, 2020d).

The full-scale spread of the financial crisis in the Russian economy began in July-August 2008, accompanied by an outflow of foreign capital and a drop in exports. Following the decline in exports, there was a drop in production and a reduction in investment programs for enterprises in the energy sector. According to Nekipelov and Golovnin (2010) the CBR's response to the crisis developed in two main directions.

Firstly, the monetary policy of assistance to the banking system was continued. Since August 2018, the Central Bank of Russia has sharply increased the provision of funds to commercial banks through traditional channels. At the same time, repo auctions were the main mechanism of bank lending. The peak of the provision of assistance was in late 2008 - early 2009.

The second direction of monetary policy in Russia during the crisis was the regulation of the exchange rate. If the first direction was in line with the main trends of the anti-crisis monetary policy of developed countries, then the second is more typical for countries with developing market economies. This was due to the desire to maintain the export and import competitiveness of domestic producers, with a high level of foreign borrowing, with the presence of significant assets in foreign currency and circulating in the national economy.

After financial crisis years the Central Bank of Russia began to simultaneously implement a more transparent monetary policy, explicitly declaring the borders of the currency band, and to reduce the degree of exchange rate regulation. At the end of February 2009, the range of the floating corridor was 2 rubles, then it gradually increased and at the end of July 2012 reached 7 rubles. By the summer of 2010, the volume of foreign exchange interventions by CBR had significantly decreased, and from the summer of 2012 to the spring of 2013, they were reduced to a minimum.

The role of the main instrument of monetary policy shifted to repo actions, the volumes of which increased sharply by the end of 2011. Thus, the Central Bank of Russia sought to increase the role of interest rates in the transmission mechanism of monetary policy. This was aimed at the transition

to the inflation targeting regime in Russia, which was announced a long time ago, but significant practical steps towards its implementation began just in the specified period (Golovnin, 2016).

The advantages of inflation targeting, which is widespread in developed countries, are not clear to countries with economies in transition. For such countries, the transition to inflation targeting means a decrease in the attention of the CBR to the exchange rate fluctuations, up to the transition to its free floating. However, the exchange rate in this group of countries plays a special role. It relates to the limitation of the possibilities of borrowing in the national currency both in foreign markets and, in part, within the national economy; also, to the dollarization of assets and the impact of exchange rate fluctuations on inflation. In addition, it is more difficult for economies in transition to determine the optimal inflation rate (Polterovich, 2006).

Until 2014, according to Golovnin (2016) the Central Bank of Russia reacted to the emergence of individual external shocks that created pressure on the foreign exchange market with moderate interventions to support the national currency rate. In a situation of a gradual slowdown in economic growth, the Russian economy faced a series of external shocks in 2014, which sharply increased the degree of uncertainty in decision-making by economic agents. These shocks were:

1) the political crisis in Ukraine, the associated annexation of Crimea to Russia and the introduction of the first sanctions by the US and the EU against Russia.

2) the introduction of sectoral sanctions by the US, EU, and several other developed countries.

3) falling oil prices on the world market.

As a result, the Russian economy found itself under the simultaneous impact of a trade shock (falling oil prices) and a halt in capital flows because of financial sanctions. During this period, the policy of the Central Bank of Russia was notable for its inconsistency. As part of the strategy of transition to inflation targeting from July to September 2014, it abandoned foreign exchange interventions, but at the same time carried out significant interventions to support the ruble exchange rate in October 2014. In a situation of continuing pressure on the foreign exchange market, the CBR in November 2014 announced the de facto early introduction of a free-floating ruble exchange rate regime. Although it was planned for early 2015. Formally, these actions were explained by the need to move to inflation targeting. However, in fact, it was recognized that the Central Bank of Russia was not ready to go on further spending of foreign exchange reserves to maintain the ruble exchange rate.

In comparison to December 2013, the nominal exchange rate of the ruble against the US dollar decreased in December 2014 by 40.6%, and against the euro - by 34.1%. The fall in the exchange rate led to an increase in the rate of inflation in 2015, which contradicted the goals set by the CBR itself. In addition to rising inflation, the fall in the exchange rate has led to other problems for the Russian economy. First, the problems associated with financial stability should be noted. As a result of the sharp change in the exchange rate, the risk of insolvency of borrowers in foreign currency has sharply increased, which has put the banking system at risk.

The CBR, in response to pressure on the foreign exchange market, raised its key interest rate in the second half of 2014, sharply raising it in December to 17% (Figure 15). Thereby, there was a sharp tightening of monetary policy in the context of the economy entering the crisis under the influence of internal and external factors. In this situation, the Central Bank of the Russian Federation faced a dilemma - a rate cut would create pressure on the exchange rate, and a high rate would suppress economic activity. Although it attracted depositors to the banking system in the short term, the possibilities of placing assets at a similar rate in the context of the onset of the economic downturn were very limited and steadily declining. In 2015, the Central Bank of Russia began to cut interest rates (Golovnin, 2016).

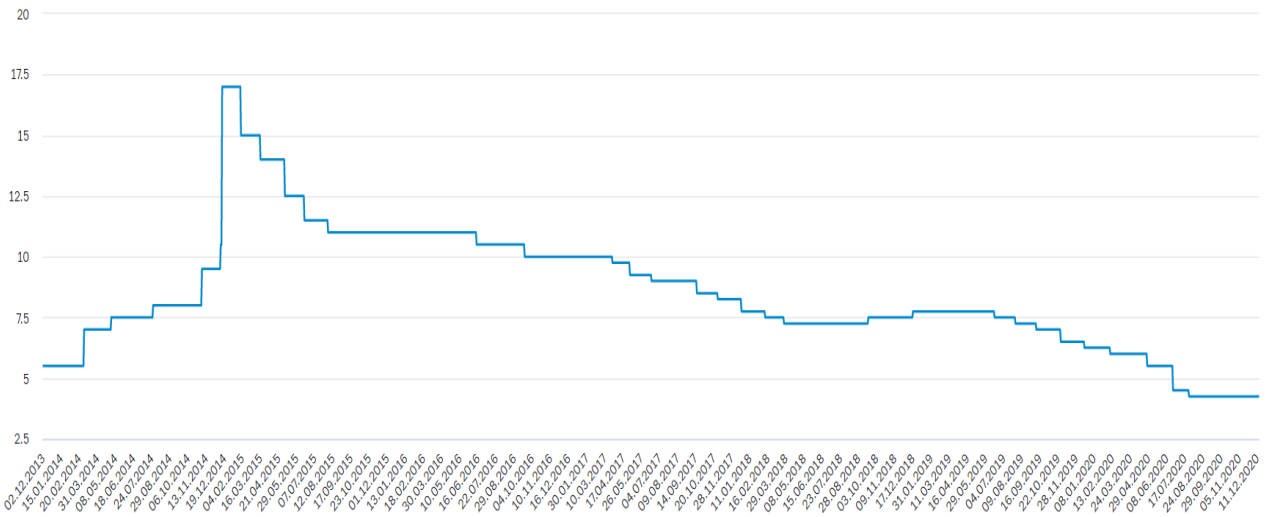

Figure 15. Key rate of CBR, %
Source: Central Bank of Russia, 2020e

After several years of negative growth due to the massive flight of capital, the collapse of the ruble, falling oil prices and trade sanctions imposed by the West after the Ukrainian crisis, the Russian economy has returned to modest growth since 2017, mainly due to mineral resource extraction and private consumption. According to the latest IMF estimates, GDP growth slowed to 1.3% in 2019 due to falling oil prices and the negative impact of rising VAT on private consumption.

The economy of the country continued to grow moderately in 2019, but industrial activity slowed due to weaker external demand, lower oil production in line with quotas agreed upon by OPEC and oil exporting countries, and higher financing costs related to sanctions introduced in 2018. After the 2015–2016 recession, the Russian government pursues a cautious macroeconomic policy aimed at maintaining financial stability, and the Central Bank of Russia carefully controls inflation. Even though they showed a decrease compared to 2018, public finances remained in surplus in 2019. The budget surplus is estimated by the IMF at 1% of GDP and should remain in surplus in 2020 (0.2% of GDP). Government debt increased, but remains low, by 16.5% of GDP in 2019. According to IMF forecasts, public debt should continue to grow, reaching 17.7% of GDP in 2020 and 18.3% of GDP in 2021. Inflation, estimated at 2.9% in 2018, rose to 4.5% in 2019, reflecting an increase in introduced VAT in 2019 (Santander, 2020).

In 2019, the Central Bank of Russia decided to reduce the key rate by 0.25 percentage points up to 7.5%. This decision is due to a decrease in annual inflation in April-May 2019 to 5.1% and a weakening of inflation risks. The inflation forecast for 2019 was revised from 4.7–5.2% to 4.2–4.7%. The CBR expected that in 2020 annual inflation would fluctuate near the target level of 4% and planned to complete the transition to a neutral monetary policy (Economy Times, 2019).

On April 24, 2020, the Central Bank of Russia lowered the policy rate by 50 bps up to 5.5 percent. It began selling foreign exchange reserves from the National Wealth Fund on March 10, reflecting a fall in oil prices below the base price in accordance with the fiscal rule, and later for the purchase of Sberbank by the government. The CBR temporarily introduced a long-term refinancing instrument; regulatory mitigation for banks intended to help corporate borrowers, and a more favorable regime for loans in foreign currencies issued to certain sectors (IMF, 2020).

The Central Bank of Russia has been active in the foreign exchange markets over the past two decades. Since 2000, the ruble exchange rate has changed from very rigidly controlled (2000-2005) to freely floating in an inflation targeting regime. But the CBR still reserves the right to intervene in the foreign exchange markets and prevent excessive volatility. The CBR has managed to mitigate the worst effects of exchange rate fluctuations, often caused by oil price fluctuations (Dominguez-Jimenez & Poitiers, 2020).

Following the financial crisis, according to Dominguez-Jimenez and Poitiers (2020) the Central Bank of Russia identified downward pressure on the ruble, fueled by capital flight and erosion of the current account balance. The CBR allowed a gradual depreciation of the ruble. It happened through gradually expanding the currency band, but at the same time the CBR supported it with market operations, because of which one third of the reserves of the CBR was depleted in three

months. In 2014, the intervention played an even bigger role as the announcement of exchange rate flexibility increased pressure on the currency, which had already been weakened by the oil crash and sanctions. The CBR supported the currency with reserves and made a great use of the key rate.

In 2014, the Russian economy experienced two serious shocks, barely escaping a recession with moderate growth of 0.6%. The first shock was a sharp drop in oil prices in the third and fourth quarters of 2014, which revealed Russia's extreme dependence on world commodity cycles. After fluctuations in a narrow band of about $ 105 per barrel in 2011-2013, crude oil prices ended in 2014 at less than $ 60 per barrel. The second shock was the economic sanctions caused by geopolitical tensions, which negatively affected investors' appetite for Russian investments. The outflow of capital and high inflation exacerbated the economic problems in Russia, as the economy experienced the serious recession since 2009 contracting 3.7% in the full year 2015 (FocusEconomics, 2020).

The unstable macroeconomic environment in Russia and the country's monetary policy have significantly affected FDI flows. FDI flows have traditionally been viewed as less volatile than other capital flows. The fundamental idea behind international capital flows is that short-term flows can be easily reversed, while long-term flows are more stable. However, foreign direct investment in the oil sector tends to be more speculative given the volatility in oil markets. The high degree of uncertainty caused by the volatile exchange rate discouraged foreign investment. In recent decades, the ruble has been heavily influenced by the price of oil. Oil exports are the largest source of dollar reserves for the country, which until 2015 regularly intervened in foreign exchange markets to manage the exchange rate. The transition from exchange rate management to inflation targeting of monetary policy was formalized in 2014 (Dominguez-Jimenez & Poitiers, 2020).

The volume of foreign direct investment in the Russian economy and from the country increased sharply and reached its peak in 2013. In 2014 the volume of inflows to Russia fell by almost 2 times. In 2015, when developed and developing countries showed steady growth, the inflow and outflow of capital from Russia continued to fall, and, on the contrary, in 2016 the opposite trend was observed.

The increased flexibility, coupled with the 2014 announcement of the pursuit of a fully floating exchange rate and inflation targeting system, has had the opposite effect of previous policies. The 2014 announcements came at a time when pressure on the currency was mounting and likely added additional pressure, contributing to a sharp depreciation of the ruble. The hint that the CBR would

allow the currency to float naturally weakened confidence in the ruble and triggered a moderate capital flight. In the months that followed, the Central Bank of Russia did its best to prop up the currency and allay market concerns, partly undermining monetary policy to that end. Although the official exchange rate target was lifted in November 2014, the CBR took major interventions to prevent a currency collapse before the end of 2014 and in the beginning of 2015. While the decline in reserves is indicative of the CBR's efforts, reserves fell by almost 30% between 2013 and 2015, this period was characterized by a rapid increase in the key rate, up to 17% (Figure 15) (Dominguez-Jimenez & Poitiers, 2020).

The main trend in investment pre-Covid period has been the growth of the positive balance, i.e. Russian investment abroad grew faster than foreign investment in Russia. However, after external shocks, primarily the decline in world oil prices and the introduction of financial sanctions against Russia, this trend has weakened, primarily due to the active repatriation of Russian investments from abroad and foreign investments from Russia. Thus, like the movement of goods and services, the outflow and inflow of investments began to decrease after 2013-2014, with a tendency to some recovery in 2017.

According to Dominguez-Jimenez and Poitiers (2020) during 2018 the Russian currency has grown reasonably well and has not been hit by shocks, and capital flight in other emerging economies is a testament to the resilience of this inflation targeting system. It is worth noting that the oil sector in Russia remains dollarized. Many contracts, both commercial and investment, are concluded in foreign jurisdictions and are denominated in foreign currency; as such, they are not devalued by ruble fluctuations. Likewise, energy companies hold large stakes in dollar-denominated debt. Thus, foreign direct investment in the energy sector can remain relatively independent of exchange rate fluctuations. However, the uncertainty that exchange rate volatility creates for the management of the value chain in multinational companies does create uncertainty, while the associated political tensions discourage foreign investors. Moreover, energy companies remain dependent on domestic revenues and expenses. Thus, excessive dollarization, especially a very large share of dollar-denominated debt, can leave companies vulnerable to large fluctuations in the ruble exchange rate. It makes difficult for them to meet their dollar obligations and thus increases the likelihood of default. However, Russian oil giants have been signing contracts for the euro. Rosneft, the state-owned oil company and one of the largest in the world, announced in the summer of 2019 that all contracts would henceforth be in euros.

The developed countries, primarily Western Europe, have been and remain, despite the sanctions, the main source of FDI for Russia. It is important to note the fact that these investments bring the

necessary technologies and managerial experience to the country's economy. The developed states, in turn, are the main destination for the outward FDI of Russia. The importance of offshore jurisdictions in the movement of investments for the country's economy also remains.

3. MATERIALS AND METHODS

This section outlines the comprehensive methodology employed in this study, detailing the research process, tools, data collection, cleaning, and analysis techniques used to investigate the determinants of Russia's outward foreign direct investment. The study utilizes sophisticated statistical tools, SPSS and Stata. Data is collected from reputable international sources and subjected to cleaning and normalization. The subsequent analysis employs advanced statistical techniques to explore the relationships between Russia's OFDI and key economic indicators.

3.1 Research process

This chapter provides a detailed description of the materials and methods employed to accomplish this research. The research process followed six phases to achieve the objectives of the study. These six phases are:

1. Defining the problem

   To gather information on the studied field of research, a thorough review of the existing literature was conducted. This involved understanding the concept of foreign direct investment, the eclectic paradigm, the Investment Development Path theory, and analyzing global investment trends. Additionally, the general characteristics of the Russian economy were examined by reviewing international reports, complex indicators, foreign trade, and monetary policy.

2. Developing an approach to find the solution

   Based on the findings of the literature review, a conceptual model was developed to investigate the outward FDI of Russia. This model incorporates various economic indicators and theoretical frameworks relevant to the study.

3. Formulating the research design

   To test the validity of the suggested model, hypotheses were developed. The research design included the selection of appropriate analytical tools and software for data analysis. Multiple linear regression using SPSS and parallel regression on the panel dataset using STATA were chosen as the primary statistical techniques to answer research questions.

4. Collecting data

Data collection was carried out using reputable sources, including international institutions such as the World Bank, OECD, and UNCTAD. The data collected included various macroeconomic indicators and statistics.

5. Analyzing data through statistical techniques

   With the help of proper statistical techniques, the collected data was analyzed. SPSS was used for multiple linear regression analysis to identify the relationship between Russian FDI and various economic indicators. STATA was employed for parallel regression analysis on the panel dataset to examine how different factors simultaneously impact Russian OFDI over time.

6. Presenting and discussing results

   The results of the data analysis were compiled and presented using tables, charts, and graphs. The findings were interpreted in the context of the Investment Development Path theory. The implications of these results for the Russian economy and its FDI strategies were discussed, leading to comprehensive conclusions and recommendations.

Following flowchart of the research process can be presented (Figure 16):

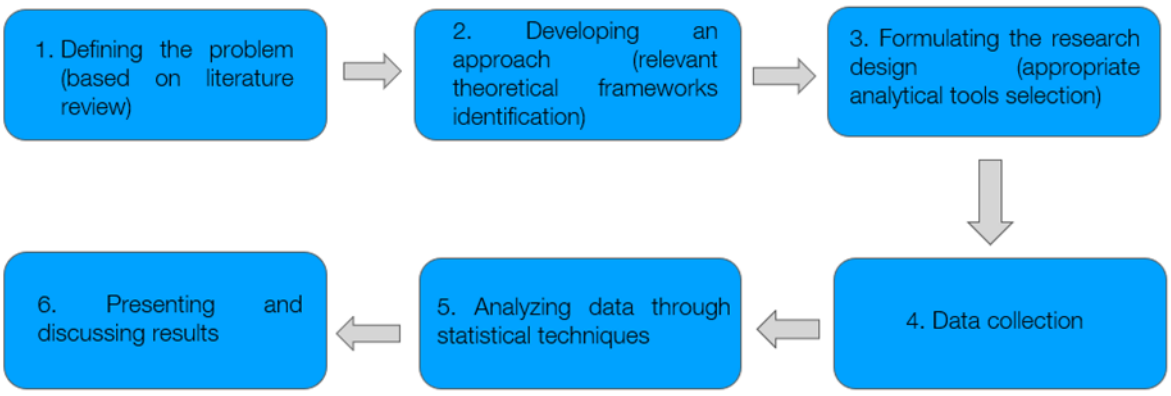

Figure 16. Research process flowchart
Source: author's own work

Since the research process has been outlined, the forthcoming chapters will offer additional details on the tools, data collection methods, and statistical techniques employed in the study. This will be followed by a presentation of the results and an analysis of the findings.

3.2 Research tools

In this chapter the tools essential for conducting thorough and accurate empirical research will be reviewed. The focus will be on two widely used statistical software packages: SPSS (Statistical Package for the Social Sciences) and Stata. SPSS will be utilized for IDP analysis, ensuring data accuracy and consistency. Stata will be employed to analyze panel data and perform parallel regression, enabling detailed examination of relationships within the data.

3.2.1 SPSS

SPSS, which stands for Statistical Package for the Social Sciences, is a powerful statistical analysis software widely used in various fields such as social sciences, health sciences, marketing, and education. Developed by IBM, SPSS offers a comprehensive suite of tools for data analysis, data management, and data documentation (IBM, 2024).

SPSS provides robust data handling capabilities, allowing users to manipulate and prepare data for analysis easily. It supports a wide range of statistical tests and procedures, including descriptive statistics, inferential statistics, regression analysis, and multivariate analysis. The multiple linear regression specifically has been used in this study. A variety of graphical representations, such as histograms, scatterplots, and bar charts, to visualize data trends and patterns can be created by SPSS.

The intuitive graphical user interface (GUI) allows users to perform complex analyses without needing extensive programming skills. SPSS integrates well with other software and databases, facilitating the import and export of data (IBM, 2024).

While SPSS is excellent for standard statistical analyses, it may not be as flexible or powerful as other software such as R or Python for highly specialized or advanced statistical methods (Wagner, 2019). SPSS remains a valuable tool for researchers and analysts due to its versatility, ease of use, and comprehensive statistical capabilities. Despite some limitations, its widespread adoption across various disciplines attests to its effectiveness and reliability.

3.2.2 Stata

Stata is another powerful statistical software package used for data analysis, data management, and graphics. It is widely utilized across various disciplines such as economics, sociology, political science, biomedicine, and epidemiology. Developed by StataCorp, the software is known for its user-friendly interface and comprehensive suite of tools for performing advanced statistical analyses (StataCorp, 2024).

Stata excels in data management, allowing users to handle large datasets, clean data, and manage missing values efficiently (Acock, 2018). It supports a vast array of statistical techniques, including descriptive statistics, inferential statistics, regression analysis, time-series analysis, and survival analysis. Stata provides advanced graphical capabilities for creating publication-quality graphs, such as scatterplots, line graphs, and bar charts (Mitchell, 2020). It includes a flexible programming language that enables users to write custom scripts and automate repetitive tasks. In the study Stata has been utilized to clean and perform parallel regression on the panel dataset.

While Stata is user-friendly, mastering its more advanced features and programming capabilities can require significant effort and training (Hamilton, 2013). Despite this limitation, Stata, the same as SPSS, remains a valuable tool for researchers and analysts due to its versatility, ease of use, and comprehensive statistical capabilities.

3.3 Data Preparation

This chapter outlines the data preparation process for this study, focusing on the collection, cleaning, and transformation of data. Two separate datasets have been assembled: the first for implementing the Investment Development Path (IDP) model, and the second to form a panel dataset crucial for examining factors affecting outward foreign direct investment (FDI) across various countries. The indicators were obtained from reputable databases and institutions, ensuring a solid basis for analysis.

3.3.1 Data collection

To apply the Investment Development Path model, the Net Outward Investment Position (NOIP) was computed using the Central Bank of Russia's data on inward and outward FDI stocks, following the methodology outlined by Bulatov (2018), which excludes reserve assets. Additionally, GDP and population data were sourced from the Federal State Statistics Service of the Russian Federation (2023). The official webpage of the Federal State Statistics Service provides accessible online data. The secondary data on GDP and population has been searched and downloaded from the webpage. The data spans from 2001 to 2017.

Panel data was collected to perform parallel regression analysis aimed at identifying the indicators that most significantly impact OFDI. The data spans from 2013 to 2019 and was sourced from several authoritative institutions, each providing essential economic indicators:

- Data on outward positions by instrument and partner country was obtained from the Central Bank of Russia, reflecting the directional principle of Russian investments abroad (CBR, 2024).
- The annual GDP growth rate, sourced from the World Bank, measures the annual percentage growth rate of GDP at market prices based on constant local currency, expressed in U.S. dollars (The World Bank, 2024a).
- The political stability and absence of violence/terrorism indicator, also from the World Bank, measures perceptions of political instability and violence, providing scores on a standard normal distribution scale, ranging from -2.5 to 2.5 (The World Bank, 2024b).
- Population data, based on midyear estimates that count all residents regardless of legal status, was obtained from the World Bank (2024c).
- Data on statutory corporate tax rates was retrieved from the OECD (2024a) Database.
- Exchange rate data for the Russian Ruble was obtained from UNCTAD, computed separately for each year (UNCTAD, 2024a).
- Inflation data, sourced from the World Bank, measures the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services (The World Bank, 2024d).
- Data on trade openness, including the sum of exports and imports as a percentage of nominal GDP, was obtained from the UNCTAD (2024b) Database.
- The Logistics Performance Index (LPI), from the World Bank, measures the quality of trade and transport-related infrastructure based on a survey of logistics professionals (The World Bank, 2024e).

Secondary data from The World Bank provides a wealth of global economic, financial, and social statistics. These datasets cover topics like poverty, education, health, and economic development, offering valuable insights for comparative research and policy analysis across countries. The OECD serves as a key resource for economic indicators and policy data. Its databases encompass a broad spectrum of statistics, including macroeconomic performance, trade, investment, and labor market conditions, particularly for developed and emerging economies. UNCTAD provides detailed data on international trade, foreign direct investment, and development statistics, focusing on trends that impact global trade and sustainable development. Their reports support analysis of economic integration, globalization, and the performance of developing economies. The Central Bank of Russia is a primary source for data on the Russian economy. It offers comprehensive statistics on monetary policy, exchange rates, inflation, and the financial system, including banking sector reports and macroeconomic forecasts. These datasets are critical for understanding Russia's

economic trends and financial stability. Together, these institutions offer a rich repository of reliable secondary data for global and regional economic research and analysis, where data for the parallel regression of this study has been collected. The data were retrieved online on official statistical webpages of mentioned institutions.

The panel dataset includes data from the following countries: Australia, Austria, Belgium, Canada, Chile, Colombia, Costa Rica, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, South Korea, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States. The countries are members of the Organization for Economic Co-operation and Development.

The indicators chosen for the dataset are critical in signaling a country's economic health and potential for profitability, which are crucial for investors. A strong and stable GDP growth rate indicates a robust economic environment, attracting foreign investors due to the potential for higher returns on investments. This is supported by the UNCTAD World Investment Report (2024c). Countries with stable political environments and transparent, investor-friendly policies are more likely to attract FDI. This includes the ease of doing business, legal protections for investments, and the absence of excessive regulation. The World Bank's Doing Business Report (2024f) provides insights into how regulatory environments affect economic activities. Larger markets often attract more FDI because they offer greater potential for sales and profits. This is typically measured by population size or total GDP. Analysis from OECD Economic Outlooks (2024b) highlights the relationship between market size and FDI. Good physical and technological infrastructure, including transportation, telecommunications, and energy, facilitates business operations, making a country more attractive for FDI. The World Economic Forum's Global Competitiveness Report (2020) evaluates infrastructure as a key factor in competitiveness. Competitive corporate tax rates and tax incentives significantly influence FDI decisions. Special economic zones with tax exemptions or reductions are common strategies to attract foreign investors. The OECD Tax Database provides detailed data on corporate taxes across countries. Investors seek financial stability, including stable exchange rates, to mitigate business risks associated with currency conversions. The International Monetary Fund's reports (2024) provide data on exchange rate stability. Open trade policies and strong trade networks enhance FDI by providing access to export markets through favorable trade agreements. Inflation, as measured by the consumer price index, reflects the annual percentage change in the cost to the average consumer of acquiring goods and services. A stable and low inflation rate indicates a stable economy, reducing uncertainty for investors.

3.3.2 Data cleaning and transformation

Ensuring that there are no missing values in a dataset is crucial for reliable and accurate analysis. Missing data can lead to biased estimates, reduce the statistical power of the analysis, and potentially distort the conclusions drawn from the data (Little & Rubin, 2019). Imputing missing values helps maintain the integrity of the dataset, allowing for more robust and consistent results. Addressing any gaps in the data is essential to enhance the validity and reliability of the research findings.

After the data collection process, it was identified that there were missing values in the panel dataset: four in the OFDI column and one in the Logistics Performance Index column. These missing values were addressed by calculating and imputing the mean value for each respective country. There was no missing data for the dataset prepared for implementation of IDP.

The next step to follow is normalization of the panel dataset as the features have different units and scales. No action was taken for the IDP dataset.

Data normalization is a critical process in data preprocessing that transforms data into a common scale without distorting differences in the ranges of values. This process is essential for ensuring that various types of data can be compared and analyzed on an equal footing, which enhances the performance and reliability of machine learning models (Jain et al., 2000). By normalizing data, the impact of features with larger numerical ranges is minimized, thereby preventing these features from disproportionately influencing the results of an analysis (Han et al., 2011).

Normalization techniques include min-max scaling, which adjusts the range of data to a fixed scale, usually 0 to 1, and z-score normalization, which scales data based on the mean and standard deviation, transforming the data to have a mean of 0 and a standard deviation of 1 (Shanker et al., 1996).

The panel dataset includes various features such as GDP growth, political stability, population, corporate tax rate, exchange rate, inflation rate, trade openness, and logistics performance index. These features are on different scales. Given that the dataset has a diverse range of features and may include outliers (e.g., population numbers and exchange rates), Z-score Normalization is more appropriate.

This method will ensure that each feature contributes equally to the analysis, regardless of its original scale. It is suitable when the data has outliers, as it centers the data and scales it based on standard deviation. Z-score normalization transforms the data to have a mean of 0 and a standard deviation of 1. The formula for Z-score normalization is:

$$X' = \frac{X - \mu}{\sigma}$$

where:

- X is the original value
- μ is the mean of the feature
- σ the standard deviation of the feature
- X′ is the normalized value

The numerical columns have been selected from the dataset that required normalization, excluding categorical columns like 'Country' and 'Year'. The result is a data frame where each numerical feature has been normalized to have a mean of 0 and a standard deviation of 1. This makes the features comparable and suitable for various machine learning algorithms and analyses.

3.4 Data Analysis

This chapter delves into essential statistical techniques for investigating and understanding complex datasets. Notably, multiple linear regression and parallel regression are highlighted as effective methods for modeling and analyzing the relationships between the variables selected for this study.

3.4.1 Multiple linear regression

Multiple linear regression is a statistical technique used to model the relationship between a single dependent variable and multiple independent variables. The general form of the multiple linear regression equation is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n X_n + \epsilon$$

where:

- Y is the dependent variable,
- $X_1, X_2, \ldots, X_n$ are the independent variables,
- β_0 is the intercept,
- $\beta_1, \beta_2, \ldots, \beta_n$ are the coefficients for each independent variable,
- ϵ is the error term (Field, 2013).

The Enter method was used in this study. The Enter method, also known as the forced entry method, involves including all specified independent variables in the regression model simultaneously. This approach does not involve any statistical criteria for including or excluding

variables; rather, it ensures that all chosen predictors are considered in the analysis (Tabachnick & Fidell, 2019). One of the primary advantages of the Enter method is that it allows for a comprehensive analysis of all potential predictors. This ensures that the effects of all included variables are assessed together, providing a holistic view of their impact on the dependent variable. Additionally, by including all variables, the method controls for potential confounders, which allows for a clearer interpretation of each predictor's effect (Field, 2013).

Prior beginning the analysis outliers were identified. Outliers can significantly influence the results of a multiple linear regression analysis, potentially leading to misleading conclusions. Identifying and addressing outliers is crucial for obtaining accurate and reliable results. Residual analysis is a fundamental method for identifying outliers. Residuals, the differences between the observed values and the predicted values from the regression model, indicate how well the model fits each data point. Large residuals suggest that a data point is an outlier. Residual plots, which are scatter plots of residuals versus predicted values, can help identify these outliers. Ideally, residuals should be randomly scattered around zero, indicating a good fit (Field, 2013).

Once outliers are identified, there are several approaches to address them. One approach is to exclude the outliers from the dataset, particularly if they are due to measurement errors or are not representative of the population. Another approach is to apply transformations, such as log transformation, to reduce the impact of outliers. Additionally, robust regression techniques, which are less sensitive to outliers, can be used. Reassessing the model with and without the outliers can help understand their impact and decide on the best course of action (Osborne & Overbay, 2004).

After running a multiple linear regression analysis in SPSS, interpreting the output is crucial for understanding the relationships between the variables. The key components of the output include the Correlation Coefficient, ANOVA table, and Coefficients table.

1. Correlation Coefficient provides the R, R-squared (R^2), and Adjusted R-squared values. R^2 represents the proportion of variance in the dependent variable explained by the independent variables. An R^2 value close to 1 indicates a good fit. Adjusted R^2 adjusts the R^2 value based on the number of predictors in the model, providing a more accurate measure of model fit when multiple predictors are involved (Field, 2013).
2. ANOVA (Analysis of Variance) table tests the overall significance of the regression model. The F-statistic and its associated p-value indicate whether the model as a whole is statistically significant. A p-value less than 0.05 suggests that the model significantly predicts the dependent variable (Tabachnick & Fidell, 2019).

3. Coefficients table provides the unstandardized and standardized coefficients (beta values), t-values, and significance levels for each predictor. The unstandardized coefficients (Beta) represent the change in the dependent variable for a one-unit change in the predictor variable. The standardized coefficients (Beta) allow for the comparison of the relative importance of each predictor. The t-values and associated p-values test the null hypothesis that the coefficient is zero. A p-value less than 0.05 indicates that the predictor significantly contributes to the model (Field, 2013).

By carefully examining these components of the output, researchers can draw meaningful conclusions about the relationships between the dependent and independent variables, the overall fit of the model, and the significance of each predictor. Additionally, the results can be visualized through various graphical representations.

3.3.2 Parallel regression

Parallel regression refers to comparing multiple regression models (pooled OLS, fixed effects, random effects) to determine the most appropriate model for the data. By running these models in parallel and applying tests like the Breusch-Pagan LM test, it is possible to validate the necessity and advantages of using panel data techniques (Baltagi, 2008).

Panel data, also known as longitudinal data, consists of observations on multiple entities (such as countries in this study) over multiple time periods. Panel data combines the cross-sectional dimension (across countries) with the time-series dimension (across years), allowing for richer analysis by accounting for both individual heterogeneity and temporal dynamics (Greene, 2012).

Before starting the parallel regression analysis it is important to check multicollinearity. Multicollinearity occurs when two or more independent variables in a regression model are highly correlated, meaning that one can be linearly predicted from the others with a substantial degree of accuracy. This situation can lead to several issues in regression analysis:

- Unstable Coefficient Estimates: When multicollinearity is present, the coefficients of the regression model can become highly sensitive to changes in the model. Small changes in the data can lead to large changes in the estimated coefficients (Greene, 2012).
- Inflated Standard Errors: High multicollinearity can inflate the standard errors of the coefficients, making it difficult to determine the statistical significance of each independent variable.

- Reduced Model Interpretability: When variables are highly correlated, it becomes challenging to isolate the effect of each variable on the dependent variable (Gujarati & Porter, 2009).

The most common method to detect multicollinearity in a regression model is Variance Inflation Factor (VIF). VIF measures how much the variance of a regression coefficient is inflated due to multicollinearity. A VIF value greater than 10 is often considered indicative of high multicollinearity. It has following formula:

$$VIF_i = \frac{1}{1 - R_i^2}$$

where R_i^2 is the R-squared value obtained by regressing the *i*-th independent variable on all other independent variables (Gujarati & Porter, 2009).

If multicollinearity is detected, several approaches can be taken to address it:

- Remove Highly Correlated Predictors**:** If two predictors are highly correlated, consider removing one of them from the model (Greene, 2012).
- Combine Predictors: Create a single composite predictor from the correlated variables (Wooldridge, 2016).
- Principal Component Analysis (PCA)**:** Use PCA to transform the correlated variables into a smaller set of uncorrelated components (Jolliffe, 2002).
- Ridge Regression: Apply ridge regression, which adds a penalty to the regression coefficients to shrink them, thus reducing multicollinearity (Hoerl & Kennard, 1970).

Once multicollinearity is checked and addressed, the Breusch-Pagan Lagrange Multiplier (LM) Test can be performed. This test, often performed using the *xttest0* command in Stata, is used to decide between a pooled ordinary least squares (OLS) model and a random effects model.

Pooled OLS Model assumes no individual-specific effects and combines all data ignoring the panel structure. The *xttest0* command in Stata tests the null hypothesis that variances across entities are zero (i.e., no panel effect). A significant test result indicates the presence of individual-specific effects, suggesting that a random effects model is more appropriate than a pooled OLS model (StataCorp, 2021).

Interpretation of the Breusch-Pagan Lagrange Multiplier test is following:

- If the test is significant (p-value < 0.05): Reject the null hypothesis. The random effects model is preferred over the pooled OLS model, indicating that panel data analysis is appropriate.

- If the test is not significant (p-value ≥ 0.05): Fail to reject the null hypothesis. The pooled OLS model may be appropriate, suggesting no significant individual-specific effects.

Ordinary Least Squares is a method for estimating the parameters in a linear regression model. The OLS method minimizes the sum of the squared differences between the observed dependent variable and those predicted by the linear function. The OLS regression model can be written as:

$$y_i = \beta_o + \beta_1 x_{1i} + \beta_2 x_{2i} + \ldots + \beta_k x_{ki} + \epsilon_i$$

where:

- y_i is the dependent variable for observation *i.*
- β_0 is the intercept, the expected value of the dependent variable when all independent variables are zero.
- $\beta_1, \beta_2, \ldots, \beta_k$ are the coefficients for the independent variables $x_1, x_2, \ldots, x_k$, the expected change in the dependent variable for a one-unit change in the respective independent variable, holding all other variables constant.
- ϵ_i is the error term for observation *i*.

If the panel data analysis is appropriate, the process can be continued by defining the model. Two primary models are often considered: fixed effects (FE) and random effects (RE).

The fixed effects model controls for time-invariant characteristics of the entities by allowing each entity to have its own intercept. It is useful when we assume that individual-specific characteristics may correlate with the independent variables (Hsiao, 2014). The fixed effects model can be specified as:

$$y_{it} = \alpha_i + \beta X_{it} + \epsilon_{it}$$

where:

- $y_{it}$is the dependent variable for entity *i* at time *t*.
- α_i represents the individual-specific intercept.
- β is the vector of coefficients for the independent variables X_{it}
- ϵ_{it} is the error term.

The coefficients (β) in the FE model represents the average effect of the independent variables on the dependent variable, controlling for time-invariant characteristics of the entities. The entity-specific effects (α_i) are not directly estimated in the FE model output, but they are captured

implicitly. These effects control for all unobserved, time-invariant factors that might influence the dependent variable.

The random effects model assumes that individual-specific effects are uncorrelated with the independent variables and are randomly distributed across entities. The RE model treats these individual-specific effects as random variables drawn from a larger population (Greene, 2012). The random effects model can be specified as:

$$y_{it} = \alpha + \beta X_{it} + u_i + \epsilon_{it}$$

- $y_{it}$is the dependent variable for entity *i* at time *t*.
- α is the overall intercept.
- β is the vector of coefficients for the independent variables X_{it}
- u_i is the random individual-specific effect.
- ϵ_{it} is the idiosyncratic error term.

The RE model is more efficient than the Fixed Effects (FE) model when the individual-specific effects are uncorrelated with the independent variables because it uses both within-group and between-group variations (Baltagi, 2008). The model retains more degrees of freedom than the fixed effects model since it does not require estimating an intercept for each entity (Wooldridge, 2016).

The Hausman test is used to differentiate between the fixed effects model and the random effects model. It tests whether the unique errors (random effects) are correlated with the regressors, which would violate the assumptions of the random effects model.

- Null Hypothesis (H0): Random effects model is appropriate (i.e., the unique errors are not correlated with the regressors).
- Alternative Hypothesis (H1): Fixed effects model is appropriate (i.e., the unique errors are correlated with the regressors).

Interpretation of the Hausman test is following:

- If the test is significant (p-value < 0.05): Reject the null hypothesis. This indicates that the fixed effects model is preferred over the random effects model, suggesting that the individual-specific effects are correlated with the independent variables (Greene, 2012).

- If the test is not significant (p-value ≥ 0.05): Fail to reject the null hypothesis. This suggests that the random effects model is appropriate, indicating no correlation between individual-specific effects and the independent variables (Baltagi, 2008).

The Hausman test is a crucial step in panel data analysis as it helps determine the appropriate model to use. By comparing the fixed effects and random effects models, the test ensures that the chosen model accurately represents the data structure and relationships (Baltagi, 2008).

When running parallel regressions using pooled OLS, fixed effects, and random effects models, it is essentially comparing the assumptions and fit of each model. The interpretation of parallel regression results involves examining the coefficients, standard errors, and fit statistics of each model to determine which one is most appropriate.

The coefficients in a regression model represent the estimated effect of the independent variables on the dependent variable. In the pooled OLS model, the coefficients are estimated assuming no individual-specific effects. The interpretation of these coefficients is straightforward: each coefficient represents the average change in the dependent variable for a one-unit change in the corresponding independent variable, assuming all other variables are held constant (Wooldridge, 2016). In the fixed effects model, the coefficients are estimated while controlling for all time-invariant characteristics of the entities. Each coefficient represents the within-entity effect of the independent variable on the dependent variable, controlling for entity-specific effects. This model accounts for unobserved heterogeneity across entities that might be correlated with the independent variables (Greene, 2012). In the random effects model, the coefficients represent the effect of the independent variables on the dependent variable, accounting for both within-entity and between-entity variations. The RE model assumes that the individual-specific effects are uncorrelated with the independent variables (Baltagi, 2008).

Standard errors measure the precision of the estimated coefficients. Smaller standard errors indicate more precise estimates. The standard errors in the pooled OLS model assume homoscedasticity (constant variance of the error terms) and no autocorrelation (Wooldridge, 2016). The standard errors in the fixed effects model account for the within-entity correlation. The standard errors in the random effects model account for the structure of the panel data. If the random effects are correlated with the regressors, the standard errors will be biased, which is why the Hausman test is crucial for deciding between RE and FE models (Baltagi, 2008).

Fit statistics provide information on how well the model explains the variability in the dependent variable. It consists of R-squared (R^2), F-test and Wald Chi-square.

In pooled OLS model the R^2 measures the proportion of the total variation in the dependent variable explained by the independent variables. However, it does not account for the panel structure of the data (Gujarati & Porter, 2009). In the FE model the within R^2 measures the proportion of the within-entity variation explained by the independent variables. It is useful for understanding the fit of the model within entities (Greene, 2012). The overall R^2 the RE model combines the within and between variations explained by the independent variables. The between R^2 measures the proportion of the between-entity variation explained by the model (Baltagi, 2008).

For pooled OLS and fixed effects models the F-test assesses the joint significance of all the coefficients. A significant F-test indicates that the model explains a significant portion of the variance in the dependent variable (Wooldridge, 2016). For a random effects model the Wald chi-square test evaluates the joint significance of the model's coefficients. A significant Wald chi-square indicates that the model is a good fit for the data (Baltagi, 2008).

4. RESULTS AND DISCUSSION

Given the importance of understanding the unique features of Russia's outward foreign direct investment, the discussion will begin with an examination of these characteristics. Following this, the focus will shift to the results of the multiple linear regression and parallel regression analyses. The findings reveal the connections between the dependent and independent variables. The discussion also assesses the effectiveness of the models, interprets significant coefficients, and considers any anomalies or unforeseen outcomes that emerged during the analysis.

4.1 Features of Russian outward direct investment

The Russian Federation was one of the main countries investing abroad during the 90s. Its FDI outflows often exceeded the inflows. Moreover, the volume of OFDI stock has increased rapidly since 1999. Its growth rates exceeded other emerging markets (Figure 17). Nevertheless, it can be explained by the fact that the CBR began to receive more accurate information after 1999 and the country's foreign investment position was significantly underestimated in previous years - Kalotay and Sulstarova (2010) say.

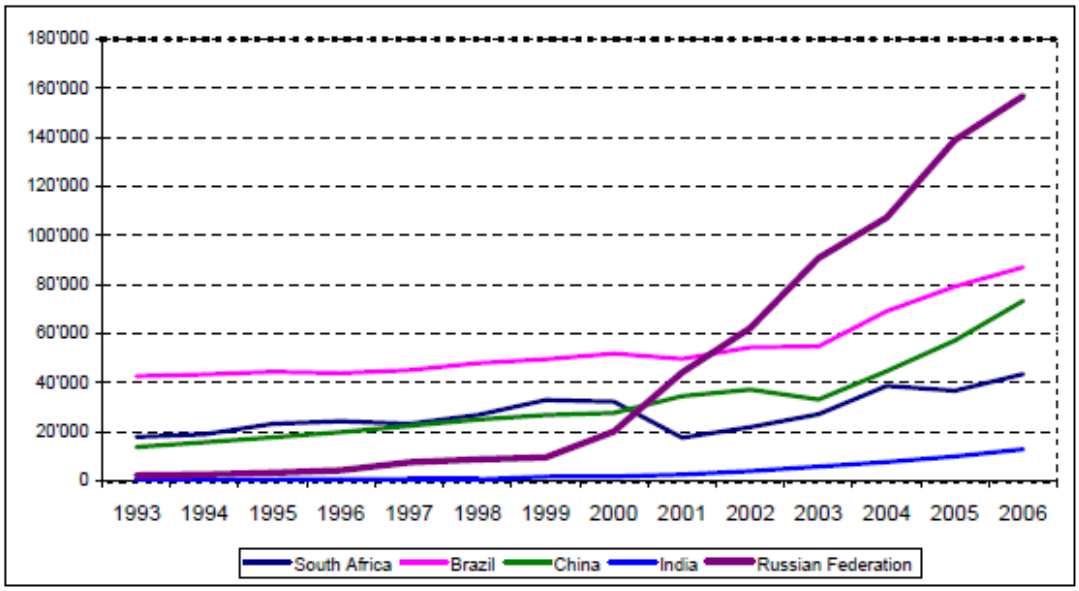

Figure 17. OFDI stock of the BRICS countries, 1993-2006 (Billions of US dollars)
Source: Kalotay & Sulstarova, 2010

According to researchers, in the early 2000s Russian OFDI were mostly stimulated by growing volumes of cross-border mergers and acquisitions (M&A). The volume of purchases of M&A by Russian MNCs increased by three times from 1992–1996 to 1997–2000 and from 1997–2000 to

2001–2004. This picture shows the evolution of Russian MNCs. They began to strengthen their competitiveness with monopolistic advantages, first domestically and then in other countries.

Regarding the geography of distribution of acquisitions abroad, the authors state Russian companies are focused mainly on firms from developed countries. However, the expansion of Russian MNCs often began in other countries of the Commonwealth of Independent States (CIS).

When it comes to the sectoral structure of M&A during the period before the financial crisis 2008, most of the M&A was made in the primary sector (Table 4). In 1992-1996 the share of the primary sector was low, but it has risen since then. The main sector at the beginning of the 1990s was manufacturing. Russian investments in the service sector were low in 1992–1996, but then grew in subsequent years. In this sector telecommunications have played an important role. However, after the crisis even though the pace of Russian OFDI has been slowed down, its sectoral composition has not changed significantly (ACRA, 2018).

Table 4. Cross-border M&A puchases by Russian MNCs, by host sector/industry, 1992–June 2008 (Millions of US dollars)

Sector/industry	1992–1996	1997–2000	2001–2004	2005–2008
Total industry	511	1 700	5 498	56 794
Primary	45	1 098	2 980	33 485
Agriculture, forestry, and fishing	-	-	5	-
Mining, quarrying and petroleum	45	1 098	2 976	33 485
Mining and quarrying	-		- 1 546	15 742
Petroleum	45	1 098	1 430	17 743
Secondary	451	146	661	13 430
Food, beverages and tobacco	-	90	9	2
Wood and wood products	3	-	-	34
Oil and gas; petroleum refining	-	7	161	589
Chemicals and chemical products	-	-	164	113
Metal and metal products	-	31	306	2 914
Machinery	6	-	17	7 575
Electrical and electronic equipment	-	2	-	453
Electronic and electrical equipment	-	2	-	217
Communications Equipment	-		- -	143
Motor vehicles and other transport equipmen	442	15	-	1 537
Transportation equipment	200	15	-	1 537
Services	15	456	1 857	8 935
Electricity, gas, and water	-	177	60	1 042
Construction firms	-	-	100	1 637
Hotels and casinos	-	-	2	468
Trade	-	235	536	350
Transport, storage and communications	15	13	1 106	3 880
Telecommunications	-	10	1 021	3 637
Finance	-	23	30	1 773
Business activities	-	2	23	116
Business Services	-	2	19	250
Community, social and personal services	-	7	-	888

Source: Kalotay & Sulstarova, 2010

The Russian OFDI is mostly carried out by large industrial conglomerates. This is especially true of the industry based on natural resources. Big companies which execute the most of Russian OFDI are characterized by a monopolistic position in the domestic market, strong competitive positions, and building up significant export earnings used to finance foreign business activities. They recognize the need to increase the expansion of their foreign presence to strengthen or maintain their positions in world markets. The biggest and possibly the most important of them are companies in the oil and gas industry. Gazprom and Lukoil are examples of international players.

Kalotay and Sulstarova (2010) defined factors influencing OFDI of the country and its geographical composition. The determinants can be divided into two groups where in the first the researchers considered factors related to home country and in the second - related to host-country.

The first factor is the home-country environment, including GDP growth. FDI outflows from Russia are positively associated with the country's GDP growth. The second determining factor is exports, since it is a general indicator of international competitiveness and revenues of Russian firms. There is an additional link between investment and trade. Exports dominate the early stages of penetrating foreign markets, and investments - the later. In the case of Russia, export earnings are a source to finance OFDI projects. The third factor is state policy. The role of the government plays an important role in explaining the development of Russian OFDI. In the 1990s during the presidency of Boris Yeltsin, the government promoted the establishment of massive private monopolies. It was seeds that had contributed to the creation of current Russian MNCs. Nevertheless, there was no specific policy that would promote OFDI. It has changed under the presidency of Vladimir Putin. State intervention has increased, especially in the activity of companies such as Rosneft and Gazprom. The foreign policy course of Russia started influencing internationalization strategies of state-owned MNCs. It also touched private firms, for example, Lukoil. In 2008 Dmitry Medvedev, who was a former chairman of Gazprom’s board became a President of the Russian Federation. Igor Sechin, a former chairman of the board of directors of Rosneft, became Deputy Prime Minister for natural resources. Thus, the relationship between the state-owned MNCs and government has become even closer. As a result, the line between business and government became unclear.

One of the main factors determining the choice of a host country may be the characteristics of the market of the host country. The main characteristic is the market size, because if it increases, the possibilities for efficient use of resources and economies of scale increase. The size of the market of the host countries is one of the main reasons for the outward FDI of Russia, since Russian MNCs

are usually present in growing and large markets. Another factor may be the natural resources endowment of a country-recipient. The motives of Russian OFDI are usually resource-seeking, especially in mining and steel companies. The reasons may be the rising cost of mining in Russia or the physical paucity of volumes in the domestic market. This also applies to large Russian oil and gas companies. The next determinant is technological assets in the host country, which is motivated by obtaining quick access to technological innovation. Russian MNCs typically operate in traditional industries with mature technologies. As a result, technology is not of paramount importance to them. However, some Russian companies have been recently interested in accessing advanced patented technologies or other opportunities abroad. For instance, Lukoil seeks to acquire advanced technologies for extraction and exploration, as well as modern oil refining technologies. The last factor is cultural proximity. The decision of Russian companies to invest can be influenced by cultural ties, for example, between the CIS countries. As a result, the expansion of Russian corporations began primarily in the CIS countries. It allowed them to occupy a prominent place next to their domestic market.

Thus, those determinants are associated positively with Russian outward FDI. It means that an increase in the value of determinants will lead to an increase of OFDI.

Over the last decades, changes have occurred in Russian outward FDI. In the decade after the USSR collapse, an increase in the volume of outward FDI was mainly a result of the fact that company owners moved out capital from Russia to avoid political risks. However, from the 2000s the motivation became more rational. It is more related to commercial interests, for example, gaining access to new technologies or strategic assets, as well as the promotion and diversification of production etc. As a result, although Russian OFDI was considered by the Russian government as a loss of resources and an obstacle to economic growth, some strategic investment projects began receiving political support. Most of Russian outward FDI is directed to resource sectors, especially metals and energy (Kalotay, 2014).

According to Liuhto (2015) as cited by Weiner (2018), the main reasons for Russian companies investing abroad are the following:

- OFDI is used a personal bank which means that it is more convenient to perform financial transactions;
- market expansion;
- increasing the rate of return by moving along the value chain from raw material exporter to the finished products seller;
- tax minimizing by tax havens and low-tax countries;

- avoidance of political risks;
- ensuring the company's supply chain though purchasing logistics units abroad to ensure export of goods from the domestic production site;
- acquiring technologies;
- serving foreign policy goals;
- the establishment of a company or the acquisition of real estate abroad in order to obtain a long-term residence permit or foreign citizenship;
- the growing global competition, thereby internationalization is needed.

Weiner (2018) considers round-tripping as one of the important features of Russian OFDI. Round-tripping FDI implies leaving FDI the country and returning. This phenomenon allows Cyprus, the British Virgin Islands and the Netherlands to lead a constant list of Russian direct investment recipients (Table 5). Furthermore, round-tripping leads to an overstatement of Russian FDI in both directions. The reasons for such movement of Russian OFDI are closely associated with negative internal factors such as the poor business and political climate, as well as with strategies of Russian MNCs to minimize the taxes.

Table 5. Russian outward FDI (calculation based on direction)

Country (region)	FDI stock			
	As of January 1, 2014		As of January 1, 2018	
	million USD	%	million USD	%
Whole world	**385321**	**100.0**	**380 047**	**100.0**
Cyprus	152702	39.6	175217	46.1
Netherlands	45012	11.7	48493	12.8
Austria	25500	6.6	30944	8.1
Luxembourg	-18796	-4.9	-19104	-5.0
Ireland	-21122	-5.5	-19849	-5.2
Other in the European Union:	41278	10.7	41637	11.0
Including:				
Germany	9607	2.5	8411	2.2
United Kingdom	7901	2.1	9091	2.4
Spain	4772	1.2	6382	1.7
France	3629	0.9	3006	0.8
Bulgaria	2853	0.7	3330	0.9
Finland	1199	0.3	3035	0.8
Italy	2056	0.5	2816	0.7
Czech Republic	1706	0.4	1791	0.5
Latvia	2821	0.7	1546	0.4
Hungary	228	0.0	259	0.1

Table 5 continued

Total European Union	*224574*	*58.3*	*257338*	*67.7*
Switzerland	12096	3.1	20160	5.3
Ukraine	5968	1.5	3658	1.0
EAEC Countries	8385	2.2	8525	2.2
Other European countries and former Soviet Union	11975	3.1	8315	2.2
United States and Canada	22585	5.9	8534	2.2
Latin America and the Caribbean, Bermuda	84874	22.0	50115	13.2
Australia and Oceania	432	0.1	550	0.1
Asia without the CIS,	9301	2.4	15327	4.0
Including:				
Turkey	5277	1.4	9490	2.5
Singapore	2332	0.6	2805	0.7
United Arab Emirates	621	0.2	907	0.2
Israel	446	0.1	571	0.2
Thailand	275	0.1	579	0.2
China	181	0.0	247	0.1
Hong Kong	64	0.0	346	0.1
Iraq	113	0.0	113	0.0
Africa	162	0.0	113	0.0
Including:				
Egypt	62	0.0	61	0.0
South Africa	36	0.0	35	0.0
Unallocated	4966	1.3	447	0.1

Source: comprised by author based on Central Bank of Russia database and Kalotay and Sulstarova, 2010

Recent studies in economic geography have recognized the round-tripping of capital from emerging economies to offshore financial centers (OFCs) and back as FDI. The reasons underlying this phenomenon have not been fully understood yet. Ledyaeva et al. (2015) suggest that the causes can be defined as the interaction of offshore secrecy and onshore corruption. They state that part of foreign direct investment includes the earnings of corruption that are laundered in OFCs and then reinvested back into the place of origin. Secrecy also prompts the round-tripping of legitimate capital. Companies use secrecy to hide their identity from the corrupt authorities of their country. In order to enlighten on unexplored phenomena such as round-tripping Ledyaeva et al. (2015) conducted empirical research on Russian patterns of FDI movement.

Offshore financial centers have established themselves as important units in the chains of the global financial market. They are often located in marginal locations, such as small island

countries. One of their key features is that OFCs hold strong positions in FDI flows of emerging economies such as Russia (Ledyaeva et al., 2015).

As a result of their study, researchers proved their hypothesis: the earnings of corruption are laundered through round-trip investment; round-trip schemes via OFCs are a tool for domestic investors to hide their identities; offshore investors are better prepared to cope with corruption in Russia. The first two results were proved by the fact that the positive relationship between offshore FDI and corruption intensified when they considered only foreign direct investment from offshore financial centers with a high level of financial secrecy. In addition, authors presume that for OFCs the establishment of very close financial relations with very corrupt onshore jurisdictions can significantly impair their reputation in the international arena.

Thus, round-tripping and offshoring are features of Russian OFDI. When it comes to geography of the country's outward FDI, Europe plays a leading role (Table 5). The main destinations of Russian OFDI in Europe are tax havens, such as Cyprus, as mentioned earlier, and rich European countries that can guarantee confidentiality and have favorable tax regimes, such as the Netherlands, Switzerland, Austria. These investments look for tax benefits or money laundering. Moreover, they suggest possible reinvestment in Russia. From data provided by the Central Bank of Russia, it is also clear that the largest recipient of the Russian OFDI is the British Virgin Islands. Oil and gas industry still dominates in Russian outward FDI, although Russian businesses are represented in almost all sectors, for example, hydrocarbons, steel, iron, mechanical engineering, banking, real estate, electronic manufacturing etc.

As for foreign direct investment, the Russian government is still focused on attracting inward investment, and not on stimulating their outflows. For a long time, any capital outflow was assessed as a negative phenomenon. However, the Russian government began providing political support for OFDI. Mainly large energy companies whose investments have both commercial and geostrategic values are supported. Other companies such as SMEs still receive little support.

In 2011 was established the Russian Agency for Insurance Export credits and Investments which is state-controlled. One of its functions is to provide financial support for OFDI, but because of the limited authorized capital it cannot provide sufficient support to investors and exporters. The Russian diplomatic service works mainly on political issues. It has insufficient experience in promoting Russian companies abroad. Thus, government support of OFDI is fragmented and controversial.

In recent decades, the increase in Russian foreign direct investment has been slowed in their accumulated volumes due to the economic crisis. According to CBR, Russian FDI decreased in

the years following the crisis 2014. Besides to economic reasons (including both world market conditions and GDP decline in Russia, ruble devaluation), political factors also have a negative impact on the volume of Russian FDI since spring 2014, first of all, rapid cooling of relations with the EU countries, the USA and Ukraine, which were among the main investment partners of Russia. Based on such conditions, the idea of a "turn" of Russia's external economic ties to the East was actively discussed (Kuznetsov, 2017).

There are successful examples of Russian investment in the East. However, Russian investment in the countries of the East faces serious problems of overseas expansion.

The first of such obstacles is the instability of the international political situation. Currently, businessmen are working on the possibility of implementing FDI in Iran, against which international sanctions have been lifted. However, it cannot be forgotten that the previous conflict over the nuclear program of this country indirectly affected the projects of Russian companies such as Lukoil and Gazprom, which were terminated in the end.

The second is the specifics of the business climate in many countries of the East, where even with the presence of political democracy in the economy, non-market decisions of the authorities can prevail. Sometimes, even in the absence of an obvious conflict between the investor and the receiving state, various nonprofit barriers force Russian investors to leave the country.

Finally, language barriers, ignorance of the local specifics of doing business and other objective factors lead to frequent miscalculations by Russian MNCs. That causes them to wind down or postpone the implementation of a number of investment projects in the East.

As shown in Table 5, some growth in the value of the countries of the East in terms of receiving Russian FDI can be observed. This can be explained mainly by a natural expansion of the foreign operations of Russian MNCs. They internationalize their business and develop new countries. The formal growth in the share of some Asian countries was not because of a reduction in the EU value, but as a result of the departure of Russian investors from the US and Ukraine, and also a decline of the weight of Caribbean offshores.

Also, the importance of Turkey is growing. However, its prospects depend on the position of the country in the fight against terrorists in Syria. Thailand and some other Asian countries increased the Russian investment presence, as well as the EAEC countries. The progress of post-Soviet economic integration as a whole allowed for retaining FDI indicators in the region. The presence of Russian investments in African countries is insignificant. Corporate information should be

further considered in order to carry out its adequate analysis, since the data for Russian OFDI in some African countries are confidential according to the Central Bank of Russia.

According to Kuznetsov (2017) the scale of Russian FDI in countries of the East in official statistics is understated, since many companies control their subsidiaries through offshores. The sectoral diversification of Russian investment in Asia and Africa is quite high in comparison to, for example, North America, where a large share in Russian FDI was mainly provided by metallurgical MNCs. To date, there are almost no large domestic MNCs that would not have tried to expand to the East. Moreover, the number of countries in Asia and Africa is growing steadily, where subsidiaries of the largest Russian MNCs operate. However, it is not appropriate to talk about reorientation to the East. This is a general expansion of the foreign presence of Russian business and the implementation of other FDI motives. Talking of main motives for the implementation of FDI, identified by J. Dunning, for Russian companies in Asia and Africa the most typical is the desire to participate in the extraction of mineral resources with the help of FDI. Thus, motives for those FDI are mostly natural resource seeking.

In Asia and Africa, Russian investors are attracted not only by raw materials, but also by rapidly growing markets. Telecommunications turned out to be the most promising, as the countries of the East mostly lagged behind Russia in terms of the speed of introducing mobile telephony and demonstrated a good dynamics of market growth precisely when demand was saturated in Russia. Moreover, the dynamic growth of the economies of many countries in Asia and Africa requires an increase in power generation capacity, thereby Russian companies have been actively involved in the construction of power plants in the East. Thus, analysis of common motives of FDI from Russia shows that Eastern countries are not always an alternative, for example, the EU.

For a long time, the geographical structure of Russian FDI was stable, where Europe played a main role. Many researchers say that this is starting to change because of the changes in priorities of Russian foreign policy. However, Russia's reorientation towards expanding investment cooperation with the Eurasian and Asian-Pacific regions, with African countries is a very slow process, which is still far from completion (Table 5).

In accordance with Weiner (2018), Italy, Germany and the United Kingdom receive the largest amount of Russian OFDI in Europe, in addition to Cyprus. Moreover, the author claims that because of the specific features of Russian OFDI, like round-tripping and offshore, and the lack of ultimate investing country statistics, the role of some host countries is overestimated, and the role of others is underestimated. However, Europe undeniably plays a leading role in Russian OFDI.

According to Kuznetsov (2017), in recent years the CBR has significantly expanded the detail of published data on Russian FDI. However, when analyzing their geography, the main problem remains unresolved, namely, accounting for investments in third world countries through offshore companies and similar jurisdictions. Distortions in official statistics are common to all recipient countries. For example, in the post-socialist countries with their dysfunctional investment climate and the desire of many entrepreneurs not to show assets obtained during dubious privatization operations, Russian companies use transshipment bases very often, which leads to an understatement of the role of Russian MNCs in those countries. Conversely, in countries like the United States and Canada, the real presence of Russian capital is much higher than according to the data of the CBR.

The amount of outward FDI presented by the CBR in relation to the EU is ambiguous. Cyprus is the formal leader in terms of Russian FDI, followed by the Netherlands, attracting very modest amounts of Russian investment.

Another problem with FDI accounting is related to the use of confidential data protection rules by all statistical authorities. If one or two companies carried out FDI, then, according to the data published for the respective state, it is easy to calculate the indicators of a particular investor, which can be used against him by his competitors. Because of that CBR, for example, does not disclose accumulated FDI in Asian countries such as Vietnam, Palestinian Authority. Among African recipients of Russian FDI, similar information has been closed for Angola, Algeria, the Republic of the Congo, Liberia, Morocco. Thus, less important from a commercial point of view of FDI flows is published.

An important role in analysis of Russian investment plays corporate information. Its main sources are materials of the largest MNCs, available on their official websites, as well as created by analytical centers, databases on companies' investments and various expert assessments. Also, OECD provides an estimate of inward FDI of the participating countries by partner country using methodology BMD4, which allows to determine the ultimate country-origin of FDI. Based on this data it is possible to see the amount of Russian outward FDI in OECD countries and compare with statistics provided by CBR. Thus, in the following chapter the presence of Russian FDI in OECD countries will be evaluated based on comparison of CBR data and OECD data.

4.2 Evaluation of Russian OFDI based on Balance of Payments and OECD data

The main source of data about foreign direct investment is Balance of Payment (BOP). The financial position of a country on the global market is usually estimated according to its balance

of payments. It is an important indicator that makes it possible to foresee the degree of a country's participation in world trade and establish its solvency.

The balance of payments is a table of the correspondence of external incomes and expenses in which all foreign exchange earnings received by a given country from other states are recorded, as well as all funds paid by a country to other countries during a certain period. In other words, it can be defined as a statistical summary of all transactions between residents and non-residents for a certain period, usually a year or a quarter. The balance of payments characterizes the level of production and consumption and the development of foreign trade. Its data allow us to trace the forms of attracting FDI, repaying the country's external debt, and changes in international reserves. In Russia, the Federal State Statistics Service collects primarily basic balance of payments data. Then the Central Bank compiles and publishes it. (Frolova, 2005).

To assess the financial position of Russia the balance of payments was obtained (Appendix 4). In 2017, against the background of an improvement in the price situation for the main goods of Russian exports, there was a strengthening of the current account. The current account surplus amounted to $ 35.2 billion in 2017. The growth in the current account surplus was the result of a strengthening trade balance. The deficit of the balance of foreign trade in services grew by 29.3% to $ 31.1 billion, because of more substantial growth in the volume of imports of services.

In recent decades, the current account of the country has evolved largely under the influence of the “Dutch disease” that swept Russia. Its symptoms in Russia are obvious: the share of the mining industry has increased, the share of revenues from oil and gas exports in the federal budget during the years of high world prices for hydrocarbons reaches 51% (RBC, 2016), while raw materials and fuel have long been the basis of Russian exports of goods. As a result, the state of both the BOP and the entire economy, which is mainly exporting, is mostly determined by fluctuations in world prices for raw materials, materials, semi-finished products, and especially for energy (Tcyrempilova et al, 2024b).

The capital account reflects Russia's forgiveness of debts to foreign countries. For example, a large negative balance of 2014 on the capital account was the result of a write-off for political and economic reasons of 42 billion dollars debt to Cuba, North Korea and Uzbekistan. A such campaign of active debt write-off is likely to end in recent years due to the external economic problems of Russia itself (Bulatov, 2018).

In recent years, the main trend in investment has been the growth of the positive balance, i.e. Russian investment abroad grew faster than foreign investment in Russia. However, after external shocks, primarily the decline in world oil prices and the introduction of financial sanctions against

Russia, this trend has weakened, primarily due to the active repatriation of Russian investments from abroad and foreign investments from Russia. Thus, like the movement of goods and services, the outflow and inflow of investments began to decrease after 2013-2014, with a tendency to some recovery in 2017.

According to Bulatov (2018), in Russia, the outflow of capital systematically exceeds its inflow, as can be seen from the balance of the financial account, if to exclude from it the movement of reserve assets (Table 6). Thus, a significant part of potential domestic investment goes abroad, mainly to offshores, not being compensated by the inflow of foreign capital. And after 2014, i.e. during the period of low oil prices, Western sanctions, economic crisis and stagnation, capital exports exceeded its imports. Even in 2015 the partial repatriation of Russian assets accumulated abroad was less than the repatriation of foreign assets from Russia.

Table 6. Outflows and inflows of Russian capital, billion rubles

	2001	2003	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net Inflows/ Outflows	13.6	0.3	0.3	-87.8	133.6	57.5	30.8	81.4	53.9	60.3	152.1	57.0	18.4	24.8
Outflows	20.0	33.6	74.8	128.4	240.6	49.7	73.7	148.1	126.9	174.9	114.4	-7.0	7.3	13.4
Inflows	6.4	33.4	74.4	216.3	107.0	-7.8	43.0	66.7	71.1	114.6	-37.7	-64.0	-11.1	-11.4

Source: Bulatov, 2018

Summing up the data of the CBR on the outward and inward investment for 2001-2017, it can be calculated that during these years outflow of capital accounted for 1369 billion, and inflow for 791 billion dollars. The main entities investing abroad were relatively narrow and because of these high-yield industries - mining, chemistry and metallurgy, which is indirectly confirmed by their high profitability and, consequently, a large weight of these industries in the profits received by all Russian organizations. Strong monopolistic barriers to entry into other Russian industries, low profitability of these industries, uncertain prospects of the Russian economy pushed the exporters of raw materials and semi-finished products to export a significant part of their profits abroad in the form of export of capital. Thus, from 40 to 60% of revenues from oil and gas exports were used to export capital and pay incomes of foreign investors (Manevich, 2017). According to the calculations of the author, the volume of outflow of capital from Russia for 2001-2017 amounted to 6.2% in relation to total GDP for this period.

A solution can be capital controls, which are widespread in the world, especially in developing countries. In modern Russian conditions, this could be the measures proposed, for example, by

S.Yu. Glazyev - the introduction of a tax on the capital export (Tobin tax); termination of suspicious transactions, especially with offshores; introduction of benefits in the Russian economy for national companies that are not affiliated with non-residents; expanding the exchange of tax information with offshores (Glazyev, 2016).

From this point of view, the recent proposal of the Center of Strategic Projects to abolish the requirement for the repatriation of the currency earnings of Russian exporters (Center of Strategic Projects, 2018) may result in an increase in the outflow of capital from Russia. The measures to strengthen tax control over Russian investments abroad and amnesty of illegally exported and returned capital to Russia, undertaken by the government in the framework of laws No. 376-FL and No.140-FL from 2012-2013, look more rational. However, these fiscal measures could not significantly increase the income of the Russian budget from previously exported capital. For 2015-2017 Russian direct investment accumulated abroad increased by 14%. Also, the results of tax amnesty are insignificant. However, these measures are a movement in the right direction, but they only allow to soften, but not solve, the problem of outflowing capital from Russia (Bulatov, 2018).

Thus, Russian outward direct investment exceeds inward FDI according to the BOP of the country. Moreover, the CBR provides detailed data of countries-recipients of Russian OFDI which allows it to model the geographical structure. Nevertheless, as it was observed before, the majority of Russian OFDI goes to offshores, which can be a transition point to other countries. Because of the specific features of Russian OFDI the data of OECD countries was obtained to compare with the data of CBR and determine the real presence of Russian capital in those countries.

OECD International Direct Investment Statistics 2018, where data related to FDI for each member-country can be found, was the main source for comparison. On the side of CBR, Positions by Instrument and Partner Country (Directional Principle) of direct investment of the Russian Federation abroad were obtained. Thus, Table 7 contains the comparison of data from both sources.

Table 7. Comparison of CBR and OECD data on Russian OFDI

Country	Russian OFDI stock, as of January 1, 2018 (millions USD)				Variance (millions USD)
	according to CBR	%	according to OECD	%	
AUSTRALIA	499	0,31	confidential data	--	--
AUSTRIA	30944	19,36	31472,8	46,83	528,8
CANADA	1758	1,10	not available	--	--

Table 7 continued

CHILE	2	0,00	not available	--	--
CZECH REPUBLIC	1791	1,12	996,4	1,48	794,6
DENMARK	1205	0,75	58,2	0,09	1146,8
ESTONIA	328	0,21	827,1	1,23	499,1
FINLAND	3035	1,90	1685,1	2,51	1349,9
FRANCE	3006	1,88	not available	--	--
GERMANY	8411	5,26	not available	--	--
GREECE	733	0,46	36,8	0,05	696,2
HUNGARY	259	0,16	not available	--	--
ICELAND	--	--	0,4	0,00	--
ISRAEL	571	0,36	nil	0,00	--
ITALY	2816	1,76	983	1,46	1833
JAPAN	53	0,03	51,4	0,08	1,6
KOREA	28	0,02	not available	--	--
LATVIA	1546	0,97	1844,6	2,74	298,6
LITHUANIA	315	0,20	313,1	0,47	1,9
MEXICO	4	0,00	24,2	0,04	20,2
NETHERLANDS	48493	30,34	1005	1,50	47488
NEW ZEALAND	109	0,07	not available	--	--
NORWAY	506	0,32	105,2	0,16	400,8
POLAND	666	0,42	1015,9	1,51	349,9
PORTUGAL	228	0,14	201,5	0,30	26,5
SLOVAK REPUBLIC	161	0,10	not available	--	--
SLOVENIA	270	0,17	644,8	0,96	374,8
SPAIN	6382	3,99	8993,8	13,38	2611,8
SWEDEN	183	0,11	70,1	0,10	112,9
SWITZERLAND	20160	12,61	confidential data	--	--
TURKEY	9490	5,94	12717,0	18,92	3227
UNITED KINGDOM	9091	5,69	confidential data	--	--
UNITED STATES	6776	4,24	4157,0	6,19	2619
Total:	159819	100.0	67203,4	100.0	92615,6

Source: comprised by author based on OECD (2023) and CBR (2023) database

According to CBR, Austria, Netherlands and Switzerland receive most of the Russian capital. They accounted for more than 50% of all Russian OFDI in OECD countries in 2017.

According to the available information, about 550 companies with Russian participation carry out their activities in Austria. They operate in areas such as trade (oil and gas, chemicals, metals and products from them), the chemical industry, including petrochemistry, banking, transport and tourism etc. (Ministry of Economic Development of Russia, 2019a). For example, in 2018, Russian Gazprom and Austrian OMV AG extended the existing gas supply contract until 2040. The parties also signed an addendum to the contract, which provides for an increase in the volume of gas supplies to Austria more than the contract amount by 1 billion m3 per year for the entire duration of the contract. Moreover, Austria plays an important role in the transportation of natural gas. It annually let Gazprom transit about 30 billion m3 of gas to Italy, France, Germany, Hungary, Slovenia and Croatia. Also, the Austrian underground gas storages are important for ensuring the reliability of gas supply in the region (Gazprom, 2019). Thus, Austria is an important gas distribution hub and receives about 85% of its gas from Russia.

As for the Netherlands, it can be said that multinational corporations use complex and diverse structures for tax evasion, but most often take money offshore through certain countries and the Netherlands is one of them. However, this is not always the case. One of the long-term cooperation projects between Russia and the Netherlands is in the energy sector. An example is Bergermeer, the largest gas storage facility in Western Europe with the participation of Gazprom. It has a strategic location, as well as significant reserves of active gas - 4.5 billion cubic meters, of which Gazprom received 1.90 billion cubic meters. The Bergemeer UGS facility will be able to provide stable operation of the Nord Stream gas pipeline and maintain reliable supplies (Ministry of Economic Development of Russia, 2019b). Russia also actively invests in the debt of the Netherlands. In this case, by investing in the capital of the Netherlands, Russia tries to minimize both the geopolitical and financial risks of its investments.

Switzerland is one of the most important banking and financial centers of the world, characterized by a relatively low tax burden for companies, proximity to the European market and well-developed infrastructure. The largest Russian investor in the Swiss economy is Renova. The company owns controlling stakes in leading high-tech Swiss companies Zulzer (engineering) and Erlikon (production of special innovative equipment and high-tech materials for various industries) (Ministry of Economic Development of Russia, 2019c).

The CBR uses as a methodological basis to compose the BOP 6th edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6). An OECD database includes the

data reported by national experts according to the 4th edition of the OECD's Benchmark Definition of FDI (BMD4). The figures are mainly based on BOP statistics published by central banks and statistical offices in accordance with the recommendations of the BPM6 of IMF and BMD4 of OECD. The data sets on FDI flows, income and positions by partner countries include FDI statistics for OECD countries presented on a directional basis. It is the recommended method for collecting detailed FDI statistics for partner countries. Outward and inward FDI statistics by partner countries are represented by host countries and countries of direct destination.

However, in the dataset of OECD shown in Table 7 there are many countries of which data is not available or confidential. Due to that the difference in total amount of OFDI in OECD countries between CBR and OECD data is tremendous, 92615,6 million US dollars. For those countries where data is presented, there is still a difference. Perhaps this is due to the peculiarities of Russian outward direct investment associated with offshores. Also, the difference in the methodology for collecting and presenting data between the CBR and the OECD can play a role. Thus, based on the data obtained in the result of comparison, it is difficult to determine the real presence of Russian capital in OECD countries which can be stated as the main limitation of this study.

4.3 Investment development paradigm and Russian MNCs

Russian outward FDI is driven by large industrial companies, especially in natural-resource-based industries. According to the RIA ranking of largest Russian companies of 2018 Rosneft was the largest company, Sberbank was 2nd and Lukoil 3rd ranked by market capitalization (Table 8).

Table 8. The 20 largest Russian firms by market capitalization, end 2018

Company	Industry	Capitalization, million USD	Change during the yeah, %
1. ROSNEFT	Oil & gas	65286	+22,5
2. SBERBANK	Banks	57818	-31,4
3. LUKOIL	Oil & gas	53823	+9,9
4. GAZPROM	Oil & gas	52240	-2,1
5. NOVATEK	Oil & gas	49393	+39,0
6. NORILSK NICKEL	Iron & steel	29633	+0,4
7. GAZPROMNEFT	Oil & gas	23594	+17,0
8. TATNEFT	Oil & gas	22859	+27,3
9. SURGUTNEFTEGAS	Oil & gas	13808	-19,7
10. NOVOLIPETSK STEEL	Iron & steel	13588	-11,5

Table 8 continued

11. SEVERSTAL	Iron & steel	11362	-12,5
12. ALROSA	Mining	10427	+8,8
13. POLYUS	Mining	10356	-1,2
14. YANDEX	IT	8872	-16,8
15. EVRAZ	Iron & steel	8845	+19,7
16. MAGNITOGORSK IRON & STEEL	Iron & steel	6909	-15,8
17. MTS	Telecom	6842	-28,6
18. X5 RETAIL GROUP	Consumer goods	6729	-34,4
19. RUSAL	Iron & steel	6728	-36,9
20. VTB BANK	Banks	6344	-40,1

Source: RIA ranking, 2019

Rosneft is an energy company with a portfolio of international assets. The company is committed to expanding its international presence in the most promising oil and gas regions of the world, increasing its resource base and increasing its efficiency. Target areas of presence are North and East Africa, South America, Asia-Pacific and the Middle East. In these regions, Rosneft already conducts activities and actively develops cooperation with local partners, aimed at mutually beneficial implementation of projects. Rosneft closed a deal to acquire a 30% stake in the Zokh gas field in Egypt in October 2017, and in December 2017, as part of an international consortium with British BP and Italian Eni, began gas production within the project. In December 2017, a license was obtained for the development of the Patao and Mejilones fields on the Venezuelan shelf for a period of 30 years with the right to export gas. Thus, the company is one of the largest foreign investors in Venezuela. It continues to consistently expand its cooperation with the Venezuelan state company Petróleos de Venezuela S. A. in the field of oil and gas production (Rosneft, 2019).

Sberbank is one of the largest banks in Central and Eastern Europe. The key vector of its strategy is the active and dynamic development of foreign networks. Sberbank is present in 20 countries. The share of international business accounted for 14% of Sberbank's total assets. The first acquisition of Sberbank in the international level was a bank in Kazakhstan in 2006. Sberbank purchased banks in Ukraine and Belarus. The next step was the launching of representative offices in China, Germany and India. In 2012 the portfolio of Sberbank was replenished with assets of the

European group of Volksbank International. The deal on the purchase of DenizBank opened the Turkish market for Sberbank (Sberbank, 2019).

The largest Russian MNCs by foreign assets is Lukoil. The company pays great attention to the implementation of international projects in the field of oil and gas exploration and production in Central Asia, the Middle East, Latin America and Africa. It has processing and marketing assets in the European Union and in the USA (Tcyrempilova et al, 2024c).

These largest companies from the list invest the bulk of Russian capital abroad. However, as was said prior, outward direct investment of the country exceeds inward. Kalotay (2005) indicates that the presence of the Russian Federation with lower-middle incomes in the global top list of outward direct investment in 2005 is an anomaly for standard theories, such as IDP. For the investment development path, the behavior of a net investment position is opposite to what the theory predicts. Instead of IFDI that exceeds OFDI and grows faster than OFDI, OFDI exceeds IFDI and grows faster. Referring to the investment development path and words of Kalotay K., to reveal any anomaly in Russian FDI the data on it will be analyzed in more detail below.

Thus, following the IDP model, in this study FDI stocks data have been used to estimate NOIP and GDP has been used to define a level of development. NOIP was calculated according to CBR's data on inward and outward FDI stocks by Bulatov (2018) which excludes reserve assets, data on GDP and population is derived from Federal State Statistics Service of the Russian Federation.

The multiple linear regression analysis was utilized to elaborate the IDP for the Russian Federation. The Enter method was used. The aim of the analysis is to determine the extent and character of influence of GDP per capita to NOI per capita and to visualize investment development path. Prior to beginning the analysis outliers were identified and eliminated. The analysis is done by using SPSS.

To determine and test the correlation between the dependent and independent variables, the Pearson Coefficient was calculated, as well as the statistic test and the corresponding probability for each combination of variables - the results are presented in the following table:

Table 9. Correlation Matrix

		NOIP per capita	**GDP per capita**
Pearson Correlation	NOIP per capita	1.000	0.459
	GDP per capita	0.459	1.000
Sig. (1-tailed)	NOIP per capita	0.0	0.078
	GDP per capita	0.078	0.0

Table 9 continued

N	NOIP per capita	11	11
	GDP per capita	11	11

Source: author's own work based on SPSS analysis

Correlation matrix is built around three parts in accordance with the significance of the data as follows:

a) the first part covers the values of the Pearson correlation coefficients;

b) the second part covers the threshold values of significance (Sig.);

c) the third part indicates the number of considered observations (in our case N=11).

The Pearson coefficient level provides information about the value and intensity of the correlation between the variables being analyzed. This coefficient can take the value in the interval [-1, 1]. When assessing the intensity of correlations between variables, threshold values of significance are also taken into account (Sig.). Considering the minimum threshold value of 0,05, below which the coefficients are significant from a statistical point of view. In other words, Sig. values below 0.05 for each calculated coefficient suggest a significant correlation between the variables being analyzed. In the results of analysis, it can be concluded that correlation between the variables is not significant.

The analysis of the model's parameters was carried out based on the results in the tables below:

Table 10. Correlation Coefficient (R)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.459[a]	0.211	0.123	177.945403100000000

a. Predictors: (Constant), GDP per capita

Source: author's own work based on SPSS analysis

Table 10 contains the values of the R correlation coefficient at the level of variable. The chosen variable is related to NOIP by 45,9%. Only 21,1 % of the fluctuation in the NIOP is explained by the variable.

Table 11. ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76146.115	1	76146.115	2.405	0.155[b]
	Residual	284981.098	9	31664.566	-	-
	Total	361127.214	10	-	-	-

a. Dependent Variable: NOIP per capita.
b. Predictors: (Constant) GDP per capita

Source: author's own work based on SPSS analysis

Using the ANOVA test, a significance threshold is calculated. The registered value is above the significance threshold (0,05), which means that the independent variable does not explain the change in the dependent variable. The model is not significant (Table 11).

Table 12 includes the analysis of the results of evaluation of the parameters of the regression model and checking their significance. In the table the coefficients of the regression model, the value of the t-test statistic, standard errors and the value of the threshold of significance (Sig.) can be found.

Table 12. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficient	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Erro	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	14.092	162.256	-	0.087	0.933	-	-	-	-	-
	GDP per capita	0.001	0.000	0.459	1.551	0.155	0.001	0.000	0.459	1.551	-

a. Dependent Variable: NOIP per capita

Source: author's own work based on SPSS analysis

Thus, the model of linear regression is:

$$NOIP = 14{,}092 + 0{,}001GDP$$

It is visualized in the following figure:

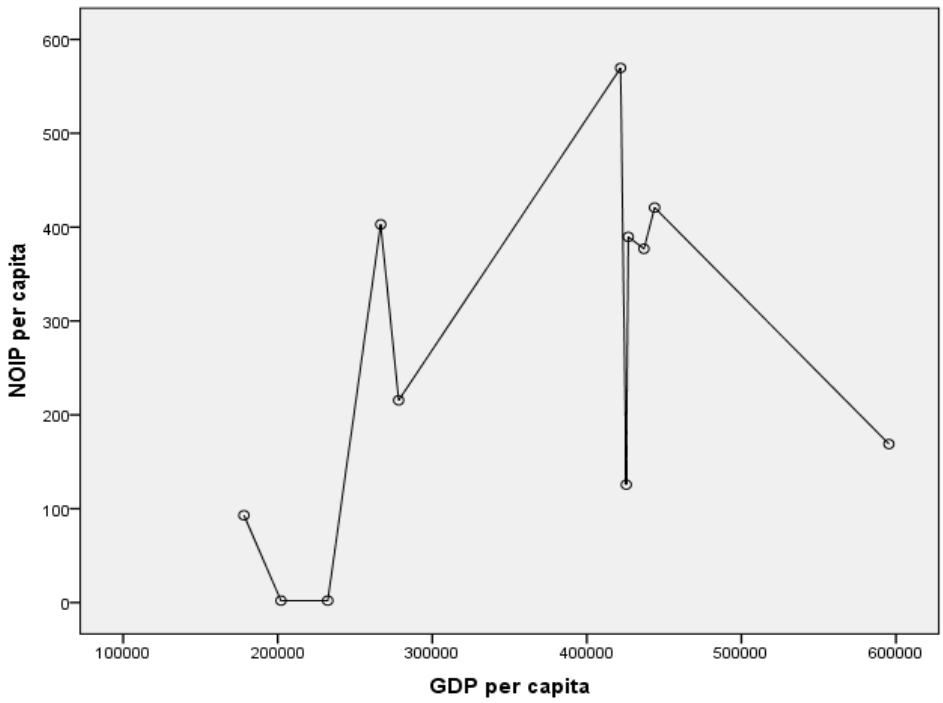

Figure 18. Visualized regression analysis model
Source: author's own work based on SPSS analysis

From the previous figure (18) it can be concluded that there is nothing like IDP in Russia. The results of the analysis are not significant and there is no strong correlation between outward direct investment and GDP. It can be explained by the paradox and special features of Russian OFDI. However, the data utilized in the analysis can be a limitation of the model. The GDP data was obtained on the official page of Russian Statistics Service, but it mentioned that data from 2011 to 2016 in 2011 prices do not correspond to similar data in 2016 prices and will be revised after recalculation of the time series in 2020. Moreover, data on net outward direct investment was taken from the work of a professor of the Department of World Economy in Moscow State Institute of International Relations, instead of CBR. Hence, the model cannot be considered as a reliable proof of not applicability of IDP for Russia.

However, talking about the Russian outward FDI paradox, even though the results of the regression analysis are not proper evidence, it still takes place and is at odds with traditional theories and models such as IDP of Dunning. Kalotay (2005) explains it in two ways: the first is by introducing an analysis of the economic and business environment into the analysis of the international investment position, and the second is by introducing the picture of the duality of the Russian economy and society as an explanatory factor.

The first way to explain this paradox is to analyze the economic and business environment. Assuming that, ceteris paribus, the more difficult the environment, the more the net investment

position shifts towards OFDI. The business environment in Russia remains difficult, despite recent improvements. The government elaborated alternative ways to create more effective areas such as special economic zones or other mechanisms. However, they do not seem to work effectively. Recent shifts in the business environment have sent conflicting messages to foreign and domestic investors. On the one hand, several impressive measures were taken to enhance the Russian business climate that include the rationalization of taxes. On the other hand, tax administration was used to reach certain non-economic, non-fiscal goals.

Another way the author used to explain the Russian paradox is to assume that there are two radically different economies and societies in the country. Most of the society has a middle income or even low. They do not have capital. However, there is a rich in capital and resources segment of society and the economy. It behaves like a country with a high level of income. This dualism causes two problems. First, the excess capital of the resource-rich segment is not necessarily intended for the poor segment of society, but rather for abroad. Another problem is that this situation can create much social tension and become unstable. This may partly explain why government actions are aimed at one of the leading outward investment companies.

The outflow of FDI by Russian companies is partly due to that they want to control the value chain of natural resources globally. Russian natural resource MNCs began internationalization through the export of their products. The profitability of such exports was due to the difference in price between the global and domestic markets. Further, to enter foreign markets and diversify the production, Russian energy companies began to establish foreign affiliates and acquire companies abroad. These subsidiaries are also used as tools of avoiding export duties, introducing more profitable tax planning (Kalotay, 2005).

The eclectic paradigm (OLI paradigm) links outward FDI with the ownership advantages and internalization of MNCs and the locational advantages of host countries. Ownership advantages include the "Oa" advantages, which consist of intangible assets and property rights, and the "Ot" advantages such as advantages of governance, learning experience and organizational competence. Russian MNCs base their international expansion on the O advantages, which are not so much connected with technology, as with organization and management (Ot). Although in recent years, a company like Lukoil has been actively investing in new technologies. Russian companies have the Ot advantages in the iron and steel industry. Moreover, the fact that foreign investment companies are more profitable than companies without foreign expansion can be considered as additional indirect evidence that the organizational and common governance-type ownership advantages are used for international expansion. As already emphasized, most Russian companies

investing to foreign countries are in the energy, mining and metallurgy industries. These industries usually generate tremendous cash flows. It was natural to look for opportunities for investment abroad for this excess capital. This excess of capital can be considered as a special case of Ot advantages. Another advantage, for example, for post-Soviet countries is familiarity with local businesses and the regulatory framework. Sometimes companies can entrust personal connections inherited from the times of the Soviet Union. It is easy to enter the country of CIS, because of the general regulatory legacy and the small language barrier. The aspect of the internalization of MNC strategies can be used to explain the behavior of Russian firms (Kalotay and Sulstarova, 2010). Companies are moving to an international expansion, developing their ownership advantages. Regarding the locational advantages of host economies, the main motives of investment for main Russian capital exporters companies are resource and market seeking. Thus, resource endowment as well as a relatively large and/or growing market can be considered as locational advantages.

However, as Kalotay (2006) suggests, more than in other countries, the environment and factors in the home-country play a key role in determining OFDI of Russia. The OLI paradigm does not have the fourth “home-country” factor. There may be sundry arguments in favor of the applicable "OLIH" theorem. One of them is the fact that the absence of home-country factors creates problems with theoretical interpretations of OFDI. It may be needed to consider state-ownership as an additional factor, as in Russia (Kalotay, 2006).

To examine Kalotay's argument, parallel regression analyses will be conducted using independent variables that are crucial indicators of a country's economic health and profitability potential. This approach will assess the impact of location advantages of the traditional OLI paradigm on Russia's OFDI.

4.4 Parallel regression of panel data

As stated earlier, this chapter aims to understand how various economic, political, and logistical factors of the receiving country, which can be grouped as Location-specific advantages, influence OFDI. Variables such as GDP growth, political stability, population, corporate tax, exchange rate, inflation, trade openness, and logistics performance are considered to capture a wide range of influences. Utilizing panel data techniques helps in accounting for both time-series and cross-sectional variations. This approach is crucial for understanding how the impact of variables on OFDI changes over time and across different countries.

As detailed in the Data preparation chapter, the dataset was constructed using data collected from various international organizations' databases. After uploading the data to STATA, the first step

of the analysis was to declare the dataset as a panel dataset. Consequently, the dataset is organized as a panel, with "country_id" as the panel variable and "Year" as the time variable, spanning from 2013 to 2019. The dataset is strongly balanced, meaning that each country has complete data for each year within this range. The time increments are yearly, with a delta of one year.

To ensure the robustness of the regression analysis, a multicollinearity test was conducted using the Variance Inflation Factor (VIF). The VIF measures how much the variance of an estimated regression coefficient increases if the predictors are correlated. A VIF value greater than 10 indicates high multicollinearity, which can be problematic for regression models (Table 13).

The analysis results are as follows:

Table 13. Variance inflation factor

	VIF	1/VIF
Political Stability	1.818	.55
Logistics index	1.566	.639
Corporate tax	1.521	.658
Trade openness	1.507	.663
Population	1.426	.701
Exchange rate	1.384	.722
Inflation	1.331	.751
GDP growth	1.139	.878
Mean VIF	1.462	.

Source: author's own work based on Stata analysis

Each variable individually shows a low level of multicollinearity. The mean VIF for all the variables in the model is 1.462, which signifies an overall low level of multicollinearity. This indicates that the variables in the regression model are not highly correlated, minimizing the risk of multicollinearity issues in the analysis. Since all VIF values are well below the threshold of 10, multicollinearity is not a concern in this analysis. This enhances the reliability of the regression coefficients, ensuring they are not significantly affected by correlations among the predictor variables.

After declaring the dataset as a panel and checking for multicollinearity, a regression has been run in Stata. To determine if panel data analysis is necessary, the Breusch and Pagan Lagrangian multiplier test for random effects was conducted using the xttest0 command (Table 14). The following results were obtained:

Table 14. Breusch and Pagan Lagrangian multiplier test for random effects

OFDI[country_id,t] = Xb + u[country_id] + e[country_id,t]

Estimated results:	Var	SD = sqrt(Var)

Table 14 continued

OFDI	1.003774	1.001885
e	.0436128	.2088367
u	.8785928	.9373328
Test: Var(u) = 0		
	chibar2(01) = 616.91	
	Prob > chibar2 = 0.0000	

Source: author's own work based on Stata analysis

The estimated results show the variance (Var) and standard deviation (SD) for OFDI, residuals (e), and the random effects (u). For OFDI, the variance is 1.003774 and the standard deviation is 1.001885. For the residuals (e), the variance is 0.0436128 and the standard deviation is 0.2088367. For the random effects (u), the variance is 0.8785928 and the standard deviation is 0.9373328.

The test hypothesis was whether the variance of the random effects (Var(u)) is equal to zero. The test statistic, chibar2(01), is 616.91 with a p-value of 0.0000. This result strongly rejects the null hypothesis, indicating that the panel data structure is appropriate and that random effects are present in the model. Thus, the Pooled OLS Model is less suitable.

To evaluate whether the preferred model in panel data analysis should be the fixed-effects model or the random-effects model the Hausman test was used. This test helps determine whether there is a correlation between the independent variables and the error terms, which affects the consistency and efficiency of the estimators (Green, 2012).

In panel data analysis, deciding between FE and RE models is crucial. The FE model controls for time-invariant characteristics by allowing the intercept to vary across individuals. The RE model assumes these individual effects are random and uncorrelated with the regressors, providing more efficient estimates if the assumption holds (Wooldridge, 2010). The test involves estimating both FE and RE models and comparing their coefficients. The null hypothesis (H0) states that the preferred model is RE, meaning the differences in coefficients are not systematic. If the null hypothesis is rejected, it implies that the FE model is more appropriate (Table 15).

Table 15. Hausman test results

---- Coefficients ----

	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))

Table 15 continued

	FE	RE	Difference	Std. err.
GDP_growth	-0.008	-0.009	0.001	.
Political_~y	0.051	0.086	-0.035	0.028
Population	-2.103	0.079	-2.183	0.857
Corporate_~x	-0.050	-0.017	-0.033	0.019
Exchange_r~e	-0.001	-0.002	0.001	0.053
Inflation	0.004	-0.010	0.013	0.004
Trade_open~s	-0.061	-0.017	-0.044	0.092
Logistics_~x	-0.091	-0.051	-0.040	0.011

b = Consistent under H0 and Ha; obtained from xtreg.
B = Inconsistent under Ha, efficient under H0; obtained from xtreg.

Test of H0: Difference in coefficients not systematic

chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 24.64
Prob>Chi2 = 0.0018
(V_b-V_B is not positive definite)

Source: author's own work based on Stata analysis

FE Coefficients (b): These are the estimates obtained from the fixed-effects model. RE Coefficients (B): These are the estimates obtained from the random-effects model. Difference (b-B): This column represents the difference between the FE and RE coefficients. Std. Err.: Standard error of the difference. The p-value for the test is 0.0018, which is less than 0.05. Therefore, we reject the null hypothesis that the preferred model is the random-effects model. This result indicates that the fixed-effects model is more appropriate for this analysis because there is a systematic difference in the coefficients, suggesting that the RE model's assumption of no correlation between the regressors and the individual effects is violated.

Before proceeding to implement the fixed-effect model, the Modified Wald test has been utilized. The Modified Wald test for groupwise heteroskedasticity is used to detect the presence of heteroskedasticity in a fixed-effects regression model (Table 16). Heteroskedasticity occurs when the variance of the error terms differs across observations or groups, which can lead to inefficient estimates and invalid statistical inferences.

Table 16. Modified Wald test for groupwise heteroskedasticity in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i
chi2 (38) = 1.9e+06

Table 16 continued

Prob>chi2 = 0.0000

Source: author's own work based on Stata analysis

The chi-square test statistic is calculated for 38 groups and the value 1.9e+06 is extremely large, indicating a significant deviation from the null hypothesis of homoscedasticity. The p-value of 0.0000 is less than any common significance level (e.g., 0.05, 0.01), providing strong evidence to reject the null hypothesis. Given these results, we reject the null hypothesis and conclude that there is significant evidence of heteroskedasticity in the fixed-effects regression model. This implies that the variance of the error terms differs across the groups in the panel data.

In summary, the Modified Wald test indicates that the fixed-effects regression model suffers from groupwise heteroskedasticity. Consequently, it is crucial to use robust standard errors to ensure the reliability of the regression results and statistical inferences. Thus, the fixed-effects regression model with robust standard errors adjusted for clustering by country_id was used to provide insights into the factors influencing outward foreign direct investment (Table 17).

Table 17. The fixed-effects regression model with robust standard errors adjusted

Fixed-effects (within) regression Number of obs = 266
Group variable: country_id Number of groups = 38
R-squared: Obs per group:
Within = 0.0528 min = 7
Between = 0.0167 avg = 7.0
Overall = 0.0158 max = 7
F(8, 37) = 1.06
corr(u_i, Xb) = -0.9181 Prob > F = 0.4141
(Std. err. adjusted for 38 clusters in country_id)

OFDI	Robust Coefficient	std. err.	t	P>t	[95% conf.	interval]
GDP_growth	-0.008	0.007	-1.130	0.267	-0.022	0.006
Political_Stability	0.051	0.079	0.650	0.522	-0.110	0.212
Population	-2.103	1.736	-1.210	0.233	-5.622	1.415
Corporate_tax	-0.050	0.034	-1.490	0.144	-0.118	0.018
Exchange_rate	-0.001	0.041	-0.030	0.975	-0.085	0.082
Inflation	0.004	0.030	0.120	0.906	-0.057	0.064
Trade_openness	-0.061	0.107	-0.570	0.573	-0.278	0.156
Logistics_index	-0.091	0.051	-1.770	0.084	-0.195	0.013
_cons	-0.000	.	.	.	.	.

Table 17 continued

sigma_u	2.490	
sigma_e	0.209	
rho	0.993	(fraction of variance due to u_i)

Source: author's own work based on Stata analysis

The analysis includes 266 observations across 38 countries. The within R-squared is 0.0528, indicating that about 5.28% of the variation in OFDI within countries over time is explained by the model. The between R-squared is 0.0167, indicating that about 1.67% of the variation in OFDI between countries is explained by the model. The overall R-squared is 0.0158, indicating that about 1.58% of the overall variation in OFDI is explained by the model. The F-statistic is 1.06, with a p-value of 0.4141, suggesting that the independent variables do not collectively explain a significant portion of the variation in OFDI.

GDP growth has a coefficient of -0.008 with a standard error of 0.007, a t-value of -1.130, and a p-value of 0.267. The 95% confidence interval is [-0.022, 0.006]. This suggests that GDP growth has a negative but not statistically significant effect on OFDI, indicating that changes in GDP growth do not have a clear impact on OFDI within the sample.

Political stability has a coefficient of 0.051 with a standard error of 0.079, a t-value of 0.650, and a p-value of 0.522. The 95% confidence interval is [-0.110, 0.212]. This suggests that political stability has a positive but not statistically significant effect on OFDI, indicating that political stability does not have a discernible impact on OFDI within the sample.

Population has a coefficient of -2.103 with a standard error of 1.736, a t-value of -1.210, and a p-value of 0.233. The 95% confidence interval is [-5.622, 1.415]. This suggests that population size has a negative but not statistically significant effect on OFDI, indicating that variations in population size do not significantly influence OFDI.

Corporate tax has a coefficient of -0.050 with a standard error of 0.034, a t-value of -1.490, and a p-value of 0.144. The 95% confidence interval is [-0.118, 0.018]. This suggests that corporate tax rates have a negative but not statistically significant effect on OFDI, indicating that changes in corporate tax rates do not have a significant impact on OFDI within the sample.

The exchange rate has a coefficient of -0.001 with a standard error of 0.041, a t-value of -0.030, and a p-value of 0.975. The 95% confidence interval is [-0.085, 0.082]. This suggests that the

exchange rate has a negligible and statistically insignificant effect on OFDI, indicating that fluctuations in the exchange rate do not significantly impact OFDI.

Inflation has a coefficient of 0.004 with a standard error of 0.030, a t-value of 0.120, and a p-value of 0.906. The 95% confidence interval is [-0.057, 0.064]. This suggests that the inflation rate has a positive but statistically insignificant effect on OFDI, indicating that inflation does not significantly influence OFDI.

Trade openness has a coefficient of -0.061 with a standard error of 0.107, a t-value of -0.570, and a p-value of 0.573. The 95% confidence interval is [-0.278, 0.156]. This suggests that trade openness has a negative but statistically insignificant effect on OFDI, indicating that variations in trade openness do not have a significant impact on OFDI within the sample.

The logistics performance index has a coefficient of -0.091 with a standard error of 0.051, a t-value of -1.770, and a p-value of 0.084. The 95% confidence interval is [-0.195, 0.013]. This suggests that the logistics performance index has a negative effect on OFDI, which is marginally significant at the 10% level, indicating that better logistics infrastructure might be associated with lower OFDI, though this result is not robust at conventional significance levels.

The variance components include sigma_u (2.490), which represents the standard deviation of the country-specific effects, and sigma_e (0.209), which represents the standard deviation of the residuals. The rho value (0.993) indicates that a significant portion of the variance in OFDI is attributed to differences across countries rather than within-country changes over time.

Overall, the fixed-effects regression with clustered standard errors suggests that the included independent variables do not have a significant impact on OFDI within the sample. The high rho value indicates that most of the variation in OFDI is due to differences across countries. The model's low R-squared values suggest that these variables explain a small portion of the variance in OFDI, and the non-significant F-statistic implies that the independent variables do not collectively explain a significant amount of variation in OFDI. Robust standard errors were used to account for heteroskedasticity, ensuring more reliable inference.

Based on the fixed-effects regression analysis, it is evident that location-specific advantages do not significantly impact Russia's OFDI. The variables representing location advantages—such as GDP growth, political stability, population size, corporate tax rates, exchange rate, inflation, trade openness, and logistics performance—show no statistically significant effects on OFDI. These variables explain only a small portion of the variance in OFDI, and most of the variation in OFDI

is due to differences across countries rather than within-country changes over time. Therefore, it can be concluded that location advantages are not a determining factor for Russian OFDI.

Russian OFDI still occurs and contradicts traditional theories and models, such as Dunning's eclectic paradigm. As Kalotay (2006) suggests, the home-country environment and factors play a more significant role in determining Russia's OFDI compared to other countries. According to the author, the OLI paradigm lacks this fourth "home-country" factor.

The international expansion of Russian firms is closely related to the reforms undertaken over the past three decades: privatization and attempts to restructure the industry to keep up with technical progress. The state played an important role in the emergence of Russian outward direct investment. State-owned enterprises have several advantages such as administrative support, access to loans from the central bank etc. These advantages contribute to their internationalization. At the same time, the influence of the state remains significant even in fully privatized companies. However, the influence of the state varies by industry. It directly influences the energy sector and in indirect form to others, stimulating their development (Panibratov and Latukha, 2014).

Panibratov and Latukha (2014) developed a theoretical framework reflecting an influence of two critical determinants on the formation of the competitive advantages of Russian MNCs. These determinants are the interest of the state and control by state. They grouped Russian companies according to the state role based on the determinants.

The first group is with a high level of both determinants. This group includes companies from industries such as oil and gas, mining, electricity, military. The sectors in the group are strategically important from an economic and political point of view for the country. The state interest in these sectors is great. Moreover, the state controls the activities of firms strictly. Capital requirements are high because of the complexity and scale of the infrastructure.

The second group is with a high level of state interest but low control by the state. It consists of banking, telecom, metallurgy, IT. The government wants to develop these sectors. The reason is the representative nature of their image. Requirements of infrastructure and capital are moderate. Firms can invest in internationalization independently of the state and the government understands that. Consequently, the state does not control the activities of these companies directly.

The third group has a high level of control by the state and a low level of interest. These sectors are media; education; sport. These industries are more important socially and politically than economically. The state can influence the home country’s population or other countries’ governments. The state controls these companies’ activities. Complicated and extensive

infrastructure is not required as well as technology requirements are low. However, the capital requirement can be relatively high to provide growth.

The last group contains the following sectors: automotive; logistics; building; fast food. It is characterized by low levels of both determinants (low interest and control by the state). Capital and infrastructure requirements in these sectors are medium and even low. The government is not interested in developing these sectors. However, it takes care of companies in a particular industry such as automotive industry but formally. The government avoids control over the activities of these companies. Progressive technologies can compensate for the lack of capital for growth.

The authors developed this framework to explain how the multi-level influence associated with government leads to different internationalization strategies. Moreover, this indicates that strategic choice patterns are determined at the industry level and modified according to the characteristics of a particular firm. The results of the researcher's analysis allow to understand the state influence on competitive advantages of Russian MNCs based on their grouping in an empirically grounded framework (Table 18).

Table 18. CAs of Russian MNEs explained by the government involvement

Sectors in the group	*Interest of the state: how it shapes CAs*	*Control of the state: how it shapes CAs*	*Other influences of the state on CAs*
Electricity; military; mining; oil and gas	Interest is high CAs are based on the domestic monopolistic position of these sectors' firms, which is supported by the state.	Control is high CAs are based on the prevention of domestic competition and protection of the foreign operation through political tools.	Government representatives often participate in the boards of these companies, which provides these firms with direct 'contact' with the state.
Banking; IT; metallurgy; telecom	Interest is high CAs are based on the attempt to develop (or rather initiate the self-development of these sectors' firms) and limited support (financial or technological) where possible.	Control is low CAs are based on non-intervention domestically and the relatively free market guaranteed at home.	These firms demonstrate the most obvious international results, moving abroad on their own. This is why the state does not prevent their expansion, since their global integration is in line with state policy, while not providing any significant support.
Education; media; sport	Interest is low CAs are based on the development by these sectors' companies (where significant physical investment is not necessary) of managerial and marketing competencies and skills as opposed	Control is high CAs are based on the willingness of the state to manage what happens in these sectors, and hence on the companies' chance to benefit from government support (mostly in image-building and management	While the development of these sectors is crucial socially, the state is not really interested in these firms' development, where short-term profits are low or absent. Internationalization may help to improve these sectors, without the state investing.

Table 18 continued

Automotive; construction; fast food; logistics	Interest is low CAs are based on the need to develop the companies' own marketing mix and brands, which may compensate for the lack of state interest.	Control is low CAs are based on the chance to attract investment (which is needed in these sectors) and to co-operate internationally, without any serious government restriction.	These firms are potential profit-makers through partnerships. Domestic investors are not interested (as a rule) in these sectors, and the state promotes the international collaboration of these firms.

Source: Panibratov and Latukha, 2014

For Russian MNCs the role of state ownership and the political aspects connected with it are stronger than for MNCs from developed countries. For example, Russian embassies abroad usually assist in obtaining important information, which allows Russian companies to establish initial contacts with foreign companies. Political support from the government is often used to reduce protectionism in countries such as Belarus or Venezuela. In addition, the role of the state for Russian MNEs is fulfilled through such schemes as "investment-for-debts". It allows companies to borrow money from financial institutions related to the state and then reinvest these funds into their international projects. Such cooperation carries political obligations, since these companies are linked to Russia's foreign policy and interests. Governments can stimulate outward direct investment and exports through various economic and financial instruments. It can be tax rebates, legal restrictions and economic diplomacy etc. Government activity is a decisive factor explaining the evolution of Russian OFDI. However, despite the statement of strategic support, the Russian government has not yet developed a successive policy of helping its MNCs in their global expansion. (Panibratov and Michailova, 2018).

Furthermore, historically, international trade and investment was the state monopoly in the Soviet Union, and then in post-Soviet Russia. It can be said that the government has much experience and knowledge in doing business at the international level. Thus, since the government actively participates in the overseas business strategy of companies, this adds the knowledge and experience presented by the government in the international activities of Russian MNCs.

However, it is worth noting that most of the representatives of the Russian political and business elite come from the Soviet period of Russian history and they are interrelated. People in the governance structures of both state bodies and corporations are the same and belong to the same interest group. It leads to the development of patronage systems and bribery; thereby public bodies do not consider the interests of small companies. Moreover, because of this close relationship between the government and the Russian MNCs, management and ownership are often used as a political tool in the international affairs of the state (Michailova and Nechaeva, 2014).

Thus, the internationalization history of Russia is closely connected with the privatization processes. It occurred after the collapse of the Soviet Union, and mainly considers the expansion of companies based on natural resources such as Gazprom, Lukoil, Norilsk Nickel and others.

Oil and gas, metallurgy and telecommunications are the industries in which Russian outward FDI is particularly important. They were created in a unique and fast way - through privatization and further nationalization. The gas sector is the most protected sector of the Russian economy. It was a strategic sector whose view was consistently supported by the Russian government. In 1989, Gazprom received its gas monopoly from the Soviet Ministry of Oil and Gas (Grigoryev, 2007).

The company was partially privatized in 1993. Gazprom's international activities are focused on promoting exports, on investments in the processing and distribution of natural gas in Western Europe, as well as on gaining access to industrial and gas electricity markets in Central and Western Europe. Its non-core FDI includes manufacturing, gas equipment, petrochemicals and banking. Other Russian oil and gas companies, such as Tatneft and Novatek, control large oil reserves, but operate mainly in the CIS countries. Among metallurgical companies, Norilsk Nickel is the largest Russian MNE by assets abroad. It was established as a state-owned enterprise in 1989. Later it was privatized by Oneximbank. Norilsk Nickel has been expanding abroad with a few investments in mining and trading companies in the United States, the United Kingdom and South Africa. It is active in the USA, UK, Switzerland, Belgium and South Africa. Another major Russian MNC in metallurgy is Severstal. It was gradually privatized in 1993. The company chose a strategy aimed at acquiring assets in developed countries. It began technological modernization of production through a joint venture with an American partner in 2001 (Panibratov & Michailova, 2018).

However, the role of the government remains important in the activities and strategies of Russian MNCs. The Russian government gives preference to the CIS countries, rather than the rest of the world, not only because of geographic proximity or similar language, but also because of strong political connections. For example, the government puts pressure on companies such as Lukoil to invest in Kazakhstan more than in other countries. Nevertheless, an expansion into advanced economies is a main priority for Russian MNCs (Panibratov, 2017).

4.5 Impact of sanction on FDI between 2014-2020

The government continues to play a significant role in the operations and strategies of Russian multinational corporations hence FDI. Russia's international and geostrategic actions, particularly the invasion of Ukraine and the annexation of Crimea in 2014, caused significant changes in its

international political and economic relations. As a result, responding to the Russian invasion the United States of America, the European Union and their allies have imposed a series of sanctions. From March 3, 2014, to September 13, 2018, the USA and the EU imposed 15 economic, 12 financial and 22 corporate sanctions against Russia (Radio Free Europe, 2018). During this period, 31 personal and 5 diplomatic sanctions were imposed. Also, one sanction related to the war in Syria, two sanctions related to the presidential elections in Russia, and three sanctions related to the incident with Sergei Skripal in 2018 were applied. In response to the sanctions, Russia has banned the import of certain food items from the EU and further strengthened its long-term import substitution policy aimed at ensuring economic sovereignty and the supply of basic commodities, as emphasized since the early 2000s. The Russian government also approved "Government Program on Industries and Competitiveness" to increase domestic production in almost all sectors (Korhonen et al., 2018).

Since March 2014, the EU has gradually introduced restrictive measures against Russia. These measures were taken in response to the illegal annexation of Crimea and the deliberate destabilization of Ukraine (European Council, 2021). The US Congress imposed sanctions in support of the sovereignty, integrity, democracy and economic stability of Ukraine and condemned Russia's unjustified military intervention in the Crimea region and its occupation, as well as any other form of political, economic or military aggression against Ukraine (United States Congress, 2014).

According to Sultonov M. (2020) Western sanctions were seen as acts of aggression against Russian interests. For example, Yevgeniy Primakov, a prominent Russian politician and diplomat, interpreted the conflicts and sanctions related to Crimea as an attempt by the United States to promote the establishment of military control over the Black Sea as part of the US policy aimed at establishing a unipolar world order and taking Russia out of world politics. A representative of the Russian scientific community, Rustem Nureev divided the reasons for the sanctions against Russia into geopolitical and economic ones. He sees attempts to weaken Russia's position on major international issues and limit the competitiveness of Russian companies in the global market and especially in the European market (Nureev & Petrakov, 2016).

Coincidentally, in July 2014, the price of crude oil on the international energy market began to fall. The price of WTI/Brent crude oil fell from USD 106.1-110.1 on July 2014 to USD 56.9-61.7 on July 2015 and to USD 32.1-30.1 USA in January 2016. Fuel exports as a percentage of Russian merchandise exports decreased from 71.2% in 2013 to 48.2% in 2016 (The World Bank, 2020). This external shock, caused by the imposed sanctions and the low oil price, had a significant impact

on the Russian economy. Accordingly, the purpose of this chapter is to analyze the impact of sanctions on the Russian foreign direct investment. The main goal is to understand if sanctions caused significant deviation in amount and destination of Russian FDI.

As said before, CBR provides statistics of FDI by country and by industry, flow and stock. Foreign direct investment stock by country was collected from the CBR database. The period of statistical data dated from 2014 to 2020. To understand the impact of sanctions on Russian FDI the changes of shares of countries that imposed sanctions in total FDI through years are calculated. Absolute numbers provided by the CBR were calculated into percentages using a simple formula:

$$y = X_c * \frac{100}{FDI}$$

where:

- X_C – absolute volume of FDI from/to a country,
- FDI – total volume of FDI of a year.

Countries of EU, the USA and some other countries that imposed sanctions were chosen. Some countries such as Denmark or Ireland were excluded from the analysis due to confidential data or negative amounts in statistical data of the CBR. Hypothetically the share in FDI volume of countries introduced sanctions should decline.

It is important to mention that if investments of a resident of country A come to the Russian economy from country B, then the official statistics of the Central Bank of Russia show them as coming from country B, and not A. Accounting is carried out according to the principle of the economic territory from which the investments came, and not according to the principle of the place of registration of the investor. So, if investments of US resident companies enter the Russian economy through other countries, as well as investments from funds earned on the territory of the Russian Federation, the Central Bank of the Russian Federation does not consider such investments as received from the USA. And there can be a lot of such investments. Thus, it can be considered as another limitation of the research overall.

4.5.1 Inward FDI

The impact of the 2007-2008 global financial crisis that shook the global economy had a significant impact on Russia's international investment position. Figure 19 shows that the decline in inward foreign direct investment was overcome by 2014. However, subsequent years under pressure from the sanctions of the United States and the EU the investment opportunities of the Russian economy have deteriorated significantly. According to the Ministry of Economic Development of the

Russian Federation, foreign sanctions have significantly reduced the ability to attract capital from abroad (Platonova, 2019).

It is important to mention that the decline in 2014 was compounded by the almost simultaneous fall in crude oil prices. Concurrently with the imposition of sanctions, Urals oil prices fell by almost 50% between June 2014 and early 2015. Traditionally, this decline was associated with a decrease in export and tax revenues in Russia, as well as with tightening financial conditions. Thus, in 2014 and 2015, these negative consequences were exacerbated by the imposition of sanctions, as well as the possibility of imposing additional sanctions (Korhonen, 2019).

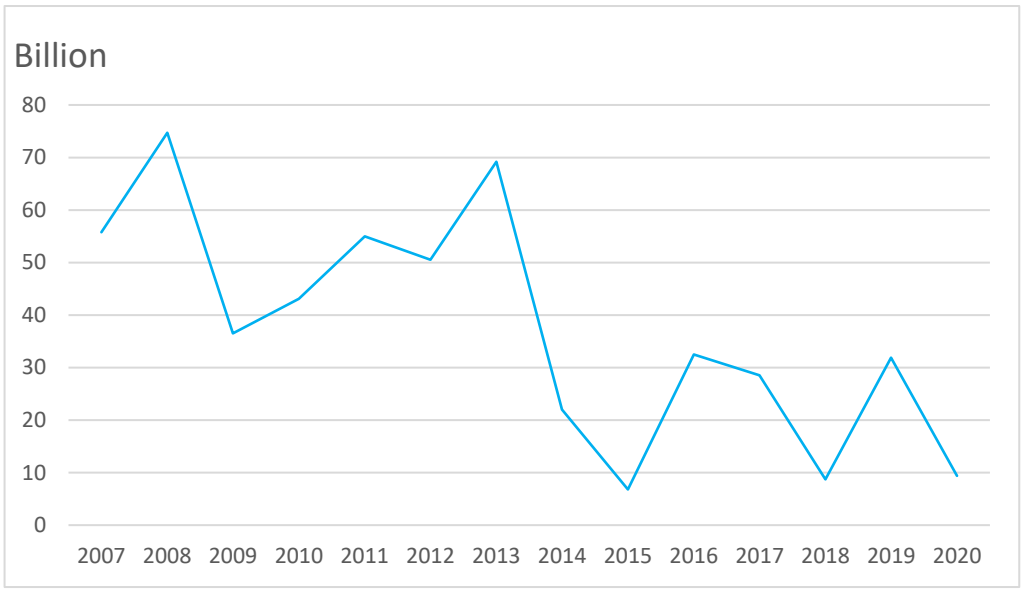

Figure 19. Foreign direct investment, net inflows (BoP, current US$) 2007 – 2020
Source: comprised by author based on the World Bank data (2021a).

According to the statistics of the World Bank (2021a), the flow of direct investment to the Russian Federation from foreign countries decreased in 2009 after the global financial crisis that began in 2008, decreased in 2012 and fell sharply in 2014–2015 after the introduction of anti-Russian sanctions in 2014 and fell of crude oil prices (Figure 19).

The various restrictive and prohibitive measures taken by several states with respect to the Russian Federation affected foreign investors both in Russia and abroad. The share of inward direct investment from foreign countries that imposed sanctions on the Russian Federation in the total volume in 2014–2020 is small (Table 19). The shares of some countries might be underestimated since foreign direct investment comes to the Russian Federation both directly from the investing country and in transit through another state, as well as from offshores (Tcyrempilova & Magda, 2022).

Table 19. Russian inward FDI stock by country 2014 – 2020, %

Country of direct investor	As of December 31, 2014	As of December 31, 2015	As of December 31, 2016	As of December 31, 2017	As of December 31, 2018	As of December 31, 2019	As of December 31, 2020
Total	100,00	100,00	100,00	100,00	100,00	100,00	100,00
AUSTRALIA	0,01	0,01	0,01	0,01	0,01	0,01	0,01
AUSTRIA	2,60	1,81	1,25	1,27	1,37	1,38	1,33
BELGIUM	0,38	0,40	0,28	0,22	0,33	0,28	0,26
BULGARIA	0,01	0,01	0,02	0,02	0,02	0,02	0,03
CANADA	0,02	0,03	0,04	0,03	0,02	0,02	0,02
CROATIA	0,01	0,01	0,02	0,02	0,02	0,02	0,02
CYPRUS	36,54	34,62	35,48	36,85	30,56	33,78	32,26
CZECH REPUBLIC	0,12	0,08	0,09	0,11	0,10	0,08	0,08
DENMARK	0,19	0,11	0,05	0,08	0,13	0,10	0,12
ESTONIA	0,05	0,05	0,09	0,09	0,09	0,10	0,09
FINLAND	0,94	2,58	0,98	0,84	1,08	1,44	1,38
FRANCE	3,34	3,81	3,72	3,43	4,24	4,54	4,33
GERMANY	4,74	4,94	4,22	4,11	4,02	4,13	4,03
GREECE	0,03	0,03	0,04	0,01	0,01	0,01	0,01
HUNGARY	0,21	0,16	0,14	0,14	0,13	0,14	0,12
IRELAND	1,60	3,14	1,67	1,25	1,43	1,27	1,29
ITALY	0,25	0,36	0,98	1,07	1,13	1,05	1,07
JAPAN	0,44	0,50	0,49	0,49	0,47	0,52	0,54
LATVIA	0,08	0,07	0,07	0,07	0,08	0,07	0,08
LIECHTENSTEIN	0,02	0,02	0,03	0,05	0,18	0,09	0,20
LITHUANIA	0,05	0,05	0,07	0,07	0,07	0,06	0,07
LUXEMBOURG	3,58	3,08	3,03	4,36	4,79	1,59	1,07
MALTA	0,03	0,04	0,03	0,05	0,06	0,07	0,12
NETHERLANDS	14,43	11,73	10,46	9,22	9,89	8,30	8,57

Table 19 continued

NEW ZEALAND	0,00	0,00	0,02	0,00	0,00	0,00	0,00
NORWAY	0,09	0,06	0,05	0,05	0,05	0,06	0,08
POLAND	0,11	0,11	0,11	0,11	0,11	0,10	0,12
SLOVAKIA	0,01	0,01	0,01	0,01	0,01	0,01	0,01
SLOVENIA	0,05	0,06	0,05	0,05	0,05	0,05	0,05
SPAIN	0,12	0,12	0,13	0,14	0,09	0,12	0,13
SWEDEN	1,13	0,93	0,99	1,16	1,11	1,02	0,68
SWITZERLAND	3,65	3,28	2,86	2,91	2,70	3,06	3,06
UNITED KINGDOM	2,50	3,30	2,97	4,23	3,66	6,65	7,19
UNITED STATES	0,58	0,51	0,65	0,69	0,78	0,70	0,87
The rest of the world	22,07	24,01	28,92	26,78	31,20	29,19	30,71

Source: comprised by author based on CBR's data

It can be seen in the Table 19 that the biggest percentages of inward FDI through years came from Cyprus and Netherlands which are well known as popular destinations for Russian outward FDI. Thus, these investments can be described by offshore companies and countries with preferential tax regimes. Investments of residents of Russia coming into the country from offshores are considered by the Central Bank of the Russian Federation (CBR) as foreign. Important to note that the CBR data includes investments made by investors of Russian origin, but through offshore structures. Additionally, the Central Bank's statistics based on the balance of payments exclude investments made in Russia by subsidiaries of foreign companies, because such investments do not cross the Russian financial border.

The shares of IFDI coming from Cyprus and Netherland between 2014 and 2020 fell from 36,54 % to 32,26 % and from 14,43 % to 8,57 % respectively (Figure 20). This can be related to changes in Russian OFDI and the deoffshorization process that Russia government has been pursuing. Interestingly, there was not much of changes in investment from Germany. Moreover, percentage of direct investment from some countries such as the UK, France and Switzerland raised.

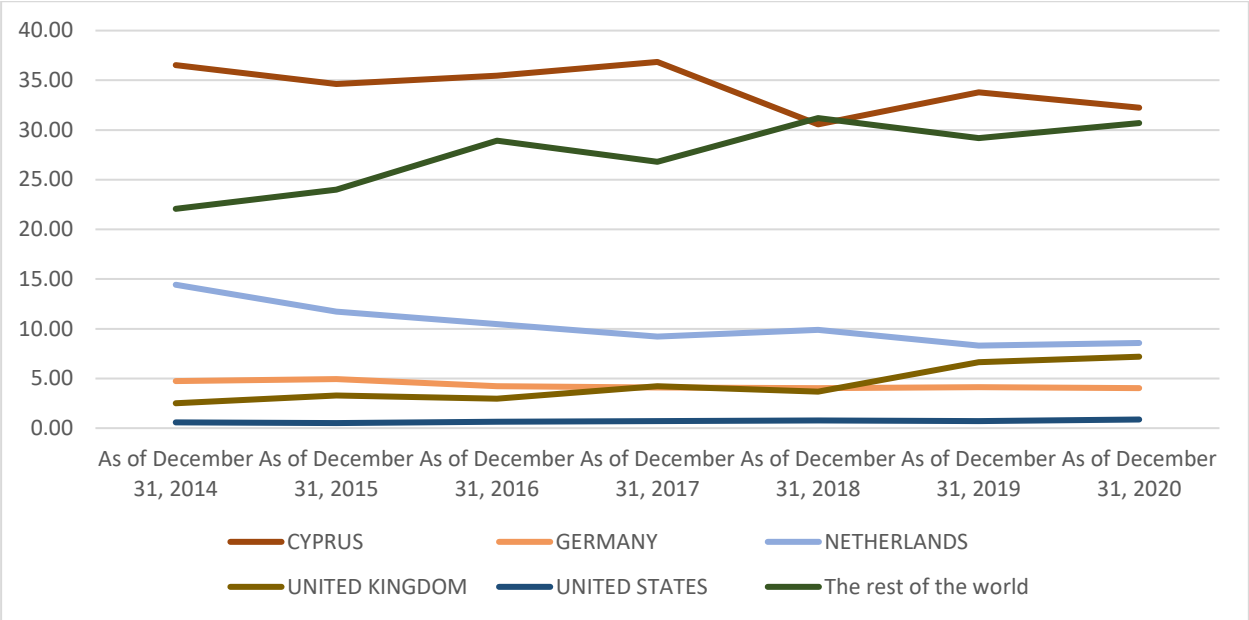

Figure 20. Russian inward FDI by country 2014 – 2020, %
Source: comprised by author based on CBR's data

Prilepskiy (2019) notes that from 2015 to the first half of 2017, the expansion of the sanctions lists was mainly due to small (on the scale of the Russian economy) organizations, which, along with maintaining a responsible macroeconomic policy of the Russian Federation, allowed Russian and foreign economic agents to continue to adapt to sanctions. However, the discussion in the United States of Russia's interference in the American elections in 2016 increased the uncertainty about the future development of the policy of restrictions. The Countering America's Adversaries Through Sanctions Act (CAATSA) of August 2017 fundamentally complicated the cancellation of previously adopted sanctions, created the prospect of imposing sanctions against mining, metallurgical and railway companies and semi-state companies of the Russian Federation. Threats included imposing secondary US sanctions against non-US residents who carry out significant transactions with persons involved in the Russian sanctions' lists.

The transition to a tougher sanction regime on the part of the United States was manifested in 2018 in the imposition of tough sanctions on the so-called Specially Designated Nationals and Blocked Persons List (SDN) against Russian individuals and companies, including Rusal. SDN leads to a ban on investing in debt securities of these companies with a certain maturity, and to the freezing of all assets under the jurisdiction of the United States and a ban on any transactions with them. Both US residents and non-residents are prohibited from any transactions with persons on the SDN list under the threat of secondary CAATSA sanctions. An example of secondary sanctions was the inclusion in the SDN list of the Equipment Development Department of the Chinese Army for the purchase of S-400 complexes from the Russian Federation. As a result of toughened sanctions

from the USA, inflationary pressures increased and monetary policy tightened in 2018, despite otherwise favorable external conditions in that year such as rather high oil prices and global economic growth rates. It leads to further deterioration of investment climate of Russia.

4.5.2 Outward FDI

Outward FDI is a normal phenomenon, conditioned primarily by the desire for growth and, accordingly, the search for new market in other countries, technology, natural resources etc. The stability of legislation, the financial, economic and socio-political situation of a few foreign countries, their comfortable tax legislation and a favorable business environment are also attractive for Russian investors. However, in the last decade, some of these advantages have disappeared and have been questioned.

This was facilitated by the events of March 2013, when, according to the decision of the authorities of Cyprus, 9.9% were written off at one time from deposits placed with banks of the country, the amount of which exceeded 100 thousand euros, and from deposits of a lesser value - 6, 75 %. Also freezing in banks of Wall Street, the City of London, Canada, Austria and several European countries of international reserves of Libya, Syria, blocking of accounts of individuals and legal entities, direct seizure of property facilitated a drop of Russian OFDI (Kazantsev, 2020).

All this showed that investors can lose their funds for financial, economic and political reasons of the legislative and executive bodies of the states in whose jurisdiction their capital is placed. Growing up in 2013 the flow of outward direct investment from Russia to other countries declined sharply in 2014 and 2015 (Figure 21). It seems that anti-Russian sanctions and possibly, measures of the first stage of the capital amnesty in the Russian Federation in 2015-2016 had an effect of this decline of outward FDI.

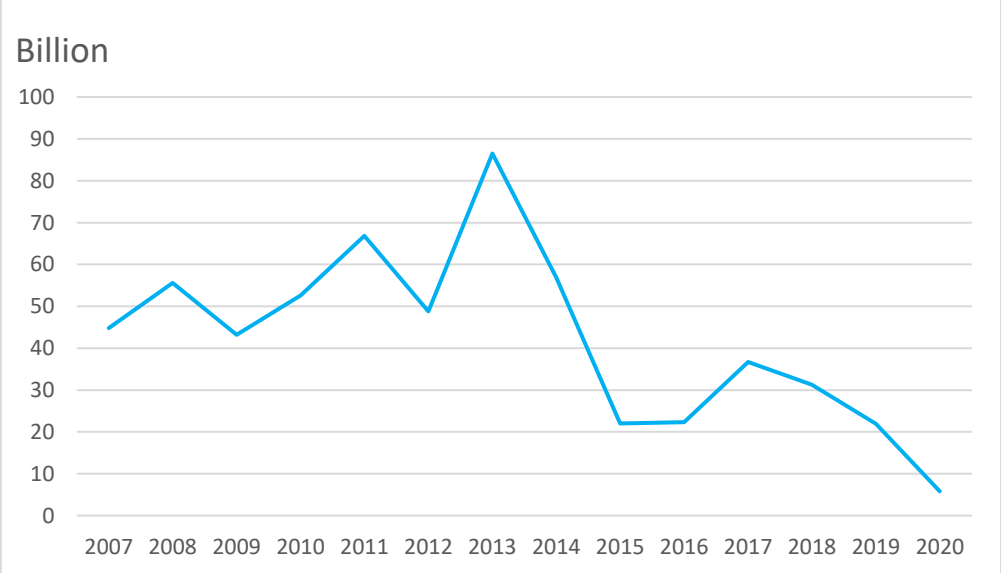

Figure 21. Foreign direct investment, net outflows (BoP, current US$) 2007 – 2020
Source: comprised by author based on the World Bank data (2021b).

Nevertheless, it can be noted that Cyprus is the main destination for Russian outward FDI (Table 20). The fact that both inward and outward FDI highly related to Cyprus and the Netherlands reveals the peculiar feature of Russian FDI, so-called "round-tripping". According to the 4th edition of Benchmark Definition of FDI of the OECD of 2008, round-tripping is defined as the transfer of local funds from direct investors to a foreign country, followed by a return of these funds in the first economy (local economy) in the form of inward FDI (Repousis et al., (2019).

Ledyaeva S. et al. (2015) highlight significant differences between investors that are part of round-tripping and genuine foreign investors. While pseudo-investors prefer to invest in resource-rich regions as well as in regions with low governance scores and high levels of corruption, genuine foreign investors prefer regions with seaports and more skilled labor. Thus, the share of round-tripping investment in total FDI is significantly higher in corrupt regions. Real FDI in Russia comes mainly from developed countries, thus bringing modern technologies and know-how to the recipient regions. Consequently, in the long term, significant interregional differences in the level of corruption can lead to uneven technological development of Russian regions and exacerbate interregional inequality.

Table 20. Russian OFDI stock by country 2014 – 2020, %

Country of direct investment	As of December 31, 2014	As of December 31, 2015	As of December 31, 2016	As of December 31, 2017	As of December 31, 2018	As of December 31, 2019	As of December 31, 2020
Total	100,00	100,00	100,00	100,00	100,00	100,00	100,00
AUSTRALIA	0,16	0,18	0,15	0,13	0,13	0,11	0,11
AUSTRIA	11,03	7,50	6,33	7,96	7,71	6,54	7,69
BULGARIA	0,94	1,12	0,95	0,86	0,90	0,72	0,77
CANADA	0,46	0,50	0,51	0,45	0,48	0,38	0,39
CROATIA	0,12	0,13	0,11	0,14	0,15	0,13	0,13
CYPRUS	35,05	36,00	41,27	45,08	48,01	49,86	49,85
CZECH REPUBLIC	0,58	0,63	0,52	0,46	0,53	0,49	0,54
ESTONIA	0,13	0,15	0,10	0,08	0,11	0,11	0,10
FINLAND	0,35	0,85	0,85	0,78	0,82	0,62	0,84
FRANCE	1,03	0,98	0,82	0,77	0,86	0,76	0,83

Table 20 continued

GERMANY	2,89	3,21	2,21	2,16	2,34	2,15	2,51
GREECE	0,20	0,22	0,20	0,19	0,19	0,16	0,17
HUNGARY	0,08	0,08	0,07	0,07	0,08	0,07	0,07
ITALY	0,73	0,81	0,72	0,72	0,80	0,70	0,73
JAPAN	0,01	0,01	0,01	0,01	0,02	0,01	0,01
LATVIA	0,45	0,48	0,40	0,40	0,46	0,39	0,42
LITHUANIA	0,09	0,10	0,09	0,08	0,09	0,09	0,07
MALTA	0,03	0,03	0,03	0,03	0,04	0,03	0,03
NETHERLANDS	16,48	18,59	15,69	12,48	11,66	8,48	6,58
NEW ZEALAND	0,03	0,04	0,03	0,03	0,03	0,03	0,03
NORWAY	0,10	0,16	0,15	0,13	0,13	0,11	0,11
POLAND	0,15	0,18	0,13	0,17	0,16	0,14	0,16
PORTUGAL	0,07	0,07	0,07	0,06	0,07	0,06	0,06
ROMANIA	0,01	0,01	0,01	0,01	0,01	0,03	0,03
SLOVAKIA	0,04	0,04	0,04	0,04	0,05	0,05	0,05
SLOVENIA	0,05	0,06	0,05	0,07	0,09	0,06	0,05
SPAIN	1,88	2,17	1,84	1,64	1,86	1,58	1,68
SWEDEN	0,03	0,05	0,05	0,05	0,05	0,06	0,09
SWITZERLAND	5,14	5,54	5,19	5,19	5,12	4,13	4,86
UNITED KINGDOM	2,44	2,65	2,53	2,34	1,84	4,66	4,06
UNITED STATES	1,97	2,12	2,11	1,74	2,12	1,57	1,62
The rest of the world	17,29	15,34	16,75	15,68	13,12	15,75	15,37

Source: comprised by author based on CBR's data

International political events in recent years, such as sanctions, also affect the degree of "offshorization" of Russian business. This is one of the key characteristics of outward FDI from Russia in recent decades, which explains the significant scale of outward FDI and the absence of Russian MNCs among the world leaders. According to Kuznetsov (2021) the official non-Russian

status of companies registered in Cyprus and in similar jurisdictions in 2014-2016 has repeatedly helped Russian companies to avoid additional discrimination in Western countries. However, over the past two or three years, Russian private business became fearful of insuring assets against encroachments from the state and reducing taxation by re-registering in offshore zones. Registration of Russian MNCs in foreign counties ceased to protect private MNCs from new anti-Russian sanctions. Moreover, the Russian government began to revise tax agreements with offshore destinations such as Cyprus and the Netherlands. However, the volume of Russian OFDI to these countries is high (Table 20).

Interestingly, investment to Germany has not changed much (Figure 22). Moreover, the shares of the UK in total Russian OFDI increased during 2014-2020. The share of receiving Russian investment of the USA as a main country that imposed sanctions has decreased during the analyzed period but not significantly.

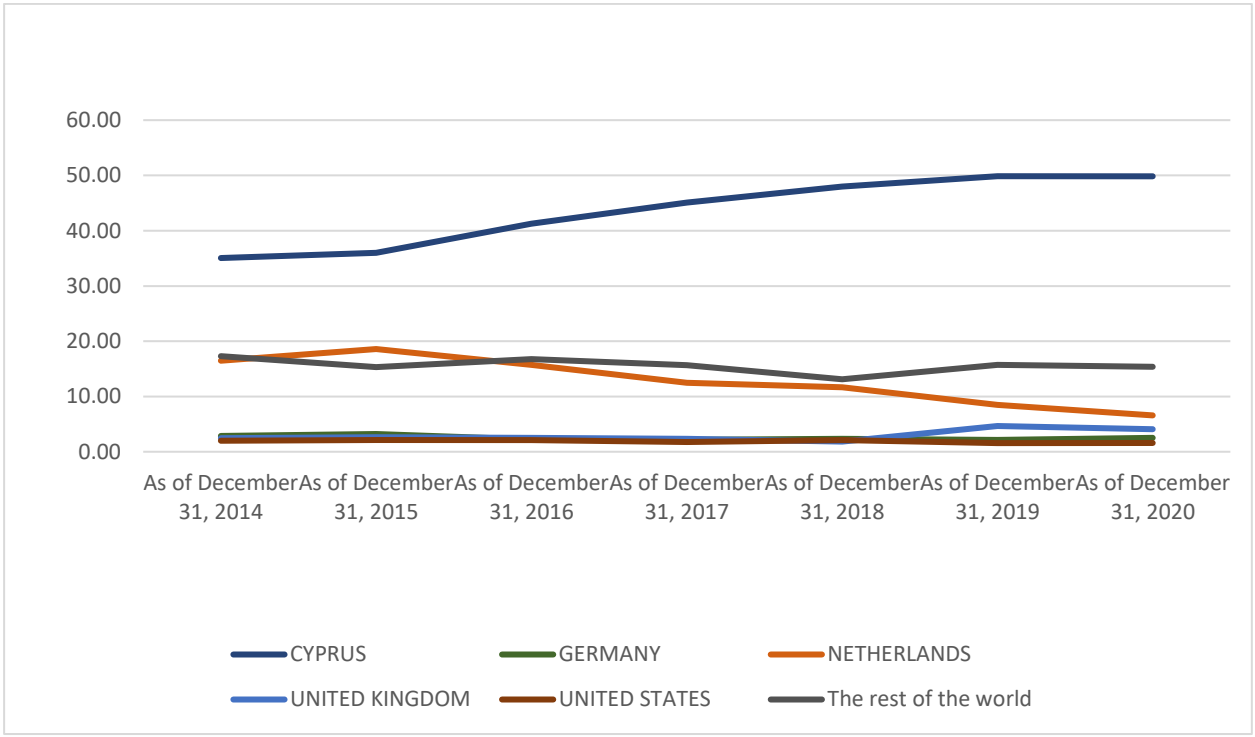

Figure 22. Russian OFDI by country 2014 – 2020, %
Source: comprised by author based on CBR's data

Thus, based on calculations and data analysis it is hard to tell that a significant deoffshorization of Russian OFDI happened. Kuznetsov (2021) notes that the national policy of deoffshorization is still contradictory, which can be partly explained by the multidirectional impact of foreign policy changes in recent years on Russian MNCs. Also, it can be concluded that despite sanctions imposed by the EU Cyprus and the Netherlands remain the main recipients of Russian capital.

It seems clearly that Western sanctions have had a negative impact on the Russian economy. At the same time, fluctuations in oil prices continue to have a greater impact on Russia's economic performance. Thus, it might be concluded that the sanctions have the expected effect. From the point of view of countries that imposed sanctions against Russia, the taken measures represent an obvious economic price for the unwanted actions of Russia. While FDI has not been banned, it is likely to suffer too. Russian sanctions and counter-sanctions also entailed certain costs for Western countries. Their exports to Russia were lower than they would have been otherwise. This may be true for sectors where Russia has not introduced an import ban.

The statistics of the World Bank show both net inward and net outward FDI fell sharply in 2014. The factor of sanctions, according to many researchers estimates, plays a key role in reducing inward foreign direct investment. As for the outward FDI, this may be due to the almost simultaneous imposition of sanctions due to the strengthening of the CBR in the fight against the outflow of "gray" capital.

The analysis of CBR data revealed that despite of sanctions the direction of Russian inward and outward FDI did not change much. Moreover, it proved importance of understanding round-tripping of Russian capital. Offshorization is a widespread phenomenon for Russia. Most of Russian money flows through Cyprus and offshore centers, which account for highest percentage of Russia's inward/ outward FDI stock. The scale of round-tripping can have very significant socio-economic implications. Thus, a better understanding of this phenomenon is needed.

5. CONCLUSION AND RECOMMENDATIONS

In this chapter, the conclusions of the study are formulated. It also provides recommendations and implications. Additionally, it outlines the limitations of the current research and suggests directions for future studies to further understand the complexities of Russian FDI.

5.1 Conclusion

This dissertation investigates the distinctive role of foreign direct investment in the economic development of the Russian Federation, highlighting significant deviations from traditional FDI theories. The study determined the main features of Russian outward FDI, emphasizing the unique factors that differentiate Russia from other economies and challenging the applicability of classic models such as the Investment Development Path and the OLI-framework.

The inadequacy of traditional theories like the IDP, which describes a sequential evolution of FDI from inward to outward, is evident in their failure to capture Russia's unique trajectory. Unlike many economies, Russia has often exhibited higher levels of outward FDI compared to inward FDI, primarily driven by geopolitical considerations and strategic resource acquisition, rather than typical economic development stages. The study's parallel regression analysis further reveals that the OLI-framework, which emphasizes Ownership, Location, and Internalization advantages, does not sufficiently account for Russian FDI patterns. Specifically, location advantages seem not play a significant role for Russian multinationals.

The characteristics of Russian OFDI are shaped by significant geopolitical factors, such as Western sanctions and international political dynamics, which compel Russian multinationals to seek investment opportunities in non-traditional markets. This behavior challenges the assumptions of classical FDI models that focus primarily on economic motivations. Russian companies strategically use FDI to secure access to critical resources and technology, rather than simply seeking new markets. This strategy marks a departure from traditional models, which typically associate outward FDI with market-seeking motives prevalent in other emerging economies.

Thus, reviewing the initial hypotheses of this dissertation, the findings confirms the first two hypotheses, demonstrating that the IDP model is inadequate for capturing the unique FDI patterns of the Russian economy, which are significantly influenced by geopolitical considerations and state ownership. These findings underscore the role of non-traditional factors, such as political alliances and state-directed strategies, in shaping Russian outward FDI. However, the third hypothesis is rejected, as the results indicate that Russian investment decisions are not primarily

driven by favorable economic conditions in host countries, contrary to what was initially proposed (Table 21). This highlights a divergence from typical economic motivations and emphasizes the strategic and geopolitical nature of Russian FDI. Thus, it is concluded that a comprehensive understanding of Russian FDI necessitates a framework that encompasses both economic and non-economic factors, accounting for the country's complex motivations and global strategy.

Table 21. Hypothesis review

Hypothesis Number	Short Description of Hypothesis	Status
H1	The IDP model is inadequate for identifying the development stage of the Russian economy due to unique economic and geopolitical characteristics.	Accepted
H2	Geopolitical considerations and state ownership significantly influence the patterns and destinations of Russian OFDI.	Accepted
H3	Russian investment is significantly attracted to locations with favorable economic conditions in the host economy, reflecting strong economic fundamentals.	Rejected

Source: author's own work

The rise of new actors in global capital movement, particularly from BRICS nations like Russia and China, has redefined the landscape of international investments. Russian corporations, often state-owned, are becoming significant global players as their cross-border investment activities increase. The unique relationship between these multinational corporations and the state necessitates a modification of existing conceptual approaches to understanding FDI, with a focus on the specific characteristics of these firms and their connections to state objectives.

Russian businesses also face a lack of attractive domestic investment opportunities due to structural imbalances, an unfavorable business climate, and institutional challenges such as poor governance and corruption. These factors contribute to a massive outflow of capital to offshore jurisdictions, complicating the development of the national economy. The dual nature of offshore usage - ranging from legal optimization to illegal activities - requires nuanced policy responses to enhance the transparency and legality of Russian OFDI.

To maximize the benefits of OFDI, it is necessary to transform state policy in the FDI field. A new strategy, informed by theoretical approaches and an understanding of modern capital movement, should aim to create conditions that enhance efficiency and yield positive effects from outflow of FDI. However, the poor quality of basic institutions, high market monopolization, administrative barriers, and corruption remain key problems that increase in impact during periods of global market volatility and domestic economic and political conflicts. As a result, the improvement of the investment climate and consistent institutional changes are critical to addressing these challenges. Pursuing a focused policy to optimize the directions and forms of OFDI is essential,

as is improving the efficiency of managing foreign assets by domestic businesses in the face of increasing global competition. OFDI can be a significant element in the implementation of the foreign economic strategy of the Russian Federation and a new factor in the development of innovative processes in the country.

Thus, the findings emphasize the need for a revised theoretical framework that captures the unique characteristics of Russian FDI. Policymakers should focus on fostering an environment that supports the strategic objectives of Russian firms, particularly in sectors with competitive advantages. An important task is to ensure the coherence of Russia's investment policy at both international and national levels, while also enhancing the effectiveness of Russian companies' strategies for international business development and improving corporate governance of foreign assets. Ultimately, achieving these strategic goals requires political will and professional dedication to reform and innovation.

5.2 Recommendations and implications

The findings from this study provide valuable insights into the unique nature of Russian outward foreign direct investment and offer several implications for policymakers and businesses aiming to optimize the benefits of OFDI. The research demonstrates that traditional FDI theories often do not adequately capture the specific characteristics and strategic motivations driving Russian multinationals. Therefore, a tailored approach to understanding and managing OFDI is essential for maximizing its positive impact on the Russian economy.

To begin with, it is crucial for the Russian government and policymakers to develop a comprehensive FDI strategy that aligns with the distinctive features of Russian firms. This strategy should emphasize the importance of ownership and internalization advantages, rather than relying solely on location advantages. Such a strategy would help Russian multinationals better leverage their proprietary technologies and resources, facilitating more effective competition in global markets.

The study highlights the significant role of geopolitical factors and the need for Russian firms to adapt by exploring investment opportunities in non-traditional markets. Therefore, policymakers should focus on building robust diplomatic and economic ties with emerging markets, especially in Asia, Africa, and Latin America. Developing bilateral agreements and trade partnerships with these regions can open new avenues for Russian investments, reducing reliance on traditional Western markets.

Given the unique challenges posed by Russia's domestic economic conditions, such as structural imbalances and an unfavorable business climate, it is essential to improve the investment environment within the country. Addressing issues like administrative barriers, corruption, and poor institutional quality can enhance the attractiveness of domestic investment opportunities, encouraging Russian firms to invest more within their own economy.

The research underscores the importance of government support for strategic sectors where Russian firms have a competitive edge. By providing targeted incentives and fostering public-private partnerships, the government can stimulate innovation and strengthen these industries. This approach will ensure that Russian companies can maintain their competitive advantage and expand their global influence.

Investing in human capital development is also a priority. Enhancing education and training programs can build a skilled workforce capable of supporting the internationalization efforts of Russian firms. By fostering a culture of innovation and promoting knowledge exchange, Russia can equip its labor force with the skills needed to drive future economic growth and adapt to global market demands.

The findings of this study can guide future research into the development of a new theoretical framework that accurately reflects the nuances of Russian OFDI. Researchers and academicians can build on this work to explore the long-term effects of FDI on the Russian economy, particularly considering ongoing geopolitical changes and economic sanctions. Additionally, future studies could examine the role of domestic policies and technological advancements in shaping Russia's investment strategies.

Overall, this research contributes to a deeper understanding of the complexities of Russian OFDI. By embracing a tailored approach to FDI and implementing targeted policies, Russia can harness the full potential of OFDI to drive sustainable economic growth and innovation.

5.3 Limitations and future research directions

As with any research, this study has certain limitations that must be acknowledged. One of the primary limitations is that the study's focus on Russian outward foreign direct investment may not fully capture the diverse range of factors influencing FDI flows across different regions and sectors. Given Russia's vast geographical and economic landscape, future research could benefit from a more granular approach, examining specific industries or regional dynamics within Russia to provide a more comprehensive understanding of OFDI patterns.

Furthermore, the data used in this study may be subject to inaccuracies due to methodological differences between sources such as the Central Bank of Russia and OECD. Future studies could aim to standardize data collection methods or incorporate additional data sources to enhance the robustness of findings.

Future research could conduct comparative studies between Russia and other emerging economies, such as other BRICS countries, to explore how geopolitical factors and domestic policies uniquely shape FDI strategies. Utilizing advanced statistical techniques could provide deeper insights into these comparative dynamics.

Moreover, this study challenges the applicability of traditional FDI theories, such as the Investment Development Path and the OLI-framework, to the Russian context. Future research could work towards developing a theoretical framework that better reflects the nuances of Russian OFDI.

Thus, this study provides a foundation for future research aimed at deepening the understanding of Russian OFDI. By addressing the limitations identified here and exploring new theoretical and empirical avenues, future research can contribute to more effective policymaking and strategic planning for Russia's global economic engagement.

6. NEW SCIENTIFIC RESULTS

Based on the research conducted, the following new scientific results can be stated, providing fresh insights into the nature and drivers of Russian OFDI:

1. Based on my research, I proved that the data of the Organization for Economic Cooperation and Development and the Central Bank of Russia differ significantly, which stem from the unique characteristics of Russian OFDI, in addition to the relationship with offshore financial centers. For this very reason, these differences represent a significant limitation in the accurate assessment of the presence of Russian capital in OECD countries, which requires caution when interpreting OFDI data.
2. During my research, I verified with the help of SPSS that there is no statistically significant correlation between NOI and GDP by performing a multiple linear regression analysis. This insignificance indicates that the traditional IDP model, which has been widely used in other economies, does not adequately capture the specificities of Russian OFDI.
3. With my research, I confirmed that Russian OFDI is not significantly driven by the attractiveness of the host countries, and I also proved that Russia's investment character is unique, which does not correspond to traditional economic theories, such as the OLI framework.

7. SUMMARY

This dissertation examines the role of Foreign Direct Investment in the economic development of the Russian Federation, focusing on both the distinctive features of Russian outward foreign direct investment and the applicability of traditional FDI theories to the Russian context. The study critically analyzes the drivers behind Russian OFDI, evaluates the relevance of existing FDI theories such as the Investment Development Path and the OLI framework. Structured around several key objectives, the research explores the trends and characteristics of Russian OFDI, assessing the influence of geopolitical factors, state ownership, and sectoral specialization on investment patterns.

The initial section provides the foundational concepts related to FDI and delves into Dunning's FDI theory, examining the eclectic paradigm and the investment development path. It also explores global investment trends post-2008 financial crisis, utilizing insights from UNCTAD's World Investment Reports, and concludes with a discussion on the Russian economy's activities prior to the Covid-19 pandemic. The research methodology combines secondary data from international databases with advanced statistical tools like SPSS and Stata. This rigorous approach is employed to investigate the determinants of Russia's OFDI and analyze the relationships between these investments and various economic indicators.

Findings reveal that Russian OFDI is heavily influenced by geopolitical considerations and state ownership, distinguishing it from typical FDI patterns. Unlike the conventional application of the IDP and OLI frameworks, which focus predominantly on economic factors, Russian OFDI is also driven by strategic motives such as securing energy supplies and expanding control over global value chains. This unique context presents challenges to the applicability of traditional FDI theories, which often overlook the impact of geopolitical dynamics and state-led strategies on investment decisions.

The dissertation concludes by highlighting the need for a revised theoretical approach to understand Russian OFDI, emphasizing the importance of incorporating geopolitical and state-related factors into FDI analysis. Policy recommendations are provided to enhance the effectiveness of Russia's investment strategies, suggesting a shift towards more diversified and strategically aligned investment policies to strengthen Russia's global economic positioning.

8. APPENDICES

1. References

1. ACOCK A. C. (2018). A Gentle Introduction to Stata (6th ed.). *Stata Press*. 2018
2. ACRA (2018). Six drivers of economic growth in Russia. Economy of Russia: elaboration of forecast up to 2022. Available at https://www.acra-ratings.ru/research/667 [in Russian]
3. ANH N.T.K. & NGOC L.H. (2016). Introduction to the Theoretical Framework of Dunning's Investment Development Path. *VNU University of Economics and Business, VNU Journal of Science: Education Research*, Vol. 32, No. 5E (2016) 1–11
4. ARNOLD, J. M., AND B. S. JAVORCIK. (2009). "Gifted Kids or Pushy Parents? Foreign Direct Investment and Plant Productivity in Indonesia." *Journal of International Economics.*
5. BALTAGI B. H. (2008). Econometric Analysis of Panel Data. *John Wiley & Sons*.2008
6. BULATOV A. S. (2018). Balance of payments of contemporary Russia: Specificities, management, prospects. *Voprosy Ekonomiki*, p.143-157.
7. CBR (2019). What trends say. Macroeconomics and markets. Available at https://www.cbr.ru/collection/collection/file/19700/bulletin_19-03.pdf [in Russian]
8. CBR (2020a). Monetary Policy. Available at https://www.cbr.ru/eng/dkp/
9. CBR (2020b). Legal Status and Functions. Available at https://www.cbr.ru/eng/about_br/bankstatus/
10. CBR (2020c). Monetary policy goals and principles. Available at https://www.cbr.ru/eng/dkp/objective_and_principles/
11. CBR (2020d). Monetary Policy Framework. Available at https://www.cbr.ru/eng/oper_br/o_dkp/mp_framework/
12. CBR (2020e). Key Rate. Available at http://cbr.ru/hd_base/KeyRate/?UniDbQuery.Posted=True&UniDbQuery.From=01.12.2013&UniDbQuery.To=15.12.2020/
13. CBR (2023). Positions by Instrument and Partner Country (Directional Principle. Available at https://www.cbr.ru/eng/statistics/default.aspx?PrtId=svs
14. CBR (2024). External Sector Statistics. Available at https://www.cbr.ru/eng/statistics/macro_itm/svs/
15. CENTER OF STRATEGIC PROJECTS. (2018). Reform of currency regulation and currency control in Russia. Available online: https://www.csr.ru/ru/research/valyutnyj-uchet-no-ne-kontrol/ [in Russian]

16. CHEN J. (2018). Inward Investment. *Investopedia.* Available at https://www.investopedia.com/terms/i/inward-investment.asp
17. DOMINGUEZ-JIMENEZ M. & POITIERS N. (2020). FDI another day: Russian reliance on European investment. *Policy Contribution Issue n˚3*, p. 8–10.
18. DUNNING J.H. (1993). Multinational Enterprise and the Global Economy. *Workingham, England and Reading. Mass.*: Addison Wesley, 1993, p. 81.
19. DUNNING J.H. AND NARULA R. (1996). Foreign Direct Investment and Governments: Catalysts for economic restructuring (1st ed.). Routledge. p. 1–40 https://doi.org/10.4324/9780203430200 .
20. DUNNING J.H. AND NARULA R. (2002). The Investment Development Path Revisited. In: Dunning J.H., Theories and Paradigms of International Business Activity - The Selected Essays John H. Dunning. Edward Elgar Publishing, Cheltenham, 2002
21. DURAN J.J. & UBEDA F. (2001). The Investment Development Path: A New Empirical Approach and some Theoretical Issues. *Transnational Corporations*, 10, 2, 1–34.
22. ECHANDI R., KRAJCOVICOVA J. & ZHENWEI QIANG C. (2015). The Impact of Investment Policy in a Changing Global Economy: A Review of the Literature. *Policy Research Working Paper*; No. 7437. World Bank, Washington, DC.
23. ECONOMY TIMES (2019). Bank of Russia moves to monetary easing. Available at http://economytimes.ru/kurs-rulya/bank-rossii-pereshel-k-smyagcheniyu-monetarnoy-politiki
24. EUROPEAN COUNCIL (2021). EU restrictive measures in response to the crisis in Ukraine. Available at https://www.consilium.europa.eu/en/policies/sanctions/ukraine-crisis/
25. FAROLE T. AND WINKLER D. (2012). Foreign Firm Characteristics, Absorptive Capacity and the Institutional Framework: The Role of Mediating Factors for FDI Spillovers in Low- and Middle- Income Countries. *Policy Research Working Paper 6265*. World Bank, Washington, D.C.
26. FEDERAL STATE STATISTICS SERVICE (2023). Official Statistics. Available at https://eng.rosstat.gov.ru/folder/11335
27. FIELD A. (2013). Discovering Statistics Using IBM SPSS Statistics (4th ed.). *SAGE Publications.*
28. FOCUSECONOMICS (2020). Russia Economic Outlook. Available at https://www.focus-economics.com/countries/russia
29. FROLOVA T.A. (2005). World economy. Taganrog: TRTU Available at http://www.aup.ru/books/m175/3_4.htm [in Russian]
30. GAZPROM (2019). Austria. Available at http://www.gazpromexport.ru/partners/ [in Russian]

31. GLAZYEV S.Y. (2016). Economy of the future. Does Russia have a chance? *Moscow: Knijny mir*. pp.385-390
32. GOLOVNIN M. (2016). Monetary Policy in Russia During the Crisis. *NEA journal*, no. 1 (29), p. 168–174
33. GOLOVNIN M. (2018). New trends in Russia's participation in the international movement capital. *Bulletin of the Institute of Economics of the Russian Academy of Sciences*. No. 6. [in Russian]
34. GÓMEZ-MERA, LAURA, THOMAS KENYON, YOTAM MARGALIT, JOSÉ GUILHERME REIS AND GONZALO V. (2015). "New Voices in Investment." *Washington, D.C.: World Bank.*
35. GONZALEZ A. (2017). Global Investment Competitiveness: New Insights on FDI. *Private Sector Development Blog.* Available at https://blogs.worldbank.org/psd/global-investment-competitiveness-new-insights-fdi
36. GREENE W. H. (2012). Econometric Analysis. *Pearson Education.* pp. 114–117, 384–386, 389–392
37. GRIGORYEV Y. (2007). Today or not today: deregulating the Russian gas sector. *Energy Policy, Vol. 35*.
38. GUJARATI D. N. & PORTER D. C. (2009). Basic Econometrics. *McGraw-Hill/Irwin*. pp. 334–336, 339–341
39. HAMILTON L. C. (2013). Statistics with Stata (Updated for Version 12). *Cengage Learning*.
40. HAN J., KAMBER M. & PEI J. (2011). Data Mining: Concepts and Techniques (3rd ed.). *Morgan Kaufmann.* 2011
41. HARDING, T., AND B. S. JAVORCIK. (2011). "Investment Promotion and FDI Inflows: Quality Matters." *CESifo Economic Studies*.
42. HOERL A. E. & KENNARD R. W. (1970). Ridge Regression: Biased Estimation for Nonorthogonal Problems. *Technometrics,* 12(1), 55–67.
43. HORNBERGER K. (2011). FDI is a global force, but is it a force for good? *Private Sector Development Blog.* Available at https://blogs.worldbank.org/psd/fdi-is-a-global-force-but-is-it-a-force-for-good
44. HPI (2016). Happy Planet Index. Available at http://happyplanetindex.org/about
45. HSIAO C. (2014). Analysis of Panel Data. *Cambridge University Press.* pp. 142-145
46. IBM (2024). IBM SPSS Statistics. Available at https://www.ibm.com/products/spss-statistics
47. IMF (2016–2020). World Economic Outlook Reports 2016–2020. Available at https://www.imf.org/en/publications/weo

48. IMF (2019). World Economic Outlook, April 2019. Growth Slowdown, Precarious Recovery. Available at https://www.imf.org/en/Publications/WEO/Issues/2019/03/28/world-economic-outlook-april-2019
49. IMF (2020). Policy Responses to Covid-19. Available at https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#to
50. INTERNATIONAL MONETARY FUND (2024). IMF Reports. Available at https://www.imf.org/en/Publications
51. JAIN A. K., DUIN R. P. W. & MAO J. (2000). Statistical pattern recognition: A review. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 22(1), 4–37.
52. JAMES, S. (2013). "Effectiveness of Tax and Non-Tax Incentives and Investments: Evidence and Policy Implications." *World Bank Group,* Washington, D.C.
53. JOLLIFFE I. T. (2002). Principal Component Analysis. *Springer*. pp. 213–215
54. KALOTAY K. & SULSTAROVA A. (2010). Modelling Russian outward FDI. Journal of International Management, *Elsevier, vol*. 16(2), p. 131–142.
55. KALOTAY K. (2005). Outward Foreign Direct Investment from Russia in a Global Context. *The Haworth Press, Inc.*
56. KALOTAY K. (2006). Russian transnationals and international investment paradigms. *Research in International Business and Finance 22*, 85–107.
57. KALOTAY K. (2014). The Crimean crisis and the future of Russian outward foreign direct investment. *Baltic Rim Economies*, 4, 31
58. KAZANTSEV S. (2020). Sanctions and foreign direct investment: Damage to Russia and sanctioning countries. *Mir novoi ekonomiki = World of the New Economy*. DOI: 10.26794/2220–6469-2020-14-1-44-532020;14(1): pp. 44-53. [in Russia]
59. KEE, H. L. (2015). "Local Intermediate Inputs and the Shared Supplier Spillovers of Foreign Direct Investment." *Journal of Development Economics.*
60. KELLER, W., AND S. YEAPLE. (2009). "Multinational Enterprises, International Trade, and Technology Diffusion: A Firm-level Analysis of the Productivity Effects of Foreign Competition in the United States." Review of Economics and Statistics. *MIT Press*, vol. 91(4).
61. KENTON W. (2018). Outward Direct Investment – ODI. *Investopedia.* Available at https://www.investopedia.com/terms/o/outward_direct_investment.asp
62. KORHONEN I. (2019). Sanctions and Counter-Sanctions — What Are their Economic Effects in Russia and Elsewhere? *NEA Journal,* No. 3 (43), pp. 184–190

63. KORHONEN I., SIMOLA H. AND SOLANKO L. (2018). Sanctions and countersanctions − effects on economy, trade and finance. *Focus on European Economic Integration, Austrian Central Bank,* issue Q3-18, pages 68–76.
64. KUZNETSOV A. (2021) Direct investment from Russia abroad: changes since 2018. *Obshchestvennye nauki i sovremennost',* no. 1, pp. 05–15. DOI: 10.18254/S207987840015225-6
65. KUZNETSOV A. V. (2017). Prospects of Diversifying Russian Direct Investment Abroad. *Studies on Russian Economic Development*, 2017, Vol. 28, No. 1, pp. 79–86.
66. KUZNETSOV A.V (2007). Internationalization of Russian Economy: Investment aspect. M.: *KomKniga*, 2007. p. 19 [in Russian]
67. LAKHERA M.L. (2008). Japanese FDI Flows in Asia Perspectives and Challenges. *Palgrave Macmillan UK*, 2008
68. LEDYAEVA S., KARHUNEN P., KOSONEN R. AND WHALLEY J. (2015). Offshore Foreign Direct Investment, Capital Round-Tripping, and Corruption: Empirical Analysis of Russian Regions. *Economic Geography*, 91:3, 305–341
69. LIEBSCHER KLAUS, JOSEF CHRISTL, PETER MOOSLECHNER & DORIS RITZBERGER-GRUNWALD (2007). Foreign Direct Investment in Europe. A Changing Landscape. *Edward Elgar Publishing*. 2007
70. LITTLE R. J. A. & RUBIN D. B. (2019). Statistical Analysis with Missing Data (3rd ed.). *Wiley*. 2019
71. LIUHTO K. (2015). Motivations of Russian firms to invest abroad: How do sanctions affect Russia's outward foreign direct investment? *Baltic Region*, 7(4): 7–26.
72. MANEVICH V. (2017). Alternative strategies of overcoming stagnation and a "new growth model" of the Russian economy. *Voprosy economiki*. N.8. p.135
73. MICHAILOVA S. AND NECHAYEVA K. (2014). The role of personal networks in Russian MNCs' internationalization. *International Finance Review*, Vol. 15, pp. 73–95.
74. MINISTRY OF ECONOMIC DEVELOPMENT OF RUSSIA (2019a). Overview conditions of economy and major directions of foreign economic activities of Austria in 2017. Available at http://www.ved.gov.ru/exportcountries/economics_review/ [in Russian]
75. MINISTRY OF ECONOMIC DEVELOPMENT OF RUSSIA (2019b). Overview conditions of economy and major directions of foreign economic activities of the Netherlands in 2017. Available at http://www.ved.gov.ru/exportcountries/economics_review/ [in Russian]

76. MINISTRY OF ECONOMIC DEVELOPMENT OF RUSSIA (2019c). Overview conditions of economy and major directions of foreign economic activities of Switzerland in 2017. Available at http://www.ved.gov.ru/exportcountries/economics_review/ [in Russian]
77. MINISTRY OF ECONOMIC DEVELOPMENT OF THE RUSSIAN FEDERATION (2019). Statistics. Available at http://www.economy.gov.ru/ [In Russian]
78. MITCHELL M. N. (2020). Data Management Using Stata: A Practical Handbook. *Stata Press*.
79. MOOSA I. A. (2002). Foreign Direct Investment. Theory, Evidence and Practice. *Palgrave Macmillan UK*, 2002
80. NARULA R. & DUNNING J.H. (2010). Multinational enterprises, development and globalization: Some clarifications and a research agenda. *Oxford Development Studies*, 38 ,3, 263–287.
81. NARULA R. AND PINELI, A. (2016). Multinational enterprises and economic development in host countries: What we know and what we don't know. Discussion paper. *Henley Business School, University of Reading*, 2016
82. NEKIPELOV A. & GOLOVNIN M. (2010). Strategy and Tactics of Monetary Policy During Global Economic Crisis. *Voprosy Ekonomiki* 1, p. 11–13
83. NEVELSKY A. (2019). Protectionism in. developed countries undermines foreign investment. Available at https://www.vedomosti.ru/economics/articles/2019/06/13/804141-protektsionizm-podrivaet-investitsii [in Russian]
84. NHA P.X. (2013). Foreign Direct Investment in Vietnam: Theories and Practices. *Vietnam National University Press, Hanoi*. 2013
85. NUREEV R., PETRAKOV P. (2016). Economic sanctions against Russia: expectations and reality. *The Business and Management Review, Volume 7*, pp. 165–176
86. OECD (2009). OECD Benchmark Definition of Foreign Direct Investment 2008: Fourth Edition. *OECD Publishing*, Paris.
87. OECD (2018). OECD Economic Outlook, Volume 2018 Issue 2. Available at https://read.oecd-ilibrary.org/economics/oecd-economic-outlook-volume-2018-issue-2_eco_outlook-v2018-2-en#page4
88. OECD (2023). OECD International Direct Investment Statistics 2018, OECD Publishing, Paris. Available at https://read.oecd-ilibrary.org/finance-and-investment/oecd-international-direct-investment-statistics-2018_bb55ccaf-en#page54
89. OECD (2024a). Statutory Corporate Income Tax Rates. Available at https://stats.oecd.org/#
90. OECD (2024b). Economic Outlook. Organization for Economic Cooperation and Development. Available at https://www.oecd.org/economic-outlook/

91. OSBORNE J. W. & OVERBAY A. (2004). The power of outliers (and why researchers should always check for them). *Practical Assessment, Research, and Evaluation*, 9(1), 6.
92. PAKHOMOV A. (2012). Direct investment outflow from Russia: essays of the theory and practice. M.: *Gaidar Institute Publishing House*, 368 p. [in Russian]
93. PAKHOMOV A. (2019). Current Trends of Global Investment Movement and Positions of Russia in this Process. *Economic development of Russia*. (2019) [in Russian]
94. PANIBRATOV A. (2017). International Strategy of Emerging Market Firms: Absorbing Global Knowledge and Building Competitive Advantage. *Routledge*, New York, NY.
95. PANIBRATOV A., LATUKHA M. (2014). The Vector of the home government influence upon Russian MNEs: Balancing the control against the interest. *Working Paper # 6 (E) –2014. Graduate School of Management, St. Petersburg State University: SPb.*
96. PANIBRATOV A., MICHAILOVA S. (2018). The role of state ownership and home government political support in Russian multinationals' internationalization. International Journal of Emerging Markets. Available at https://doi.org/10.1108/IJOEM-10-2017-0380
97. PLATONOVA I. (2019). The impact of financial sanctions on foreign investment on the Russian economy. *Economy and Management: problems, solutions*, no. 3, pp. 117–121 [in Russian]
98. POLTEROVICH V. (2006). Decrease of inflation should not be the main goal of the government. Available at https://mpra.ub.uni-muenchen.de/22064/1/MPRA_paper_22064.pdf
99. PRILEPSKIY I. (2019). Financial Sanctions: Impact on Capital flows and GDP Growth in Russia, *Journal of the New Economic Association*, New Economic Association, vol. 43(3), pages 163–172.
100. RADIO FREE EUROPE (2018). A Timeline of All Russia-Related Sanctions. Available at https://www.rferl.org/a/russia-sanctions-timeline/29477179.html
101. RBC (2016). The share of non-oil Russian budget revenues dropped to seven years level. Available at https://www.rbc.ru/economics/24/03/2016/56f32a639a794756a61f301e [in Russian]
102. REPOUSIS S., LOIS P. AND KOUGIOUMTSIDIS P. (2019). Foreign direct investments and round tripping between Cyprus and Russia. *Journal of Money Laundering Control*, Vol. 22 No. 3, pp. 442–450. https://doi.org/10.1108/JMLC-08-2018-0054
103. RIA RANKING (2019). Russia's largest companies by capitalization - results of 2018. Available at http://www.riarating.ru/infografika/20190129/630115992.html [in Russian]
104. ROSNEFT (2019). Annual report 2017. Available at https://www.rosneft.ru/docs/report/2017/en/results/international-projects.html

105. SANTANDER (2020). Russia: Economic and Political Outline. Available at https://santandertrade.com/en/portal/analyse-markets/russia/economic-political-outline

106. SBERBANK (2019). International Business. Available at https://www.sberbank.ru/ru/about/affiliated_banks_abroad [in Russian]

107. SEGAL T. (2019). Green-field and brown-field investments unveiled. *Investopedia.* Available at https://www.investopedia.com/ask/answers/043015/what-difference-between-green-field-and-brown-field-investment.asp

108. SHANKER M., HU M. Y. & HUNG M. S. (1996). Effect of data standardization on neural network training. *Omega*, 24(4), 385–397.

109. STATACORP (2021). Stata Statistical Software: Release 17. College Station, *TX: StataCorp LLC*. pp. 167–169

110. STATACORP (2024). Stata Statistical Software: Release 16. College Station, TX: StataCorp LLC. Available at https://www.stata.com/

111. STEPHENSON M. & PEREA J. R. (2018). Outward foreign direct investment: A new channel for development. *Private Sector Development Blog*. Available at https://blogs.worldbank.org/psd/outward-foreign-direct-investment-new-channel-development

112. SULTONOV, M. (2020). The Impact of International Sanctions on Russian Financial Markets. *Economies 2020, 8, 107*. https://doi.org/10.3390/economies8040107

113. TABACHNICK B. G. & FIDELL L. S. (2019). Using Multivariate Statistics (7th ed.). *Pearson*. 2019

114. TCYREMPILOVA S. & MAGDA R. (2022). Impact of Sanctions on Russian FDI Between 2014–2020. *Economics & working capital 2022*: 3–4 pp. 48–55, 8 p. (2022)

115. TCYREMPILOVA S. & MAGDA R. (2023). Foreign Direct Investment and Natural Resources of Russia (Before COVID-19). *Controller info 11*: Special Issue 2 pp. 60–65, 6 p. DOI: 10.24387/CI.2023.SPECIAL ISSUE 2.11

116. TCYREMPILOVA S., ERTUGRUL C., HEGEDŰS M., DAUD A. M., DÉNES D. L. & MAGDA R. (2024b). Evaluation of Russian OFDI based on balance of payments and OECD data (before COVID-19). *Journal Of Infrastructure Policy and Development 8*: 6 Paper: 3717 (2024). https://doi.org/10.24294/jipd.v8i2.3717

117. TCYREMPILOVA S., ERTUGRUL C., HEGEDŰS M., DAUD A. M., DÉNES D. L. & MAGDA R. (2024c). Russian MNCS and international investment paradigm (Before COVID-19). *Journal Of Infrastructure Policy and Development 8*: 6 Paper: 3725, 14 p. (2024). https://doi.org/10.24294/jipd.v8i6.3725

118. TCYREMPILOVA S., MEHTIYEV J., MAGDA R. (2024a). Analysis of foreign trade of Russia and its economy by input-output tables. *Economics & working capital 2024.*

119. THE WORLD BANK (2018a). Global Investment Competitiveness Report 2017/2018: Foreign Investor Perspectives and Policy Implications. *Washington, DC: World Bank.* doi:10.1596/978-1-4648-1175-3. License: Creative Commons Attribution CC BY 3.0 IGO

120. THE WORLD BANK (2018b). Russia Economic Report: Preserving stability; Doubling growth; Halving poverty - How, 2018. Available at https://documents.worldbank.org/en/publication/documents-reports/documentdetail/215711545408416700/russia-economic-report-preserving-stability-doubling-growth-halving-poverty-how

121. THE WORLD BANK (2018c). GNI, PPP (constant 2011 international $). Available at https://data.worldbank.org/indicator/NY.GNP.MKTP.PP.KD

122. THE WORLD BANK (2018d). GDP, PPP (constant 2011 international $). Available at https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.KD

123. THE WORLD BANK (2018e). GNI per capita, PPP (constant 2011 international $). Available at https://data.worldbank.org/indicator/NY.GNP.PCAP.PP.KD

124. THE WORLD BANK (2019a). Investment Policy and Promotion. Available at https://www.worldbank.org/en/topic/investment-climate/brief/investment-policy-and-promotion

125. THE WORLD BANK (2019b). Doing Business 2019: Training for Reform. Available at http://www.doingbusiness.org/en/reports/global-reports/doing-business-2019

126. THE WORLD BANK (2020). Fuel Exports (% of merchandise exports). Available at https://data.worldbank.org/indicator/TX.VAL.FUEL.ZS.UN

127. THE WORLD BANK (2021a). Foreign direct investment, net inflows (BoP, current US$) – Russian Federation. Available at https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD?end=2019&locations=RU&start=2007&view=chart

128. THE WORLD BANK (2021b). Foreign direct investment, net outflows (BoP, current US$) - Russian Federation. Available at https://data.worldbank.org/indicator/BM.KLT.DINV.CD.WD?end=2019&locations=RU&start=2007&view=chart

129. THE WORLD BANK (2024a). GDP (current US$). Available at https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2019&start=2009

130. THE WORLD BANK (2024b). Political Stability and Absence of Violence/Terrorism: Estimate. Available at https://data.worldbank.org/indicator/PV.EST
131. THE WORLD BANK (2024c). Population, total. Available at https://data.worldbank.org/indicator/SP.POP.TOTL
132. THE WORLD BANK (2024d). Inflation, consumer prices (annual %). Available at https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?end=2019&start=2009
133. THE WORLD BANK (2024e). Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high). Available at https://data.worldbank.org/indicator/LP.LPI.INFR.XQ
134. THE WORLD BANK (2024f). Doing Business Report. World Bank Group. Available at http://www.doingbusiness.org/.
135. UNCTAD (2009–2020). World Investment Report. Available at https://unctad.org/publications-search?f[0]=product%3A397
136. UNCTAD (2013a). World Investment Report 2013: Global Value Chains. *Investment and Trade for Development.* New York and Geneva.
137. UNCTAD (2013b). Global Investment Trends Monitor. Special edition. Available at https://unctad.org/en/Pages/DIAE/Global-Investment-Trends-Monitor.aspx
138. UNCTAD (2019a). Global foreign investment flows dip to lowest levels in a decade. Available at https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=1980.
139. UNCTAD (2019b). World Investment Report 2019. Available at https://unctad.org/publication/world-investment-report-2019
140. UNCTAD (2020). Global investment flows flat in 2019, moderate increase expected in 2020. Available at https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2274
141. UNCTAD (2024a). Currency exchange rates, annual. Available at https://unctadstat.unctad.org/datacentre/dataviewer/US.ExchangeRateCrosstab
142. UNCTAD (2024b). Goods and services (BPM6): Trade openness indicators, annual. Available at https://unctadstat.unctad.org/datacentre/dataviewer/US.GoodsAndServTradeOpennessBpm6
143. UNCTAD (2024c). World Investment Report. United Nations Conference on Trade and Development. Available at https://unctad.org/topic/investment/world-investment-report
144. UNITED STATES CONGRESS (2014). H.R.4152 - Support for the Sovereignty, Integrity, Democracy, and Economic Stability of Ukraine Act of 2014. Available at https://www.congress.gov/bill/113th-congress/house-bill/4152/text/pl?overview=closed

145. VOLGINA N.A. (2003). Eclectic paradigm of international production. *Vestnik of Peoples' Friendship University of Russia. Series: Economics*, (1), 33–45. [in Russian]

146. WAGNER W. E. (2019). Using IBM SPSS Statistics for Research Methods and Social Science Statistics. *Sage Publications*. 2019

147. WEINER C. (2018). Pull Factors driving Russian multinationals into five CEE countries. A sectoral overview. *Centre for Economic and Regional Studies HAS Institute of World Economics.* Working Paper Nr. 250 (2018) 1–40

148. WOOLDRIDGE J. M. (2016). Introductory Econometrics: A Modern Approach. *Cengage Learning*. pp. 95–99

149. WOOLDRIDGE, J. M. (2010). Econometric Analysis of Cross Section and Panel Data. *MIT Press*, pp. 327–328.

150. WORLD ECONOMIC FORUM (2017). The Global Competitiveness Report 2017–2018. Available at https://www.weforum.org/publications/the-global-competitiveness-report-2017-2018/

151. WORLD ECONOMIC FORUM (2020). Global Competitiveness Report 2020. Available at https://www.weforum.org/reports/global-competitiveness-report-2020

152. WORLD INPUT-OUTPUT DATABASE (2016). National Input-Output Tables. Available at http://www.wiod.org/database/niots16

153. WTO (2017). World Trade Report 2017. Trade, technology and jobs. Available at https://www.wto.org/english/res_e/publications_e/wtr17_e.htm

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4. Balance of payments of Russia 2001-2017 (main units), billion dollars

	2001	2003	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current account	**32.1**	**33.1**	**84.4**	**72.2**	**103.9**	**50.4**	**67.5**	**97.3**	**71.3**	**33.4**	**57.5**	**68.8**	**25.5**	**35.2**
Share in GDP, %	11.1	8.2	11.0	5.9	6.2	3.8	4.1	4.7	3.2	1.5	2.8	5.0	2.0	2.8
Goods	45.2	55.8	116.2	123.4	177.6	113.2	147.0	106.9	191.7	180.6	188.9	148.4	90.3	115.0
Exports	95.6	129.1	240.0	346.5	466.3	297.2	392.7	515.4	527.4	521.8	496.8	341.4	281.9	353.0
Including oil and gas	52.1	73.7	148.9	218.6	310.9	190.7	254.0	342.7	346.8	349.1	324.4	203.4	154.0	192.9
Imports	51.3	73.2	123.8	223.1	288.7	183.9	245.7	318.6	335.8	341.3	307.9	193.0	191.6	238.0
Services	-8.1	-9.2	-11.6	-16.7	-20.4	-17.6	-26.1	-33.5	-46.6	-58.3	-55.3	-36.9	-23.8	-31.1
Exports	12.7	18.4	28.8	43.9	57.1	45.8	49.2	58.0	62.3	65.7	65.7	51.7	50.6	57.8
Including travel	3.6	4.5	5.9	9.4	11.8	9.4	8.8	11.3	10.8	12.0	11.8	8.4	7.8	9.0
Imports	20.8	27.6	40.5	60.6	77.6	63.4	72.3	91.5	108.9	121.0	121.0	88.6	74.4	88.9
Including travel	9.1	12.4	17.0	20.4	23.2	21.0	26.7	32.9	42.8	53.5	50.4	34.9	24.0	31.1
Primary income	-4,2	-13.2	-18.5	-28.8	-46.5	-39.7	-47.1	0.4	-67.7	-79.6	-68.0	-36.9	-34.6	-39.5
Compensation of employees	0.1	-0.1	-1.1	-7.3	-14.4	-8.9	-8.5	-9.5	-11.8	-13.2	-10.1	-5.1	-2.2	-2.3
Investment income	-4,4	-13.0	-17.4	-21.5	-32.1	-31.0	-38.7	-51.0	-58.8	-66.5	-58.0	-31.8	-32.5	-37.3
Rent	0	0	0	0	0	0.1	0.1	0.2	1.0	0.1	0.1	0.1	0.1	0.1
Secondary income	-0.9	0.4	-1.6	-5.7	-6.8	-5.5	-6.3	-5.7	-6.1	-9.3	-8.2	-5.7	-6.3	-9.2
Capital account	**-8.9**	**-0.4**	**-12.4**	**-10.6**	**-0,1**	**-12.5**	**-0.1**	**0.1**	**-5.2**	**-0.4**	**-42.0**	**-0.3**	**-0.8**	**-0.2**
Net lending (+) / net borrowing (-) (Balance from current and capital accounts)	**23.2**	**32.8**	**72.0**	**61.6**	**103.8**	**37.9**	**67.4**	**97.4**	**66.1**	**33.0**	**15.5**	**68.5**	**24.8**	**34.9**
Net lending (+) / net borrowing (-) (Balance from financial account)	**15.1**	**25.3**	**67.0**	**51.8**	**100.7**	**31.5**	**58.3**	**88.8**	**55.7**	**24.1**	**23.5**	**71.5**	**20.2**	**38.7**
Net incurrence of liabilities ('+' - increase, '-' - decrease)	-4,2	-13.2	-18.5	-28.8	-46.5	-39.7	-47.1	0.4	-67.7	-79.6	-68.0	-36.9	-34.6	-39.5
Direct investment	-0.3	1.8	2.4	-11.1	-19.1	6.7	9.4	11.8	-1.8	17.3	35.1	15.2	-10.2	10.7
Net acquisition of financial assets	2.5	9.7	17.9	44.8	55.7	43.3	52.6	66.9	48.8	86.5	57.1	22.1	22,3	38.6

Net commitment	2.8	7.9	15.5	55.8	74.8	36.6	43.2	55.1	50.6	69.2	22.0	6.7	32.5	27.9
Portfolio investment	0.7	4.5	11.4	-4.9	35.7	1.9	1.5	15.3	-17.0	11.0	39.9	26.4	-2.4	-8.1
Net acquisition of financial assets	-0,1	2.1	10.7	10.5	7.8	10.6	3.4	9.8	2.3	11.8	16.7	13.6	0.6	1.3
Net commitment	-0.8	2.3	-0.8	15.4	-27.9	8.7	1.9	-5.4	19.3	0.7	-23.2	-12.9	3.0	9.3
Derivative financial instruments	0	-0.6	0.2	-0.3	1.4	3.2	1.8	1.4	1.4	0.3	5.3	7.4	0.5	0.2
Other investments	6.5	-6.7	-8.5	-80.8	121.7	16.3	8.7	47.7	43.1	17.6	50.7	20.7	24.1	13.3
Net acquisition of financial assets	-0.1	16.0	34.0	59.9	185.8	-9.3	19.2	83.4	83.7	80.8	24.0	-15.8	-2.3	-8.6
including Cash foreign currency	2.1	-4.7	1.3	-15.8	29.4	-6.7	-15.0	-3.4	2.2	-0.6	50.7	-19.3	6.3	17.1
deposits	0.3	-2.4	7.3	13.2	55.0	-8.2	-2.9	21.2	15.6	17.1	41.8	-3.1	-18.7	-8.6
loans	-8.7	3.4	-8.4	25.7	40.0	-15.6	9.1	23.9	14.0	21.2	-18.8	-1.2	6.0	-9.2
trade credit and advances	-0.8	3.9	7.6	0.8	8.1	-5.9	0.8	3.5	7.7	7.6	-20.2	5.2	-1.6	-8.4
fictitious transactions	5.9	14.8	27.5	34.5	50.6	24.6	0.9	33.3	38.8	6.5	8.6	1.5	0.8	0.4
Net commitment	-6.6	22.7	42.5	140.8	64.1	-25.6	10.5	35.7	40.6	63.3	-26.7	-34.4	-26.4	-21.9
including Cash domestic currency	0.1	0.1	0.1	0.9	1.5	0.7	0.1	-0.3	0.9	1.8	-1.0	-0.2	0.1	-0.1
deposits	1.8	11.0	17.8	51.7	11.8	-37.7	19.5	20.5	28.7	16.2	-20.1	-32.6	-16.4	-15.2
loans	-6.0	11.3	24.4	86.9	49.1	2.9	-9.9	14.3	8.8	43.6	-8.9	-3.0	-12.3	-7.8
trade credit and advances	0	0	0	0	0	0.6	0.1	0.3	0.5	0.2	0.4	-0.6	0.1	0.5
Reserve assets	8.2	26.4	61.5	148.9	-38.9	3.4	35.8	12.6	30.0	-22.1	-107.5	1.7	8.2	22.6
Net errors and omissions	**-8.1**	**-7.4**	**-5.0**	**-9.7**	**3.1**	**-6.4**	**-9.1**	**-8.7**	**-10.4**	**-8.9**	**8.0**	**2.9**	**-4.6**	**3.8**
Reference: Balance from financial account, excl. reserve assets)	**6.9**	**-1.1**	**5.5**	**-97.1**	**139.6**	**28.1**	**22.9**	**76.1**	**25.7**	**46.2**	**131.0**	**69.8**	**11.9**	**16.0**
Share in GDP, %	2.4	-0.2	0.7	-7.9	8.3	2.1	1.4	3.7	1.1	2.1	6.4	5.1	0.9	1.3

Source: Bulatov A.S. (2018)

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