

CHARLES UNIVERSITY
FACULTY OF SOCIAL SCIENCES
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Master's Thesis

2024

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International Masters in Economy, State and Society

**Determinants of China's Outward Foreign Direct
investment (OFDI) in Central and Eastern Europe
(CEE)**

Master's Thesis

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Year of the defence: 2024

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References

QI, Yiyun. *Determinants of China's Outward Foreign Direct investment (OFDI) in Central and Eastern Europe (CEE)*. Master thesis. Charles University, Faculty of Social Sciences, Institute of International Studies, Supervisor M.Sc. Karel Svoboda, Ph.D

Length of the Thesis: 21292

Abstract

Since the inception of the "Belt and Road" initiative, there has been a discernible uptick in China's Outward Foreign Direct Investments (OFDI) within Central and Eastern European (CEE) countries. As Chinese investors evince burgeoning interest in the CEE region, comprehending the modalities and underlying impetuses of Chinese investment in these nations assumes paramount importance. Consequently, this study endeavors to delineate the determinants governing Chinese OFDI in CEE countries.

Using panel data analysis covering the period from 2005 to 2021, the study examines the factors influencing Chinese FDI in 16 CEE countries. Through Two-way fixed effects models incorporating both traditional macroeconomic variables and selected formal and informal institutional variables, the study seeks to determine which factors best explain Chinese investment activities. The results consistently indicate that Chinese multinational corporations primarily invest in CEE countries for market-seeking, strategic asset-seeking, and efficiency-seeking motives. At the level of formal institutions, China tends to invest in countries with deteriorating economic and political institutions, aligning with previous research findings. Moreover, at the informal institutional level, the study revealed China's inclination towards investing in countries characterized by diversity and the presence of diverse ethnic and social groups, indirectly reflecting on the accessibility of visas and residence permits. Moreover, considering the heterogeneity among the 16 CEE countries, the study conducts two additional heterogeneous analyses based on EU membership and geographical location after the full-sample analysis. Lastly, by synthesizing findings from descriptive analyses, regression analyses, and subsample regressions, the study concluded with recommendations, thus furnishing valuable insights for policymakers and investors seeking to promote and attract Chinese investment for the purposes of economic development and cooperation.

Abstrakt

Od vzniku iniciativy „Pás a cesta“ došlo v rámci zemí střední a východní Evropy (CEE) k zřetelnému vzestupu čínských přímých zahraničních investic (OFDI). Jak ukazují čínští investoři rostoucí zájem o region CEE, nabývá prvořadý význam pochopení modifikací a fundamentálních podnětů čínských investic v těchto státech. V důsledku toho se tato studie snaží vymezit determinanty vládnoucí čínskému OFDI v zemích CEE.

Studie s využitím analýzy panelových dat za období 2005 až 2021 zkoumá faktory ovlivňující čínské přímé zahraniční investice v 16 zemích střední a východní Evropy. Prostřednictvím modelů obousměrných fixních efektů, které obsahují jak tradiční makroekonomické proměnné, tak vybrané formální i neformální institucionální proměnné, se studie snaží zjistit, které faktory nejlépe vysvětlují čínské investiční aktivity. Výsledky soustavně naznačují, že čínské nadnárodní korporace investují v zemích CEE především do motivů, které vyhledávají trh, strategicky vyhledávají aktiva a usilují o efektivitu. Na úrovni formálních institucí má Čína tendenci investovat v zemích se zhoršujícími se ekonomickými a politickými institucemi, což se shoduje s předchozími poznatky výzkumu. Na neformální institucionální úrovni studie navíc odhalila čínské sklony k investicím v zemích vyznačujících se rozmanitostí a přítomností různých etnických a sociálních skupin, které nepřímo reflektují dostupnost víz a povolení k pobytu. Vzhledem k různorodosti mezi 16 zeměmi střední a východní Evropy studie navíc provádí dvě další heterogenní analýzy založené na členství v EU a geografické poloze po analýze celého vzorku. A konečně, syntetizací poznatků z popisných analýz, regresních analýz a podvzorkových regresí studie zakončila doporučeními, čímž poskytla cenné poznatky politikům a investorům usilujícím o podporu a přilákání čínských investic za účelem hospodářského rozvoje a spolupráce.

Keywords

Foreign Direct Investment, China, Central and Eastern European Countries, Investor's Motivations, Institutions

Klíčová slova

Přímé zahraniční investice, Čína, země střední a východní Evropy, motivace investorů, instituce

Title

Determinants of China's Outward Foreign Direct investment (OFDI) in Central and Eastern Europe (CEE)

Název práce

Determinanty čínských přímých zahraničních investic (OFDI) ve střední a východní Evropě (CEE)

Acknowledgement

I would like to express my gratitude to my parents and friends for their support during my two-year master's program.

Additionally, I want to express my appreciation to my supervisor, M.Sc. Karel Svoboda, Ph.D., and my personal tutor, Dr. Svetlana Makarova, for their guidance and assistance with my thesis and studies.

I am thankful for everything I experienced during the two years in London and Prague, and I am grateful for my resilience throughout the journey.

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Introduction

After entering the 21st century, the outward foreign direct investment (OFDI) from emerging economies experienced a dramatic increase, either directed towards developed countries or other emerging economies. Among these, the People's Republic of China stands out as one of the five closely observed emerging economies, particularly within the BRICS. Following the enactment of its "Go Global" strategy, China's role shifted from being a primary target for Western multinational corporations' OFDI to becoming a source nation for OFDI into various global economies. However, starting from 2016, China experienced a notable slowdown in its investments abroad, marking a significant shift in global investment dynamics. Beyond that, a wave of unilateralism and trade protectionism was initiated. In 2016, the United Kingdom exited the European Union. By January 2017, the United States had withdrawn from the Trans-Pacific Partnership Agreement (TPP). Subsequently, the China-U.S. trade war, which started in May 2018, resulted in a continuous decline in bilateral trade. Following the outbreak of the COVID-19 pandemic in 2020, trade protection policies among Western developed countries became even more stringent. In the context of rising deglobalization and escalating trade tensions, strengthening economic and trade cooperation with Central and Eastern European (CEE) countries emerged as an inevitable strategy.

From the viewpoint of CEE, the onset of the global financial crisis in 2008 marked the beginning of a continuous decline in world economic growth. Subsequent debt and refugee crises further intensified internal EU conflicts, leading to a period of low growth in economic and trade development. Against this backdrop, CEE countries sought to actively find new partners, hoping to reinvigorate their trade markets and emerge from these challenges. At this juncture, China's swift progress in the economic and trade arena captured the attention of CEE nations. Additionally, given the sudden

shifts in the EU's policy towards China, which contributed to growing discord between China and Europe, China likewise pursued new avenues for trade cooperation with European countries. Being emerging market economies at similar development stages, both China and CEE countries recognized that successful collaboration could significantly boost the efficiency of bilateral trade. The inaugural China-CEE Countries Economic and Trade Forum in 2011 established a cooperative foundation, officially launching the "16+1 cooperation" framework between China and the CEE countries.

Following this period, leaders of the participating countries conducted several official meetings, significantly elevating the level of bilateral cooperation into a golden era. The fourth "16+1" leaders' summit, which took place in Suzhou in November 2015, served as a milestone in the evolution of the "16+1" mechanism. This meeting proposed the enhancement of the China-Europe land-sea express network to improve connectivity. The fifth leaders' summit, held in Riga, Latvia, in November 2016, centered on "Connectivity, Innovation, Inclusion, and Sharing." A joint declaration was released, indicating a commitment to further bolster the strategic partnership and collaborative growth. In 2019, Greece's integration into the Central and Eastern European cooperation framework marked the official expansion from the "16+1" to the "17+1" mechanism.

Significant progress was made in cooperation between China and CEE countries under the joint promotion of the "16+1" mechanism and the Belt and Road Initiative (BRI). From a trade perspective, bilateral trade between China and the 16 CEE countries was merely 4.3 billion USD in 2001. However, by 2021, this figure had soared to 404.17 billion USD, indicating a nearly 100-fold increase over the span of 21 years. In terms of investment, China's OFDI in CEE countries has witnessed rapid expansion. In 2009, China's accumulated OFDI in the 16 CEE countries stood at a modest 410 million USD, but by 2012, it had surged to 3.02 billion USD, marking a staggering growth rate of 636.6%. Although China's accumulated direct investment in the 16 CEE countries

accounted for only 2.5% of the total EU's direct investment abroad, the overall trend is steadily improving. In terms of infrastructure, in 2022, Chinese companies signed engineering contracts worth \$9.36 billion with CEE countries. Additionally, the number of launched Pan-Eurasian freight trains reached about 16,000, a 9% increase compared to the previous year. Moreover, projects such as the Mozura Wind Farm Project, Montenegro Highway, Pelješac Bridge, and Budapest-Belgrade Railway have been successfully completed.

So in the post-pandemic era and against the backdrop of the "16+1 cooperation" mechanism, this paper aims to identify the reasons why China decided to invest in CEE countries by combining traditional macro factors and institutional factors. The purpose of this study is to explore new possibilities for cooperation between China and CEE countries in the future. To gain a comprehensive understanding of the issue, the research questions will address the following sub-questions:

What is the historical exchange process between CEE and China? What are the characteristics of Chinese investment in CEE in recent years (investment scale, structure, and spatial distribution)?

How do economic and institutional factors in CEE countries influence the investment decisions of Chinese multinational corporations? Particularly in terms of informal institutions, what new insights can be drawn?

To address these questions, this paper is divided into five sections for specific investigation: the first section serves as an introduction. The dissertation begins by introducing the necessity and key highlights of cooperation between China and CEE within the global context. It also establishes the research objectives and research questions.

The second section covers the theoretical framework and literature review. Firstly, it reviews relevant theories in the field of FDI, focusing primarily on Dunning's OLI theory and institutional theory. Subsequently, it conducts a review of literature on Chinese direct investment in CEE, with a perspective largely grounded in the traditional four macro-level investment motives and institutional factors. Additionally, it identifies some gaps in the existing literature, particularly in terms of institutional factors, and outlines how this dissertation aims to address these gaps and differentiate itself from other works.

The third section entails descriptive analysis. This part primarily unfolds in three dimensions. Firstly, it delves into the historical development and progression of relations between China and CEE countries. The subsequent segment outlines the current investment landscape between China and CEE countries, encompassing investment scale, structure, and spatial distribution. The third aspect of this section concentrates on certain issues existing within the investment and cooperation dynamics between China and CEE.

The fourth section entails empirical analysis. It employs a two-way fixed effects model to explore the factors influencing China's OFDI in CEE countries, primarily integrating four traditional macroeconomic investment motives and institutional aspects. Subsequently, the model will undergo subsample regression analysis, encompassing EU and Non-EU countries, and three regional groups (Baltic countries, Visegrad group and Slovenia, Balkans countries).

The final section will focus on presenting conclusions and policy recommendations. Drawing upon previous analyses, this section will offer policy suggestions concerning China's OFDI in CEE countries. Additionally, it will summarize the innovative aspects and shortcomings of this study.

1. Theoretical Foundations

This section introduces the IB theories relevant to this study, mainly based on the OLI framework and institutional theory. As a traditional IB theory, there has been some controversy regarding its applicability to the Chinese market. Some scholars (Boisot and Meyer, 2008) suggest that the extent to which traditional FDI theories can explain FDI in emerging markets remains uncertain. In their literature review of 62 articles on China's outward foreign direct investment across 15 peer-reviewed journals, Berning and Holtbrügge (2012) observed that a majority of the studies indicate the limited applicability of traditional IB theories in understanding Chinese investments. However, some researchers also have verified that the behavior of EMNES does indeed conform to traditional theories. For instance, in their study, Gugler and Boie (2009) found that traditional theories can explain the behavior of Chinese multinational corporations when engaging in FDI. Others also argue that, with some adjustments, traditional theories can be applied to study the investment patterns of emerging market enterprises (Wang et al., 2012). Chen (2015) investigated the determinants of investment decisions of provincial-level enterprises in China and found that the investment patterns of these enterprises align with traditional IB theories.

1.1 OLI Framework

Dunning (1977) elaborated on the Internalization Theory, proposing that firms should not just have advantageous resources but also be ready to internalize them, thus extending Hymer's notion of ownership advantages. The willingness of firms to internalize activities aims to either avoid disadvantages or capitalize on the advantages arising from imperfect markets (Dunning, 1977, p. 402). Dunning (1981), integrating Monopolistic Advantage Theory and Internalization Theory while introducing the concept of location advantages, proposed the Eclectic Paradigm. The ownership advantages, locational advantages, and internalization advantages of the OLI framework explain the determinants of multinational corporations' investment decisions and how these decisions are influenced by these three factors.

- a) Ownership advantage in the host country (O): Distinctive and enduring possession of particular advantages such as a firm's production processes, patents, technical expertise, and so forth, when contrasted with competing entities affiliated with the investing firm within the host nation.
- b) Location advantage of the host country (L): Investment firms leverage their "O" to operate within a specific host nation instead of in alternative global locations, gaining a competitive edge (Batschauer da Cruz, Eliete Floriani and Amal, 2020).
- c) Internalization advantage via the host country (I): It is certainly more advantageous for investor firms in the host country to use these net ownership advantages than to sell or lease them.

From all theories regarding FDI and MNEs, the OLI paradigm seems most suited to describe the nature of FDI in industrialized countries as it provides a comprehensive approach. Consequently, numerous studies have explored the determinants of FDI based on the OLI framework (Amal, Tomio and Raboch, 2010; Salem and Baum, 2016; Batschauer da Cruz, Eliete Floriani and Amal, 2020; Ramasamy and Yeung, 2020). Even with the emergence of EMNEs and new theories explaining EMNEs' behavior, there is evidence suggesting that the OLI framework still applies, at least partially, to these situations.

Dunning (1988) highlights that these OLI advantages may differ based on factors such as the level of development of the country, its size, the nature of the industry (whether labor-intensive or capital-intensive), the stage of the market (emerging or mature), and its competitive landscape (competitive or monopolistic). In this regard, investigating the heterogeneity of the host country is very necessary.

At the same time, Dunning (1988) for the first time 'cuts' these theoretical motivations by outlining 'three main forms of international production': market-seeking (import

substitution), resource-seeking (supply orientation) and efficiency-seeking (rationalisation of investment). Dunning (1991) introduces a fourth classification - strategic asset-seeking. This addition aims to broaden the theoretical framework to encompass knowledge-oriented strategic partnerships, where firms seek to align with others to obtain strategic assets they lack. Subsequently, Dunning (1993) formally delineates four primary categories of international production: natural resource seekers, market seekers, efficiency seekers, and strategic asset or capability seekers.

FDI driven by market-seeking motives seeks to penetrate the domestic market of the host country and typically relates to aspects such as the size and income level of the market, its growth potential, access to regional and global markets, consumer preferences, and the structure of the domestic market. Resource-seeking FDI seeks and acquires natural resources, such as raw materials, physical infrastructure (ports, roads, electricity and telecommunications, etc.). Efficiency-seeking FDI is motivated by the creation of new sources of competitiveness for firms, focusing on lower unit labour costs for unskilled labour and pools of skilled labour resources, and flows to locations with lower production costs. Finally, strategic asset-seeking FDI aims to advance a firm's global or regional strategy into foreign networks of created assets such as technology, organisational capabilities and markets (Faeth, 2009).

Over the years, the eclectic theory of international production has gradually been extended to include additional elements of other theories. For example, Dunning (2000) later suggested that the OLI paradigm could be applied to the research such as the effects of FDI, foreign divestment, and the dynamics involved in FDI. Furthermore, numerous new theories in international business have emerged from this foundation. For instance, Mathews (2006) introduced the LLL framework—"Linkage, Leverage, Learning"—as an extension of the Dunning OLI framework. Mathews noted a departure among numerous companies in the Asia-Pacific region from the investment patterns outlined in traditional theories. Rather than adhering to conventional

approaches, they adopt a "linkage" strategy, engaging in joint ventures or partnerships with foreign entities to access resources that are difficult to acquire but possess strategic value. These resources may include easily replicable, transferable, or imitable assets. Additionally, Luo and Tung (2017) later developed the springboard perspective, which considers both home and host country institutions and emphasizes the acquisition of strategic assets. They argue that firms, even those lacking extensive experience and knowledge, can internationalize because multinational corporations can swiftly acquire strategic assets through mergers and acquisitions, circumventing unfavorable domestic institutional environments and mitigating disadvantages faced by latecomers.

1.2 Institutional Theory

Institutional research was deemed crucial as no organization within a country's environment could evade the influence of its institutions. Institutions formed the core of governing political, legal, and social affairs. Institutional theory played a vital role in explaining factors not readily observable through purely economic methods (Peng, Wang and Jiang, 2008). In general, the influence of institutions on long-term economic advancement remains strong both in terms of quantity and quality (Acemoglu, Gallego and Robinson, 2014; Siddiqui and Ahmed, 2013).

In the study of FDI, institutions constitute a significant component of a country's locational advantages. Davis and North (1970, p. 6) defined the institutional framework as "the set of fundamental political, social, and legal ground rules that establishes the basis for production, exchange, and distribution." Informally, institutions were referred to as the "rules of the game." According to Markusen (2003), the term "institution" is ambiguous, encompassing multiple elements, and thus requires definition to clarify which institutional definitions will be employed in this dissertation.

Meanwhile, recognizing the crucial role of institutions in firms' decisions regarding FDI location, Dunning and Lundan (2008) extended Dunning's OLI paradigm to incorporate

both home and host country institutional factors. They integrated institutions into the previously mentioned eclectic paradigm, emphasizing that institutions serve as the foundational element for all three components of the OLI framework. Furthermore, there has been a change in the makeup and importance of assets that contribute to competitiveness. These assets have evolved from purely production-related assets such as patents and technology to more institutional assets such as brand, corporate culture, and human capital.

In terms of definition, North has always been a trailblazer in the field of institutional theory. According to North (1990), institutions can be divided into formal written rules and informal codes of conduct. Formal institutions encompass political (and judicial) rules, economic rules, and contracts. Political institutions broadly define the hierarchical structure of the polity, the fundamental decision-making structures, and the explicit characteristics of agenda control, such as those within democratization processes. Economic rules delineate property rights, which include the rights to use and derive income from property, as well as the capacity to transfer assets or resources. Contracts involve the specific terms of particular exchange agreements (North, 1990).

Informal constraints, a pervasive feature of modern economies, are challenging to describe accurately due to their broad and abstract nature. Culture, for example, embodies the customs, beliefs, and values transmitted across generations by ethnic, religious, and social groups. Changes in informal institutions, often exemplified by cultural shifts, typically unfold gradually and do not promptly adjust alongside modifications in formal regulations (Guiso, Sapienza, and Zingales, 2006; Williamson, 2000; North, 1990). Based on this, the literature identifies three widely recognized types of informal institutions: trust, social networks, and corruption (Mondolo, 2018). Trust is defined as the willingness to make oneself vulnerable based on the belief in the reliability of others (Bohnet, 2010). Trust plays a pivotal role in addressing problems related to opportunism and moral hazard, diminishing the ambiguity surrounding

intricate transactions for enterprises, fostering collaboration and adaptability among partners, enhancing information exchange, and consequently lower expenses (Beugelsdijk and van Schaik, 2005; Méon and Sekkat, 2015).

Closely related to trust, social networks represent informal institutions developed through interpersonal and inter-organizational relationships among individuals and businesses (Inkpen and Tsang, 2005). Social networks enable the transitivity and diffusion of trust, where trust fosters cooperation, and cooperation fosters trust, thereby creating a virtuous cycle (Putnam, 1993). A fascinating example pertains to China's well-established social network known as "guanxi," which refers to interpersonal connections founded on trust and mutual assistance, enabling individuals to exchange favors (Wang, 2000). In Japan, mutual aid networks such as *youi* (composed of labor exchanges, typically between families), *moyai* (based on the redistribution of goods and services), and *tetsudai* (providing help without expecting reciprocity), have traditionally been significant features of Japanese society. Despite profound changes in the country over the last century, the tradition of mutual support persists, especially in rural areas (Onda, 2013).

Although trust and social networks are frequently regarded as supplementary or potential substitutes for informal institutions, corruption, as Helmke and Levitsky (2007) highlight, can be considered a prevalent form of competitive informal institution. Corruption entails illicit informal transactions that encompass the abuse of public authority for personal benefit. The commonly held belief is that corruption adversely affects the economy by elevating transaction expenses for overseas investors (Bardhan, 2002), jeopardizing reputation and brand equity (Zhao, Kim, and Du, 2003), and fostering inefficiency and market irregularities by granting corrupt enterprises preferential entry to lucrative markets (Habib and Zurawicki, 2002). Conversely, corruption may aid investors in bypassing protracted and ineffective bureaucratic processes, expediting decision-making, and facilitating businesses in navigating

complex government regulations (Lui, 1985). As a final consideration on corruption, it's worth noting that some authors distinguish not the perception of corruption but the effectiveness of government control and prevention of corruption, as covered by the "control of corruption" indicator in the World Governance Indicators. In this context, corruption is often included within formal institutions.

Moreover, formal and informal institutions interact with each other, a relationship detailed by Williamson (2000) in his four levels of social analysis. He categorized norms, customs, mores, traditions, and other informal institutions as the first layer, termed the level of social embeddedness. Over time, constitutions, laws, property rights, and other formal institutions emerged as the second layer, the institutional environment, surpassing the informal institutions of the first level. Together, these two layers laid the groundwork for the governance of social structures at the third level and resource allocation under the production functions at the fourth level, collectively ensuring economic development.

2. Empirical Literature

2.1 Empirical Literature on Chinese Investment in CEE Countries

In the dawn of the 21st century, the dynamics of economic and diplomatic engagements between the People's Republic of China and the nations of CEE have notably intensified. Following the dissolution of the Soviet Union, the orientation of CEE nations was predominantly towards Western alliances, culminating in the accession of many to the EU. However, the global financial crisis of 2008-2009, which precipitated a profound economic downturn within the EU, impeding its capacity to furnish adequate financial support to its new members, prompted a strategic pivot of CEE countries towards the East (Ross, 2016). Although China's investments in the CEE region have been relatively modest on a global scale, there has been a notable acceleration in Chinese investment flows into the region since 2010 (McCaleb and Szunomár, 2017). This trend is partially

attributable to the strategic push by the Chinese government through its Belt and Road Initiative, which aims to deepen cooperation in sectors including infrastructure, transport logistics, trade, and investment. Consequently, the examination of the motivations and determinants behind China's OFDI in the CEE region necessitates an analysis that transcends conventional economic considerations, incorporating a nuanced understanding of the political and institutional landscapes both within the recipient countries and China itself.

The corpus of literature examining China's OFDI in the CEE region demonstrates a notable paucity of quantitative analyses that specifically interrogate the motivations behind China's direct investments in CEE nations. Rather, these studies frequently aggregate the CEE region as part of the broader European Union and as constituents of the Belt and Road Initiative countries, thus diluting the specificity of inquiry into the CEE context (Shahriar, Kea and Qian, 2020; Chen, Liu and Liu, 2020; Dudas and Dudasova, 2016; Shuyan and Fabuš, 2019). Furthermore, the scholarly discourse on the determinants of Chinese investment motivations in CEE nations predominantly concentrates on traditional macroeconomic variables (mostly based on Dunning's theory of four motives.). There exists a relative dearth of literature that delves into institutional determinants, particularly those that encompass the political-economic nexus (Éltető and Szunomár, 2016; Jacoby and Korkut, 2016; Szunomár and Biedermann, 2014; Turcsányi, 2014). In the rare instances where studies have attempted to integrate both traditional economic and institutional factors, the discourse around institutional determinants largely remains confined to formal institutions, such as political stability and property rights (Cristina, 2019; Tintin, 2013). Notably, there is a scarcity of investigation into informal institutional factors.

The subsequent sections will review literature from the perspectives of Dunning's traditional four motives and institutional theory, specifically identifying relevant gaps.

2.1.1 Empirical Literature on Dunning's taxonomy of FDI motives

Market-seeking motive

Market size stands as one of the most frequently utilized traditional indicators for determining the attractiveness of a host country (Buchanan, Le, and Rishi, 2012), and it has been demonstrated to be a significant factor influencing OFDI by transnational corporations (Davidson, 1980; Chakrabarti, 2001). Certain scholars (Böckem and Tuschke, 2010; Krifa-Schneider and Matei, 2010; Rodríguez and Bustillo, 2011) have highlighted both market size and market growth as crucial determinants of OFDI motivated by market-seeking behaviors. Typically, market size is gauged using GDP per capita or GNI per capita, while market growth is assessed by the percentage increase in GDP over a specified period.

Focusing on the CEE case, where China primarily seeks markets in the region (Bieliński, Markiewicz and Oziewicz, 2019; Cristina, 2019; Abu Dayeh and Janičko, 2021; Mccaleb and Szunomár, 2017), CEE countries' EU membership allows them to see the region as a "backdoor" or assembly base for products to be sold in the affluent EU market (tariff-jumping FDI). Simultaneously, upon entering the CEE market, Chinese enterprises gain access not solely to the EU market but also to regions like the CIS, the Mediterranean, the EFTA, etc. (Éltető and Szunomár, 2016), and even the North American market (Mccaleb and Szunomár, 2017).

Resource-seeking Motive

Resource-seeking foreign direct investment refers to the pursuit of natural endowments such as minerals, petroleum, raw materials, or existing local infrastructure. While some studies on Chinese multinational enterprises posit that natural resources constitute a primary determinant of foreign direct investment, aligned with China's internalization strategic objectives (Alon, 2010), it is essential to note that this motivation primarily

applies to regions abundant in natural resources, such as Africa. Given that CEE countries are not anticipated to possess substantial natural resources, this factor does not emerge as a principal objective for Chinese enterprises in these nations.

Efficiency-seeking Motive

Due to the escalation of domestic costs, which erodes the competitive advantage of multinational corporations within both domestic and international arenas, some such entities opt for internationalization to mitigate operational expenses. Consequently, the allure of lower wage rates becomes a significant factor in the decision-making process. Chinese multinational corporations, when involved in labor-intensive activities, carefully consider regions characterized by relatively reduced labor costs (Cheung and Qian, 2009). It is essential to note that the efficacy of this strategy is contingent upon the productivity levels; in instances where productivity is markedly low, the ostensibly advantageous low labor costs may not translate into substantive benefits. Within this context, several CEE countries emerge as strategic locations for Chinese investments due to their combination of lower-than-EU-average labor costs and a workforce characterized by enhanced quality and efficiency. This phenomenon is particularly pronounced in the assembly sector, rendering these countries as pivotal hubs for such activities (Mccaleb and Szunomár, 2017).

Strategic Asset-seeking Motive

Dreger, Schüler-Zhou, and Schüller (2017) revealed that Chinese multinational corporations operating in Europe predominantly seek strategic assets. While strategic assets may be more enticing in Western Europe, research and development departments in Central and Eastern Europe have become increasingly appealing, notably within the Visegrad countries (Dreger, Schüler-Zhou, and Schüller, 2017). In line with the springboard view theory (Luo and Tung, 2018), Chinese enterprises aspire to acquire strategic assets to attain ownership advantages comparable to those held by

multinational corporations from developed countries, a proposition substantiated by multiple studies. Additional research corroborates that strategic assets constitute a principal driver of Chinese investments, particularly for private enterprises (Xie, Reddy, and Liang, 2017; Amighini, Rabellotti, and Sanfilippo, 2013; Blomkvist and Drogendijk, 2016).

This tendency is manifested in instances such as China's LiuGong Machinery acquiring Poland's Huta Stalowa Wola or China Everbright International Limited acquiring Novago. In these cases, Chinese investors actively pursue local companies possessing technologies and distribution channels at a lower cost than those in the EU-15 or North America. In terms of research within the investment domain, the predominant sectors for Chinese investors include telecommunications, electronics, chemicals, transportation, and energy (Mccaleb and Szunomár, 2017). Over time, the service industry has also garnered increasing investments (Jiang and Lattemann, 2018). Illustrative examples encompass the establishment of branches of the Bank of China and the Industrial and Commercial Bank of China in Hungary and Poland, as well as the presence of major Chinese law firms like Yingke (established in Hungary in 2010 and in Poland since 2012) and Dacheng (in Poland since 2011 and in Hungary since 2012).

However, conventional economic factors appear insufficient to comprehensively elucidate the determinants of FDI by multinational corporations. A body of scholarly work in international economics and business has underscored the pivotal role of institutional factors in shaping the conduct of multinational enterprises (Tihanyi, Devinney, and Pedersen, 2012). Examining market size, as per the Eurostat "Demography Report 2022", Poland and Romania emerge with the most substantial populations (37.65 million and 19.04 million, respectively), while other nations exhibit medium-sized populations (Czech Republic 10.52 million, Hungary 9.69 million, and Bulgaria 6.84 million). Moreover, Czech Republic, Poland, and Hungary signify

relatively affluent markets based on per capita GDP, with Czech Republic leading (26,832 USD in 2022), followed by Slovakia (21,263 USD in 2022), Hungary (18,579 USD in 2022), and Poland (18,342 USD in 2022), while Romania (15,821 USD in 2022) and Bulgaria (13,821 USD in 2022) display comparatively lower figures. Despite these economic disparities, Hungary attracts the most significant Chinese investment. Furthermore, in terms of efficiency, Bulgaria and Romania feature lower unit labor costs than Hungary, Czech Republic, Slovakia, and Poland. Nonetheless, these discrepancies do not seem to substantially influence the investment decisions of Chinese enterprises, as Hungary, Poland, and Czech Republic receive higher investments compared to Romania and Bulgaria.

Although Hungary may not be the most attractive option economically, it stands as a primary beneficiary of Chinese investment, possibly due to institutional factors—because compared to other CEE countries, Hungary enjoys a good relationship with China, and China's level of direct investment in Hungary is also high (Mccaleb and Szunomár, 2017; Szunomár, 2018). Hungary is the only country in the region that offers special incentives to foreign investors outside the European Union, namely the "golden visa" program, which allows investors to obtain residency permits by investing a certain amount of funds. Additionally, Hungary has the largest Chinese community in the region, making relationship assets an institutional factor that can serve as ownership advantages (Mccaleb and Szunomár, 2017; Buckley et al., 2007). All of this underscores the critical role that institutional factors may play in the site selection process for Chinese firms.

Subsequent discussions will delve into the nuanced relationship between institutional quality and FDI, showing existing gaps at the macro level.

2.1.2 Empirical Literature Review on Institutions

Variability in Institutional Impact on FDI

The shift of CEE countries from centrally planned economies to market economies has prompted thorough examination of the correlation between institutional quality and FDI inflows into these transitioning nations. Fabry and Zeghni (2006) employ an analytical framework to explore the connections among transition, institutions, and FDI in 11 previously communist European countries from 1992 to 2003. The article uses aggregated data and a pooled model to study the relationship of quality of each institution, such as Enterprise reform, Index of competition policy, expenditure on health and education as a percentage of GDP, Corruption perception index, civil liberties index with FDI. The results suggest that FDI is sensitive to specific and local institutional arrangements. Pournarakis and Varsakelis (2004) use data from the CEE countries for the period 1997-2001 to examine the relationship with FDI by employing three institutional indices: political institution, civil liberties and freedom of press. The results show that good institutions have a facilitating effect on attracting FDI in CEE countries. Similarly, a study by Popovici and Adrian Cantemir Călin (2015) shows that over the period 1994-2003, the variables regarding the institutions' quality (index of economic freedom, government deficit and debt to proxy the stability) are significant for CEE countries to attract the foreign investment.

However, in contrast to these results, Bevan and Estrin (2004) use panel data to study the factors influencing investment from EU countries to CEE countries in 1994-2000. The article uses evaluation of riskiness index from institutional investor dataset to verify its relationship with FDI, but the results show that host country risk, an institutional factor, is not an important determinant of FDI. Walsh and Yu (2010) use a panel data to investigate the relationship between FDI and host country risk. They explore various macroeconomic, developmental and institutional factors (including judicial independence, labour market flexibility, legal system efficiency, etc.) affecting FDI using a dataset of emerging markets and developed economies for the period 1985-2008. The results show that primary sector FDI is not strongly correlated with macroeconomic stability, development level and institutional quality.

The results are also multifaceted when focusing on the relationship between China's OFDI and institutional quality. Wang and Xiang (2015) use China's non-financial OFDI data for 142 countries and regions to analyse the relationship with China's OFDI using political, economic and legal system factors classified from the World Governance indicators and the heritage foundation databases. The study finds that the size of China's OFDI prefers higher institutional quality. Papageorgiadis, Xu and Alexiou (2019) used dynamic panel data to study the impact of property rights intensity on Chinese outward FDI in 23 European countries from 2003-2015. The results show that a sound IPR regime has a positive effect on attracting Chinese OFDI. Tian, Song, and Huang (2019) highlight that the caliber of the host nation's economic system positively influences China's decision regarding investment locations.

In contrast to the aforementioned findings, many scholars observe that China's OFDI is more likely to be attracted to countries with high political risks (Buckley et al., 2007; Kolstad and Wiig, 2012; Amighini et al., 2014; Li, Liu, and Jiang, 2015; Li, Hu, and Deng, 2019). This is often due to the easier access to natural resource rents in those countries, where natural resources are typically associated with unfavorable institutions, a phenomenon referred to as the "resource curse." This aligns with the research by Ramasamy and Yeung (2020), which establishes a negative correlation between the political stability variable and China's OFDI. Another contributing factor may be that certain flaws in China's capital markets can be transformed into ownership advantages for enterprises, making them more inclined to invest in higher-risk markets. Due to the imperfections in the capital markets, they can secure capital at rates below the market norm (Buckley et al., 2007). A critical deficiency in the capital market is the prevalence of state-owned enterprises, which receive substantial government support when investing abroad. Wang et al. (2012) even categorize the presence of state-owned enterprises as a "unique advantage of local firms." Given the extensive government involvement, state-owned enterprises are not solely driven by profit maximization; rather, their behavior is also influenced by political objectives (Kolstad and Wiig, 2012).

China also offers low-cost capital to local businesses via a banking system known for its inefficiency, illustrated by institutions like the China International Trust and Investment Corporation (CITIC) or the sovereign wealth fund China Investment Corporation (CIC). These investment firms are backed by the massive foreign exchange reserves accumulated by the Chinese government over the past few decades, offering substantial support to many Chinese multinational enterprises. Due to the robust government backing, Chinese state-owned enterprises struggle to thoroughly assess foreign risks while simultaneously mitigating operational risks in such unstable environments, which may be a contributing factor to their inclination to invest in high-risk markets (Voss, Buckley, and Cross, 2010; Ramasamy, Yeung, and Laforet, 2012). Furthermore, Chinese enterprises possess distinctive ownership advantages, enabling them to achieve superior outcomes compared to their Western counterparts when investing in other developing countries. This is attributed to the familiarity of Chinese multinational corporations with challenging institutional environments and pervasive corruption (Kolstad and Wiig, 2012).

The literature mentioned above indicates that researchers may obtain varied outcomes when employing identical institutional variables. This underscores the need for further research to develop more dependable, robust, and unbiased institutional variables for analyzing the factors influencing FDI.

Examining the Interplay of Formal and Informal Institutions

Furthermore, numerous factors illustrate the connection between institutional quality and FDI, such as democratic institutions and political stability (Vasilyeva and Mariev, 2021; Kim, 2010; Jensen, 2008), political regime (Chanegriha, Stewart and Tsoukis, 2016; Elkomy, Ingham and Read, 2015; Madani and Nobakht, 2014), tax policies (Mateev, 2009; Rjoub et al., 2017; Eicher, Helfman and Lenkoski, 2012; Feld and Heckemeyer, 2008), property rights (Papageorgiadis, Xu and Alexiou, 2019; Tanaka

and Iwaisako, 2014; Ali, Fiess and MacDonald, 2010), quality of educational system (Wendlassida Miningou and Tapsoba, 2017; Kottaridi, Louloudi and Karkalagos, 2019), and security (journals Iosr et al., 2015; Stoian and Vickerman, 2005). Most of them belong to formal institutions.

Nevertheless, formal and informal institutions constitute two interconnected components of the system (North, 1990), and an effective institutional framework should encompass a combination of formal institutions like legal frameworks enforced by the state and informal institutions grounded in social customs influenced by the historical and sociological context of individual countries. Political (and judicial) regulations, economic policies, and contractual agreements are all considered formal institutions, an area that has predominantly captured the attention of scholarly research in recent years, with informal institutions receiving comparatively less focus. Particularly in the context of CEE countries, there is a scarcity of literature that investigates the cultural aspect of informal institutions, or that focuses on trust, social networks, and public perceptions of corruption. This is also probably due to its broad and abstract nature, which makes it difficult to define them precisely. Szunomár (2018) proposes that the motivations of Chinese multinational corporations in CEE primarily involve institutional factors and other challenging-to-quantify aspects. Besides considerations like EU membership, market opportunities, and qualified yet more cost-effective labor, crucial factors include the scale and feedback of China's ethnic minorities, the likelihood of obtaining visas and permanent residency permits. These factors, focusing on cultural and ethnic aspects within informal institutions, pose difficulties in quantification and research.

In this regard, this dissertation will comprehensively analyse the impact of formal institutions and informal institutions on FDI. Economic Freedoms and Political Rights are used to proxy formal institutions (economic and political institutions); The State

Fragility Index and corruption perception index are used to proxy informal institutions, which focus more on the impact of culture and trust & social networks.

A Focus on CEE Countries' Heterogeneity

North (1990, p.110) emphasized that “Economic (and political) models are specific to particular constellations of institutional constraints that vary radically both through time and cross-sectionally in different economies. ” This suggests that the outcomes of institutional reform vary across countries, potentially due to the varying abilities of institutions to enact reforms (Summers and Thomas, 1993).

An illustrative example is the CEE region serving as representative transition countries, where disparities in the implementation of transition policies among different CEE nations create inter-country heterogeneity, thereby affecting their ability to attract FDI. China's substantial investment in the EU is predominantly driven by the institutional stability it offers, notably in terms of property rights protection. The volatile institutional, economic, and political conditions within the home country serve as a significant impetus for China's OFDI (Morck, Yeung, and Zhao, 2008). This aligns with the findings of Clegg and Voss (2012), who posit that China's OFDI in the EU reflects an "institutional arbitrage strategy." Chinese private enterprises tend to invest in locations providing a clearer, more transparent, and stable institutional environment, such as EU member countries like Poland, Hungary, and Slovakia (Witt and Lewin, 2007). In contrast, CEE countries lagging in the implementation of transition policies, delaying their accession to the EU, impede FDI inflows (Bevan and Estrin, 2004), resulting in inter-country developmental heterogeneity.

In fact, besides institutional factors, other elements also elicit varied responses to country heterogeneity. However, in most of the studies on determinants of OFDI in CEECs, the subjects are essentially agglomerated groups (Botrić and Škuflić, 2006; Kersan-Skabic and Orlic, 2007; Pečarić, Kusanović and Jakovac, 2021; Galego, Vieira

and Vieira, 2004; Popovici and Adrian Cantemir Călin, 2015; Carstensen and Toubal, 2004), and also a few through transitions period (Popovici, 2015) and geographic location (Liebscher, 2007) categorisation. The level of economic development of individual country subjects is still very different among CEECs, and for this gap, this study will analyse the heterogeneity of the 16 CEECs by dividing them into EU and Non-EU countries and three regional groups for further sub-group analysis after full sample regression.

Exploring the Nexus of Traditional and Institutional Determinants

Following the insights of North (1990) and Williamson (1975) and eclectic theories, scholars have started to use different institutional variables to explore the determinants of OFDI. However, individual institutional variables often lack objectivity, suffer from limited data coverage, measurement inaccuracies, or correlations with other variables. Therefore, some scholars prefer to analyse the determinants of FDI without considering institutional factors, concentrating on factor endowments (Makhavikova, 2018; Botrić and Škuflić, 2006; Kersan-Skabic and Orlic, 2007; ÇEviŞ and ÇAmurdan, 2008; Cristina, 2019) such as market size and gravity variables (Mateev, 2009). However, institutional factors never exist alone and their development is always intertwined with socio-economic, political and other aspects (Acemoglu, Johnson and Robinson, 2004) and influences all aspects in the form of embeddedness. Therefore, a coherent modeling of FDI flows requires considering not just the variables related to the institutional environment of the investment, but also traditional determinants, including gravity models and Dunning's four seeking motives. Therefore, this paper will draw on this point to discuss the relationship and degree of stickiness between traditional factors, institutional factors and China's OFDI in CEE countries.

A noteworthy example is Hungary, which stands out with strong relations and a notably high level of direct investment from China compared to other CEE countries. This

distinction may stem from being a nation that combines traditional economic factors with institutional elements, seemingly playing a crucial role in attracting Chinese investors.

Hence, a cohesive model for foreign direct investment flows necessitates consideration not only of conventional macroeconomic determinants, including gravity models and Dunning's four motives for seeking investment, but also variables related to the institutional environment in which such investments occur. Building on this foundation, this dissertation will explore the relationship and degree of stickiness between traditional factors, institutional elements, and China's OFDI in CEE countries.

2.2 Summary

Overall, this section reviews relevant literature on Chinese OFDI in CEE countries from the perspectives of Dunning's four motives and institutional quality. Simultaneously, it identifies some gaps in the existing literature and attempts to address them in this dissertation. Given the inconsistent conclusions regarding institutional quality research, this paper will employ a relatively comprehensive Institutional Quality Index. Addressing the inadequacies in the study of informal institutions, this paper aims to demonstrate the impact of host country's informal institutions on attracting FDI from China through relevant variables. Concerning the issue of heterogeneity among countries, this paper will conduct sub-sample regressions and analysis after the full-sample regression. Furthermore, to address the deficiency in integrating traditional macroeconomic factors with institutional factors, this paper will undertake a combined study of both aspects to explore their influence on Chinese OFDI.

3. Descriptive Analysis

CEE countries, serving as crucial nodes and vital links connecting the Eurasian continent, have emerged as significant choices for China's foreign trade and economic cooperation, owing to their unique geographical position and political relations. Particularly against the backdrop of the ongoing deepening of the Belt and Road Initiative and the increasingly refined "16+1" cooperation framework, the potential for cooperation between China and CEE has been further unleashed. Substantial progress has been made in both the scope and content of cooperation. It is undeniable that investment cooperation between China and CEE is still in its nascent stage. However, with the deepening and refinement of bilateral cooperation mechanisms, coupled with favorable development trends, a conducive business environment, and robust policy support, the willingness of Chinese enterprises to invest directly in CEE is poised to strengthen further. This will contribute to promoting bilateral complementarity and optimizing the investment structure of the Belt and Road Initiative. This chapter aims to encapsulate the present traits of investment through a comprehensive examination of the historical progression of China's OFDI in CEE countries.

3.1 Historical Development of Chinese OFDI in CEE Countries

Analysis of the development trajectory of FDI should be based on a clear understanding of the concept of CEE. Originally a geopolitical concept, CEE emerged from the geopolitical transformations in Eastern Europe after World War II. Although the political significance of Eastern Europe diminished with the end of the Cold War, its geographical significance as a crucial political and economic region continued to significantly influence the global market system. Therefore, conducting research on CEE as an independent region is essential for accurately grasping the dynamics of global economic development, given its strategic position as a key junction between the Eurasian continent and a focal point of geopolitical competition among major world powers.

In recent years, the definition of CEE has lacked a unified standard. According to definitions by the UN, WTO, World Bank, and International Monetary Fund, CEE countries specifically refer to the 12 nations located in the central and eastern part of Europe, namely Albania, Croatia, Estonia, Latvia, Bulgaria, Romania, Slovenia, Czech Republic, Lithuania, Hungary, Poland, and Slovakia. Following the successful inaugural meeting of leaders from China and CEE in April 2012, the concept of the "16+1" grouping was formally proposed. This expanded the original 12 countries to include Bosnia and Herzegovina, Montenegro, Serbia, and North Macedonia. This dissertation adopts the concept of the "16+1" grouping to conduct a detailed study on China's OFDI in CEE. As an integral part of the European market, the 16 CEE countries cover a total area of 1.336 million square kilometers and have a population of approximately 120 million. Among the 11 countries that have joined the EU, Estonia, Slovenia, Slovakia, Lithuania, and Latvia have adopted the euro, while even those not yet in the union, such as Montenegro, North Macedonia, Bosnia and Herzegovina, Serbia, and Albania, have become priority targets for the EU's external policies. This indicates that CEE has largely embraced a Western perspective and is strengthening its integration process through deepening cooperation.

China's economic and trade ties with CEE nations boast a lengthy past. Serving as among the initial countries to establish diplomatic ties with New China, they held considerable significance within China's diplomatic landscape. Nevertheless, the sweeping changes in Eastern Europe in 1989 precipitated profound shifts in the region's political and economic frameworks, consequently reshaping the basis and character of bilateral relations between China and CEE nations. Since then, a new phase of development has commenced in China's relations with CEE countries, with the year 1990 marking a new starting point for China's exploration and understanding of the CEE market. Therefore, this dissertation, beginning in 1990, delineates the developmental trajectory of China's OFDI in CEE into the following six stages:

The First Stage (1990-1995): Initial Exploration Phase

Following dramatic political changes in the region, the changes in CEE led to the loss of the original institutional basis and shared consciousness in bilateral relations between China and these countries. Due to both sides prioritizing Western countries as their primary cooperation partners in economic and trade relations, China's direct investment in these regions temporarily stagnated, maintaining only low-level economic and trade exchanges. In order to deepen mutual understanding and eliminate economic and trade barriers arising from differences in institutional frameworks and consciousness, interactions between China and CEE took place during this period. For instance, in 1990, Deputy Minister of Foreign Affairs of China, Tian Zengpei, visited Bulgaria and Hungary for routine consultations, affirming that there were no fundamental conflicts of interest between China and CEE countries, and that developing comprehensive bilateral relations was beneficial to both sides. Similarly, in 1991, Qian Qichen, then State Councilor of China, expressed China's keen interest in bilateral cooperation during visits to five countries in CEE. His initiatives received strong endorsement from the leaders of these countries, further consolidating the political foundation for China's direct investment in the region. Thus, despite a temporary interruption in China's OFDI in CEE countries due to political sensitivities, friendly exchanges at the higher levels gradually normalized bilateral diplomatic relations, paving the way for deeper economic and trade ties in the future.

The Second Stage (1995-2004): Consolidation and Development Phase

In July 1995, during his visit to Hungary, the then Chinese President Jiang Zemin elucidated the five fundamental principles governing the development of bilateral relations between China and CEE, known as the "Budapest Principles." The introduction of the "Budapest Principles" gradually thawed the interaction between China and CEE in both political and economic domains. Subsequently, through a series

of high-level meetings, barriers to China's direct investment in CEE were further alleviated. Premier Li Peng, during his visit to Romania, proposed four basic principles guiding China's policy towards CEE countries, which were recognized and praised by these nations, deepening cooperation to a certain extent. The fundamental principles included respecting the choices of peoples in each country and refraining from interfering in the internal affairs of other nations, fostering traditional friendship and peaceful coexistence, enhancing mutually beneficial cooperation for common development and prosperity, and supporting peaceful dispute resolution to promote regional stability. China expressed willingness to deepen economic and trade cooperation, develop economic and trade relations further, thus laying a solid foundation for future cooperation between the two sides.

The Third Stage (2005-2011): Deepening and Enhancement Phase

Between 2004 and 2007, ten out of the sixteen countries in CEE joined the EU. Consequently, China's economic and trade relations with CEE exhibited a dual characteristic: bilateral exchanges with China and multilateral relations within the framework of the EU. The large-scale accession to the EU facilitated the free circulation of products from CEE countries within the EU. Simultaneously, the EU's policies offering preferential treatment and subsidies to foreign enterprises significantly encouraged the pace of openness in these countries, effectively boosting the enthusiasm of Chinese enterprises for investment in CEE countries. In 2005, China's OFDI in EU countries was only \$190 million. By 2007, this figure had increased to \$1.044 billion, representing nearly a 4.5-fold increase in just two years. Direct investment in CEE countries also experienced a surge during this period, increasing 2.6 times over two years. Although China's OFDI in CEE experienced a slight setback due to the 2008 financial crisis, it resumed growth shortly thereafter. In 2011, China's direct investment in CEE countries reached \$130 million. Although this accounted for only 0.17% of China's total OFDI that year, it had more than doubled compared to the 0.08% share in

2005, demonstrating robust growth. Meanwhile, China further enhanced communication with Central and Eastern Europe. In 2004, during visits to Poland, Hungary, and Romania, then Chinese President Hu Jintao issued a joint statement advocating for the establishment and deepening of friendly cooperation partnerships with these countries. During his speech in Romania, Hu Jintao proposed the "Bucharest Principles" for the development of China's relations with CEE countries. Notably, this speech marked the first time that cooperation in counter-terrorism and international affairs between China and CEE countries was proposed, underscoring the increased importance of CEE to China. Consequently, under the vigorous promotion of high-level officials, the bilateral relations saw significant improvement, providing greater opportunities for Chinese enterprises to invest directly in the region.

The Fourth Stage (2012-2015): Comprehensive Cooperation Phase

In 2012, during the China-Central and Eastern European Forum held in Poland, China proposed the "Twelve Measures to Promote Friendly Cooperation with Central and Eastern European Countries," formally launching the "16+1" cooperation mechanism. Subsequently, under the deepening efforts of the new government, the scale and level of cooperation continued to rise. For instance, the "Bucharest Guidelines for China-Central and Eastern European Countries Cooperation" proposed in 2013 institutionalized high-level meetings between the two sides. They unanimously agreed to actively explore the construction of a China-CEE national transport railway—China-Europe Railway Express. Moreover, the "Mid-term Plan for China-Central and Eastern European Countries Cooperation" released in 2015 further refined the top-level planning of the "16+1" mechanism, outlining the focus of cooperation for the next five years.

With the gradual maturity of the "16+1" mechanism and the continuous improvement of the investment openness level of CEE countries, Chinese enterprises have become

increasingly active in the CEE market. Renowned Chinese companies such as Huawei, Lenovo, and ZTE have established a significant presence in CEE. In terms of scale, scope, and approach, Chinese direct investment in CEE has reached unprecedented levels. As bilateral understanding steadily deepens and the complementarity of economic structures is further explored, this is expected to translate into enormous potential.

The Fifth Stage (2016-2019): Period of Continuous Achievement

The period from 2016 to 2019 witnessed continuous achievement. The China-Europe Railway Express, a key facet of the collaboration, was developed by China Railway Corporation to manage international intermodal train services, including nations along the Belt and Road. Prior to its implementation, plans were made to create 43 strategic hub nodes and formulate 43 routes to enhance the efficiency of transportation. Spanning the breadth of the Eurasian landmass, the China-Europe Railway Express connects with CEE nations such as Poland, the Czech Republic, Hungary, and Latvia. In its inaugural year, 2011, the service saw only 17 train operations. Yet, this figure saw a consistent annual increase, reaching beyond 1,000 train operations in 2016 and soaring to over 8,000 by 2019.

The Budapest-Belgrade Railway stands as another pivotal endeavor. On November 24, 2015, an agreement titled "Budapest-Belgrade Railway Hungary Segment Development, Construction, and Financing Cooperation Agreement" was executed between the Chinese and Hungarian governments. Under this agreement, the International Railway Company of China Railway Corporation, along with the Hungarian State Railways, were designated as the principal contractors for the project. The Hungarian Parliament sanctioned the upgrade of the Budapest-Belgrade Railway within Hungary on April 12, 2016. While the Hungarian section saw gradual progress, the development of the Serbian section proceeded more swiftly. The commencement of

construction for the Belgrade-Novı Sad segment, part of the Budapest-Belgrade Railway project, was celebrated with a groundbreaking ceremony in Serbia on November 28, 2017.

The Sixth Stage (2020-present): Period of Challenges and Achievements Coexisting

The European "Belt and Road" initiative faced significant challenges during the period from 2016 to 2019. Despite being severely affected by the COVID-19 pandemic and the Russia-Ukraine conflict, progress was still made.

Initially, advancements persisted in the development of the Budapest-Belgrade Railway. Operations began in March 2022 for the Serbian section, spanning from Belgrade to Novi Sad, with the Novi Sad-Sombor section marking its groundbreaking ceremony in November 2021. Construction for the southern segment project in Hungary commenced in May 2022. Despite encountering several challenges, the construction of the railway between Hungary and Serbia steadily moved forward.

Secondly, the container volume at the Port of Piraeus surged from 880,000 TEUs in 2010 to 5.437 million TEUs in 2021, propelling its global standing from 93rd to 29th, positioning it among the most promising container terminals worldwide. During the initial six months of 2022, combined maritime-rail transport revolving around the Port of Piraeus conveyed 88,000 TEUs, marking a 38.3% year-on-year rise, with 1,262 trains in operation, representing a 26% increase.

Thirdly, Hungary attracted investment from Contemporary Amperex Technology Co., Limited (CATL). The projected investment outlay for the venture amounts to €7.34 billion, with an anticipated creation of 9,000 direct job opportunities. CATL's investment stands as one of the most substantial "greenfield investments" witnessed in Europe over the last decade and marks the largest in Hungary's records.

However, cooperation between China and CEE under the Belt and Road initiative also faces many challenges, such as the outbreak of the Russia-Ukraine war has had a negative impact.

In early 2022, the abrupt escalation of tensions between Russia and Ukraine had repercussions on cross-border initiatives. For instance, during the first quarter of 2022, there was a notable decline in the number of trains departing from Xi'an on the China-Europe Railway Express, dropping from 606 to 568 compared to the same period the previous year, while trains departing from Chongqing decreased from 724 to 265. Moreover, the conflict between Russia and Ukraine led to escalated inflation, rising prices, and an energy crisis in Europe. Consequently, this situation resulted in elevated costs of raw materials for the Budapest-Belgrade Railway project, thereby disrupting the regular progress of cooperation.

3.2 Current Analysis of Chinese OFDI in the CEE Region

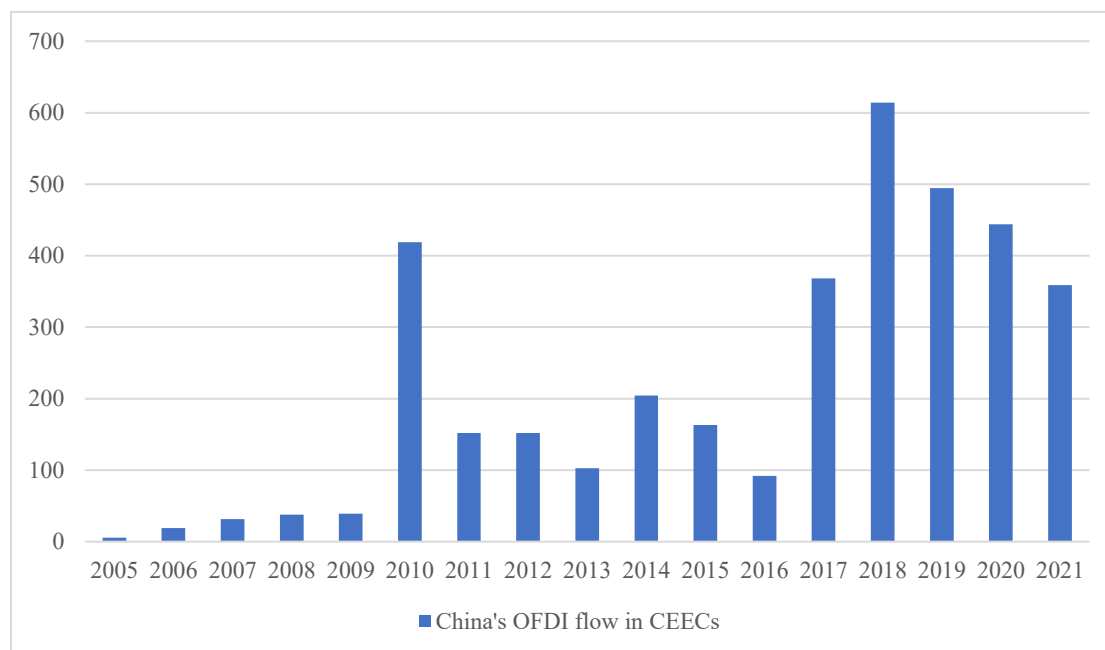
3.2.1 The Scale of China's OFDI in CEE Countries

China's OFDI in CEE countries has roughly undergone the aforementioned stages. With the continuous strengthening of cooperation willingness and the deepening understanding of the importance of cooperation between both parties, China's OFDI in CEE countries has been expanding.

In terms of OFDI flow (see Figure 1), China's OFDI flow into CEE countries has experienced fluctuations but an overall upward trend. From 2005 to 2009, China gradually began cooperation with CEE countries, but the scale was relatively small, amounting to less than \$100 million. In 2010, China's OFDI in CEE countries saw a significant surge, reaching \$400 million, indicating China's growing recognition of the importance of cooperation with CEE countries and its increasing efforts in collaboration. After 2010, China's investment in CEE countries steadily remained at the level of hundreds of millions of dollars. Following the establishment of cooperation

mechanisms in 2012, the investment broke through \$200 million in 2014, nearly doubling compared to the previous year. With the continuous advancement of cooperation, the investment amount reached nearly \$600 million in 2018. However, since 2018, the data on Chinese investment flows have shown a downward trend year by year, but the data is still relatively large.

Figure 1 China's OFDI flow in CEECs (Millions of Dollars)

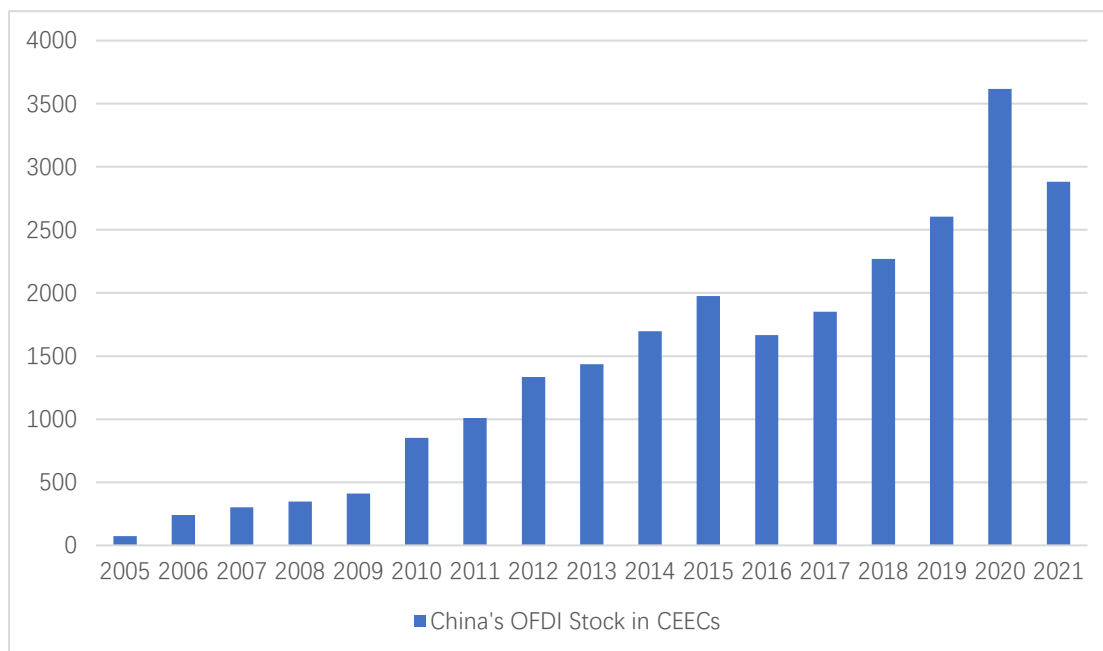


Source: Statistical Bulletin of China's Outward Foreign Direct Investment

From the perspective of OFDI stock (see Figure 2), it is evident that there has been a significant increase in the direct investment amount from 2005 to 2021. During the period from 2005 to 2011, although China's OFDI in CEE countries was less than \$1 billion, it steadily grew from \$73 million to \$1 billion. In 2012, with the initial establishment of the China-CEE cooperation mechanism, China's OFDI stock in CEE countries reached \$1.334 billion, a 32% increase compared to the previous year. Following a strong upward trend from the preceding year, China's OFDI stock in CEE countries experienced a slight decline in 2016, primarily due to sluggish global economic growth. However, it gradually recovered thereafter. Over the span of seven

years, the OFDI stock increased from \$1.334 billion at the end of 2012 to \$3.618 billion at the end of 2020.

Figure 2 China's OFDI Stock in CEECs (Millions of Dollars)



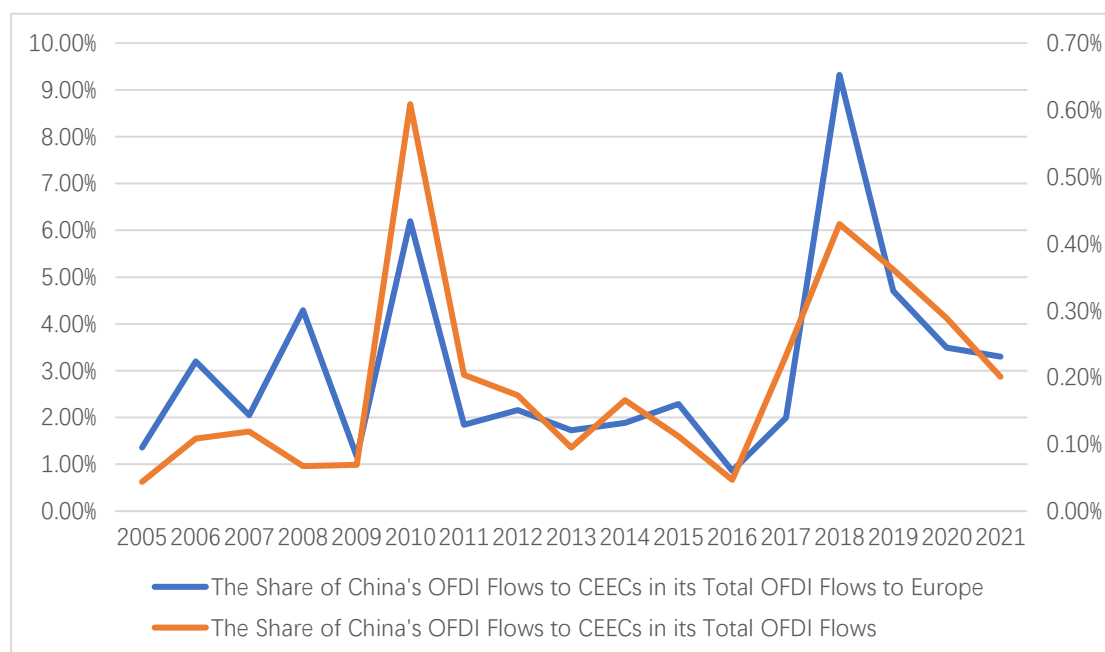
Source: Statistical Bulletin of China's Outward Foreign Direct Investment

Although the scale of China's OFDI in CEE countries has been expanding, the existing direct investment scale does not match the strategic position of these countries in the BRI. As depicted in the graph, in terms of flow, in 2005, China's OFDI in CEE countries accounted for only 0.04% of its total OFDI and 1.36% of its direct investment flow to Europe. By 2021, these proportions had increased significantly to 0.2% and 3.3%, respectively, indicating notable growth, yet the absolute scale remains relatively low. In terms of stock, the proportion of China's OFDI in CEE countries to its total outward direct investment and its direct investment in Europe tends to be consistent. A comparison of data from 2005 and 2021 reveals a slight decrease in the proportion of China's OFDI in CEE countries to its direct investment in Europe and its total outward direct investment, indicating that China's direct investment in CEE countries is relatively small, and the depth of cooperation is insufficient. This may suggest a lack

of understanding of the situation in CEE countries and a reduced possibility of deeper cooperation.

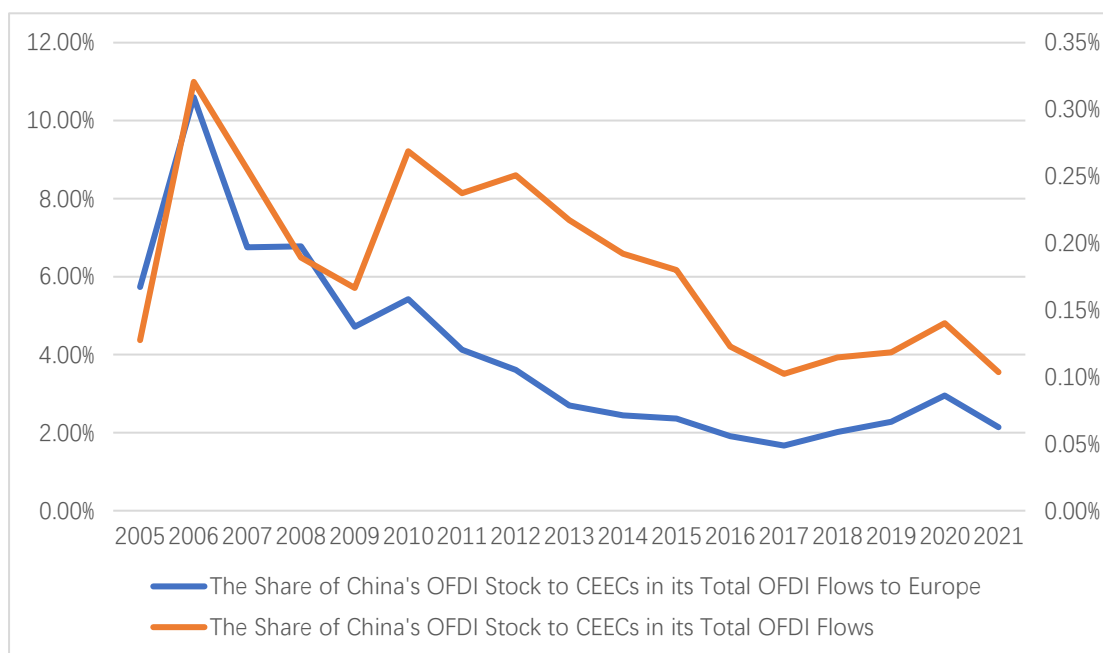
In general, China's OFDI in CEE countries started late and remained relatively small. Despite the long-established diplomatic relations between CEE countries and China, investment cooperation between the two sides began to show some signs of development only in 2005, with the scale being less than \$100 million. With the establishment of the China-CEE "16+1" cooperation mechanism in 2012, both sides continued to advance economic and trade cooperation. However, China's direct investment in CEE countries remained significantly low. As of 2021, China's OFDI stock in CEE countries amounted to \$2.8 billion, accounting for only 0.1% of China's total outward direct investment, a negligible fraction.

Figure 3 Share of Chinese OFDI flows to CEECs, 2005-2021



Source: Statistical Bulletin of China's Outward Foreign Direct Investment

Figure 4 Share of Chinese OFDI stock to CEECs, 2005-2021



Source: Statistical Bulletin of China’s Outward Foreign Direct Investment

3.2.2 Chinese Direct Investment Structure in CEE Countries

As the industry data on Chinese investment in CEE countries was not directly accessible, this dissertation analyzed investment projects in various sectors from 2012 to 2021 in these countries based on the Investment Project Information Database of the Ministry of Commerce People’s Republic of China. The analysis reveals a diversified investment pattern.

According to the table 1, the manufacturing sector had the highest number of investment projects, reaching 172, accounting for 29.01% of China's OFDI projects in CEE countries. In the manufacturing sector, CEE has been a hotspot for manufacturing enterprises from various countries due to its mature industrial base. Many globally renowned companies have established production lines in the region and formed comprehensive production systems through substantial associated investments. Considering the relatively liberal institutional environment and the availability of high-quality and cost-effective production resources in CEE, Chinese manufacturing

companies have also increased their investment in the region. Leading domestic manufacturing companies such as Dongfeng Motor Corporation from Hubei, Great Wall Motor Company Limited from Hebei, Liugong Group from Guangxi, and Sanjiang Group from Hubei have all converged in CEE. This influx not only injects vitality into the local economic development but also optimizes the operational layout of these enterprises.

Next is the electricity, heat, gas, and water production and supply sector, accounting for 13.49% of the total. The real estate industry and transportation industry have nearly equal proportions, accounting for 11.47% and 9.78% respectively. Among the various sectors, the most noteworthy is the investment cooperation in infrastructure, such as transportation. On the one hand, the infrastructure level in CEE countries is relatively underdeveloped, resulting in strong demand for the construction of railways, ports, airports, telecommunications, and nuclear power plants. On the other hand, as a priority area of the BRI, China has always had outstanding production capacity and technological advantages in infrastructure construction. Compared to Western companies, China also provides more favorable financing support. Projects such as the Velika Morava Hydroelectric Power Station in Serbia, the Kostolac Coal Power Plant renovation, and the Hungary-Serbia Railway project implemented in recent years fully demonstrate that investment cooperation between China and CEE in the field of infrastructure has reached a new level. According to data provided by PricewaterhouseCoopers, it is estimated that the demand for funds for transportation infrastructure construction in CEE will reach 615 billion euros by 2025, indicating enormous investment potential.

Furthermore, in terms of investment industries, direct investment in the wholesale and retail industries is the least, with only three projects. Overall, the structure of Chinese direct investment in CEE countries is relatively concentrated. From the analysis, it can be seen that since 2012, Chinese direct investment in CEE countries has mainly focused

on manufacturing, electricity, real estate, and transportation industries, accounting for a high proportion of 63.75% of the total investment projects. Although investment projects related to the financial industry and the pharmaceutical chemical industry were not found in the Ministry of Commerce's Investment Project Information Database, this does not mean that both parties have not been involved in cooperation in these areas. To some extent, it indicates that there is still significant room for cooperation between the two sides.

From an analysis of investment projects by region, it can be observed that China's OFDI in the manufacturing industry of CEE countries was mainly concentrated in Bosnia and Herzegovina and the Czech Republic. Investments in these two countries accounted for 65% of China's investment in the manufacturing industry of CEE countries. Investments in electricity, heat, and gas were concentrated in Poland and Romania, representing more than half of China's investments in these sectors in CEE countries. Investments in the real estate industry were concentrated in Bosnia and Herzegovina and Hungary, constituting 74% of China's investments in the real estate industry of CEE countries. Investments in other sectors were relatively fewer and more dispersed. Although Central and Eastern European countries are geographically close, they exhibit uneven economic and cultural development, leading to certain national differences. Therefore, it is essential to consider the existence of diversity and focus on identifying investment cooperation areas tailored to the characteristics of different sub-regions, thereby diversifying investments. For example, strengthening investment in each country's advantageous industries, such as agricultural cooperation in Bulgaria and Romania due to their strong agricultural foundations, or finding breakthroughs in financial cooperation in Bosnia and Herzegovina, which boasts financial and monetary stability.

Table 1 The Status of China's OFDI projects in CEECs, 2012-2021

Industry	Number of Projects	Percentage (%)
Manufacturing industry	172	29.01%
Electricity, heat, gas and water production and supply	80	13.49%
Real estate industry	68	11.47%
Transportation, warehousing and postal service industry	58	9.78%
Building industry	47	7.93%
other	35	5.90%
Agriculture, forestry, animal husbandry and fishery	27	4.55%
Education, health, culture and sports, entertainment	19	3.20%
Water conservancy, environment and public facilities	16	2.70%
Mining industry	15	2.53%
Information transmission, software and information technology services industry	15	2.53%
Hotel and catering services industry	14	2.36%
Leasing and business service industry	12	2.02%
Residents services, repair and other services industry	8	1.35%
Scientific research and technology service industry	4	0.67%
Wholesale and retail industry	3	0.51%
Financial industry	—	—
Pharmaceutical chemical industry	—	—

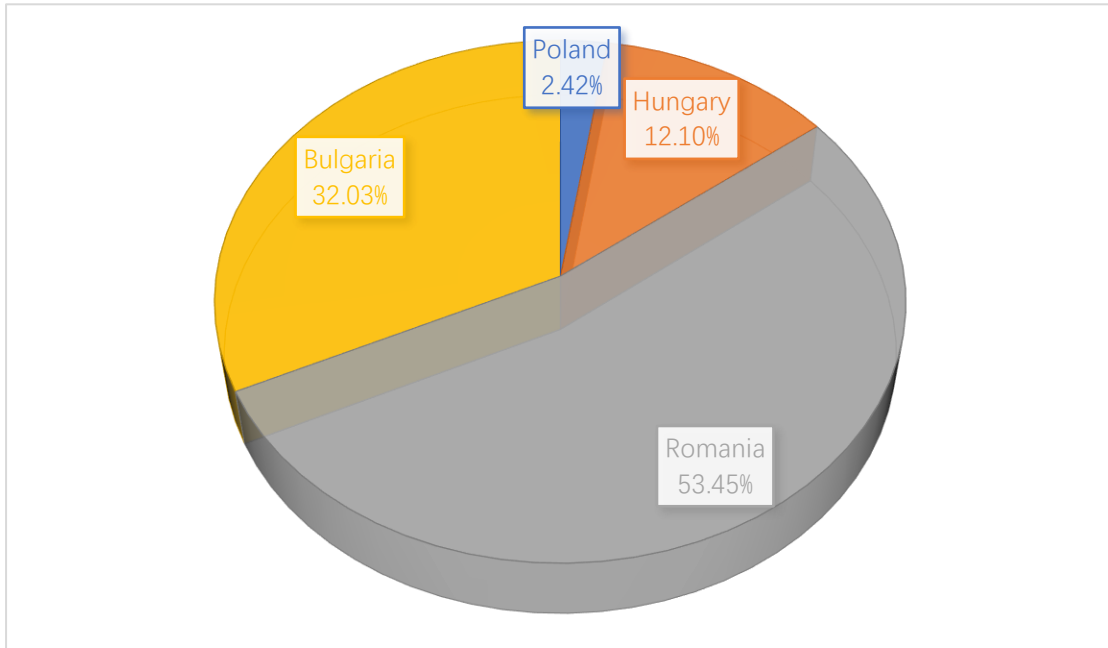
Source: Ministry of Commerce People's Republic of China - Investment Project Information Database

3.2.3 The Spatial Distribution of China's OFDI in CEE Countries

The Expansion of China's OFDI in CEE Countries

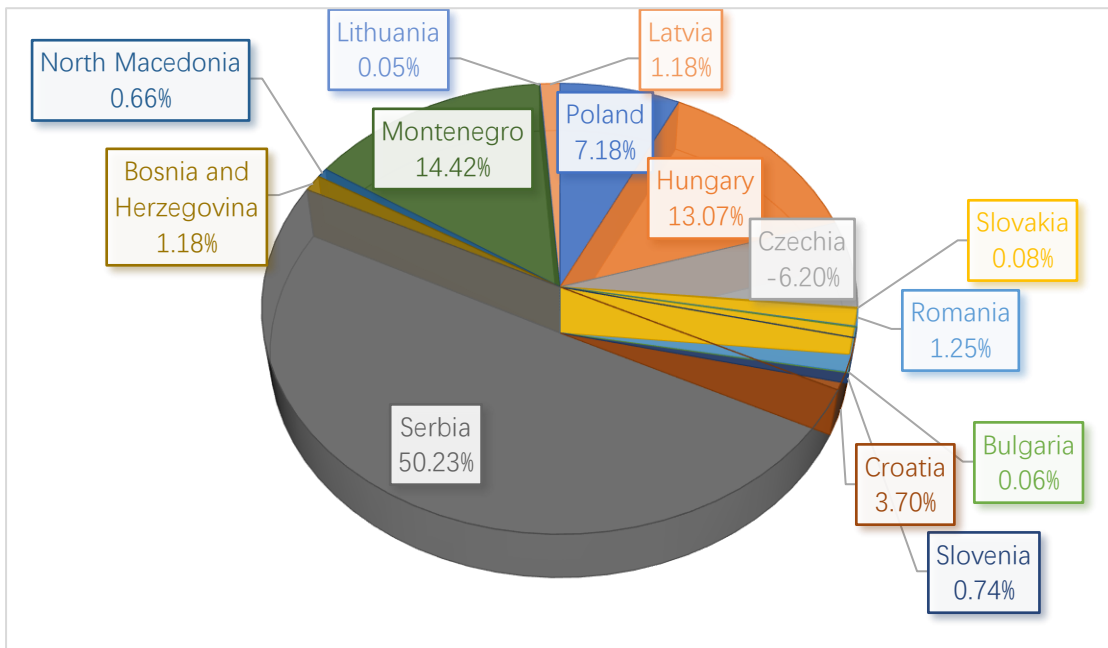
As the investment climate in CEE nations continues to enhance and economic and trade interactions with China deepen, there has been a notable expansion in the distribution of China's direct investments across the CEE region in recent years. In terms of investment flows, in 2005, among the 16 countries in CEE, China only conducted foreign direct investment in four countries: Romania, Bulgaria, Hungary, and Poland. However, by 2021, the number of CEE countries receiving net inflows of Chinese direct investment had increased to 14, significantly expanding the coverage of investments. Regarding the stock of investment, by the end of 2005, China's investment in CEE countries was highly concentrated, with Croatia alone accounting for 54.03% of China's total OFDI stock. However, by 2021, the regional distribution of investment stock had become more diversified and evenly distributed. Furthermore, driven by the deepening bilateral relations and the maturation of cooperation mechanisms, the overall absorption of direct investment from China by these countries has shown a steady increase, leading to an optimization of the regional investment structure to some extent.

Figure 5 2005 Distribution of China's OFDI Flows to CEECs



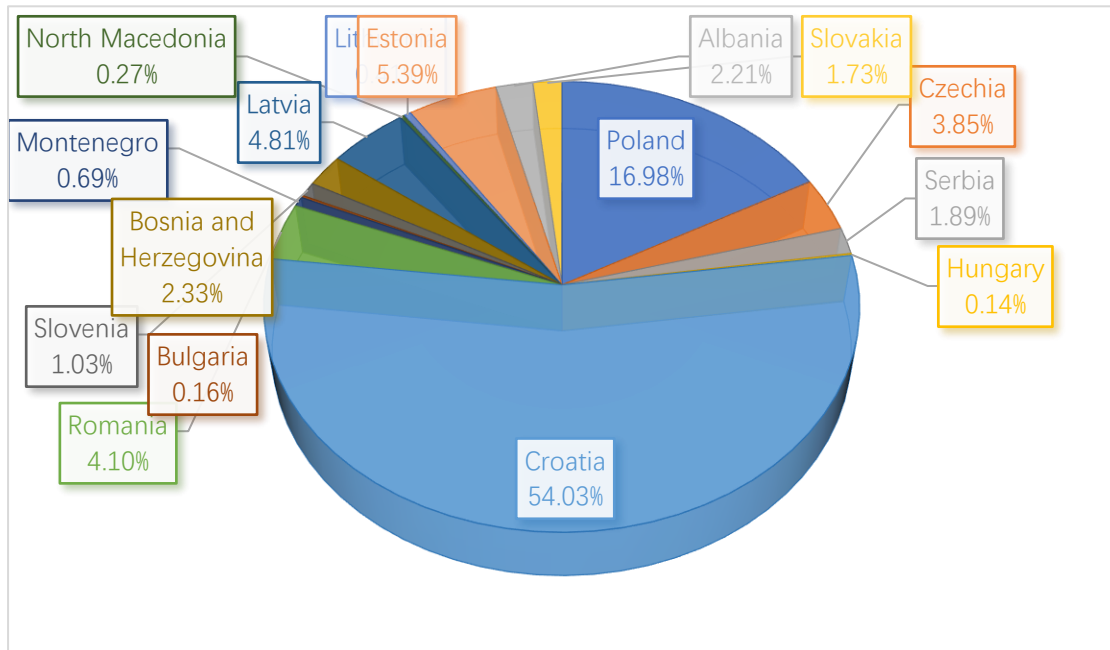
Source: Statistical Bulletin of China's Outward Foreign Direct Investment

Figure 6 2021 Distribution of China's OFDI Flows to CEECs



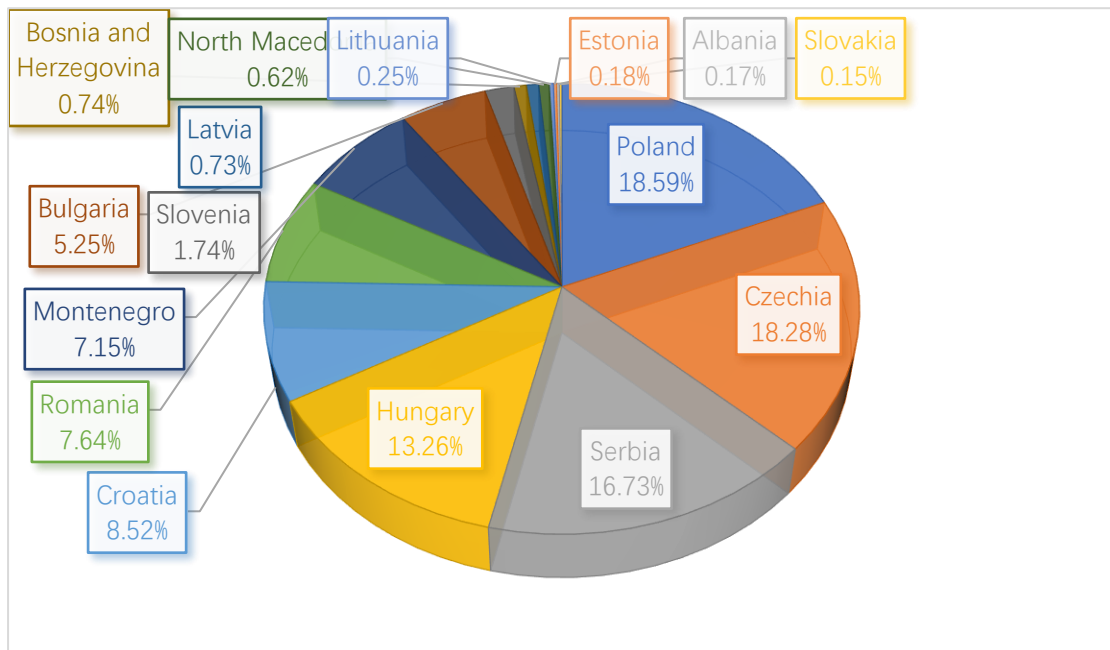
Source: Statistical Bulletin of China's Outward Foreign Direct Investment

Figure 7 2005 Distribution of China's OFDI Stock to CEECs



Source: Statistical Bulletin of China's Outward Foreign Direct Investment

Figure 8 2021 Distribution of China's OFDI Stock to CEECs



Source: Statistical Bulletin of China's Outward Foreign Direct Investment

The Regional Shifts in China's OFDI in CEE Countries

However, from the data, we can discern that China's OFDI in CEE still exhibits uneven regional distribution, displaying a tendency towards concentrated investment flows to some extent. Based on geographical positioning and the homogeneity of economic development, this part divides CEE into three major economic blocs. The aim is to summarize the dynamic differences in China's direct investment among countries at different stages of development within the region, thereby further elucidating the current characteristics of China's investment distribution in CEE countries. These three major blocs are: the Baltic countries, the Visegrad Group and Slovenia, and the Balkans countries.

Firstly, the Baltic countries encompass Lithuania, Estonia, and Latvia. As the region with the highest level of economic development among CEE countries, the Baltic countries have consistently been classified as developed countries by the International Monetary Fund. Their robust economic foundations and favorable investment environment have positioned them as crucial partners for the European Union's expansion eastward. Although they demonstrated strong economic growth momentum after officially joining the EU in 2004, with growth rates far exceeding those of other countries in CEE, this momentum came to an abrupt halt due to the dual impact of the financial crisis and the European debt crisis. In 2009, Lithuania, Estonia, and Latvia experienced GDP contractions of 14.81%, 14.72%, and 14.4%, respectively, ranking among the top three in terms of decline among CEE countries. Although they later experienced rapid recovery, the growth momentum remained somewhat subdued compared to pre-2008 levels. Despite the generally moderately free foreign investment environment and economic advantages of the Baltic states, their insufficient internal growth impetus and policy orientation tied to the EU have diminished their overall attractiveness to Chinese investors. In 2005, there were no relevant data on China's direct investment flow to the Baltic countries, with their stock accounting for 10.61%.

However, by 2021, this proportion had decreased to 1.16%, reflecting a substantial loss in investment share and a weakening position of the Baltic countries in China's economic and trade cooperation. Exploring new areas of mutual interest while consolidating existing cooperation achievements will be crucial for further advancing investment interaction between China and the Baltic countries in the future.

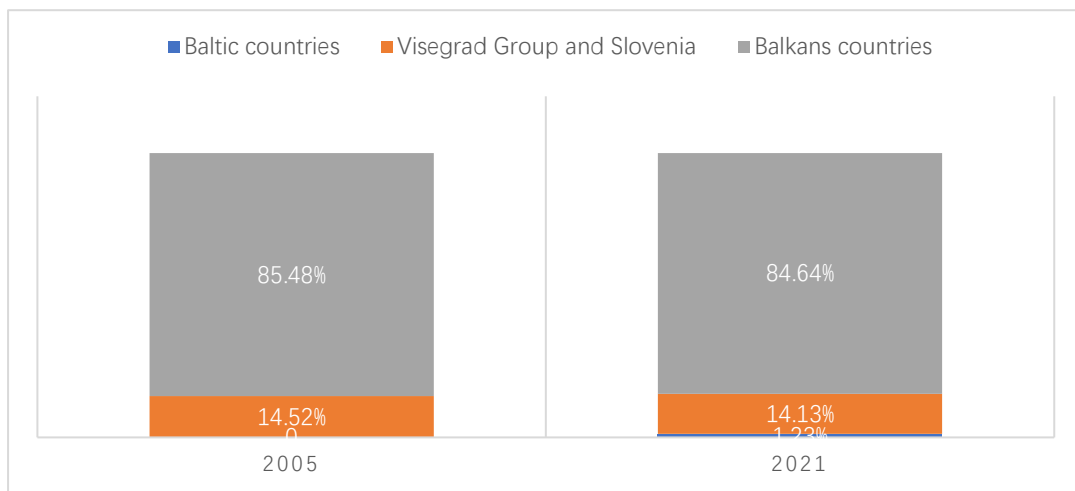
Secondly, the Visegrad Group and Slovenia represent regions with relatively advanced industrial levels in CEE. This group includes Hungary, Poland, Czechia, Slovakia, and Slovenia. All five countries joined the European Union in 2004, with Slovenia and Slovakia subsequently joining the Eurozone in 2007 and 2009, respectively, underscoring their strong economic foundations. In recent years, both the Visegrad Group and Slovenia have maintained stable and rapid economic growth, leading in the CEE region and surpassing other regions in manufacturing value-added. This demonstrates the robust industrial strength and strong momentum of manufacturing development in the Visegrad Group and Slovenia. The complementarity of industries offers significant investment cooperation opportunities between China and this economic bloc. Moreover, the openness of policies towards China has provided a favorable external environment for Chinese investors to enter smoothly. Initiatives such as Poland's "Invest in Poland" project targeting Chinese enterprises and Hungary's "Opening to the East" economic development strategy not only reduce their own excessive economic dependence on the EU but also serve as a positive demonstration effect for the implementation and alignment of China's Belt and Road Initiative in CEE. Supported by multiple favorable factors, China's direct investment in the Visegrad Group and Slovenia has not only experienced rapid growth but also significantly increased its share of overall direct investment in CEE. In 2005, China's direct investment flow and stock in the Visegrad Group and Slovenia accounted for 14.52% and 22.7% of the CEE region, respectively. By 2021, these figures had decreased to 14.13% and increased to 50.28%, respectively, with investment stock in this region accounting for over half. Although the future prospects for China's direct investment in

the Visegrad Group and Slovenia remain promising, internal ethnic conflicts within the region and differences in attitudes towards cooperation with China continue to threaten the deepening of economic and trade cooperation. Conducting multidimensional and multilevel dialogues and exploring mutually beneficial development interests will be key focal points for advancing China's economic and trade interaction with this bloc.

Thirdly, the Balkans countries in Eastern Europe encompass Albania, Croatia, Bulgaria, Romania, Bosnia and Herzegovina, Montenegro, Serbia, and North Macedonia. As emerging and developing economies in Europe, only Bulgaria, Romania, and Croatia among the Balkans countries have joined the EU, while the remaining five countries are still in the process of accession. Consequently, this region is relatively weaker in overall economic strength compared to other parts of CEE. Located in the southeastern part of the European continent, the Balkan Peninsula is hailed as the "crossroads of Europe," connecting Europe, Asia, and Africa. Simultaneously, the industrial system in the Balkans is relatively well-developed, with abundant natural resources. For instance, Albania boasts the largest onshore oil reserves in Europe, contributing to a highly developed energy sector, while Romania's agricultural land covers 61.7% of its total area, leading its agricultural industry ahead of that in other parts of CEE, earning it the moniker of "Europe's breadbasket." Leveraging its advantageous geographical location and resource base, the Balkan Peninsula has long been an important region for China's OFDI. In 2005 and 2021, the direct investment flow accounted for 85.48% and 84.64%, respectively, of China's total direct investment in CEE, ranking first in China's investment in the region. Regarding direct investment stock, the figures were 66.69% in 2005 and 48.56% in 2021, indicating a certain degree of decline. On one hand, the region's strategic importance has led to increased geopolitical competition, resulting in higher investment risks. On the other hand, countries like North Macedonia, Montenegro, and Bosnia and Herzegovina have relatively small economic aggregates and lagging development levels, affecting the willingness of Chinese enterprises to engage in investment cooperation to some extent. However, it cannot be denied that, as

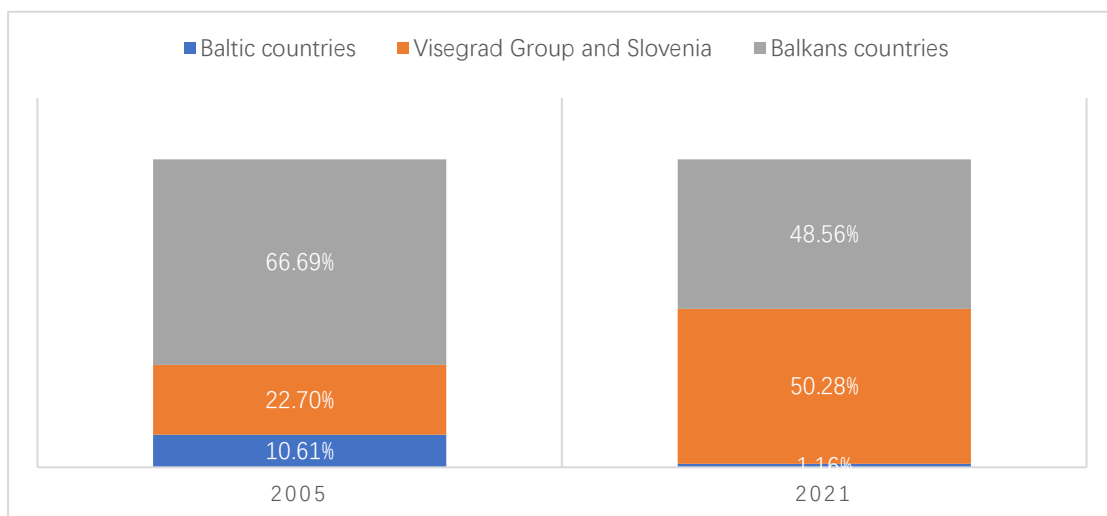
the region hosts non-EU members of CEE, it exhibits a more positive attitude towards investors from outside the EU compared to other blocs. Coupled with the vigorous demand for infrastructure within the region and the urgent expectations for development, there are many investment opportunities for China to engage with the Balkan region.

Figure 9 2005 and 2021 Proportion of China's OFDI Flows to Different Regions in CEECs



Source: Statistical Bulletin of China's Outward Foreign Direct Investment

Figure 10 2005 and 2021 Proportion of China's OFDI Stock to Different Regions in CEECs



Source: Statistical Bulletin of China's Outward Foreign Direct Investment

3.3 The Problems between China and CEE Countries Cooperation

3.3.1 Trade Surplus

Consistently, China maintained a trade surplus with various CEE countries, indicating that its exports to these nations surpassed imports from them. According to statistics from the Chinese Ministry of Commerce in 2019, China experienced a trade deficit solely with Slovakia and North Macedonia, amounting to around \$3.05 billion and \$10 million, respectively. However, like most other CEE countries, China sustained significant trade surpluses. Particularly noteworthy were the substantial surpluses with Poland, the Czech Republic, and Greece, amounting to \$19.93 billion, \$8.34 billion, and \$7.01 billion, respectively. Although trade surpluses with other regional nations remained below \$3 billion, this persistent trade imbalance raised concerns among CEE nations. Therefore, rectifying this imbalance is essential to promote more sustainable and mutually beneficial trade relations between China and the CEE region.

3.3.2 The Structure of Trade Products Needs to be Adjusted

According to Cui and Li (2018), from 2012 to 2017, there were no changes in the top ten traded goods between China and CEE countries. All of them were heavy industrial products and light industrial products. The proportion of trade volume of the top ten goods decreased by only 0.61%. Similarly, there were no significant changes in the top ten goods in terms of import and export trade volume, with a decrease in proportion of only 0.33% and 0.78% respectively. Therefore, although the structure of trade products is gradually optimizing, the process is slow.

Furthermore, there is a slight lack of expansion in the trade product sectors. Compared to the 5113 commodities under the HS six-digit code, the number of products imported by China from CEE countries increased by only 300 from 2012 to 2017, reaching 2932, accounting for 57.34% of the total global commodities and 62.61% of China's total imports. The number of exported goods increased by only 100 from 2012 to 2017,

reaching 3470, accounting for 67.87% of the total global commodities and 74.56% of China's total exports. Overall, the expansion of trade goods categories between the two sides is relatively slow, and the structure of trade products still needs optimization and adjustment.

3.3.3 Market Environment Needs Improvement

Firstly, in CEE, EU standards are widely adopted, demanding strict compliance and covering a broad range of areas. This necessitates Chinese companies to invest greater effort and resources to adapt to these new regulations, thereby encountering higher cooperation barriers. CEE imposes stringent criteria and conditions for market access, technology, and personnel. For instance, foreign enterprises are required to meet local qualifications and obtain corresponding certificates before engaging in direct investment. Not only are the certification procedures complex, but the associated costs are also relatively high, significantly increasing the entry and operational burdens for Chinese companies in the CEE market.

Moreover, as some CEE countries are still in the process of refining their market mechanisms, there remains ample room for improvement in the regulatory and transparency aspects of their foreign policies.

3.3.4 Cross-cultural Barriers Persist

The social and cultural environment of the region encompasses various factors such as language, beliefs, customs, and values. Due to the significant geographical distance between CEE and China, as well as substantial differences in their historical development processes, both sides have markedly different social foundations and cultural traditions. This not only leads to certain barriers in communication and exchange but also makes the differences in business conduct standards likely to cause inadvertent breaches of taboos by Chinese companies, thereby adversely affecting their operations.

Diverse cultural backgrounds and customs shape different values and ways of thinking, and these differences directly impact the operational and managerial efficiency of Chinese companies in CEE, becoming an issue that Chinese enterprises cannot afford to overlook. Furthermore, the multicultural tendencies stemming from the diverse religious compositions in the region make market behaviors and preferences in CEE increasingly complex, thereby invisibly increasing the workload and difficulty for Chinese companies in market positioning and investment decision-making.

3.3.5 Geopolitical Ambitions and Political Constraints

The "Belt and Road" initiative is commonly perceived as a significant geopolitical and economic strategy. Among China's varied motivations is the desire to extend its development model to the external world through this initiative. This involves emphasizing familiar aspects of China's domestic economy, such as state-led large-scale investments and infrastructure projects (Casarini, 2016), which diverge significantly from market-driven models. This ambitious geopolitical strategy aligns closely with China's core national interests, encompassing geographical dimensions like global quests for natural resources and markets, strategically vital transit corridors, and delineated spheres of influence.

Concurrently, the "Belt and Road" initiative serves political and strategic purposes, signaling China's ambition to play a more significant role in international leadership (Wang, 2016). By challenging existing geopolitical and geoeconomic structures favorable to Western countries (Ploberger, 2017), there is widespread skepticism about China's plans. Some even define the 16+1 framework as a political rather than economic initiative (Matura, 2019). Despite China moving away from its typical planned economy, its heavy communist legacy is not universally welcomed by CEE countries. As a major beneficiary and significant stakeholder in globalization, China lacks both the incentive and capability to replace the existing order with another. There is still a long way to go in terms of normative aspirations and material capabilities.

4. Empirical Analysis

4.1 Data Source

This study selected 16 countries from CEE as research samples, namely Poland, Hungary, Czech Republic, Slovakia, Romania, Bulgaria, Albania, Slovenia, Croatia, Serbia, Bosnia and Herzegovina, North Macedonia, Montenegro, Lithuania, Latvia, and Estonia. The selected sample period ranges from 2005 to 2021. This period was chosen due to data availability constraints; data for years before 2005 and after 2021 have significant missing variables, which could potentially affect the objectivity and accuracy of the study.

The data for the dependent variable, namely stocks of China's OFDI towards CEE countries, was obtained from the Statistical Bulletin on China's Outward Foreign Direct Investment issued by the National Bureau of Statistics of China. Data on GDP (current US\$), GDP growth (annual %), school enrollment (tertiary, % gross), medium and high-tech exports (% of manufactured exports), net foreign assets (current LCU), total natural resources rents (% of GDP), and rail lines (total route-km) were sourced from the World Development Indicators (WDI) database. Economic Freedom data was retrieved from The Heritage Foundation database. Political Stability and Absence of Violence/Terrorism estimates were obtained from the World Governance Indicators (WGI) database. The State Fragility Index was sourced from the Fund for Peace database, while the Corruption Perceptions Index was obtained from the Transparency International database.

4.2 Variables and Assumptions

Building upon the literature review conducted earlier, this section primarily integrates Dunning's theory of four seeking motives with institutional quality to explore the determinants of China's OFDI in the CEE region. Table 2 outlines the proposed determinants of OFDI pertinent to Chinese enterprises. These determinants are

categorized into four distinct motivations: market-seeking, resource-seeking, efficiency-seeking, and strategic asset-seeking. The variables representing these determinants and their respective data sources are also provided.

4.2.1 Dependent Variable

This dissertation selected the stock of China's OFDI in CEE countries as a measure, which is considered a more precise indicator for assessing the distribution of FDI locations (Kang and Jiang, 2012). In comparison to the annual flow values of China's OFDI to CEE countries, it exhibits less volatility, making it easier to model and with fewer missing data issues (Cheung and Qian, 2009). Therefore, this paper analyzed the annual stock data of OFDI.

4.2.2 Independent Variables

Market-seeking variable: Some researchers (Krifa-Schneider and Matei, 2010; Rodríguez and Bustillo, 2011) have identified market size as a determinant of market-seeking FDI, with per capita gross domestic product (GDP) or per capita gross national income (GNI) often used to measure market size. Therefore, this paper selected per capita GNI as the indicator to measure the market-seeking motive, as it accounts for population size and wealth distribution, per capita income is a more accurate measure of a nation's economic growth than per capita GDP (Shah, 2023). It was anticipated that higher per capita GNI levels in the host country would lead to greater investment from China. However, due to the influence of other factors, per capita GNI in CEE may not necessarily correlate positively with China's OFDI.

Furthermore, as mentioned in the literature review, for CEE countries, Chinese firms may be interested not only in the domestic market but also in accessing the larger European Union market. So this dissertation incorporated the exports of individual CEE countries to the EU into the model and expected this indicator to be positively correlated with China's OFDI.

Efficiency-seeking variable: The tertiary enrollment rate was sourced from the World Bank database and quantified as the "gross enrollment ratio," which signifies the proportion of total enrollment, irrespective of age, relative to the population within the corresponding age bracket for the specified educational level. Tertiary education, typically requiring successful completion of secondary education as a minimum admission requirement, includes advanced research qualifications (World Bank, 2018). It was anticipated that higher enrollment rates would correlate positively with China's inclination to invest, driven by the attraction of its skilled labor force, thereby enhancing labor efficiency and quality.

Strategic-asset seeking variable: This study selected the proportion of medium and high-tech product exports to total manufactured exports and net foreign assets as indicators of strategic asset seeking. For a country, a higher level of technological development indicates stronger manufacturing capabilities and competitiveness in the market, leading to better investment returns. Moreover, a higher level of technological development in the host country can result in technology spillover effects (Franco, 2013), promoting the technological advancement of Chinese investing enterprises and thus attracting Chinese firms to invest in them. Additionally, the indicator of net foreign assets (NFA) can illustrate a country's financial assets, which to some extent influences the inflow of foreign direct investment and the choices of investors from various countries (Mohieldin, Mohamed and Chahir, 2020). The NFA position indicates whether the nation is a net creditor or debtor to the rest of the world. A positive NFA balance indicates that it is a net lender. Moreover, if a country's net foreign assets indicator consistently and significantly remains positive, it may increase the relative foreign exchange value of its currency, as it signifies a robust overall economy, making it more appealing for Chinese investments.

Resource-seeking variable: Total natural resources rents (% of GDP) was chosen in the study to measure the indicator of resource-seeking motivation. Total natural resources

rents represent the aggregate of oil rents, natural gas rents, coal rents (both hard and soft), mineral rents, and forest rents, and can indicate a country's level of resource abundance (World Bank, 2022). As per the literature review in earlier sections, it is known that the CEE region is not inherently endowed with natural resources. Therefore, it is assumed that the natural resources of CEE countries lack the potential to attract Chinese foreign investment, and it is expected that the Total natural resources rents indicator would be insignificant.

Formal institutions encompass various aspects, including political and judicial regulations, economic principles, and contractual agreements, as outlined by North (1990). These institutions delineate the hierarchical framework of governance, decision-making processes, and aspects of agenda control within the political system. Economic rules establish property rights, defining the rights associated with property usage, income generation, and asset transfer, while contracts specify the terms of exchange. Therefore, in this study, economic freedom and political stability indicators are used to proxy the economic and political aspects of formal institutions, respectively. Political Stability and Absence of Violence/Terrorism measure perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism (World Bank, 2010). This can more comprehensively reflect the overall performance and efficiency of the political system and the law. The Economic Freedom indicator is sourced from the Heritage Foundation, which evaluates scores for "every human to control his or her own labor and property" and is mainly obtained through four components: Rule of Law (property rights, government integrity, judicial effectiveness); Government Size (government spending, tax burden, fiscal health); Regulatory Efficiency (business freedom, labor freedom, monetary freedom); and Open Markets (trade freedom, investment freedom, financial freedom) (Foundation, 2023).

However, in speculating on the relationship with Chinese OFDI, many studies have also indicated that China's OFDI is more easily attracted to countries with high political

risk (Buckley et al., 2007; Kolstad and Wiig, 2012; Amighini et al., 2014; Li, Liu and Jiang, 2015; Li, Hu and Deng, 2019). As indicated in the literature review section above, this could be either positively or negatively correlated.

Informal institutions variable: Representative of informal institutions is culture, which encompasses the customs, beliefs, and values passed down through generations of ethnic, religious, and social groups. Changes in these informal institutions typically occur slowly and do not immediately respond to changes in formal rules (Guiso, Sapienza, and Zingales, 2006; Williamson, 2000; North, 1990). Furthermore, widely recognized types of informal institutions appearing in the literature include trust, social networks and corruption (Mondolo, 2018). Therefore, this study selects the State Fragility Index and Corruption Perceptions Index to describe the influences of culture and corruption, respectively. The State Fragility Index includes the Group Grievance Indicator, which focuses on divisions and schisms between different groups in society (The Fund for Peace, 2019). It indicates that tensions between identity groups divided by language, religion, race, ethnicity, nationality, class, caste, clan, or region of origin may escalate into conflicts, thereby leading to state fragility. The state fragility index ranges from 0 (no fragility) to 120 (extreme fragility), and we hypothesize that it should be negatively correlated with Chinese OFDI. The Corruption Perceptions Index (CPI) aggregates data from various sources, providing insights into the perception of public sector corruption by business people and country experts. For data after 2012, standardized data sources are on a scale of 0-100, where 0 equals the highest level of perceived corruption and 100 equals the lowest level. Before 2012, due to different calculation methods, scores ranged from 0 (highly corrupt) to 10 (very clean). It is anticipated that Chinese OFDI is positively correlated with these scores.

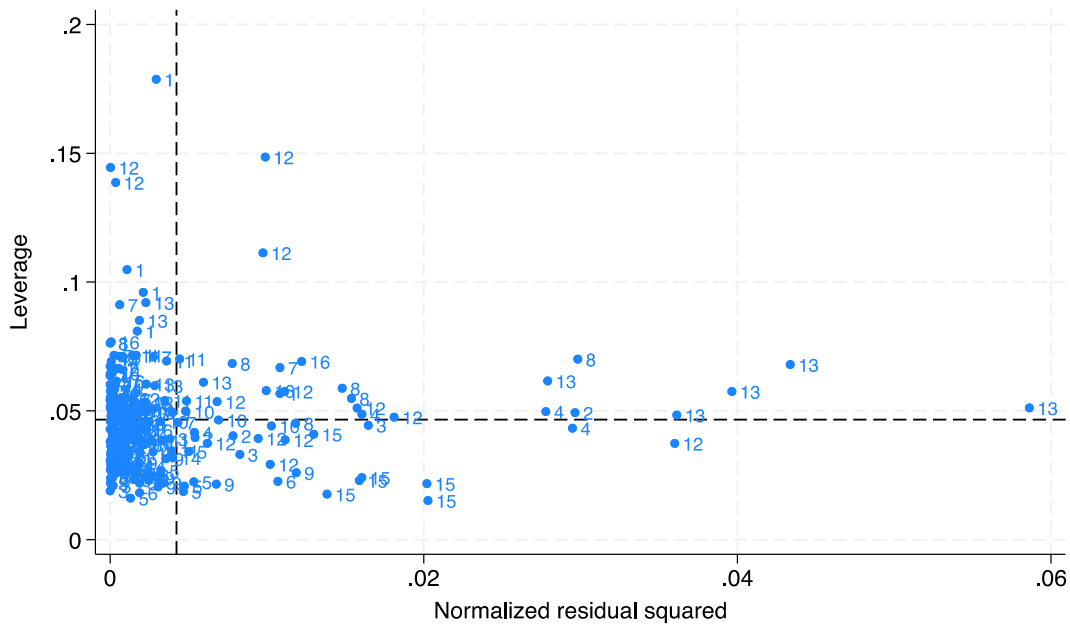
Specifically, this part will detail the relevant information on variables, including description, motivation category, sources and assumptions, as shown in Table 2. Additionally, considering that taking the logarithm of variables can help alleviate

heteroscedasticity and increase stationary (see Appendix 1), China's OFDI stocks towards each CEE country, the exports to EU-27 countries and net foreign assets were logarithmically transformed.

Table 2 Variables

Determinants	Description	Motivation category	Source	Assumptions
IOFDI	China's Foreign direct investment stock to CEECs	/	Statistical bulletin of China's outward foreign direct investment	/
IEXP	Exports to EU-27 countries	Market-seeking	UN Comtrade Database	+
PGNI	GNI per capita (constant 2015 US\$)	Market-seeking	World Development Indicators (WDI)	+/-
SET	School enrollment, tertiary (% gross)	Efficiency-seeking	WDI	+
TECH	Medium and high-tech exports (% manufactured exports)	Strategic-asset seeking	WDI	+
INFA	Net foreign assets (current LCU)	Strategic-asset seeking	WDI	+
TRES	Total natural resources rents (% of GDP)	Resource-seeking	WDI	+
EF	Economic Freedom	Formal institutions	The heritage foundation	+/-
POLI	Political Stability and Absence of Violence/Terrorism: Estimate	Formal institutions	World Governance Indicators (WGI)	+/-
SFI	State Fragility Index	Informal institutions	The Fund for Peace	-
CPI	Corruption Perceptions Index	Informal institutions	Transparency International	+

Figure 11 Leverage-versus-squared-residual Plot



The presence of outliers in the model is then checked using the leverage vs. squared residual plot shown in Figure 11. There is three obvious observation (8&12&13) and that slightly exceed the boundary. Nevertheless, considering the limited presence of outliers and the substantial Chinese OFDI share attributed to Slovenia, North Macedonia, and Montenegro, represented by 8, 12, and 13 respectively, their inclusion was deemed necessary to maintain data representativeness. Consequently, they were retained, and more robust methodologies were employed in subsequent data analyses to mitigate outlier-induced disruptions. Consequently, the panel data utilized in this study may possess certain shortcomings, leading to limitations within the model.

4.3 Methodology

To ascertain which explanatory variables play a decisive role in China's OFDI in the CEE region, regression analysis will be conducted in this study. To develop and estimate the model, a general-to-specific approach was employed for panel data analysis, involving three tests: the Chow F-test, Breusch-Pagan LM test, and Hausman test. Subsequently, a two-way fixed effects model was deemed suitable, accounting for

both time and country effects. Following regression, further post-estimation analysis was conducted. Thus, the model is as followed:

$$\begin{aligned}
 lOFDI_{it} = & \alpha_i + \beta_1 lEXP_{it} + \beta_2 lPCGDP_{it} + \beta_3 TECH_{it} + \beta_4 INFA_{it} \\
 & + \beta_5 TRES_{it} + \beta_6 SET_{it} + \beta_7 EF_{it} + \beta_8 POLI_{it} \\
 & + \beta_9 SFI_{it} + \beta_{10} CPI_{it} + \varepsilon_{it}
 \end{aligned}$$

Where $\varepsilon_{it} = \mu_i + \lambda_j + \gamma_{it}$. μ_i is the unobserved country-specific effects; λ_j is the unobserved time-specific effects; and γ_{it} is the remaining stochastic disturbance term.

4.4 Model Estimations

4.4.1 Provisional Analysis

This section employs Stata to conduct a descriptive analysis of the variables mentioned earlier, aiming to better understand their fundamental characteristics.

Table 3 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
IOFDI	272	7.267	2.293	2.303	11.694
IEXP	272	23.187	1.741	18.602	26.192
PGNI	272	10771.9	5282.4	2728.7	24138.2
TECH	272	46.545	18.252	3.557	78.564
INFA	243	24.564	2.647	16.216	30.161
TRES	272	1.125	.875	.137	5.714
SET	272	60.194	14.585	22.122	95.627
EF	264	65.82	5.71	48.8	79.1
POLI	272	.416	.492	-1.156	1.149
SFI	272	53.863	12.82	25.8	88.5
CPI	272	30.738	23.42	2.4	75

The logarithm of China's OFDI stock in CEE countries was analyzed first. Disparities among the various countries were significant, with the maximum value being 11.694 and the minimum value only 2.303, indicating a concentration of investment in certain

CEE countries. Among the traditional macro variables, there were substantial disparities in almost all variables across countries. Especially in the variable of PGNI, the minimum value was 2728.721, while the maximum was 24138.186. In the case of the four institutional variables, differences among countries were also relatively large. For the state fragility index, the minimum value was 25.8, indicating a high level of stability, while the maximum value was 88.5, signifying a state of alertness, where conflicts may arise among societal groups with diverse cultural backgrounds.

To further ensure the accuracy of the regression results and mitigate the potential impact of correlations among variables, tests were conducted to assess the correlations between variables before conducting the regression analysis. The purpose was to identify and address any multicollinearity issues that could affect the results. The results of these tests are presented in the table below. Multicollinearity was determined based on the correlation coefficient between variables, with coefficients closer to 1 indicating stronger correlations. As shown in table 4, most of the correlation coefficients between variables were small, indicating a low likelihood of multicollinearity.

Table 4 Pairwise Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) IOFDI	1.000						
(2) IEXP	0.654	1.000					
(3) PGNI	0.233	0.560	1.000				
(4) TECH	0.548	0.766	0.662	1.000			
(5) INFA	0.460	0.413	-0.089	0.305	1.000		
(6) TRES	-0.087	-0.134	-0.406	-0.408	0.056	1.000	
(7) SET	0.220	0.347	0.629	0.258	-0.134	-0.133	1.000
(8) EF	0.146	0.276	0.466	0.299	-0.052	-0.203	0.421
(9) POLI	0.278	0.562	0.784	0.614	0.022	-0.359	0.602
(10) SFI	-0.318	-0.534	-0.877	-0.620	0.078	0.423	-0.652
(11) CPI	0.427	0.213	0.400	0.261	-0.023	-0.199	0.317

	(8)	(9)	(10)	(11)
(8) EF	1.000			
(9) POLI	0.435	1.000		

(10) SFI	-0.555	-0.868	1.000	
(11) CPI	0.414	0.220	-0.429	1.000

Table 5 Variance Inflation Factor

	VIF	1/VIF
SFI	9.143	.109
PGNI	6.174	.162
POLI	5.148	.194
TECH	3.913	.256
IEXP	3.478	.287
SET	2.29	.437
EF	1.8	.556
CPI	1.787	.56
INFA	1.645	.608
TRES	1.458	.686
Mean VIF	3.684	.

Moreover, the variance inflation factor (VIF) offers an additional means to evaluate multicollinearity among the variables. Following empirical guidelines: if $0 < VIF < 10$, the model does not exhibit multicollinearity; if $10 \leq VIF < 100$, there is a strong multicollinearity issue in the model; if VIF equals or exceeds 100, the model suffers from severe multicollinearity. As indicated in Table 5, the VIF values for each variable are below 10, indicating that the subsequent regression analysis can proceed.

4.4.2 Model Specification

In the process of model selection for analysis, tests were used to compare the pooled model (PLS), the country-fixed effect model (FE), the country and time-fixed effect model (two-way fixed effects), and the random effect model, to make an appropriate model selection.

Testing for Pooled Model vs. Fixed Effect Model

In the comparison between the PLS and FE models, an F-test was conducted. According to the table 6, the p-value of the F-test was 0.000, indicating significance at the 1%

level. Therefore, we have sufficient reason to reject the null hypothesis that "the pooled regression model is acceptable," and conclude that the fixed effects model aligns with the data model of this study.

H0: Pooled model
H1: Country fixed effect model

Table 6 F Test Result

F test that all $u_i=0$: $F(15, 210) = 15.54$
Prob > F = 0.0000

Testing for Pooled Model vs. Random Effect Model

In this section, we will compare the pooled model and the random effects model using the Breusch-Pagan Lagrange multiplier test. The hypothesis for the test is as follows:

H0: Pooled model
H1: Random effect model

Table 7 Breusch-Pagan Lagrange multiplier Test

Breusch and Pagan Lagrangian multiplier test for random effects		
$lOFDI[code,t] = Xb + u[code] + e[code,t]$		
Estimated results:		
	Var	SD = sqrt(Var)
lOFDI	4.956385	2.226294
e	0.9949835	0.9974886
u	0.714459	0.8452568
Test: $Var(u) = 0$		
chibar2(01) = 89.86		
Prob > chibar2 = 0.0000		

The random effects model is favored over the pooled model due to the rejection of the null hypothesis and the attainment of a p-value of zero in the results.

Testing for Random Effect Model vs. Fixed Effect Model

As previously stated, both the fixed effects model and the random effects model are deemed more suitable than the pooled model. Subsequently, the Hausman test will be employed to compare these two models. The following assumptions and findings can be deduced:

H0: Random effect model

H1: Fixed effect model

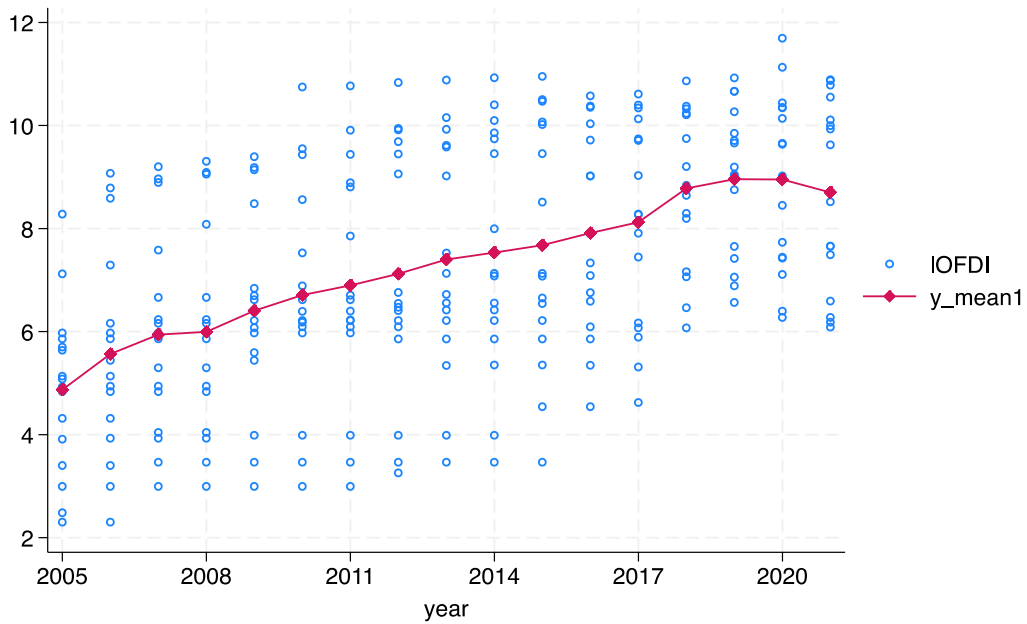
Table 8 Hausman Test

Test of H0: Difference in coefficients not systematic
$\chi^2(10) = (b-B)'[(V_b - V_B)^{-1}](b-B)$
$= 84.15$
Prob > $\chi^2 = 0.0000$
($V_b - V_B$ is not positive definite)

Based on the Hausman test outcomes presented in Table 8, the P-value is 0.0000, which falls below 0.01. Consequently, the null hypothesis of the random effect model is rejected, affirming that the fixed effect model is more suitable.

Additionally, apart from fixed effects, we also need to consider the impact of time on the model. Firstly, analyzing time heterogeneity reveals that there is fluctuation in the logarithm of Chinese OFDI over time, indicating time heterogeneity. The general trend suggests a gradual increase in Chinese OFDI over the years. However, the decision to include time-fixed effects in the model should be based on formal tests following these visual examinations.

Figure 12 Heterogeneity Analysis Across Times



As illustrated in Figure 12, an additional examination is necessary to assess the inclusion of time-fixed effects. To ascertain whether time-fixed effects are warranted, time dummy variables were created and subjected to testing using the testparm command following regression with these variables. The outcome dismisses the null hypothesis that all year coefficients are collectively zero, thus indicating the necessity of time fixed effects.

H0: All years coefficients are jointly equal to zero
H1: All years coefficients are not jointly equal to zero

Table 9 Testparm Result

(1)	year_1 = 0
(2)	year_2 = 0
(3)	year_3 = 0
(4)	year_4 = 0
(5)	year_5 = 0
(6)	year_6 = 0
(7)	year_7 = 0
(8)	year_8 = 0
(9)	year_9 = 0

(10)	year_10 = 0
(11)	year_11 = 0
(12)	year_12 = 0
(13)	year_13 = 0
(14)	year_14 = 0
(15)	year_15 = 0
(16)	year_16 = 0
F(16, 194)	4.00
Prob>F	0.0000

The specific results are presented in the table below:

Table 10 The Result of Models

VARIABLES	Pooled Model	Country-fixed Effect	Two-way fixed Effect	Random Effect
	IOFDI	IOFDI	IOFDI	IOFDI
IEXP	0.6296*** (6.38)	0.6537*** (3.27)	0.3323* (1.66)	0.4362*** (2.97)
PGNI	-0.0003*** (-5.78)	0.0002** (2.13)	-0.0003** (-2.35)	-0.0000 (-0.38)
TECH	0.0370*** (3.81)	0.0774*** (6.05)	0.0699*** (5.79)	0.0626*** (5.33)
INFA	0.1554*** (3.41)	0.2216* (1.71)	0.1380 (1.06)	0.2902*** (3.71)
TRES	-0.0528 (-0.43)	0.0042 (0.04)	0.0665 (0.57)	0.0043 (0.04)
SET	0.0343*** (3.50)	0.0775*** (6.84)	0.0643*** (5.90)	0.0672*** (6.06)
EF	-0.0777*** (-3.63)	-0.0355 (-1.04)	-0.0786** (-2.38)	-0.0145 (-0.49)
POLI	-0.4397 (-1.05)	-1.3012*** (-3.22)	-0.9496** (-2.44)	-1.4016*** (-3.52)
SFI	-0.0495** (-2.30)	0.0607* (1.81)	0.1445*** (4.06)	0.0340 (1.18)
CPI	0.0388*** (7.23)	0.0252*** (4.70)	0.0434** (2.11)	0.0307*** (6.23)
Constant	-5.4121* (-1.79)	-24.4817*** (-3.85)	-13.7262** (-2.14)	-17.9097*** (-4.20)
Country Fixed Effects	NO	YES	YES	NO
Time Fixed Effects	NO	NO	YES	NO

Observations	236	236	236	236
Adjusted R-squared	0.622	0.619	0.714	0.600
Number of Code		16	16	16

t-statistics in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Based on the model specification process and the R-square value for the two-way fixed effects model, which indicates that 71% of the variability observed in the target variable is explained by the two-way effect model and is higher than the R-square of other models, all these suggest that the two-way fixed effects model is more appropriate than other models. Crucially, the two-way linear fixed effects regression on panel data has emerged as the standard approach for estimating causal effects. Numerous researchers favor this method as it allows for the simultaneous control of unobserved unit-specific and time-specific confounding variables (Imai and Kim, 2020). Consequently, it can be contended that the data are most appropriately modeled using the two-way effects model.

Due to the aforementioned outliers and some defects of panel data itself, it is necessary to further post estimation analysis after regression and adopt more robust methods.

4.4.3 Post Estimation Analysis

This part will conduct additional analysis after estimation, which will involve examinations for heteroskedasticity, cross-sectional dependence, and autocorrelation.

Heteroskedasticity Test

H0: No Presence of Heteroskedasticity

H1: Presence of Heteroskedasticity

Table	11 Heteroskedasticity	Test
<hr/>		
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model		
<hr/>		
H0: $\sigma(i)^2 = \sigma^2$ for all i		
<hr/>		
chi2 (16) = 170.09		
<hr/>		
Prob>chi2 = 0.0000		
<hr/>		

Based on the results presented in Table 11, the null hypothesis is strongly rejected with a P-value of 0.0000, indicating a significance level below 0.01. Consequently, it can be concluded that the two-way fixed effect model exhibits heteroskedasticity.

Cross-sectional Dependency Test

H0: No Presence of Cross-sectional

H1: Presence of Cross-sectional

Table 12 Cross-sectional Dependency Test

<hr/>	
Pesaran's test of cross sectional independence =	-2.935, Pr = 0.0033
<hr/>	
Average absolute value of the off-diagonal elements =	0.386
<hr/>	

The findings from Table 12 reveal a P-value of 0.386, exceeding the threshold of 0.05. Therefore, it can be inferred that there is no evidence of cross-sectional dependency within the country and time-fixed effect model, as the null hypothesis stands unchallenged.

Autocorrelation Test

H0: No First-order Autocorrelation

H1: First-order Autocorrelation

Table 13 Wooldridge Test

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
F(1, 15) = 40.504
Prob > F = 0.0000

Furthermore, it is imperative to conduct an autocorrelation test in addition to the aforementioned analyses. Detecting first-order autocorrelation in a variable is crucial as it can lead to underestimated standard errors of coefficients, thereby inflating R-squared values. The null hypothesis that there is no first-order autocorrelation is rejected due to a P-value of 0.0000, falling below the significance threshold of 0.05. Consequently, the panel data exhibits first-order autocorrelation. Hence, clustered standard errors can be employed to compute heteroscedasticity- and autocorrelation-consistent standard errors in subsequent diagnostic procedures.

Table 14 Clustering model compared with Country and Time-fixed Effect model

VARIABLES	Country and Time-fixed Effect	Model after clustering
IEXP	1OFDI 0.3323* (1.66)	1OFDI 0.3323*** (3.64)
PGNI	-0.0003** (-2.35)	-0.0003 (-0.92)
TECH	0.0699*** (5.79)	0.0699*** (5.99)
INFA	0.1380 (1.06)	0.1380 (1.35)
TRES	0.0665 (0.57)	0.0665 (0.57)
SET	0.0643*** (5.90)	0.0643*** (4.84)
EF	-0.0786** (-2.38)	-0.0786* (-1.76)
POLI	-0.9496** (-2.44)	-0.9496* (-2.08)
SFI	0.1445*** (4.06)	0.1445** (2.41)
CPI	0.0434**	0.0434

	(2.11)	(1.15)
Constant	-13.7262**	-13.7262**
	(-2.14)	(-2.19)
Country Fixed Effects	YES	YES
Time Fixed Effects	YES	YES
Observations	236	236
Adjusted R-squared	0.714	0.714
Number of Code	16	16

Robust t-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

After implementing robust standard errors to account for country-level clustering, the coefficients remain consistent, with the majority of variables retaining their significance. However, the significance levels of the variables decrease compared to the model without clustering, reflecting a more realistic scenario as their standard errors increase relative to the two-way fixed effects model. Consequently, we can conclude that the final full-sample model format should be set as:

$$\begin{aligned}
lOFDI_{it} = & -13.7262 + 0.3323lEXP_{it} - 0.0003PGNI_{it} + 0.0699TECH_{it} \\
& + 0.1380INFA_{it} + 0.0665TRES_{it} + 0.0643SET_{it} - 0.0786EF_{it} \\
& - 0.9496POLI_{it} + 0.1445SFI_{it} + 0.0434CPI_{it}
\end{aligned}$$

In the full-sample analysis, it was observed that the market size represented by the host country's GNI per capita exhibited a negative correlation with China's OFDI, contrary to the initial hypothesis. This indicates that for most CEE countries, the economic potential of their local markets is not substantial. Meanwhile, it was noted that the indicator of CEE countries' exports to the EU showed a significant positive correlation with China's OFDI, which corroborates the earlier assumption regarding market seeking, suggesting that the attractiveness of the EU market is an important factor for Chinese investment there. In line with this, Ramasamy and Yeung (2020) also found a significant negative correlation between market size and China's OFDI, explaining that China's investment in the CEE region is not confined to its domestic market but aims to enter the EU market. Additionally, Mccaleb and Szunomár (2017) arrived at a similar

conclusion in their research, noting that GDP is not directly proportional to China's OFDI and attributing this phenomenon more to institutional factors.

The results find that the strategic asset-seeking motive is very strong. The research findings indicate a significant positive impact of the share of medium and high-tech exports on China's OFDI in host countries. This suggests a propensity for Chinese OFDI to flow into regions with higher levels of high-tech exports, consistent with existing literature. A study by Kılavuz and Topcu (2012) examined the impact of different import-export classifications of 22 developing countries on economic growth during 1998-2006. The results revealed that exports of high-tech manufacturing were among the few categories with a positive and significant impact on economic growth. In such cases, exporting high-tech products contributes to enhancing a country's competitiveness in the international market. Today, exporting high-tech products is considered one of the most important objectives for countries worldwide (Saray and Hark, 2015). High-tech exports to some extent measure a country's technological level. Nowadays, modern technology influences efficiency and directs FDI towards technologically advanced countries (Pantelidis and Kyrkilis, 2005). Chinese multinational firms are showing a growing interest in investing in technology within CEE nations. They perceive an opportunity to enhance their competitive edge by acquiring technology from these regions, including laser production in Lithuania, automotive industry advancements in the Czech Republic, and developments in the aviation and biotechnology sectors in Poland.

In the variable of Net Foreign Assets, the expected sign aligned with the hypothesis, showing a positive correlation with China's OFDI, albeit not significant. This suggests that the more financial assets CEE countries possess, indicated by a sustained and substantially positive net foreign asset indicator, the stronger their overall economy, making it easier to attract investors for investment in these regions.

In the variables related to resource-seeking, the variable total natural resource rents showed a positive but insignificant correlation with China's OFDI, aligning with the expected hypothesis. This indicates that China's OFDI in CEE countries was not driven by a seeking of resources, consistent with the analysis presented in the literature review earlier in the text.

Regarding the tertiary school enrollment rate, utilized as a proxy for the quality of the labor force for the efficiency-seeking motive, the results were highly significant, demonstrating a notable positive correlation. Specifically, for every one-unit increase in the school enrollment rate, China's investment in the host countries increased by 6.43%. This suggests that China's OFDI in CEE was efficiency-seeking, emphasizing the importance of labor quality and education. Moreover, compared to China, CEE countries boast higher labor quality while maintaining labor costs below the European Union average. This significantly reduces the unit cost of labor, thereby attracting foreign direct investors. This observation aligns with several scholars' research, emphasizing the comparative success of CEE countries in the transition process, partially due to the benefit of cost-effective, educated labor, which plays a significant role in attracting FDI (McCaleb and Szunomár, 2017; Carstensen and Toubal, 2004).

In terms of formal institutions, both economic freedom and Political Stability and Absence of Violence/Terrorism exhibited significant negative correlations, both at the 10% significance level. This suggests that China tended to invest in regions with deficient formal institutions, characterized by imperfect property rights, governmental and regulatory shortcomings, closed markets, and politically unstable environments. Yang, Liu, and Zhang (2016) also pointed out China's inclination to invest in politically risky developing economies, with political connections being a primary motivator for China's investment decisions in these economies. Miniesy and Elish (2017) identified weak governance in host countries as a crucial determinant of China's outbound direct investment destinations. Addressing this phenomenon, Buckley et al. (2007) provided

a corresponding explanation, suggesting that some deficiencies in China's capital markets could be translated into ownership advantages for enterprises, thus attracting investment in riskier markets. Due to the imperfections in capital markets, they could access capital at rates lower than the market rate. A critical flaw in capital markets was the prevalence of state-owned enterprises (SOEs), as these enterprises received substantial government support when investing overseas. Wang et al. (2012) even categorized the existence of SOEs as "indigenous enterprise-specific advantages." With deep government involvement, SOEs did not purely pursue profit maximization but were also driven by political objectives (Kolstad and Wiig, 2012). China also provided cheap capital to domestic enterprises through an inefficient banking system, supporting many Chinese multinational corporations. With extensive government backing, Chinese SOEs were unable to thoroughly assess foreign risks, simultaneously reducing operational risks in such unstable environments, which could also account for their investment in higher-risk markets (Voss, Buckley, and Cross, 2010; Ramasamy, Yeung, and Laforet, 2012). Additionally, Kolstad and Wiig (2012) proposed another possible rationale: Chinese multinational corporations were accustomed to adverse institutional environments, as less stringent regulations in their home country allowed for morally questionable activities, with lower risks and financial costs, potentially reducing moral costs and facilitating smoother operations in such environments.

In terms of informal institutions, the state fragility index exhibited a significant positive correlation with Chinese OFDI, indicating China's inclination towards investing in countries with fragile political systems. Based on the content encompassed in the state fragility data, this to some extent suggests that China is more inclined to invest in countries with diverse social identity groups. This is because, due to differences in language, culture, race, ethnicity, etc., societies with more diverse identity groups are more prone to conflicts compared to those with fewer cognitive groups, leading to heightened tensions and ruptures in society, thereby increasing national fragility (The Fund for Peace, 2019). The presence of diverse racial identity groups in society

indirectly implies that the country is more likely to grant visas and permanent residency permits compared to other nations. Consequently, there would be a larger scale and feedback from ethnic Chinese minorities, facilitating greater social network interactions and even investment activities (guanxi), aligning with the views of Mccaleb and Szunomár (2017). However, it's worth noting that the state fragility index only includes a subset of data related to culture, social cohesion, and other aspects. Some data from other aspects may also contribute to certain interference in these results, indicating a limitation in this aspect of the study. In terms of corruption, we observed that the Corruption Perceptions Index aligned with the expected hypothesis but lacked a significant relationship. It's important to emphasize again that this differs from the World Bank database's control of corruption data, which primarily indicates the effectiveness of government control and prevention of corruption and is typically included in formal institutions. However, the corruption perception data reflects the perception of corruption in the environment by the general public and experts, leaning more towards informal institutions. The positive correlation in the regression results indicates China's preference for investing in environments perceived as clean by the general populace.

4.4.4 Sub-sample Test of Model

Table 15 Sub-sample Test 1: EU CEE Countries versus Non-EU CEE Countries

VARIABLES	EU CEE	Non-EU CEE
	countries	countries
	IOFDI	IOFDI
IEXP	0.8916 (0.77)	0.3709 (1.62)
PGNI	0.0002 (1.22)	0.0009 (1.16)
TECH	0.0209 (0.77)	0.0767*** (4.62)
INFA	0.1615 (1.16)	0.4548 (0.52)
TRES	0.1546	0.2654

	(0.91)	(1.47)
SET	0.0703***	0.0544**
	(5.44)	(2.33)
EF	-0.0747**	0.0047
	(-2.01)	(0.06)
POLI	-1.3400**	-0.5137
	(-2.30)	(-0.71)
SFI	0.0618	0.3220***
	(1.31)	(3.99)
CPI	-0.0171	0.1265**
	(-0.54)	(2.24)
Constant	-22.2075	-48.5730**
	(-0.77)	(-2.42)
Country Fixed Effects	YES	YES
Time Fixed Effects	YES	YES
Observations	162	74
Adjusted R-squared	0.869	0.910
Number of Code	11	5

*** p<0.01, ** p<0.05, * p<0.1

As mentioned in the literature review, CEE countries, as representatives of transition economies, exhibited heterogeneity among them due to differences in the implementation of transition policies. Those CEE countries that lagged behind in implementing transition policies delayed their accession to the EU, thereby affecting their ability to attract FDI (Clegg and Voss, 2012). Therefore, this section divided the 16 countries into two groups according to the classification by the European Commission: EU CEE countries and Non-EU CEE countries, for separate analysis. EU CEE countries included Slovakia, Slovenia, Croatia, Lithuania, Latvia, Estonia, Poland, Romania, Hungary, and Bulgaria. Non-EU CEE countries comprised Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia.

As evident from the findings, the R-squared values for the models of EU CEE countries and Non-EU CEE countries are 0.869 and 0.910, respectively. These values are close to 1, suggesting a strong fit for the models. Hence, it is advisable to structure the subsample model as follows:

For EU CEE Countries:

$$\begin{aligned} lOFDI_{it} = & -22.2075 + 0.8916lEXP_{it} + 0.0002PGNI_{it} + 0.0209TECH_{it} \\ & + 0.1615INFA_{it} + 0.1546TRES_{it} + 0.0703SET_{it} - 0.0747EF_{it} \\ & - 1.34POLI_{it} + 0.0618SFI_{it} - 0.0171CPI_{it} \end{aligned}$$

For Non-EU CEE Countries:

$$\begin{aligned} lOFDI_{it} = & -48.573 + 0.3709lEXP_{it} + 0.0009PGNI_{it} + 0.0767TECH_{it} \\ & + 0.4548INFA_{it} + 0.2654TRES_{it} + 0.0544SET_{it} + 0.0047EF_{it} \\ & - 0.5137POLI_{it} + 0.322SFI_{it} + 0.1265CPI_{it} \end{aligned}$$

The regression results reveal that neither market-seeking nor resource-seeking motives were significant for the two groups of regressions. Instead, a preference for investing in non-EU countries was observed for strategic asset-seeking motivations. A potential explanation for this finding is supported by the work of Ciupagea and Moncada-Paternò-Castello (2006), who indicated that compared to non-EU countries, EU nations have a smaller proportion of output in highly R&D-intensive industries. This is particularly evident in the sectors of IT hardware, as well as software and computer services. Combined, IT hardware and software, along with computer services, account for merely 3.3% of the top EU companies' sales on the scoreboard, in contrast to 15.5% for non-EU firms. There are only 38 EU corporate groups active in the IT hardware field, compared to 107 non-EU groups declaring activity in this sector. This suggests that non-EU countries exhibit higher efficiency in the production of technological products and perform better in the market, thereby attracting Chinese investors. In terms of efficiency-seeking motives, a significant preference for the labor quality in CEE EU member states by Chinese OFDI is clearly observed, indicating that the higher labor quality in EU countries is more attractive to Chinese investors.

In the variables related to institutional quality, it can be observed that Chinese OFDI was more sensitive to the formal institutional variables in EU member states and to the

informal institutional quality in non-EU member states. It is evident that China was more attracted to the deteriorating economic and political institutions in EU member states. In terms of informal institutions, Chinese investment tended to favor non-EU countries with higher state fragility index scores. This could be attributed to the relaxed visa and residency permit systems in these non-EU countries, which led to a higher proportion of diverse ethnic and social groups, facilitating the formation of social networks. The significance of the Corruption Perceptions Index (CPI) exhibits a significantly positive correlation in non-EU countries, indicating that these countries are perceived to have lower levels of corruption by the public, thus making them more attractive to Chinese investors.

Table 16 Sub-sample Test 2: Baltic Countries versus Visegrad Group and Slovenia versus Balkans Countries

VARIABLES	Baltic countries	Visegrad Group and Slovenia	Balkans countries
	IOFDI	IOFDI	
IEXP	5.6295 (0.48)	-1.4403 (-0.56)	0.3603* (1.73)
PGNI	-0.0003 (-0.32)	0.0010** (2.47)	-0.0002 (-0.79)
TECH	-0.1071 (-0.56)	0.1628** (2.43)	0.0584*** (4.15)
INFA	0.5340 (0.98)	0.1701 (0.83)	0.2004 (0.44)
TRES	2.3307 (0.97)	-0.2172 (-1.19)	0.0859 (0.52)
SET	0.0917** (2.60)	0.0338 (0.95)	0.0449*** (2.66)
EF	-0.1032 (-0.33)	-0.0194 (-0.29)	-0.0782 (-1.39)
POLI	0.3855 (0.10)	-2.2360** (-2.25)	-1.1231** (-2.33)
SFI	0.4190 (0.88)	0.0697 (0.78)	0.2655*** (4.06)
CPI	0.0299 (0.12)	-0.0273 (-0.54)	0.0197 (0.53)

Constant	-148.8608 (-0.51)	14.7361 (0.23)	-21.6933* (-1.66)
Country Fixed Effects	YES	YES	YES
Time Fixed Effects	YES	YES	YES
Observations	38	77	121
Adjusted R-squared	0.887	0.915	0.886
Number of Code	3	5	8

*** p<0.01, ** p<0.05, * p<0.1

Considering the geographical distribution and economic development characteristics of these 16 countries, they can be divided into three blocs. The first bloc consists of the Baltic States, namely Estonia, Latvia, and Lithuania. The second bloc comprises the Visegrad Group and Slovenia, consisting of Poland, Czechia, Slovakia, Hungary, and Slovenia. The third bloc encompasses the Balkan countries, including Romania, Bulgaria, Serbia, Croatia, Bosnia and Herzegovina, Montenegro, North Macedonia, and Albania, totaling eight countries.

As evident in the outcomes, the R-squared values for the Baltic countries model, the Visegrad Group and Slovenia model, and the Balkans countries model are 0.887, 0.915, and 0.886, respectively, nearing 1. These values signify a strong fit for the models. Therefore, it is recommended to structure the three sub-sample models as follows:

For Baltic Countries:

$$\begin{aligned}
LOFDI_{it} = & -148.8608 + 5.6295IEXP_{it} - 0.0003PGNI_{it} - 0.1071TECH_{it} \\
& + 0.534INFA_{it} + 2.3307TRES_{it} + 0.0917SET_{it} - 0.1032EF_{it} \\
& + 0.3855POLI_{it} + 0.419SFI_{it} - 0.0299CPI_{it}
\end{aligned}$$

For Visegrad Group and Slovenia:

$$\begin{aligned} lOFDI_{it} = & 14.7361 - 1.4403lEXP_{it} + 0.001PGNI_{it} + 0.1628TECH_{it} \\ & + 0.1701INFA_{it} - 0.2172TRES_{it} + 0.0338SET_{it} - 0.0194EF_{it} \\ & - 2.2360POLI_{it} + 0.0697SFI_{it} - 0.0273CPI_{it} \end{aligned}$$

For Balkans Countries:

$$\begin{aligned} lOFDI_{it} = & -21.6933 + 0.3603lEXP_{it} - 0.0002PGNI_{it} + 0.0584TECH_{it} \\ & + 0.2004INFA_{it} + 0.0859TRES_{it} + 0.0449SET_{it} - 0.0782EF_{it} \\ & - 1.1231POLI_{it} + 0.2655SFI_{it} - 0.0197CPI_{it} \end{aligned}$$

Based on the regression results, overall, the performance of the Baltic States was not favorable, except for the quality of labor force, as almost all variables were not significant, indicating less attractiveness to Chinese OFDI compared to the other two groups. However, this could also be attributed to the small number of sample countries in this group. The performance of the Visegrad Group and Slovenia is primarily concentrated around market-seeking and strategic-seeking motives, while also being attracted by the deteriorating quality of political institutions within this group. On the other hand, the variables for the Balkan countries display the most significant correlations, showing the strongest responsiveness to Chinese OFDI.

In terms of market motives, it was found that, apart from the Visegrad Group and Slovenia, the market size represented by per capita GNI in the other two groups showed a negative correlation with Chinese OFDI. The rise of domestic markets in the Visegrad Group and Slovenia has become a noteworthy incentive for Chinese FDI in this cluster. Specifically, the four countries within the Visegrád Group, characterized by their high-income status and remarkably high Human Development Index, have experienced consistent economic expansion for more than a century, amassing considerable market opportunities. Meanwhile, in the Balkan countries, it was observed that the motive for Chinese investment extended to gaining access to the EU market.

In terms of strategic motives, it was observed that the variable of medium and high-tech exports in Balkan countries showed a significant positive correlation with Chinese OFDI, indicating that China's investment in this region relied heavily on cooperation in high-tech products and strategic sectors. For instance, in 2015, China and Albania reached a technological economic cooperation agreement. Additionally, in recent years, both parties have signed administrative cooperation and customs assistance agreements, cultural cooperation plans including cultural product collaboration, a Memorandum of Understanding on cooperation of hydraulic projects, etc. (Markovic Khaze and Wang, 2020). Additionally, the Visegrad Group and Slovenia were particularly responsive to strategic-seeking motives, likely due to their highly developed manufacturing sectors, especially in automotive technology, attracting Chinese investors to leverage their strategic resources.

In terms of resource-seeking motives, it is evident that none of the three regions showed significant results. However, it can be gleaned that China's investment motives in Baltic countries and Balkans countries at least exhibited a positive correlation. This conclusion is supported by the research of Zakić and Radišić (2019), which revealed that since 2008, investment in the energy sector in Balkans countries reached \$9.69 billion, accounting for 31.14% of all sector investments.

In terms of efficiency-seeking motives, the focus was predominantly on Balkans countries, indicating that for every 1-unit increase in tertiary enrollment rate, China's OFDI increased by 3.77%. This suggests attraction by their high-quality labor force.

In terms of institutional factors, the quality of institutions in the Baltic countries did not play a decisive role in China's OFDI. Conversely, Chinese OFDI was attracted to the Balkans countries by their poor economic and political institutions, as well as the presence of diverse ethnic groups and expandable social networks within society. In the case of the Visegrad Group and Slovenia, the attraction was not only due to their

adverse political systems but also noteworthy was the negative correlation with the Corruption Perception Index, suggesting that higher levels of perceived corruption in society more strongly attracted Chinese investment. This issue of informal social networks also played a role in promoting the formation of high-risk political systems within formal institutions to some extent. According to Chakraborty, Mukherjee, and Saha (2015), formal and informal institutions are neither parallel sets of rules nor continuous stages, but they interact and influence each other. Therefore, we link these two variables, where the widespread personal or racial networks perceived corruption can serve as substitutes for formal institutions, thus deepening the instability of formal institutions (Kiong and Kee, 1998; Park and Luo, 2001; Shafer, Fukukawa, and Lee, 2006; Tong, 2005). This may also be related to the types of Chinese enterprises investing in Visegrad Group and Slovenia, as most investments there are made by state-owned enterprises (Zakić and Radišić, 2019; Kolstad and Wiig, 2012). According to Ramasamy, Yeung, and Laforet (2012), Chinese private enterprises tend to seek opportunities abroad to escape domestic institutional constraints, hence they avoid locations with economic and political risks when choosing investment destinations, whereas state-owned enterprises are inclined to be attracted to areas with high political risks.

5. Contributions and Limitations

In aspect of contributions, firstly, in terms of research dimensions, Journal publications specifically addressing Chinese investment in CEE are scarce, with most studies either considering CEE as part of the European Union or as part of the Belt and Road Initiative countries. This study focuses on the motivations behind Chinese direct investment in CEE, providing targeted analysis in this area.

Secondly, previous research on Chinese investment in CEE has primarily emphasized traditional macroeconomic factors, with less consideration given to institutional factors. This study integrates traditional macroeconomic factors with institutional factors to conduct a relatively comprehensive analysis.

Thirdly, in the few studies that have integrated traditional and institutional factors, research on institutional quality has predominantly focused on formal institutions, particularly political institutions such as the rule of law, political stability, and democratic systems. However, due to the subjectivity of informal institutions and the challenges in quantifying data, there has been limited research in this area. This study addresses this gap by selecting two variables—culture and perception of corruption within informal institutions—and incorporating them into the analysis.

Fourthly, this study fully acknowledges the heterogeneity among the 16 countries in CEE and categorizes them into two sub-groups for a more targeted analysis. This approach yields more focused results.

Additionally, this study provides a detailed review of empirical literature on Chinese investment in CEE. The findings of this study can serve as a reference for the governments of CEE countries in formulating strategies to attract foreign direct investment and for the Chinese government to optimize its investment strategies in the region.

And several limitations that need to be considered in this study and future:

Firstly, concerning data, the focus was on the correlation between Chinese OFDI and CEE countries. Moreover, industry-specific analysis and analysis of different types of investors (state-owned vs. private enterprises) were not conducted, resulting in a predominantly macro-level analysis.

Secondly, at the methodological level, due to the author's limited research proficiency, the analysis was conducted using panel regression without considering more comprehensive models, such as multilevel logit models, to delve deeper into the dimensions of the relationship between China and CEE investments.

Thirdly, in selecting proxy variables for informal institutional factors, this study chose the Fragile State Index from the Fund for Peace database. While this database includes the Group Grievance Indicator, which focuses on societal divisions based on language, religion, ethnicity, nationality, class, and other identity groups, it also encompasses surveys leaning towards formal institutional aspects, such as the legitimacy of political systems, which may introduce certain distortions to the results. Alternatively, datasets purely focusing on informal institutions, such as the World Value Survey (WVS), the European Value Survey (EVS) and the European Social Survey (ESS) were considered. However, these datasets have inconsistent collection years and entail periodic questionnaire surveys, leading to potential data gaps. Additionally, most survey results in these databases are text-based, posing challenges for quantitative analysis in software like Stata. Thus, this study conservatively opted for the Fragile State Index.

Fourthly, in the selection of variables related to efficiency-seeking motives, only variables proxying labor quality, such as tertiary enrollment rates, were chosen, overlooking factors related to labor costs, such as hourly wages, resulting in an incomplete analysis of this factor.

Fifthly, the selection of variables related to informal institutions was not exhaustive. Variables typically associated with informal institutions, such as trust, social networks, corruption, culture, and religion, were not fully considered. While this study focused on culture and corruption, other aspects were neglected.

Sixthly, the research perspective was limited to the perspective of host countries, neglecting the analysis of factors influencing exports to CEE countries from the home country's standpoint.

Conclusions and Suggestions

This dissertation focuses on China's OFDI in CEE countries, providing a comprehensive overview of the development and current state of Chinese direct investment in these nations. Building upon the theoretical analysis in the literature, the paper empirically examines the influencing factors of Chinese investment in CEE countries both at the aggregate and subgroup levels. Based on the research conducted, the following conclusions are drawn:

Firstly, China's investment in CEE countries continues to expand, and economic and trade cooperation between the two regions deepens despite fluctuations. The initiation of the "Belt and Road" initiative, along with the impact of the United States' strategic pivot to the East and the European debt crisis, has led to a gradual increase in China's OFDI in CEE countries. Due to the economic complementarity between China and CEE countries, as well as the political assurances provided by the institutional frameworks governing their interactions, future trade relations between China and CEE countries are expected to develop favorably. This will gradually foster multifaceted and deepened cooperation between the two parties, enhancing bilateral trade levels and achieving mutual development.

Secondly, China's investment in CEE spans a wide range of industries, but there remains an issue of excessive concentration. Chinese investment in the CEE region has expanded to include infrastructure, energy, machinery manufacturing, high technology, and agriculture. Cooperation in fields such as infrastructure and equipment manufacturing has seen a steady increase. The natural resources of CEE countries are concentrated in the agricultural sector, where they possess abundant resources, particularly in agriculture, forestry, and dairy industries, giving them certain comparative advantages. However, China has not effectively tapped into these distinctive industries nor formed a resource-seeking investment motive.

Thirdly, in terms of investment regions, Poland, the Czech Republic, Serbia, Hungary, Croatia, and Romania emerged as the six primary destinations for Chinese investment at present. As of December 2021, the investment scale in these six regions accounted for 83.01% of China's total OFDI in the CEE region. Thus, there existed an issue of uneven distribution of investment regions and high concentration. Most investments were concentrated in regions with favorable geographical distribution, abundant strategic resources, and strong comprehensive labor capabilities. Meanwhile, certain Southeast European countries with immense development potential failed to attract effective attention from Chinese enterprises.

Fourthly, through empirical testing of the traditional macroeconomic factors influencing Chinese investment in CEE countries, it was found that the host country's ability to access the EU market (rather than the host country's own market), the export of medium and high-tech products, and the higher quality of the local labor force all facilitated direct investment from China into CEE countries. This indicates that the investment motives of China towards CEE countries are market-seeking, strategic asset-seeking, and efficiency-seeking. In terms of institutional factors, the unstable economic and political systems in host countries, as well as the diversity and feedback of ethnic and social groups in society (which indirectly reflect the accessibility of visas and residence permits), also promoted Chinese direct investment in CEE countries.

Fifth, within the CEE EU member states, a higher quality of labor significantly promoted China's OFDI in these countries, aiming for efficiency-seeking. For non-EU countries in the CEE region, investments were inclined towards seeking strategic resources and efficiency, possibly due to these countries' superior output efficiency in technological products. Notably, in terms of institutional quality, investments in EU member states were primarily attracted by formal institutions, specifically due to their adverse economic and political institutions; whereas, in non-EU member states, there was a greater sensitivity towards informal institutions, such as the diversity of races and

groups within society. This sensitivity to some extent reflects the higher accessibility to visas and residence permits in non-EU countries, making them more attractive for Chinese OFDI.

In the sixth analysis, examining geographical regions revealed significant national differences in China's OFDI in CEE countries. The Baltic States showed almost no significance across all variables, indicating a lack of attractiveness for Chinese investment compared to the other two groups. Within the Visegrad Group and Slovenia, China's motivations for investment primarily stemmed from domestic market and technological strategic factors. This region, belonging to the industrially developed sector of CEE, hosts numerous automobile industry factories, offering vast markets and high levels of technological development. Additionally, the high perception of social corruption in its informal institutions, coupled with unstable formal political institutions, attracted significant Chinese investment, mostly from state-owned enterprises, inclined towards poor institutions. In the Balkans, China's investment motives included market access to the EU, strategic resource-seeking, and efficiency-seeking. With slower economic growth compared to the aforementioned sectors, the Balkans exhibit a mix of industrialization and traditional agriculture, with prominent industries in the infrastructure and energy sectors. Furthermore, its high-quality and low-cost labor force serves as a significant attraction for Chinese OFDI. Simultaneously, the region's unstable formal political systems and diverse social groups also attracted considerable Chinese investment. In summary, the Visegrad Group and Slovenia, with their pronounced industrial advantages, serve as primary regions for Chinese corporate investment, while investments in Infrastructure and energy sectors primarily concentrate in the Balkan Peninsula countries.

Furthermore, based on the aforementioned analysis, this study proposes the following recommendations:

Firstly, there is a need to diversify investment fields and explore distinctive industries. The research indicates that Chinese investments in the CEE region are primarily motivated by the pursuit of the EU market, with insufficient emphasis on the exploitation of natural resources. Therefore, expanding investment fields and tapping into distinctive industries to foster multifaceted collaborations is essential. While the Baltic countries excel in the service industry, the Visegrad Group and Slovenia boast industrial prowess, and the Balkan Peninsula features a coexistence of industry and traditional agriculture. In this context, considering the comparative advantages of agriculture in the resources distributed among the CEE countries, China should fully consider these factors when investing in the region and explore distinctive industries, such as Bulgaria's rose oil and Croatia's shipbuilding industry.

Secondly, leveraging the institutional quality advantage provided by the Chinese government to expand investment cooperation is crucial. Empirical research indicates that Chinese investments in the CEE region are largely driven by a poor formal institutional orientation, stemming from the predominance of state-owned enterprises and preferential financing and risk prevention support from relevant platforms like the China Development Bank and the Export-Import Bank of China. Against the backdrop of varying national conditions among the 16 CEE countries, with a mix of developing and developed economies and diverse advantageous industries, China should strategically develop markets and tailor trade and economic cooperation plans according to the market size and characteristics of each country. Enterprises should conduct feasibility analyses and planning based on existing domestic investment experiences before engaging in cross-border investments. Simultaneously, strengthening cooperation with resource-endowed countries and increasing imports of resource-intensive products is advisable. For economically significant countries like Poland, the Czech Republic, and Hungary, deepening cooperation in high-tech industries is a future goal.

Thirdly, optimizing investment layout to further unleash investment potential is imperative. Due to the concentration of Chinese investments in the CEE region, optimizing investment layout becomes essential. Although the Balkan countries have relatively lower levels of economic development, they possess enormous economic potential, as evidenced by numerous significant variables identified in empirical studies. Enterprises should conduct thorough market research before investing, selectively targeting countries with large market sizes and low competitiveness, which facilitates economies of scale.

Fourthly, leveraging the advantage of institutional social networks is vital. The presence of diverse ethnic and national groups in society, relatively large Chinese communities, and easier accessibility to visas and residence permits, alongside good intergovernmental relations, indicate the potential for investment attraction. For instance, Hungary, home to the largest Chinese diaspora in the region, serves as a recognized factor in attracting Chinese FDI, as it represents a relationship asset that constitutes ownership advantages (Buckley et al., 2007). This research findings reveal that many Chinese investors are sensitive to informal institutional factors in host countries. This is particularly true for the non-EU country group, and Balkan country group in the subgroup analysis. Therefore, actively leveraging informal institutional advantages to expand cooperation and investment is crucial. Conversely, CEE countries can capitalize on this characteristic by actively reforming relevant visa policies, increasing the inclusiveness of multi-ethnic and multi-national countries, and attracting investment.

Fifthly, for small and medium-sized enterprises (SMEs), participation in large-scale infrastructure and financing projects may be challenging. Hence, cross-border e-commerce presents the best entry point into international markets. China can further promote its existing e-commerce platforms, such as Alibaba, Tmall International, and JD Global, in CEE countries. Additionally, for individual enterprises, establishing

independent shops on platforms like Shopee and attracting consumer attention through social networking sites like Instagram can lead to more B2B or B2C orders.

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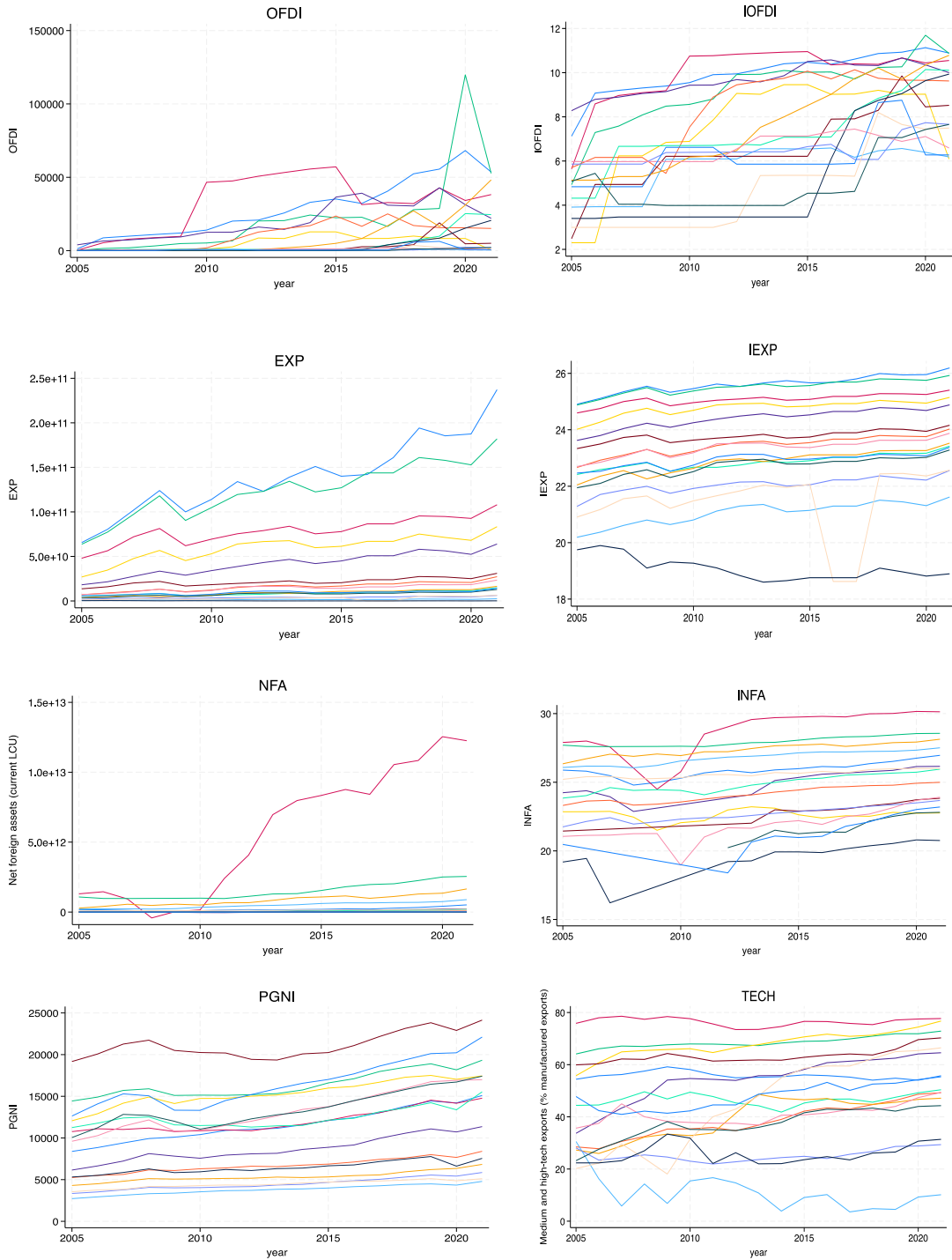
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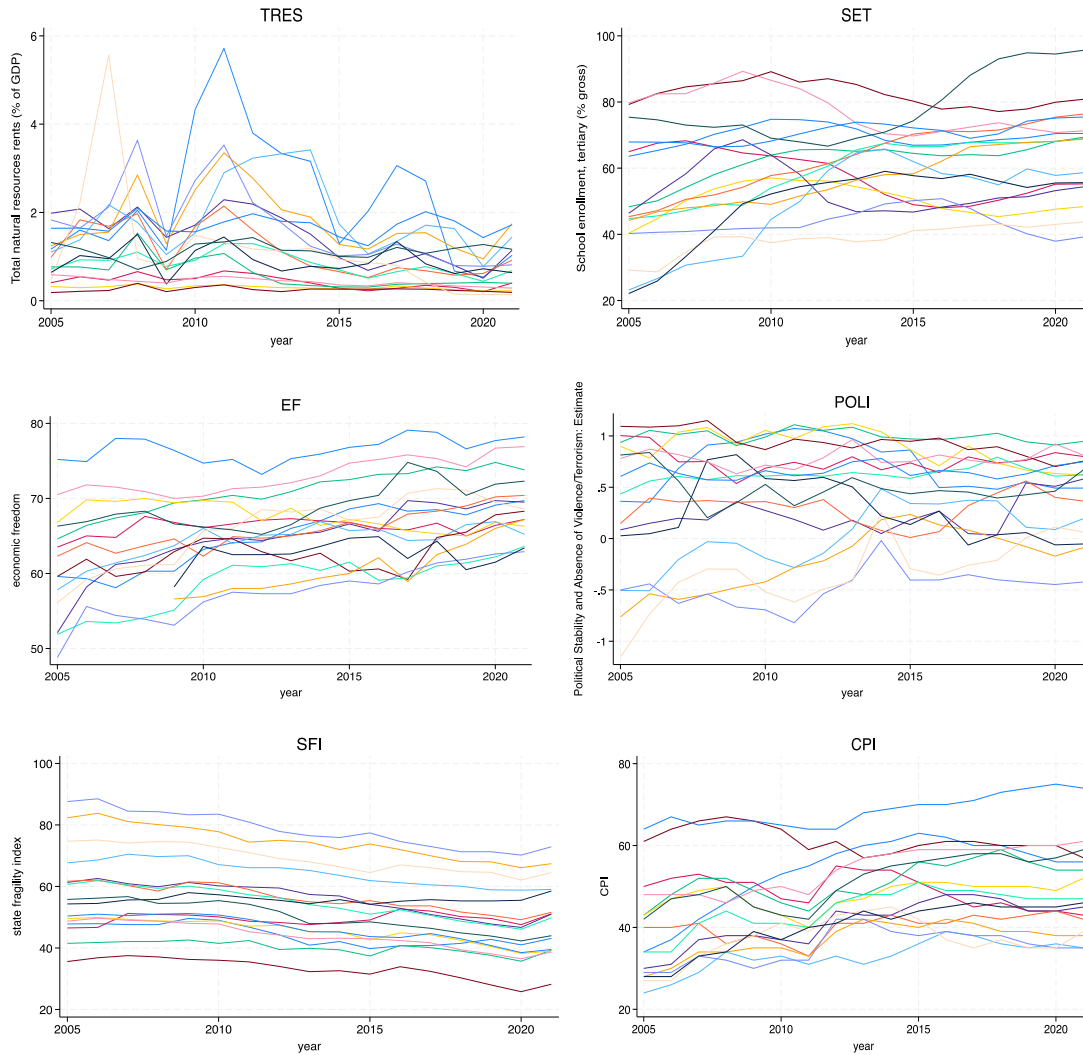
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List of Appendices

Appendix no. 1: Time Series Graphs (graph)





To provide analysis of stationarity, time series plots of the dependent and independent variables are used in this part. In order to compare the different forms of the variables, this section presents a graphical analysis of some of the variables in their original and logarithmic forms. The graphs show that the OFDI, EXP and NFA are clearly non-stationary, and that the logarithmic treatment of the OFDI, EXP and NFA has improved this problem, but they also have a certain degree of trendy characteristics. And the rest are all very stationary.

Appendix no. 2: Code (table)

1	Poland
2	Hungary
3	Czechia

4	Slovak Republic
5	Romania
6	Bulgaria
7	Albania
8	Slovenia
9	Croatia
10	Serbia
11	Bosnia and Herzegovina
12	North Macedonia
13	Montenegro
14	Lithuania
15	Latvia
16	Estonia

Appendix no. 3: Panel Data Description (table)

Panel variable: code (strongly balanced)
Time variable: year, 2005 to 2021
Delta: 1 unit

Appendix no. 4: Model Specification Testing for Panel Data Models (graph)

