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THE POLITICAL AND ECONOMIC INFLUENCE OF THE 16+1 INITIATIVE ON CEE COUNTRIES: FOCUS ON VISEGRAD GROUP

Master thesis

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Abstract

This investigates the political and economic influence of the 16+1 Initiative on Central Eastern Europe countries, particularly on the Visegrad Group countries. In the recent decade, this initiative, which serves as an economic framework between CEE countries and China, has garnered significant interest in academia and within the policy dimension due to its probable economic and political implications in the region. This study, therefore, investigates the multifaceted nature and impact of the 16+1 initiative by analysing the economic influence on FDI inflows and bilateral trade between the Visegrad Group countries and China. It also delves into the political influence of the initiative in the region.

To accomplish these objectives, this study conducts an econometric and comparative analysis of the existing FDI and trade flows data from the Eurostat database, World Bank Databases, academic journals and publications databases, and the United Nations Comrade Database. Two models are developed to aid the econometric data analysis: the fixed-effect panel model and the gravity model for trade flow. The findings of this study reveal a statistically significant positive influence of the Initiative on FDI inflows to the CEE countries (Visegrad Group) from China. The coefficient of 0.368 is recorded, highlighting that participation in the initiative is directly associated with a significant increase in FDI inflows. The findings of this study show a crucial positive relationship between bilateral trade flows and the initiative between the Visegrad Group CEE countries and China. The associative coefficient is 0.263, suggesting that the initiative has proven instrumental in bolstering trade relations. Regarding economic size and geopolitical distance, the findings indicated that more considerable distances reduced FDI inflows and trade volumes between the participating countries. Economic sizes are also significant in shaping these two variables.

Qualitative analysis of the existing perception of the potential actual objectives of the initiative shows that most policymakers believe there are hidden political interests in China. The most cited was prompting self-interest in the region from a political standpoint. The findings reveal that China's potential objective through the initiative is strengthening ties and aligning political interests with the Visegrad Group countries. This study's primary limitation is insufficient data in academic and expert reports on the political attribute of the initiative.

Abstrakt

Zkoumá politický a hospodářský vliv iniciativy 16+1 na země středovýchodní Evropy, zejména na země Visegrádské skupiny. Tato iniciativa, která slouží jako ekonomický rámec mezi zeměmi střední a východní Evropy a Čínou, vzbudila v posledním desetiletí značný zájem akademické obce i politického rozměru vzhledem k pravděpodobným ekonomickým a politickým důsledkům v regionu. Tato studie proto zkoumá mnohostrannou povahu a dopad iniciativy 16+1 prostřednictvím analýzy ekonomického vlivu na příliv přímých zahraničních investic a bilaterální obchod mezi zeměmi Visegrádské skupiny a Čínou. Zabývá se rovněž politickým vlivem iniciativy v regionu.

K dosažení těchto cílů provádí tato studie ekonometrickou a srovnávací analýzu existujících údajů o přímých zahraničních investicích a obchodních tocích z databáze Eurostatu, databází Světové banky, databází akademických časopisů a publikací a databáze OSN Comrade. Na pomoc ekonometrické analýze dat jsou vytvořeny dva modely: panelový model s fixním efektem a gravitační model pro obchodní toky. Výsledky této studie odhalují statisticky významný pozitivní vliv iniciativy na příliv přímých zahraničních investic z Číny do zemí střední a východní Evropy (Visegrádské skupiny). Je zaznamenán koeficient 0,368, který zdůrazňuje, že účast v iniciativě je přímo spojena s významným zvýšením přílivu PZI. Zjištění této studie ukazují rozhodující pozitivní vztah mezi bilaterálními obchodními toky a iniciativou mezi zeměmi Visegrádské skupiny SVE a Čínou. Asociační koeficient je 0,263, což naznačuje, že

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iniciativa se ukázala jako nástroj pro posílení obchodních vztahů. Pokud jde o ekonomickou

velikost a geopolitickou vzdálenost, zjištění ukázala, že výraznější vzdálenosti snižují příliv

přímých zahraničních investic a objem obchodu mezi zúčastněnými zeměmi. Ekonomická

velikost je rovněž významná při utváření těchto dvou proměnných.

Kvalitativní analýza stávajícího vnímání potenciálních skutečných cílů iniciativy ukazuje, že

většina tvůrců politik se domnívá, že v Číně existují skryté politické zájmy. Nejčastěji byl

uváděn podnět k vlastnímu zájmu v regionu z politického hlediska. Zjištění ukazují, že

potenciálním cílem Číny prostřednictvím iniciativy je posílení vazeb a sladění politických zájmů

se zeměmi Visegrádské skupiny. Hlavním omezením této studie je nedostatek údajů v

akademických a odborných zprávách o politickém atributu iniciativy.

Klíčová slova

Iniciativa 16+1, Visegrádská skupina, bilaterální obchod, politické zájmy Číny ve Visegrádské

skupině, ekonomické a politické korelace, ekonomické a politické korelace, FDI (přímé

zahraniční investice).

Keywords:

16+1 Initiative, Visegrad Group, Bilateral Trade, China's Political Interests in

Visegrad Group, Economic and Political Correlations, Economic and Political

Correlations, FDI (foreign direct investment).

Range of thesis: 77th

Declaration of Authorship

- 1. The author hereby declares that he compiled this thesis independently, using only the listed resources and literature.
- 2. The author hereby declares that all the sources and literature used have been properly cited.
- 3. The author hereby declares that the thesis has not been used to obtain a different or the same degree.

China... 1st Aug 2023

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As the clock strikes eleven, accompanied by the rhythmic patter of rain against the window, the culmination of my graduation thesis draws near. This period has been a journey abundant with challenges and enriched with personal growth. First and foremost, I wish to express my heartfelt gratitude to my academic supervisor Prof. Vilém Semerák, Ph.D., whose guidance and assistance have been instrumental in the crafting of this thesis.

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Embracing the next chapter of my life with confidence and excitement, I move forward, my heart full of gratitude. I am ready to fulfil my social responsibilities and obligations, committed to applying the wealth of knowledge I have gained and making a meaningful contribution to society.

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CHAPTER ONE

1.1 Background of the Study

Established in 2012, the 16+1 initiative serves as a framework and platform for cooperation enhancement between sixteen Central and Eastern European (CEE) countries and China (Jakubowski, 2018; Vangeli, 2018; Zakić and Tešić, 2018). The initiative strengthened economic, cultural, and political ties between CEE countries and China. According to Bak (2019), these ties were to be fostered through projects that relate to investment, trade, people-to-people exchanges, and trade. Based on the existing information, the initiative comprised eleven European Union (EU) member states and five non-EU members (Vangeli, 2018; Zakić and Tešić, 2018). The EU members included Bulgaria, Croatia, Estonia, the Czech Republic, Hungary, Slovenia, Slovakia, Poland, Romania, Latvia, and Lithuania. The other non-EU members who participated or participated in this initiative included Bosnia and Herzegovina, Serbia, North Macedonia, Montenegro, and Albania (Vangeli, 2018; Zakić and Tešić, 2018). Until 2019, the initiative was referred to as 16+1 until Greece joined in late 2019, resulting in a 17+1 initiative. From a broader perspective, China's participation in the 16+1 initiative has been viewed by experts and scholars as part of its wider BRI (Belt and Road Initiative), which sought to enhance and promote trade, connectivity, and investment along the classical Silk Road routes (Bielinski et al., 2019; Pepermans, 2018; Turcsányi and Qiaoan, 2020).

The 16+1 initiative provides a substantial opportunity for the Visegrad Group countries, comprising Hungary, Poland, the Czech Republic, and Slovakia, to enhance economic and political cooperation with China (Szczudlik, 2016; Turcsányi and Qiaoan, 2020; Bielinski et al., 2019). This study focuses on these countries since, historically, they have maintained robust diplomatic relations with China since the Cold War period (Bielinski et al., 2019). Furthermore, the Visegrad Group countries have significantly been receptive to Chinese investment in energy, infrastructure, and manufacturing industries, making them a suitable case study to understand the political and economic influence this relationship has had on them through the 16+1 initiative (Vangeli, 2018; Zakić and Tešić, 2018). However, despite its existence and predominance in the past decade, the initiative in a broader scope, in other words, not only in the Visegrad Group countries but also in CEE countries, has drawn multiple criticisms across academia and industry reports. Concerns, in particular, have been raised about the potential implication the initiative could have on the EU unity and China's broader geopolitical ambitions (Bielinski et al., 2019; Vangeli, 2018; Zakić and

Tešić, 2018). This has resulted in discussions on the officially stated objectives of the initiative and the actual objectives considering China's geopolitical considerations or goals within the EU region.

According to Kowalski (2017), the officially stated objectives frame the 16+1 initiative as a platform that promotes pragmatic mutual benefits and cooperation between CEE countries and China. The initiative focuses on China's commitment to increasing investment flows, enhancing trade, and fostering social and cultural exchanges with the CEE countries. Moreover, it is stated that the initiative emphasises connectivity projects, financial cooperation, and infrastructure development to promote economic development and growth in the region (Szczudlik, 2019; Kaczmarski and Jakubowski, 2015). Kowalski (2017) asserts that the 16+1 initiative, as presented on paper, depicts China as a complement to China-EU relations; however, criticism of potential actual objectives and geopolitical considerations shows that this may not be the case. For instance, Turcsányi (2020) posited that China's intents and motivations may extend beyond the stated objectives' scope. Scholars, in particular, have suggested that the initiative serves as China's broader geopolitical interest to increase its prominence and influence in Europe (Vangeli, 2018; Szczudlik, 2016; Matura, 2018). Besides, it is argued that infrastructure development, the initiative's primary focus, is a debt trap for political dependencies. Therefore, while this paper addresses the political and economic influence of the 16+1 initiative, it will also investigate both schools of thought on China's intentions.

1.2 Problem Statement

Since its establishment in 2012, three countries, namely Latvia, Lithuania, and Estonia, have stepped out of the 16+1 initiative as per 2021 statistics, and others are contemplating leaving (Bharti, 2022; Castrillón-Kerrigan, 2022). This contributes to the complexity of the evolving aspect of China-CEE relations through the initiative providing various components or arguments for this rationale. Furthermore, the pressure from keen observers, including Austria, Switzerland, the EU, Belarus, and European Bank for Reconstruction and Development, has contributed to the complexity and put the actions of China and the participating countries under scrutiny. For instance, experts, as illustrated in the background of the study above, have criticised the objectives of the study; however, these criticisms have been limited, especially concerning the political and economic influence of the 16+1 initiative (Szczudlik, 2019; Kaczmarski and Jakubowski, 2015). Therefore, through critical appraisal of both the officially stated objectives and the potential actual

objectives of the initiative, the current study aims at providing insights into China's broader geopolitical considerations and motivations. Similarly, by comprehensively understanding the possible purposes, this study offers a supplementary nuanced perspective on the initiative's implication on the CEE countries and, more specifically, the Visegrad Group countries.

Consequentially, based on its officially stated objectives, the initiative is expected to draw implications for foreign direct investment flows (FDI) and trade patterns between the Visegrad Group countries and China. By utilising the gravity-derived specifications and gravity models, this research investigation will seek to evaluate the initiative's overall impact on economic cooperation between the two and identify some of the critical drivers of both investment and trade flows. In addition, policymakers' attitudes are of fundamental significance in this research considering some countries are contemplating leaving the framework. Therefore, by exploring the reasons behind the varying perspectives among the key stakeholders within the Visegrad Group countries, this study purposes to understand and address some of the future implications of the initiative. Likewise, policymakers, academics, and businesses can get valuable insights into the motivations of the initiative for better comprehension of its significance for EU-China relations and the dynamics that characterises it regionally. It is also significant t note that businesses that operate within the region, through the potential research findings of this study, can have the ability to identify probable opportunities and challenges that may arise from the relations. From an academic perspective, the study contributes to the growing literature on the connections between CEE and China and the critical dynamics of the 16+1 initiative.

1.3 Research Aims and Objectives

This research aims to investigate the political and economic influence of the 16+1 initiative on CEE countries, focusing on the Visegrad Group countries. The secondary aim is that this study seeks to evaluate and explore both the officially stated objectives of the initiative and potential actual objectives, taking into account a perspective approach from China's side. Through its tertiary aim, this study will aim to examine the implications the 16+1 initiative has on the Visegrad Group countries by considering the policymakers' attitudes and the potential for the CEE or Visegrad Group countries to leave the framework. The objectives of the investigation are as follows:

- To critically differentiate the potential actual objectives of the 16+1 initiative from the officially stated goals for a better understanding of the political and economic influence of the initiative.
- To explore the influence of the 16+1 initiative on trade patterns between China and Visegrad countries, using the appropriate models to address potential biases.
- To examine the impact of the 16+1 initiative on FDI flows between China and Visegrad Group countries, using the appropriate models to improve the accuracy of the investigation.
- To evaluate the attitude of the Visegrad Group countries towards the initiative, accounting for their contemplation to leave or stay within the framework.

1.4 Research Questions

The following are the research questions that will guide the undertakings of this study:

- 1. To what degree do the officially state objectives of the 16+1 initiative align with the probable actual goals based on China's perspective, and how do they influence China's overall geopolitical interest in the CEE region Visegrad Group countries in particular?
- 2. How has establishing and evolving the 16+1 initiative impacted the FDI flows and trade patterns between China and Visegrad Group countries, and what are the primary determinants that influence these economic interactions?
- 3. What attitudes do policymakers within the Visegrad Group countries hold towards the 16+1 initiative, and how do they shape the prospects of the initiative's sustainability and cooperation with China?

As demonstrated above, the first research question focuses on the initiative's political influence by investigating China's general political interest in the Visegrad Group countries and the EU. The second research question examines the economic effect of the initiative and its implication on EU-China relations with a focus on the Visegrad Group countries. On the other hand, the third research question determines what policymakers think of the initiative based on the political and economic influences and how the findings impact their overall attitude towards the success or potential benefits of participating in the framework. The significance of the study is illustrated in the subsequent section.

1.5 Significance of the Study

Recognising the evolving nature and complexity of the 16+1 initiative is a first step towards acknowledging the need for critical analysis, especially from theoretical and practical aspects. This investigation considers various perspectives, accounts for the dynamic geopolitical environment, and acknowledges the potential biases that may result in the region, which are significant in this study. Through a balanced analysis, this study is essential since it avoids oversimplification and presents a comprehensive and valuable understanding of the initiative's implications on Visegrad Group Countries, overall, CEE, and China. From a practical aspect, this investigation can inform European Union's approach towards China and its policies regarding regional cooperation and the BRI initiatives through its findings. China can benefit from the results of this study since they will be able to comprehend the potential impact of the 16+1 unity on decision-making processes and EU unity. The latter will likely assist in enhancing coordination within the EU and address any potential challenges that may arise as the 16+1 initiative evolves.

In addition, through assessment of the impact of the 16+1 initiative on investment and trade, businesses and policymakers will be able to evaluate the role it has played and will play regarding infrastructure development and overall economic development. Still, differentiating between officially stated objectives and the potential benefits, this study can provide insights to governments that will be valuable in making informed decisions regarding the level of engagement within the framework and the implication of their involvement in regional stability and cooperation. Focusing on the academic or theoretical aspect, the significance of the study can be realised through the implementation of this study's findings by other scholars and academics as the foundation for further investigations, with a primary focus on EU-China relations.

1.6 Research Methodology

To achieve the research aims and objectives, this investigation adopts a mixed-method approach comprising qualitative and quantitative analysis. The quantitative process will use econometric modelling to evaluate FDI flows and trade patterns. Besides, the gravity-derived specifications will be employed to account for any potential biases in the data. The qualitative approach will gather different policymaker perspectives and attitudes towards the 16+1 initiative. The research

methodology is presented in Chapter 3 of this investigation and outlines all the steps taken during the study.

1.7 Research Structure

This study is divided into six chapters. Chapter 1 presents an introduction to the investigation and outlines the study's background, aims, objectives, and significance. Chapter 2 presents a comprehensive critical literature review of the existing knowledge on the research topic. Chapter 3 provides an extensive research methodology illustrating the steps to acquire, analyse, and report data through appropriate econometric models. Chapter 4 presents the research results of the study and appropriate analysis based on the gathered data. Chapter 5 provides an in-depth discussion of the study's main findings illustrating their significance and relating them to the existing evidence based on the literature review in Chapter 2. Chapter 6 of the study provides a summary of the key findings. It highlights the study's main objectives and hypotheses while presenting recommendations and the need for future research based on the limitations identified.

CHAPTER TWO

2.1 Introduction

While the first chapter of this study sets precedents and pace for investigating the political and economic influence of the 16+1 Initiative on CEE countries with a focus on Visegrad Group countries, this chapter provides a critical and comprehensive review. The comprehensive review aims to critically appraise and synthesise the findings from previous scholarly work or studies to provide a theoretical understanding of the key concepts, theories, and evidence on the political and economic influence of the 16+1 Initiative. It also aims to identify existing literature gaps and present a foundation for the current investigation. The chapter is divided into three sections addressing the theoretical frameworks underpinning the recent study, empirical evidence on the 16+1 Initiative, and empirical evidence reviews concerning the Visegrad Group countries. Notably, these sections are further divided into subsections to broaden the scope of the study and provide a comprehensive analysis of the different aspects of the relationship between the political and economic influence and the 16+1 Initiative.

2.2 Theoretical Framework

Several theoretical frameworks underpin the appraisal or analysis of the economic and political influence of the 16+1 Initiative on the Visegrad Group countries. This investigation draws upon three primary theoretical perspectives: trade theories, the gravity model, and international relations theories.

2.2.1 Gravity Model

Evidence emanating from existing literature on the subject area has recognised the gravity model as one of the key theoretical frameworks suitable for the bilateral trade and investment flows analysis between countries (Anderson, 2011; Karemera et al., 1999; Metin and Tepe, 2020; Van Bergeijk and Brakman, 2010). According to Metin and Tepe (2020), as a theoretical concept and framework, the gravity model postulates that the volume of trade and investment between two countries is robustly and positively associated with the economic size between them – usually measured by GDP – and inversely or indirectly proportionate to the distance that separates them. This notion or school of thought emanates from Newton's law of gravity which has been reported in literary work to suggest that two objects gain traction or are attracted to one another with a force

proportion to their masses and inversely proportional to the distance that exists between them (Shahriar et al., 2019; Marimoutou et al., 2009). Borrowing from the inspiration of Newton's law of gravity, this theoretical framework has been extensively applied in international economics and trade to investigate the determinants of work that follow and identify or predict emergent trade patterns, especially among countries (Marimoutou et al., 2009).

Gravity model predominance in international economics is associated with its empirical success and simplicity making it a valuable tool and framework for economists concerning trade potentials estimations and analysis of the impact of various factors that influence trade interactions (Anderson, 2011; Karemera et al., 1999). Studies focusing on the 16+1 Initiative have predominantly focused on and emphasised the applicability of the gravity model theoretical framework to assess the influence of the Initiative on investment flows and trade patterns between China and CEE (Aiello et al., 2010; Fan et al., 2016; Li et al., 2020). For instance, investigations by Aiello et al. (2010) and Li et al. (2020) employed the model to examine the increase in bilateral trade volumes between CEE countries and China after its launch. The primary findings of this study were that the economic size of China and the CEE countries, coupled with different factors, such as geographical proximity, contributed to the growth in their interactions based on trading patterns. Moreover, Jing et al. (2020) and Di Stefano et al. (2021) utilised the theoretical framework to evaluate the impact of the initiative trade patterns and FDI flows from CEE countries and China. The findings of both studies report a substantial rise in Chinese FDI in the region, focusing on Visegrad Group countries, particularly in the manufacturing and infrastructure sectors (Jing et al., 2020; Di Stefano et al., 2021). The gravity estimates provided in these studies further supported the assumption that guided the investigation that the 16+1 initiatives' emphasis on economic cooperation and connectivity projects implored more significant investment inflows.

A critical review of the evidence presented through the reviewed literature in the preceding paragraphs reveals that the gravity model within the context of the current investigation provides comprehensive and valuable insights into the increased investment and trade between the CEE countries and China, including Visegrad Group countries. The model is presented as an instrumental theoretical framework that establishes the presence of a positive correlation between bilateral economic interactions and factors such as geographical proximity and economic size. The results reflect the significance of the 16+1 Initiative in fostering economic cooperation while

enhancing investment and trade relations. However, it is essential to note that the model itself has inherent limitations since it does not capture the entire complexity of the factors that have an influence on trade and investment based on the observation made from the literature review and supported by additional studies, such as (Huang et al., 2020; Huang et al. 2020). Therefore, in the current study, the estimates are interpreted cautiously, considering additional contextual factors illustrated in Chapter 3 of this investigation alongside the modelling of the theoretical framework to address the main objectives of this study.

2.2.2 Trade Theories

Several trade theories present valuable theoretical frameworks to comprehend better the implications of the 16+1 initiatives on economic interactions and trade patterns between the CEE countries, focusing on Visegrad Group countries and China. Based on the reviewed literature with a primary focus on the research aims and objectives, three main theories are identified: the new trade theory, the theory of comparative advantage, and the Hechsher-Ohlin theory.

The Theory of Comparative Advantage

Proposed by David Ricardo, the theory of comparative advantage presents an argument that suggests the need for countries to specialise in the production of goods and services that offer lower opportunity costs and trade with others to obtain goods and services they cannot efficiently produce (Costinot and Donaldson, 2012; Costinot, 2009). According to Copeland and Kotwal (1996), this often results in mutual gains from economic efficiency and trade. Both findings resonate with those of Costinot (2009), suggesting that countries often benefit from comparative advantage when they focus on producing goods or services with relatively lower opportunity costs than their other trading patterns. On the contrary, while this theory highlights the gains and efficiencies of trade, critics argue that it oversimplifies the real-world complexities. Hunt and Morgan's (1995) assertions on the contrary argument reveal that the theory emphasises and makes assumptions about two-good and two-country, which according to the real-world complexities, may not reflect the complexities associated with contemporary international trade. In reality, while the theoretical framework is integral in understanding the trade patterns between China and the Visegrad Group countries, it lacks a true reflection of the modern international trade characterised by numerous countries, various factors of production, and multiple goods and services.

The contrary argument has also indicated that attributes, such as capital and labour, may not be as mobile as assumed by the theory of comparative advantage, which assumes perfect factor mobility (Prasch, 1996). According to this theory, it is considered that factors of production can move freely between countries and industries; however, it neglects the non-tariff barriers, such as regulations, quotas, and subsidies. In the context of the 16+1 Initiative, this theoretical framework explains the potential gains from increased trade between Visegrad Group countries and China. It helps in understanding the focus of different nations when producing goods and services that align with their respective comparative advantage that could result in increased efficiency and specialisation. For instance, understanding China's motivation and manufacturing capabilities and industry expertise could complement the Visegrad Group countries' service and agricultural sectors, creating potential avenues for trade in the long term.

Heckscher-Ohlin Theory

Also known as factors proportions theory, the Heckscher-Ohlin theory is a predominant and significant concept in international trade theory (Prakash and Dhir, 2023; O'Rourke, 2003; Leamer, 1995). Heckscher and Ohlin first proposed the theory according to literature in the early 20th century to explain the different trade patterns based on the diversity in endowment factors between countries (O'Rourke, 2003; Leamer, 1995). The theory postulates that countries tend to export goods that intensively use aspects of production at their disposal or have in abundance and, in the process, import goods that use factors of production that are reported to be relatively scarce (Prakash and Dhir, 2023; Jha, 2020). It is important to note that since its inception, this theoretical framework has been expanded and studied across multiple subjects to determine its implications and limitations.

Empirical evidence about the Heckscher-Ohlin theory has focused on exploring its validity by examining trade patterns and factors endowments across different countries. Studies conducted by Jha (2020) and Umair et al. (2022) mainly have presented evidence supporting the theory's prediction capability. The findings show that countries worldwide export goods that utilise their abundant factors of production more intensively. Additional investigations by Prakash and Dhir (2023) and O'Rourke (2003) have found that while the theory was initially developed to explain the trade in goods, the increasing significance of intangibles and services and the overall growth of the international business landscape have impacted its applicability. However, it is stated by

Guarascio and Stöllinger (2022) that the relevance of the theory indicates that despite the changes in the global market, its predictions extend to trade in certain knowledge-intensive goods and service sectors. Furthermore, studies that have explored the relevance of the theory on the global value chains in today's interconnected world found that the theory's assumption of factor immobility and perfect competition does not capture the complexities associated with modern trade entirely (Umair et al., 2022; Brondino, 2022).

While this theory has been explored and examined for validity and applicability, existing empirical evidence illustrates various limitations. For instance, Brondino (2023) argues that the approach presents simplistic assumptions which assume a constant return to scale, complete factor mobility, and perfect competition may not be held in the present international business landscape. As Jha (2020) posited, these simplifications may lead to predictions of trade or market conditions that do not align with the observed trade patterns, especially with the intensity of the complex global. Furthermore, the static model fails to account for changes in technological advancements, factor endowments, and shifts in comparative advantage over time. However, in the context of this study and by leveraging on the limitations of the comparative advantage theory illustrated previously, the theory could provide explanations of the composition of the trade between the Visegrad Group countries and China, as discussed in the relevant chapters of this study.

New Trade Theory

The new trade theory underscores the significance of understanding the influence of the 16+1 Initiative on CEE countries by focusing on Visegrad Group countries. This is because it challenges the traditional focus on comparative advantage and improves Heckscher-Ohlin's theory based on existing literature (Freedland, 2019; De Rogatis, 2022). The theoretical underpinnings of this theory argue that industries are characterised by the economics of scales and production differentiation (Schumacher, 2020; Uddin, 2021; Wei, 2021). As Wei (2021) noted, the theory confirms that firms that produce at a larger scale have a competitive advantage. That trade can only be influenced by the availability of differentiated products, as consumers in different markets have preferences for variety. In this topic under investigation, this theory may provide valuable insights into the Initiative's potential impact on sectors with economies of scale.

For instance, due to the increased economic cooperation between the different Visegrad Group countries and China, economies of scale may emerge in specific industries, leading to increased competitiveness and cost reductions. Besides, the 16+1 Initiative may stimulate the production and export of custom-made differentiated goods to satisfy consumers' preferences. This could diversify the trade patterns. However, while the applicability of this theory is relevant in understanding economies of scale and product differentiation, its relevance in this study may vary since the Initiative is not only dependent on these factors but also other factors, such as technological capabilities and market demand. The next chapter highlights literature on international relations theories contributing to this study's theoretical framework.

2.2.3 International Relations Theories

Four primary international relation theories were identified in the literature to inform the theoretical framework to understand the political implications of the 16+1 initiatives on the CEE countries, with the main concern being the Visegrad Group countries. They include realism, neoliberal institutionalism, constructivism, and ultimately complex interdependence theories (Knutsen, 2020; Rourke and Boyer, 2008; Viotti and Kauppi, 2019). According to literature, realism as a theory of international relations posits that countries or states act in their self-interest to maximise their power and security (Baylis, 2020; Lawson, 2023). Realism remains one of the most predominant theories in international relations. Rourke and Boyer (2008) demonstrate that it continues to shape how policymakers and scholars comprehend and interpret international politics based on its central tenet. Realists and scholars pro this theory believe the global system is anarchic (Baylis, 2020; Lawson, 2023; Rourke and Boyer, 2008). This is postulated by Viotti and Kauppi (2019), who argue that by being anarchic, the international system is characterised by the absence of an overarching world government that could be mandated to enforce order while preventing conflicts that may arise among states.

Research indicates that conflicts and competition often arise when states maximise their security and power. Therefore, in this investigation's context, the realism theory could be applied to comprehend China's potential objectives and motivations for engaging with the CEE region. From a critical realist perspective, China's involvement in the region through the 16+1 Initiative could probably be driven to expand its geopolitical and economic influence to strengthen its position in the global business environment. Furthermore, the move could be a means of acquiring access to

critical markets and resources. However, despite the theory's capability to present an understanding of the political motivations of the Initiative, it faces criticisms from multiple neorealism scholars and non-realists alike. In recent decades, emerging criticism of the realism theory suggests that it oversimplifies states' motivations by emphasising security and power (Knutsen, 2020; Viotti and Kauppi, 2019). This ignores and does not factor in other aspects of states' motivations, such as culture, ideology and domestic politics (Baylis, 2020; Lawson, 2023; Rourke and Boyer, 2008). Critics have also indicated that the theory overlooks the role of institutions operating within the international landscape and norms involved in shaping the behaviours of the state.

Unlike the realism international relations theory, emerging studies have indicated the significance of neoliberalism or neoliberal institutionalism as a critical theory that forms the theoretical framework for understanding the political influence of the 16+1 initiatives on Visegrad Group countries within the CEE region (Sorensen et al., 2022; Baylis, 2020; Lawson, 2023). Evidence from research has shown that neoliberalism emerged to respond to some of the criticisms that had been levelled up against the traditional realism theory (Sorensen et al., 2022; Baylis, 2020; Lawson, 2023). The idea attempted to explain and illustrate state behaviour within international cooperation and institutions (DURUGI et al., 2022; Gismondi, 2007; Dunne et al., 2021). This deviates from the realism theory founded on power and security. According to Keohane (2020), neoliberal institutionalism strongly emphasises the role of international institutions, regimes, and organisations in facilitating behaviour and managing conflicts among the states. In this review and study, this theory could be applied to examine the institutional framework of the 16+1 Initiative in shaping interactions between the Visegrad Group countries and China. From a critical point of view, it may aid in understanding how the Initiative's framework facilitates cooperation, dialogue, and economic partnerships between the different countries.

Despite its predominance in international relations, neoliberalism is not without any criticism. Some arguments in recent years have shown that it overestimates the role of international institutions while underestimating the impact of material capabilities and power to shape the behaviour of states (Sorensen et al., 2022; Baylis, 2020; Lawson, 2023). Other critical studies have also shown that institutions, despite their stature, can be manipulated and dominated by powerful states to serve their interest, a move that often leads to unequal outcomes (Knutsen, 2020; Rourke and Boyer, 2008; Viotti and Kauppi, 2019). This has been observed within the dynamics of the

initiatives as bilateral arrangements with other individual EU countries have raised concern resulting in some countries leaving and others contemplating to do the same due to concerns about the fragmentation within the EU's collective approach regarding China. This may challenge the efficacy of the institutional frameworks.

Like the other two, the theories of constructivism and complex interdependence are also significantly critical in shaping the theoretical framework underpinning this study. Unlike the two approaches, constructivism as an international relations theory emphasises the role of identities, norms, and ideas in shaping international relationships (DURUGI et al., 2022; Gismondi, 2007). On the other hand, the theory of complex interdependence posits that in an interconnected world, nations or states are bound by multiple interdependent relationships (Sorensen et al., 2022; Baylis, 2020; Lawson, 2023). Research which has focused on constructivism recently has debated that the actions of states and associative actors are dependent on the interpretation of the world rather than the objective material factors (Rousseau, 2006; Burchill et al., 2022). This investigation can employ this theory to analyse how the individual countries and participants' perceptions of the 16+1 initiatives influence their policy decisions and behaviour. It could aid in comprehending how ideas of Development, economic cooperation, and connectivity as officially stated objectives shape China's engagement and interaction with the Visegrad Group countries.

However, while the theory of constructivism can be used to achieve the objectives of this study, it is not deficient in criticism. For instance, from a critical perspective, the theory has been described as less formalised and abstract than the other international relations theories (Ruiz, 2008; Sorensen et al., 2022; Baylis, 2020; Lawson, 2023). Besides, this illustrates that despite its inclusion in the study's theoretical framework to understand the political influence of the Initiative, it may not fully capture and address China's power dynamics and material interests in the CEE region. Complex interdependence theory addresses this and the other limitations of the theories presented in the previous paragraphs and section since it can be implemented to explore the mutual dependencies and web of economic ties between the Visegrad Group countries and China.

According to research, complex interdependence theory introduces the concept of soft power, which Vucetic (2020) reported to indicate states' ability to influence others without coercions, such as diplomatic or ideology persuasion. Furthermore, military force becomes less powerful and impactful within this theory since the risk associated with using power and increasing costs

become tightly interconnected (Sorensen et al., 2022; Baylis, 2020; Lawson, 2023). It has been argued that through its persuasion in interdependent relationships, states manage their conflicts through compromise and negotiations rather than military force (Baylis, 2020; Lawson, 2023; Rourke and Boyer, 2008). The applicability of this theory as a theoretical framework for the primary investigation lies in its insight's ability to aid in understanding how investment and economic cooperation create interdependencies that may result in political interactions. The immediate criticism of this theory is that it underestimates the persistence of power politics and the continued essentiality of military force in international relations. This limitation is, however, addressed in the classical realism theory; thus, all approaches are independent in managing the objectives of this study.

2.3 Empirical Evidence on the 16+1 Initiative

2.3.1 Officially Stated Objectives vs Potential Actual Objectives

The officially stated objectives and potential actual objectives of the 16+1 Initiative have gained significant traction among scholars and experts in policy analysis and academic literature (Zhou, 2016). The Initiative and the possible outcomes associated with its implementation, as noted by Matura (2019), have been the centre of attention for both international and European scholars, prompting debates on the motivations of China and the implications the Initiative has on the cooperation between Europe and China and the overall geopolitical landscape. While the majority of the studies have retaliated the purpose of the Initiative, which essentially was to enhance diplomatic and economic ties, there has been countered the argument that that may not be the ultimate goal of China's motivation in the long-term prompting some members of the CEE to contemplate leaving the Initiative's framework.

Research and policy reports available in both the public and academic databases have shown that the official stated objectives that informed the formation of the Initiative was the need for enhanced economic ties between China and CEE countries (Zhou, 2016). As posited by Matura (2019), as part of its economic objective, the Initiative was tailored to implore infrastructure investments, promote regional economic Development, and ultimately facilitate trade. Consequently, existing reports and investigations indicate that the 16+1 Initiative was implemented to foster connectivity between China and Europe through investment in transportation infrastructure, including highways, railways, and ports (Vangeli and Pavlićević, 2019). As Zhou (2016) illustrated, the

ultimate goal was to facilitate the movement of people and goods between Europe and China. Furthermore, the initiative framework was tailored to foster people-to-people and cultural exchange, which could have been impossible without sufficient connectivity, as Vangeli and Pavlićević (2019) asserted. It is reported that the latter included participating in cultural events, educational exchanges, and tourism promotion between CEE and China.

While the other officially stated goals or objectives promoted policy dialogue and financial cooperation, studies conducted in the last decade have found that beyond economic purposes, the 16+1 Initiative serves a broader strategic interest concerning China (Zhou, 2016). The findings presented by Góralczyk (2017) found that apart from the officially stated objectives, China's long-term strategic goal is to increase or broaden its influence in the CEE region to counter potential containment from the West while accessing strategic markets and resources. This echoes the findings of Matura (2019), who stated that some members of the CEE were contemplating leaving the Initiative due to concerns regarding the probable political conditions attached to the investments from China. According to Góralczyk (2017), this has led some policymakers to assess the long-term implications of the Initiative cautiously and whether China's potential actual objectives could interfere with their diplomatic relations with other states that are not within the 16+1 Initiative or any other initiative associated to China's expansive investment across the globe.

Further research has highlighted various potential actual objectives of the 16+1 initiatives based on critics' perspectives. Studies that criticised the Initiative have argued that China's trading quest with CEE countries is a means to bypass EU policies and institutions the country perceives as unfavourable to its overall interest (Zhou, 2016; Vangeli and Pavlićević, 2019). The context of this argument has been tied to China's interest in engaging directly with individual countries, which is illustrative of their intention to pursue projections that ordinarily could not be supported or approved at the European Union level (Matura, 2019). Additionally, research has argued that the Initiative's other potential objectives may be grounded on the divide and conquer notion to showcase China's global reach. According to Matura (2019), it is debated that by engaging individual countries directly and fostering close ties with them, China can exploit the differing interest among the CEE countries within the EU, weakening the collective approach that the EU has held to China-related issues. Similarly, this can be demonstrated by China's demonstration of

its ability to expand its reach and influence beyond its immediate neighbours. The following subsection analyses the relevant literature on the impact of the Initiative on trade and investment.

2.3.2 Impact on Trade and Investment

Existing empirical evidence on the 16+1 initiatives' impact on investment and trade between CEE countries and China has highlighted notable and significant changes in economic interactions. The substantial economic changes are tied to initiatives with officially stated objectives to enhance economic cooperation between China and the CEE countries. Several studies, including that of Góralczyk (2017), which used the panel data analysis to investigate the impact of the Initiative on trade and investment, found that the 16+1 Initiative led to a substantial increase in the bilateral trade volumes between CEE countries and China. Due to the increased bilateral trade volumes, electronics, machinery, and agricultural products are the most impacted sectors (Góralczyk, 2017). Apart from increased trade volumes, the existing literature has demonstrated that the Initiative has resulted in a surge in Chinese investment in the CEE region (Szczudlik, 2019; Pepermans, 2019). Furthermore, it has contributed to the diversification of trade partners as most countries in the CEE region opted to reduce their dependence on the Western market (Szczudlik, 2016).

While the 16+1 Initiative has positively impacted trade and investment for all partners involved, concerns of imbalance and infrastructure debt have been raised in the current literature. The imbalance concerns have been reported mainly on trade relations. Some studies have indicated that trade deficits have widened concerning some of the CEE countries, which could result in probable economic changes (Matura, 2018; Szczudlik, 2016; Pepermans, 2018). Moreover, the concerns of potential debt burdens have arisen with a focus on the recipient countries' ability to pay the debts associated with the large-scale infrastructure projects solemnly funded through the Initiative by China (Szczudlik, 2019; Matura, 2018). In other words, there are worries about the sustainability of the debts and the probability of increased dependency on China, which could propel China's potential actual objectives criticised in the preceding subsection. As a result, policymakers need to understand the attitude of the 16+1 Initiative, as illustrated below.

2.3.3 Policymaker Attitudes towards the 16+1 Initiative

Over the decade, the policymakers' attitudes towards the 16+1 have been put under empirical inquiry. Jakimów (2019), who conducted a survey and gathered different perspectives from experts and policymakers, found that they had varying attitudes towards the 16+1 Initiative. For instance, as presented by Matura (2018), while some policymakers, especially those in Hungary, had a positive and robust attitude towards the proponents of the Initiative, terming it as a pragmatic and valuable addition to the overall economic cooperation, other policymakers have demonstrated caution, particular, the Czech Republic and Poland. Vangeli (2018) made the same observations, who stated that policymakers' attitudes differed based on the alignment of the 16+1 Initiative with the policies of the EU and the probable divisions that may arise within the European Union. Remarkably, most policymakers were concerned about the intentions of the bilateral arrangements within the Initiative's framework and how its core objectives could undermine the coherence of the typical approach by the European Union towards China (Vangeli, 2018; Pepermans, 2018).

Despite the economic cooperation fostered through the Initiative, policymakers are concerned that it has failed to address some of the CEE region's development needs (Jakimów, 2019; Vangeli, 2018; Pepermans, 2018). Policymakers in the Visegrad Group countries block mainly have expressed the need for the Initiative to have a more sustainable and balanced economic partnership with China that focuses beyond the economic threshold and addresses innovation, knowledge-sharing, and technology transfer needs (Pawluszko, 2021). Therefore, from a general perspective, it could be stated that the policymakers' attitudes vary based on the perceived benefit of the Initiative to their particulate countries or needs and the alignment of the Initiative's objectives with the institutional block of the EU. All the literature reviewed to provide empirical evidence on the 16+1 Initiative has provided valuable insights into its multifaceted nature and identified the complexities of political and economic interactions between the CEE region and China.

2.4 Empirical Evidence Review on the Visegrad Group

2.4.1 The 16+1 Initiative Political Dynamic with the Visegrad Group Countries

The 16+1 Initiative is reported to have exerted substantial political pressure and influence on the Visegrad Group countries (Matura, 2019). Matura (2018) and Vangeli (2018) assertions have demonstrated that the framework has created a new mode or model of interactions between the Visegrad Group countries and China, fostering direct engagements and reducing the group's dependency on the European Union's existing mechanisms. As Matura (2019) noted, this has broadened the Visegrad Group countries' political and economic engagement level by allowing them to pursue their economic interests while interacting with China politically and economically.

The primary political dynamic feature of the 16+1 Initiative is attributed to the notion of the China-Visegrad Group countries' unique relations. According to Kavalski (2022), China and the relevant policymakers have promoted the narrative of the special relations between Visegrad Group countries and itself by emphasising shared development experiences and historical ties. The framing of the political dynamic feature of the Initiative further resonates with those of the policymakers within the target countries who have insistently sought to diversify their engagement and leveraging on the economic growth of China to develop their states (Musabelliu, 2020; Matura, 2019; Vangeli, 2018). However, the rising concerns among the European institutions and member states have challenged the power dynamics of the Initiative, terming it as a potential source of fragmentation within the Visegrad Group countries concerning them being members of the CEE group operating under the EU (Song and Qiqi, 2017; Kavalski, 2022). Furthermore, policymakers from Western Europe have raised concerns about the political dynamic influencing the Initiative and terming it as a framework that could potentially undermine and dilute the EU's bloc efforts to address contentious issues, such as human rights and market access, especially if the Visegrad Group countries engage with China directly (Kavalski, 2022).

2.4.2 Political Alignment and Cooperation within the Visegrad Group

The Visegrad countries have, for the last decade, shown differing degrees of cooperation and alignment with the 16+1 Initiative (Zuokui, 2016; Laš, 2017). Focusing on individual countries, existing empirical evidence has shown that Hungary has demonstrated robust support for the Initiative and, since its inception, has been an enthusiastic participant (Zuokui, 2016; Pepe, 2017). Various scholars and experts have attributed the enthusiasm to Hungary's pursuit of FDI, economic cooperation, and economic pragmatism concerning China (Przychodniak, 2017; McCaleb and Szunomár, 2017). On the other hand, available evidence has shown Poland to be more cautious in its interaction with China through the Initiative (Pepe, 2017). Experts and scholars' opinions have demonstrated that Poland has carefully balanced their economic interest concerns over the political conditions the Initiative attaches to the Chinese investment. As Laš (2017) noted, Poland's cautious stance reflects its strategic positioning within the European Union and its objective of ensuring a united EU attitude towards China.

Šebeňa (2018) evaluation of the Visegrad Group countries and association with the 16+1 initiative report that the Czech Republic and Slovakia have taken a moderate approach that seeks to benefit from the Initiative's economic opportunities. The author further states that the moderate approach characterises both countries since they are also mindful of the broader relations and strategy that illustrates the more general EU-China dynamics. An illustration of findings presented by Zuokui (2016) has shown that Slovakia and the Czech Republic seek economic alignment over political alignment, which has been discussed as the potential actual objectives of the Chinese approach, emphasising technological innovation, investment in high-value-added sectors and technology transfer. Therefore, Visegrad Group countries' overall political alignment and cooperation within the 16+1 Initiative reflect a strong and cautious balancing act between pursuing economic benefits and opportunities and maintaining cohesion within the more comprehensive EU framework. The next section of this study provides illustrations of the economic influence of the 16+1 Initiative on the Visegrad Group countries as presented in the literature.

2.4.3 Trade Relations and Patterns Between Visegrad Group Countries and China

The trade relations between China and Visegrad Group countries have substantially developed since the 16+1 Initiative was implemented. As was the case with the broad CEE region as illustrated in the respective section of this chapter, the Initiative, as posited by Przychodniak (2017), has been characterised by enhanced economic cooperation and trade opportunities between Hungary, the Czech Republic, Slovakia, Poland, and China. The relationship has resulted in changes in trade volumes and patterns, which has benefited all the involved countries, as Pepe (2017) indicated. Przychodniak (2017) and Zuokui (2016) assert that increased trade volumes have resulted in trade imbalances in the Visegrad Group countries. Most goods are exported from China, while their exports to China are fundamentally agricultural products and raw materials. This is illustrated by Šebeňa (2018), who points out the dominance of manufactured goods from China in the Visegrad Group countries, raising questions about the impact the Initiative has on the domestic industries of these countries. Furthermore, policymakers from these countries have highlighted the need for more robust and balanced trade relations between their countries and China (Matura, 2018; Matura, 2019; Pepe, 2017). Similarly, there is a need to diversify the export basket through this relation for the countries to gain access to additional value-added sectors within the Chinese market.

2.4.4 FDI Flows between Visegrad Group Countries and China

Like the trade relations between Visegrad Group countries and China, FDI flows have attracted attention among scholars and policymakers regarding the 16+1 Initiative. The overall investment goal for the Initiative has been shared across the Visegrad Group countries as it is for the CEE region as a bloc (McCaleb and Szunomár, 2017; Matura, 2019; Pepe, 2017). For instance, as with CEE countries, of which the Visegrad Group countries are a part, Chinese investments have predominantly targeted energy, infrastructure, and manufacturing sectors. The Chinese FDI inflow, notably, has provided investment and capital for economic Development in the Visegrad Group countries, contributing to improving infrastructure in generating employment (Musabelliu, 2020; Matura, 2019; Vangeli, 2018). However, policymakers, experts, and scholars have raised concerns concerning the conditions and transparency of these investments. In particular, policymakers in the Visegrad Group countries have adopted an approach that ensures that the Chinese investments align with their national interest and ultimately meet the standards prescribed in their regulatory guidelines (McCaleb and Szunomár, 2017). In response to the uncertainties, some Visegrad Group

countries have diversified their FDI sources by promoting investments from other regions and countries. In the subsequent chapters, this investigation will unveil some of these regions and countries.

2.5 Critical Review and Gaps in the Literature

Overall, the presented literature and the critical review of the same provide valuable insights into the political and economic influence of the Initiative on the CEE countries and also narrow down to the impact of the same on Visegrad Group countries. However, literary gaps still exist in the present studies. For instance, while there is increased investment and trade as a result of the Initiative, a need for more advanced econometric methodologies is imminent to address the potential biases that arise from the current models to enhance the reliability of the results. Furthermore, there is a need to critically appraise or examine the possible actual objectives of China and its geopolitical interest in the Visegrad Group countries through the integration of the various international relations theories to gain a deeper understanding of the motivations of China and ultimately implications of the Initiative within the broader aspect of the EU-China relations.

CHAPTER THREE

3.1 Introduction

This chapter highlights the methodology used to accomplish the investigation based on the research objectives and questions presented in Chapter 1. The purpose is to address the potential literature gap identified and critically review the study's findings in the next chapter. The hypotheses developed are presented in this chapter the sources of data utilised, research design and approach, and model simulations used in the study.

3.2 Hypotheses Development

Based on the gaps in the literature, several hypotheses were developed for econometric modelling and data analysis. They are as follows:

3.2.1 Trade Flow Hypothesis

H₁: There is a significant increase in bilateral trade flows between China and the Visegrad Group countries due to the establishment of the 16+1 Initiative.

3.2.2 FDI Flow Hypothesis

H₂: There is a positive and statistically significant effect on FDI flow between China and the Visegrad Group countries due to their participation and membership in the 16+1 initiatives.

3.2.3 Political Alignment Hypothesis

H₃: Members of the Visegrad Group countries with greater levels of political alignment with China experience increased trade flows and FDI inflows compared to those with lower political alignment levels.

3.2.4 Economic Indicators Hypothesis

H₄: Factors such as distance between countries, GDP, and population size, have statistically significant effects on FDI inflows and trade flows between China and the Visegrad Group countries.

3.3 Research Design and Approach

The investigation into the political and economic influence of the 16+1 Initiative on Visegrad Group countries employed the quantitative research design with a comparative analysis research

approach. The quantitative research approach was selected primarily due to its capability to analyse objective data used in this investigation through the econometric models that were subsequently stated and elaborated. Similarly, the research design was preferred for its clear and precise results, which could be communicated to the relevant policymakers and stakeholders straightforwardly (Bloomfield and Fisher, 2019; Watson, 2015). Consequently, its suitability for a large sample size of data made it suitable for this investigation apart from being considered efficient and time-saving compared to the alternative research design (Lowhorn, 2007; Corner, 2002). As noted by Watson (2015), quantitative research design also utilises the deductive research approach, which is known to improve its causality and control significantly in understanding the cause-and-effect relationships within the context of this investigation. Besides, the quantitative research design is known for its data visualisation capability, making it possible to observe trends through graphical representations and, as such suitable for the longitudinal aspect of the relationship between Visegrad Group countries and China through the 16+1 Initiative.

On the other hand, the comparative research approach complemented the quantitative research's deductive approach based on its preference for systematically exploring the experiences and outcomes of the Visegrad Group countries within the dimensions of the Initiative, presenting a basis for comparison (Della Porta, 2008). The research approach was considered at the time of selection as well-suited for investigating the political and economic influence of the 16+1 investigations. It was further preferred to complement the research design due to its ability to provide distinctions among the Visegrad Group countries based on their political, historical, and economic backgrounds. Additionally, its longitudinal perspective was leveraged since the investigation focused on data ranging from the Initiative's inception in 2012 to the present (Schneider and Wagemann, 2010). The data sources used to obtain appropriate data are addressed in the subsequent section.

3.4 Data Sources

Multiple data sources were used to obtain appropriate econometric data related to the Visegrad Group countries. The data sources ranged from official statistical databases to government and academic research. They are highlighted below:

Eurostat: This database was used to obtain econometric data on various economic and social indicators for the EU countries. The obtained data were trade flows, FDI, GDP, and employment data.

World Bank Database: Longitudinal or time-series data was obtained from this database focusing on Visegrad Group countries' trade, FDI, and trade indicators regarding China.

United Nations Comrade Database: This database obtained Time-series data from primary traderelated data and associative statistics. The FDI data trends were also obtained for comparison purposes.

Academic Journals and Publications: The different academic databases were utilised to obtain qualitative data for the comparative analysis, focusing on the political perception of policymakers and experts in the Visegrad Group countries regarding the 16+1 Initiative.

CEPII Gravity Dataset: Provide Gravity model variables like distance and GDP for trade analysis.

3.5 Variables and Model Specifications

3.5.1 Variables

The dependent variables used in the analysis and selected based on the hypotheses and research objectives were as follows.

- 1. Trade flows Import and Exports
- 2. FDI flows Inward and Outward

The independent variables as employed in the various analysis included:

- 1. Degree of Visegrad Group countries' alignment with China
- 2. GDP
- 3. Population Size
- 4. Distance between countries.

3.5.2 Model Specifications

To accomplish its objective of analysing the trade flows and FDI flows between China and Visegrad Group countries based on the obtained data, this study employed the use of the Gravity model, which has been predominantly used by scholars and experts to model bilateral interactions in which distance and size effects enter multiplicatively (Cyrus, 2002). Furthermore, gravity equations have been used in various investigations to analyse the determinants of bilateral trade flows, which is one of the primary objectives of this study (Egger and Pfaffermayr, 2003). As illustrated by Tay (2014), gravity equations and models are commonly used to conduct analysis involving investment and trade flows between countries based on its founding notion that both attributes are positively correlated with the size of the economy, often the GDP, and negatively correlated with the distance between the trading countries (Egger and Pfaffermayr, 2003). In this case, the distance between the Visegrad Group countries and China. The following two equations were modelled and used to accomplish the different objectives.

• Fixed-effects panel Model

$$FDI_ijt = \beta_0 + \beta_1 * 16+1_Indicator_ij + \beta_2 * Control_Variables_ijt + \alpha_i + \lambda_t + \varepsilon ijt$$

Where i represented a country in the Visegrad Group countries, j represented China, and t represented the period. Therefore, FDI_ijt was the FDI flow from a country i to j within a specific period t. 16+1_Indicator_ij was a binary variable that represented the Visegrad Group (i) members who participated in the 16+1 Initiative. Control_Variables_ijt represented relevant political, economic, and institutional variables that may have had intended consequences on FDI flow. α_i described unobserved fixed effects that were country-specific. λ_i captured time-specific shocks, and ϵ_i to captured unobservable measurement errors or factors. β_i 0, β_i 1, and β_i 2 was estimating parameters evaluated.

• Gravity Model for Trade Flow

Trade
$$ij = \beta \ 0 * GDP \ i^\alpha * GDP \ j^\beta * Distance \ ij^\gamma * Xi \ ij^\delta * \varepsilon \ ij$$

Trade_ij represented bilateral trade between countries (i) in the Visegrad Group and China (j). GDP_i and GDP_j were the GDPs of the respective countries; they were used as proxies for economic size determination. Distance_ij represented the geographical location between the i and j countries to capture the trade costs. Xi ij captured additional variables

or factors specific to the Visegrad countries and the Initiative that directly influenced the trade flows. ε_{ij} captured measurement errors and unobservable characteristics. All the other attributes of the model were parameters to be estimated.

3.6 Data Analysis

Three data analysis techniques were used to accomplish the specifics of this study based on collected data. They included descriptive statistics, regression analysis, and hypothesis. Descriptive statistics was employed as a data analysis technique to provide a summary and overview of the data collected. The method involved calculating measures of central tendency, such as mean, standard deviation, variance, and median of the collected data. This was considered crucial for comprehending the fundamental characteristics of the data before proceeding to advanced analysis, such as hypothesis testing and regression. The descriptive statistics provided vital information on the trade and FDI data's total investment and trade volumes, including trade balances and annual growth rates between China and the Visegrad Group countries. The results and analysis of the obtained data are provided in the next chapter (Chapter).

The regression data analysis technique was used in this investigation to examine the relationship or correlation between the identified independent and dependent variables. For instance, during data analysis using STATA, a statistical data analysis, the regression analysis involved the assessment of the influence of independent variables, such as political alignment, GDP, population, and distance, influenced the FDI flow and trade flow between China and the Visegrad Group countries. The fixed-effect panel model was used to control country-specific effects and time-specific shocks when evaluating the economic and political impact of the 16+1 Initiative based on the model equation presented in the respective section of this study. On the other hand, the gravity model for trade flow analysis was also employed based on the modelled equation to estimate the effect of distance and the size of economies on trade flows between countries. As a regressive model, this allowed the research to analyse the impact of the Initiative on trade relations between these countries. The results of both analyses are presented and discussed in the subsequent section.

For the hypothesis testing data analysis technique, the researcher could evaluate the validity of the developed research techniques. The data analysis process involved testing the developed hypotheses to determine whether the observed results provided by the collected data supported or rejected them. Statistical tests, such as F-tests and t-tests, were utilised to determine the presence

of statistically significant associations between the dependent and independent variables. The confidence level of these tests was 95% to determine whether the observed data were likely to occur, suggesting a 5% significance level that they were unlikely to happen. If the obtained statistics recorded a significance level lower than 5%, the hypotheses claims would be claimed and rejected if the value was higher. The researcher believed that by utilising the hypothesis testing technique, the impact of the 16+1 Initiative would be understood and valid conclusions drawn. The comprehensive results and analysis are presented in the results and analysis chapter.

3.7 Ethical Considerations

The study utilised publicly available data, and since it did not involve individuals' participation, the relevant ethical approval guidelines were not necessary. However, some ethical considerations were observed, such as obtaining and utilising publicly available data that did not require authorisation from the relevant authors, experts, or databases. Similarly, for ethical considerations, data obtained from academic publications and journals were analysed without providing their authorship unless they were used as supporting evidence, as was the case during the data review. Consequently, in the context that human participants were named, that is, policymakers and experts, this report concealed their identities, especially regarding comprehending various perceptions or attitudes towards the 16+1 Initiative and its influence on the Visegrad Group countries.

CHAPTER FOUR

4.1 Introduction

This chapter provides the result and associative analysis of the data collected from the sources highlighted in the preceding chapter. The results focus on different aspects of the political and economic influence of the 16+1 initiative on the Visegrad Group countries, focusing on foreign direct investment flows and trade flows between the Visegrad Group countries and China. This chapter's results and outputs are directly associated with the descriptive statistics, regression analysis, and hypothesis testing conducted and highlighted previously. It is important to note that this chapter is organised based on the research questions and hypotheses outlined in the preceding chapters.

4.2 Descriptive Statistics

4.2.1 Description of Data

The provided data in the subsequent tables were obtained from 2014 to 2021. This period became the focus since it was after 2014 that the Visegrad Group countries became part of the European Union and the 16+1 initiative. The latest available data could be traced to 2021, with those about GDP and other indicators traceable to 2019. Tables 4.2.1 and 4.2.1.1 present data on the total importance and exports from China and into China in USD millions for the Visegrad Group countries from this period. According to Table 4.2.1, imports from China have consistently grown in Poland, starting from \$2,943.18 million in 2014 and closing at \$5,544.34 million in 2021. This signifies an increase in reliance on Chinese products in the domestic market of Poland, as visualised by Fig. 4.2.1. In the context of Slovakia, Table 4.2.1 and Fig. 4.2.1 show that it experienced fluctuating trends regarding imports from China. In 2014 and 2015, there was a notable decrease from \$3,3376 million to \$2,237.32 million, respectively. However, it gradually increased to approximately \$7,543.52 million in the closing year 2021. The significant growth could be associated with or indicate expansion in trading activities or relationships between China and Slovakia.

Countries	2014	2015	2016	2017	2018	2019	2020	2021
Poland	2,943.18	2,747.95	2,533.07	3,351.31	3,646.26	3,943.81	4,322.01	5,544.34
Slovakia	3,376.30	2,237.32	2,407.08	2,585.01	5,245.68	5,967.43	6,432.55	7,543.52
Czech	2992.39	2785.09	2948.06	3694.08	4410.62	4628.04	5143.28	6052.59
Rep.								
Hungary	3,260.04	2,873.27	3,463.12	4,088.46	4,340.10	3,747.42	4,283.81	5,566.77

4.2.1: Imports from China (USD Millions)

Like Slovakia, the data in the table above reported a notable fluctuation in imports from China. However, the cumulative figures indicate that the imports were \$2,9992.39 million in 2014 and reached \$6,052.59 million in 2021. This illustrated an upward trend showing an increasing economic tie between the two countries. On the other hand, the import data from China to Hungary demonstrated a similar trend to that of Poland, with the imports increasing consistently from \$3260.04 million in 2014 and closing at \$5,566.77 million in 2021. As visually illustrated in Fig. 4.2.1, the consistent growth signified the growing reliance of Hungary on Chinese goods. Overall, observation from the import volume shows a rising pattern and trend across all the Visegrad Group countries, indicating their increased reliance on Chinese products. This could be associated with various factors potentially fostered by their participation in the 16+1 initiative.

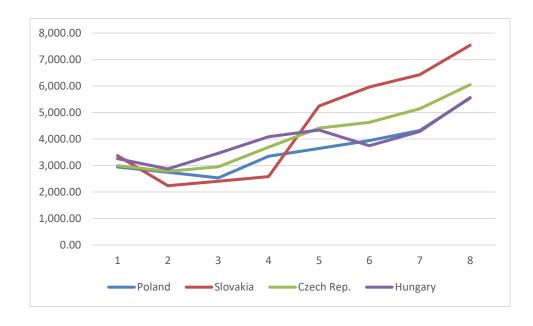


Fig. 4.2.1: Imports from China to Visegrad Group countries

The data on export between the Visegrad Group countries and China, as illustrated in Table 4.2.1.1 and visualised in Fig. 4.2.1.1, show that Poland's exports to China showed remarkable growth between 2014 and 2021. The exports stood at \$14,256.26 million in 2014 and surged to \$36,678.64 million in 2021. This signified an expansion in the export trade between China and Poland. On the other hand, the same statistics for Slovakia were relatively stable during this period; however, some fluctuations were realised though they were within the moderate range. The data show that the export volume was \$2,829.19 million in 2014, reaching \$4,547.20 million in 2021—this showcased consistency in export trade relations between the two countries. Based on the collected data, the Czech Republic showcased a steady growth in the export volume, increasing from \$7,994.52 million to \$15,110.59 million in 2014 and 2021, respectively. This finding indicated that Czech Republic's export market was expanding in China, which could be attributed to several factors. Similarly, the same observations were made regarding Hungary, whose export total volume increased to \$10,161.29 million in 2021 from \$5,76406 million in 2014.

4.2.1.1: Export to China (USD Millions)

Countries	2014	2015	2016	2017	2018	2019	2020	2021
Poland	14,256.26	14,345.65	15,253.50	17,997.38	20,990.11	23,906.09	27,860.26	36,678.64
Slovakia	2,829.19	2,794.41	2,870.08	2,732.12	2,561.19	2,893.89	3,048.35	4,547.20
Czech	7,994.52	8,227.27	8,061.25	8,793.82	11,916.33	12,911.01	13,781.20	15,110.59
Rep.								
Hungary	5,764.06	5,197.87	5,427.49	6,056.15	6,553.21	6,439.10	7,431.06	10,161.29

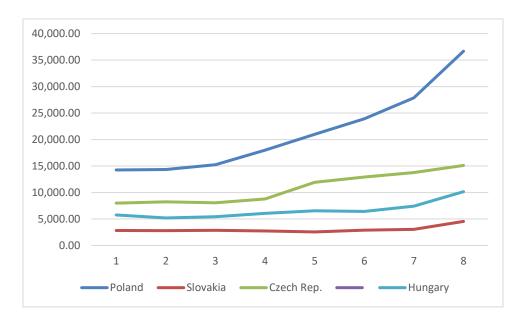


Fig. 4.2.1.1: Exports to China from Visegrad Group countries

Overall, the findings of this study based on the collected data imply a growing economic interdependence between China and the Visegrad Group countries. Furthermore, the consistent to moderate fluctuation in trade volumes in both directions illustrates the significance of bilateral trade relations and the probable benefits for both sides across the distance divide. However, this study recognises the importance of accounting for trade balance, economic regulations, and trade policies. These are discussed in-depth in the subsequent chapter based on the regression results and hypothesis findings presented in the following sections.

Apart from the trade volumes, this study also explored key statistics concerning FDI flow between the Visegrad Group countries and China. According to Table 4.2.1.2, FDI inflow to Poland demonstrated a fluctuating trend during the period considered for the study. This trend ranged from \$-2.228 million in 2015 to \$280.815 million in 2018. This signified a significant peak, with the positive values suggesting a net positive FDI inflow in most years, indicating increasing interest in investment opportunities in Poland by China. The FDI inflow demonstrated a relatively volatile market, fluctuating across different years. In 2016, the FDI inflow was reported at \$6.39 million, while the highest inflow was realised in 2021 at \$46.234 million. Czech Republic's FDI inflow experienced a significant variation, with a peak value realised in 2016 at \$512.019 million with negative values from 2019 to 2021. On the contrary, the FDI inflow to Hungary showed steady growth, as illustrated in Fig. 4.2.1.1, from \$0.789 million in 2014 to 4109.076 million in 2021.

Countries	2014	2015	2016	2017	2018	2019	2020	2021
Poland	83.949	-2.228	13.843	56.862	93.399	93.399	30.723	280.815
Slovakia	-2.696	1.265	3.568	6.39	-7.599	22.002	-26.616	46.234
Czech	-4.095	277.058	512.019	-59.587	-54.976	39.906	-246.989	-87.084
Rep.								
Hungary	0.789	22.794	80.87	8.658	58.121	147.725	58.487	109.076

Table 4.2.1.2: FDI inflow (USD Millions)

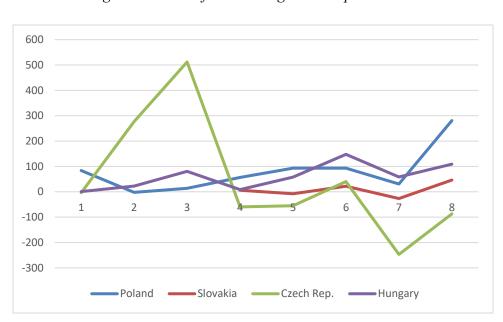


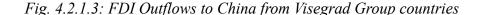
Fig. 4.2.1.2: FDI flow to Visegrad Group countries

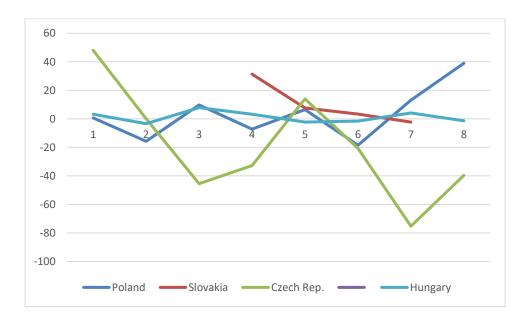
Table 4.2.1.3 and Fig. 4.2.1.3 present data and visualisation of the same on FDI outflow for Visegrad Group countries from 2014 to 2021. According to the presented statistics, Poland's FDI outflows upheld positive values across the study period showing that Polish companies or entities are investing in China. The highest investment per the FDI outflow was in 2021 at \$38.981 million. However, in the case of Slovakia, the FDI outflow regarding China was relatively low, with varying volumes across the study period. There were no investments reported in 2021. For the Czech Republic, negative FDI outflows were recorded, especially in the last three years. This suggested that most of China was withdrawing more FDI from the Czech Republic than the Czech Republic was investing in China (refer to Fig. 4.2.1.3). The FDI outflows in the context of Hungary

were largely positive with exceptions in 2015, 2018, 2019, and 2021. The positive result indicated that most Hungarian firms engaged in foreign direct investment in China.

Countries	2014	2015	2016	2017	2018	2019	2020	2021
Poland	0.666	-15.729	9.761	-7.197	6.479	-18.492	13.105	38.981
Slovakia	0.016			31.371	7.676	3.39	-2.267	
Czech	48.066	0.119	-45.415	-32.822	13.991	-20.651	-75.25	-39.568
Rep.								
Hungary	3.272	-3.382	7.88	3.293	-2.272	-1.573	4.096	-1.322

Table: 4.2.1.3 FDI outflows (USD Millions)





The data analysed in the preceding paragraphs concerning FDI inflows and outflows present valuable insights into the investment opportunities and activities involving Visegrad Group countries and China. Positive FDI inflows, as illustrated in the respective tables and graphical representations, show that Visegrad Group countries have been attractive destinations for Chinese investment, with particular interest in Hungary and Poland, which have witnessed unswerving net positive FDI inflows throughout the period under investigation. Moreover, the positive FDI outflows have showcased that the Visegrad Group countries actively participate in international

investments, contributing to their economic growth and integration into the global business landscape. An in-depth discussion of these findings is presented in Chapter 5 of this dissertation.

4.2.2 Descriptive Statistics

Table 4.2.2 below summarises the critical trade flows data and FDI flows between the Visegrad Group countries and China. As illustrated in the table, the total trade import flows during the study period were reported to be approximately \$16,137.99 million, with a standard deviation of roughly \$1,733.77 million. The statistics reveal the dispersion or variability of trade import volumes around the mean. The minimum and maximum values recorded during this period were \$10,643.59 million and \$24,707.22 million, illustrating the trade import volume dispersion as shown by the standard deviation.

The mean of the total trade export volume was reported as \$141,923.82 million with a standard deviation of \$12,672.16, indicating the variability of trade export volumes or dispersion around the mean. The minimum total trade export flow, as illustrated by Table 4.2.2, was \$30,565.20 while the maximum was \$66,497.72 million supporting the reported dispersion of total trade export volumes between Visegrad Group countries and China.

Variables	Mean	Standard	Minimum	Maximum
		Deviation		
Total Trade Import flows	17057.45	15364.2	2237	66498
Total Trade Export flows	16087.4	16291.31	2561	69494
Total FDI Inflows	39.07505	117.5491	-246.989	512.019
Total FDI Outflows	38.07605	134.7677	-184.395	604.567

In regards to FDI inflows and outflows, the summary statistics presented in Table 4.2.2 reveal that the average FDI inflow was \$39.076 million to the Visegrad Group countries from China, and the mean for the FDI outflows was \$38.075 million from Visegrad Group countries to China. The FDI inflow standard deviation was recorded at approximately \$117.54 million, and that of the FDI outflows was reported to be roughly \$134.76. The general observations on both phenomena of this study reveal the variability of both FDI inflows and FDI outflows around their means. The minimum and maximum values of these attributes support these findings. For instance, the

minimum value of FDI inflows was reported to be -\$246.98 million indicating a negative FDI inflow for the study period, and the maximum value for the same was \$512.019 million. The maximum and minimum values of the FDI outflows were reported as \$604.567 million and -\$184.39 million, respectively.

The descriptive statistics on trade volumes and FDI flows reveal that the average total import volumes from China to the Visegrad Group countries are higher than the average trade export volumes from China to Visegrad countries. This demonstrates that the Visegrad Group countries export less goods to China than China import to them. Similarly, the average total FDI inflows indicate that Visegrad Group countries receive more foreign direct investment from China than they can invest in China. However, as illustrated by the findings in Table 4.2.2, the average FDI outflow has been reported to be negative concerning Visegrad Group countries' investment in China, showing that, on average, the countries withdraw more foreign direct investment from China than they can invest in the country. A critical evaluation and discussion of these findings are presented in the subsequent chapters.

4.3 Regression Analysis and Hypothesis Testing

Table 4.3.1 and Table 4.3.2 presents the results of the fixed-effect panel model for FDI flows and gravity model for trade flows, as illustrated in Chapter 3 of this investigation. The results presented and summarised in Table 4.3.1 below indicate a coefficient of 1109.61 for the 16+1 Initiative variable. In the context of the model developed for this analysis, the coefficient represents the potential or expected change in the FDI inflows for every one-unit change of the 16+1 initiative variable to the Visegrad Group countries if all other variables remain constant. Furthermore, the efficiency, as displayed in the table, is statistically significant at a 95% confidence level and a 5% significant level with be p-value being 0.000. This illustrates that the 16+1 initiative has a meaningful positive and robust relationship or impact on FDI inflows. In other words, the coefficient and its statistically significance attribute indicate that participating in the 16+1 initiative is associated with increased levels of FDI inflows from China to the Visegrad Group countries. A discussion of this finding is presented in the subsequent section.

On the GDP variable, the result suggests that the associative coefficient is 5.272. A standard interpretation of this coefficient in the context of this study indicates that with a one-unit increase in the GDP variable about the Visegrad Group country, there is a 5.272 increase in the overall FDI

inflow of that specific country. However, all the other variables must remain constant for this condition to be met. The coefficient is statistically significant at 0.001, less than the 5% level of significance used in the analysis. The statistical significance suggests that greater GDP among the Visegrad Group countries is associated with increased FDI inflow from China. On the distance issue, the coefficient was reported at -0.010 and is statistically significant at 0.000 p-values. From a general perspective, the coefficient suggests that a one-unit increase in the distance between China and the Visegrad Group countries leads to an approximately 0.010 unit decrease in FDI inflows if all other variables remain constant. The statistical significance of the coefficient shows that greater geographical distance negatively affects FDI inflows from China. This could be illustrative of why China's investments in this region have predominantly focused on infrastructure and associative industries. The implication of this finding is discussed in the subsequent chapter, especially in relation to the cost of transport reduction.

Statistical findings on the population variable reported a regression coefficient of 0.000000819, statistically significant at a p-value of 0.000. As with the preceding variables, the coefficient of the fixed effect model on population suggests that a one-unit population increase has a ripple effect of 0.00000819 unit increase in the FDI inflow to Visegrad Group countries from China. As it is the condition with all the other factors, all other variables must be constant for this relationship to be realised. The significance of the association suggests that in the context of the Visegrad Group countries, a higher population is correlated with a higher FDI inflow from China.

Table 4.3.1: Fixed-effect panel model for FDI flow results

Variables	Coefficient	Standard	t-Value	P-Value	Upper	Lower
		Error			Value	value
16+1 Initiative	1109.671	116.1137	9.56	0	882.09	1337.25
GDP	-5.272672	1.54402	-3.41	0.001	-8.298	-2.246
Distance	-0.0100031	0.0002871	-34.84	0	-0.0105	-0.0094
Population	8.19E-07	8.46E-08	9.67	0	6.53E-07	9.85E-07
Constant	-965.8275	115.6051	-8.35	0	-1192.40	-739.24
Wald Test	13243.71 (p valu	e = 0.00)				

The result displayed in Table 4.3.2 provides the regression analysis of the trade flows between Visegrad Group countries in China using the gravity model for trade flows. As illustrated in Chapter 3, the model explored and appraised factors influencing bilateral trade between the CEE countries and China. On the primary variable, which was the 16+1 initiative, the regressive coefficient indicates the presence of a relationship between them. The coefficient, reported at 674.35, suggests that the 16+1 initiative positively impacts the Visegrad Group countries' bilateral trade with China. An increase in one unit of the 16+1 initiative variable increased the bilateral trade flow by 674.35 if all other factors were constant. Besides, the coefficient is statistically significant at a p-value of 0.000, lower than the 5% significance level. This indicates that the initiative substantially affects trade flows between the two countries, as demonstrated by the data description in Table 4.2.1 and Table 4.2.1.1.

The coefficient on the GDP for country i (any country in the Visegrad Group countries) was -0.138. This variable represented the influence of both economic sizes on the bilateral trade flows between Visegrad Group countries and China. These coefficients reported that for every one-unit increase in the GDP of either Visegrad Group countries or China, there was a -0.138 units decrease in bilateral trade flows, respectively, holding all other relevant variables constant. Based on the significance level, the results displayed in Table 4.3.2 below the coefficients were statistically significant, suggesting that economic sizes significantly positively influenced trade flows. Regarding the distance variable, the coefficient remained at -0.00042, as with the FDI inflow. This implied that for every one-unit increase in the distance variable between Visegrad Countries and China, there was a 0.00042 unit decrease in trade flows. The coefficient was statistically significant, demonstrating that geographical distance negatively impacted the bilateral trade between the two regions.

Table 4.3.2 Gravity model for trade flow result

Variables	Coefficient	Standard Error	t-Value	P-Value	Upper Value	Lower Value
16+1 Initiative	674.35	58.438	11.54	0	559.8142	788.88
GDP	-0.138	0.1240	-1.12	0.263	-0.3820	0.1042
Distance	-0.000420	0.00017	-2.37	0.018	-0.00076	-0.00007
Population	5.21E-07	4.07E-08	12.78	0	4.41E-07	6.01E-07
Constant	-667.98	59.695	-11.19	0	-784.99	-550.98
Wald Test	694.84 (p value	e = 0.000				

Predominantly, the models used above for econometric regressive analysis provide vital insights that require further discussion into the factors that impact both FDI inflows and trade flows within the regions where this study is based. Overall, the positive coefficients associated with participation in the 16+1 initiative implied that it significantly impacted both the FDI and trade flows between Visegrad Group countries and China. The negative relationship was observed regarding other variables, such as GDP and population. Further discussions into these findings are presented in the discussion chapter. In the meantime, the following section presents a comparative analysis of different academic literature or expert reports on the political influence of the 16+1 initiative on the Visegrad Group countries.

4.4 Comparative Analysis

While the entire study uses the comparative analysis approach, as part of the presentation and analysis of the result, the comparative analysis was conducted to analyse the impact of the political aspect or influence of the 16+1 initiative. Various academics scrutinised their participants' perceptions or reports on the political implications of accomplishing the latter. Table 4.4 below highlights the different perspectives or potential actual objectives and the number of articles that discussed them in length. Only studies that focused on Visegrad Group countries were considered, and according to the table majority of the indexed or appraised articles indicated that the initiative's potential actual objectives were to enhance diplomatic relations (n = 6) between Visegrad Group countries and foster cultural exchange (n = 6). The commonly cited political factors that it is believed implored the 16+1 initiative establishment include the need for policy alignment (n = 6), mitigation of historical tensions (n = 4), and persuasion of alliances in the region (n = 4). Only three sources of the analysed reports suggested that facilitating high-level visits informed the basis for the 16+1 initiative.

Overall, the presented data imply that the 16+1 initiative's political influence in the context of the Visegrad Group countries is perceived positively regarding enhancing diplomatic relations, strengthening political ties, and naturing cultural exchange. The provided data indicate variation in the perceived influence across various aspects, with others being discussed in multiple reports compared to the others. This highlights the multifaceted yet complex nature of the 16+1 initiative's political influence or impact in relation to the Visegrad Group countries.

Table 4.4: Political perspectives on the 16+1 initiatives

Perspectives	Articles
Enhancement of diplomatic relations	6
Encouraging policy alignment	4
Consolidating political ties	6
Mitigation of historical tensions	4
Persuading alliances in the region	4
Nurturing cultural exchange	6
Facilitation of high-level visits	3

CHAPTER FIVE

5.1 Introduction

The study's results were provided, interpreted, and analysed in the previous chapter. This chapter provides a comprehensive discussion of the analysed findings on the political and economic influence of the 16+1 initiative on the Visegrad Group countries. It refers to the research objectives and hypotheses and links the results to the existing literature based on the literature review. This study aimed at assessing the influence of the Initiative on FDI flows, political dynamics, and bilateral trade flows within the Visegrad Group countries. Therefore, this discussion presents valuable insights into the implication of the investigation's results, contributing to a comprehensive and deeper understanding of the significance of the initiative for the CEE and Visegrad countries' relations with China.

5.2 Hypotheses

Various hypotheses that resonate with the objectives of this study and the gaps in literature were developed to provide data collection and analysis direction for this investigation. These hypotheses were as follows:

 H_1 : There are significantly increased bilateral trade flows between China and the Visegrad Group countries due to establishing the 16+1 initiative.

 H_2 : There is a positive and statistically significant effect on FDI flow between China and the Visegrad Group countries due to their participation and membership in the 16+1 initiatives.

*H*₃: Members of the Visegrad Group countries with greater levels of political alignment with China experience increased trade flows and FDI inflows compared to those with lower political alignment levels.

 H_4 : Factors such as distance between countries, GDP, and population size, have statistically significant effects on FDI inflows and trade flows between China and the Visegrad Group countries.

The first hypothesis, as highlighted above, directly correlated with the second objective of this study, whose primary purpose was to explore the influence of the 16+1 initiative on trade patterns

between China and the Visegrad countries using appropriate models. Based on the study's findings using the gravity model for trade flows, the results indicated a positive and statistically significant relationship or correlation between bilateral trade flows between Visegrad Group countries and China due to the establishment of the 16+1 initiative and their participation in it. This supports the first hypothesis and rejects the null hypotheses that potentially suggest that there would be no association between these critical variables. These findings echo those of Przychodniak (2017) and Pepe (2017), which also found that the initiative positively impacted the trade flows between the two regions – Visegrad Group countries region and China. Therefore, regarding the economic influence of the 16+1 Initiative on Visegrad Group countries, it could be stated that it successfully achieved its officially indicated goal. Further, the following section of this report discusses the latter.

While addressing the existing literature's gaps, this study's second hypothesis addressed the study's third objective. This objective set out to assess or examine the impact of the 16+1 Initiative on FDI flows between the Visegrad Group countries and China, using the appropriate model to improve the accuracy of the investigation. The associated findings for both the hypotheses and objective revealed that the initiative had a statistically significant impact on FDI inflows, which could be termed positive. The second hypothesis was supported in this case since the statistical significance in the relationship depicted that participation in the 16+1 initiative was significant and was associated with broader and larger FDI inflows to Visegrad Group countries from China. The findings were substantially related to those of Šebeňa (2018), McCaleb and Szunomár (2017), and Zuokui (2016), which also concluded that these countries' participation in the 16+1 initiative increased China's investments in various sectors across the region. A detailed discussion of the research findings is discussed under the economic influence of the 16+1 Initiative on the Visegrad Group countries section.

On whether members of the Visegrad Group countries with greater levels of political alignment with China experienced increased trade flows and FDI inflows compared to those with lower political alignment levels, the findings of this study supported this claim. The results are attributed to the relevant FDI inflow and bilateral trade flows, which showed that Hungary, which is perceived to have a robust political alignment with China and Poland, had increased FDI inflows and bilateral trade volumes compared to the Czech Republic and Slovakia, which took a moderate

approach as reported by Laš (2017). Furthermore, on the comparative analysis of the different academic literature that addressed the political influence of the 16+1 initiative, most of the studies that focused on the Visegrad Group countries were on political alignment as a potential actual objective of the initiative. In other words, there was higher FDI inflow and trade volumes influx in certain regions than others perceived to have lower political alignment with China. This confirms the third hypothesis and resonates with the overall findings of the literature reviewed in Chapter 2 that indicated that the initiative may have hidden objectives that influence the officially stated goals. Further discussion and synthesis are provided in section 5.4

As demonstrated above and in Chapter 3 of this study, the fourth hypothesis proposed to investigate whether factors such as GDP, population size, and distance between Visegrad Group countries impact the FDI inflows and trade flows between both regions. Based on the findings, there was a negative statistical significance between distance and the other two factors. According to the two developed models, this suggested that the relationship between distance and FDI inflow and bilateral trade volume was negatively skewed, suggesting that greater geographical distance between Visegrad Group countries and China resulted in decreased trade and FDI flows. Regarding GDP or economic sizes, it was illustrated that countries with higher GDP correspondingly attracted higher FDI inflows and bilateral trade flows between them and China. The coefficient for this finding was positive and statistically significant, supporting or confirming the fourth hypothesis of the study. As part of the economic framework and influence of the 16+1 Initiative on Visegrad Group countries, further discussion has been presented in the associative section as this part of the chapter purposed to confirm or refute the hypotheses to determine the implication of the study across multiple avenues, including political.

5.3 Economic Influence of the 16+1 Initiative on Visegrad Group Countries

The findings of this study and the confirmation of all four hypotheses developed for this study reflect the varying levels of the economic influence of the 16+1 initiative as witnessed by the Visegrad Group countries based on Chinese trade engagement and investment. According to the findings, the trade relations between China and Visegrad Group countries have substantially developed since the 16+1 initiative was implemented. Furthermore, the description of data and their implication in this study reverberated the findings of Przychodniak (2017), which reported enhanced trade opportunities and economic cooperation between the different Visegrad Group

countries with China. As demonstrated by the presented analyses, the existence and changes of trade patterns and volumes have resulted from the Visegrad countries participating in the initiative, thus benefiting more than others who have shied away from the Initiative or non-EU members not part of the larger group.

However, despite their participation in the 16+1 initiative, the predominance of other economies over the others confirms the assertion of Pepe (2017), Przychodniak (2017), and Zuokui (2016) which demonstrated that increased trade volumes in the region by China as a part of the overall BRI and 16+1 initiative have resulted in trade imbalances in the Visegrad Group countries. Based on the statistics and research findings presented so far among all the Visegrad Group countries, Hungary has benefited more than the others receiving the highest FDI inflow. Poland and the Czech Republic follow closely, while Slovakia's share of the investment from China through the 16+1 initiative remains minimal. Moreover, the peak time associated with the investment inflow has varied, as reported in this study, with Poland depicted to experience steady growth while Hungary witnessed a slowdown. On the other hand, the Czech Republic showed a rapid acceleration regarding the peak time investment inflow compared to the others. This has been primarily associated with its changing attitude and stance towards China, as illustrated in the discussion about the political influence of the 16+1 initiative.

Notably, the bilateral trade flow volumes have indicated that most goods are exported from China, and in return, China gets more exports from the Visegrad Group region. As noted by Pepe (2017), the Visegrad Group countries import more finished goods from China than China imports from them due to the countries' incapacity to produce finished goods. According to Matura (2018), China can export finished and unfinished goods and thus acquire more imports from the Visegrad countries than they export. As illustrated by the reviewed literature in the respective chapter, most goods exported to China are fundamentally agricultural products and raw materials. This is illustrated by Šebeňa (2018), who points out the dominance of manufactured goods from China in the Visegrad Group countries, raising questions about the impact the initiative has on the domestic industries of these countries. Regarding the exportation of goods or products to China, Hungary was illustrated as the prominent exporter, and this could be associated with various reasons, as discussed in the following paragraph.

Fundamentally, over the last decade and the era that pre-dates the establishment of the 16+1 initiative, reports have demonstrated that among the Visegrad Group countries, Hungary actively pursued the development of its relationship with China (Matura, 2019; Pepe, 2017). According to McCaleb and Szunomár (2017), various experts considered this a strategic partnership that transcended the political division. This demonstrates why Hungary benefits more from FDI inflow than other Visegrad Group countries. The findings also illustrate why it remains one of the most significant exports of presumable agricultural and raw materials to China. A critical review of the conclusions and collaboration to findings of the studies discussed above illustrate that economic ties have remained the focal point of the Hungary and China partnership. As Pepe (2017) indicated, Hungary has not shied away from showing unwavering support for China regarding critical international issues. This cements the notion that in return to their allegiance and steadfast support, the country, compared to its neighbours, enjoys disproportionate access to China's investment and bilateral trade. However, this could also have political implications. However, despite the latter, policymakers from within the Visegrad Group countries have highlighted the need for more robust and balanced trade relations between their countries and China that persist beyond political alliance to address the disproportionality experienced or that that has characterised the initiative since its inception and establishment in Europe (Matura, 2018; Matura, 2019; Pepe, 2017). Moreover, there is a need to diversify the export basket through this relation for the countries to gain access to additional value-added sectors within the Chinese market.

The participation of the Visegrad Group countries in the 16+1 initiative and the results provided in the respective chapter and sections show that despite the disparities realised, the contributory aspect of individual countries is aimed at strategic significance and prospects. Furthermore, the regressive findings and confirmation of all four hypotheses emphasise the importance of trade relations with China. The relationship or partnership between these countries and China could be motivated by the fact that these countries recently joined the EU and aim to position themselves as the hub for Chinese products, especially those destined for the European market. Consequently, the confirmation of the hypotheses on the significance level of the 16+1 initiative on trade flow volumes and FDI inflows suggests that while China continues to play a critical role in the global market, its trade relations could provide strategic positioning to the Visegrad Group countries providing it with opportunities to enhance their economic growth in Europe and influence economic international affairs.

While the discussion above provides the potential reasons and insights as to why the results were positive and significant, overall, the econometric analysis provides compelling empirical evidence supporting that the 16+1 has significantly contributed to improving and bolstering FDI inflows in the Visegrad Group countries. Furthermore, the initiative has been associated with increased and strengthened bilateral trade flow volumes, which has enabled increased market access and economic cooperation between the Visegrad Group countries and China. The compelling investment in the different countries as part of the 16+1 initiative's official stated objective, as Vangeli (2018) reported, has seen Chinese investments predominantly target energy, infrastructure, and manufacturing sectors. These sectors are considered more sustainable and sufficiently feasible compared to other industries described as developed.

The Chinese FDI inflow, notably, has provided investment and capital for economic development in the Visegrad Group countries, contributing to improving infrastructure in generating employment. However, policymakers, experts, and scholars have raised concerns concerning the conditions and transparency of these investments. In particular, policymakers in the Visegrad Group countries have adopted an approach that ensures that the Chinese investments align with their national interest and ultimately meet the standards prescribed in their regulatory guidelines as depicted in literature to avert the potential actual objectives of China through the initiative. In response to the uncertainties, some Visegrad Group countries have diversified their FDI sources by promoting investments from other regions and countries. The study's findings leveraged this and investigated the potential political influence of the 16+1 initiative. The discussion of the associative results is provided in the following section.

5.4 Political Influence of the 16+1 Initiative on Visegrad Group Countries

The perception of the policymakers and overall attitude based on the data source acquired to investigate the political influence of the 16+1 Initiative on Visegrad Group countries reveal positive sentiments on the initiative's possible political consequences that extend beyond the officially stated objectives. Based on the findings, the political influence of the 16+1 initiative was interpreted based on its perceived effect on political ties, diplomatic relations, and high-level visits. It was indicated that variations were persistent in avenues, such as historical tensions and policy alignment which reflected a diverse geopolitical context within the study region. The findings were in alignment with those of Vangeli (2018) and Matura (2016) and who was adamant that the 16+1

Group countries (Matura, 2019). Matura (2018) and Vangeli (2018) assertions have demonstrated that the framework has created a new mode or model of interactions between the Visegrad Group countries and China, fostering direct engagements and reducing the group's dependency on the European Union's existing mechanisms. As Matura (2019) noted, this has broadened the Visegrad Group countries' political and economic engagement level by allowing them to pursue their economic interests while interacting with China politically and economically.

The primary political dynamic feature of the 16+1 initiative is attributed to the concept of the China-Visegrad Group countries' unique relations. Kavalski (2022) found that China and the relevant policymakers have promoted the narrative of the special relations between Visegrad Group countries and itself by emphasising shared development experiences and historical ties. The framing of the political dynamic feature of the initiative further resonates with those of the policymakers within the target countries who have insistently sought to diversify their engagement and leveraging on the economic growth of China to develop their states (Musabelliu, 2020; Matura, 2019; Vangeli, 2018). The relationship between Hungary and China has demonstrated this, as they have been the primary recipients of Chinese investment and have benefited most compared to the other three Visegrad Group countries. The pursuit for closer relations pre and after the inception of the 16+1 initiative through the formal announcement of its Eastern Opening policy in 2012 indicated that the relationship extended beyond the economic ties or relations.

Furthermore, it is evident through the political sentiments and the econometric analysis that China perceives Hungary as a conduit through which it will gain a political presence within Europe. This is illustrated by the active participation of Hungary in most of the China-CEE Economic and Trade forums compared to its other Visegrad Group member states, suggesting that it has a higher commitment to fostering stronger and robust regional and bilateral relations. However, the rising concerns among the European institutions and member states have challenged the power dynamics of the initiative, terming it as a potential source of fragmentation within the Visegrad Group countries concerning them being members of the CEE group operating under the EU, through Hungary (Song and Qiqi, 2017). Besides, policymakers from Western Europe have raised concerns about the political dynamic influencing the initiative and terming it as a framework that could

potentially undermine and dilute the EU's bloc efforts to address contentious issues, such as human rights and market access, especially if the Visegrad Group countries engage with China directly.

While most presented evidence has focused on Hungary as a case study for the political ties, various scholars and experts have attributed the enthusiasm to Hungary's pursuit of FDI, economic cooperation, and economic pragmatism concerning China (Przychodniak, 2017; McCaleb and Szunomár, 2017), based on the acquired data that resonated with the review presented in Chapter 2, available evidence has shown Poland to be more cautious in its interaction with China through the initiative. Experts and scholars' opinions have demonstrated that Poland has carefully balanced their economic interest concerns over the political conditions the initiative attaches to the Chinese investment. According to the different assertions, Poland's cautious stance reflects its strategic positioning within the European Union and its objective of ensuring a united EU attitude towards China. Šebeňa (2018) evaluation of the Visegrad Group countries and association with the 16+1 initiative report that the Czech Republic and Slovakia have taken a moderate approach that seeks to benefit from the initiative's economic opportunities. These findings state that the reasonable approach characterises both countries since they consider the broader relations and strategy that illustrate the more general EU-China dynamics. Furthermore, the results have shown that Slovakia and the Czech Republic seek economic alignment over political alignment, which has been discussed as the potential actual objectives of the Chinese approach, emphasising technological innovation, investment in high-value-added sectors and technology transfer, as also reported by Przychodniak (2017).

A comparative analysis of the political influence as perceived within the EU and Visegrad countries compared to non-EU countries, such as Serbia, show that the latter are at liberty to participate in the initiative without focusing on the potential actual objectives of the initiative. Unlike the Visegrad Group countries, the non-EU member states within the economic framework face different economic and political challenges (Przychodniak et al., 2018). For instance, it has been illustrated in the literature that Serbia, like all the other non-EU member states, has received the notable influence of Chinese FDI on its decision-making and domestic policies compared to the EU member states (Bonomi and Uvalic, 2019; Matura, 2018). These evidential findings underscore that political influence within the 16+1 initiative is shaped by several factors, including economic interests, geopolitical context, and historical ties, as illustrated in the case of the Visegrad group

and also reported within the new trade theory. In other words, by virtue of not having political influence on the EU, non-member states participating in the economic framework have achieved increased economic cooperation and economies of scale, especially in the infrastructure and manufacturing sectors, resulting in improved competitiveness and cost reduction resulting in higher rates of investment from China (Bonomi and Uvalic, 2019). Furthermore, by having different political characteristics, based on the theory of comparative advantage, Serbia will benefit more from FDI inflow than the region under study.

Compared to non-EU member states, while actively participating in the 16+1 economic framework, the Visegrad Group countries often prioritise their relationship with the EU, resulting in variations in the engagement level with China and the amount of FDI inflow. Therefore, Visegrad Group countries' overall political alignment and cooperation within the 16+1 initiative reflect a strong and cautious balancing act between pursuing economic benefits and opportunities and maintaining cohesion within the more comprehensive EU framework. The findings show that there are hidden potential actual objectives of the initiative which have influenced the interaction or participation of the Visegrad countries in the 16+1 initiative. For instance, some countries have formed a political tie and alignment to acquire more FDI inflow from China. At the same time, others have remained cautious, emphasising economic relations over political associations. In summary, the results, analysis, and in-depth discussion on the political influence of the 16+1 initiative reveal that it has a higher impact on how Visegrad Group countries relate to China primarily for economic gains. The implication of the study is discussed in the subsequent section.

5.5 Implication of the Study

This investigation's findings have significant implications for stakeholders and policymakers in the focus region. The positive and robust influence of the 16+1 initiative opens doors for enhanced and agile collaboration between these countries and China. This diversifies trade relations while attracting investments. Therefore, policymakers and relevant stakeholders can leverage the officially stated objectives of the initiative to boost economic development and growth. The implications are illustrated subsequently and have been collaborated with existing literature.

The "16+1" policy is now a subject of considerable controversy. On one hand, China's growing investment volume and share in Central and Eastern European countries, as a significant trade partner, is widely recognized. Some perceive this as a beneficial transaction, arguing that China's

foreign investment will bring about economic effects akin to other direct investment flows. Hanemann and Huotari (2015) suggest that China's burgeoning foreign investment offers a rare opportunity for Europe to attract capital and help reignite investment and economic growth. Empirical studies have also demonstrated a positive impact of China's FDI on Eastern Europe's economic growth.

On the other hand, an increasing number of Western scholars, with certain political biases, argue that Central and Eastern European countries face fierce competition to attract Chinese capital in the short term. Accompanying the influx of Chinese capital are implicit conditions that influence European norms and policies, including the relaxation of human rights, environmental standards, and labor law provisions. In the long run, these could have negative implications for the economic growth, national security, and governance of Central and Eastern Europe (Turcsanyi, 2017).

Existing empirical evidence on the 16+1 initiatives' impact on investment and trade between CEE countries and China has highlighted notable and significant changes in economic interactions providing significance to this study. The results show that substantial economic changes are tied to initiatives with officially stated objectives to enhance economic cooperation between China and the Visegrad Group countries, which the relevant stakeholders and policymakers can leverage to gain the acquired economic gain and development. These findings and the implication are supported by various investigations, including that of Góralczyk (2017), which reported that by leveraging the 16+1 initiatives, participating countries could substantially increase their bilateral trade volumes with China and acquire the needed FDI inflow. Evidence from other CEE countries has shown that due to the increased bilateral trade volumes, electronics, machinery, and agricultural products have been the most impacted sectors indicating areas that policymakers should concentrate on to achieve a certain level of economic growth.

Apart from increased trade volumes, the implication of the study's results shows that participation in the 16+1 initiative positively influences or results in a Chinese investment surge which should be the focus of the policymakers. This study provides valuable insights into diversifying trade partners to avoid political overdependence most associated with having few trading relationships. Policymakers and stakeholders can leverage the 16+1 initiative to reduce dependence on the

Western market. While the 16+1 initiative has positively impacted trade and investment for all partners involved, concerns of imbalance and infrastructure debt have been raised in the current literature. The imbalance concerns have been reported mainly on trade relations. Some studies have indicated that trade deficits have widened in some CEE countries, potentially resulting in probable economic changes. As such, these insights can be used to form strategic plans that address over-dependence.

Furthermore, the concerns of potential debt burdens arising from the findings of this study based on a literature review based on the recipient countries' ability to pay the debts associated with the large-scale infrastructure projects solemnly funded through the Initiative by China should be a concern for the policymakers and as such this study will help them negotiate better engagement terms. In other words, there are worries about the sustainability of the debts and the probability of increased dependency on China, which could propel China's potential actual objectives; hence as an implication of the study, there is a need to differentiate between the officially stated goals and the possible precise objectives that could manifest as potential debt burdens. As a result, policymakers can leverage need the findings of this study on the 16+1 initiative to avoid such occurrences.

The different perspectives on the other policymakers' attitudes towards the initiative contribute to the implications of this study. As the existing evidence illustrates, policymakers have had varying attitudes towards the 16+1 initiative. For instance, as presented by Matura (2018), while some policymakers, especially those in Hungary, had a positive and robust attitude towards the proponents of the Initiative, terming it as a pragmatic and valuable addition to the overall economic cooperation, other policymakers have demonstrated caution, particular, the Czech Republic and Poland. Vangeli (2018) made the same observations, who stated that policymakers' attitudes differed based on the alignment of the 16+1 initiative with the policies of the EU and the probable divisions that may arise within the European Union. Remarkably, most policymakers were concerned about the intentions of the bilateral arrangements within the initiative's framework and how its core objectives could undermine the coherence of the typical approach by the European Union towards China (Vangeli, 2018; Pepermans, 2018). This evidence is significant in the context of the discussion as it not only indicates the potential downsides of the initiative but also provides

insights on how it can be retailored to address the concerns of all member states by providing clear goals.

In spite of the economic cooperation fostered through the initiative, policymakers are concerned that it has failed to address some of the CEE region's development needs. Policymakers in the Visegrad Group countries block mainly have expressed the need for the initiative to have a more sustainable and balanced economic partnership with China that focuses beyond the economic threshold and addresses innovation, knowledge-sharing, and technology transfer needs. Therefore, from a general perspective, it could be stated that the policymakers' attitudes vary based on the perceived benefit of the initiative to their particulate countries or needs and the alignment of the initiative's objectives with the institutional block of the EU. All the literature reviewed to provide empirical evidence on the 16+1 initiative has provided valuable insights into its multifaceted nature and identified the complexities of political and economic interactions between the CEE region and China. All this evidence could be leveraged to advance this study's theoretical aspect while addressing the potential practical implication of the findings presented in the subsequent chapters. Overall, the robust and positive economic influence of the 16+1 initiative creates opportunities for increased collaboration among participating countries within the EU bloc and the Visegrad Group attracting more investments and diversifying trade relationships. It also presents the political influence of the initiative and how it can be leveraged to address the rising concerns among the EU institutions questioning the loyalty between respective countries.

CHAPTER SIX

6.1 Introduction

This chapter provides an overview and summary of the understanding of the dissertation. This includes the presentation of the critical findings summary, the contribution of the findings to the existing theoretical literature and policy implications. It highlights the limitations encountered and the potentiality for future research based on the methodological approach adopted for the study. The purpose of the chapter is to ensure that the investigation has addressed its objectives and hypotheses based on its primary aim; the study focuses on the different attributes that underscore why the study was necessary in the first place. The following sections highlight these critical dimensions of the study.

6.2 Summary of Key Findings

This study explored the political and economic influence of the 16+1 Initiative on Central Eastern Europe countries, particularly on the Visegrad Group countries. The 16+1 initiative, which serves as an economic framework between CEE countries and China, has garnered significant interest among policymakers and scholars alike due to its potential political and economic implications within the CEE region. Therefore, this study purposed to investigate the multifaceted nature and impact of the 16+1 initiative by analysing the economic influence on FDI inflows and bilateral trade between the Visegrad Group countries and China. It also delved into the political influence of the initiative in the region. To accomplish the latter, this study leveraged the significance of the quantitative research design with both deductive and comparative analysis approaches.

As part of its methodology, the study conducted an econometric and comparative analysis of the existing FDI and trade flows data from the Eurostat database, World Bank Databases, academic journals and publications databases, and the United Nations Comrade Database to accomplish these objectives. Two models were developed to aid the econometric data analysis: the fixed-effect panel model and the gravity model for trade flow. The findings of this study revealed a statistically significant positive influence of the Initiative on FDI inflows to the CEE countries, particularly the Visegrad Group countries, from China. A coefficient of 0.368 was recorded for this correlation, highlighting that participation in the initiative was directly associated with a significant increase in FDI inflows. Consequentially, the findings of this study showed an essential positive relationship between bilateral trade flows and the initiative between the Visegrad Group CEE countries and China. The associative coefficient was 0.263, suggesting that the initiative had proven instrumental in bolstering or boosting trade relations between the Visegrad Group countries and China.

Further analysis of the study revealed that economic size and geopolitical distance, in one way or the other, influenced trade flow volumes and FDI inflow influxes. The findings indicated that more considerable distances reduced FDI inflows and trade volumes between the participating countries. There was a positive and direct relationship between the economic sizes of the countries and the trade flows and FDI inflows. The higher the GDP was perceived or recorder, the higher the trade flow volumes and FDI inflow recorded.

Qualitative analysis of the existing perception of the potential actual objectives of the initiative showed that most policymakers believed there are hidden political interests in China. The most cited was prompting self-interest in the region from a political standpoint. The findings revealed that China's potential objective through the initiative was strengthening ties and aligning political interests with the Visegrad Group countries. This study's primary limitation is insufficient data in academic and expert reports on the political attribute of the initiative. Table 6.2 summarises the hypotheses and whether they were confirmed or rejected.

Table 6.2: Summary of the Hypotheses

Hypotheses	Description	Status
H ₁ : There are significantly increased bilateral trade flows between China and the Visegrad		Supported / Confirmed

Group countries due to establishing the 16+1 initiative. H2: There is a positive and statistically significant effect on FDI flow between China and the Visegrad Group countries due to their participation and membership in the 16+1 initiatives.	between China and Visegrad Group countries. To investigate the impact of the 16+1 initiative on the FDI inflow to Visegrad Group countries from China.	Supported / Confirmed
H ₃ : Members of the Visegrad Group countries with greater levels of political alignment with China experience increased trade flows and FDI inflows compared to those with lower political alignment levels.	To explore the political influence of the 16+1 initiative on the trade flows and FDI inflows within the Visegrad Group countries.	Supported / Confirmed
H4: Factors such as distance between countries, GDP, and population size, have statistically significant effects on FDI inflows and trade flows between China and the Visegrad Group countries.	To determine the influence of factors, such as GDP and geographical distance, on the FDI inflows and trade flows between Visegrad Group countries and China.	Supported / Confirmed

6.3 Contribution to the Existing Theoretical Literature

The findings of this study contribute substantially to the existing theoretical literature or studies on trade theories and associative international relationship theories. The discussion demonstrates that some key study aspects can only be negotiated or interpreted in-depth based on these theories. For instance, the new trade theory can be used to illustrate the relationship between Hungary and China in-depth and the realism theory to understand the motivation of Hungary-China relationships beyond the 16+1 initiatives' officially stated objectives. Furthermore, through the use of econometric models, this investigation shed light on the political and economic influences of the initiative, which could be explored in detail using other econometric models to understand the different dimensions of the relationship in more considerable aspects of the region. Overall, the findings of this study contribute to the comprehension of the evolving dynamics between the CEE countries and China, using Visegrad Group countries as case countries.

6.4 Policy Implications

In regards to policy implications based on the study's implications discussed in the previous chapter, this investigation shows that Visegrad Group countries and the CEE groups, in general show critically evaluate their economic relationship with China to address any potential actual objectives of the association that have not been officially stated. In addition, while the investments from the

Chinese to the Visegrad Group countries and the larger CEE region provide opportunities for economic growth and development, policymakers and the relevant stakeholders should be cautious about the implications these investments may have, especially regarding infrastructure projects rather than greenfield investments. Furthermore, the substantial trade deficits between the Visegrad Group countries and other CEE countries should be closely examined regarding the structure of the trade association and the impact they may have on domestic industries in the long term.

Policy implications in the perspective of CEE countries:

Balancing Economic Benefits and Political Independence: Central and Eastern European (CEE) countries need to strike a balance between the economic benefits derived from the "16+1" Initiative and maintaining their political independence. While Chinese investments can stimulate economic growth, it's crucial to ensure that these investments do not compromise the countries' autonomy or their adherence to European norms and standards.

Strengthening Regulatory Frameworks: CEE countries should strengthen their regulatory frameworks to ensure that foreign investments, including those from China, align with their national interests and do not undermine their commitments to human rights, environmental standards, and labor laws.

Promoting Transparency: To mitigate concerns about the potential political implications of Chinese investments, CEE countries should promote transparency in their dealings with China. This includes making information about investment agreements publicly available and ensuring that these agreements are subject to public scrutiny and debate.

Engaging with the European Union: Given the concerns about the "16+1" Initiative potentially undermining EU unity, CEE countries should actively engage with the EU in their relations with China. This could involve coordinating their approach to China at the EU level and ensuring that their bilateral relations with China complement the EU's overall strategy towards China.

Diversifying Economic Partnerships: To reduce their economic dependence on China, CEE countries should seek to diversify their economic partnerships. This could involve strengthening economic ties with other countries and regions and exploring new opportunities for trade and investment.

Capacity Building: CEE countries should invest in capacity building to better manage and benefit from foreign investments. This could involve enhancing their ability to negotiate investment agreements, improving their understanding of the potential risks and benefits of foreign investments, and strengthening their capacity to regulate and monitor foreign investments.

6.5 Recommendations for Future Research

To further enrich the comprehension of the 16+1 initiative's impact beyond the economic sphere, future studies can investigate and evaluate the political objectives and motives behind the initiative and compare them to the stated objectives. Moreover, there is a need to investigate the potential reasons for the variations being realised among the Visegrad Group countries regarding Chinese investment. Such investigations could go beyond the political motivations or perceived relationship and explore sectorial influences or impacts on investment opportunities. In addition, further studies could delve into the influence of the 16+1 initiative on political dynamics and regional cooperation within the Visegrad group. Based on all the gathered facts of this study, this study illuminates the intricate dynamics of the initiative. It can be used to point out any limitations that may require further exploration through a literature review.

The findings highlight the significance of economic ties and strategic partnerships between CEE countries and China, underscoring the potential need for balanced approaches based on existing international relations and trade theories. Similarly, as the initiative progresses in shaping the political and economic ties in the regions it operates, this investigation lays the foundation for further study and informed policymaking regarding CEE-China relations. While no studies

comprehensively compare the economic and political influence of the initiative on non-EU members, other studies are required based on the findings presented in the discussion comparing the initiative's impact on Serbia and the Visegrad Group countries. There is room for future studies to explore the variability in trade flow volumes and FDI inflows between the EU and non-EU members despite participating within the same framework.

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APPENDICES

Appendix A: Data Used in the Study

Imports, CIF from Partner Countries China, P.R.: Mainland US Dollars, Millions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Australia	59,698.07	80,929.74	78,593.07	91,558.19	90,132.22	65,141.38	70,127.18	92,807.78	105,140.90	119,608.31	114,766.77	162,182.73	140,706.86
World	1,393,909.27	1,741,429.57	1,817,343.88	1,949,298.83	1,963,058.03	1,601,760.50	1,589,460.07	1,832,125.64	2,134,026.33	2,068,950.25	2,060,258.10	2,678,856.79	2,715,369.67
Advanced Economies	822,223.99	990,453.87	994,351.19	1,094,467.87	1,107,325.83	948,498.76	966,120.21	1,087,818.64	1,212,834.26	1,147,467.34	1,172,700.22	1,484,067.26	1,404,798.92
Euro Area	141,959.01	178,557.27	177,382.08	180,651.06	197,760.32	169,141.44	168,490.15	196,940.69	220,661.49	222,799.25	226,058.58	270,786.01	250,928.64
Austria	4,236.65	4,766.12	4,725.23	5,036.53	5,855.67	4,966.00	5,004.13	5,857.01	6,912.72	7,622.81	6,671.76	8,420.46	8,237.84
Belgium	7,827.27	10,133.51	9,962.99	9,866.31	10,055.59	7,031.73	6,867.02	7,547.37	6,981.31	6,869.82	7,857.04	8,545.00	8,736.61
Croatia, Rep. of	50.85	79.61	74.91	106.77	100.64	112.10	161.42	182.69	211.92	145.39	141.47	340.07	158.88
Cyprus	17.20	26.29	118.65	52.89	62.62	49.88	47.77	53.33	54.00	57.61	25.22	28.87	34.83
Estonia, Rep. of	176.76	197.28	135.64	199.87	225.41	235.22	211.53	260.65	245.86	299.41	281.44	281.50	30150
Finland	4,033.54	4,547.18	3,836.02	3,910.23	4,072.86	3,485.35	3,451.77	4,251.96	4,757.03	4,630.68	4,195.83	5,319.69	5,246.57
France	17,112.40	22,085.26	24,235.56	23,014.33	27,115.47	24,974.48	22,699.64	27,299.35	32,287.47	32,580.85	30,215.85	39,155.31	35,614.65
Germany	74,378.39	92,759.00	92,029.03	94,131.11	104,776.26	87,470.11	86,376.90	96,945.21	106,213.68	105,037.21	105,282.29	120,018.80	111,422.37
Greece	390.40	354.01	428.25	434.73	346.12	286.12	284.73	427.32	565.56	726.21	773.30	974.04	833.16
Ireland	3,409.46	3,703.01	3,795.38	4,191.69	3,734.24	4,285.74	5,279.02	8,135.17	10,859.37	13,449.67	14,044.33	17,627.70	18,103.21
Italy	13,990.07	17,573.50	16,242.45	17,556.50	19,273.11	16,784.73	16,738.02	20,414.35	21,170.91	21,421.27	22,248.93	30,326.20	26,995.32
Latvia	38.56	63.43	68.79	99.16	146.89	144.40	132.23	177.20	212.80	195.65	200.47	239.05	375.31
Lithuania	43.90	87.58	88.99	124.24	156.81	139.71	163.54	254.74	332.43	436.79	487.48	433.30	90.99
Luxembourg	258.04	309.25	266.42	256.61	303.89	309.53	305.73	307.69	312.20	360.51	390.64	601.74	52168
Malta	569.06	851.69	894.03	725.21	591.58	441.14	399.93	409.67	349.13	358.58	387.55	553.50	584.79
Netherlands, The	6,478.57	8,644.09	8,718.73	9,787.31	9,368.53	8,805.34	9,741.85	11,206.14	12,303.28	11,195.73	12,788.09	14,017.88	12,531.37
Portugal	754.16	1,162.26	1,517.79	1,401.23	1,664.86	1,471.84	1,580.94	2,132.09	2,249.56	2,317.89	2,773.43	3,454.28	3,040.88
Slovak Rep.	1,790.29	3,456.67	3,654.88	3,453.58	3,376.30	2,237.32	2,407.08	2,585.01	5,245.68	5,967.43	6,432.55	7,543.52	7,709.49
Slovenia, Rep. of	176.79	201.90	255.88	302.92	332.24	289.61	436.55	495.08	591.15	516.46	508.59	633.70	589.47
Spain	6,226.66	7,555.65	6,332.44	5,999.84	6,201.20	5,621.10	6,200.37	7,998.65	8,805.44	8,609.26	10,352.29	12,271.40	9,799.70
Australia	59,698.07	80,929.74	78,593.07	91,558.19	90,132.22	65,141.38	70,127.18	92,807.78	105,140.90	119,608.31	114,766.77	162,182.73	140,706.86
Canada	14,791.21	21,564.10	22,759.46	24,132.09	21,133.55	18,549.15	18,248.06	20,346.97	28,362.68	28,032.46	21,873.15	30,161.58	42,370.61
China, P.R.: Hong Kong	9,501.34	15,506.38	17,955.26	16,225.27	12,920.24	8,161.48	17,016.71	7,502.16	8,533.62	9,056.65	7,125.96	9,771.82	7,884.89
China, P.R.: Macao	119.46	161.02	276.82	385.07	210.30	183.23	139.70	103.99	64.07	66.84	63.11	82.49	79.36
Czech Rep.	1,718.49	2,318.95	2,406.83	2,612.48	2,992.39	2,784.09	2,948.06	3,694.08	4,410.62	4,628.04	5,143.28	6,052.59	5,420.69
Denmark	2,646.46	2,815.45	2,903.08	3,373.83	4,055.83	4,095.92	4,267.06	4,209.90	4,385.20	4,955.41	6,007.87	6,978.66	5,720.07
Iceland	41.33	75.56	88.95	75.81	59.42	65.97	95.27	110.10	165.75	142.63	104.59	151.82	190.95
Israel	2,604.42	3,038.07	2,924.70	3,183.68	3,165.75	2,804.20	3,201.64	4,199.49	4,631.72	5,157.62	6,285.36	7,535.33	8,966.84
Japan	176,304.03	194,409.77	177,726.83	162,219.41	162,685.64	142,715.66	145,524.03	165,773.12	180,478.66	171,523.31	176,089.03	206,153.13	184,830.70
Korea, Rep. of	138,023.82	161,673.31	166,589.71	182,881.54	190,286.02	174,288.63	159,187.13	177,561.96	202,995.45	173,553.27	173,501.49	213,554.72	200,162.67
New Zealand	3,755.07	4,990.52	5,806.14	8,251.51	9,504.66	6,583.32	7,143.64	9,371.86	11,077.66	12,491.02	12,062.27	16,140.50	15,970.59
Norway	3,232.86	3,620.78	3,067,99	3,483.55	4,475.23	4,147.26	3,189.68	3,127,61	3,418.98	3,897.90	7,226.68	10,181.92	7,690.31

*Exports, FOB to Partner Countries China, P.R.: Mainland US Dollars, Millions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Australia	27,227.66	33,906.49	37,761.52	37,555.90	39,121.98	40,380.32	38,061.19	41,701.32	47,646.84	48,103.59	53,509.15	66,481.14	78,983.41
World	1,578,428.16	1,899,157.65	2,049,947.24	2,210,578.28	2,343,130.29	2,280,422.89	2,136,523.81	2,280,048.85	2,501,304.87	2,498,531.56	2,598,014.48	3,368,216.97	3,604,481.49
Advanced Economies	1,111,446.49	1,308,591.75	1,392,184.78	1,486,406.33	1,543,122.98	1,505,933.74	1,404,528.27	1,488,892.12	1,627,320.86	1,565,379.34	1,649,558.49	2,085,581.77	2,145,897.85
Euro Area	236,392.55	270,756.22	248,094.59	246,766.63	267,915.21	251,665.18	241,831.69	265,946.99	293,626.17	301,286.14	321,217.67	426,294.39	463,457.57
Austria	1,853.58	2,227.46	2,039.23	2,037.77	2,397.52	2,497.72	2,245.59	2,527.14	2,844.65	3,021.83	3,399.02	5,349.79	5,097.93
Belgium	14,302.86	18,971.22	16,377.43	15,558.81	17,222.47	16,220.76	14,987.34	15,891.10	17,177.56	18,242.35	20,776.48	30,400.67	35,534.45
Croatia, Rep. of	1,343.21	1,541.05	1,300.07	1,390.03	1,027.50	986.20	1,029.19	1,156.76	1,332.69	1,386.44	1,565.14	1,978.70	2,268.19
Cyprus	1,348.21	1,123.99	1,093.12	964.14	1,036.48	589.32	470.97	523.19	738.60	575.63	892.44	869.19	1,167.62
Estonia, Rep. of	676.68	1,132.03	1,234.02	1,109.89	1,146.26	954.40	968.63	991.51	1,032.64	915.84	861.46	1,010.24	945.78
Finland	5,497.78	6,630.53	7,442.70	5,831.53	5,099.95	3,552.95	2,912.88	2,849.70	3,094.48	3,024.72	2,947.63	3,805.62	4,548.21
France	27,859.42	30,244.14	27,209.06	27,015.10	28,975.69	27,048.10	25,303.22	28,123.92	31,247.81	33,104.06	37,272.09	46,474.44	46,070.90
Germany	68,068.78	76,433.38	69,175.77	67,349.00	72,730.92	69,203.67	66,044.12	71,463.82	78,154.62	79,706.09	86,997.61	115,267.20	116,212.01
Greece	3,958.38	3,949.36	3,594.85	3,215.28	4,185.52	3,665.17	4,296.25	4,817.39	6,572.27	7,740.22	7,041.06	11,197.26	13,020.62
Ireland	1,986.60	2,149.38	2,098.66	2,477.02	2,800.90	2,824.71	2,812.56	2,925.71	3,661.22	3,267.31	3,992.11	5,321.67	5,706.41
Italy	31,141.49	33,709.45	25,658.39	25,750.81	28,759.02	27,849.19	26,565.23	29,282.19	33,325.40	33,410.76	32,946.54	43,647.65	50,875.16
Latvia	795.09	1,192.81	1,313.74	1,375.15	1,316.64	1,023.34	1,081.14	1,148.33	1,168.32	1,078.37	1,048.66	1,146.52	1,023.45
Lithuania	982.35	1,335.23	1,631.68	1,686.53	1,658.16	1,211.11	1,301.51	1,601.08	1,765.58	1,681.95	1,802.80	2,196.29	1,788.97
Luxembourg	987.62	1,595.97	1,956.31	1,807.98	1,946.40	2,325.44	1,255.54	701.06	855.20	1,579.03	999.19	1,512.57	586.82
Malta	1,843.40	2,329.42	2,314.72	2,521.25	3,192.62	2,376.68	1,603.32	2,125.17	1,434.54	1,156.40	1,358.45	2,198.77	1,968.60
Netherlands, The	49,711.08	59,482.03	58,917.23	60,317.91	64,923.31	59,653.97	58,051.72	67,587.72	73,288.72	73,945.37	79,056.50	102,481.90	117,679.65
Portugal	2,513.52	2,800.90	2,502.16	2,506.82	3,137.25	2,898.65	4,039.85	3,485.62	3,783.65	4,325.49	4,216.76	5,357.57	5,974.78
Slovak Rep.	1,958.59	2,512.38	2,422.90	3,084.57	2,829.19	2,794.41	2,870.08	2,732.12	2,561.19	2,893.89	3,048.35	4,547.20	4,435.71
Slovenia, Rep. of	1,385.45	1,676.24	1,568.58	1,833.18	1,991.73	2,093.55	2,293.33	2,893.64	4,453.35	3,404.44	3,452.78	5,364.82	6,864.17
Spain	18,178.47	19,719.25	18,244.00	18,933.86	21,537.66	21,895.84	21,699.26	23,119.81	25,133.68	26,825.96	27,542.61	36,166.33	41,688.16
Australia	27,227.66	33,906.49	37,761.52	37,555.90	39,121.98	40,380.32	38,061.19	41,701.32	47,646.84	48,103.59	53,509.15	66,481.14	78,983.41
Canada	22,208.07	25,249.13	28,106.99	29,197.86	30,000.36	29,407.03	27,854.75	31,765.29	35,660.22	36,827.42	42,126.46	51,568.17	53,745.08
China, P.R.: Hong Kong	218,204.97	268,038.62	323,654.11	384,876.90	363,222.84	332,728.41	293,996.67	281,917.84	303,724.55	279,616.72	275,463.09	351,640.43	302,337.80
China, P.R.: Macao	2,136.31	2,352.78	2,708.08	3,178.90	3,605.91	4,614.75	3,352.26	3,210.14	3,131.33	3,047.19	2,227.54	3,189.66	4,244.58
Czech Rep.	7,119.54	7,670.43	6,323.42	6,836.61	7,994.52	8,227.27	8,061.25	8,793.82	11,916.33	12,911.01	13,781.20	15,110.59	18,228.78
Denmark	5,189.84	6,448.54	6,541.51	5,714.63	6,550.10	6,155.60	5,459.34	6,522.89	7,306.91	6,716.70	7,456.81	10,873.02	10,183.17
Iceland	71.05	75.12	95.40	147.12	143.69	125.01	134.31	111.67	256.35	113.07	100.53	206.90	310.33
Israel	5,037.54	6,743.67	6,990.57	7,637.76	7,739.27	8,624.32	8,351.53	9,021.79	9,356.42	9,516.48	11,258.57	15,317.96	16,426.70
Japan	120,262.43	147,290.06	151,509.25	149,912.34	149,451.72	135,897.05	129,617.47	137,528.61	147,564.61	143,223.97	142,721.95	165,902.06	173,096.27
Korea, Rep. of	68,810.57	82,924.70	87,646.84	91,174.36	100,401.65	101,428.83	95,815.60	103,042.09	109,524.34	110,984.86	113,028.96	150,553.94	164,077.92
New Zealand	2,764.03	3,736.39	3,876.44	4,132.45	4,741.60	4,920.25	4,882.00	5,135.25	5,813.55	5,704.62	6,070.41	8,568.62	9,188.12
Norway	2,84187	3.789.98	3.033.31	2.739.00	2.734.08	2.857.35	2.618.25	2.489.74	2.656.65	3.392.97	3.521.59	4.406.12	5,185.93