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Geoeconomic Fragmentation in the Wake of the Polycrisis in Central, Eastern, and Southeastern Europe

PhD Thesis

2026

Andrássy University Budapest
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Geoeconomic Fragmentation in the Wake of the Polycrisis in Central, Eastern, and Southeastern Europe

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27.03.2026.

10.15772/ANDRASSY.2026.006

Acknowledgements

I am most grateful to the Andrássy University for allowing me to write my PhD thesis and pursue my interest of research. The deepest of gratitude goes to my supervisor, Prof. Dr. Stefan Okruch, whose advices, support and flexibility paved my way throughout these five years even in times where I would have otherwise given up. I am perfectly aware and sure that without this support of his, I would not be writing these lines.

I am most grateful to Prof. Dr. Martina Eckardt for chairing the doctoral committee as well as the reviewers of the thesis, Prof. Dr. Siegfried Franke and Dr. Balázs Ferkelt for reading and evaluating this work. I am also thankful to many at the Andrássy University Budapest who made remarks on my work during a number of different courses, seminars, as well as private discussions. I am particularly grateful to Dr. Jörg Dötsch with whom we co-authored two papers, and who introduced me to the world of scientific research already during my master's studies.

Beside my supervisor at the Andrássy University Budapest, I am extremely grateful to my (work) supervisors at the Hungarian and Austrian central banks. Without their support, none of the papers in the cumulative thesis would have been written. My gratitude goes to Georgina Juhász at Magyar Nemzeti Bank and Julia Wörz at the Oesterreichische Nationalbank for supporting my research activities at both institutions.

Furthermore, I would like to thank all my coauthors at the MNB and the OeNB: Eszter Boros, Antje Hildebrandt and Patrik Tischler. The collaboration, the fruitful discussions contributed tremendously to the papers we have published together. Having presented these papers at different scientific workshops, I am most grateful to the suggestions of the participants there, and most notably to Katharina Allinger, Juuso Kaaresvirta and Tuuli McCully for discussing three of the papers.

By far the most challenging part of writing a thesis is the emotional rollercoaster one endures throughout the years. It was my wife who supported me even during the hardest of times. She encouraged me to apply to a doctoral school, and gave me emotional as well as intellectual support throughout the last five years. Thank you so much!

Tamás Ginter

March 2026

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In loving memory of my grandmother.

Ku pamięci mojej Babci.

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Summary[1]

1. Introduction

Deglobalisation, (geo-economic) fragmentation, friend-shoring, and related concepts that describe the restructuring of the global economy have attracted significant scholarly attention in recent years. Their relevance has been further amplified by a series of global crises throughout the 2020s. Nevertheless, relatively limited attention has been devoted to Central, Eastern, and Southeastern Europe (CESEE), a region that is aligned with major Western powers in both geopolitical and economic terms, yet characterised by distinctive positions within global value chains as well as by its geographical context.

The primary objective of this thesis is to address this gap by identifying the region's position—and its evolution—within an increasingly fragmenting global economy. The research questions addressed in the individual papers comprising this cumulative thesis include whether the CESEE region has experienced deglobalisation in recent years under the strain of the polycrisis; whether it has decoupled from geopolitically distant trading partners and investors; and whether it has responded to the growing global tendency toward geo-economic fragmentation.

To answer these questions, three of the four papers included in this thesis present descriptive statistical analyses based on extensive datasets of relevant indicators, particularly those related to trade and foreign direct investment (FDI). These papers examine trade and FDI flows through a geopolitical lens in two subregions of Central, Eastern, and Southeastern Europe: the Visegrád countries and the Western Balkans. The main findings suggest that, thus far, CESEE exhibits only limited signs of deglobalisation—evidenced by its increasingly intensive participation in international trade—and fragmentation, as it shows minimal engagement in decoupling from non-Western powers and, in fact, demonstrates growing trade and investment flows from regions beyond its principal geopolitical alliances.

The fourth paper in this cumulative thesis addresses a related but distinct research gap identified during the course of the study. Despite the expanding body of literature on fragmentation, no clear consensus has emerged regarding the number and composition of geopolitical blocs, which constitute a fundamental precondition for geo-economic fragmentation. Accordingly, the fourth

[1] Generative AI tools were used exclusively for spelling checks and for linguistic and stylistic revision in this section. No substantive content was generated by these tools.

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paper applies hierarchical clustering techniques to a set of relevant variables—including, but not limited to, trade and FDI—and identifies a coherent three-bloc structure of the global economy.

The introduction to the thesis is structured as follows. It begins with a contextual overview of the research topic, including key definitions and the conceptual framework underpinning the three empirical papers, as well as an outline of the thesis's regional focus. This is followed by a synthesis of the main findings of the individual papers, along with a discussion of their limitations and potential directions for future research. The introduction draws extensively on the four papers; accordingly, it does not aim to provide an exhaustive review of all relevant background literature, as this is addressed in detail within the individual studies. At the same time, a certain degree of overlap between the introduction and the papers is both inevitable and intentional.

1.1 A brief theoretical framework

Globalisation and the international division of labour have constituted the backbone of the international economic order over the past decades. Without seeking to provide an exhaustive definition of globalisation[2], it is important to note that, from an economic perspective, its key features include increasing shares of international trade relative to global GDP, rising levels of foreign direct investment, and the expansion of international financial flows (see, e.g., Halmai 2023).[3] Deglobalisation, by contrast, can be understood as a restructuring of the global economy in a direction opposite to that of globalisation. It is therefore characterised by declining shares of international trade, decreasing levels of foreign direct investment, and a reduction in international financial linkages (see, inter alia, Altman et al. 2024).

Just as the global economy has experienced a series of crises since the global financial crisis (GFC) of 2007–2008, so too have increasing obstacles emerged to the expansion of cross-border flows of goods, capital, and labour. From a historical perspective, such developments are not unprecedented: cyclical patterns of globalisation and deglobalisation can be observed (Jones 2005). As argued by Halmai (2023), the GFC represents a critical turning point in the trajectory of globalisation, as it prompted policymakers, firms, and societies to shift towards renationalisation and financial fragmentation (see also James 2018; Kim et al. 2020). This new wave of deglobalisation led to a

[2] These are extensively addressed in Papers 1 and 3.

[3] Further definitional aspects of globalisation are presented in Paper 1 (Ginter – Tischler 2024).

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marked decline in international trade and foreign direct investment (Witt 2019) and was further intensified by a succession of global crises, often referred to as a "polycrisis."

While events such as Brexit and the trade conflict between the United States and China may be interpreted as early warning signs, it was the polycrisis of the 2020s—encompassing, inter alia, the COVID-19 pandemic and escalating geopolitical tensions, including the wars in Ukraine and the Middle East—that generated pressures for a profound restructuring of global value chains (GVCs). In response, a range of new concepts has emerged, each reflecting different dimensions of this restructuring process.

Among these, the concepts of "reshoring" and "friendshoring" are particularly salient. They are defined as strategies aimed at relocating production processes to trusted countries with aligned political preferences in order to enhance supply chain resilience and reduce vulnerability to geopolitical risks (Ahn et al. 2023). Both concepts reflect the growing political impetus to reorganise GVCs in the context of the polycrisis of the 2020s, especially in light of the COVID-19 pandemic and the war in Ukraine. The pandemic exposed the vulnerabilities inherent in global trade networks, thereby reinforcing the need to shorten supply chains—a process commonly referred to as "reshoring" (or "backshoring"). By contrast, the escalation of the war in Ukraine in 2022 underscored the importance of organising economic relations along geopolitical lines. This has entailed redirecting trade and investment towards countries with similar foreign policy alignments, a process captured by the concept of "friendshoring."

A specific manifestation of friendshoring is "decoupling," defined as the deliberate reduction or cessation of economic relations with particular countries on geopolitical grounds. Decoupling may take either a broad form — implying an overall decline or termination of trade — or a more strategic form, involving the restriction of economic ties in selected sectors (see also Wache et al. 2024).

Closely related to these concepts is that of (geoeconomic) fragmentation. Ahn et al. (2023) define geoeconomic fragmentation as a "policy-driven reversal of global economic integration" (p. 91), emphasising that fragmentation is shaped by deliberate political and economic decisions rather than arising spontaneously from exogenous shocks. In this respect, it bears strong similarities to processes such as nearshoring and friendshoring. Campos et al. (2023) and Norring (2024) argue that the emergence of politically aligned blocs within the global economy constitutes a precondition for fragmentation, as such alignment ultimately constrains trade and capital flows between blocs. Norring (2024) further conceptualises geoeconomic fragmentation as a component of deglobalisation, whereby economic activity becomes increasingly concentrated within blocs and is

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driven by geopolitical considerations. Common representations of the global economy along these lines typically involve a three-bloc structure—for example, a configuration comprising the United States and the European Union, Russia and China, and the rest of the world (Gopinath et al. 2024), or, alternatively, a division into “East,” “West,” and “Neutral” blocs (Campos et al. 2023).[4]

1.2.Review of the literature in a geographic context

Just as definitions of (de)globalisation, fragmentation, and related concepts vary considerably, it is equally challenging to establish a consensus definition of Central, Eastern, and Southeastern Europe (CESEE). Nevertheless, as providing a precise definition is not the primary objective of this thesis or the associated papers, the analysis adopts the categorisation of the International Monetary Fund (2016), which includes the following subregions: Central and Eastern Europe, Southeastern Europe, the Baltics, and selected CIS (Commonwealth of Independent States) countries.

Three of the papers comprising this thesis focus on two of these subregions: Central and Eastern Europe—specifically the Czech Republic, Hungary, Poland, and Slovakia (i.e. the Visegrád Four)—and the non-EU member states of Southeastern Europe, more commonly referred to as the Western Balkans (i.e. Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia). (The fourth paper operates with a global sample.) The selection of these countries is motivated by several factors, including their broadly shared historical trajectories, comparable geopolitical positions, and similar levels of integration into Western institutional structures.

The Visegrád countries share a common historical legacy and a broadly similar contemporary geopolitical position. Following their transition to market economies, they became members of major Western political and security institutions, namely the European Union and NATO. These shared characteristics are further reflected in their cooperation within the Visegrád Group as a political and cultural platform (see also Losoncz 2017; Kazharski, 2020). At the same time, their position within an increasingly fragmenting global economy is distinctive, as they constitute some of the easternmost members of the Western bloc. Moreover, these countries rank among the most open economies globally, exhibiting some of the highest trade-to-GDP ratios (Chetverikova 2020; Darmo et al. 2020; Kordalska and Olczyk 2021).

[4] Much of the conceptual framework on fragmentation is highly based on Papers 3 and 4 (Ginter 2025 and Ginter – Boros, in press.).

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Despite their internal diversity, the Western Balkan countries display a number of shared characteristics, particularly with regard to their geopolitical position, which is likewise unique within the European context (see, inter alia, Zarić and Budimir 2022; Hake and Radzyner 2019). The six countries of the region are predominantly oriented towards the West, and significant progress has been made in their integration into the European Union. However, enlargement fatigue within the EU has led to a relative standstill, and full integration into the European economic system remains a longer-term prospect. In the meantime, major global actors have expanded their influence in the region, including the United States through NATO enlargement and China through the Belt and Road Initiative (see also Barisitz 2024). Although these economies are generally less open than their Visegrád counterparts, they remain highly dependent on international trade and foreign direct investment and occupy comparable positions within global value chains.

Despite the region's distinctive geopolitical characteristics and the growing relevance of global value chain restructuring, relatively limited scholarly attention has been devoted to deglobalisation and fragmentation in CESEE. An extensive review of the scholarly literature showed that only a small number of studies have addressed this topic from a regional perspective. Kaaresvirta et al. (2023) find that although trade and FDI flows between the United States and China have declined, deglobalisation is not a generalised phenomenon across other regions; indeed, Central and Eastern Europe has experienced increasing trade and investment flows since the onset of the COVID-19 pandemic. Similarly, Javorcik et al. (2023) analyse the economic implications of friendshoring and conclude that the associated welfare losses are likely to be more limited in emerging Europe (largely overlapping with CESEE). While these studies—alongside global analyses by Gopinath et al. (2024) and Bosone et al. (2024)—find limited overall evidence of deglobalisation, friendshoring, or fragmentation, some countervailing findings also exist. Based on firm-level data, Jovanović et al. (2024) identify emerging nearshoring tendencies in the Western Balkans.

As stated above, however, the fourth study included in this thesis extends beyond the geographical scope of CESEE by examining a global sample. The paper focusing on geoeconomic fragmentation in the Western Balkans identifies a key research gap: namely, that the number and composition of geopolitical blocs—often treated as a prerequisite for fragmentation—have not yet been clearly established in the literature. To address this gap, one of the four studies deliberately adopts a broader, global perspective. At the same time, its findings remain directly relevant for the CESEE region.

In summary, in the context of a global economy shaped by multiple, overlapping crises and an increasing need for structural adjustment, concepts such as deglobalisation, fragmentation,

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reshoring, and friendshoring have become central to contemporary international economics. Nevertheless, relatively limited scholarly attention has been paid to one of the most geopolitically distinctive regions in this regard: Central, Eastern, and Southeastern Europe. Accordingly, the aim of this thesis is to contribute to filling this gap by analysing deglobalisation and geo-economic fragmentation in the Visegrád countries and the Western Balkans, while also contributing to the broader global discourse on fragmentation. These phenomena are examined primarily through trade and investment data, which are commonly used as proxies for (de)globalisation and fragmentation (see, e.g., Vujakovic 2009; Irwin 2020). The main findings of the individual papers are presented below.

2. Part 1: Deglobalisation and decoupling tendencies in the Visegrád countries in the wake of the polycrisis

The first paper of the cumulative thesis (Ginter – Tischler 2024) examines the effects of the polycrisis—most notably the COVID-19 pandemic and the war in Ukraine—on the trade patterns of the Visegrád countries. Deglobalisation is operationalised as a decline in trade-to-GDP ratios (see, e.g., Irwin 2020), while decoupling is assessed by distinguishing between trade with geopolitically aligned partners and trade with the rest of the world. In addition, the study analyses trade relations with the region's principal trading partners and partner groups, including both aligned and non-aligned countries.

Deglobalisation is examined over a longer time horizon, spanning the period from 2002 to 2022. European integration contributed positively to trade openness in the region, whereas the global financial crisis (GFC) of 2007–2008 caused a significant setback, followed by recovery in the early 2010s. Although trade continued to expand throughout the 2010s, the pace of integration slowed, in line with the concept of "slowbalisation" in the literature. The COVID-19 pandemic led to a temporary decline in trade-to-GDP ratios, but this was followed by a recovery. Overall, no persistent signs of deglobalisation are observed; the Visegrád countries remain more integrated into global supply chains than prior to the polycrisis, despite short-term disruptions.

Similarly, no clear evidence of fragmentation is identified. Trade in all four countries is predominantly conducted with geopolitically aligned partners (EU, NATO, and/or EFTA members), with less than one-fifth of total trade attributed to non-aligned economies. Notably, trade with non-aligned partners increased in all four countries during the polycrisis period (early 2019 to late 2022). Evidence on decoupling from major non-aligned economies—namely Russia and China—is mixed. China remains a key import partner (though less significant for exports), and trade volumes

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increased between 2019 and 2022, indicating no decoupling. In contrast, partial decoupling from Russia is observed: Poland significantly reduced trade following the 2022 escalation of the war in Ukraine, whereas energy dependencies limited similar adjustments in the other three countries. Exports to Russia, however, declined markedly from early 2022 onwards, suggesting an emerging decoupling trend.

These findings support the view that deglobalisation and decoupling often function more as policy narratives than as observable economic realities. The Visegrád countries remain highly globalised and, while primarily oriented towards the European Union, continue to expand trade with non-aligned economies. It is argued that in highly GVC-integrated economies, political actors are likely to maintain participation in global trade even when this conflicts with geopolitical considerations. The observed decoupling patterns further reflect the region's geopolitical context: proximity to Russia renders decoupling from the Russian economy a more immediate policy priority than disengagement from China, which is generally not perceived as a direct regional threat.

3. Part 2: Geopolitical shifts in the Western Balkans: Where is FDI coming from?

The second paper (Ginter – Hildebrandt 2024) analyses the origins of foreign direct investment (FDI) in the Western Balkans in the context of global geopolitical shifts over the past decade. The study employs FDI stock data for the period 2010–2023.

FDI stocks in the Western Balkans have generally increased over time. While the GFC resulted in only minor and temporary setbacks, the polycrisis of the 2020s led to a more prolonged stagnation in inflows. In terms of economic significance, FDI-to-GDP ratios in the region are broadly comparable to those of CESEE EU member states, although variation exists across countries: Serbia and Montenegro exceed the regional average, whereas Bosnia and Herzegovina lags behind. On a per capita basis, however, FDI stocks remain lower than in EU member states.

This heterogeneity is also reflected in the structure of investors. The European Union has consistently remained the dominant source of FDI across all Western Balkan countries, often accounting for more than half of total inward stock. Nevertheless, its relative share has declined over time, with the exception of Kosovo, where a slight increase is observed. By contrast, US investments remain limited across the region.

The presence of non-aligned investors, particularly China and Russia, varies significantly. Russian FDI is concentrated in countries with cultural or historical ties to Russia and, apart from Montenegro, remains relatively limited and declining. Chinese investment, in contrast, is a more recent

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phenomenon associated with the Belt and Road Initiative, showing substantial growth—particularly in Serbia and, to a lesser extent, in other Slavic countries of the region. Additionally, Türkiye and certain Gulf states play a notable role in selected countries. Increasing investment from non-Western actors has coincided with the relative decline of EU FDI. At the same time, intra-regional investment among Western Balkan countries has intensified, indicating growing regional integration.

Overall, FDI patterns in the Western Balkans do not provide evidence of fragmentation. Instead, investment flows appear to be primarily shaped by geographic proximity and cultural ties. Despite increasing geopolitical tensions, a systematic reorientation of FDI along geopolitical fault lines is not observed.

4. Part 3: Geoeconomic fragmentation in the Western Balkans

The third paper (Ginter 2025) adopts a similar analytical framework to that of the first paper, examining geoeconomic fragmentation through trade flows with different partner groups. The analysis focuses on the Western Balkans over the period 2010–2023 and applies a three-bloc framework.

Trade openness in the Western Balkans remains below that of most smaller CESEE EU member states, although trade-to-GDP ratios have increased steadily over time. The COVID-19 pandemic and the war in Ukraine caused temporary disruptions, but no lasting decline in trade openness is observed. Several structural patterns emerge. First, the size of the economy influences trade orientation: smaller economies tend to be more regionally integrated, while larger ones exhibit a more global focus. Second, the European Union remains the primary trading partner for all countries, although its share has declined in some cases. The Western Balkans itself constitutes the second most important partner group. Third, trade with major global powers (the United States, China, and Russia) remains limited and is predominantly import-oriented.

An assessment of fragmentation effects—based on changes in intra- and extra-bloc trade—reveals no clear evidence of geoeconomic fragmentation. Trade with Russia has declined over time, with reductions beginning in the 2010s and continuing after 2022. In contrast, trade with China has increased significantly, counteracting fragmentation dynamics. Intra-bloc trade with Western partners has not shown substantial growth. Overall, trade patterns remain stable and continue to be driven by geographic proximity, as well as historical, cultural, and economic linkages—paralleling the FDI patterns discussed in the second paper.

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The findings align with the broader literature suggesting limited evidence of fragmentation in emerging Europe, now including the Western Balkans. Several explanations may account for this outcome. Fragmentation pressures and reshoring dynamics are relatively recent developments, and structural adjustments may require time. Moreover, the reconfiguration of global value chains may reflect political narratives rather than economic imperatives. As in the case of the Visegrád countries, such restructuring entails significant costs, which policymakers may seek to avoid.

5. Part 4: A Three-Bloc Structure of the World Economy: Evidence of Geoeconomic Fragmentation in International Trade, Financial and Military Data

The fourth paper (Boros – Ginter, in press) further investigates geoeconomic fragmentation by addressing an additional gap in the literature. As noted by, inter alia, Norring (2024), the emergence of distinct geopolitical blocs constitutes a precondition for fragmentation. However, the number and composition of such blocs remain contested.

The paper provides a comprehensive literature review of both existing classifications and their underlying methodologies. An analysis of 16 relevant studies reveals that most identify either two or three global blocs, typically structured along an East–West divide or centred around major powers such as the United States and China. Some studies also include a group of non-aligned countries. Methodologically, many of these classifications rely on arbitrary or ad hoc criteria. To address this limitation, the paper adopts a data-driven approach to identifying country groupings.

Hierarchical clustering is applied to a broad set of geopolitically relevant indicators, including trade, investment, financial, and military linkages. Due to data constraints, the final sample comprises 89 countries, excluding, inter alia, Latin America and Sub-Saharan Africa. The results reveal a three-bloc structure of the global economy: one centred around the United States (including developed economies in the Gulf and Asia-Pacific regions), one around the European Union (including most neighbouring countries), and a third comprising a China–Russia grouping (covering much of Asia). These findings support the commonly assumed East–West divide and the three-bloc framework. However, the identification of separate blocs for the United States and the European Union challenges the prevailing assumption of a unified Western bloc.

6. Conclusions

This section summarises the main findings of the cumulative thesis. Overall, while the literature emphasises the growing need to restructure global value chains (see, e.g., Ahn et al., 2023; Gopinath

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et al., 2024), empirical evidence does not substantiate these expectations—at least not in Central, Eastern, and Southeastern Europe. The region's economies appear resilient to deglobalisation and fragmentation trends; contrary to prevailing assumptions, both trade (including with non-aligned partners) and investment flows (including from non-aligned actors) remain robust. These findings are consistent with those of Kaaresvirta et al. (2023) and Javorcik et al. (2024). By providing a detailed analysis of the Visegrád countries and the Western Balkans, the thesis contributes to a relatively underexplored regional dimension of the deglobalisation and fragmentation debate.

Several factors may explain this apparent resilience. First, the discourse on deglobalisation and fragmentation is relatively recent, and structural adjustments in global value chains may unfold only gradually. This evolving nature of the debate is further highlighted in the fourth paper, which contributes to understanding the formation of geopolitical blocs. Second, the specific geographic and geopolitical position of CESEE countries (aligned with the bloc centred around the EU, as stated in the fourth paper) may position them as beneficiaries of ongoing global value chain reconfigurations (see also Javorcik, 2024; Jovanović, 2024). Trade patterns may already reflect such adjustments, with the region serving as a destination for relocated production. In this context, global deglobalisation trends may coincide with increased regional trade integration. Finally, the limited evidence of current decoupling trends may reflect broader structural dynamics. CESEE economies remain strongly integrated with the European Union, whose relative weight in the global economy is declining. Even if fragmentation pressures favour trade within aligned blocs, faster growth in non-aligned economies may sustain or increase economic linkages with them. Moreover, fragmentation entails significant economic costs (see Section 1.1.), which may discourage its implementation.

Overall limitations of the papers comprising the cumulative thesis include the reliance on descriptive statistics. While applying descriptive statistics allows for identifying signs of deglobalisation and fragmentation, it does not show deeper underlying causes of this restructuring (such causes may be of economic, political, or even societal nature). Furthermore, while trade and FDI count as the most commonly used variables for addressing the research question, including other variables (such as cross-border flows of payments or migration) would allow for expanding this scope – even if data is hard to obtain and its reliability may be questionable. In addition, the discourse on deglobalisation, fragmentation and the like evolves, and so does the actual restructuring of the global economy. Thus, expanding the time horizon of these samples is and will always remain desirable. This thesis therefore invites future research to investigate these trajectories more thoroughly.

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References

Ahn, J. – Carton, B. – Habib, A. – Malacrino, D. – Muir, D. – Presbitero, A. (2023): Geoeconomic fragmentation and foreign direct investment. In: International Monetary Fund: World Economic Outlook, April 2023: A Rocky Recovery. https://www.elibrary.imf.org/display/book/9798400224119/CH004.xml

Altman, S. A. – Bastian, C. R., – Fattedad, D. (2024): Challenging the deglobalization narrative: Global flows have remained resilient through successive shocks. Journal of International Business Policy, 7(4): 416-439.

Barisitz, S. (2024): Downsized, restructured and greener (2019-23): A new era for China's New Silk Road? OeNB Occasional Paper, 2024/4: 1–18. https://www.oenb.at/en/Publications/Economics/occasional-papers.html

Bosone, C. – Dautović E. – Fidora M. – Stamato G. (2024): How geopolitics is changing trade. ECB Economic Bulletin, 2024/2. https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202402_02~c81f58179e.en.html

Campos, R. G. – Estefanía-Flores, J. – Furceri, D. – Timini, J. (2023): Geopolitical fragmentation and trade. Journal of Comparative Economics, 51(4): 1289–1315. https://doi.org/10.1016/j.jce.2023.06.008

Chetverikova, A.S. (2020): The Visegrad Countries in the EU: Economic Results. Mirovaia ekonomika i mezhdunarodnye otnosheniia, 64(2): 63–70. https://doi.org/10.20542/0131-2227-2020-64-2-63-70

Darmo, L. – Novák, M. – Kálovec, M. – Rybošová, P. (2020): Determinants of the FDI Inflow into the Visegrad Countries 1. Ekonomický časopis, 68(10), 1057–1080. https://doi.org/10.31577/ekoncas.2020.10.05

Ginter, T. (2025): Geoeconomic fragmentation in the Western Balkans. Financial and Economic Review 24(2): 27-46. https://hitelintezetiszemle.mnb.hu/en/fer-24-2-st2-ginter

Ginter, T. – Boros, E. (in press): A Three-Bloc Structure of the World Economy: Evidence of Geoeconomic Fragmentation in International Trade, Financial and Military Data. Financial and Eocnomic Review, in press.

Ginter, T. – Hildebrandt, A. (2024): Geopolitical shifts in the Western Balkans: where is FDI coming from? OeNB Reports, 2024/21. Economic trends in EU Candidates and Russia: 1-11.

10.15772/ANDRASSY.2026.006

https://www.oenb.at/Publikationen/Volkswirtschaft/reports/2024/report-2024-21-economic-trends-in-cesee/html-version.html

Ginter, T. – Tischler, P. (2024): Deglobalisation and Decoupling Tendencies in the Visegrád Countries in the Wake of the Polycrisis. Financial and Economic Review, 23(2): 56–82. https://en-hitelintezetiszemle.mnb.hu/letoltes/fer-23-2-st2-ginter-tischler.pdf

Gopinath, M. G. – Gourinchas, P. O. – Presbitero, A. F. – Topalova, P. (2024): Changing global linkages: a new cold war? IMF Working Papers, 24(76): 1–23. https://www.imf.org/en/Publications/WP/Issues/2024/04/05/Changing-Global-Linkages-A-New-Cold-War-547357

Hake, M. – Radzyner, A. (2019): Western Balkans: Growing economic ties with Turkey, Russia and China. BOFIT Policy Brief 1/2019: 1–18. https://publications.bof.fi/handle/10024/44871

Halmai, P. (2023): Globalisation versus Deglobalisation. Financial and Economic Review, 22(2): 5–24. https://doi.org/10.33893/FER.22.2.5

International Monetary Fund (2016): Regional Economic Outlook. Retrieved from https://www.imf.org/en/Publications/REO/EU/Issues/2017/01/07/Central-Eastern-and-Southeastern-Europe on 24 May 2025.

Irwin, D.A. (2020): The pandemic adds momentum to the deglobalization trend. Peterson Institute for International Economics, April 23. Retrieved from https://www.piie.com/blogs/realtime-economics/pandemic-adds-momentum-deglobalization-trend on 24 May 2025.

James, H. (2018): Deglobalization: The Rise of Disembedded Unilateralism. Annual Review of Financial Economics, 10: 219–237. https://doi.org/10.1146/annurevfinancial-110217-022625

Javorcik, B. S. – Kitzmueller, L. – Yıldırım, M.A. – Schweiger, H. (2023): Economic Costs of Friend-Shoring. CID Faculty Working Paper Series 2022.422, Harvard University, Cambridge, MA

Jones, G. (2005): Multinationals and Global Capitalism: From the Nineteenth to the Twenty First Century. Oxford University Press, New York. https://doi.org/10.1093/0199272093.001.0001

Jovanović, B. et al. (2024): Transforminsg the Western Balkans through Near-shoring and Decarbonisation. wiiw Joint Study No. 2024/10 https://wiiw.ac.at/transforming-the-western-balkans-through-near-shoring-and-decarbonisation-p-6999.html

10.15772/ANDRASSY.2026.006

Kaaresvirta, J. – Kerola, E. – Nuutilainen, R. (2023): Do international investment and trade flows show any signs of fragmentation? BOFIT Policy Brief, 2023 No. 12. https://publications.bof.fi/bitstream/handle/10024/53083/bpb1223.pdf?sequence=1

Kazharski, A. (2020): An ad hoc Regionalism? The Visegrád Four in the "Post-Liberal" Age. Polity, 52(2): 250–272. https://doi.org/10.1086/708182

Kim, H.-M. – Li, P. – Lee, Y.R. (2020): Observations of deglobalization against globalization and impacts on global business. International Trade, Politics and Development, 4(2): 83–103. https://doi.org/10.1108/ITPD-05-2020-0067

Kordalska, A. – Olczyk, M. (2021): New patterns in the position of CEE countries in global value chains: functional specialisation approach. Oeconomia Copernicana, 12(1): 35–52. https://doi.org/10.24136/oc.2021.002

Losoncz, M. (2017): A globális és regionális integrálódás és a fenntartható gazdasági növekedés néhány kérdése a visegrádi országokban (Issues for the Visegrád countries of global and regional integration and sustainable economic growth). Közgazdasági Szemle (Economic Review), 64(7–8): 677–697. https://doi.org/10.18414/KSZ.2017.7-8.677

Norring, A. (2024): The economic effects of geoeconomic fragmentation. BOFIT Policy Brief, 2024 No. 8. https://publications.bof.fi/handle/10024/53827?show=full

Vujakovic, P. (2009): How to Measure Globalisation? A New Globalisation Index (NGI). WIFO Working Papers, No. 343, Austrian Institute of Economic Research (WIFO), Vienna. https://www.econstor.eu/handle/10419/128904

Wache, B. – Boeters, S. – Kutuk, M. M. – Meijerink, G. – Van't Riet, M. – Sommer, K. (2024): Decoupling China and Russia from the West: The Effects on Trade. 20th EUROFRAME Conference on Economic Policy Issues in the European Union, Kiel, Germany, June (Vol. 7).

Witt, M.A. (2019): De-globalization: Theories, predictions, and opportunities for international business research. Journal of International Business Studies, 50(7): 1053–1077. https://doi.org/10.1057/s41267-019-00219-7

Zarić, I., – Budimir, Ž. (2022): The great powers' geopolitical competition over the Balkans – the influence of the Ukrainian crisis. Review of International Affairs, 73(1186): 79-104. https://doi.org/10.18485/iipe_ria.2022.73.1186.4

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Part 1: Deglobalisation and Decoupling Tendencies in the Visegrád Countries in the Wake of the Polycrisis[5]

After a number of shocks (including the Covid-19 pandemic and the war in Ukraine, in particular), global trade has undergone a transformation that is characterised by deglobalisation and decoupling tendencies. In this paper, we use descriptive statistics to analyse the short-term effects of exogenous shocks on international trade in the Visegrád countries. We find that between 2019 and 2022, deglobalisation tendencies were not persistent in the region. The trade-to-GDP ratio has exceeded the pre-pandemic levels (thus, the region is more globalised than in 2019), despite short-term declines induced by the various shocks. While the region trades mainly with politically-economically aligned partners, the proportion of international trade with non-Western partners has also grown over the past four years. Trade with Russia has declined significantly since the outbreak of the war in Ukraine, but decoupling from China has not started. However, certain country differences apply.

Journal of Economic Literature (JEL) codes: F02, F50, F62
Keywords: deglobalisation, decoupling, Central and Eastern Europe, Visegrád countries

1. Introduction

The global economy of the 2020s may be experiencing *"the most difficult set of challenges of the 21st century",* the so-called "polycrisis", during which nations must simultaneously tackle climate change, the Covid-19 pandemic, the threat of nuclear war and the war in Ukraine (*Henig – Knight 2023:3*). One of the key changes induced by the polycrisis is that exogenous shocks such as the pandemic and the war in Ukraine have evoked a need for a massive restructuring of global value chains (GVCs; see *Hausmann 2020*; *Halmai 2023*). Measures aimed to prevent the spread of the coronavirus included temporary closures of borders and businesses, causing trade disruptions on a global level and thus incentivising companies and governments to prioritise safety over (economic) efficiency (*Simola 2021*). From early 2022 on, war in Ukraine resulted in a further destabilisation of supply chains: sanctions and public pressure prompted Western companies and governments to sever trading ties with Moscow, transforming energy trade flows on a global scale, amongst other

[5] Ginter, T. – Tischler, P. (2024): Deglobalisation and Decoupling Tendencies in the Visegrád Countries in the Wake of the Polycrisis. Financial and Economic Review, 23(2): 56–82. https://doi.org/10.33893/FER.23.2.56

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things (see e.g. *Borin et al. 2023*). The far-reaching effects of the pandemic and the war in Ukraine have led to a shift in the globalisation debate: due to the uncertainty caused by the exogenous shocks, the past years have reinforced the narrative of deglobalisation.

This paper aims to empirically analyse potential deglobalisation tendencies in CEE countries after the pandemic and the war in Ukraine, respectively. To do so, in the literature review, we first introduce the terminology used for describing different (de-)globalisation phenomena and present their brief theoretical development, with a particular focus on the CEE region. Based on this framework, we then conduct an empirical study of how the polycrisis of recent years has influenced deglobalisation (including a brief historical overview of globalisation tendencies in the past two decades) and decoupling tendencies in Central and Eastern Europe by examining international trade flows.

2. Theoretical background

In the course of developments in the past decade, a wide range of new concepts has emerged when describing phenomena related to globalisation. Therefore, in the first section of the literature review, we introduce a set of relevant concepts (such as deglobalisation, nearshoring, friendshoring, etc.). As this paper is not a systematic literature review, we do not aim to collect all available definitions and aspects, providing instead a taxonomical framework upon which we then base our empirical analysis.

Globalisation is commonly associated with international economic integration, multilateralism and interdependence among nations. Thus, globalisation is not characterised by a single factor, but is instead a complex "*process that encompasses the causes, course, and consequences of transnational and transcultural integration of human and non-human activities*" (*Al-Rodhan – Stoudmann 2006:5;* see also *Halmai 2023*). Therefore, globalisation has a cultural dimension with the transmission of different cultures, traditions and knowledge across borders. In the economic dimension, globalisation creates a highly interconnected economic environment through the establishment of global value chains, the enhancement of free trade, international capital flows, cross-border payments and the establishment of international organisations (*Kim et al. 2020; Irwin 2020*). Globalisation also has a political dimension associated with global governance, meaning that states in hegemon positions provide a level of global order, which affects the functioning of every nation to a greater or lesser extent. This political globalisation comes hand in hand with global rivalry among hegemons, as they aim to maintain their authority over the global order by means of military and economic power as well, creating dependencies and vulnerabilities in GVCs. Thus, political (de-

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)globalisation is one of the key drivers of economic (de-)globalisation and vice versa: changes in power structures at certain intervals (as a result of rivalry) can initiate globalisation and deglobalisation trends (*Chase-Dunn et al. 2023*).

According to *Jones (2005*), a historical cyclical pattern can be observed between globalisation and deglobalisation forces. Jones argues that the first wave of globalisation lasted from 1840 to 1929. After that, the Great Depression caused the first deglobalisation wave from 1929 to 1979, during this period the negative consequences of the Second World War and the formation of the bipolar world order reversed globalisation. Then, globalisation gained ground again, as financial and trade integration developed quickly and peaked, until the Global Financial Crisis (GFC) in 2008. The GFC marked a turning point, as distrust in the global financial system and global companies emerged among citizens, pushing nations towards renationalisation, populism and financial fragmentation (*James 2018; Kim et al. 2020*). As *Halmai* (*2023*) stated, the GFC led to a temporary decline in global trade of over 10 per cent. Before the GFC, global trade had reached more than 60 per cent of global GDP, before falling to approximately 50 per cent by 2009. Subsequently, up to now, global trade has still not been able to recover to pre-GFC levels.

After the GFC, a new wave of deglobalisation emerged, marked by a significant drop in international trade and foreign direct investment (FDI; *Witt 2019*). *Goldberg – Reed* (*2023*) argue that recent deglobalisation processes can be clearly divided into three stages. Between 2015 and 2019, due amongst other things to Brexit and the emerging trade war between the USA and China, protectionist policies gained momentum, triggering a slowdown in globalisation, but not terminating it. With the outbreak of the pandemic, there appeared a growing need to enhance the resilience of value chains, and thus a justification for nearshoring (also known as reshoring or backshoring). Last but not least, the war in Ukraine compelled decoupling based on political alliance: demand for minimising trade with countries that are not considered friends resulted in the restructuring of GVCs in the form of friendshoring.

With the growing need to describe deglobalisation processes, a broad range of definitions and concepts has emerged. According to *Kandil et al. (2020),* reshoring implies the geographical relocation of activities within a company back to a country close to the country of origin. Consequently, there is no significant difference between the meanings of reshoring and nearshoring, as nearshoring means relocating activities to a nearby country compared to the home country. Thus, we argue that the two terms are used interchangeably. Furthermore, while friendshoring (which is undeniably the most important component of decoupling) aims to reduce supply chain risks by

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shifting GVCs to trusted and friendly countries, the term backshoring used in Europe indicates relocating abroad activities back to the home country of the company. The term decoupling is used similarly to that of friendshoring (denoting the need to minimise trade with politically non-aligned countries; see *Maihold 2022*). In this paper, for the purposes of our analysis, we use the term "decoupling" as an equivalent of friendshoring.

Our analysis focuses on deglobalisation and decoupling tendencies in the Visegrád countries (i.e. the Czech Republic, Hungary, Poland and Slovakia). The reasons for our particular focus on the Visegrád countries as the subject of the analysis are manifold. First, the four Visegrád countries share a very similar historical development. After having been controlled (partially or entirely) by the Habsburg Empire and a short-lived independence between the two world wars, they were forced to be members of the Warsaw Pact. Since having regained their independence in the early 1990s, these countries have transitioned from a centrally planned to a market-oriented, open economy and become parts of Western structures (the EU and NATO, most notably) (*Gorynia – Wolniak 2009; Losoncz 2017*). This market transformation resulted in a significant increase in foreign trade and inward foreign direct investment. In addition, they also share a common political-cultural platform, the Visegrád Group (*Kazharski 2020; Pakulski et al. 2016*). Second, these countries' geographical position is peculiar amidst the polycrisis of the early 2020s: with the global economy transforming into two blocks, these countries are the easternmost members of the Western bloc. This is of particular relevance not only because of geographical proximity to the war, but also due to the high level of energy-related links with Russia. Third, while they show very similar characteristics in terms of the structure of the economy and economic development, these countries are also among the most embedded in global trade and are thus particularly vulnerable to disturbances of global supply chains (*Chetverikova 2020; Darmo et al. 2020; Kordalska – Olczyk 2021*). Additional similarities among the Visegrád countries can also be detected in terms of trade relations, as they developed strong trade linkages with Germany in the 1990s. Moreover, these countries have gained a similar position in GVCs: their presence is more robust within the downstream segment of GVCs compared to developed countries (such as the USA, Germany, Japan) and EU average. Thus, the Visegrád countries present lower added value in global trade, meaning that their economies tend to focus on assembly phases in manufacturing (*Cieślik et al. 2016*).

The deglobalisation tendencies of the past decade have also been present in the four Visegrád countries (*García-Herrero – Tan 2020*; as cited by *Bykova et al. 2021*): the latest literature features conflicting findings as to whether the region has witnessed a decreased pace of globalisation (slowbalisation) or a decrease in the level of embeddedness in GVCs (deglobalisation). *Bykova et*

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al. (*2021*) also suggest that these trends are reinforced by the trade shifts caused by the pandemic. This is also confirmed by *Kalotay – Sass* (*2021*), who state however that the Visegrád countries were less affected by the reduction of FDI inflows than the global average. *Kaaresvirta et al.* (*2023*) analysed decoupling tendencies in the CEE region as well.[6] The authors contend that on the one hand little evidence is available for decoupling on a global level and on the other hand the level of bilateral trade flows has grown even considerably between the USA and the CEE region and China and the CEE region, respectively. Thus, so far, on an aggregate level, the CEE region has not taken a demonstratable part in decoupling tendencies.

Based on the reviewed literature, we pose the following research questions:

- Has the polycrisis affected the level of globalisation of the Visegrád countries? Does the region align with the global trends in deglobalisation?
- Have the Visegrád countries started decoupling from non-aligned economies? If so, can the region be considered homogeneous in terms of the possible restructuring of trade flows?

3. Methods

3.1. The quantification of (de-)globalisation

To quantify the terms of deglobalisation and decoupling, we use international trade statistics as a proxy variable. Based on *Vujakovic* (*2009*) and *Irwin* (*2020*), we assume that a country's international trade as a share of GDP can be used as a proxy for the degree of globalisation. While this does not cover all dimensions of globalisation (see e.g. financial globalisation, capital flows, political-institutional globalisation, etc.), numerous authors (see above) consider this as a sufficient means for tracing (de-)globalisation tendencies.

Data were retrieved from *the "Direction of Trade Statistics (DOTS)"* database of the IMF.[7] DOTS *"*presents the value of merchandise exports and imports disaggregated according to a country's primary trading partners. (…) Imports are reported on a cost, insurance and freight (CIF) basis and exports are reported on a free on board (FOB) basis*"* (*IMF DOTS*).

For our long-term analysis, we used annual data of the IMF DOTS ranging between 2002 and 2022 (the latest timepoint available). In order to obtain data comparable both in temporal and geographical

[6] Kaaresvirta et al. (2023) consider Poland, Romania, Bulgaria, Ukraine, Hungary and Czechia as Central Eastern Europe, thereby diverging from the Visegrád Four to a certain extent.
[7] https://data.imf.org/?sk=9d6028d4-f14a-464c-a2f2-59b2cd424b85. Downloaded: 16 March 2024.

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terms, we calculated trade-to-GDP ratios (adding up imports and exports by country and then dividing it by the respective GDP, with data on the latter retrieved from the World Bank[8]). With four countries (the Czech Republic, Hungary, Poland and Slovakia) in the sample, our long-term analysis consisted of a sample with N=84.

To paint a more detailed picture of deglobalisation tendencies during the polycrisis, we collected data (in million USD) on quarterly imports and exports (and total international trade, as an aggregate) by country and divided this by the quarterly GDP of the respective country for the time period between 2019Q1 and 2022Q4.[9] Quarterly GDP data was retrieved from the OECD's Quarterly International Trade Statistics (*OECD 2023*). We calculated an import-to-GDP ratio, an export-to-GDP ratio and a trade-to-GDP ratio (expressed in the form of percentages), allowing for country comparison (and controlling for inflationary effects, amongst other things).[10] We thus obtained an initial dataset with three indicators: with the four examined countries (i.e. the Czech Republic, Hungary, Poland and Slovakia) and 16 (15 in the case of Poland) quarters in our sample, we used here a dataset with N = 65.

3.2. The quantification of decoupling

With the aim of measuring the effects of decoupling in the Visegrád countries, we used the same IMF DOTS dataset. The database contains trade volume with respective trading partners (covering "all IMF member states, some non-member countries, the world and major areas"; IMF DOTS) for each country (quarterly, between 2019Q1 and 2022Q4).

In order to quantify the effects of decoupling/friendshoring, we follow a two-step methodological process. First, we grouped all trading partners into two possible subgroups. The first subgroup contains aligned countries (in terms of economic partnership and foreign policy), while the second subgroup contains all other trading partners. As *Rashid* (*2022:47*) argues, the war in Ukraine "pushed the world into an ideological divide", identifying the West as one pole of an emerging new cold war. Aligning with both sociological concepts (see e.g. *Huntington 1996*; *World Population*

[8] Source: Countries and Economies. https://data.worldbank.org/country. Downloaded: 28 February 2024.
[9] Except for Poland where data is available until 2022Q3.
[10] Instead of calculating the percentage change (by defining the first point on the timeline as 100 per cent), we calculated nominal percentages, thus allowing for the comparison of the trade structure of the respective countries in the sample.

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Review[11]) and economic ones (e.g. *Spielvogel 2015, IMF database*[12]), we consider all member states of the European Union and/or NATO and/or the European Free Trade Association (see complete list in the *Appendix*) as members of the group of allies. All other countries (that were not included in the group of allies) were considered as the "rest of the world" (RoW).[13] Trade figures by both groups were added up (thus expressing the sum of exports, the sum of imports and the sum of international trade by group). With this first grouping, we aim to quantify the effects of decoupling, as we set up a possible distinction between countries aligning with the Western side of the political-economic divide and the rest of the world. With four countries and 16 (15 in the case of Poland) points on the timeline, we once again obtained a dataset with N=65, with the following variables:

- International trade with allies (the sum of exports and imports, as a percentage of GDP)
- International trade with RoW (the sum of exports and imports, as a percentage of GDP)

At this point, it is worth noting that we use data on trade value for measuring the effects of deglobalisation and decoupling. This data, however, does not reflect on price changes. It is therefore possible that even if trade grew in a certain period, the actual volume of traded goods did not. This is also addressed in *Section 5*.

In the second step of our analysis, we proceeded as follows. In order to explore the phenomenon of decoupling in more depth, we further broke down the aforementioned two-faceted categorisation of allies and RoW. Based, *inter alia*, on *Kaaresvirta et al.* (*2023*), we constructed the following subgroups of the main trading partners:

- the European Union,
- the United States,
- China,
- Russia,
- the United Kingdom,

[11] Source: Western Countries 2023. https://worldpopulationreview.com/country-rankings/western-countries. Downloaded: 14 August 2023.
[12] World Economic and Financial Surveys. International Monetary Fund. https://www.imf.org/external/pubs/ft/weo/2022/01/weodata/groups.htm. Downloaded: 14 August 2023.
[13] The reason for using this dichotomous categorisation is derived from Rashid (2022) on the one hand. On the other hand, the concept of decoupling / friendshoring implies a dichotomy itself: a country is either friendly or it is not; the ideological divide leaves little room for anything in between. The second step of our analysis aims to paint a more detailed picture where both allies and RoW are further deconstructed into relevant trading partner countries and country groups.

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- and Japan and South Korea (as an aggregate of the two sums).

It is worth noting that certain trading partners in the list above belong to the category of allies, while others belong to that of RoW (notably, China and Russia). Besides being some of the main trading partners of the region, these two countries (i.e. China and Russia) are the ones that are the main subjects of Western decoupling intentions. Thus, this allows for a direct analysis of decoupling phenomena (or, potentially, the lack thereof).

The six listed countries and country groups cover at least 86 per cent of total imports and exports of the Visegrád countries (and often exceed even 90 per cent).[14] This also implies that an analysis of trade with these countries and country groups provides sufficient understanding of decoupling in the Visegrád countries.

As we were primarily interested in the decoupling effects emerging during the polycrisis, we used quarterly data from between 2019Q1 and 2022Q4 for imports and 2019Q1 and 2023Q2 for exports, respectively (the difference in the timeframe resulted from the availability of data). Altogether, we thus obtained a dataset of 16 quarters for imports, while 18 quarters for exports and 6 export partner groups, resulting in a total N of 816 (all items in all the four examined countries' exports and imports). In order to control, *inter alia*, for inflationary effects and other distorting factors, we calculated the ratio of exports to (imports from) a certain trading partner to total exports (imports). Thus, we were able to measure the relevance of a certain trading partner country or country group proportionately to total trade.

In this paper, we thus use descriptive statistics to analyse the short-term effects of exogenous shocks on international trade in the Visegrád countries. While descriptive methodology does not allow for testing hypotheses, it does provide us with the opportunity to answer the research questions stated in *Section 2*.

4. Results

4.1. Long-term (de-)globalisation tendencies in the Visegrád countries

First, we aimed to provide an overall picture of (de-)globalisation tendencies of the analysed region over the longer run, for the period from 2002 to 2022. This allows us to construct a framework for the time when we later strive to identify deglobalisation tendencies (or a lack thereof) in the region

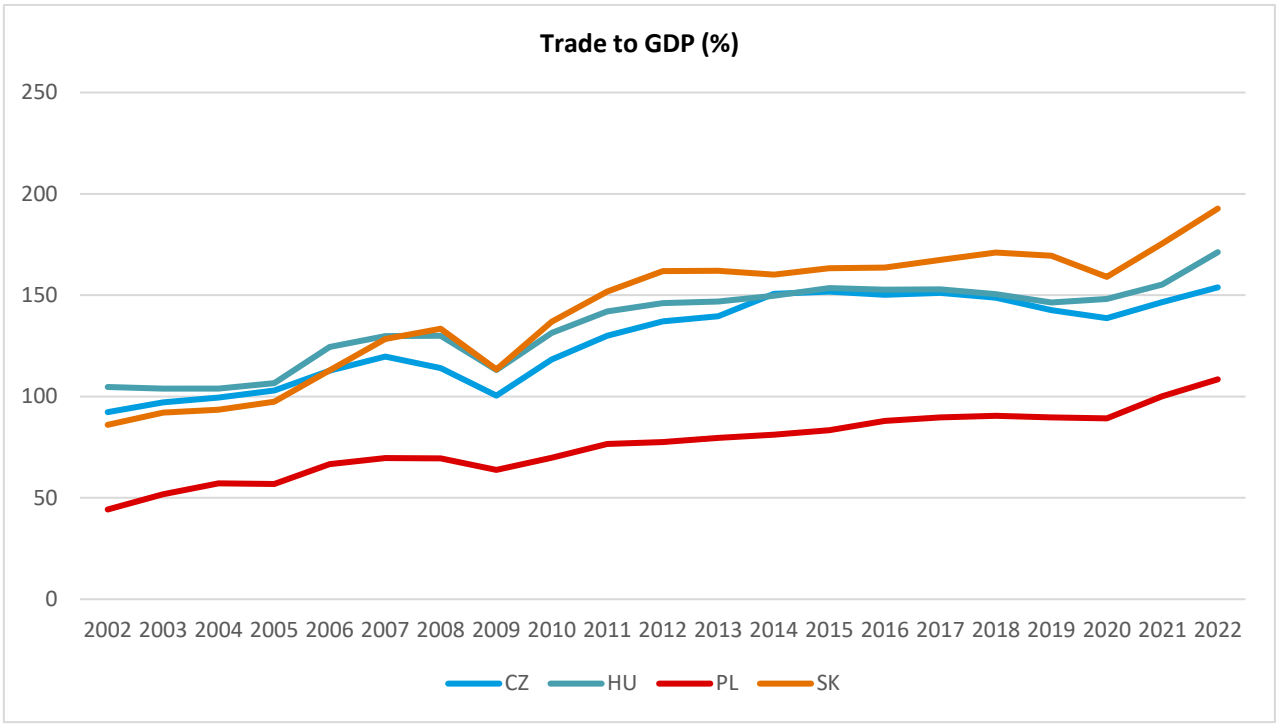
14 Detailed statistics on the distribution of trade with the six constituted countries and country groups can be found in the Appendix in Table 1.

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during the polycrisis of the early 2020s. Our results correspond with the relevant findings in the literature (see *Kaaresvirta et al. 2023*; *Kalotay – Sass 2021*). We found that European economic integration had a visible effect on these countries' embeddedness in the global economy: the examined countries were characterised by a rising share of foreign trade (to GDP) between 2004 (the year of EU accession) and 2007/2008 (the start of the Global Financial Crisis). Recovery after the GFC was achieved by the early 2010s (varying by country to a certain extent), with the globalisation indicator exceeding pre-crisis levels. A notable slowdown in the pace of globalisation occurred in the second half of the 2010s (referred to in much of the literature as "slowbalisation"; see *Kandil et al. 2020; Bykova et al. 2021*). Then, in 2020 (i.e. the outbreak of the Covid-19 pandemic), a sudden decline was seen in the level of globalisation (albeit less grave than during the GFC), which was followed by a quick recovery, despite the prolonged crisis induced by the pandemic and the subsequent war in Ukraine (which was also assumed to have further disrupted GVCs.) In addition, in accordance with previous suppositions (see *Chetverikova 2020; Losoncz 2017; Cieślik et al. 2016*), it is visible that while the Czech Republic, Hungary and Slovakia share a very similar path and extent of globalisation tendencies, Poland's share of foreign trade (in relation to GDP) is significantly lower than that of the other three countries. Also, the Polish economy appears to be more resistant to shocks (such as the GFC or the Covid-19 pandemic). This presumably results from the relative size of the Polish economy and that the Polish economy relies strongly on internal consumption (in contrast to the other three Visegrád countries, which mainly base growth on foreign investment). *Figure 1* shows the aforementioned trends in detail.

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Figure 1: Long-term (de-)globalisation tendencies in the Visegrád countries between 2002 and 2022



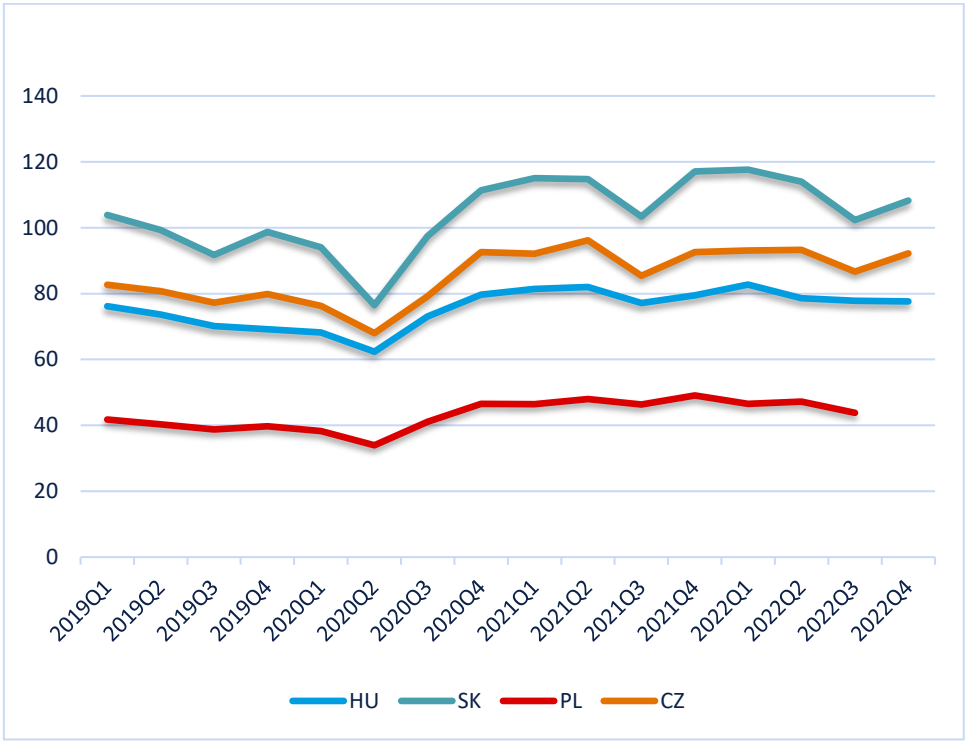
Source: Compiled based on data from IMF DOTS and the World Bank

4.2. Short-term effects of the polycrisis on the (de-)globalisation of the Visegrád countries

In this section, we present the statements on short-term deglobalisation tendencies that can be drawn from international trade statistics. First of all (and despite the widespread presumption of deglobalisation tendencies), over the longer run (i.e. between early 2019 and late 2022) we do not see any significant decline in international trade. International trade (controlled for the change in output) was higher in late 2022 than prior to the shocks of the early 2020s (i.e. the Covid-19 pandemic and the war in Ukraine). This is true for all four countries in the sample, regardless of these countries' embeddedness in global trade flows (which has traditionally been significantly lower in the case of Poland compared to the other three Visegrád countries, for comparison, see also *Figure 2*).

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Figure 2: International trade as a percentage of GDP in the Visegrád countries

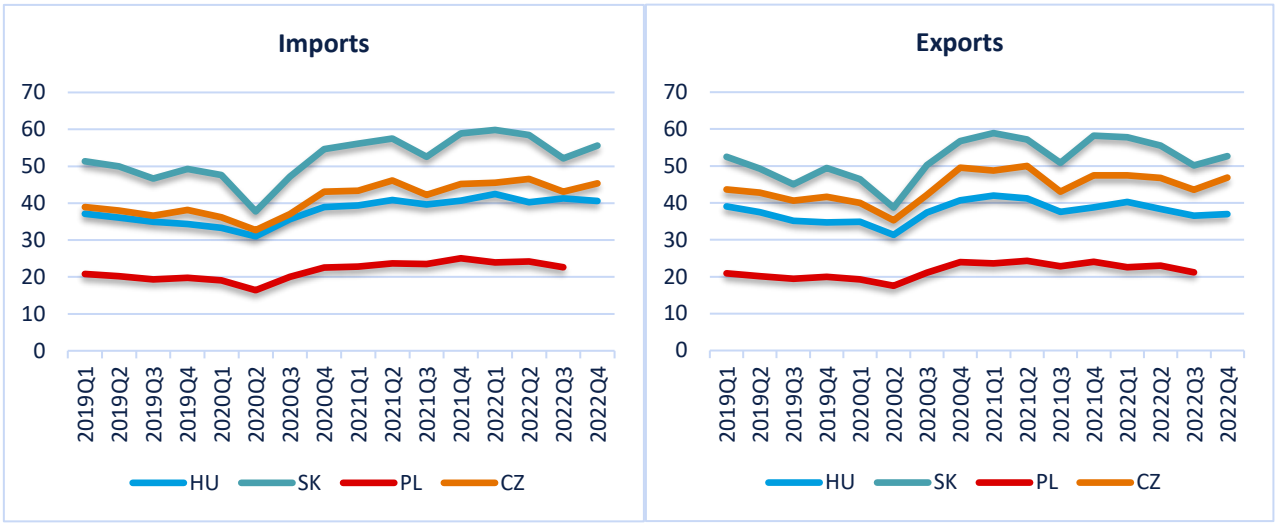


Source: Compiled based on data from IMF DOTS and the OECD (2023)

However, during the past four years, components of the polycrisis affected international trade figures over the short run. All of the examined economies experienced a significant drop in international trade in the first wave of the Covid-19 pandemic (2020Q1 vs. 2020Q2), due to restrictions and the short-term deterioration of global value chains. This drop, however, was followed by a very quick recovery of trade activities, which exceeded the pre-pandemic levels within a maximum of 6 months. A similar drop occurred in 2021Q2 to 2021Q3, followed by another fast recovery. The drop was caused by manufacturing supply chains reaching their limit and slowing down production, thus creating further disruptions in international trade (*Tradeshift 2021*). Unlike the outbreak of the Covid-19 pandemic in early 2020, the war in Ukraine affected the international trade of the Visegrád countries with a lag, as the ratio reached its low point as late as 2022Q3, approximately one half year after the start of the war (it should be noted that the downturn in 2022Q3 still approximates the 2019 figures in all of the examined countries). Thus, we can state that the supply chain shocks caused by measures aimed to stop the pandemic had a faster and more direct effect on international trade than the war in Ukraine (and sanctions directed against Moscow).

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Figure 3: Imports and exports as a percentage of GDP in the Visegrád countries



Source: Complied based on data from IMF DOTS and the OECD (2023)

If the trade statistics are further broken down into imports and exports, we see that the imports-to-GDP ratio is slightly higher in all of the examined countries in late 2022 (compared to early 2019). By contrast, exports are slightly lower in Hungary, slightly higher in Slovakia, and roughly the same in the Czech Republic and Poland in late 2022 (compared to early 2019). Therefore (assuming that international trade is a proxy for measuring globalisation), we can state that no significant deglobalisation trends can be detected in the Visegrád countries, but also that international trade did not increase significantly. (See *Figure 2* on overall trade statistics; a presentation of disaggregated data on imports and exports can be seen in *Figure 3*. Certain limitations regarding the shift in terms-of-trade ratios may apply; this is addressed in the subsequent subsections.)

4.3. Decoupling tendencies in the Visegrád countries

4.3.1. Share of trade with allies and RoW

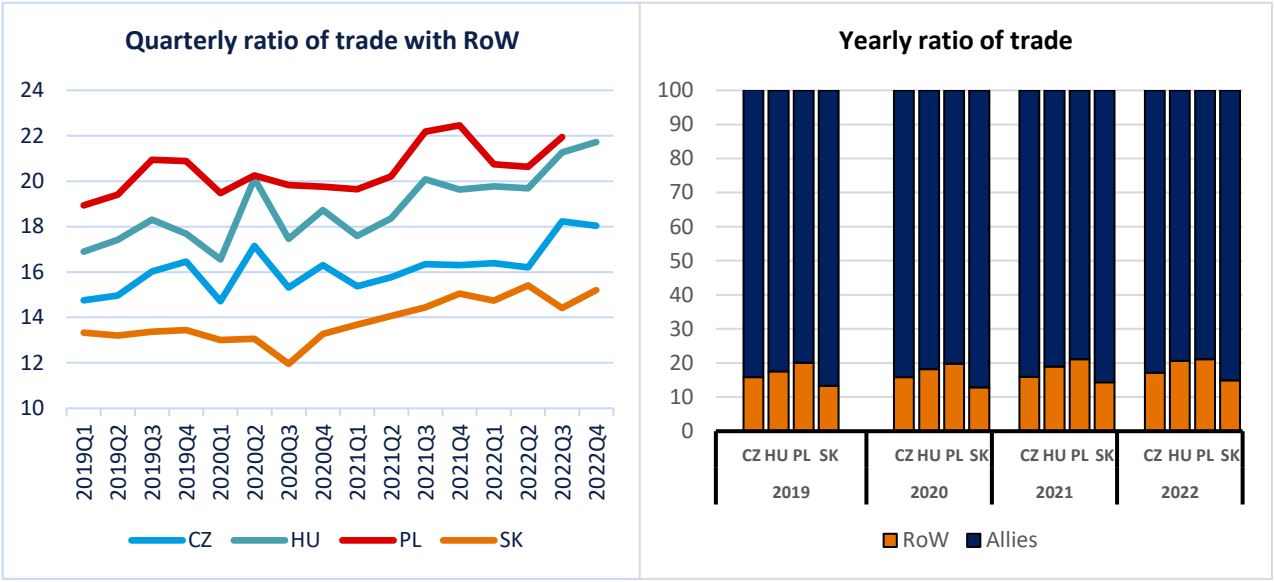
In this section, we focus on decoupling tendencies in the Visegrád countries after the polycrisis of recent years (and the shock of the war in Ukraine, in particular), based on international trade statistics. To measure these effects, we first use the previously introduced dichotomous categorisation of the group of allies (i.e. NATO, EU, and EFTA countries) and the rest of the world (RoW).

First of all, we find that the Visegrád countries trade predominantly with allies. Between 2019 and 2022, over 80 per cent of the trade conducted by the Czech Republic, Hungary and Slovakia trade was with allies, with Poland's ratio also fluctuating around 80 per cent. Accordingly, between 2019

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and 2022, only 12–15.4 per cent of Slovakia's international trade flowed to and from RoW countries. In the Czech Republic, this ratio ranges between 14.7 and 18.2 per cent, in Hungary 16.5–21.7 per cent, and in Poland 18.9–22.5 per cent. (Interestingly, while Poland is the least open economy in the examined group, its trade relations are also the most diversified in terms of this two-faceted setup.) Disaggregated for imports and exports, the ratio of imports from RoW to total imports significantly exceeds that of exports directed towards RoW countries to total exports. (See *Figure 4* on overall trade data with RoW and allied countries to total trade ratio, while disaggregated data on imports and exports by trading partners can be found in *Sections 4.3.2* to *4.3.4.*)

Figure 4: International trade with allies and RoW countries as a percentage of total trade in the Visegrád countries



Source: Compiled based on data from IMF DOTS

When analysing the effects of the polycrisis, it is worth noting that – despite all of the efforts to shorten value chains and minimise trade with countries outside the political-economic block of alliance – trade with RoW countries has not diminished over the past four years. All of the examined countries traded more with RoW countries in 2022 than they did in 2019 (adjusted for GDP). In the Czech Republic, Hungary and Poland, the Covid-19 pandemic resulted in an upward spike in trade with the rest of the world (most probably due to a need for healthcare goods typically produced by non-Western countries). Also, 2021 as a whole was characterised by an increase in the ratio. When analysing imports and exports on aggregate, no clear decline in trade with RoW can be shown after the start of the war in Ukraine. One major exception here is Poland, where a decline in trade with RoW countries can be seen in the ratio in 2022Q1 and 2022Q2 (in the case of Slovakia, after the outbreak of the war, the ratio oscillates close to the value recorded for 2021Q4).

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Altogether, considering exports and imports on aggregate, no clear signs of decoupling can be seen in the Visegrád countries in a dichotomous setup (i.e. distinguishing between allies and RoW). In order to paint a more detailed picture, in the next section we analyse trade flows with specific trading partner countries (and country groups).

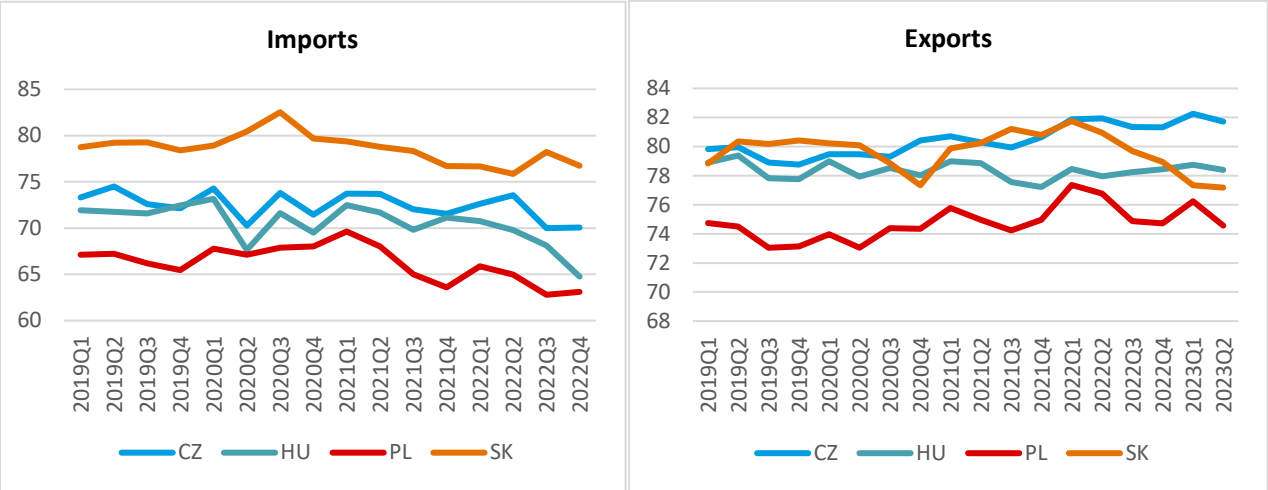
4.3.2. Trade with the European Union

While "decoupling" has become a keyword when it comes to the restructuring of global value chains in the past years, it was already shown in *Section 4.3.2* that all of the Visegrád countries mostly trade with countries (and groups) with which they are politically, economically and militarily aligned. By far the most significant trading partner of the region has been and remains the European Union. Out of all countries, at least 70 per cent of exports are directed towards the European Union, with Poland being the least reliant on EU exports, while Czech exports directed to the EU exceed 80 per cent. (This reflects not only the political-economic alignment of the region, but its position in European-owned global value chains.) Furthermore, exports to the EU have remained more or less constant regardless of the polycrisis: a moderate decline can be seen in Slovakia, while moderate growth occurred in the case of the Czech Republic.

The European Union is also the largest import partner for all of the Visegrád countries, with imports ranging from approximately 65 per cent (in the case of Poland) to approximately 80 per cent (in the case of Slovakia), with the Czech Republic and Hungary in between. However, in respect of trends and tendencies, the polycrisis did affect the ratio of imports to the region: between early 2019 and late 2022, imports from the EU declined by 2–7 percentage points (with Hungary registering the steepest decline). This, however, can not necessarily be interpreted as a "decoupling from the EU". The relative decline in imports from the EU most likely resulted from the steep increase in energy prices starting from 2021 on (and particularly early 2022; see e.g. *Yagi – Managi 2023*) (with energy being imported from outside the EU, thus reducing the relative proportion of trade with the European Union). *Figure 5* presents the aforementioned results in detail.

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Figure 5: Exports to and imports from the European Union expressed as a percentage of the respective total imports and exports by country



Source: Compiled based on data from IMF DOTS

4.3.3. Decoupling – imports (non-EU)

When it comes to analysing imports from the aforementioned partners and partner groups, the Visegrád countries diverge. However, some commonalities can be mentioned. First, even though China is one of the trading partners from which certain Western actors aim to decouple, none of the Visegrád countries trade less (as a percentage of total trade) with China than before the start of the polycrisis. Moreover, in all four countries, the ratio of Chinese imports is higher than before 2020 (with significant upward spikes during the start of the Covid-19 pandemic, presumably reflecting the elevated need for healthcare products typically manufactured in China). Also, it is worthy to mention that, except for Slovakia (and in 2022Q4, Hungary), China is the number one import partner for all countries; China's position is particularly strong in the case of the Czech Republic.

The four countries diverge when it comes to decoupling from Russia. In geopolitical terms, Russian power projection potential is significantly higher in the region than that of China. Thus, while the global decoupling discourse primarily focuses on China (vis- à-vis the United States and Europe), decoupling from Russia carries with it a particular significance for the region – due to the geopolitical proximity on the one hand and energy dependence on the other. Despite certain common regional interests, significant country differences apply. Poland indeed decoupled from Russian imports after the start of the war in Ukraine, shrinking its imports by two thirds throughout 2022. Poland's ability to decouple from Russia is likely associated with the fact that Warsaw had already severed numerous energy sector ties prior to the war in Ukraine (see e.g. *Abnett et al. 2022*). Czech

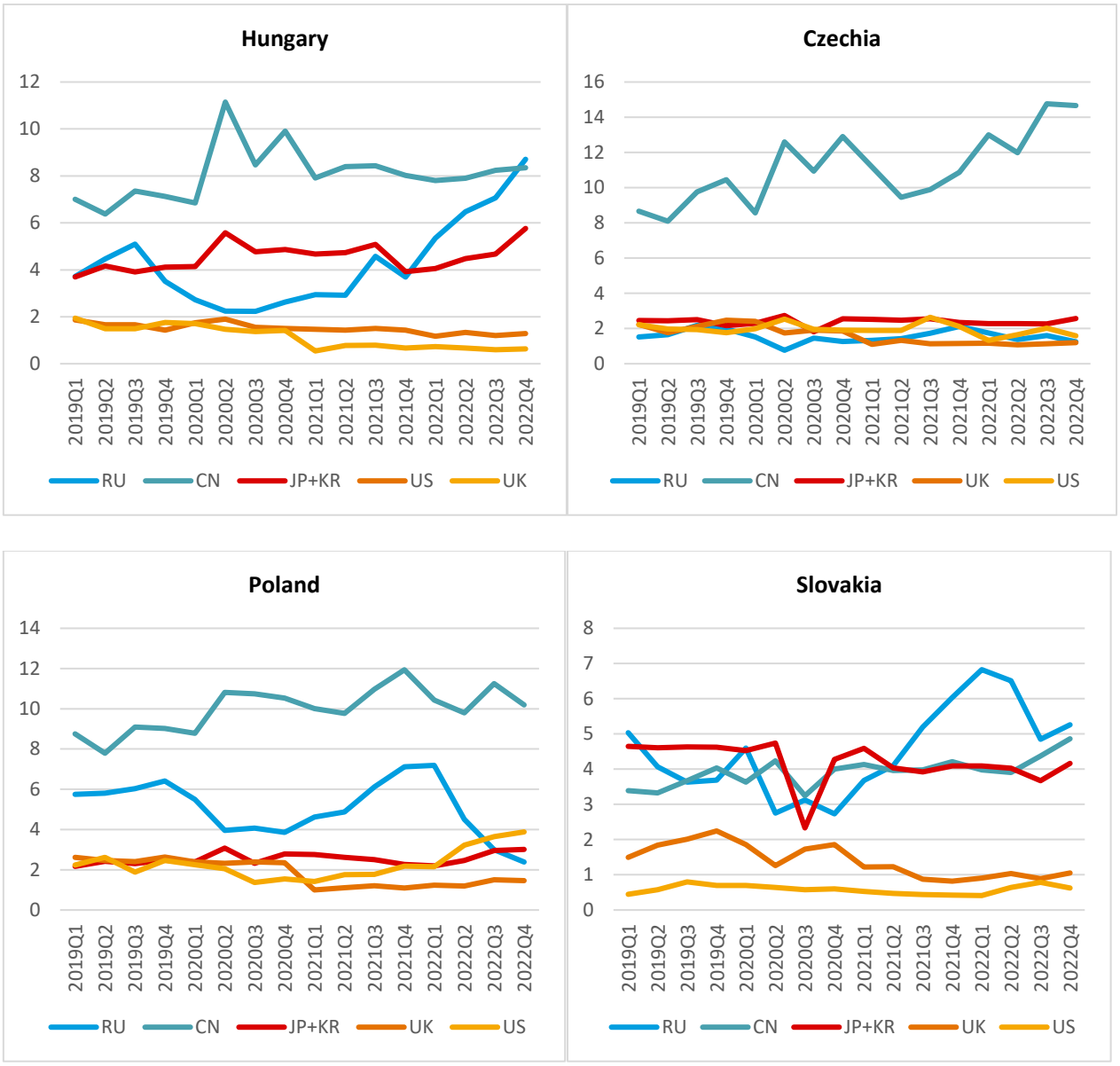
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imports from Russia have stagnated since the start of the polycrisis (at around 2 per cent of total imports), while Hungarian and Slovak imports have risen significantly (due to the sharp rise in energy prices from late 2022 on).

Imports from the United Kingdom, the United States, Japan and South Korea represent a relatively small proportion (less than 5 per cent in all cases) of total imports in all four Visegrád countries. By late 2022, no major overall rises in imports from the aforementioned partners had occurred, and the trade relations are rather characterised by stagnation. Imports from the UK tended to shrink (presumably due to Brexit rather than any decoupling aims). A notable rise in imports from the United States occurred in the case of Poland throughout 2022. Further details can be seen in *Figure 6*.

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Figure 6: Imports from Russia, China, Japan, Korea, the United Kingdom and the United States expressed as a percentage of total imports by Visegrád countries



Source: Compiled based on data from IMF DOTS

4.3.4. Decoupling – exports (non-EU)

In respect of exports, besides the European Union, the United Kingdom and the United States are the largest partners of the Visegrád countries (before 2022, Russia came in second place in some quarters for some of the countries; this shift is shown below), while these two partners play a less significant role in imports. This fact clearly reflects the region's position in global value chains: while imports arrive from the East (China, in particular), after assembly, goods move westward. Exports to the UK shrunk to some extent between 2019 and 2023 (again, presumably due to Brexit)

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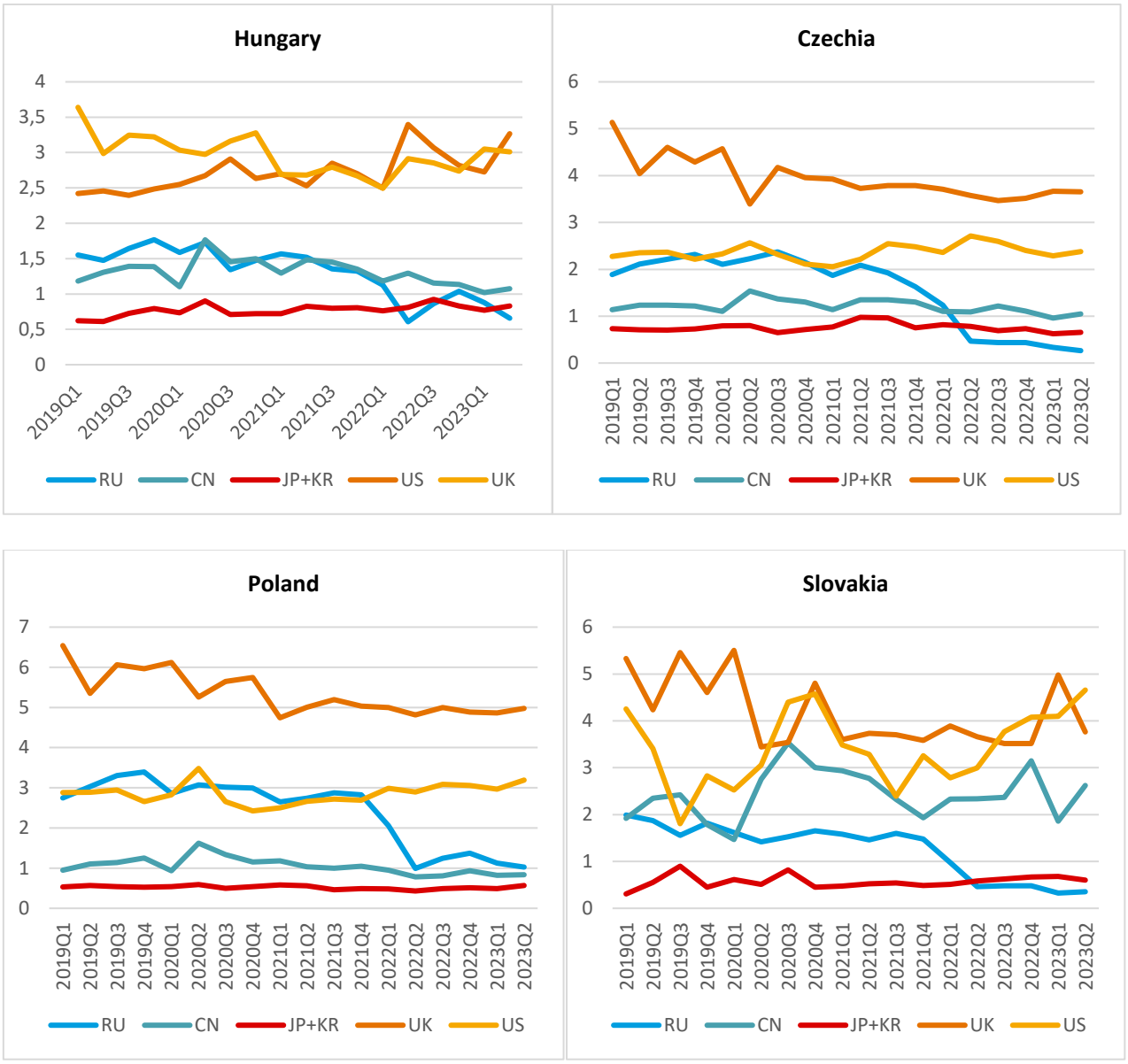
except for Hungary, which exported more to the United Kingdom during this period. Thus, trade with the major Western partners did not grow significantly (despite the communicated need for re- and friendshoring). Similarly, exports to Japan and Korea also did not change significantly; however, altogether these two countries account for less than 1 per cent of total exports for each country and thus are not to be considered major export partners for the region.

While China is the most significant import partner for all Visegrád countries, it plays a significantly less relevant role when it comes to exports (also well reflecting the region's position in GVCs). Only one per cent of the respective Visegrád countries' total exports is directed towards China (the ratio is somewhat higher in Slovakia, ranging between 1.5 and 3.5 per cent during the examined timeframe). Exports to China saw a short-term upward spike during the first wave of the Covid-19 pandemic. Other than that, no major changes in exports have occurred, and accordingly there are no signs of decoupling from Chinese exports, despite Western efforts to do so.

While the region has not decoupled from the Chinese economy in the past five years, the case with Russian exports differs. In all four Visegrád countries, exports to Russia already started to decline before the start of the full-scale invasion of Ukraine and reached an all-time low in 2022, with exports falling by one half to two thirds after February 2022. Thus, in contrast to the lack of decoupling from China, the region indeed did decouple from the Russian economy (when it comes to exports) due to the geopolitical reshuffling, the sanctions regimes, uncertainty and the lack of trust in Russian actors (see e.g. *Sonnenfeld et al. 2022*). This has been the case regardless of foreign policy preferences (that do diverge among the Visegrád countries to some extent). Further details can be seen in *Figure 7*.

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Figure 7: Exports to Russia, China, Japan, Korea, the United Kingdom and the United States expressed as a percentage of total exports by Visegrád countries



Source: Compiled based on data from IMF DOTS

5. Conclusion

In this section, we summarise our key findings and their contribution to state-of-the-art literature on deglobalisation and decoupling. The key findings are the following.

1. In contrast to expectations about deglobalisation (see *Witt 2019, Goldberg – Reed 2023*), the ratio of international trade to GDP in the Visegrád countries is higher than before the pandemic. Thus, in terms of the value of international trade, the countries examined are more globalised than ever. Accordingly, we do not see any long-term changes in international trade in any of the

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Visegrád countries in the wake of polycrisis. Shocks (such as the pandemic, the war and the disruption of supply chains in Q3 2021) did indeed cause temporary setbacks in the trade-to-GDP ratio, but a recovery generally occurred within no more than two quarters.

2. Trade between the Visegrád countries and non-aligned ones (RoW, i.e. non-NATO, non-EU and non-EFTA) countries is generally low (ranging between 12 and 22 per cent of total international trade activities, respectively). However, trade with RoW countries in 2022 was higher in all of the examined cases than in 2019.
3. After we deconstruct the dichotomous setup, it becomes clear that the EU is by far the biggest trading partner of the region. Besides the EU, China is the biggest import partner of every Visegrád country, but a minor partner when it comes to exports. The share of trade with China has not declined since 2019, and thus the region has not started decoupling from the Chinese economy.
4. Russia was (and in some cases, still is) a major import partner for the region. When it comes to imports, Poland (which is less energy dependent on Russia) was able to decouple from the Russian economy after February 2022; this goal, however, could not be achieved by the other three Visegrád countries due to energy-related links. Nevertheless, all of the Visegrád countries export significantly less (as a proportion of their total imports) to Russia since the outbreak of the war in Ukraine in 2022, signalling weakening bonds with the Russian economy.

Our findings contribute to the current literature in several ways. While deglobalisation and decoupling have become an ever more widely researched phenomenon in the course of the past years (see especially *Kaaresvirta et al. 2023*), hitherto no focus was directed on the Visegrád countries' trade patterns in the wake of the polycrisis. We hope to have narrowed this gap.

Also, our findings challenge mainstream expectations about trade tendencies in the Western world. Neither have the economies of the Visegrád countries become less globalised than in the late 2010s, nor have they decoupled from the non-Western part of the global economy. This is particularly surprising in a region that is extremely embedded into GVCs (and thus has a potential to reduce this embeddedness) and which is much more affected by the war in Ukraine (due to its geographic proximity) than its Western counterparts. With these findings, we generally support the claims of *Kaaresvirta et al.* (*2023*) and *Kalotay – Sass* (*2021*) regarding the lack of deglobalisation and decoupling in the region, and thus contradict *Bykova et al*.'s (*2021*) expectation of deglobalisation tendencies in the Visegrád countries. We also contribute to previous findings by presenting specific characteristics in the trade of the respective countries in the sample.

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In terms of decoupling, it is also important to note how differently trade relations with Russia and China have developed. While decoupling is often treated as an equivalent of decoupling from China, the Visegrád countries – due to historical and geographic reasons – have a different focus when it comes to restructuring supply chains. As China does not pose a direct geopolitical threat to the Visegrád countries, there are no intentions to reduce this dependence. On the other hand, trade with Russia has shrunk to a vast extent since the 2022 escalation of the war in Ukraine. As energy ties are relatively hard to sever, the reduction of trade is particularly visible on the side of exports. Conclusively, the Visegrád countries' focus area on decoupling lies closer to home: it is directed against trade with Russia, instead of China.

The aforementioned findings have several implications. From a theoretical perspective, one must consider the issue of why deglobalisation and decoupling tendencies are lacking in this part of the world. While the format of such a paper does not allow for a thorough analysis for the reasons for this phenomenon, we suggest a few possible explanations.

First, in a region that is extremely dependent on its embeddedness in GVCs, political elites (irrespective of ideological preferences) will remain committed to maintaining participation in global commerce – even if this contradicts the interests of powerful allies or other domestic (geopolitical, economic, etc.) aspects. (This is a significant implication for policymakers within and outside the Visegrád countries as well: the globalised nature of these economies puts pressure on local policymakers to sustain international trade with all possible measures as long as possible.) Second, the lack of deglobalisation tendencies (or in some cases even the growth of the level of globalisation) can be explained by the specific position of the region in GVCs. Traditionally, the Visegrád countries (and CEE economies in general) are specialised in production phases with lower added value. Thus, when it comes to reshoring/nearshoring production processes, the Visegrád countries can be an alternative to faraway, politically unstable or untrustworthy countries to which low value-added production was offshored previously (East Asia, in particular). If production is indeed nearshored to the Visegrád region, it explains why this region can become further globalised, despite deglobalisation tendencies on a global level. This again has a very important policy implication: decoupling tendencies hide a potential for the region, as these countries have good chances to attract production sites withdrawing from the non-Western world.

In the meantime, overall decoupling tendencies (i.e. aims to create a bipolar world economy) are not persistent in the Visegrád countries, and trade with non-aligned partners has grown in the past years (for obvious motives, Russia is an exception in this case). The most notable reason for this might be

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the fact that the Visegrád countries constitute a region that is already decoupled to a notable extent. The region predominantly trades with aligned countries (and in particular, fellow EU members), leaving little space for further decoupling. Also, the structure of GVCs incentivises maintaining the current setup. Beside the fact that GVCs are not necessarily easily reconfigured, the region is a connection point in production where imports from non-aligned countries are assembled, which later move westwards, to aligned countries. This function as a gateway thus leaves little space for individually determined decoupling, unless global decisions on value chain reconfigurations are made.

Also, we find it paramount to emphasise the special position of the Visegrád countries when it comes to decoupling. These countries focus on decoupling from Russia (instead of China, or, in more general terms, from all non-aligned economies) due to obvious geopolitical reasons. A simultaneous decoupling from both Eastern powers (in more general terms, all non-aligned economies) seems economically implausible and thus the priority is set to the decoupling from the more direct threat (even if the severing of energy ties can only be a longer-term goal in some cases). Thus, in this paper, we make a case for a new, regionally adjusted understanding of decoupling.

As a conclusion of this paper, we identify some limitations of our work and propose some directions for potential further research. Regarding the limitations, first (and as stated in the methodological unit of the paper), we used international trade as a proxy variable for measuring globalisation. The key here is the word proxy: while many (see *Vujakovic 2009* and *Irwin 2020*) argue that it is indeed a good proxy for globalisation, it does not cover all possible factors, such as cross-border flows of capital or political-institutional globalisation. Furthermore, as addressed in *Section 3.2*, in our dataset, we used trade volumes (in USD) to measure globalisation (and not terms of trade). Thus, it is possible that the lack of deglobalisation (and, in some cases, trade volume growth) rather reflects the price growth of certain goods and not a real upward shift in goods traded. On the one hand, this does not change our findings on globalisation: international exposure is well reflected in the value trade volume (measured in USD). On the other hand, we suggest that future research delve further in this phenomenon to determine whether international trade (as a whole and by different possible groupings, as well) grew in real volumes as well, or it is the change in prices that leads to the perceived growth. The former would indicate higher embeddedness in the global economy, while the latter would tend to implicate problems of the real economy. Another methodological limitation is the potential persistence of sanction evasion (especially when it comes to decoupling from Russia where, as our analysis suggests, significant supply chain reconfigurations took place within a short timeframe); trade diversions via intermediaries were not controlled for in our analysis.

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Additionally, our sample is limited in both geographic and temporal terms. While our results apply to the Visegrád countries, it would be worthwhile to extend our research to the entire CEE region (including the Baltics and the Balkans), or even to examine the issue on a global database. Also, the timeframe analysed (i.e., from 2019Q1 to late 2022 and early 2023) allows for measuring short-term effects of the polycrisis, it would also be worthwhile to examine the topic in a broader timeframe when it comes to the measurement of decoupling. This applies to decoupling tendencies since (at least) the GFC in 2007–2008 on the one hand, and a retrospective analysis some years in the future on the other (especially considering the fact that already the 2010s featured some events, such as the 2014 Russian aggression in Ukraine or the US-China trade war, that may have affected trading partner preferences). It is certain, however, that, due to the economic, political and military shifts in the global order, not even by then will deglobalisation and decoupling tendencies lose relevance – neither in the Visegrád countries nor elsewhere in the world.

References

Abnett, K. – Strupczewski, J. – Melander, I. (2022): *EU agrees Russia oil embargo, gives Hungary exemptions; Zelenskiy vows more sanctions*. Reuters, 31 May. https://www.reuters.com/world/europe/best-we-could-get-eu-bows-hungarian-demands-agree-russian-oil-ban-2022-05-31/. Downloaded: 31 August 2023.

Al-Rodhan, N.R. – Stoudmann, G. (2006): *Definitions of globalisation: A comprehensive overview and a proposed definition*. Program on the geopolitical implications of globalisation and transnational security. https://www.academia.edu/2969717/Definitions_of_Globalization_A_Comprehensive_Overview_and_a_Proposed_Definition_The_International_Relations_and_Security_Network_ETH_Zurich_June_19_2006

Borin, A. – Conteduca, F.P. – Di Stefano, E. – Gunnella, V. – Mancini, M. – Panon, L. (2023): *Trade decoupling from Russia*. International Economics, 175: 25–44. https://doi.org/10.1016/j.inteco.2023.05.001

Bykova, A. – Grieveson, R. – Grübler, J. – Sass, M. – Szemlér, T. (2021): *30th Anniversary of the Visegrád Agreement*. Monthly Report, No. 2/2021, The Vienna Institute for International Economic Studies. https://wiiw.ac.at/monthly-report-no-2-2021-dlp-5601.pdf. Downloaded: 31 August 2023.

Chase-Dunn, C. – Álvarez, A. – Liao, Y. (2023): *Waves of Structural Deglobalization: A World-Systems Perspective*. Social Sciences, 12(5), 301. https://doi.org/10.3390/socsci12050301

10.15772/ANDRASSY.2026.006

Chetverikova, A.S. (2020): *The Visegrad Countries in the EU: Economic Results*. Mirovaia ekonomika i mezhdunarodnye otnosheniia, 64(2): 63–70. https://doi.org/10.20542/0131-2227-2020-64-2-63-70

Cieślik, E. – Biegańska, J. – Środa-Murawska, S. (2016): *The intensification of foreign trade in post-socialist countries and their role in global value chains*. Acta Oeconomica, 66(3): 465–487. https://doi.org/10.1556/032.2016.66.3.5

Darmo, L. – Novák, M. – Kálovec, M. – Rybošová, P. (2020): *Determinants of the FDI Inflow into the Visegrad Countries 1*. Ekonomický časopis, 68(10), 1057–1080. https://doi.org/10.31577/ekoncas.2020.10.05

García-Herrero, A. – Tan, J. (2020): *Deglobalisation in the context of United States–China decoupling*. Policy Contribution, Issue No. 21, Bruegel, Brussels. https://www.bruegel.org/wp-content/uploads/2020/12/PC-21-2020-211220.pdf. Downloaded: 27 March 2024.

Goldberg, P.K. – Reed, T. (2023): *Is the Global Economy Deglobalizing? And if so, why? And what is next?* NBER Working Paper 31115. https://doi.org/10.3386/w31115

Gorynia, M. – Wolniak, R. (2009): *The Participation of Transitional Economy in Globalisation – The Case of Poland*. In: Gorynia, M. (ed.): International business in transition. Difin SA, Warsaw, pp. 99–114. https://mariangorynia.pl/wp-content/uploads/International_business_cala_7.05.09-.pdf#page=99. Downloaded: 19 March 2024.

Halmai, P. (2023): *Globalisation versus Deglobalisation*. Financial and Economic Review, 22(2): 5–24. https://doi.org/10.33893/FER.22.2.5

Hausmann, R. (2020): *Transformation of Global Supply Chains in the Manufacturing Industry as a Result of the Coronavirus Pandemic*. Financial and Economic Review, 19(3): 130–153. https://doi.org/10.33893/FER.19.3.130153

Henig, D. – Knight, D.M. (2023): *Polycrisis: Prompts for an emerging worldview*. Anthropology Today, 39(2): 3–6. https://doi.org/10.1111/1467-8322.12793

Huntington, S.P. (1996): *The clash of civilizations and the remaking of world order*. New York: Simon & Schuster.

Irwin, D.A. (2020): *The pandemic adds momentum to the deglobalization trend*. Peterson Institute for International Economics, April 23. https://www.piie.com/blogs/realtime-economics/pandemic-adds-momentum-deglobalization-trend. Downloaded: 30 August 2023.

10.15772/ANDRASSY.2026.006

James, H. (2018): *Deglobalization: The Rise of Disembedded Unilateralism*. Annual Review of Financial Economics, 10: 219–237. https://doi.org/10.1146/annurev-financial-110217-022625

Jones, G. (2005): *Multinationals and Global Capitalism: From the Nineteenth to the Twenty First Century*. Oxford University Press, New York. https://doi.org/10.1093/0199272093.001.0001

Kaaresvirta, J. – Kerola, E. – Nuutilainen, R. (2023): *Do international investment and trade flows show any signs of fragmentation?* BOFIT Policy Brief, 2023 No. 12. https://publications.bof.fi/bitstream/handle/10024/53083/bpb1223.pdf?sequence=1. Downloaded: 31 August 2023.

Kalotay, K. – Sass, M. (2021): *Foreign direct investment in the storm of the COVID-19 pandemic and the example of Visegrad countries*. Acta Oeconomica, 71(S1): 73–92. https://doi.org/10.1556/032.2021.00030

Kandil, N. – Battaïa, O. – Hammami, R. (2020): *Globalisation vs. Slowbalisation: a literature review of analytical models for sourcing decisions in supply chain management*. Annual Reviews in Control, 49, 277-287. https://doi.org/10.1016/j.arcontrol.2020.04.004

Kazharski, A. (2020): *An ad hoc Regionalism? The Visegrád Four in the "Post-Liberal" Age*. Polity, 52(2): 250–272. https://doi.org/10.1086/708182

Kim, H.-M. – Li, P. – Lee, Y.R. (2020): *Observations of deglobalization against globalization and impacts on global business*. International Trade, Politics and Development, 4(2): 83–103. https://doi.org/10.1108/ITPD-05-2020-0067

Kordalska, A. – Olczyk, M. (2021): *New patterns in the position of CEE countries in global value chains: functional specialisation approach*. Oeconomia Copernicana, 12(1): 35–52. https://doi.org/10.24136/oc.2021.002

Losoncz, M. (2017): *A globális és regionális integrálódás és a fenntartható gazdasági növekedés néhány kérdése a visegrádi országokban* (*Issues for the Visegrád countries of global and regional integration and sustainable economic growth*). Közgazdasági Szemle (Economic Review), 64(7–8): 677–697. https://doi.org/10.18414/KSZ.2017.7-8.677

Maihold, G. (2022): *A New Geopolitics of Supply Chains: The Rise of Friend-Shoring*. (SWP Comment, 45/2022). Berlin: Stiftung Wissenschaft und Politik – SWP – Deutsches Institut für Internationale Politik und Sicherheit. https://doi.org/10.18449/2022C45

10.15772/ANDRASSY.2026.006

OECD (2023): *OECD Quarterly International Trade Statistics, Volume 2022 Issue 4*. OECD Publishing, Paris. https://doi.org/10.1787/5a1ef126-en

Pakulski, J. – Higley, J. – Lengyel, Gy. – Ilonszki, G. – Szomolányi, S. – Gál, Zs. – Frič, P. – Jasiecki, K. (2016): *The Visegrad countries in crisis*. https://depot.ceon.pl/handle/123456789/12433. Downloaded: 31 August 2023.

Rashid, M.T. (2022): *Russo-Ukrainian Conflict: A New Cold War*. Orient Research Journal of Social Sciences, 7(2): 47–56. https://www.gcwus.edu.pk/wp-content/uploads/2023/01/6.-Russo-Ukrainian-Conflict.pdf

Simola, H. (2021): *The impact of Covid-19 on global value chains*. BOFIT Policy Brief, 2021 No. 2. https://publications.bof.fi/bitstream/handle/10024/44890/bpb0221.pdf?sequence=1. Downloaded: 31 August 2023.

Sonnenfeld, J. – Tian, S. – Zaslavsky, S. – Bhansali, Y. – Vakil, R. (2022): *It pays for companies to leave Russia*. SSRN. https://doi.org/10.2139/ssrn.4112885

Spielvogel, J.J. (2015): *Western Civilization*. Cengage Learning.

Tradeshift (2021): *The Tradeshift Index of Global Trade Health, Q4 2021*. https://tradeshift.com/wp-content/uploads/2022/11/TS-Index-of-Global-Trade-Health-Q4-2021-copy.pdf. Downloaded: 17 August 2023.

Vujakovic, P. (2009): *How to Measure Globalisation? A New Globalisation Index (NGI).* WIFO Working Papers, No. 343, Austrian Institute of Economic Research (WIFO), Vienna. https://www.econstor.eu/handle/10419/128904

Witt, M.A. (2019): *De-globalization: Theories, predictions, and opportunities for international business research*. Journal of International Business Studies, 50(7): 1053–1077. https://doi.org/10.1057/s41267-019-00219-7

Yagi, M. – Managi, S. (2023): *The spillover effects of rising energy prices following 2022 Russian invasion of Ukraine*. Economic Analysis and Policy, 77(March): 680–695. https://doi.org/10.1016/j.eap.2022.12.025

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Appendix

Countries categorised into the group of allies: Albania, Austria, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Greece, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

Table 1: Average ratio of trade with the six trading partner countries and country groups by country between 2019Q1 and 2022Q4 (imports) and 2023Q2 (exports), respectively

	Exports (%)	**Imports (%)**
Czech Republic	90.29	91.10
Hungary	87.43	90.03
Poland	86.95	87.96
Slovakia	91.53	93.22

Source: Compiled based on data from IMF DOTS

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Part 2: Geopolitical shifts in the Western Balkans: Where is FDI coming from?[15]

1. Introduction

The role of foreign direct investment (FDI) in the Western Balkan (WB) economies[16] has been growing steadily since the 1990s, generally supporting their transition to market economies and contributing significantly to the region's economic convergence. Furthermore, the growing magnitude of FDI has allowed for a substantial reduction of poverty rates (Topalli et al., 2021) and stimulated domestic investments (Sucubasi et al., 2021). While having recently shown an ability to attract foreign direct investments in relation to their respective economic size well above other emerging European economies (Jovanović, 2023), most WB economies are still lagging behind in terms of inward FDI stock per capita compared to several CESEE EU member states.

According to the classic framework of Dunning and Lundan (2008), there are four motives for investing capital abroad: Investors may seek markets (by entering the local markets where FDI is flowing), efficiency (enhancing competitiveness via lower labor costs), natural resources (e.g. raw materials) or assets (e.g. high-skilled labor). In the Western Balkans, the former two (i.e. market-seeking and efficiency-seeking) have been investors' main motives. FDI primarily flowed to larger WB countries (Serbia, in particular) and the services sector. Sources of FDI have also been determined by geographic, cultural and linguistic proximity. For example, there is a large share of Italian FDI stock in Albania and Russian FDI stock in Montenegro (Jirasavetakul and Rahman, 2018).

However, the geopolitical fragmentation of the late 2010s and the early 2020s has somewhat restrained FDI flows (Abeliansky, Belabed and Mayrhuber, 2024). On a global scale, FDI is in decline, and the remaining flows take place between geopolitically aligned countries. This causes vulnerabilities for emerging market economies reliant on FDI stemming from geopolitically diverse sources

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[15] Ginter, T. – Hildebrandt, A. (2024): *Geopolitical shifts in the Western Balkans: where is FDI coming from?* OeNB Report 2024/21: Economic trends in EU Candidates and Russia. https://www.oenb.at/Publikationen/Volkswirtschaft/reports/2024/report-2024-21-economic-trends-in-cesee/html-version.html

[16] Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia. The designation "Kosovo" is used without prejudice to positions on status and in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

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(IMF, 2023). Nevertheless, there are signs showing that WB economies can profit from the restructuring of the global economy. Jovanović et al. (2024) recently suggested that Bosnia and Herzegovina, Kosovo and North Macedonia are experiencing certain nearshoring tendencies.

The Western Balkans' geographic, economic, and institutional characteristics place the region in a peculiar position, well reflected in the structure of the respective sources of FDI. The Balkan peninsula has long been considered a geopolitical chessboard: While there is a bilateral commitment for integrating the WB economies into the European economy via EU membership that is being supported, to varying extent, by the people in these countries (International Republican Institute, 2024), all major global and regional powers are present in the region – showing different levels of embeddedness, interests and preferences. Major Western powers (i.e. the European Union and the United States) are very present, the EU having always been the number one investor in all WB economies (Jaćimović et al., 2023). But also Russia and Türkiye have fostered historical, cultural as well as economic ties with the WB nations, also manifested in Moscow's and Ankara's investments directed toward the region (Hake and Radzyner, 2019). Over the course of the past decade, further non-Western sources of FDI have come into play, namely, China (most notably investing in infrastructure projects related to the Belt and Road Initiative) and the Gulf states (Đurašković, Konatar and Radović, 2021). This has resulted in a diversification of the sources of FDI flowing to the WB economies on the one hand, and, on the other hand, in a reshuffling of the geopolitical landscape of the region.

In the following, we thus analyze the relevance of FDI in the WB economies between 2010 and 2023, with a particular focus on the (country-level) sources of investments and shifts therein. This paper is structured as follows. In the next section, we discuss the overall magnitude of FDI in the entire WB region (including major sources of investment and country-level characteristics of industry structure) over the period 2010–2023. Then, in section 3, we provide specific profiles for each WB economy in focus. Section 4 presents trends of intra-WB regional integration with regards to FDI; section 5 concludes.

2. The structure of FDI in the Western Balkans economies

The size of FDI stocks in the WB economies

The magnitude of FDI stocks in the WB economies has grown steadily over the past 15 years, ranging between 38.6% (Bosnia and Herzegovina) and 80.2% (Montenegro) of GDP in 2023 (2022)[17].

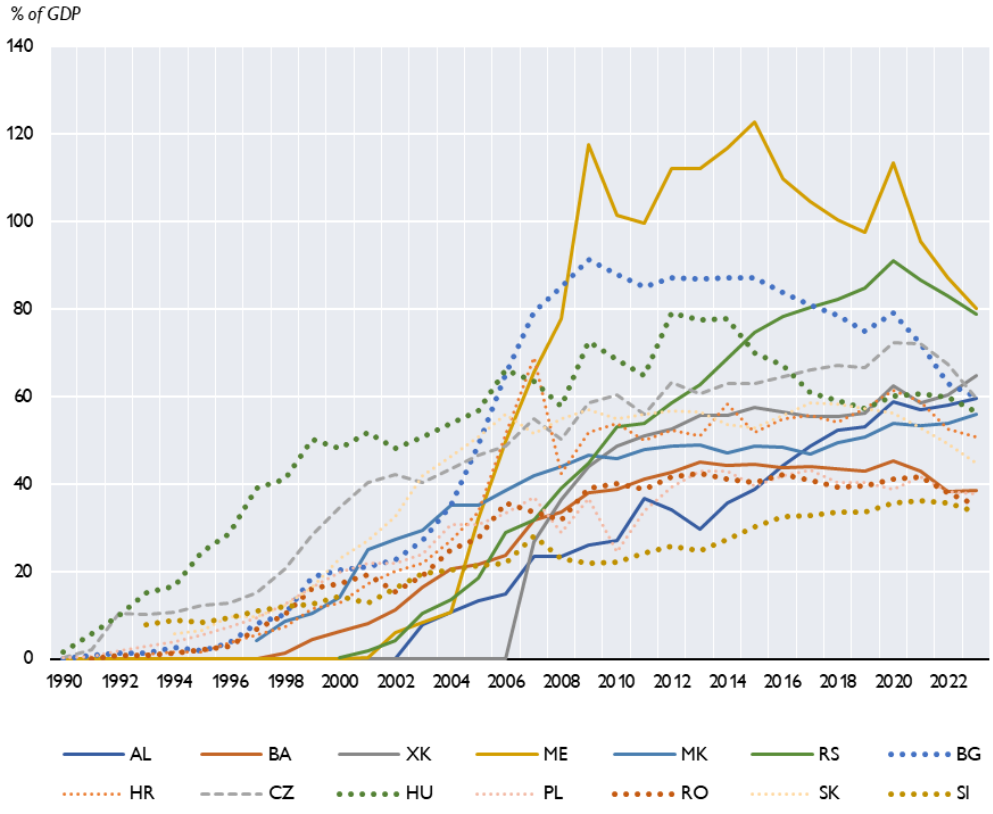
[17] Depending on data availability.

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The proportion of FDI stock relative to GDP has shown steady growth since 2007 (with the great financial crisis resulting in certain setbacks in North Macedonia and especially Montenegro). However, the polycrisis of the early 2020s (i.e. the consequences of the COVID-19 pandemic and Russia's war of aggression in Ukraine) resulted in stagnation (Albania, Kosovo, North Macedonia) or setbacks (Bosnia and Herzegovina, Montenegro, Serbia) in FDI stock as a share of GDP.

There are certain differences among the WB economies regarding the magnitude of the role of FDI in the respective economies. In terms of the proportion of inward FDI stock to GDP, Montenegro has been the most popular investment destination, with the ratio exceeding 100% between 2009 and 2018, and in 2020 (chart 1). Due to the setbacks in FDI inflows directed to Montenegro in the 2020s, the 2023 level of the Montenegrin FDI-to-GDP ratio is approximated by that of Serbia (around 80% each). The least popular destination for FDI inflows was Albania between 2007 and 2015, and then, from 2016 on, Bosnia and Herzegovina.

Inward FDI stock in the Western Balkan and CESEE EU member states

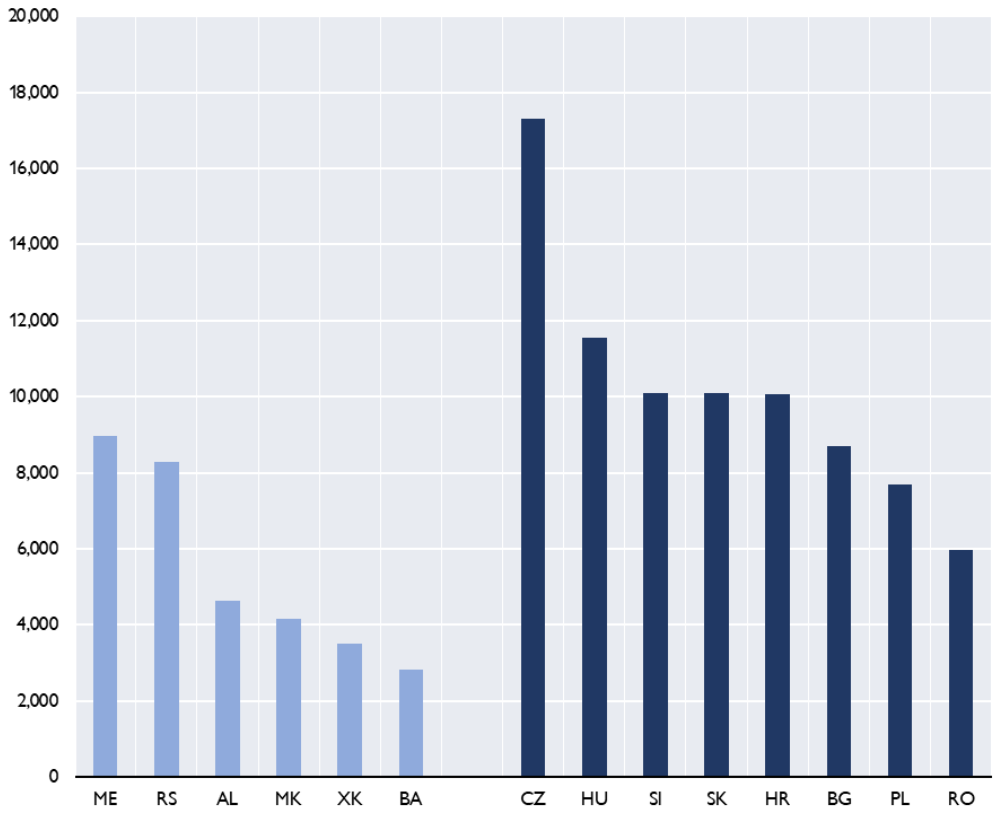


Source: wiiw FDI database.

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The FDI stock-to-GDP ratio of the two top performers (Montenegro and Serbia) exceeds that of the CESEE EU member states[18] by far. Albania, Kosovo and North Macedonia have reached levels comparable to those of most CESEE EU countries while Bosnia and Herzegovina is lagging behind. However, when considering FDI stock per capita, the top performers of the WB (Montenegro and Serbia) show similar levels to the lowest-performing CESEE EU member states (Bulgaria, Poland and Romania). The remaining four WB economies (i.e. Albania, Bosnia and Herzegovina, Kosovo and North Macedonia) have a significantly lower FDI stock-per-capita ratio than any other EU member state in the region (chart 2). Overall, the comparatively high share of FDI to GDP and the low FDI stock per capita highlight the catching-up potential of the WB economies both in term of GDP and in FDI.

Inward FDI stock per capita (2023) in the Western Balkan and CESEE EU member states



Source: wiiw FDI database.

[18] The Baltic countries are not included.

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Industry structure of FDI

The individual WB economies show differences when it comes to FDI preferences by industry and the complexity of the respective industry structures.[19] FDI stock in Kosovo shows the least diversified picture: In 2023, more than half of available FDI stock was recorded in the real estate sector. This is a dramatic increase: In 2015, the real estate sector accounted for only a quarter of FDI stock in Kosovo. Financial and insurance activities are the second-largest component of FDI stock accounting for 13% of total FDI, the share being relatively stable over time.

Bosnia and Herzegovina and North Macedonia show more diversified and similar industry structures in their FDI stock; moreover, these industry structures are relatively constant over time. In both countries, manufacturing is the dominant sector (35% of FDI stock in North Macedonia and 29.5% in Bosnia and Herzegovina in 2022). Financial and insurance activities rank second, accounting for approximately a fifth of total FDI stock in both countries; wholesale and retail trade ranks third (14.3% of total FDI stock in Bosnia and Herzegovina, and 12.6% in North Macedonia).

The industry structure of FDI stock in Albania differs from the aforementioned countries and shows certain changes over the past decade. The energy sector (electricity, gas, steam, and air conditioning supply) accounted for a quarter of total FDI stock in 2023; this share has doubled since 2015. Mining and quarrying accounted for 16.4% of FDI stock in the country (versus 12.7% in 2015). Financial and insurance (11.8%), as well as real estate activities (11.7%) also recorded notable shares in 2023, with the latter having grown enormously, by 8.7 percentage points since 2015. The share of the information and communication sector shrunk from a remarkable 24.4% in 2015 to 10.3% in 2023.

Major sources of FDI inflows in the WB economies

The European Union has been the major foreign investor in the Western Balkans in the past 15 years (see also Jaćimović et al., 2023), even accounting for more than three-quarters of total FDI stock in certain cases. The EU's share in total inward FDI stock is, however, following a downward path over time – starting in 2010 at a share ranging between 55.4% (in Montenegro) to 78.7% (in North Macedonia). In 2022 it accounted for between 38.5% (in Montenegro) and 65.0% (in North Macedonia).The decline was the steepest in Montenegro, while Kosovo is the only WB economy where the share of FDI stock originating in the EU grew over time (30.8% in 2012 vs. 40.1% in 2023).

[19] Data on FDI by industry is available for Albania, Bosnia and Herzegovina, Kosovo and North Macedonia.

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Despite these general downward trends, the EU is still by far the number one investor in the Western Balkans, accounting for more than half of total FDI inward stock in four out of six WB economies.

In contrast, FDI originating in the United States is much less common in the WB economies. The share of US FDI in total FDI stock typically ranges between 0.5% and 2.5% in the Western Balkans, lacking any major upward and downward trends. The only notable exception is Kosovo, where the share of US relative to total FDI stock has shown a strong increase over time (from 2.7% in 2015 vs. 7.3% in 2023).

The presence of Russian FDI strongly varies across the region. Relative to its total FDI stock, Montenegro is the main recipient of Russian FDI (with the share in its total FDI stock ranging between 10.7% and 14.0% throughout the time period examined); this share has grown steadily from 2017 on. However, this is not the result of nominal Russian FDI stock growing, but rather reflects the shrinking magnitude and, in some cases, withdrawal of EU FDI. Russian investments used to reach 9.2% of total FDI stock in 2010 in Bosnia and Herzegovina, with this share gradually shrinking to 2.3% in 2022; the decline was faster from 2015 on. On the other hand, in Serbia, the presence of Russian FDI has grown over time (from 3.7% in 2010 to 5.6% in 2023). However, Russian FDI always accounted for less than 1% of total FDI in North Macedonia and has been negligible in Albania and Kosovo. Thus, Russian FDI is primarily directed to those WB countries that share cultural (linguistic or religious) ties with Russia.

Chinese FDI, on the other hand, is a relatively new phenomenon to the economies of the Western Balkans. Until 2013, China's presence was negligible in the region, which, however changed with the launch of the Belt and Road Initiative[20] in the same year (see also Barisitz, 2020, and Barisitz, 2024). A fast upswing in Chinese FDI was seen until the late 2010s in Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia. While the former three countries saw stagnating Chinese FDI inflows in the 2020s, the proportion of Chinese FDI (to total FDI) has skyrocketed in Serbia ever since, reaching a record high of 11.3% in 2023. For Albania and Kosovo, however, Chinese investments have remained negligible, similarly to Russian FDI flows. On the other hand, investments from Türkiye account for a larger part of current FDI stock in these countries (7.7% in Albania and 8.0% in Kosovo) and, similarly, in North Macedonia (7.7%).

[20] The Belt and Road Initiative (BRI) is a Chinese proposal for enhancing international trade and as such includes a number of infrastructure projects (see also World Bank, 2018).

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3. Country profiles

Albania

In Albania, EU investors are by far the largest owner of FDI stock (dominated by Italy, the Netherlands and Austria). However, the EU's share in total stocks is in moderate decline over time. The Swiss share in the country's FDI stock is also remarkably high (exceeding 15.7% in 2023) in a regional comparison; notable growth was registered throughout the late 2010s and early 2020s. Apart from the EU, however, global geopolitical players are almost absent in Albania: The Chinese and Russian FDI share is negligible, US investments account for around 2%. Instead, the major non-Western investor in Albania has been Türkiye, with a relatively constant share from 2010 on, reaching 7.7% in 2023.

Bosnia and Herzegovina

Similarly, in Bosnia and Herzegovina the EU has remained the major investor, accounting for 59.4% of total FDI stock in 2022. Contrary to other WB economies, Bosnia and Herzegovina has not recorded a permanent downward trend in the EU's share of FDI stock. Rather, the EU's FDI share has been moving together with conjunctural trends (upward swing in the second half of the 2010s, shrinking afterward). Austria, Croatia and Slovenia are the main EU holders of FDI stock, well reflecting geographic and cultural proximity in investment trends. Furthermore, despite their share diminishing over time, intra-WB investments are of particular relevance in Bosnia and Herzegovina (14.3% by 2022), highly dominated by Serbia. Russia's share showed significant decline over the past decade (9.2% in 2010 vs. 3.9% in 2022); the FDI share of the US and China is negligible in the country. On the other hand, the Gulf states (Saudi Arabia, the UAE and Kuwait) have shown growing interest in the region and reached a share of 6.6% of FDI stock in 2022.

Kosovo

Though the EU is also the main investor in Kosovo, its position there is the least dominant among all WB economies (40.1% in 2023). The EU's share is growing nevertheless, which is also atypical for the region; major EU investors include Germany and Austria. The Swiss share in total FDI stock in Kosovo is remarkably high and growing at a fast pace (reaching 16.2% in 2023), reflecting the size of the diaspora in Switzerland. Türkiye is the major non-Western investor in the economy; however, the Turkish share of FDI stock in Kosovo has declined over the past seven years. While Chinese and Russian presence in Kosovo is negligible, the United States shows particular interest in

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investing in Kosovo (with a steadily growing FDI share that reached 7.3% in 2023). Intra-WB investments also play a significant and growing role (7.2% of total FDI stock), vastly dominated by Albanian FDI, reflecting the cultural ties between the two economies.

Montenegro

In Montenegro, the share of FDI stock attributable to EU investors has declined remarkably, by a third over the past ten years (59.3% in 2013 vs. 38.5% in 2022). Dominant EU investors are Hungary, Italy and Austria, reflecting the role of geographic proximity in foreign direct investments. Russia holds a remarkably high share (14.0% in 2022) of Montenegrin FDI stock, with the ratio moderately growing over the late 2010s. Intra-WB FDI stock (dominated by Serbian investments) also plays a significant and growing role in Montenegro (11.1% in 2022). While the US, China and Türkiye hold a minor share of FDI stock in the country, the shares of Azerbaijan, Switzerland and the UAE each showed significant growth over the past decade and exceeded 5% in 2022.

North Macedonia

Out of all WB economies, North Macedonia shows the highest share of FDI stock attributable to EU investors, although this share has declined by a quarter over the past decade (65% in 2022). The most notable EU investors are Austria, Greece and Germany. UK investments showed remarkable growth in the mid-2010s, making the UK the major non-EU investor in North Macedonia (3.1% in 2010 vs. 9.0% in 2022). Turkish investments have also grown over the past decade, reaching 7.6% in 2022. The influence of other major geopolitical actors (US, China and Russia) is small in North Macedonia; the share of intra-WB FDI is also moderate.

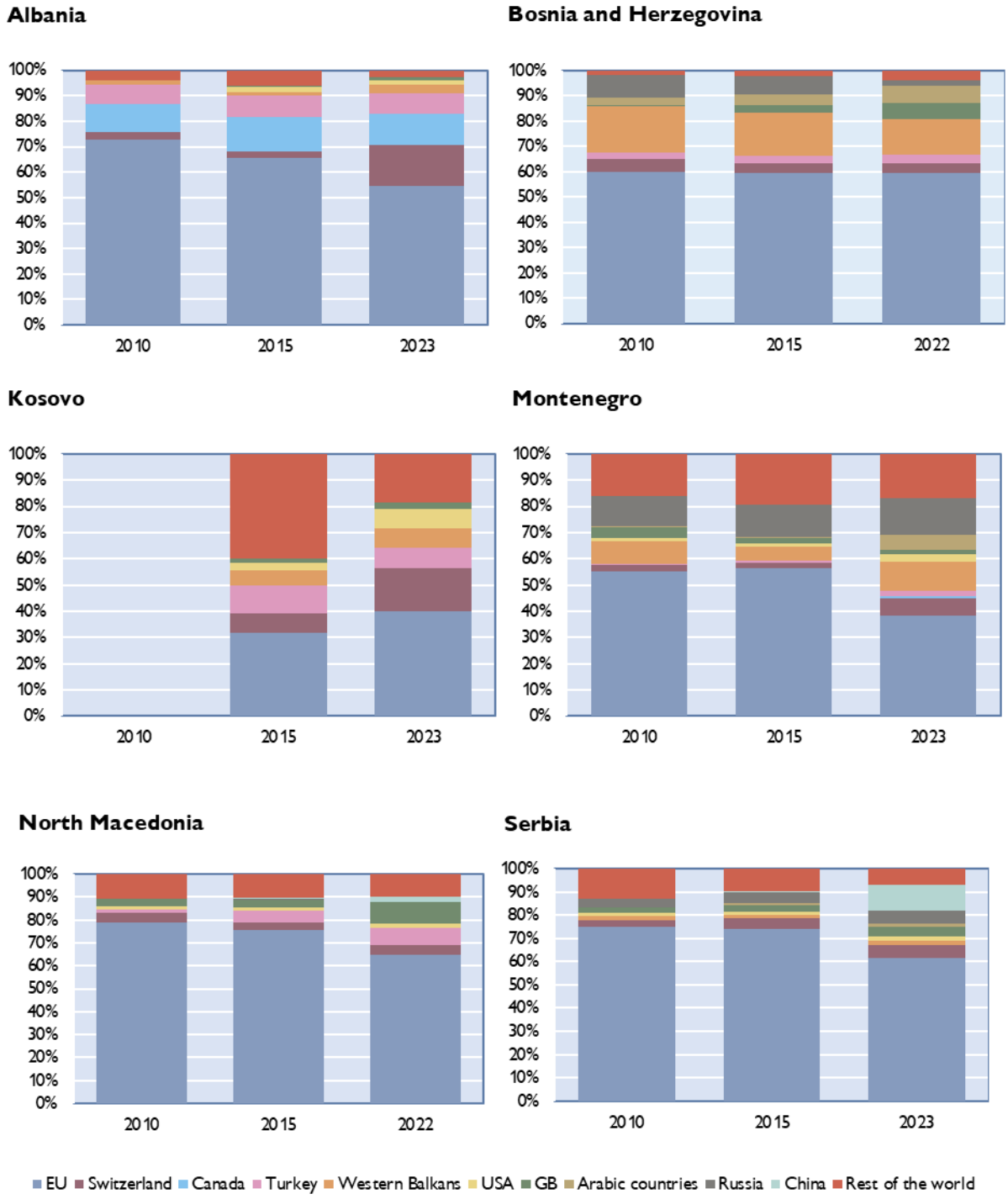
Serbia

Similarly, the EU's share in FDI in Serbia has diminished over the past decade (74.8% in 2010 vs. 61.5% in 2023). Nevertheless, the EU remains the by far dominant holder of FDI stock in the country. Major EU investors include the Netherlands, Austria and Germany. Also, Chinese investments have skyrocketed in the past decade from practically zero to 11.3% in 2023; the rising share of Chinese FDI is linked with the launch of the Belt and Road Initiative, consisting of international infrastructure projects (see also Barisitz, 2024). Russian investments showed moderate growth in the past decade (3.7% in 2010 vs. 5.6% of all FDI stock in 2023), similar trends are visible in the case of Swiss investments. Other players' share (including the US, the remaining WB economies and Türkiye) is moderate.

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Inward FDI stock by country of origin

% of total FDI stock



Source: wiiw FDI database.

4. Signs of a regional integration

Beside the shift in external partners' investments, FDI flows between the six economies of the Western Balkans have also shown certain changes in the past 15 years. Overall, there are clear signs of regional integration: Three of the WB economies (Albania, Kosovo, and, to the greatest extent,

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Montenegro) have registered a growing share of FDI from the remaining five economies of the region. On the other hand, in the cases of Serbia and North Macedonia, intra-WB shares of FDI stock have remained low (1.4% to 2.0% and 2.7% to 3.8%, respectively) throughout the past 15 years. A notable outlier is Bosnia and Herzegovina. The country has received an unusually high degree of intra-WB FDI with a peak of 21.3% in 2007; nevertheless, this proportion has been in decline ever since (reaching an all-time low by 2019 and stagnating in the 2020s). The sources of intra-WB investments reflect cultural and historical ties and geopolitical interests within the region. Serbia is particularly active in investing in Bosnia and Herzegovina as well as in Montenegro, while Albania primarily invests in Kosovo.

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Inward FDI stock originating from other WB economies

% of total inward FDI stock, 2023 or latest available year



Source: wiiw FDI database.

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5. Concluding remarks

The role of FDI has steadily grown in the WB economies over the past decade. However, on a per capita basis, the Western Balkans are still lagging behind the CESEE EU members. Across the WB economies, there is remarkable heterogeneity both in terms of the magnitude of FDI stocks and the composition of investors. In parallel with global geopolitical shifts of the 2010s and the 2020s, the sources of FDI have also become diversified for the Western Balkans; the most notable actors that have appeared are China and, to a lesser extent, the Gulf states. This growing influence of non-Western actors has come at the cost of the EU whose position has weakened somewhat. The United States has not expanded its activities in the region. Furthermore, intra-WB investments have also grown over the past decade, showing signs of regional integration. This diversification in FDI sources, however, only reflects a shift in proportions rather than a complete reshuffling: the European Union has remained by far the number one investor in the Western Balkans. Our findings align with the supposition (Jirasavetakul and Rahman, 2018) that geographic and cultural factors do play a significant role in foreign investors' preferences: investments by European, Russian, Turkish and Gulf states as well as intraregional FDI flows are organized in line with geographic and cultural proximity. It is safe to say that changes have indeed appeared in the source structure of foreign direct investments in the Western Balkans over the past decades. However, historic, cultural and geopolitical factors continue to play a decisive role, with the latter gaining more importance recently.

References

Abeliansky, A., C. A. Belabed and J. Mayrhuber. 2024. Enjoy the silence? (De)globalization and cross-border investment – a gravity approach. In: OeNB Bulletin Q2/24. 60–81.

Barisitz, S. 2020. China's New Silk Road: a stocktaking update and economic review (2017–2019). In: Focus on European Economic Integration Q1/20. OeNB. 20–50.

Barisitz, S. 2024. Downsized, restructured and greener (2019–23): A new era for China's New Silk Road? Occasional Paper No. 4. OeNB. April.

Dunning, J. H. and S. M. Lundan. 2008. Multinational Enterprises and the Global Economy. Cheltenham: Edward Elgar.

Đurašković, J., M. Konatar and M. Radović. 2021. The Western Balkans Caught in a Globalization Trap? In: Researching Economic Development and Entrepreneurship in Transition Economies. 9–21.

10.15772/ANDRASSY.2026.006

Hake, M. and A. Radzyner. 2019. Western Balkans: Growing economic ties with Turkey, Russia and China. BOFIT Policy Brief 2019, No. 1.

International Monetary Fund. 2023. Geoeconomic Fragmentation and Foreign Direct Investment. In: World Economic Outlook. April. 91–114.

International Republican Institute. 2024. Western Balkans Regional Poll. February–March.

Jaćimović, D., J. I. Deichmann and K. Tianping. 2023. The Western Balkans and Geopolitics: Leveraging the European Union and China. Journal of Balkan and Near Eastern Studies.

Jirasavetakul, L. F. and J. Rahman. 2018. Foreign Direct Investment in New Member States of the EU and Western Balkans: Taking Stock and Assessing Prospects. IMF Working Paper WP/18/187.

Jovanović, B. 2023. What lies behind the strong FDI inflows in the Western Balkans? In: wiiw Monthly Report. May. 24–34.

Jovanović, B., A. Zlatanović, S. Kluge et al., 2024. Transforming the Western Balkans through Near-shoring and Decarbonisation? wiiw Joint Study No. 2024-10. October.

Sucubasi, B., B. Trenovski, B. Imeri and G. Merdzan. 2021. The Effects of FDI on Domestic Investments in Western Balkans. SHS Web of Conferences Vol. 92.

Topalli, M., M. Papavengjeli, S. Ivanaj and B. Ferra. 2021. The Impact of Foreign Direct Investments on Poverty Reduction in the Western Balkans. In: Economics, Vol. 15., No. 1. 129–149. https://doi.org/10.1515/econ-2021-0008.

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Part 3: Geoeconomic Fragmentation in the Western Balkans[21]

Geoeconomic fragmentation has become one of the timeliest topics in international economics. This paper focuses on geoeconomic fragmentation in the Western Balkans by applying a descriptive analysis of trade flows with each of the region's major trading partners between 2010 and 2023. In addition to painting a detailed picture of the trading partner structures of the economies in the region, I examine whether geoeconomic fragmentation (growing trade within a geopolitical bloc) can be identified. I find that the Western Balkans trades predominantly with the EU and intraregionally. Trade patterns with Russia and China show mixed signs, and there are no clear signs of geoeconomic fragmentation. Thus, this paper supports the literature stating that so far in Central, Eastern and Southeastern Europe, geoeconomic fragmentation has rather been a possible policy narrative than an economic reality.

Journal of Economic Literature (JEL) codes: F4, F5, F6
Keywords: geoeconomic fragmentation, trade fragmentation, Western Balkans

1. Introduction

Geoeconomic fragmentation (i.e. a 'policy-driven reversal of global economic integration', *IMF 2023*, p. 91) has become one of the timeliest topics of international economic research during the past decade. The underlying causes are manifold: following the US-China trade war in the late 2010s, the polycrisis of the 2020s (including the Covid-19 pandemic, escalating geopolitical tensions as well as an energy crisis comparable with that of the 1970s) erupted. On the one hand, this polycrisis generated a need to restructure global value chains (GVCs) once the vulnerability of such had become evident after the numerous supply chain crises caused by pandemic-induced measures. This need to restructure value chains is described by the terms 'reshoring' and 'nearshoring', meaning the approximation of production and consumption, as well as shortening GVCs (see also *Aiyar – Ilyina 2023* and *Abeliansky et al. 2023*). On the other hand, the escalating geopolitical tensions of the 2020s (including military conflicts such as the wars in Ukraine and the Middle East as well as the emerging rivalry between the United States and China) resulted in a need to relocate production to and enhance trade with countries that are geopolitically aligned (described by the term 'friendshoring', *Maihold 2022*).

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[21] Ginter, T. (2025): *Geoeconomic Fragmentation in the Western Balkans*. Financial and Economic Review, 24(2): 27–46. https://doi.org/10.33893/FER.24.2.27

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While geoeconomic fragmentation has emerged as a widely researched phenomenon in the past decade, relatively little focus has been directed towards its effects on the countries of the Western Balkans (WB).[22] This is all the more peculiar as the Western Balkans' geopolitical position can be considered rather unique on the European continent (see, for example, *Zarić – Budimir 2022*; *Hake – Radzyner 2019*). The six countries of the WB can be primarily characterised by a westward orientation, and significant steps have been made towards integration into the European Union, albeit the bloc's enlargement fatigue has resulted in a standstill and full-fledged integration into the European economy still seems a distant goal. In the meantime, global geopolitical actors have all expanded their influence in the Western Balkans (the United States by successful steps of NATO enlargement and China by launching the Belt and Road Initiative in the mid-2010s; see also *Barisitz 2024*). Furthermore, Russia has numerous historic, cultural and economic ties primarily with Slavic, orthodox WB nations, while regional geopolitical powers (such as Türkiye and certain Gulf states) are also exerting power via trade and investments (*Reményi – Csapó 2021*). Considering this unique position of the Western Balkans, the research of geoeconomic fragmentation in the region is particularly relevant and timely.

This paper thus aims to analyse geoeconomic fragmentation in the Western Balkans using trade data as a proxy. It is structured as follows: *Section 2* includes a literature review (focusing on the phenomenon of geoeconomic fragmentation as well as the relevant research on the Central, Eastern and Southeastern European region). *Section 3* and *Section 4* present the research methodology and results (on a country level as well as on a regional level), respectively. *Section 5* concludes.

2. Literature review

2.1. Geoeconomic fragmentation: definitions and consequences

2.1.1. Definitions and a brief historical overview

Definitions of (geoeconomic) fragmentation vary to a certain extent. *IMF* (*2023*) defines geoeconomic fragmentation as a 'policy-driven reversal of global economic integration' (p. 91), reflecting on the fact that fragmentation is initiated by political and economic agents, rather than being a spontaneous shift in the global economy caused by exogenous factors. A similar, but more detailed, definition stems from *Gopinath et al.* (*2024*), who define fragmentation as 'policy-induced changes in

[22] Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia. The designation 'Kosovo' is used without prejudice to positions on status and in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

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the sources and destinations of cross-border flows, often guided by strategic considerations, such as national and economic security, sovereignty, autonomy, which may or may not be associated with a decline in world trade relative to GDP' (p. 1). *Campos et al.* (*2023*) consider the emergence of aligned blocs within the global economy as a prerequisite for fragmentation that eventually limits (trade and capital) flows between the respective blocs. The underlying causes of this (policy-driven) geoeconomic fragmentation include changes in trade policy (and the rise of protectionist policies in particular) as well as a reshuffling of the global geopolitical order (including the emerging need for strategic autonomy; *Baur et al. 2023*).

The term 'fragmentation' is often linked with the concepts of 'reshoring' and 'friendshoring', which are defined as 'strategies to move production processes to trusted countries with aligned political preferences, to make supply chains more resilient and less vulnerable to geopolitical tensions' (*IMF 2023*, p. 91). Similarly, *Norring* (*2024*) categorises geoeconomic fragmentation as a component of deglobalisation, where fragmentation (i.e. 'economic activity concentrating within blocs' (p. 4)) is 'driven by geopolitics' (*ibid*). No clear definition of these blocs is, however, available, and delving into the geopolitical background of the formation of blocs would exceed the scope of this paper. Common categorisations predominantly use three bloc models (the United States and the European Union, Russia and China, the rest of the world; *Gopinath et al. 2024* or similarly, East, West and Neutral; *Campos et al. 2023*).

Research related to economic disintegration and the reconfiguration of global supply chains in accordance with geopolitical motives has gained significant importance over the past decade. The literature (see, for example, *Kaaresvirta et al. 2023* or *Norring 2024*) typically refers to the trade war between the United States and China as a starting point of global fragmentation, but signs of economic disintegration were already seen during the aftermath of the Great Financial Crisis (*Halmai 2023*). Other major milestones causing a need for policies supporting fragmentation include the Covid-19 pandemic (primarily incentivising nearshoring) and the war in Ukraine (primarily incentivising friendshoring; *Blanga-Gubbay – Rubínová 2023*). Fragmentation is transmitted through a variety of channels, including foreign direct investment, cross-border migration and international trade (*Aiyar – Ilyina 2023*). The analyses in this paper focus on the latter as trade has been extensively used as a proxy for measuring geoeconomic fragmentation (see, for example, *Hakobyan et al. 2023; Alvarez et al. 2023*; etc.).[23]

[23] FDI-related fragmentation in the Western Balkans is examined by Ginter – Hildebrandt (2024), for a review, refer to Section 2.2.

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2.1.2. Effects of geoeconomic fragmentation

While geoeconomic fragmentation has become a widely researched phenomenon, its extent is highly debated in the literature. *Gopinath et al.* (*2024*) corroborate the emergence of fragmentation since the 2022 start of the full-scale war in Ukraine: trade flows between geopolitically distant blocs have declined relative to trade among aligned countries. Nevertheless, so far fragmentation has proceeded at a relatively slow pace. These findings are supported by *Bosone et al.* (*2024*), whose EU-wide analysis concludes that when it comes to EU imports, evidence for nearshoring and friendshoring trends is limited. *Kaaresvirta et al.* (*2023*) found that despite the ever-intensifying discourse on deglobalisation, little evidence supports geoeconomic fragmentation on a global level. While trade and FDI flows between the United States and China have diminished since the start of the trade war between the two superpowers, the data do not support the emergence of other economic blocs. Furthermore, emerging regions (including Central and Eastern Europe) have seen growing patterns in trade and foreign direct investment since the start of the polycrisis of the 2020s. The latter findings are supported by *Ginter – Tischler* (*2024*) on a regional level: trade patterns in the Visegrád countries also do not show signs of fragmentation.

The effects of geoeconomic fragmentation are hard to model, and thus estimations vary substantially (*Norring 2024*). *Campos et al.* (*2023*) estimate that in the case of a global order with three blocs (West, East and Neutral), international trade would be reduced to one half in the most extreme scenarios and cause average welfare losses of 3.4 per cent. Losses would be more severe in the Eastern bloc. *Javorcik et al.* (*2023*) estimated the economic effects of friendshoring (i.e. reconfiguring trade flows by predominantly trading with countries that share similar values). They found that friendshoring may cause losses of up to 4.7 per cent of GDP, but the losses for countries in emerging Europe are estimated to be lower. Furthermore, *Javorcik et al.* state that not even emerging European countries would profit from friendshoring (through the relocation of production sites), although non-aligned status would help in minimising the losses caused by the restructuring of global value chains. Similarly, *Aiyar – Ohnsorge* (*2024*) state that while costly for most actors, fragmentation can create opportunities for jurisdictions fostering free trade agreements, and thus acting as 'connector countries'; emerging Europe being considered as one of these regions.

2.2. Geoeconomic fragmentation in the Western Balkans

As referred to in *Section 1*, despite the Western Balkans' peculiar geopolitical position, little focus has been directed to geoeconomic fragmentation concerning the region. *Kaloyanchev et al.* (*2018*)

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painted a very detailed picture of the trade structure and main trading partners of the Western Balkans, albeit their data do not include recent developments induced by the polycrisis. According to *Kaloyanchev et al.,* as of 2018 the most important trading partner of the region was the European Union, with intraregional trade (i.e. trade within WB countries) ranking second; the former was declining, while the latter was rather stable. Looking at trade among the six WB countries, geographical proximity does not play a major role: it is rather linguistic and cultural proximity as well as the deconstruction of trade barriers that enhances intraregional trade. Trade with major non-Western geopolitical actors, i.e. 'Russia, China and Turkey is less pronounced and is systematically skewed towards imports from them' (*ibid, p. 1*).

Ginter – Hildebrandt (*2024*) researched geoeconomic fragmentation in the Western Balkans by examining major geopolitical actors' share in foreign direct investment stock (FDI) in the respective WB countries between 2010 and 2023. They found that while the EU has been the major investor in the region, its share in FDI stocks has declined over time, while China, and to a lesser extent certain Gulf states, have emerged as investors. US investment activity has been limited and so has that of Russia. (Russian investments, however, still play a substantial role in Bosnia and Herzegovina). Furthermore, there have been signs of regional integration, with WB countries becoming investors themselves in fellow WB countries. Thus, foreign direct investment does not show a pattern of fragmentation in the Western Balkans. On the contrary, the region's investor structure has become diversified across geopolitical blocs. *Jovanović et al.* (*2024*) used micro-level data to identify nearshoring trends in the Western Balkans. They found that such trends are occurring in WB countries, and, that the region is a beneficiary of global nearshoring trends with production being moved to the Western Balkans (from Asia, in particular). Furthermore, they state that it is not only European companies moving production facilities to the region, but also certain Asian manufacturers which are aiming to ensure their proximity to European markets by their presence in the Western Balkans.

2.3. Research questions

Based on the reviewed literature, I posed the following research questions:

- Has the change in the global geopolitical landscape been reflected in the Western Balkans' trade flows?
- Has the Western Balkans been subject to geoeconomic fragmentation in the light of the global need for GVC rearrangements?

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- Are there country-specific characteristics of geoeconomic fragmentation in the Western Balkans?

3. Methods

The goal of this paper is thus to identify any signs of potential geoeconomic fragmentation in the Western Balkans by analysing trade linkages with major trading partners and other, global and regional geopolitical actors. While fragmentation as a concept covers more than merely trade, similarly to a body of literature (*Hakobyan et al. 2023; Alvarez et al. 2023*; etc.), I use trade data as a proxy for measuring fragmentation (the limitations thereof can be found in *Section 5*). Based on the literature review, I consider geoeconomic fragmentation present if intra-bloc trade grows and trade outside the respective geopolitical bloc declines.

Before examining the trading partner structure of the Western Balkans, I first provide an overall assessment of the role of foreign trade in the Western Balkans. I used data from the World Bank[24] on the respective trade-to-GDP ratios for the WB countries. Then, I drew on the IMF's DOTS[25] database and analysed the shares of trade flows by respective trading partners for each WB country. This allows for a country-level understanding of the various structures. In order to gain a more long-term understanding of major trade trends in the WB countries, I used a dataset ranging between 2010 and 2022 (for imports) or 2023 (for exports). Exports and imports were treated separately in the analysis. Eight distinct trading partners and partner groups were identified as relevant for the analysis (based either on their global geopolitical influence and/or the significant trade share in some or all WB countries):

- the European Union,
- the United States,
- Switzerland,
- the United Kingdom,
- Türkiye,

[24] https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS?locations=AL-MK-XK-RS-BA-ME. Downloaded: 29 October 2024.
[25] Direction of Trade Statistics. https://data.imf.org/?sk=9d6028d4-f14a-464c-a2f2-59b2cd424b85. Downloaded: 29 October 2024.

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- the remaining five Western Balkans countries,[26]
- Russia, and
- China.

Altogether, the share of these eight trading partners and partner groups covers at least 85 per cent of total exports and imports of all the WB countries in focus, and in most cases their sum even exceeds 90 per cent, thus covering all major trading partners of the region. I provide a descriptive analysis of the share of trade flows by partner countries and groups between 2010 and 2023 (or 2022). By doing so, I provide a detailed picture of the trade structures and trade integration of the WB countries.

In order to measure geoeconomic fragmentation, I identified (the three) global geopolitical blocs based on the relevant literature. Based on all major categorisations of blocs (*Gopinath et al. 2024* as well as *Campos et al. 2023*), the EU and the US are undoubtedly representatives of the Western bloc; this paper categorises Switzerland and the UK as part of the Western alliance as well (see also *Campos et al. 2023*). Conversely, Russia and China are part of the Eastern bloc. In this analysis, I consider Türkiye as well as the rest of the world to be unaligned (the latter in accordance with *Gopinath's* categorisation). Furthermore, I treat the region itself separately, due to the region's historical intertwinement as well as the very peculiar bundle of interests present in the region. The comparison of the respective blocs' shares in each WB country's trade allows to determine whether signs of geoeconomic fragmentation are emerging.

4. Results

4.1. Role of international trade in the Western Balkans

In this analysis, I first assess the overall role of trade in the WB countries. Trade-to-GDP ratios in these countries (as depicted in *Figure 1*) tend to be lower than those of the smaller Central, Eastern and Southeastern European (CESEE) EU member states (i.e. the Czech Republic, Hungary, Slovakia and Slovenia) and comparable with those of the larger ones (i.e. Romania or Poland; cf. World Bank data).[27] This primarily reflects the relatively small internal markets of the WB countries as well as the lack of beneficial effects of EU integration.

[26] For example, if Albania is the country in focus, the remaining five Western Balkans countries (hereinafter abbreviated as WB5) consist of Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia.
[27] https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS. Downloaded: 29 October 2024.

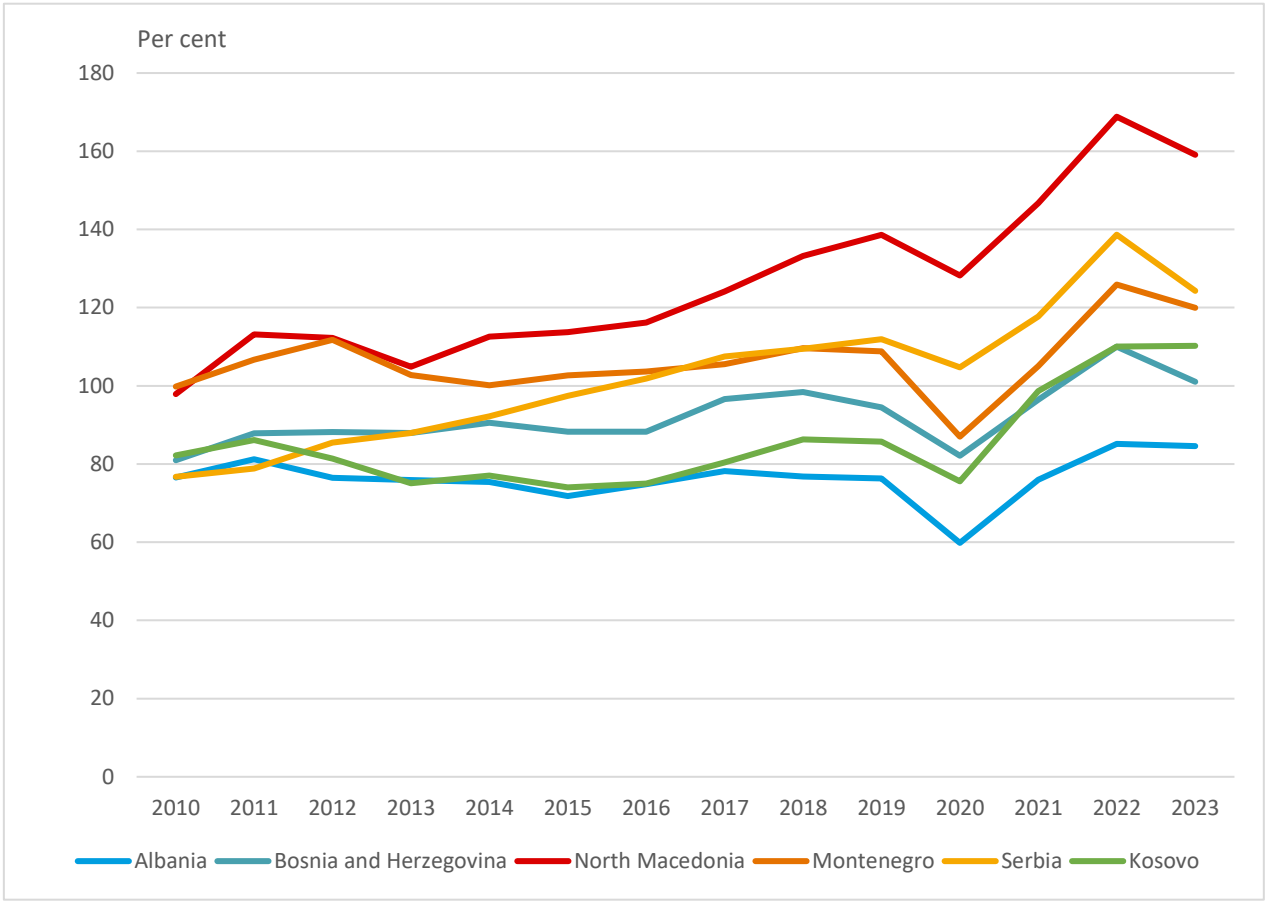
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In terms of trade openness, as of 2023 North Macedonia (159.1 per cent) and Serbia (124.3 per cent) had the highest trade-to-GDP ratios. The least open economy in the WB is Albania (84.5 per cent). In the timeframe 2010 to 2023, trade openness trends varied among WB countries. Serbia, and even more notably North Macedonia, recorded strong growth in their trade-to-GDP ratios. Other WB countries' trade trends were more characterised by stagnation throughout the 2010s. These results align with the narrative on slowed-down globalisation (slowbalisation) after the GFC (see also *Halmai 2023*).

Trade-to-GDP ratios were significantly affected by global economic developments. The Covid-19 pandemic and the related measures caused a sharp setback in trade activities in 2020, followed by a rapid recovery, with 2022 trade-to-GDP ratios vastly exceeding pre-Covid levels in all six countries. (These results show much similarity to those of *Ginter – Tischler* (*2024*), who analysed trade-to-GDP ratios in the Visegrád countries for the same timeframe, implying that these metrics developed very similarly across the broader CESEE region). As far as data are available, this recovery might have been temporary, as 2023 came with another setback in all countries, also in connection with external crises. This setback happened irrespectively of the sanctions related to the Russian-Ukrainian conflict; countries refraining from sanctions were also affected (see also *Stanicek – Caprile 2023*).

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Figure 1: Trade-to-GDP ratios in the Western Balkan countries between 2010 and 2023



Source: World Bank

4.2. Country profiles

In this section, I present the developments in the shares of the respective trading partners by each country in focus (for a detailed depiction, refer to *Figure 2*).

4.2.1. Albania

As is widely common in the region, Albania's most important trading partner is the European Union. The EU's share is particularly dominant in the case of exports, exceeding 70 per cent over the entire timeframe analysed and remaining more or less constant over time. This is less the case with imports that can be characterised by a shrinking trend throughout the past decade, with the EU's share reaching an all-time low of 51.5 per cent by 2022 (vs. 68.5 per cent in 2010). This setback can be considered atypical compared to other WB jurisdictions. Albania's major trading partner within the EU is – due to its geographic and historical proximity – Italy, which accounts for more than one half of Albania's trade with the EU. Exports to other WB countries (especially Kosovo) showed a rising

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trend from 2010 on, reaching an all-time high of 18.8 per cent by 2023, indicating deepening regional integration. Imports from the WB5 are markedly lower and comparable with those from China (between 6–9 per cent during the timeframe analysed). Exports to Türkiye shrunk markedly in the past decade, while Turkish imports have grown, however, making Türkiye the second biggest import partner of Albania by 2023 (at 12.0 per cent of total imports). Trade with other major geopolitical actors (such as the United States and Russia as well as imports to China) is limited to negligible (maximum 2.5 per cent of total trade).

4.2.2. Bosnia and Herzegovina

In the 2010–2023 timeframe, the EU's share in Bosnian trade has always markedly exceeded 50 per cent (oscillating at around 60 per cent of total imports and 70 per cent of total exports). Contrary to other WB countries, the share of trade with the EU has not shrunk in the past decade (and on the export side it has even shown moderate growth). In addition to major EU economies (and Germany and Italy, in particular), trade is intensive with the former Yugoslav EU countries (Croatia and Slovenia). A notable and constant share of Bosnian exports (14–20 per cent) flow to the other WB5 economies (especially Serbia and to a lesser extent Montenegro). As for imports, WB5 countries (strongly dominated by Serbia) are the second biggest source after the EU, with a constant, albeit smaller share (10–13 per cent). In terms of imports, China and Türkiye also doubled their shares between 2010 and 2022 (reaching 8.1 and 5.8 per cent, respectively); Russian imports contracted significantly in this timeframe (from 8.4 per cent in 2010 to 2.3 per cent in 2022).

4.2.3. Kosovo

Kosovo is the least dependent on the EU out of the sample in focus. Imports from the EU account for a stable 40–45 per cent, while exports to the EU declined by one third between 2010 (45.2 per cent) and 2023 (32.3 per cent). On the other hand, the share of trade with the remaining five countries of the Western Balkans is outstandingly high. WB5 countries' share (particularly that of Albania and North Macedonia) in exports grew from 22.6 per cent in 2010 to an impressive 39.8 per cent in 2023; with imports (particularly from Serbia and North Macedonia), however, Kosovo experienced a decreasing share (34.4 per cent in 2010 vs. 17.7 per cent in 2022). Geographic proximity indeed plays a role in Kosovo's intra-WB trade (thus confuting the findings of *Kaloyanchev et al. 2018*). Furthermore, the United States' share in foreign trade is the largest in the case of Kosovo: in 2023, 12.3 per cent of Kosovan exports were directed to the US (this is a relatively new phenomenon: until 2019 the share of the US in Kosovan exports was negligible). On the import side, Türkiye is a notable

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player with a share of 14.9 per cent in 2022 (a share that has doubled in 12 years). The Russian share is negligible, and trade with China is much skewed towards imports and maintains a constant share.

4.2.4. Montenegro

The share of EU trade in Montenegro is lower compared to most other WB countries; major EU trading partners include Germany, Italy and Slovenia. The share of EU imports fluctuated around 45 per cent, while the share of exports narrowed in the early 2010s and has since stabilised around 30–35 per cent. Similar to Kosovo, intra-WB trade accounts for a remarkably high share in Montenegrin trade, with exports growing (38.1 per cent in 2010 vs. 48.0 per cent in 2023) and imports shrinking (36.5 per cent in 2010 vs. 26.1 per cent in 2022). There is trade with all WB5 countries, with Serbia as the largest partner. The share of imports from China ranges around 10 per cent (exports to China do not play a major role), while other partners' share is moderate.

4.2.5. North Macedonia

In contrast to several of its WB counterparts, the EU's share in North Macedonian exports has grown markedly over the past decade (from 68.0 per cent in 2010 to 77.3 per cent in 2023), making the country highly integrated into European value chains. However, the EU's share of imports has fallen slightly (50.0 per cent in 2010 vs. 45.5 per cent in 2022). The growing share of EU exports went hand in hand with lower intra-WB exports; along with Albania, North Macedonia is the least integrated into trade with the remaining five WB countries (12.0 per cent of exports and 8.6 per cent of imports in 2022). While these two groups of entities cover approximately nine tenths of North Macedonian exports, the structure of imports is somewhat more diverse. The share of Chinese and Turkish imports has grown to a moderate extent over the past decade (reaching 8.8 and 6.3 per cent in 2022, respectively). Furthermore, Russian imports have declined to a remarkable degree, dropping by approximately two thirds between 2010 (10.1 per cent) and 2022 (3.5 per cent; this decline was not related to the war in Ukraine and had already taken place in the first half of the 2010s). Furthermore, the United Kingdom plays a more than remarkable role in North Macedonian imports, with a share of above 10 per cent (a share that has grown markedly over the past decade).

4.2.6. Serbia

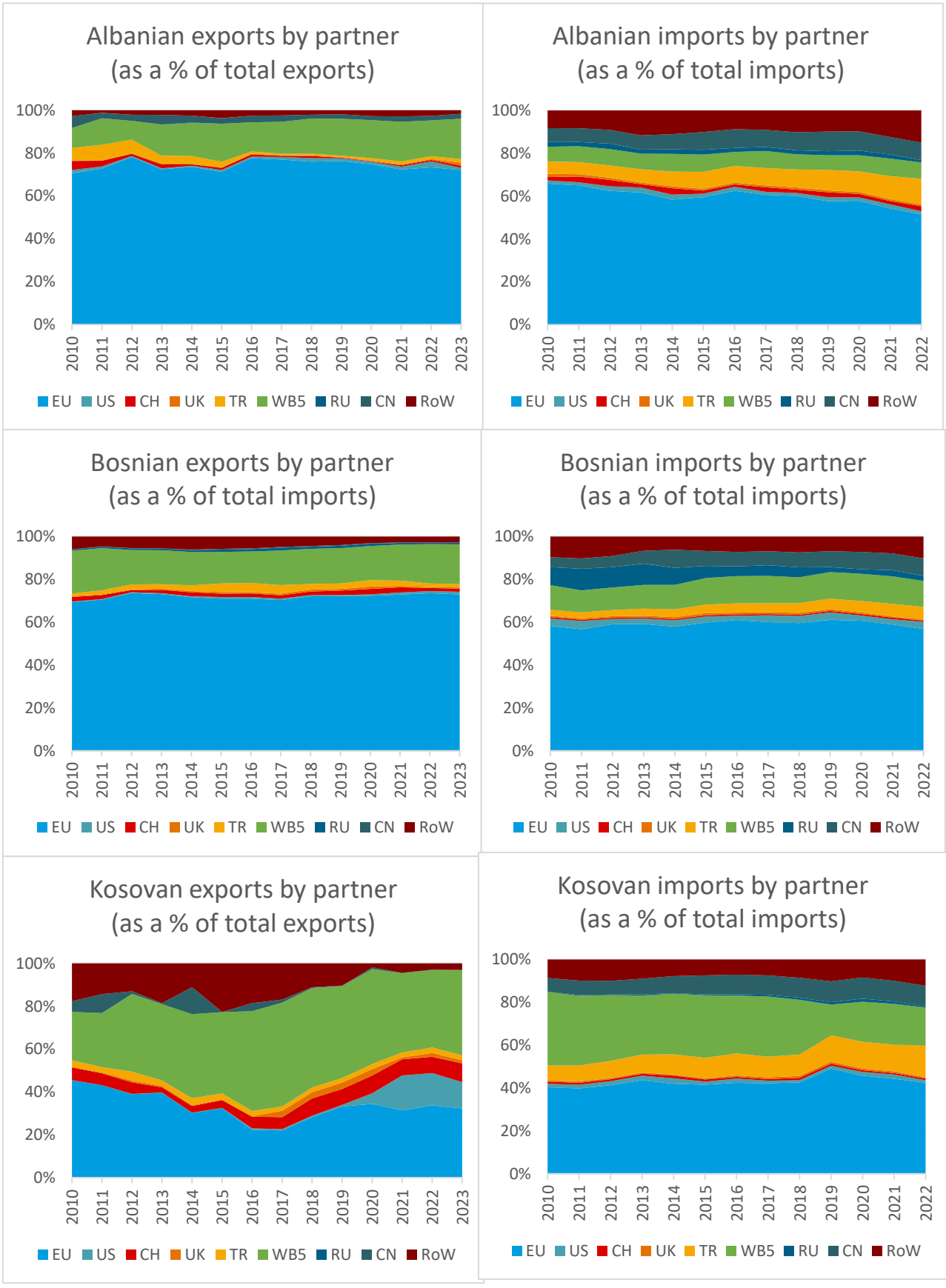
EU and intra-WB trade account for four fifths of Serbian exports, with the former showing moderate growth (58.9 per cent in 2010 vs. 63.2 per cent in 2023), while the latter shows a downward trend (25.5 per cent in 2010 vs. 15.3 per cent in 2023). The Serbian import structure is more diverse. While

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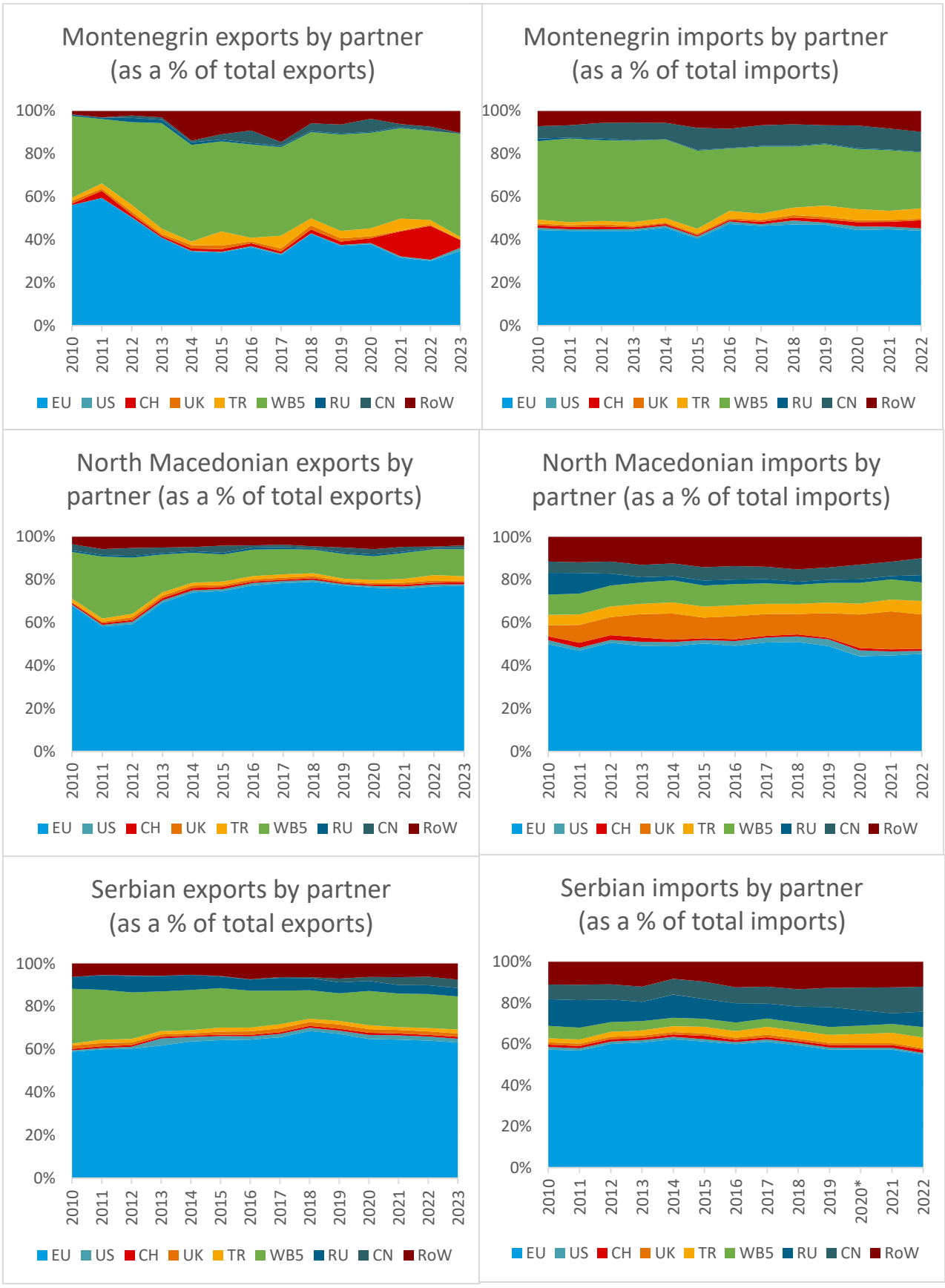
the EU is Serbia's main source of imports, its share has fallen moderately (from 57.3 per cent in 2010 to 54.9 per cent in 2022), and other, major geopolitical actors also play a role in Serbian imports. Chinese and Turkish imports expanded remarkably between 2010 and 2022 (rising from 7.2 per cent to 12.1 per cent, and from 1.9 per cent to 5.2 per cent, respectively), but Russian imports tapered off in this period (from 12.9 per cent to 7.5 per cent). The share of imports from other WB countries is low compared to other subjects in the sample (varying between 3.7 and 5.9 per cent). Thus, Serbia – which is the biggest economy of the WB countries – is the most globally oriented country as well. While Serbian imports have not become significantly more diversified, a restructuring of non-Western imports has taken place along with the geopolitical shifts of the past decade.

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Figure 2: Country profiles: trade by partner



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*Note: * Data of the IMF regarding Serbian imports in 2020 was inaccurate, thus, data for 2020 imports are extrapolated. Source: IMF (2024)*

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4.3. Overall assessments of trade integration and geopolitics in the Western Balkans

After having presented the country profiles, in this section I discuss the overall results and trends regarding trade structures for the entirety of the Western Balkans. Three major results can be derived from the data.

First, the size of the respective economies appears to determine the trade orientation of a given country to a certain extent. The smallest countries (i.e. Kosovo and Montenegro) are the most integrated regionally (i.e. have the highest share of trade with the remaining five WB countries). Besides market size, this phenomenon can be explained by historical factors, as well: these two countries were the last to declare independence from Serbia (Montenegro in 2006 and Kosovo in 2008). Conversely, larger economies tend to be more diversified, as well as more open to trade with non-Western partners.

Second, despite growing concerns regarding WB foreign policy turning all the more eastward, the European Union is the main trading partner for all of the WB countries. (The only exception is Kosovo, where, by the 2020s, intra-WB exports exceed EU exports. Nevertheless, the share of Western partners, i.e. the European Union and the United States combined exceeds that of the WB5.) Despite the declining share of trade with the EU in some cases, the European Union has not ceased to be the main trading partner, and, in some cases has even gained in share of trade (these results align with those of *Ginter – Hildebrandt* (*2024*) where the respective shares in FDI stock show a similar structure). The second major partner group for all of the countries in focus consist of the remaining five countries of the Western Balkans themselves. Thus, trade in the WB countries is primarily characterised by regional integration: on the one hand, into EU value chains, and, on the other hand, on a more local level.

Third, in line with the EU's share in trade as well as the important role of intraregional trade, trade between other global geopolitical players (i.e. the United States, China and Russia) and the WB countries is limited and skewed toward the imports side. Imports from China are significant in all of the countries' trade portfolios; other than that, trade with global geopolitical powers does not play a major role. Certain alliances, however, are reflected in trade flows, such as growing Kosovan exports to the United States, and the moderate, yet persistent trade between Russia and both Serbia and Bosnia and Herzegovina. In addition, geographic proximity plays a greater role than global geopolitical power: nearby Türkiye is a major source of imports for (primarily Southern) WB countries. These findings largely support those of *Kaloyanchev et al.* (*2018*).

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4.4. Overall assessments of geoeconomic fragmentation in the Western Balkans

In order to assess the geoeconomic fragmentation of the Western Balkans countries, I calculated the differentials between the respective shares of a trading partner (or partner group). These differentials (calculated from the two temporal endpoints of the sample, i.e. 2010 and 2022 or 2023, respectively, depending on data availability) are depicted in *Tables 1* and *2*. The tables also separate the different – and allegedly emerging – geopolitical blocs (West, consisting of the EU, the US, Switzerland and the UK; East, consisting of Russia and China; and Neutral, consisting of Türkiye and the rest of the world. The WB5 is not clustered in any of the three blocs due to itself being the subject of the analysis).

As for exports, WB countries' alignment with the Western bloc (and trade with its members) has remained unchanged. Some outliers exist in both positive as well as negative terms. While the smallest countries (having declared independence only in the 2000s, i.e. Kosovo and Montenegro) have registered a significant drop in the share of EU trade, the remaining four countries' exports to the EU have grown. The extent of this growth is most notable in North Macedonia and Serbia. Other major Western partners' shares have remained constant in the past decade, along with remarkable growth in Kosovan exports to the US. Regarding exports to the Eastern bloc, there are no clear signs of fragmentation. Exports to Russia have always been negligible (and have not grown either); Chinese exports have either shrunk (Albania, Kosovo) or grown (Serbia) to a smaller extent. Exports to the Neutral bloc have tended to decline. Intra-WB integration shows a mixed picture: exports have grown remarkably for Albania, Kosovo and Montenegro, while contracting remarkably in the case of North Macedonia and Serbia (see *Table 1* for more details).

Regarding imports, the overall picture is similar, yet certain differences apply. Western imports have remained roughly constant in the past twelve years (with Albania being a notable outlier having registered a sharp drop in EU imports). On the other hand, imports from the Eastern bloc have changed notably. WB countries that used to trade extensively with Russia (primarily the Slavic ones, Bosnia and Herzegovina, North Macedonia, and Serbia) have registered significant drops in imports from Russia. This has not been a result of 2022 sanctions in the aftermath of the escalation of the war in Ukraine, but rather a gradual downward trend since 2010. However, imports from China have grown in all WB countries over the past twelve years (most notably in Serbia). Thus, mixed conclusions can be drawn regarding import fragmentation and decoupling from the notable Eastern geopolitical actors. In the Neutral bloc, it is Türkiye from which imports have grown notably. As for

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imports, the share of the WB has remained unchanged, and, for the two smallest countries (Kosovo and Montenegro), it has fallen significantly.

Table 1: Heat map: percentage point change of the respective export partners' shares between 2010 and 2023

Exports	Albania	Bosnia and Herzegovina	Kosovo	Montenegro	North Macedonia	Serbia
European Union	1.50	3.61	–13.12	–21.25	9.27	4.32
United States	–0.46	0.96	12.28	1.30	0.13	1.09
Switzerland	–3.24	–0.68	2.78	3.01	0.35	0.25
United Kingdom	1.37	0.03	1.14	–1.14	0.13	–0.08
Russia	0.02	0.07	0.00	–0.50	–0.34	–1.59
China	–3.29	0.11	–4.84	0.32	–1.61	3.88
Türkiye	–4.34	0.42	–0.80	–0.19	0.52	1.04
Rest of the World	–1.04	–3.19	–14.68	8.50	0.54	1.28
WB5	9.47	–1.32	17.23	9.94	–9.00	–10.19

Source: author calculations based on IMF data

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Table 2: Heat map: percentage point change of the respective import partners' shares between 2010 and 2022

Imports	Albania	Bosnia and Herzegovina	Kosovo	Montenegro	North Macedonia	Serbia
European Union	–14.26	–1.43	2.09	–0.39	–4.53	–2.49
United States	–0.18	–0.11	–0.37	0.10	–0.45	–0.33
Switzerland	0.78	–0.10	–0.26	2.65	–0.76	0.26
United Kingdom	–0.70	–0.19	–0.09	–0.16	10.63	–0.33
Russia	–1.07	–6.13	0.36	–0.99	–6.68	–5.40
China	1.74	3.46	3.44	3.61	2.52	4.92
Türkiye	6.32	3.17	7.96	3.03	1.57	3.24
Rest of the World	6.72	0.58	3.61	2.57	–1.51	1.01
WB5	0.64	0.75	–16.74	–10.43	–0.80	–0.88

Source: author calculations based on IMF data

To summarise, based on trade data, no clear signs of geoeconomic fragmentation can be seen in the Western Balkans: while the region has minimised trade ties with Russia, trade with China has grown notably. Also, intra-bloc trade (i.e. trade with major Western partners) has not grown significantly. In general, major trading partners have remained the same (i.e. the European Union and fellow WB countries), determined by geographic proximity, and cultural, historic and economic linkages (very similar trends persist for FDI in the WB, see *Ginter – Hildebrandt 2024*).

5. Conclusions

In this paper, I presented an analysis on trade data of the Western Balkan countries between 2010 and 2023. I found that the structure of the WB countries' trading partners has been relatively stable in the past thirteen years. The main trading partner of the region has been the European Union (albeit showing a somewhat shrinking share in certain cases). Intraregional trade plays a significant role as well. Trade with the United States is limited, while trade with major non-Western geopolitical entities (Russia, and especially China and Türkiye) primarily occurs on the imports' side, their share

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being smaller than that of the EU and the WB5. Trade with Russia has dropped off significantly in the past decade, its share being taken over by China and Türkiye. WB countries' trade has been thus organised by regional (WB-level and EU-level) integration rather than by the interest of global geopolitical actors. I also found that little evidence supports fragmentation in the Western Balkans: trade with the Western bloc has remained stable (has neither grown, nor shrunk), while the Eastern bloc results are mixed (lower trade with Russia, but Chinese imports growing significantly).

This paper generally supports findings on geoeconomic fragmentation (for example, *Kaaresvirta et al. 2023; Ginter – Tischler 2024; Ginter – Hildebrandt 2024*): hitherto moderate to no signs of fragmentation are seen in emerging Europe – including the Western Balkans. The reasons behind this are manifold. As the phenomenon of geoeconomic fragmentation is relatively new, economies need time to align. It is however not an economic necessity to reshape value chains according to a new geopolitical reality: as stated above, fragmentation is primarily driven by policy. Thus, it is not necessarily the case that small, open economies on the European semi-periphery share the needs for fragmentation of global geopolitical players. This is especially true if we accept the supposition of *Javorcik et al.* (*2023*) that, for emerging regions, it might be beneficial to conduct non-aligned (trade) policy. Furthermore, WB countries (along with the entirety of Central, Eastern and Southeastern Europe) may be beneficiaries of reshoring and friendshoring tendencies due to relative geopolitical alignment and geographic proximity to GVC sections with high value added – even if their trade policy is not completely aligned.

With these results, I hope to have contributed to the literature on geoeconomic fragmentation, including a yet unexamined region in the analysis. By doing so, I painted a detailed picture on the structure of the respective WB countries trading partners, providing a temporal prolongation for the sample *of Kaloyanchev et al*. (*2018*). Furthermore, I provided a descriptive analysis on the (potential) geoeconomic fragmentation of the six WB countries. Among the limitations of the study, it is important to emphasise that trade was the only factor in respect of which I analysed geoeconomic fragmentation. While trade may be a good proxy for measuring fragmentation, other cross-border flows (e.g. FDI or migration) also come into play. While geopolitical aspects of FDI in the Western Balkans have recently been covered by *Ginter – Hildebrandt* (*2024*), it would be beneficial for future research to focus on other variables proxying fragmentation. Furthermore, future research should tackle other factors that influence trade flows (such as free trade agreements or the progress of EU

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integration). Last but not least, as stated above, geoeconomic fragmentation is a relatively new phenomenon. Thus, a temporal extension of the sample and renewed study in the future could provide further insights.

References

Abeliansky, A. – Belabed, C.A. – Mayrhuber, J. (2023): *Enjoy the silence? (De)globalization and cross-border investment – a gravity approach.* OeNB Bulletin, 2024/Q2: 60–81. https://www.oenb.at/en/Publications/Economics/bulletin/2024/q2-2024.html

Aiyar, S. – Ilyina, A. (2023): *Geoeconomic fragmentation: An overview.* In: Aiyar, S. – Presbitero, A. F. – Ruta, M. (eds.): Geoeconomic Fragmentation – The Economic Risks from a Fractured World Economy. Centre for Economicy Policy Research, Paris, pp. 9–18.

Aiyar, S. – Ohnsorge, F. (2024): *Geoeconomic Fragmentation and "Connector" Countries.* MPRA Paper No. 121726. https://mpra.ub.uni-muenchen.de/121726/

Alvarez, J. – Andaloussi, M.B. – Maggi, C. – Sollaci, A. – Stuermer, M. – Topalova, P. (2023): *Geoeconomic fragmentation and commodity markets.* IMF Working Paper No. 2023/201. https://www.imf.org/en/Publications/WP/Issues/2023/09/28/Geoeconomic-Fragmentation-and-Commodity-Markets-539614

Barisitz, S. (2024): *Downsized, restructured and greener (2019-23): A new era for China's New Silk Road?* OeNB Occasional Paper, 2024/4. https://www.oenb.at/dam/jcr:acdfb086-d2e4-4b74-a495-4367e6c3fdd6/occasional_paper_no-4.pdf

Baur, A. – Dorn, F. – Flach, L. – Fuest, C. (2023): *Rethinking geoeconomics: Trade policy scenarios for Europe's economy*. EconPol Policy Report, No. 44, CESifo GmbH, Munich. https://www.econpol.eu/publications/policy_report_44/rethinking-geoeconomics

Blanga-Gubbay, M. – Rubínová, S. (2023): *Is the global economy fragmenting?*. WTO Staff Working Paper, No. ERSD-2023-10, World Trade Organization (WTO), Geneva. https://www.wto.org/english/res_e/reser_e/ersd202310_e.htm

Bosone, C. – Dautović E. – Fidora M. – Stamato G. (2024): *How geopolitics is changing trade.* In: ECB Economic Bulletin, 2024/2. https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202402_02~c81f58179e.en.html

10.15772/ANDRASSY.2026.006

Campos, R.G. – Estefanía-Flores, J. – Furceri, D. – Timini, J. (2023): *Geopolitical fragmentation and trade*. Journal of Comparative Economics, 51(4): 1289–1315. https://doi.org/10.1016/j.jce.2023.06.008

Ginter, T. – Hildebrandt, A. (2024): *Geopolitical shifts in the Western Balkans: where is FDI coming from?*. OeNB Report 2024/21: Economic trends in EU Candidates and Russia. https://www.oenb.at/Publikationen/Volkswirtschaft/reports/2024/report-2024-21-economic-trends-in-cesee/html-version.html

Ginter, T. – Tischler, P. (2024): *Deglobalisation and Decoupling Tendencies in the Visegrád Countries in the Wake of the Polycrisis*. Financial and Economic Review, 23(2): 56–82. https://doi.org/10.33893/FER.23.2.56

Gopinath, M.G. – Gourinchas, P.O. – Presbitero, A.F. – Topalova, P. (2024): *Changing global linkages: a new cold war?* IMF Working Paper No. 2024/76. https://doi.org/10.5089/9798400272745.001

Hake, M. – Radzyner, A. (2019): *Western Balkans: Growing economic ties with Turkey, Russia and China*. BOFIT Policy Brief No. 1/2019. https://publications.bof.fi/handle/10024/44871

Hakobyan, S. – Meleshchuk, S. – Zymek, R. (2023): *Divided we fall: Differential exposure to geopolitical fragmentation in trade*. IMF Working Paper No. 2023/270. https://www.imf.org/en/Publications/WP/Issues/2023/12/22/Divided-We-Fall-Differential-Exposure-to-Geopolitical-Fragmentation-in-Trade-542842

Halmai, P. (2023): *Globalisation versus Deglobalisation*. Financial and Economic Review, 22(2): 5–24. https://doi.org/10.33893/FER.22.2.5

IMF (2023): *Geoeconomic fragmentation and foreign direct investment*. In: World Economic Outlook, April 2023: A Rocky Recovery, Chapter 4. USA: International Monetary Fund. https://www.elibrary.imf.org/display/book/9798400224119/CH004.xml

Javorcik, B.S. – Kitzmueller, L. – Schweiger, H. – Yıldırım, M.A. (2023): *Economic Costs of Friend-Shoring*. CID Faculty Working Paper Series 422, Harvard University, Cambridge, MA. https://growthlab.hks.harvard.edu/publications/economic-costs-friend-shoring

Jovanović, B. – Zlatanović, A. – Kluge, S. – Zec, A. – Ibrahimi, M. – Brašanac, M. – Vasić, J. – Šelmić, R. – Mima, R. – Manova Stavreska, A. – Nikolova, S. – Rajič, A. – Alihodžić, B. – Lalović, O. – Tomić, V. – Ćulafić, B. (2024): *Transforming the Western Balkans through Near-*

10.15772/ANDRASSY.2026.006

shoring and Decarbonisation. wiiw Joint Study No. 2024/10, Vienna Institute for International Economic Studies. https://wiiw.ac.at/transforming-the-western-balkans-through-near-shoring-and-decarbonisation-p-6999.html

Kaaresvirta, J. – Kerola, E. – Nuutilainen, R. (2023): *Do international investment and trade flows show any signs of fragmentation?*. BOFIT Policy Brief 2023 No. 12. https://publications.bof.fi/bitstream/handle/10024/53083/bpb1223.pdf?sequence=1

Kaloyanchev, P. – Kusen, I. – Mouzakitis, A. (2018): *Untapped potential: Intra-regional trade in the Western Balkans.* European Economy Discussion Paper No. 2018/080. Directorate General Economic and Financial Affairs (DG ECFIN), European Commission. https://economy-finance.ec.europa.eu/system/files/2018-05/dp080_western_balkans.pdf

Maihold, G. (2022): *A New Geopolitics of Supply Chains: The Rise of Friend-Shoring.* SWP Comment, 45/2022. Berlin: Stiftung Wissenschaft und Politik – SWP – Deutsches Institut für Internationale Politik und Sicherheit. https://doi.org/10.18449/2022C45

Norring, A. (2024): *The economic effects of geoeconomic fragmentation*. BOFIT Policy Brief 2024 No. 8. https://publications.bof.fi/handle/10024/53827?show=full

Reményi, P. – Csapó D.G. (2021): *A szállítási infrastruktúra fejlesztése és a geopolitika összefüggései a Nyugat-Balkánon* (*The Relationship between the Development of Transport Infrastructure and Geopolitics in the Western Balkans*). Földrajzi Közlemények, 145(1): 17–31. https://doi.org/10.32643/fk.145.1.2

Stanicek, B. – Caprile, A. (2023): *Russia and the Western Balkans: Geopolitical Confrontation, Economic Influence and Political Interference*. European Parliament. European Parliamentary Research Service. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2023)747096

Zarić, I. – Budimir, Ž. (2022): *The great powers' geopolitical competition over the Balkans – the influence of the Ukrainian crisis*. Review of International Affairs, 73(1186): 79–104. https://doi.org/10.18485/iipe_ria.2022.73.1186.4

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Part 4: A Three-Bloc Structure of the World Economy: Evidence of Geoeconomic Fragmentation in International Trade, Financial and Military Data[28]

Geoeconomic fragmentation has received much attention by scholars for the past years as a key process shaping the future of the international community. The hypothesis that such fragmentation is taking place carries the assumption that distinct geopolitical blocs exist or are currently taking shape. Many papers include presumptions on the number and the exact composition of these blocs, which vary largely in the literature. Taking stock of the different approaches reveals a considerable lack of efforts to define blocs on an empirical basis. To narrow this gap, we aim to check the existence of different country groups in a data-driven way. We apply hierarchical clustering to a broad set of geopolitically relevant data (on i.a. trade, investments, finance and military links) at the country level. Our results reveal a sensible three bloc structure of the world economy. Blocs are centred around major geopolitical powers: the United States (along with developed countries in the Gulf and Asia-Pacific regions); the European Union (along with an overwhelming majority of non-EU members in close proximity); and a China-Russia conglomerate (comprising most of the Asian continent), respectively. While our results corroborate the commonly applied East-West divide, the finding that the two major Western geopolitical actors form separate blocs challenges the existing consensus.

Journal of Economic Literature (JEL) codes: F02, F12, F50

Keywords: geoeconomic fragmentation, geopolitical blocs, hierarchical clustering

1. Introduction

The global economy has been undergoing significant shifts throughout the past years. One of these reconfigurations can be described by the term geoeconomic fragmentation, which (albeit definitions vary) most commonly refers to a "policy-driven reversal of global economic integration often guided by strategic considerations" (*IMF 2023a* p. 91.). A body of research (see i.a. *Norring 2024a*, *Kaaresvirta et al. 2023*) considers the formation of distinct geopolitical blocs a prerequisite of geoeconomic fragmentation. Nevertheless, the existence of such blocs is not trivial and hence, previous research shows significant variation in how they define distinct geopolitical blocs. Both two- and three-bloc

[28] Boros, E. – Ginter, T. (2026): *A Three-Bloc Structure of the World Economy: Evidence of Geoeconomic Fragmentation in International Trade, Financial and Military Data*. Financial and Economic Review, in press.

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models are commonly used. Poles are usually coined as East and West (alternatively, US- and China-leaning blocs), while three bloc models typically add a third, neutral grouping. Literature classifies respective countries into these blocs either arbitrarily or based on UN voting behaviour patterns (for a detailed comparison refer to Section 2.3). Thus, we have identified a significant niche in the literature tackling the phenomenon of geoeconomic fragmentation: to the best of our knowledge, the existence (as well as the number and the composition) of such economic blocs has not been researched in any systematic way. In order to narrow this gap, our aim was to identify geoeconomic blocs (if any) empirically, i.e. based on the linkages which might exist between different countries in terms of various geoeconomic data such as trade, investments, finance and military links. Applying a widely used clustering technique (hierarchical clustering) to a broad set of data, our results support the idea that certain country groupings exist and have a meaningful impact on the structure of the international economy. Nevertheless, our results offer a different bloc structure of the global economy than those in the existing literature. We identify three blocs centred around the United States, the European Union, and the China-Russia conglomerate, respectively. While the East-West divide remains, the finding that the United States and the EU belong to different blocs largely differs from what has been assumed in previous pieces of research.

This paper is structured as follows. Section 2 provides an overview of the literature (including a definitional framework and a review of effects of geoeconomic fragmentation, as well as an extensive stock-taking of how the respective pieces of research divide the world economy into geopolitical blocs). Section 3 describes the methodology and empirical approach we have used to identify blocs. In Section 4, we present the results, while Section 5 elaborates on our conclusions.

2. Literature review

2.1. Geoeconomic fragmentation: a definitional framework

The recent shifts in the global economy cover a broad range of economic activities and cross-border flows and are caused by a multitude of reasons, including the emerging systemic rivalry between the United States and China, the Covid-19 pandemic, supply chain and energy crises as well as the ever-intensifying military conflicts of the 2020s (see e.g. *Halmai 2023*, *Altman et al. 2024* and *Halmai 2025b*. For an in-depth historical review refer to i.a. *Halmai 2025a*). Many concepts have emerged in the literature describing these reconfigurations (e.g. deglobalisation, decoupling, near-shoring, friendshoring etc. with fragmentation being the most common of them). Due to the novel need of describing the shifts of the global economy, definitions often vary and overlap. Thus, in this

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section we provide a brief overview of concepts related to the current reshaping of the global economy in order to later enable our delving deeper into the analysis of geoeconomic fragmentation.

The most common term capturing this reconfiguration of the global economy is geoeconomic fragmentation. Its most widely accepted definition stems from the *IMF* (*2023a*) who describe geoeconomic fragmentation as "a policy-driven reversal of global economic integration often guided by strategic considerations" (p. 91; this definition is also used by i.a. *Aiyar – Ilyina 2023, Bolhuis et al. 2023* as well as *Mohr – Trebesch 2025*). The definition of the *IMF* is complemented by that of *Gopinath et al.* (*2024*) who emphasise that these policy-induced changes apply for "the sources and destinations of cross-border flows" (p.1.) and are "often guided by strategic considerations, such as national and economic security, sovereignty, autonomy" (ibid.; this definition is also referred to by i.a. *Altman et al. 2024* and *Ginter 2025*).

Separating the concepts of geoeconomic fragmentation is no easy task not only due to its novelty but also due to several similar (or, even, overlapping) concepts having emerged in the past years. In her review, *Norring* (*2024a)* provides a conceptual framework by classifying the concepts of (de)globalisation and (geo)economic fragmentation. *Norring* defines globalisation as an "increasing of links of economic activity between countries" (ibid. p. 8) and, conversely, deglobalisation describes a dissolution of such linkages "driven by e.g. changes in technology, preferences, regulation, or economic conditions" (ibid.). *Norring* distinguishes fragmentation from deglobalisation by a special characteristic of the former, namely, the emergence of "concentration of economic activity within blocs" (ibid).[29] Blocs (a term coining a group of countries based on a certain kind of proximity) can be formed on a regional basis (i.e. between countries close to each other in a geographical sense) or based on policy proximity. Should fragmentation occur due to geopolitical motives and strategic rivalry, one speaks of geoeconomic fragmentation (see also *Norring 2024b* and *Airaudo et al. 2025*).

Further, interlinked concepts include those of friendshoring ("a preference for sourcing inputs from economies that share similar values"; *Javorcik et al. 2023,* p. 2), nearshoring (the shortening and regionalisation of global value chains caused by the risks stemming from distance; *Plummer 2023*), reshoring (bringing back production to certain countries and thus protecting the domestic economy;

[29] In this paper, we use the term blocs in the broader sense outlined above, that is, to denote groupings in which multiple dimensions of economic activity are concentrated. These dimensions include not only trade but also other forms of cross-border economic flows.

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Altman et al. 2024 and *Plummer 2023*) as well as decoupling ("the process of weakening interdependence between two nations or blocs of nations"; *Witt et al. 2023*, p.1.). Others (e.g. *Kaaresvirta et al. 2023*) use the term decoupling for the "economic distancing of China and the United States" (p. 4) and coin fragmentation as nations "either taking sides in US-China competition or forming alternative trading blocs" (ibid).

As demonstrated above, concepts related to (geoeconomic) fragmentation are not only intertwined but often used interchangeably. In this paper, we rely on the definition of the *IMF (2023a)* (i.e., consider fragmentation as a policy-driven reversal of global economic integration, p. 91) as well as *Norring*'s (*2024a*) prerequisite of the formation of and the concentration of economic activity within blocs. By such blocs (and in similar vein as e.g. *Ayar et al. 2023*) we mean groups of countries that exhibit tighter economic integration within the group and reduced engagement with countries outside the group. In the following parts of the literature review we consider pieces of research that deal with geoeconomic fragmentation based on the above definitions, even if the respective authors coin the term differently. In the following sections we summarize certain characteristics and effects of geoeconomic fragmentation as well as the understanding of blocs serving as a prerequisite of geoeconomic fragmentation.

2.2 Geoeconomic fragmentation: channels and effects

In order to gain deeper understanding of the phenomenon, in this section we present the channels through which geoeconomic fragmentation is transmitted, as well as its effects on global welfare. *Aiyar – Ilyina* (2023) identify three main channels through which the effects of fragmentation are transmitted: (1) international trade, (2) cross-border migration, and (3) cross-border capital flows (and foreign direct investments, in particular). Earlier, these channels used to be the main contributors to global economic integration (supported by the diffusion of technology), and conversely, the diminished use of these channels reinforces fragmentation trends. *Fernández-Villaverde et al.* (*2024*) identify a similar structure of variables along which they quantify geopolitical fragmentation. The authors identify 16 variables as proxies, grouped in a four-factor structure; the four factors include (1) trade fragmentation (comprising trade openness as well as different types of trade restrictions), (2) financial fragmentation (comprising FDI and financial flows as well as capital controls), (3) mobility fragmentation (including migration-related variables as well as patent flows), and (4) political fragmentation (including geopolitical risk, UN voting patterns, energy uncertainty as well as the number of armed conflicts and sanctions).

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The estimated effects of geoeconomic fragmentation vary to a high extent (*Farkas et al. 2023*); two different approaches persist in the literature when it comes to calculating these estimates. The first approach uses different modelling strategies to estimate the economic costs of fragmentation; these papers emphasise the costly nature of fragmentation-related policies. *Javorcik et al.* (*2023*) use a quantitative, two-bloc model incorporating inter-country inter-industry linkages and find that fragmentation[30] would result in losses of up to 4,7% of GDP in certain economies. *Campos et al. (2023)* also model the welfare effects of trade fragmentation in a supposed three-bloc setup (West, East and Neutral). They estimate that in case of a three-bloc fragmentation, global trade flows would diminish by up to 57%, resulting in welfare losses up to 3.7% (these losses would be higher in the Eastern bloc). Similarly, *Felbermayr et al.* (*2023*) modelled the effects of major economies' and country groups' (the EU, the US, Russia and China) decoupling from one another. In the most severe scenario (with the US and the EU decoupling from the BRICS-economies[31]) would result in welfare losses up to 3,9%.

The second approach uses retrospective analyses of available data (on trade, FDI etc.), trying to prove or disprove of the existence of geoeconomic fragmentation. In these pieces of literature, results are more nuanced. *Altman et al.* (*2024*) challenge the deglobalisation narrative drawing on a multitude of variables proxying cross-border transactions. They find that "international flows have not decreased relative to domestic activity, there is not an ongoing shift from global to regional business, and geopolitically driven shifts in international flows still primarily involve countries at the center of present conflicts" (p. 416). While certain signs of US-China decoupling persist (as well as Western countries successfully decoupled from Russia), the global economy does not seem to have rearranged itself into geopolitical blocs distinct from each other. *Kaaresvirta et al.* (*2023*) come to a similar conclusion when comparing trade and investment trends before and after the start of the US-China trade war (using this need for decoupling as a demarcation). They find that while US-Chinese linkages have contracted after the start of the trade war, by their cut-off point at 2021, no other signs of the formation of distinct blocs have emerged. *Aiyar – Ohnsorge* (*2024*) contradict the above findings stating that between 2016 and 2023, fragmentation has increased in trade, bank and

[30] While Javorcik et al. (2024) use the term "friendshoring"', their paper clearly focuses on fragmentation effects (as it analyses scenarios of trade between and within two distinct geopolitical blocs). This also reflects the need for a clear terminology on these interlinked concepts.
[31] Brazil, Russia, India, China and South Africa.

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FDI liabilities. Similarly, *IMF* (*2023a*) find that FDI flows have become increasingly more common between geopolitically aligned countries, and especially in strategic sectors.

2.3 Geoeconomic fragmentation and blocs

As referred to by *Norring* (*2024a*), a prerequisite of (geoeconomic) fragmentation is the formation of distinct blocs; considering specifically geoeconomic fragmentation, these blocs are formed on the basis of particular geopolitical strategic alliances. While the thorough definition of such blocs is necessary for capturing geoeconomic fragmentation, literature is divided on what categorisations should be used to describe the respective blocs. Below, we have reviewed fourteen different studies focusing on fragmentation-related topics, all of which include geoeconomic blocs. The body of literature reviewed is not only divided on the number of blocs, but also their composition as well as what this composition is based upon. We summarize these variations below; the results of the review are also presented in a structured way in *Table 1*.

First, the number of blocs is not uniform across the literature: studies either use two- or three-bloc models (examples for the former include *Alvarez et al. 2023*, *IMF 2023b*, *Bekkers – Góes 2023*, *Maskus 2023*, while for the latter *Campos et al. 2023*, *Gopinath et al. 2024*, *Aiyar – Ohnsorge 2024*, *Bolhuis et al. 2023*, *Fernández-Villaverde et al. 2024*, *Conteduca et al. 2025*, *Baur et al. 2023*, *Baur et al. 2025*, *Kirsamer – Riha 2025* as well as *Gopinath 2023*) or both (*Javorcik et al. 2023*, *Abeliansky et al. 2024*).

Second, categorizations also vary, however, to a lesser extent. Most categorizations include an East-West divide, often framed as a US-centred bloc and a China-centred bloc (*Aiyar-Ohnsorge 2024*, *Gopinath et al. 2024*, *Bekkers – Góes 2023, Abeliansky et al. 2024, Conteduca et al. 2025*, *Baur et al. 2023*), respectively. Others (*IMF 2023b, Bolhuis et al. 2023, Fernández-Villaverde et al. 2024 and Kirsamer – Riha 2025*) specify the Western bloc as the conglomerate of the US and the European Union, while the Eastern counterpart as that of Russia and China. There occur some further, regional specifications (*Javorcik et al. 2023, Abeliansky et al. 2024, Gopinath 2023*), presented in detail in *Table 1*. Three-bloc models (see above), in addition, include a neutral or nonaligned bloc, the members of which are neither Western, nor Eastern allies. The latter bloc is in certain cases coined as the set of ‘connector countries’ (see *Baur et al. 2025, as well as Aiyar – Ohnsorge 2024*), characterised by “their unique position in maintaining substantial economic ties with both Western and Eastern blocs” (*Baur et al. 2025*, Section 1., para. 2.). However, non-aligned countries are often treated as members of a third bloc (aligned to neither of the two world

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powers).[32] Nevertheless, the available body of research on connector countries is limited so far and it varies across the literature which countries behave as connector ones. Thus, in our paper we do not address the issue explicitly; however, we encourage future research in doing so. Third, it varies to a high extent upon what the respective authors base the composition of the respective geopolitical blocs. The majority of the studies reviewed uses countries' voting behaviour at the United Nations General Assembly (UNGA). Certain authors either compose their blocs based on the voting behaviour at one specific resolution: the one on the aggression against Ukraine (*Javorcik et al. 2023, Alvarez et al. 2023, IMF 2023b*) or the one concerning the suspension of the rights of membership of the Russian Federation in the Human Rights Council (*Campos et al. 2023*). A more sophisticated approach of countries' categorizations into geopolitical blocs based on voting behaviour at the UNGA includes the usage of aggregate voting behaviour (ideal points and clustering: *Javorcik et al. 2023 and Kirsamer – Riha 2025*[33]; the Foreign Policy Similarity Database based on UNGA voting: *Bekker – Góes 2023;* or affinity of voting with China or the US: *Maskus 2023, Gopinath et al. 2024, Abeliansky et al. 2024, Aiyar – Ohnsorge 2024*). Several other authors (*Bolhuis et al. 2023, Fernández-Villaverde et al. 2024, Conteduca et al. 2025*) use an arbitrary East-West (or, alternatively EU-US and Russia-China) categorization of blocs instead. In addition, *Gopinath* (*2023*) uses a historical categorization from the Cold War era.

Table 1: The number and the composition of geopolitical blocs in the literature reviewed

Author(s)	**Number of blocs**	**Name and composition of blocs**	**Methodological basis of the composition of blocs**
Javorcik et al. (2023)	2	Bloc 1: countries that voted in favour of the UN General Assembly resolution on "Aggression against Ukraine" Bloc 2: countries voting against or abstaining	voting behaviour at the UN General Assembly (at the resolution on "Aggression against Ukraine")

[32] The paper of Baur et al. (2025) includes three simulations, in two of which connector countries are assigned to either of the two blocs concentrated around the US and China.
[33] The latter includes further diplomatic and political variables: the Level of Representation index and the Voice and Accountability index.

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		Bloc 1: North America and Europe Bloc 2: Southeast Asia, Russia, Latin America	voting behaviour at the UN General Assembly (ideal points based on voting between 2014 and 2021)
	3	friends, non-friends and non-aligned	voting behaviour at the UN General Assembly (clustering based on heat maps of bilateral vote similarity)
Alvarez et al. (2023)	2	Bloc 1: countries that voted in favour of the UN General Assembly resolution on "Aggression against Ukraine" Bloc 2: countries voting against or abstaining	voting behaviour at the UN General Assembly resolution on "Aggression against Ukraine"
IMF (2023b)	2	Bloc 1: US-Europe+ Bloc 2: China-Russia+	voting behaviour at the UN General Assembly resolution on "Aggression against Ukraine"
Campos et al. (2023)	3	Bloc 1: West Bloc 2: East Bloc 3: Neutral	countries allocated to a bloc according to UN vote „on the resolution concerning the suspension of the rights of membership of the Russian Federation in the Human Rights Council. Countries are part of a Western, Eastern, or a Neutral bloc, de-pending on whether they voted with Russia, against Russia, or abstained" (p. 2)
Gopinath et al. (2024)	3	Bloc 1: US leaning bloc Bloc 2: China leaning bloc Bloc 3: Nonaligned	political proximity based on voting patterns at the UN General Assembly; top quartile of voting with the

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			US or China results in being classified into Bloc 1 or 2, otherwise a country is considered nonaligned
Bekkers – Góes (2023)	2	Bloc 1: West (US-centred bloc) Bloc 2: East (China-centred bloc)	Foreign Policy Similarity Database based on UN General Assembly voting
Maskus (2023)	2	Bloc 1: higher-productivity West (EU and US centred) Bloc 2: lower-productivity East (China-centred bloc)	affinity of voting with China and the US at the United Nations
Abeliansky et al. (2024)	2	Bloc 1: US bloc (North America, Europe, Japan, Soth Korea, Australia, New Zealand) Bloc 2: China bloc (Asia, Africa, Latin America, Caribbean)	geopolitical distance to China and the US based on voting behaviour at the UN General Assembly
	3	Bloc 1: US bloc (North America, Europe, Japan, Soth Korea, Australia, New Zealand) Bloc 2: China bloc (most of Central Asia and North Africa, parts of Southeast Asia) Bloc 3: Nonaligned (Russia, India, Middle East, Latin America, Caribbean)	geopolitical distance to China and the US based on voting behaviour at the UN General Assembly; countries that are not in the closest quartile of the USA or China are considered non-aligned
Aiyar – Ohnsorge (2024)	2	Bloc 1: US bloc Bloc 2: China bloc	geopolitical distance to China and the US based on voting behaviour at the UN General Assembly
Bolhuis et al. (2023)	2	Bloc 1: EU and US Bloc 2: Russia and China	arbitrary

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Fernán-dez-Vil-laverde et al. (2024)	3	Bloc 1: EU and US Bloc 2: Russia and China Bloc 3: others	arbitrary
Conteduca et al. (2025)	3	Bloc 1: West (US-centric bloc) Bloc 2: East (China-centric) Bloc 3: non-aligned	arbitrary
Baur et al. (2023)	3	Bloc 1: West (led by the US) Bloc 2: East (led by China) Bloc 3: non-aligned (i.a. India, Brazil, South-Africa)	arbitrary; alternative scenarios include non-aligned joining either Bloc 1 or Bloc 2
Baur et al. (2025)	3	Bloc 1: West (led by the US) Bloc 2: East (led by China) Bloc 3: non-aligned (i.a. India, Brazil, South-Africa)	voting behaviour at the UN vote on the suspension of Russia's membership in the Human Rights Council
Kirsamer – Riha (2025)	3	Bloc 1: EU and US Bloc 2: Russia and China Bloc 3: New bloc	The new bloc (which could not be identified with 2002 data) includes i.a. Latin American, South African countries as well as India.
Gopinath (2023)	3	Bloc 1: West (US, Europe, Canada, Australia and New Zealand) Bloc 2: East (Belarus, China, Mali, Nicaragua, Russia, and Syria) Bloc 3: Non-Aligned (rest of the world)	based on Gokmen's (2017) categorisation referring to the Cold War period

Source: own edition based on the body of literature listed

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2.4 Research questions

Our literature review clearly shows that the phenomenon of geoeconomic fragmentation has gained much importance in the past decade. Nevertheless, a conceptual question remains unanswered: namely, what exactly are the blocs between which economic activity is diminishing and by doing so, causing geoeconomic fragmentation? As demonstrated in Section 2.3, there is no consensus on the number and composition of these blocs. Furthermore, literature so far lacks a solid methodology of dividing the global economy into different blocs. A number of authors did so in an arbitrary fashion, while others used voting behaviour at the UNGA for doing so. Nevertheless, as stated in Section 2.1, geoeconomic fragmentation is a complex phenomenon, comprising economic, security as well as foreign policy factors. Thus, the usage of voting behaviour only allows for a partial understanding of fragmentation and excludes a number of economic and geopolitical variables. (Some, but not all of relevant variables were collected by *Fernández-Villaverde et al*. (2024). However, they also constructed the bloc structure in an arbitrary manner.) Thus, we have identified a niche in the literature focusing on geoeconomic fragmentation: to the best of our knowledge, no attempt has been made to empirically identify the blocs upon which geoeconomic fragmentation is based. We thus design our research to address the following questions:

1. Is there an identifiable structure of blocs in the global economy?
2. If such a structure exists at all, is it one consisting of two, three, or more blocs?
3. If such a structure exists at all, does it align with the supposed East-West divide described in the literature?
4. If such a structure is available at all, which countries of the world economy can be categorised in the respective blocs?

3. Methodology

As described, we found a significant gap in the literature, i.e. the lack of empirical approaches to identify groups of countries (“clusters”) based on relevant data, which reveal basic splits (if any) on the global level in terms of trade, investment and other kinds of relations. To fill this gap, we apply a widely used clustering technique (hierarchical clustering) to a broad set of data which we deem relevant based on the literature of geoeconomic fragmentation, as well as practical considerations

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(data availability, quality etc.).[34] As usual in econometrics, the method of clustering is sensitive to different choices regarding (inter alia) the sample, the variables and certain features of the technique itself. Our choices are explained in more detail in Chapter 3.1 and 3.2, respectively. The final results are based on several rounds of iterations where we applied clustering to various sets of countries and variables. In what follows, we present our data and considerations which resulted in the final "sample" underlying the main output of this paper.

3.1.Variables and data

The starting point of our empirical work is the identification of variables which could be decisive in determining the "geoeconomic proximity" of different countries. For the purposes of this paper, the concept of "geoeconomic proximity" is operationalized to capture the strength of the relationship of country *i* with a small set of great powers of our age. Countries are then compared based on these relationships and included in clusters characterized by the presence or lack of these "great powers". It is undoubted that the United States (US) and the People's Republic of China (PRC, hereinafter "China" or CN) need to be regarded as such powers as they are at the heart of the fragmentation issue nowadays. Besides them, the European Union (EU) and Russia (RU) are among the major players mastering a web of geoeconomic relations spanning beyond their closest neighbours. Thus, we select these four actors as "points of reference" when creating measures of economic and geopolitical links.

As for these links, we identify five broad topics relevant for fragmentation, based on our literature review:

(1) Trade
(2) Foreign direct investments
(3) International financial support (development finance)
(4) Military links (arms sales)

[34] Clustering is a widely used methodological approach in international economic research. Some of the studies cited in Section 2.3. use different clustering approaches (Javorcik et al. 2023 and Kirsamer – Riha 2025) for researching certain (narrower or specific) aspects of geoeconomic fragmentation. Nonetheless, clustering is more typical for researching other aspects of international economics. Notable examples include the clustering of countries based on their Human Development Index (see e.g. Altaş-Arikan 2017) or international (e.g. trade) flows (see e.g. Jiménez-Almazán et al. 2020).

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(5) Public opinion (about great powers)

These broad categories cover the most important aspects of geoeconomic fragmentation discussed in a broad set of papers focusing on the topic (Chapter 2). Furthermore, this list already reflects practical considerations such as data availability. Variables and metrics related to these topics can be best interpreted as proxies signalling the overall stance or orientation of different countries vis-á-vis the four "great powers" mentioned above.

This approach yields the following variables (Table 2):

Table 2: Full set of variables considered in the empirical analysis

Topic	**Variable**	**Description and notes**	**Unit of measure**	**Source**	**Variable names**
(1)	Trade share of "great power" *j* in total foreign trade of goods of country *i* in 2022	*j* = USA; CN; EU; RU Total foreign trade (goods): exports + imports	%	IMF	TRADE_SHARE_US TRADE_SHARE_CN TRADE_SHARE_EU TRADE_SHARE_RU
(2)	Net FDI stock of "great power" *j* in country *i* in 2023	Liabilities less assets	million USD	IMF	FDI_US FDI_CN FDI_EU FDI_RU
(3)	Approved financing amounts by AIIB to country *i* between 2016 and July 2025 (Asian Infrastructure Investment Bank)	Proxy of closer links to China Sum of nominal values (sovereign and non-sovereign finance extended to/in country *i*)	million USD	AIIB	FIN_AIIB

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(3)	IBRD loans, total disbursed amount to country *i* as of 30 June 2025 (International Bank for Reconstruction and Development, World Bank)	Possible proxy of closer links to the West Data provided by IBRD as sum of nominal values	million USD	IBRD	LOAN_IBRD
(4)	Ratio of arms purchases by country *i* from source *k*, for items purchased between 2016-2024	*k* = NATO and APAC allies; CN; RU Ratio calculated from sum of purchase volumes (number of items)	%	SIPRI	ARMS_NATO ARMS_CN ARMS_RU
(5)	Net favourability of China in country *i*, 2024 or latest data available since 2020	Aggregated worldwide polling data, share of positive minus negative responses No wide-scale data available for US, EU, RU	ppt	ASPI	FAV_CN

Notes: Topic (2) was omitted in final output due to data availability issues (several cases of missing data). Unit of measure: Standardised variables are used for clustering. APAC allies: Closest U.S. allies in the Asia-Pacific region, i.e. South Korea, Japan, Australia, Philippines, Taiwan (Republic of China, ROC). The distinction between the ROC and the PRC is merely practical and does not represent any statement about the related territorial issues. For details of data sources, see Appendix 1.Source: own edition

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3.2.List of countries and clustering method

Initially, we considered the full list of countries; however, due to missing data, countries with population less than one million were removed. In a narrower list of 156 countries, lack of data and potential distortions still posed a challenge, especially when FDI data was included as initially planned. To handle this issue, FDI variables had to be removed, just as Latin American and Sub-Saharan countries. Our final (standardised) data set thus contains 89 countries (N = 89) and 10 variables (those described in Table 2, except for Topic (2)). Clusters were identified by hierarchical clustering using the Ward criteria.[35] [36]

4. Results

Based on the dendrogram (Appendix 2), it is possible to identify 3 clusters. Figure 1 and Table 3 provide an overview of them. For the list of members in each cluster, see Appendix 3. Significance tests show that all of the 10 variables included in the analysis have a significant relationship with

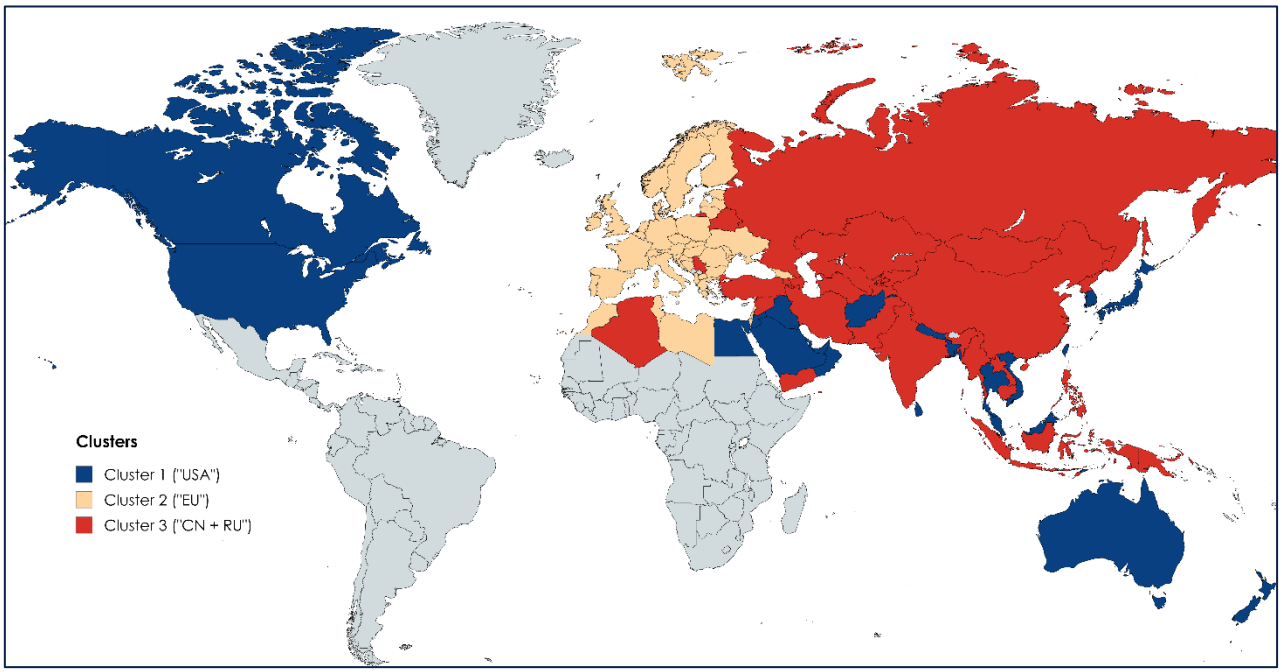
[35] Our basic distance metric was the Euclidean distance which is a conventional and very common interpretation of distance in a multidimensional space of data points. The Ward approach starts with unique data points (i.e. their Euclidean distance) and creates groups based on the objective to minimize the increase in total within-cluster variance (within-cluster sum of squares, WSS). This process can be best illustrated with dendrograms. Instead of this agglomerative approach, it is possible to randomly set a certain number (k) of cluster centres and assign the closest data points to them (usually using their Euclidean distance). This is called k-means clustering, where the subsequent iterations change the cluster centres step by step to minimize the WSS (until no further improvement is possible). As a counterfactual to our main output, we also resorted to k-means clustering. (Missing data were handled by MICE imputation, i.e. multiple imputations by chained equations.) In the cases of k = 3 and k = 4, the result was disproportionate in terms of the size of the resulting clusters. (Most of the countries, i.e. 72 and 67 of them, respectively, formed one single cluster, while the remaining clusters were very small.) This highlights the fact that our results are sensitive to different clustering techniques as it was only the Ward criteria which resulted in meaningful outcomes. However, we think that our case study adds to the empirical analysis of geoeconomic fragmentation, considering the significant barriers in data availability and quality, as well as the high complexity of the global geoeconomic landscape.

[36] As FDI was excluded from our final cluster analysis, we deem that the remaining variables grasp conceptionally different dimensions of international linkages (i.e. trade; military links; financial links; public opinion). Any relationships among these variables can eventually be traced back to a latent variable, namely a general orientation of a country towards one of the great powers/geopolitical blocs, which is the major topic of our paper. Therefore, excluding any of our variables due to its potential relationship to the others could result in limiting our interpretation of "geopolitical proximity", and would be rather arbitrary.

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cluster membership (α = 10%). (Except for TRADE_SHARE_CN and FAV_CN, all the other variables have an empirical significance level less than 5%.)

Figure 1: Our clusters on the world map



Source: own edition

Table 3: Overview of the clusters

Cluster	"Great power" in the cluster	Examples of other countries	n	Cluster averages									
				Trade share (%)				Finance (million USD)		Arms purchases (%)			FAV CN
				US	CN	EU	RU	AIIB	IBRD	NAT	CN	RU	
(1)	USA	Australia, Canada, Gulf States, Japan,	25	10	19	10	1	420	2598	85	4	4	7

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		South Korea, Taiwan											
(2)	EU	Georgia, Israel, Ukraine, United Kingdom	38	5	6	60	3	28	2974	90	1	0	-19
(3)	CN, RU	Armenia, Azerbaijan, India, Iran, Kazakhstan, Serbia, Türkiye	26	4	26	17	11	1565	10 787	20	16	42	31

Note: Higher values (percentage points) of FAV_CN mean a more positive image of China. Averages are unweighted. Source: own edition

Based on this cluster structure, between-cluster sum of squares (BSS) was calculated and compared to the total sum of squares (TSS). Calculating BSS/TSS, i.e. eta-squared yielded 0.102. This can be interpreted as 10% of the variance in the dataset is explained by our cluster structure. This effect size is a major limitation of our paper. However, considering the difficulties in capturing the underlying phenomenon (i.e. fragmentation), as well as data availability issues, it can be concluded that our classification still carries a considerable amount of relevant information. This is supported by the fact that each variable proved to be significant in the respective ANOVA tests as explained above.

Boxplot is an easy-to-use tool to illustrate the distributions of the variables in each cluster. Our boxplots are included in Appendix 4. We rely on them and the cluster averages (Table 3) to characterise the three country groups.

Cluster 1 includes the United States and many of its closest allies. It is remarkable that this group of countries stretches from North America to the Persian (Arabian) Gulf and the Asia-Pacific region (APAC) where it “encircles” China. Anglo-Saxon countries (Australia, Canada, New Zealand) are

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part of this cluster, except for the United Kingdom which proved to be "closer" to the European Union in this setting. All of the seven Arab states bordering the Persian Gulf (Bahrain, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) belong to this cluster. From APAC, the cluster includes close U.S. allies such as Japan, South Korea, Taiwan, as well as some countries with historical links to the West (Singapore, Malaysia, Thailand).[37] Boxplots 4.1-4.4 show that Cluster 1 countries tend to have the highest shares of trade with the U.S., while the lowest with Russia. In addition, half of them purchased more than 87% of their arms from the NATO and NATO allies.

Cluster 2 includes the members of the European Union and several of their neighbours. Boxplots tell a lot about why these countries form a separate cluster (i.e. why they are not linked to the U.S.). First of all, they trade a way more with (other) EU members than anyone else. (The average share of trade with the EU is 60% in this cluster.) Consequently, they trade less with the U.S. and China than Cluster 1 countries on average. In addition, they have the lowest amounts of AIIB loans (if any at all) and the most unfavourable views of China. (Average FAV_CN indicates a relatively strong negative perception in this group, while the other clusters tend to be more positive about the East Asian giant.) In terms of arms purchases, the NATO and NATO allies dominate this cluster.

Note that Cluster 2 includes Israel, some other countries located in the Mediterranean (e.g. Lebanon, Morocco, Tunisia), as well as Ukraine and the United Kingdom. This reflects the impact of geographical proximity on trade, but it can also be indicative in terms of geopolitical orientation, especially in the case of Ukraine. The high share of trade with the EU and NATO arms supplies were decisive in classifying Ukraine into Cluster 2.

Having a separate "EU" cluster is one of the most remarkable results of our study; nevertheless, the composition of Cluster 3 is equally interesting. China and Russia happen to be in the same group, together with India, Iran, Türkiye, North Korea, Pakistan and a large part of the post-Soviet region. Southeast Asia is split between Cluster 1 and 3, reflecting its role as a "buffer zone". It is worth mentioning that Serbia, a candidate country for EU membership, was classified into this group which is in line with its traditional relationship with Russia, as well as its more recent orientation towards China.

[37] Regarding the South China Sea disputes with China, three of the major claimants happen to be in this cluster, notably Vietnam, Malaysia and Taiwan. Interestingly, another major claimant, the Philippines was classified into the "China + Russia" cluster, which must be due to its relatively lower share of trade with the U.S. and its higher amount of AIIB loans.

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Boxplots show that higher shares of trade with China and Russia are typical for Cluster 3 countries, and they are also the main recipients of finance from the AIIB and IBRD. Let us note here that although IBRD loans proved to be significant in terms of the cluster structure, the reason for this is likely different from our original assumption. LOAN_IBRD was included as a possible proxy of Western influence (closer links to the West). Nonetheless, Boxplot 4.6 suggests that it may only indicate a "developing country" status and tells little about geopolitical orientation. In contrast, finance from AIIB is a much clearer sign of closer links to China (see Boxplot 4.5).

As for arms purchases, Cluster 3 countries do not really buy weapons from the NATO and its allies. Instead, Russia has a clear edge in this group. China also seems to be a relatively important arms supplier, and the image of China is apparently the most favourable in this cluster.

5. Discussion

The results of the hierarchical clustering thus show that the world economy is arranged into three blocs. These blocs are centred around the United States, the European Union as well as the conglomerate of the two major non-Western powers (i.e. China and Russia), respectively. Our results are in accordance with previous pieces of research suggesting a three-bloc structure of the global economy (*Campos et al. 2023*, *Gopinath et al. 2024*, *Aiyar-Ohnsorge 2024*, *Bolhuis et al. 2023*, *Fernández-Villaverde et al. 2024*, *Conteduca et al. 2025*, *Baur et al. 2023* as well as *Gopinath 2023*), and similarly to previous papers, our results also reveal blocs centred around major global geopolitical powers.

However, the composition of the respective blocs differs from any of those reviewed in Section 2. Previous pieces of research on geoeconomic fragmentation emphasise the divide between East and West as well as the dichotomic systemic rivalry between the United States (often accompanied by i.a. the European Union, Japan, South Korea and Australia) and China (often accompanied by i.a. Russia, Central Asia and North Africa); others complement this structure with a neutral bloc. Our results, however, show a different structure. According to our findings, the United States and the European Union belong to separate blocs, while China, Russia and certain aligned states form the third one. (The latter, i.e. Russia and China jointly forming the cornerstone of a predominantly Eastern bloc however corroborates a vast array of literature reviewed in Section 2.3.) The fact that the United States and the European Union belong to different geoeconomic blocs challenges previous consensus in the fragmentation literature and suggests that the *a priori* linking of the US and the EU (as seen in many pieces of literature) may need reconsideration.

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This result of ours has also implications on a broader scale: the public discourse on fragmentation also tends to classify the United States and the European Union into one geoeconomic bloc, which, however, is not justified by our data. The finding that these two Western actors belong to distinct clusters does obviously not weaken existing diplomatic and economic ties between them. Nevertheless, this measured geopolitical distance between the United States and the European Union should be taken into account in the overall fragmentation discourse. With our findings we hope to have contributed to the literature on geoeconomic fragmentation. By answering the research questions and presenting a three-bloc structure of the world economy, we offer a new narrative for the fragmentation discourse where – despite all presuppositions – the Western bloc turns out to be two blocs instead of one.

While supplementing the fragmentation literature with novel findings, our paper also bears certain limitations. First, our results represent a snapshot of the global economy – while geoeconomic fragmentation (along with deglobalisation, decoupling etc.) is rather of a processual nature. Thus, longitudinal analysis may prove valuable if one aims capturing changes in how the global economy is structured (and thus, adding to our description of its present characteristics). Such a longitudinal analysis would also allow for a deeper understanding of the respective state actors' motives for pursuing fragmentation-enhancing policies. While relevant from our perspective, the cross-sectional nature of our research did not allow for the examination of such motives – future research delving deeper into this question would be of great value.

Second, due to the unavailability and inaccuracy of data in the case of certain variables, in our analysis, we had to exclude certain countries (Latin America and the majority of Africa, in particular). The exclusion of these countries from our analysis necessarily brought about an incompleteness of the results: countries excluded are considered as part of the neutral bloc by certain authors (*Gopinath 2023* as well as *Abeliansky et al. 2023*). In addition, we were not able to use FDI data due to many missing values in the breakdown of FDI stocks. The necessity to omit certain variables and regions might have distorted the results to a certain extent. Furthermore, an analysis comprising all countries of the globe would also allow for identifying connector countries in the sample, as well as a deeper understanding of their function. (Pertinent studies listed in Section 2.3. indicate that i.a. Latin American countries may fall under this definition – these were, however, excluded from our analysis due to data gaps.) Moreover, examining connector countries separately—by analytically distinguishing them from the main sample comprising the respective blocs—would make it possible to map their roles in mediating between-bloc interactions. However, conducting such an analysis (and especially

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the exploratory identification of connector countries) would have exceeded the scope of the present study. We encourage future research to pursue investigations in this direction as well.

Third, it is a general challenge to identify a broad set of variables capturing geoeconomic fragmentation while also avoiding excessive multicollinearity. Clustering does not involve estimating coefficients or predicting dependent variables, so in this sense, correlation between our variables does not violate any assumptions. Nevertheless, as the Ward criteria relies on calculating Euclidean distances, similar variables might carry the risk of overemphasizing certain features. In our analysis, data about trade and arms purchases could thus play a more pronounced role in driving the classification of countries into clusters. If higher data quality and availability could be reached (especially in case of FDI or attitude surveys), the set of variables could be further developed and refined, for example by using principal component analysis. It would be desirable for future quantitative research to address the above-mentioned matters.

6. REFERENCES

Abeliansky, A. – Belabed, C.A. – Mayrhuber, J. (2023): *Enjoy the silence? (De)globalization and cross-border investment – a gravity approach.* OeNB Bulletin, 2024/Q2: 60–81. https://www.oenb.at/en/Publications/Economics/bulletin/2024/q2-2024.html

Airaudo, F. – de Soyres, F. – Fisgin, E. – Gaillard, A. – Santacreu, A. M. – Richards, K. – Young, H. (2025). *Understanding Trade Fragmentation*. Federal Reserve Board, FEDS Notes, December 12.
Retrieved from https://www.federalreserve.gov/econres/notes/feds-notes/understanding-trade-fragmentation-20251212.htm on 27 January 2026.

Aiyar, S. – Chen, J. – Ebeke, C. H. – Garcia-Saltos, R. – Gudmundsson et al. (2023): *Geoeconomic fragmentation and the future of multilateralism. IMF Staff Discussion Note SDN/2023/001*. International Monetary Fund. https://doi.org/10.5089/9798400229046.006

Aiyar, S. – Ilyina, A. (2023): *Geoeconomic fragmentation: An overview.* In: Aiyar, S. – Presbitero, A. F. – Ruta, M. (eds.): Geoeconomic Fragmentation – The Economic Risks from a Fractured World Economy. Centre for Economic Policy Research, Paris, pp. 9–18.

Aiyar, S. – Ohnsorge, F. (2024): *Geoeconomic Fragmentation and "Connector" Countries.* MPRA Paper No. 121726. https://mpra.ub.uni-muenchen.de/121726/

10.15772/ANDRASSY.2026.006

Altaş, D. – Arikan, G. (2017): *The analysis of Human Development Index with cluster analysis techniques*. Social Sciences Research Journal, 6(3), 126–138.

Altman, S. A. – Bastian, C. R. – Fattedad, D. (2024). *Challenging the deglobalization narrative: Global flows have remained resilient through successive shocks.* Journal of International Business Policy, 7(4): 416-439.

Alvarez, J. – Andaloussi, M. B. – Maggi, C. – Sollaci, A. – Stuermer, M. – Topalova, P. (2023): *Geoeconomic fragmentation and commodity markets.* IMF Working Paper No.2023/201. https://www.imf.org/en/Publications/WP/Issues/2023/09/28/Geoeconomic-Fragmentation-and-Commodity-Markets-539614

Baur, A. – Dorn, F. – Flach, L. – Fuest, C. (2023): *Rethinking geoeconomics: Trade policy scenarios for Europe's economy*. EconPol Policy Report, No. 44, CESifo GmbH, Munich

Baur, A. – Dorn, F. – Flach, L. – Fuest, C. (2025): Geoeconomic fragmentation and the role of non-aligned countries. Economics Letters, 255, 112533. Retrieved from https://epub.ub.uni-muenchen.de/130612/1/1-s2.0-S0165176525003702-main.pdf on 27 January 2026.

Bekkers, E. – Góes, C. (2023): *The potential impact of global decoupling accounting for innovation spillovers from trade*. In: Aiyar, S. – Presbitero, A. – Ruta, M. (Eds.): Geoeconomic fragmentation: The economic risks from a fractured world economy. CEPR Press. pp. 55-62.

Bolhuis, M. A. – Chen, J. – Kett, B. (2023): *Geoeconomic fragmentation: Accounting for commmodities*. In: Aiyar, S. – Presbitero, A. – Ruta, M. (Eds.): Geoeconomic fragmentation: The economic risks from a fractured world economy. CEPR Press. pp. 39-44.

Campos, R. G. – Estefanía-Flores, J. – Furceri, D. – Timini, J. (2023): *Geopolitical fragmentation and trade*. Journal of Comparative Economics, 51(4): 1289–1315. https://doi.org/10.1016/j.jce.2023.06.008

Conteduca, F. P. – Mancini, M. – Romanini, G. – Giglioli, S. – Borin, A. – Attinasi, M. G. – Boeckelmann, L. – Meunier, B. (2025). *Fragmentation and the future of GVCs*. Bank of Italy Occasional Paper, No. 932.

Farkas, B. – Pelle, A. – Somosi, S. (2023): *Az Európai Unió és a geoökonómiai kihívások – ipar- és versenypolitikai válaszok.* Közgazdasági Szemle, 70: 1193–1212. https://doi.org/10.18414/KSZ.2023.11.1193

10.15772/ANDRASSY.2026.006

Felbermayr, G. –Mahlkow, H. – Sandkamp, A. (2023): *Cutting through the value chain: The long-run effects of decoupling the East from the West.* Empirica, 50(1): 75-108.

Fernández-Villaverde, J. – Mineyama, T. – Song, D. (2024): *Are we fragmented yet? Measuring geopolitical fragmentation and its causal effect.* Working Paper no. w32638. National Bureau of Economic Research.

Ginter, T. (2025): *Geoeconomic Fragmentation in the Western Balkans*. Financial and Economic Review, 24(2): 27–46.

Gopinath, G. (2023): *Cold War II? Preserving Economic Cooperation Amid Geoeconomic Fragmentation*. Presented at the 20th World Congress of the International Economic Association on 11 December.

Gopinath, M. G. – Gourinchas, P. O. – Presbitero, A. F. – Topalova, P. (2024): *Changing global linkages: a new cold war?* IMF Working Paper No. 2024/76. https://doi.org/10.5089/9798400272745.001

Halmai, P. (2023): *Globalisation versus Deglobalisation*. Financial and Economic Review, 22(2): 5–24. https://doi.org/10.33893/FER.22.2.5

Halmai, P. (2025a): *Globális dezintegráció? A globális szabadkereskedelem víziójától a geoökonómiai fragmentációig*. Külgazdaság, 69(1-2): 51-65.

Halmai, P. (2025b): *Globalizáció vagy deglobalizáció?* Magyar Tudomány, 186(10): 1898–1910. https://doi.org/10.1556/2065.186.2025.10.4

IMF (2023a): *Geoeconomic fragmentation and foreign direct investment*. In: World Economic Outlook, April 2023: A Rocky Recovery, Chapter 4. USA: International Monetary Fund. https://www.elibrary.imf.org/display/book/9798400224119/CH004.xml

IMF (2023b): *Fragmentation and Commodity Markets: Vulnerabilities and Risks*. October 2023 World Economic Outlook, Chapter 3. Washington, International Monetary Fund.

Javorcik, B. S. – Kitzmueller, L. – Schweiger, H. – Yıldırım, M. A. (2023): *Economic Costs of Friend-Shoring*. CID Faculty Working Paper Series 422, Harvard University, Cambridge, MA. https://growthlab.hks.harvard.edu/publications/economic-costs-friend-shoring

Jiménez-Almazán, M. – Uribe-Toril, J. – Ruiz-Real, J. L. (2020): *International trade and sustainability: Bibliometric and cluster analysis*. Sustainability, 12(17), 6816. https://doi.org/10.3390/su12176816

10.15772/ANDRASSY.2026.006

Kaaresvirta, J. – Kerola, E. – Nuutilainen, R. (2023): *Do international investment and trade flows show any signs of fragmentation?*. BOFIT Policy Brief 2023 No. 12. https://publications.bof.fi/bitstream/handle/10024/53083/bpb1223.pdf?sequence=1

Kirsamer, N., – Riha, K. (2025): *Mapping geopolitical fragmentation: a bilateral index for economic analysis*. *OeNB Bulletin*, 2025/Q4: 1-35. https://www.oenb.at/Publikationen/Volkswirtschaft/bulletin.html

Maskus, K. E. (2023): The impacts of technological geoeconomic fragmentation: Comments and observations. In: Aiyar, S. – Presbitero, A. – Ruta, M. (Eds.): *Geoeconomic fragmentation: The economic risks from a fractured world economy*. CEPR Press. pp. 75-82.

Mohr, C. – Trebesch, C. (2025): *Geoeconomics*, CESifo Working Paper, No. 11564, CESifo GmbH, Munich

Norring, A. (2024a): *Geoeconomic fragmentation, globalization, and multilateralism*, BoF Economics Review, No. 2, Bank of Finland, Helsinki, https://nbn-resolving.de/urn:nbn:fife2024031811700

Norring, A. (2024b): *The economic effects of geoeconomic fragmentation.* BOFIT Policy Brief, No. 8, Bank of Finland, Helsinki.

Plummer, M. G. (2023): *Estimating the costs of geoeconomic fragmentation to the global economy*. Aiyar, S. – Presbitero, A. F. – Ruta, M. (eds.): Geoeconomic Fragmentation – The Economic Risks from a Fractured World Economy. Centre for Economic Policy Research, Paris, pp. 45–54.

Witt, M. A. – Lewin, A. Y. – Li, P. P. – Gaur, A. (2023): *Decoupling in international business: Evidence, drivers, impact, and implications for IB research*. Journal of World Business, 58(1), 101399. https://doi.org/10.1016/j.jwb.2022.101399

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7. APPENDIX

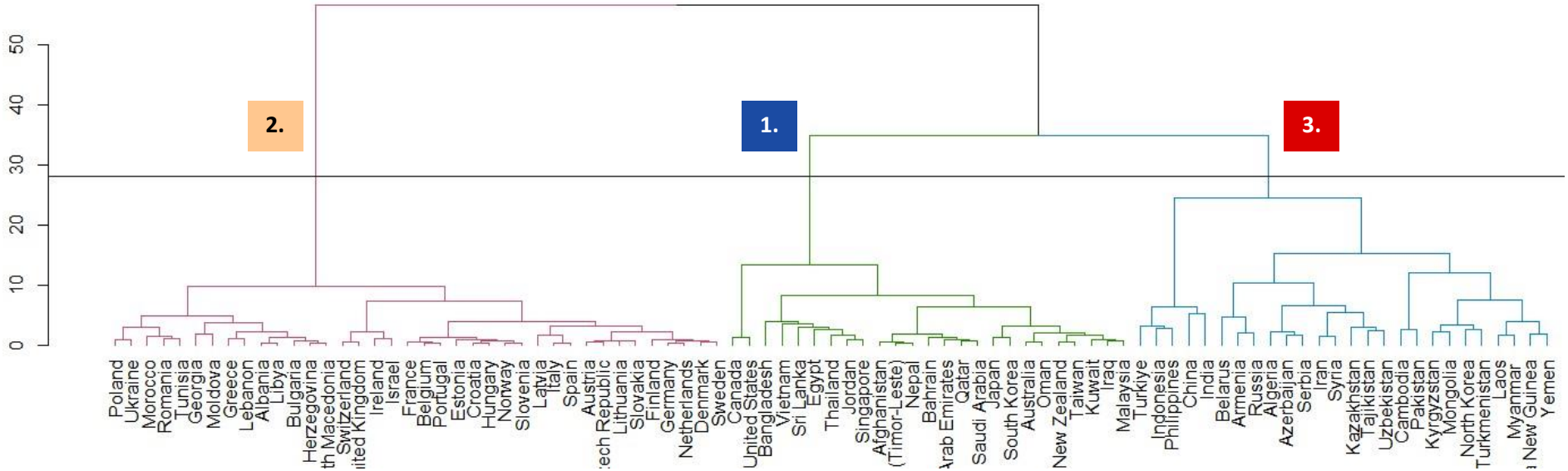
Appendix 1: Data sources

Variable	Variable names	Source
Trade share of "great power" *j* in total foreign trade of goods of country *i* in 2022	TRADE_SHARE_US TRADE_SHARE_CN TRADE_SHARE_EU TRADE_SHARE_RU	IMF International Trade in Goods (by partner country) https://data.imf.org/en/Search-Results#q=dots&t=coveob02de888&sort=relevancy
Net FDI stock of "great power" *j* in country *i* in 2023	FDI_US FDI_CN FDI_EU FDI_RU	IMF Direct Investment Positions by Counterpart Economy https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:DIP(12.0.0)
Approved financing amounts by AIIB to country *i* between 2016 and July 2025	FIN_AIIB	AIIB Approved Financing Amounts https://www.aiib.org/en/projects/list/year/2025/member/All/sector/All/financing_type/All/status/All
IBRD loans, total disbursed amount to country *i* as of 30 June 2025	LOAN_IBRD	IBRD Loans Disbursed Amount https://financesone.worldbank.org/ibrd-country-economy-wise-loan-summary/DS01538
Ratio of arms purchases by country *i* from source *k*, for items purchased between 2016-2024	ARMS_NATO ARMS_CN ARMS_RU	SIPRI Arms Transfers Database, Transfers of Major Conventional Arms https://armstransfers.sipri.org/ArmsTransfer/TransferData
Net favourability of China in country *i*, 2024 or latest data available since 2020	FAV_CN	Asia Society Policy Institute's Global Public Opinion on China https://asiasociety.org/policy-institute/global-public-opinion-china

Note: FDI was omitted in final output due to data availability issues (several cases of missing data).

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Appendix 2: Dendrogram



Source: Own edition in R. Check full country names in Appendix 3.

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Appendix 3: List of countries in each cluster (in alphabetical order), N = 89

Cluster 1 **"USA"** **25 countries**	**Cluster 2** **"EU"** **38 countries**	**Cluster 3** **"CN + RU"** **26 countries**
Afghanistan	Albania	Algeria
Australia	Austria	Armenia
Bahrain	Belgium	Azerbaijan
Bangladesh	Bosnia and Herzegovina	Belarus
Canada	Bulgaria	Cambodia
East Timor (Timor-Leste)	Croatia	China
Egypt	Czech Republic	India
Iraq	Denmark	Indonesia
Japan	Estonia	Iran
Jordan	Finland	Kazakhstan
Kuwait	France	Kyrgyzstan
Malaysia	Georgia	Laos
Nepal	Germany	Mongolia
New Zealand	Greece	Myanmar
Oman	Hungary	North Korea
Qatar	Ireland	Pakistan
Saudi Arabia	Israel	Papua New Guinea
Singapore	Italy	Philippines
South Korea	Latvia	Russia
Sri Lanka	Lebanon	Serbia
Taiwan	Libya	Syria
Thailand	Lithuania	Tajikistan
United Arab Emirates	Moldova	Türkiye
United States	Morocco	Turkmenistan
Vietnam	Netherlands	Uzbekistan
	North Macedonia	Yemen

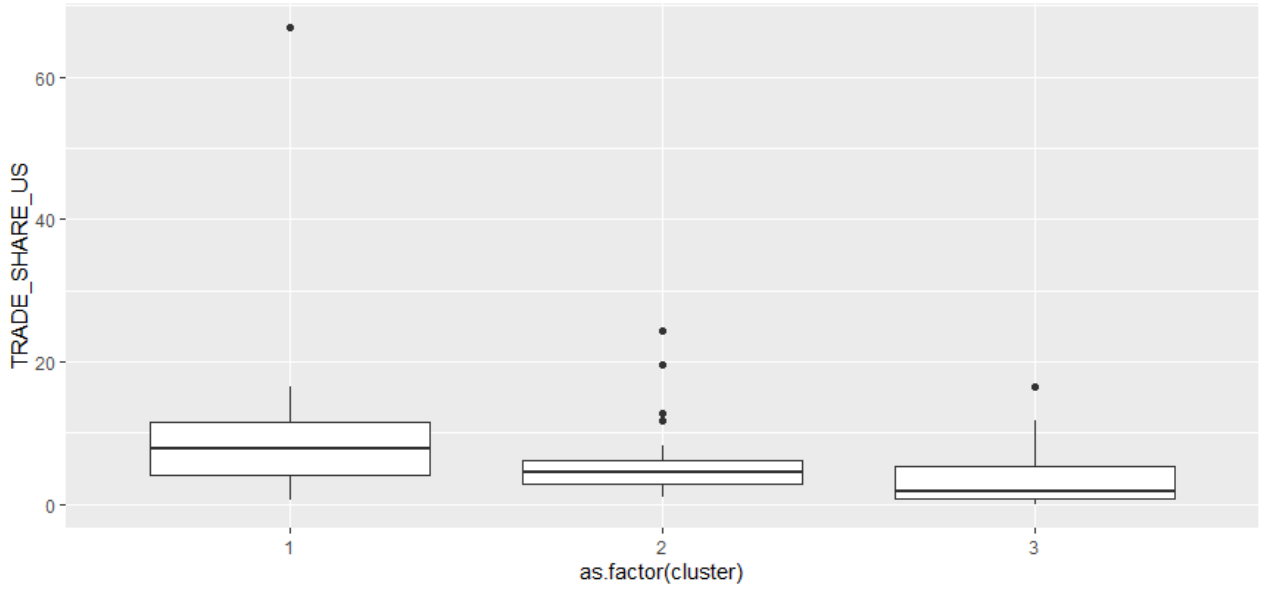
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	Norway	
	Poland	
	Portugal	
	Romania	
	Slovakia	
	Slovenia	
	Spain	
	Sweden	
	Switzerland	
	Tunisia	
	Ukraine	
	United Kingdom	

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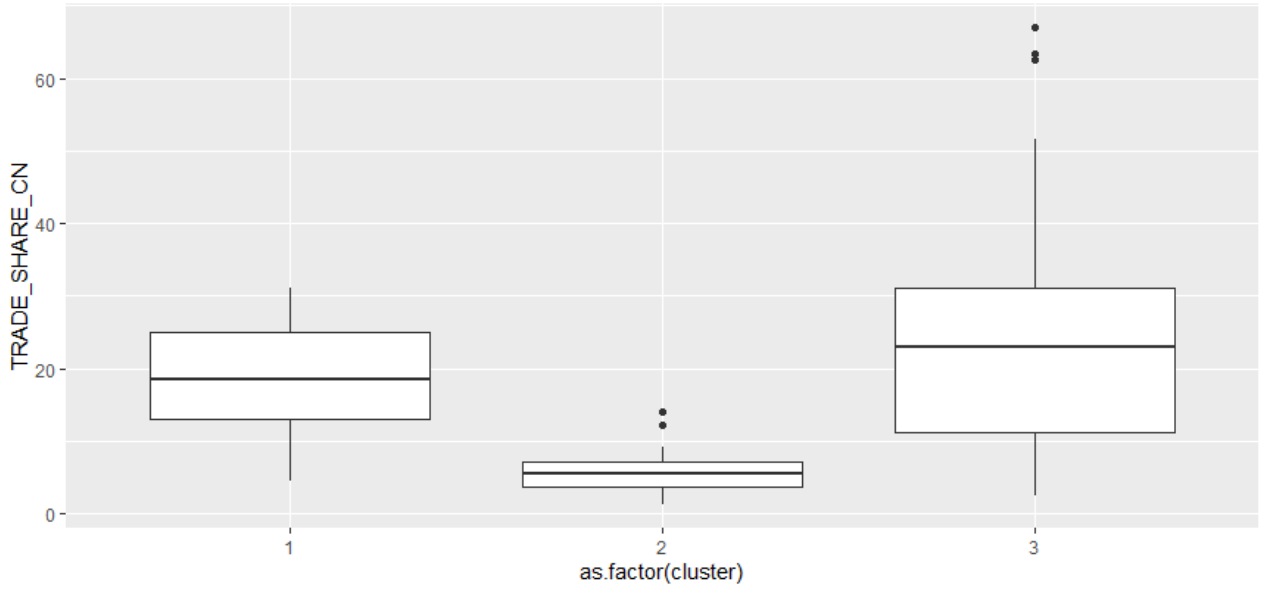
Appendix 4: Boxplots

4.1. TRADE_SHARE_US



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

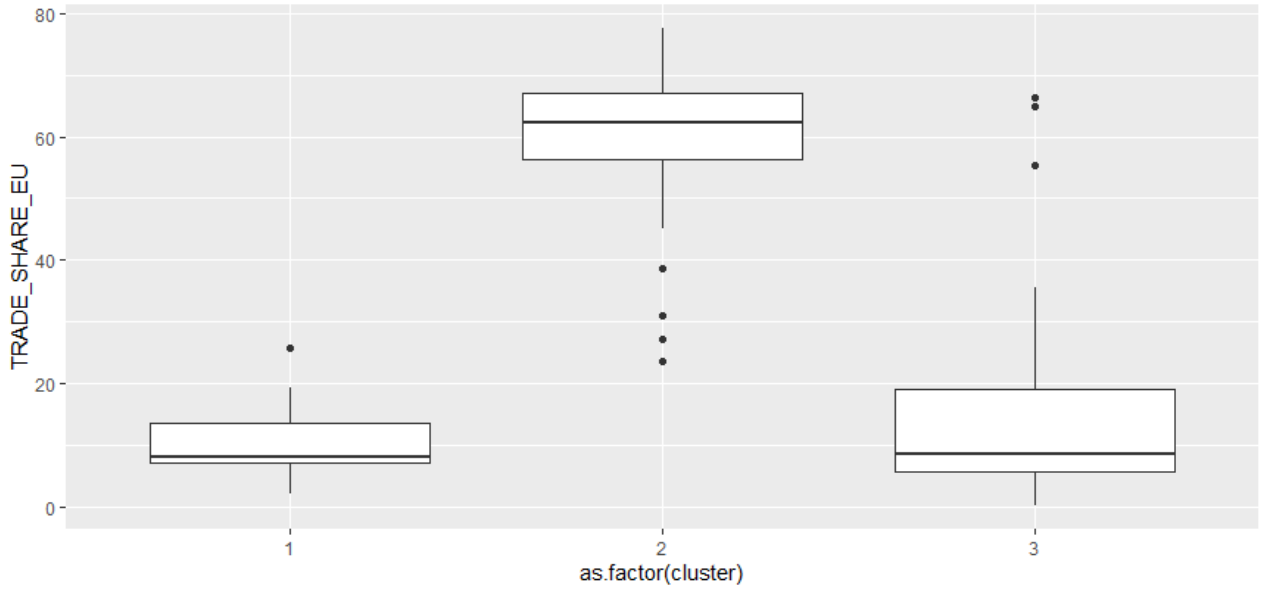
4.2. TRADE_SHARE_CN



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

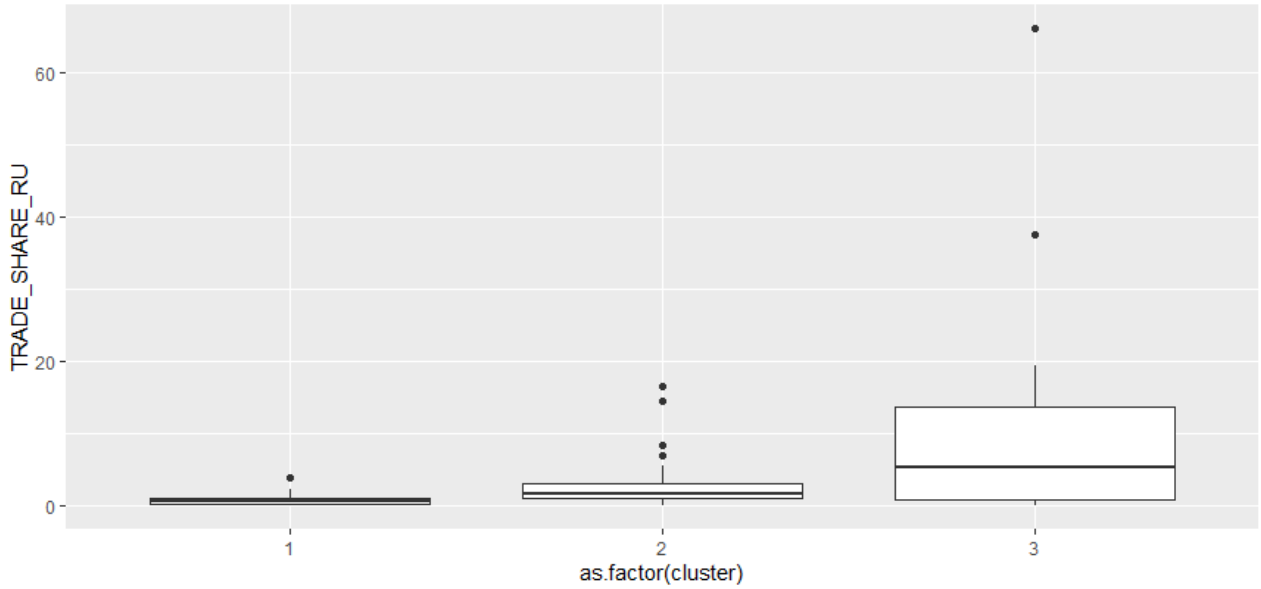
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4.3. TRADE_SHARE_EU



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

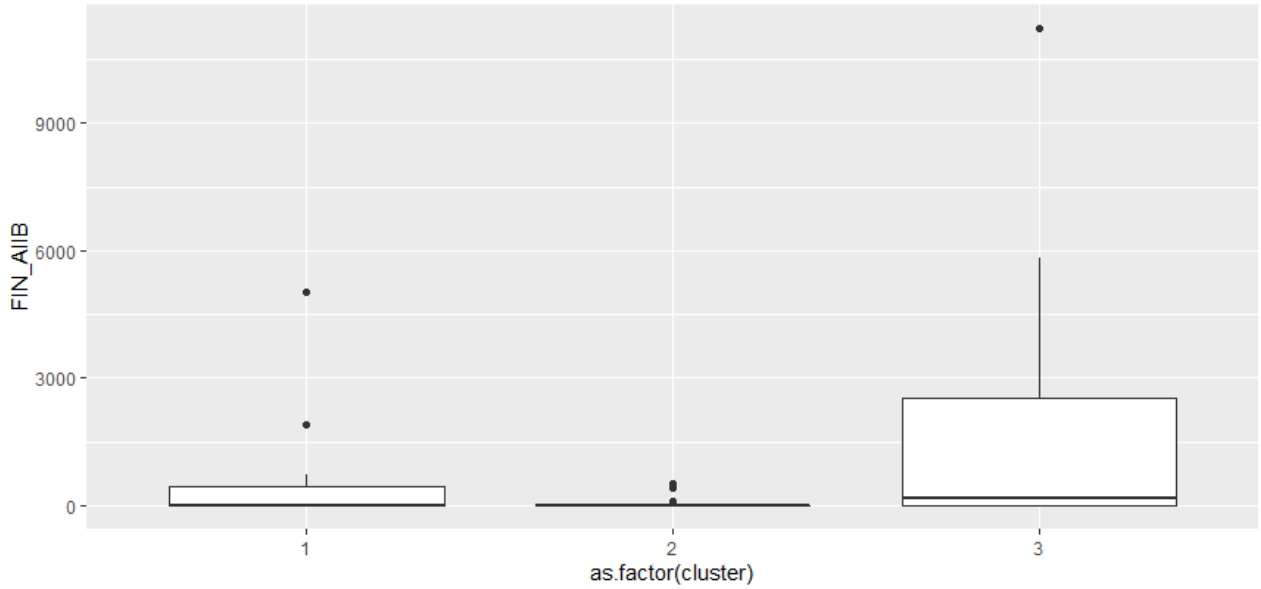
4.4. TRADE_SHARE_RU



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

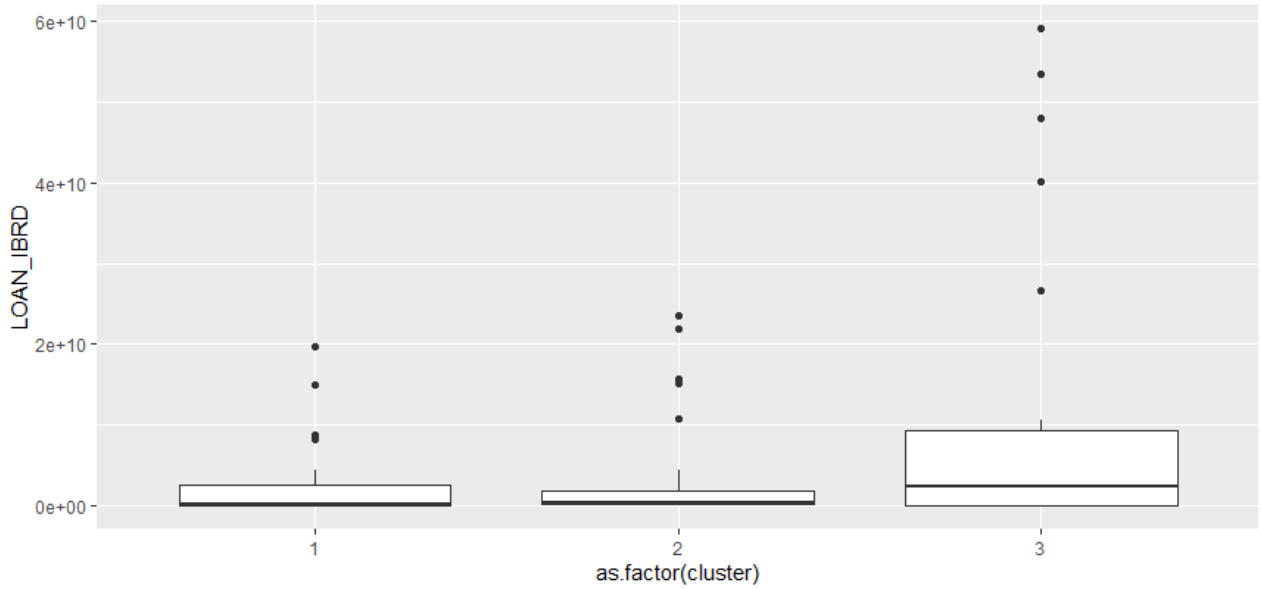
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4.5. FIN_AIIB



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

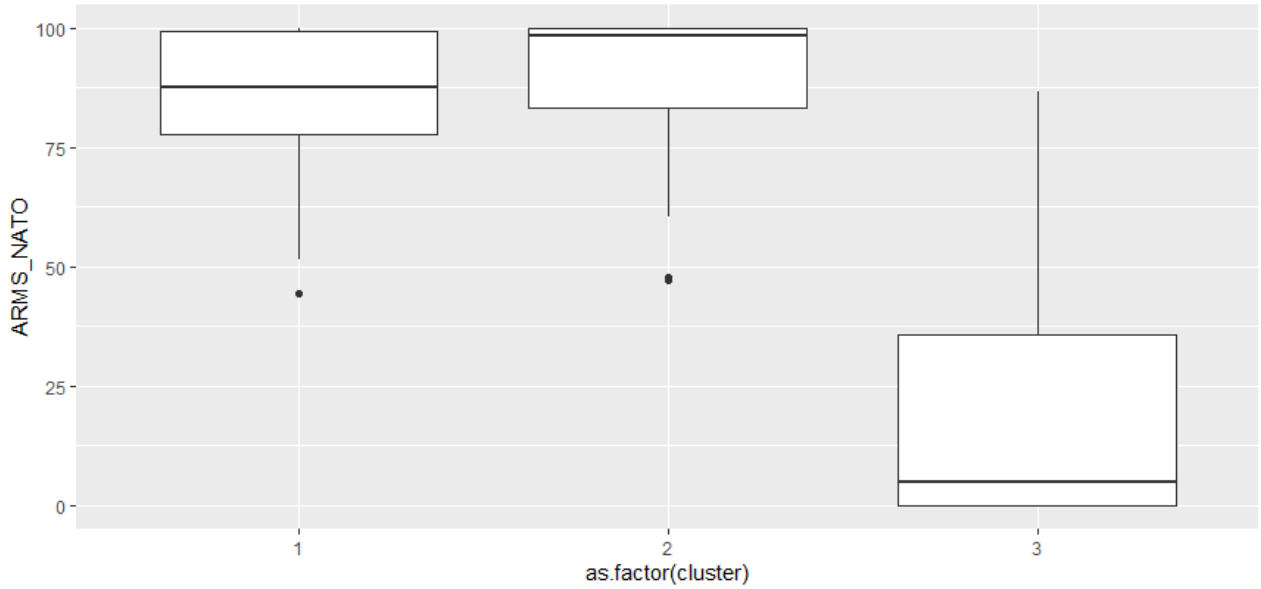
4.6. LOAN_IBRD



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

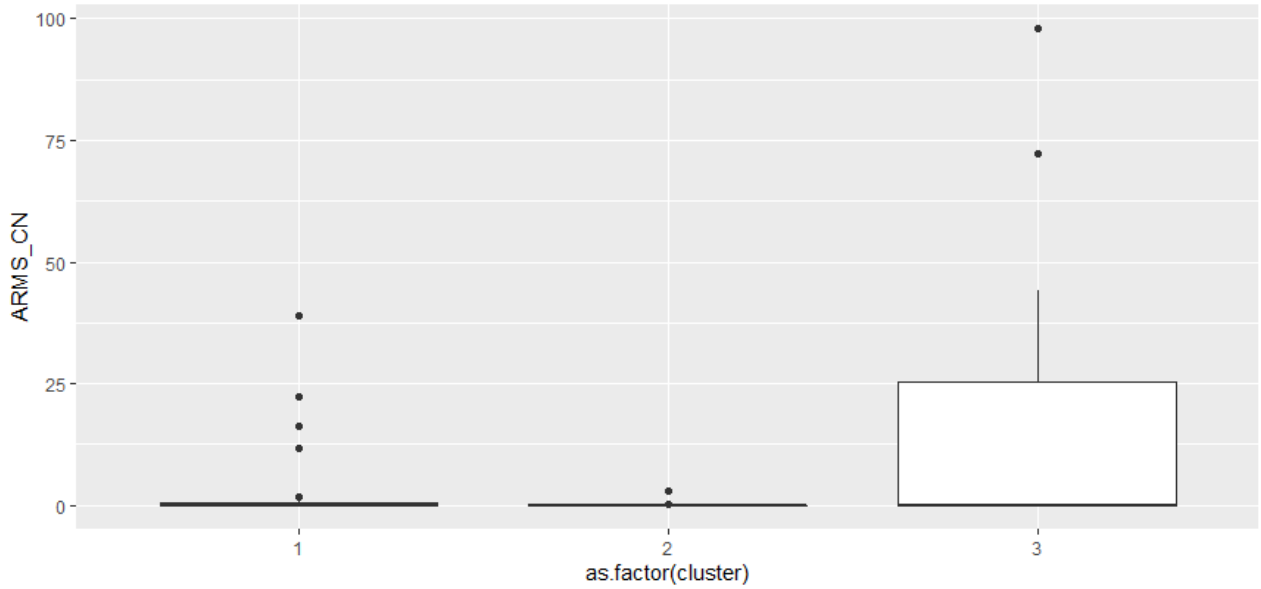
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4.7. ARMS_NATO



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

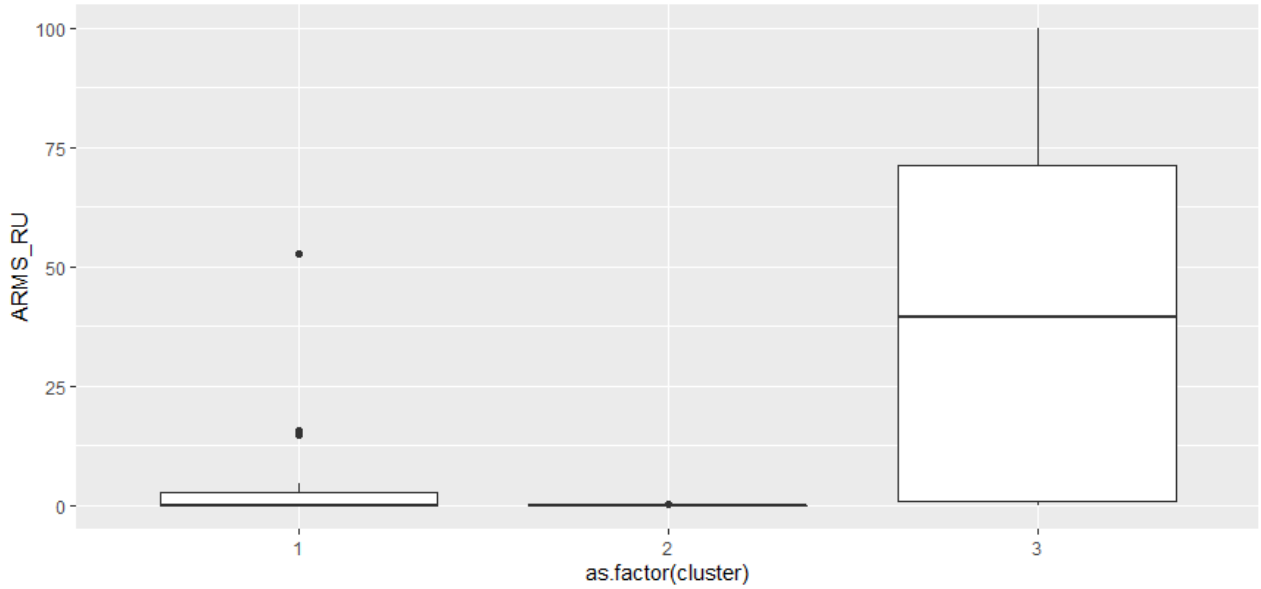
4.8. ARMS_CN



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

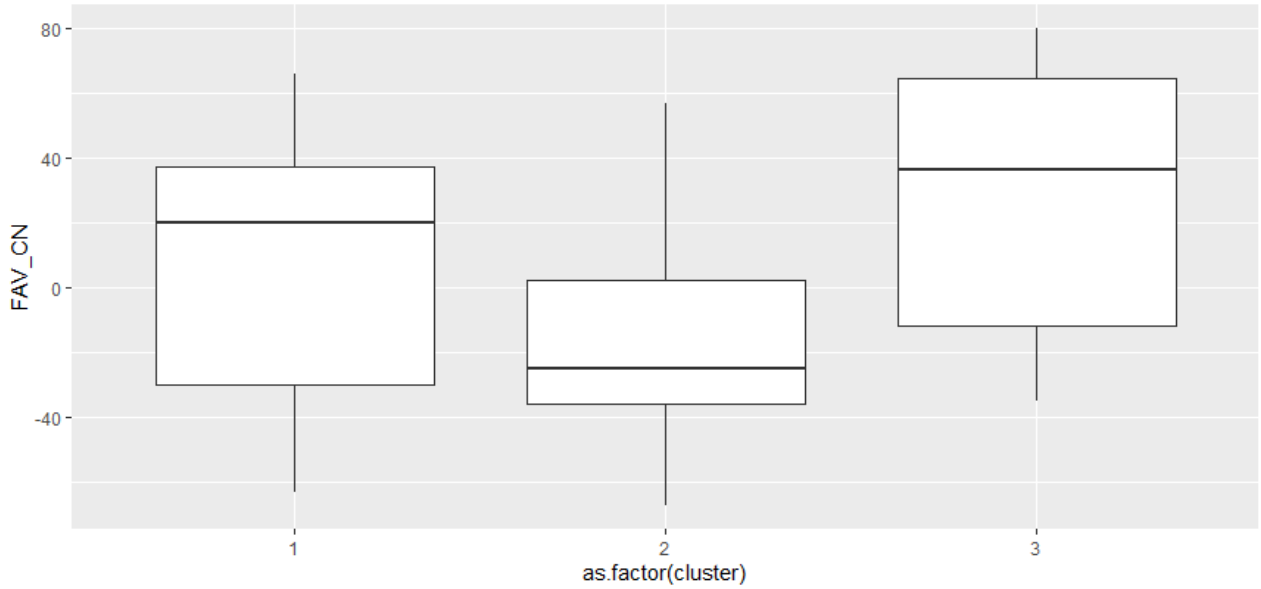
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4.9. ARMS_RU



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

4.10. FAV_CN



Cluster 1: "USA", Cluster 2: "EU", Cluster 3: "CN + RU". Source: Own edition in R.

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