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Geoeconomic fragmentation, globalization, and multilateralism

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Abstract

The world is witnessing growing turbulence stemming from geopolitics and a tangible threat of economic disintegration. There are some indications of globalization in retreat, international trade growth slowing down and a transition from optimizing efficiency of global value chains towards ensuring their resilience. Disentangling the causes and effects of the various trends around global economic integration and pushing towards de-globalization is extremely difficult. This paper aims to inform the policy debate and the research agenda by giving an overarching view of geoeconomic fragmentation, i.e., economic disintegration driven by geopolitics. It defines the relevant concepts, channels of effect and amplification mechanisms, and discusses the main causes and implications of geoeconomic fragmentation.

Keywords: geoeconomic fragmentation, globalization, international monetary system, global financial safety net, multilateralism, costs of economic fragmentation

JEL codes: E61, F02, F10, F13, F15, F20, F30, F42, F60

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1 Introduction

After decades of increasing global integration, the global community has entered a period of turbulence. Geopolitical blocs are realigning, and international cooperation is becoming more difficult. Growth in global flows of goods and capital has been levelling off and barriers to trade are being erected. Global value chains (GVCs) are hampered by supply disruptions and geopolitics. The global financial markets are more jittery, and spillovers of financial stress move easily across borders. Food and energy insecurity are making living conditions more precarious especially among the most vulnerable. There is a growing risk of a world fragmented into distinct economic blocs with different ideologies, political systems, technology standards, cross-border payment systems, trade systems, and reserve currencies. The fraught geopolitical situation, exacerbated by the senseless invasion of Ukraine by Russia, slowing growth of the global economy and protracted recovery from the COVID-19 pandemic, persistent inflation, and shrinking policy space make it more difficult to resist the trends pushing towards widening geopolitical fault-lines and economic fragmentation.

The benefits of globalization have propagated through multiple channels. On the whole, globalization has brought about more efficient trade and GVCs, as well as more opportunities for international risk sharing via global financial markets. Economic integration has lifted people out of extreme poverty and helped low-income countries (LICs) and emerging market and developing economies (EMDEs) improve living conditions. Consumers have enjoyed lower prices and a broader range of goods. LICs and EMDEs have been catching-up advanced economies (AEs) in productivity via technological diffusion. Globalization has also broadened opportunities for people migrating to work outside their home countries, as well as eased the burden of demographics in aging societies.

The ramifications of de-globalization, fragmentation and geoeconomic fragmentation (GEF), i.e., economic fragmentation driven by geopolitics¹, will spread via the same multiple channels. They are likely to entail significant economic costs, risks of social and political instability and less capacity to confront global challenges. As more countries resort to

¹ According to Caldara and Iacoviello (2022) "geopolitics" is defined as power struggles between states and political actors associated with wars, terrorism, and any tensions arising from other reasons, including trade or politics. These struggles affect the peaceful course of international relations. This definition is used throughout this paper. See the discussion in Caldara and Iacoviello (2022) on the differences between the traditional narrow definition of geopolitics and its more complex, popular usage.

inward looking and protectionist policies, we risk a less resilient, fragmented world economy, and less safe, regionalized international financial system. Research suggests that even if such fragmentation may bring some strategic advantages for individual countries, the aggregate economic costs of a segregated world would outdo such advantages by a wide margin.

From the recent policy debate, it emerges that there is a need to conceptualize and clarify what we mean by economic fragmentation in general and geoeconomic fragmentation as its special case, as well as their implications. Views on the issue are quite divergent: Some, such as the International Monetary Fund, argue that geoeconomic fragmentation is a serious threat to global prosperity and its first signs are already visible in the world economy.² Leaders such as the president of the European Central Bank Christine Lagarde have taken a clear stance on the perils of fragmentation.³ Some, such as the World Trade Organization⁴, see fragmentation as a clear threat, but one that is still only marginally visible in the data. Others see that because of security and resilience considerations, there is a need for economic policies with geopolitical dimensions⁵, and the economic costs of ensuing fragmentation are negligible or should be accepted. It also appears that the relevant concepts are not well defined, meaning that they are used interchangeably in discussions and debates, complicating a complex phenomenon further.

This paper brings clarity and structure to the debate by conceptualizing geoeconomic fragmentation, its channels of effect and likely implications. The paper gives an overview of geoeconomic fragmentation, its definition, and main causes, as well as early signs already visible in the global economy and financial system. It discusses the likely implications of geoeconomic fragmentation on the global economy, international financial markets, and the functioning of the International Monetary System. Moreover, the paper sketches out the potential costs of runaway geoeconomic fragmentation based on available modelling exercises. Finally, the paper discusses the role of central banks and international organizations, as well as possible ways forward as envisioned in various policy discussions on the international fora.

² See e.g., Aiyar et al. (2023), the April and October 2023 Flagship Reports, as well as recent speeches and blogs of IMF management and staff.

³ E.g. Lagarde, 2023.

⁴ E.g. Okonjo-Iweala, 2023.

⁵ See e.g., the US administration on “friend shoring” or “ally shoring” (Yellen, 2022), or the French administration on strategic autonomy (Macron, 2017).

2 Defining geoeconomic fragmentation

Even though geopolitics and economic fragmentation have taken center stage in international policy discussions especially during the past few years, it is important to acknowledge that the developments are part of a longer-term trend that took off around the shallow economic recovery from the Global Financial Crisis (Baldwin 2022, Antràs 2021).⁶ Indications of retrenching globalization can be seen from data: The growth of export flows has not reached similar, sustained strong growth as before the GFC (figure 1). Similarly, the integration of the global financial system that accelerated prior to the GFC, took a sharp reversal after the crisis as cross-border capital flows declined sharply (IMF, 2023b).

Figure 1: **Global export flows.** Source: International Monetary Fund.



Literature finds many possible explanations for these developments. For capital flows, the main reason behind slowing growth has been found to be the need of banks to reduce cross-border lending to rebuild capital buffers after the GFC, as required by stricter regulatory requirements (Lane and Milesi-Ferretti 2018). For trade flows, the changes have been found to be partly due to cyclical, demand related reasons, and partly due to structural

⁶ Naturally, this is not the first time that the global economy and globalization have faced headwinds from economies turning inwards, protectionist policies, and geopolitics. The economic disintegration before World War I and the obliteration of the international economy between the Great Depression and World War II are well documented in economic and political history. See e.g., Conrad and Sachsenmaier (2007) for a good overview.

changes in GVCs. These are mostly related to the structural changes in the Chinese economy. (Constantinescu et al. 2020) Given China's size and role in international trade, it seems intuitive that the fast growth of international trade during late 1990's and up to the GFC was largely explained by China's integration to the global economy. Further, the slowdown of growth in trade could be explained by a large share of GVCs having moved inside China. This would reduce the number of times intermediate inputs cross borders and thus slow the growth of aggregate trade, even keeping the global appetite for internationally traded goods equal. Moreover, given that the trends during 1980's and early 1990's look very similar to the ones witnessed after 2010's, it could be that the fast growth of cross-border activity during late 1990's and up to the GFC were an anomaly caused by China's global integration. Maybe similar growth will only be possible if a structural change akin to China's global integration would happen – and this may be wholly unrealistic.

However, the GFC was also followed by an era of prolonged slowdown in the pace of trade reforms and weakening political support for open trade amid rising geopolitical tensions stoked by the growing strategic rivalry between US and China (Woods 2021), as well as Russia's hybrid war against the West (Snyder 2018). This coincided with the growing debate on the value of multilateralism and the unequal benefits of globalization, and inward-looking policies grew in appeal to policymakers (e.g., Pastor and Veronesi 2021, Autor et al. 2020, Rodrik 2018). Thus, it is worthwhile to explore what specific role geopolitics, protectionism and inward-looking policies play in the trends related to globalization.

To better understand the drivers behind the slowdown of economic integration, it is important to pin down the different drivers. However, it should be acknowledged that distinguishing the effects of geoeconomic fragmentation from other changes is not clear-cut. For example, if US consumers start avoiding Chinese products due to the wider geopolitical tensions, changes in consumer preferences and geopolitics would overlap. Thus, it is difficult to disentangle the different effects from the available data and even more difficult to tease out the causalities.

2.1 What do we talk about when we talk about geoeconomic fragmentation?

As discussed above, the trends affecting the development of global trade in goods and services and international capital flows are varied, mixed and difficult to disentangle. To

build some structure around the issue, clarity is needed on how we define the relevant phenomena, i.e., *de-globalization, fragmentation and geoeconomic fragmentation*.

Globalization has an established definition as the increasing of links of economic activity between countries. This means that its opposite, *de-globalization*, is defined as de-linking of trade, finance and other economic flows between countries. De-globalization can be driven by e.g., changes in technology, preferences, regulation, or economic conditions. For example, automatization can make production less dependent on cheap labor in other countries, rising interest rates and more stringent financial conditions can make investing in very long GVCs unattractive, higher fuel costs can reduce the appeal of long-distance freight, and climate considerations may influence the preferences of households. In a de-globalizing world, countries turn inwards and benefits from trade are lost.

Fragmentation is driven by similar factors as de-globalization, but the endpoint is concentration of economic activity within blocs. These blocs could consist of economies that are close to each other geographically (*regionalization*), similar in terms of institutions or regulation, or like-minded in their foreign policy. Fragmentation *per se* is not necessarily related to geopolitics and the forming blocs are not necessarily aligned along geopolitical fault lines, as it can also arise from policies without a geopolitical motivation. Such policies could be related to e.g., macroprudential policy and financial regulation, protecting the environment or fighting climate change, ensuring labor rights, and preventing the use of forced or child labor. For example, in addition to near-shoring due to economic conditions, companies might have incentives to concentrate their GVCs within countries that have similar labor and environmental laws for efficiency gains or corporate responsibility considerations. Similarly, capital flows and banking activities could be concentrated in countries adhering to similar prudential regulations.

Given the increased role of geopolitics and strategic, protectionist policies, it is useful to further disentangle the effects of reversal of economic integration driven by geopolitics from the other trends of de-globalization. Following the IMF⁷, in this paper **Geoeconomic**

⁷ The IMF published a Staff Discussion Note by Aiyar et al. on GEF in January 2023 to serve as an umbrella paper on this multifaceted theme, on which there are a number of research projects in the pipeline. The Staff Discussion Note is available at [Geo-Economic Fragmentation and the Future of Multilateralism \(imf.org\)](https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2023/01/27/Geo-Economic-Fragmentation-and-the-Future-of-Multilateralism-507023). The IMF Flagship Reports, World Economic Outlook and Global Financial Stability Report of April 2023 included analytical chapters on fragmentation in foreign direct investments and financial fragmentation respectively. The World Economic Outlook of October 2023 included an analytical chapter on fragmentation of commodity markets.

Fragmentation (GEF) is defined as a policy-driven reversal of global economic integration, guided by geopolitical motivations and strategic considerations. The motivations behind policies driving GEF are varied, but they include national strategic objectives related to security, autonomy, or strategic economic rivalry. Geopolitical competition and strategic rivalry are at the core of goeconomic fragmentation: In this context countries may have a preference to pursue economic policies that hurt its rivals, even if the policies entail costs to the domestic economy also. It is also important to acknowledge that domestic economic policy objectives and the wider dynamic of national politics have an impact on the geopolitical constellation. This definition of GEF does not include reversals to global economic integration that are driven by autonomous change, such as shifts in technology, demographics, or preferences, nor policies motivated primarily by prudential or environmental concerns and labor or human rights. Examples of goeconomic fragmentation include e.g. the use of economic sanctions, the Brexit vote, and the trade tensions between China and the US.

These concepts are closely intertwined. One can think of de-globalization, fragmentation and goeconomic fragmentation broadly as nested, as in Figure 2. Goeconomic fragmentation is by definition a special case of fragmentation, but de-globalization and fragmentation do not necessarily overlap completely. There could be a case where fragmentation leads to delinking of economic activity *between different blocs* (i.e. de-globalization), but an increase in net cross-border economic activity (i.e. globalization), if the economic links *within blocs* increase more than to compensate the loss of cross-border links between blocs.

The main causes of GEF are rooted in geopolitics and the economy, and uncertainty of both geopolitics and economic policy has heightened concurrently (figure 3). The change from a post-cold war, unipolar world to a multipolar one has not occurred without complications⁸. Recent years have seen heightened geopolitical tensions, reflected in increased disagreement in votes related to foreign policy issues in the United Nations especially between the US and China⁹, growing incidence of geopolitical tensions and threats, rising military spending and a growing number of military conflicts¹⁰. The global political and economic landscape has in recent years been dominated by the rising *strategic rivalry* between

⁸ For an overview of this development, see Layne, 2012.

⁹ Based on an index measuring the ideal point distance between the US and China on voting patterns in the UN General Assembly on votes related to foreign policy based on Håge (2011).

¹⁰ See Uppsala Conflict Data Program.

the US and China, whereby China seeks to increase its influence and the US attempts to contain China's ambitions (Woods 2021). Geopolitical uncertainty has negative economic implications: Heightened geopolitical uncertainty has been found to lead to lower investment, stock prices and employment, as well as higher probability of economic crises with larger downside risks to the global economy (Caldara and Iacoviello 2022).

Figure 2. The relationship between de-globalization, fragmentation and geoeconomic fragmentation.

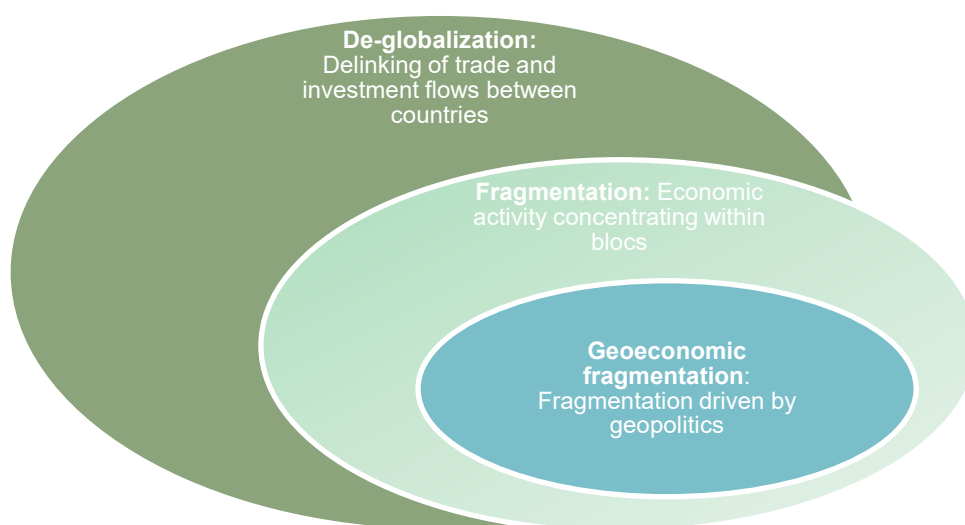
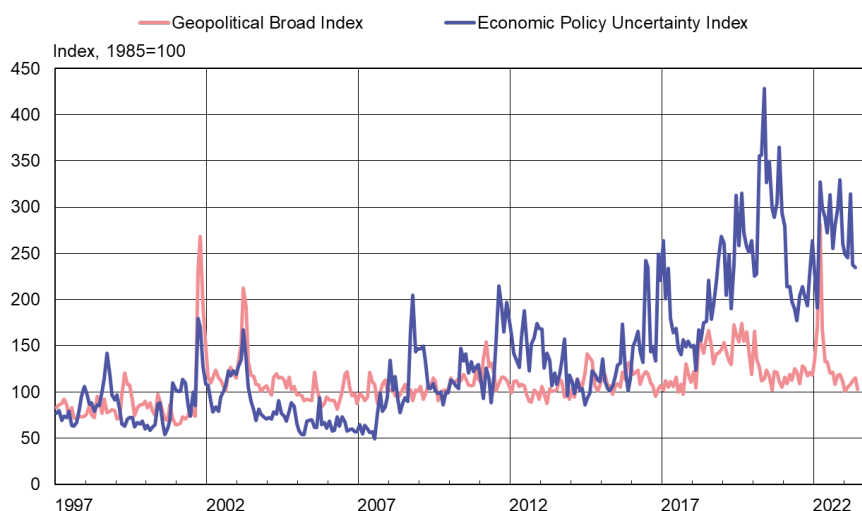


Figure 3: Geopolitical risks and trade policy uncertainty. 1985 = 100. Sources: Geopolitical Risk Index, Trade Policy Uncertainty Index.



The effects run also vice versa from the economy to geopolitics. The benefits from globalization have not been distributed evenly: The dislocations from trade and technological change have harmed some communities disproportionately, which has led to declining public support for economic openness in several countries, a rise in political populism and a temptation to resort in inward looking policies. These developments have been exacerbated by increasing inequality and clash of values, as well as the politics of grudge and ethnic tensions stoked by Russia's hybrid war on the West¹¹. The uneven recovery from the GFC exacerbated this trend and has played its part in the rise of political populism and trade tensions. The votes for UK to leave the European Union and for Donald Trump as the president of United States can be considered manifestations of these trends. The COVID-19 pandemic and the ensued restrictions of trade in health-related goods and bans on free movement of people harmed trust in the benefits of an open trade system. This failure of global coordination was disappointing especially from the viewpoint of EMDEs. The unequal scarring from the COVID-19 pandemic and the fallout from Russia's invasion of Ukraine have again flared up debates about the future of globalization, GVCs, and reducing interdependence between countries that do not share the same values, are considered rivals or even outright enemies.

2.2 The first signs of geoeconomic fragmentation

We are witnessing the first effects of geopolitical factors influencing the global economy and financial system, and these early signs of geoeconomic fragmentation predate the COVID-19 pandemic. Economic sanctions imposed on rogue regimes, such as Syria or Russia already in 2014 after the invasion of Crimea, the vote for UK to leave the EU in 2016, and the US-China trade war are all early examples of how geopolitics can drive fragmentation. Brexit, the US-China trade war and other geoeconomic tensions have led to a surge in global trade policy uncertainty and a paralysis of the multilateral trade dispute mechanisms.

For the moment the emerging empirical evidence still points to only marginal changes in international trading patterns and of cross-border trade fragmenting along geopolitical fault lines. The WTO (2023a, 2023b) finds recent data suggesting that trade patterns may be reorienting and trade shares shifting along geopolitical lines, but the changes could also be related to other factors, such as a reversion to pre-pandemic trends. Kaarevirta, Kerola

¹¹ See e.g. Snyder (2018).

and Nuutilainen (2023) look for signs of fragmentation in trade and investment patterns between the major trading countries and groups of countries, concluding that for the moment only the bilateral flows between China and the US show some damage. Of wider fragmentation or of the world splitting into competing blocs there is still little to no indication. In a similar vein, the findings of Qui et al. (2023) show that whereas GVCs have lengthened, and trade shifted especially between China and the US, there are no signs of reversal of regional integration. Moreover, as pointed out by WTO (2023b), the share of intermediate goods in world merchandise trade shows only a marginal shift downwards (figure 4). Cevik (2023) finds that when extreme outliers are removed from samples, the effects become statistically insignificant and economically marginal. Thus one could conclude that even if there could be some changes in trade patterns, bilateral flows and trading shares, there seems to be no indication of globalization in reverse in general.

However, the headwinds are growing stronger. The number of new trade and investment restrictions started to increase in late 2010s (figure 5), and such increases in barriers to trade are bound to have real economic effects at some point. E.g. Estefania-Flores et al. (2022) show that trade restrictions harm economic growth and lead to output losses using a dataset of aggregate trade restrictions. Text mining analysis of earnings reports of firms shows increased corporate talk about reshoring, onshoring and nearshoring, notably after the flare-up of US-China trade tensions (Aiyar et al. 2023). This has been accompanied by political demands for “friend-shoring” especially in the US. The increase in trade barriers has been especially notable in high-tech sectors that are most likely linked to national security or strategic competition (Aiyar et al. 2023). Fragmentation is also starting to show up in commodity markets: Alvarez et al. (2023) find that dispersion in commodity prices has increased sharply across regions, and the authors attribute this to GEF. They warn of serious macroeconomic risks from increased price volatility especially to the green transition, should GEF constrain the flow of commodities across markets. There is also preliminary evidence that geopolitical distance, measured as the difference between voting patterns in the UN General Assembly on votes related to foreign policy, already has a significant and an increasing effect on greenfield FDI (IMF 2023a), which will eventually change the geography of global value chains. The October 2023 World Economic Outlook of the IMF (IMF 2023c) puts emphasis on GEF as one of the main forces holding back the recovery of the global economy.

Figure 4: **The share of intermediate goods in world merchandise trade excluding fuels.**
Source: World Trade Organization.

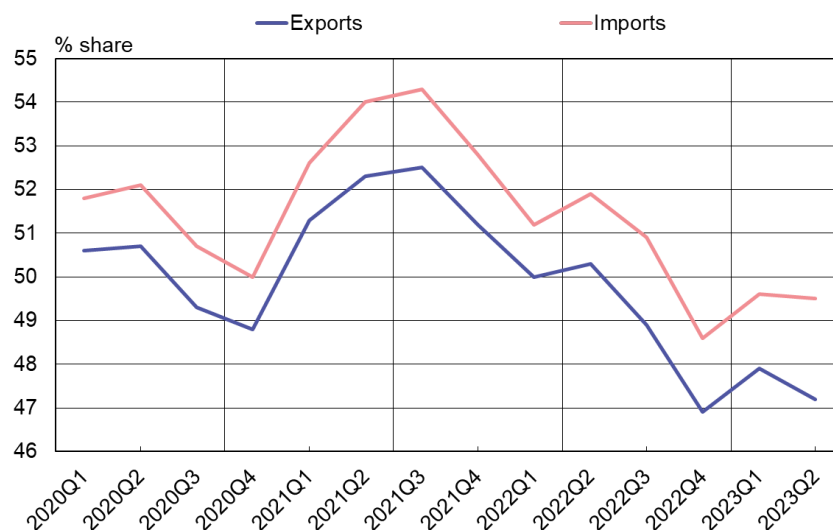
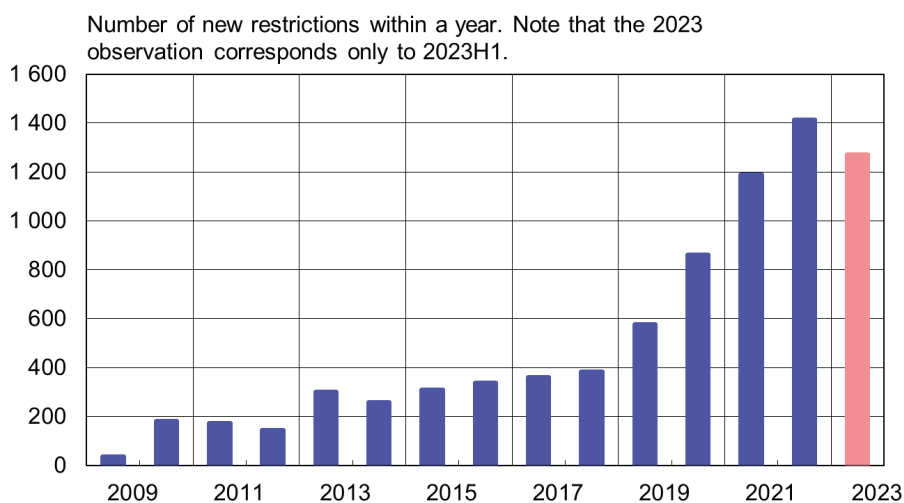


Figure 5: **Number of trade restrictions imposed.** Sources: Global Trade Alert.



Similarly, capital account liberalization has stalled in recent years (figure 5). Crucially, restrictions have been imposed across different countries: for major EMEs, the share of countries with high levels of capital controls has increased, and the share of AEs with low level of capital controls has decreased over the past 20 years (figure 6). Many of these restrictions have a clear geopolitical dimension: National security concerns have increasingly been given as a motivation for restrictions for capital flows after 2015 in IMF surveys tracking the exchange rate and trade regimes of member countries (Aiyar et al. 2023). Restrictions of foreign direct investment based on national security grounds have also

proliferated and are likely to result in a permanent change in how foreign investors are treated (Evenett 2021). As an ultimate example of cutting financial ties due to geopolitics, the sanctions imposed on Russia have sharply reduced cross-border banking and portfolio flows to Russia. Moreover, those countries that rejected the motion in the United Nations in March 2022 to condemn Russia's invasion of Ukraine and have subsequently been seen as aligned with Russia have seen sharp reductions in capital flows. (IMF 2023b) This could be interpreted as investors having taken precautions to contain geopolitical risks. The authors of this analysis argue that geopolitical differences seem to already have a significant role also on the movement of capital across borders, as capital flows and banking asset allocations are lower between country pairs with geopolitical misalignment (IMF 2023b). This could also be driven by banks not eager to set up offices in certain countries or by investors avoiding investing into markets they are unfamiliar with – but then again, the preferences of banks and investors can also be influenced by geopolitics.

The latest adverse geopolitical developments point to further headwinds for global economic and financial integration. Russia's full-scale invasion of Ukraine is the latest stage of a long brewing conflict between Russia and the West. Russia's attempt to blackmail the EU with disrupting energy supplies even before its invasion of Ukraine drove up energy prices already in end-2021, strengthening the resolve of Europe to wean itself off Russian energy supply and cut other economic ties. Sanctions imposed by the West to restrict Russia's ability to continue its war have disrupted trade and cut Russia's financial sector largely off from the global financial system. The war in Europe and China's unwillingness to distance itself politically from Russia's actions have further shifted the balance of trade policy and economic conditions from optimizing efficiency to ensuring resilience and security. Many countries are grappling with the realization that they may be extremely vulnerable to geopolitical pressures due to dependency on only one or few countries for providing critical materials and inputs. This entanglement of economic interests of countries geopolitically non-aligned can have complicated consequences and reducing these dependencies can be very costly. For example, US is utterly dependent on imports for many critical minerals¹², as is Europe for rare earth supplies from China¹³. Semiconductors, arguably one of the most critical of intermediate goods, are mostly produced in the geopolitical hotspot of Taiwan. These critical nodes of vulnerability in GVCs have led many governments to introduce

¹² United States Department of the Interior (2022), "United States Geological Survey: Mineral Commodity Summaries 2022", p. 5.

¹³ European Parliamentary Research Service (2022), "Securing the EU's supply of critical raw materials", July.

legislation with the aim to increase supply security. It is thus very likely that we have not seen the full effect of geopolitics on the global economy.

Figure 6: **Development of average degree of capital account openness for different country groups.** The index ranges from 0 to 1, where 0 implies fully closed capital account and 1 fully open capital account. Source: Chinn and Ito, 2006, 2022 update.

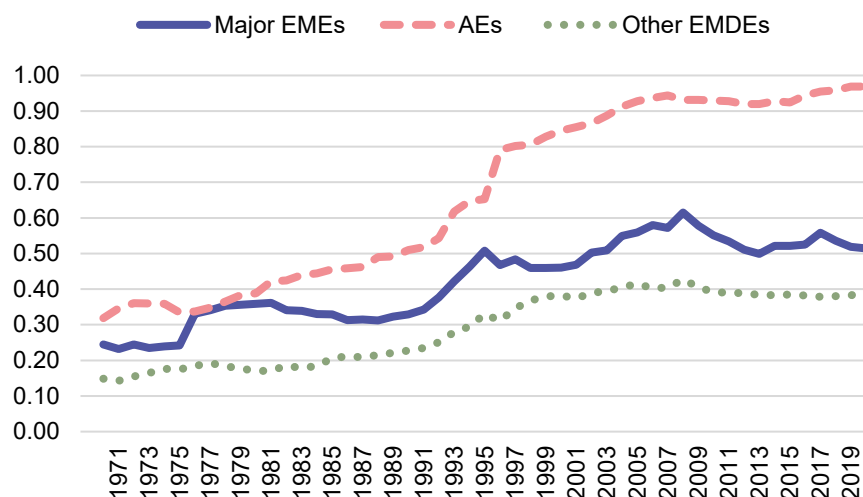
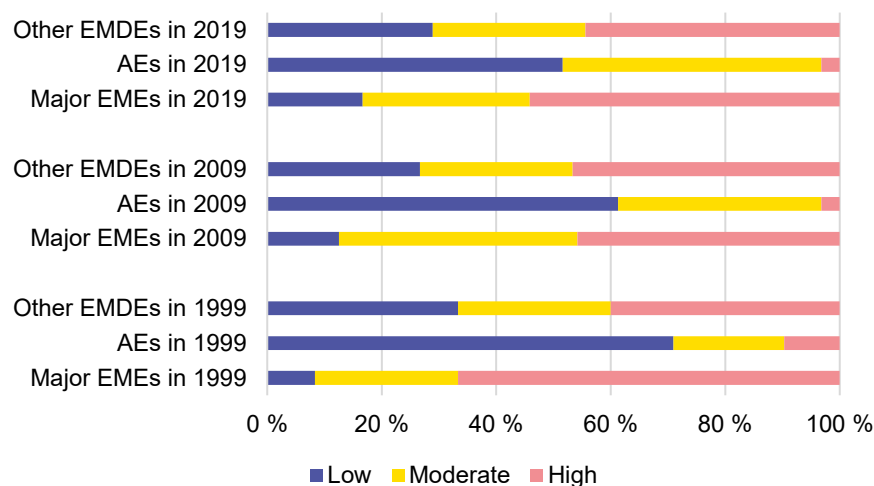


Figure 7: **Share of different country groups that had low, moderate, or high levels of capital flow restrictions in 1999, 2009 and 2019.** “Low” implies an index value lower than 0,15, “High” a value higher than 0,6. Source: Fernández et al. 2016, 2021 update.



3 Implications of geoeconomic fragmentation

The consequences and costs of GEF will propagate via all the channels whereby countries engage with each other economically and through which the benefits of globalization have propagated. These channels of effect can be classified into those related to the global economy, the International Monetary System (IMS), and provision of global public goods, visualized in Figure 9.¹⁴ GEF of the **global economy** could lead to less open and free international trade, restrictions to labor mobility, curbs to diffusion of technology and more fragmented foreign direct investment (FDI)¹⁵. In the **International Monetary System**, the effects of GEF would be seen in more fragmented capital flows, payment systems and reserve currency configuration. Preventing, mitigating and resolution of crises would be complicated, and the functioning of the Global Financial Safety Net (GFSN) compromised. Finally, GEF would complicate the provision of global public goods, global challenges expanding outside the realms of economy and financial system, such as climate change and prevention of humanitarian crises. These channels of effect are discussed in detail in this section, as well as the potential costs from GEF.

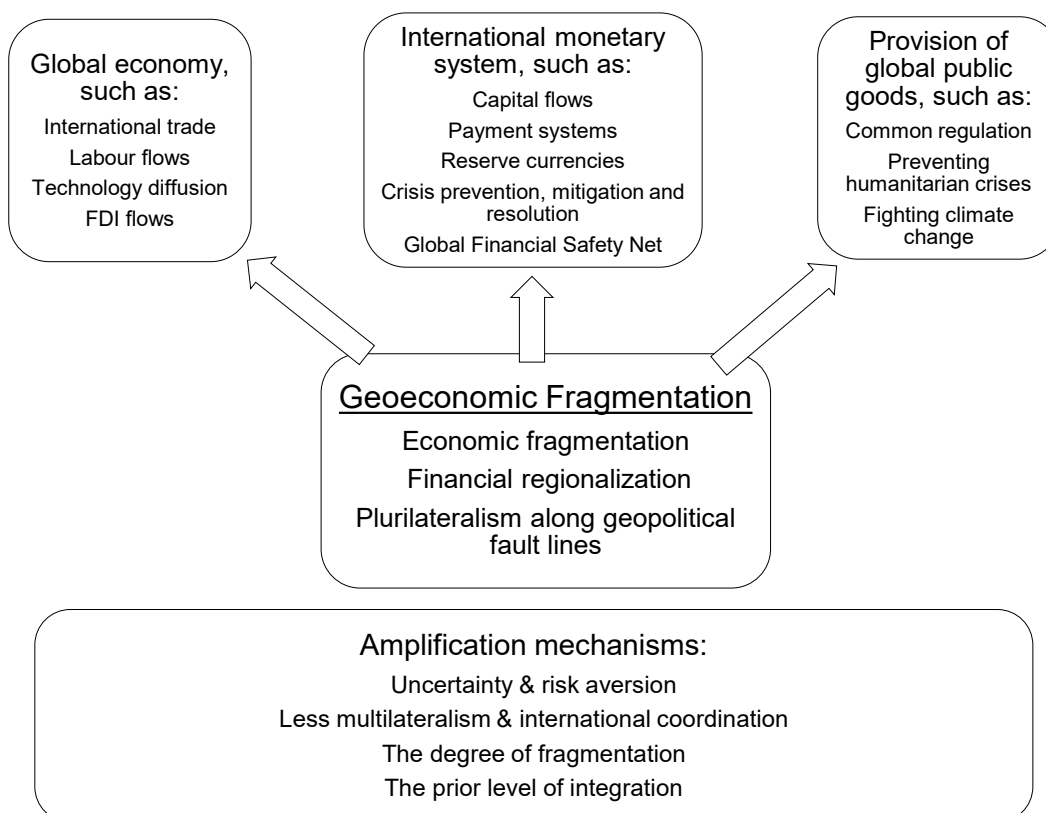
It is important to note that these channels of effect are likely to be in interaction and mutually reinforcing: A strong relationship between cross-border financial and trade linkages is well-established in the literature (Cavallo and Frankel 2008). Geopolitical tensions leading to restrictions on international trade and technology transfers would lead to disruptions in GVCs and commodity markets, which would in turn adversely affect financial conditions of corporates and generate credit risks, thus compromising financial stability. On the other hand, restrictions on capital flows and payments would clearly complicate the functioning of GVCs. Adverse feedback loops could easily arise as reduced economic linkages further discourage cross-border investments, leading to ever less links of trade and capital

¹⁴ The classification used here builds on that of Aiyar et al. (2023), but with modifications. I develop the IMF analysis by identifying further channels of effect and more importantly by differentiating between channels of effect and *amplification mechanisms*.

¹⁵ FDI flows, being part of capital flows, could also be classified under the International Monetary System. However, given the close connection between FDI, international trade, and technology diffusion, as well as the fact that FDI flows tend to behave quite differently from the more volatile portfolio and other capital flows, FDI is considered under the global economy.

between geopolitically distant countries. Further, more complicated and difficult provision of global public goods would exacerbate fragmentation of the global economy and the International Monetary System.

Figure 8: The channels of effect of goeconomic fragmentation and amplification mechanisms.



In addition to the distinct channels of effect, several cross-cutting **amplification mechanisms** of the effects of GEF can be identified. These mechanisms, listed in Figure 8, affect all the different channels of effect. They are different from the channels of effect because their tangible implications depend on interacting with the channels of effect. **Uncertainty** along the economic, policy and geopolitical dimensions is likely to reduce all types of cross-border flows, be it trade, capital, labor, or technology, make international financial system more prone to instability, and make the future of multilateralism more fraught complicating the provision of global public goods.¹⁶ The degree of uncertainty would depend on how

¹⁶ Note that Aiyar et al. (2023) classifies uncertainty as a separate channel of effect, but I argue that uncertainty should rather be seen as an amplification mechanism. In another conceptual framework on the channels of effect

protracted or disruptive the transition into a more fragmented global order would be. **Less multilateralism and international cooperation** will make agreeing on policies that benefit all participants more difficult and thus increase the depth of economic fragmentation and financial regionalization, as well as make the provision of global public goods more complicated. The higher **the degree of fragmentation** and wider its scope, the larger the costs from GEF: Partial fragmentation restricted to strategic sectors would undoubtedly be less harmful than attempts at full decoupling between geopolitical blocs. GEF will also entail more costs when **the prior level of integration** is high, with the difficulties of post-Brexit UK a case in point.

Finally, the effects of GEF to each country are likely to be highly dependent on **country characteristics**. These include factors such as the structure of the economy, openness to trade, place in GVCs, financial interconnectedness, level of development of domestic financial markets, and the size of external buffers. The effects are thus likely highly asymmetric between different economies. However, the costs of GEF are likely to be so large that any strategic advantage gained by individual countries in, say, supply of critical commodities or intermediate goods, would be outweighed by the costs accruing via the other channels of effect.

Given that geoeconomic fragmentation would compromise both price stability and financial stability, **central banks** have a clear role to play in containing the effects of fragmentation. Central banks should continue to work towards ensuring both price and financial stability but factoring in the implications of geoeconomic fragmentation into their decision making. The IMF (2023b) underlines the need for increased awareness of the potential risks and urges policy makers to dedicate resources for identifying, quantifying, managing, and mitigating the risks related to geopolitics.

3.1 Fragmentation will test the resilience of the global economy

The world is more interconnected than ever: The economic linkages between countries are highly complex with cross-border movement of goods, information, capital, and people.

focusing more on the effects of geopolitics on financial stability sketched in IMF (2023b) uncertainty and risk aversion are thought as an indirect channel of effect working together with a direct channel of restrictions.

This has made the world economy more prosperous, efficient, and resilient, as countries have had the opportunity to diversify their supply networks. Geoeconomic fragmentation would reverse all these gains, if it leads to less diversified GVCs, more protectionist trade policies and controls on flows of goods, information, capital, and people.

3.1.1 The benefits from free and open trade in jeopardy

It is well-established by academic literature that international trade has many advantages to the global economy. Even if global gains from trade have often been unevenly distributed among communities and workers with different levels of human capital, opening of international trade has been a powerful engine of economic growth and new innovations (e.g. Melitz and Redding 2021, Feyrer, 2021, 2019, Sachs and Warner 1995). Most importantly, international trade has benefited EMDEs and LICs by promoting catch-up in productivity, technology, and incomes (e.g., Acemoglu et al. 2015, Rodrik 2007, Frankel and Romer 1999, Dornbusch 1992). This has spurred an immense reduction in poverty and helped in closing development gaps (e.g., Dollar and Kraay 2004, 2002, Bhagwati and Srinivasan, 2002, Dollar 1992). In AEs international trade has reduced prices and helped especially low-income consumers (Jaravel and Sager 2019, Fajgelbaum and Khandelwal 2016).

GEF is likely to slow or reverse all these developments. Caldara et al. (2023) use data since 1900 and find that rising geopolitical tensions and risks lead to falling international trade, higher inflation, and lower economic activity. Similarly, the deepening geopolitical crisis between Russia and Europe dislocated global energy markets, leading to steep rises in energy prices, extreme volatility, and fears of energy shortages. Would “friend-shoring” provide insurance against such risks? Javorcik et al. (2022) find that although friend-shoring could be used to provide insurance against risks in the supply of critical input, the economic costs would be very high: up to 4.6 % of global GDP. The multiplied trade restrictions (see figure 6) have already raised consumer prices, reduced potential growth, employment, and efficiency. Empirical evidence suggests that the increased tariffs related to the 2018-2019 US-China trade dispute were passed on to domestic consumers and importers in their entirety (Cavallo et al. 2021, Fajgelbaum et al. 2020, Amiti et al. 2019). Research also finds that the trade war has dampened US export growth (Handley et al. 2020) and lowered employment (Flaaen and Pierce 2019).

The high level of internationalization of supply chains via outsourcing of manufacturing and to a lesser extent services has led to very complex and specialized GVCs. This has

increased efficiency gains, but it has also led to concentrated production of certain critical commodities and intermediate goods. The COVID-19-pandemic showed that the system of GVCs and financing networks build over decades on economic integration that seemed to work almost seamlessly under benign global conditions was susceptible to disruptions from heightened uncertainty. Concentration of critical nodes in GVCs has become a source of fragility, as their vulnerability to market power, logistical risks, and geopolitical disruptions has increased.¹⁷ There is anecdotal evidence of companies putting more emphasis on the resilience of their supply chains. E.g., according to analysis of language used in company earning calls and annual reports, companies are increasingly considering shorter GVCs via reshoring, onshoring or nearshoring (Ayar et al. 2023). While some considerations are driven by economic, logistical and efficiency considerations, government policies influenced by geopolitics will impact these decisions.¹⁸

It should be acknowledged that some changes in GVCs could be warranted to increase resilience: A situation akin to the dependence of Europe on cheap imports of Russian energy should be avoided in the future. In so far as the reconfiguration of GVCs would mean reducing the dependency of countries from too concentrated GVCs, developments related to GEF can increase the resilience of the global economy. However, it is important to ensure that de-risking of certain nodes of GVCs does not lead to new dependencies. Simply bringing production closer to customers does not ensure resilience of GVCs. Rather, the key to resilience lies in making GVCs more diversified and agile, thus resilient to disruptions at some corner of the network¹⁹. Even as protectionist measures are argued for as increasing supply security via diversification, strengthening domestic security and maintaining technological advantage, analysis suggests that geopolitically fragmented GVCs would reduce economic activity (Caldara et al. 2023), increase the level of consumer prices (Attinasi et al. 2023) as well as reduce diversification and make countries more vulnerable to macroeconomic shocks (IMF, 2022). We should be mindful not to confuse ensuring resilience, i.e., the ability to bounce back from shocks, with striving for seemingly robust solutions that are in fact too rigid to sustain or rebound from unexpected events.

¹⁷ See e.g. Leruth et al. 2022 for the case of minerals critical for the green transition.

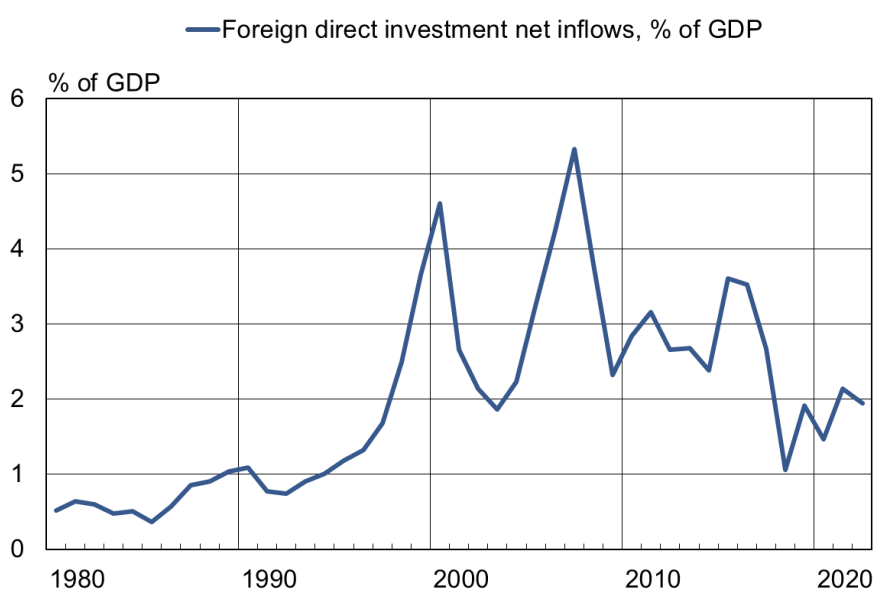
¹⁸ E.g., the US "Inflation Reduction Act" (2022), the European "Chips Act" (2022) and "Made in China 2025" (2015) all contain provisions of support to domestic production to the detriment of foreign competition.

¹⁹ See e.g. Bacchetta et al. (2021), Dadush (2022) and other analysis by the WTO.

3.1.2 The geography of foreign direct investments changing

Foreign direct investment (FDI) as a share of GDP has decreased sharply from its peak just around the global financial crisis, clearly visible in Figure 10. FDI is the less fickle type of cross-border investment as FDI is a means to establish a stable and long-lasting relationship between the recipient and the source country. As FDI is closely related to the topography of GVCs, changes in FDI can be interpreted as an early indicator of more long-term structural changes in trade relationships. FDI is also an important source of technology and knowledge diffusion, as the establishment of a subsidiary in a recipient country usually involves technology transfers from the source country. EMDEs in particular have benefited from FDI enhancing economic growth and technology catch-up (Kose et al. 2009, Javorcik 2004). However, as geopolitical tensions have heightened, this has also given rise to worries of critical technologies ending in the hands of competitors, rivals or even enemies. Indeed, restrictions on FDI motivated by national security considerations have increased markedly (Evenett 2021). FDI is thus one of the most critical channels of effect via which the ramifications of GEF could create global spillovers. To look for the early signs of geoeconomic fragmentation in international trade, it is useful to discern whether there is indication of greenfield FDI fragmenting along geopolitical fault lines.

Figure 9: Global foreign direct investment net inflows as a percentage share GDP. Source: World Bank.



There are indicative early signs of fragmentation in the data. Detailed data on greenfield FDI used by IMF in recent analysis (IMF 2023b) shows that FDI flows to different regions are diverging and China is losing market share. As the effects are clearer in strategic sectors as a whole and in particularly contested sectors as the semiconductor sector²⁰, the IMF argues that this is an indication of geoeconomic fragmentation in FDI. These observations should still be considered preliminary, and one shouldn't read too much into data from only the past few years coinciding with China having been mostly closed due to the COVID-19 pandemic. It will be interesting to see whether the fall in FDI to China is due to firms diverting their investments elsewhere or delaying their investments into an economy in practice closed for international business.

However, IMF presents more evidence in support of its argument that fragmentation in FDI is beginning to have effect (IMF 2023b). First, using the UN General Assembly voting patterns as an indicator of geopolitical alignment and a gravity equation model, FDI is shown to having become more responsive to geopolitical factors since the GFC. The analysis finds that both geographical and geopolitical closeness affect FDI flows, meaning that in addition to the familiar home and closeness biases, investors are also prone to a surprisingly large geopolitical bias. Interestingly, the importance of both geopolitical and geographical closeness has increased over the last decade, but the importance of geopolitical closeness much more so. Geographical distance playing a larger role in FDI flows can be interpreted as the effect of nearshoring, but the effect of geopolitical alignment has risen much more. This can be interpreted as the effect of geoeconomic fragmentation. Analysis further suggests that the effect of geopolitical alignment is larger for EMDEs than AEs, for strategic sectors and post the flare-up of China-US trade tensions.

3.1.3 Technological diffusion and movement of labor

Another well-established empirical fact is that global **diffusion of technology** has improved technology adaption and knowledge transfers, enhanced the skill base of the workforce, and created innovation spillovers.²¹ Strategic competition between countries and skepticism towards knowledge sharing is making this increasingly difficult, diminishing the economic benefits from technological diffusion. GEF is likely to reduce FDI flows, create market distortions from strategic subsidies, and reduce data and technology sharing, thus

²⁰ See figure 4.4. in World Economic Outlook, April 2023, Chapter 4.

²¹ See Aiyar et al. (2023) for a good overview of literature.

resulting in curbed productivity growth. The US restrictions of sales to and development of certain high-tech goods in China, which are motivated by national security considerations, are the most poignant example of such technological fragmentation. Given the high degree of technological integration between the US and China, the costs of a high-tech decoupling between the two countries would be very large and have global implications. As with trade fragmentation, the costs of technological fragmentation are most likely the steepest for the less developed countries, which have benefited the most from technological diffusion.

Finally, restrictions to **labor flows** would have large negative implications for the global economy. Barriers to migration could reduce knowledge diffusion, risk-sharing and efficient division of labor. Many AEs with their rapidly aging populations would struggle with unfavorable demographic trends, whereas origin countries would be deprived of the opportunities related to migration and of remittance flows, an important source of income stabilization.²²

3.2 A fragmented, less safe global financial system

GEF of the global financial system, international financial markets, and the International Monetary System (IMS) could have profound implications for global financial stability. These implications could include higher macroeconomic volatility, reversal of capital flows, more severe crises, greater pressures on national reserve buffers, less efficient payment systems, and widening of the current weaknesses. Geopolitical tensions can lead to a fragmented global financial system via outright restrictions on flows and payments, but here uncertainty and risk aversion play a very important role as amplification mechanisms. These effects could be even stronger than on the side of the real economy because of the relative speed at which capital flows can be reversed and banking relationship severed.

3.2.1 Capital flows and international risk sharing

Cross-border capital flows would likely be one of the first forms of economic interaction to be affected by GEF with profound implications for international risk sharing. There are some indicative signs in capital flows that could be related to fragmentation already happening in capital flows: IMF (2023b) notes that cross-border bilateral financial linkages have weakened in recent years as major advanced economies and emerging economies have

²² See Box 3.1 in IMF (2023b) for an interesting case study on the effects of GEF on remittances.

concentrated their international finance exposure increasingly to fewer partner countries. Focusing more precisely on the effects of geopolitics, the analysis also suggests that geopolitical divergence between an investing and recipient country can have a very large effect on bilateral cross-border portfolio and banking asset allocation. The effect is far from negligible: One standard deviation increase in diverging voting behavior at the UN general assembly could reduce allocation by about 15 percent. That is, in addition to the well-known home and closeness biases, investors appear to also suffer from a geopolitical bias. However, further analysis of the underlying drivers is needed, as well as controlling for e.g., the relatively closed capital accounts of EMEs and LICs.

GEF could have profound effects on how capital is allocated across countries. Rising restrictions on foreign investments would directly limit the flow of capital, but uncertainty and growing aversion of geopolitical risks would also have a strong effect. Geoeconomic fragmentation could lead to **reversals of cross-border capital flows**, if major partner countries would impose restrictions on capital flows and cross-border investments, or if rising geopolitical tensions frighten investors. In the case of abrupt changes or spikes in geopolitical tensions, large capital flow reversals could be triggered. Analysis of bilateral cross-border investments suggests that a one standard deviation increase in geopolitical disagreement between a recipient country and its investor countries could result in capital outflow of almost 3 % of GDP from the recipient country (IMF 2023b). Further, analyzing aggregate capital flows shows that EMDEs would be especially vulnerable to capital outflows triggered by geopolitical disagreement.

The gains of financial integration from **international risk sharing** would be diminished as a less broad range of external financing sources would reduce the possibilities of countries to hedge against idiosyncratic risks. A shift from financial globalization to financial regionalization would make risks within blocs more synchronized and the benefits from diversification smaller. EMDEs would be especially hard hit, as fragmentation could limit the development and deepening of their financial markets., and thereby weaken their shock absorption capacity. Reduced diversification could also increase the volatility of capital flows at least during a transition period. In such a scenario the ability of especially EMDEs to shield their economies from the negative effects of large and volatile capital flows would need to be strengthened. **Regulation and oversight** of the global financial system would become more difficult, contributing to regulatory arbitrage and weaker financial risk management.

3.2.2 The current weaknesses of the International Monetary System risk worsening

The key structures of the International Monetary System (IMS) comprise the rules and conventions governing monetary and exchange rate arrangements, cross-border payments for current transactions, capital flows and related management measures, international reserves, and the various layers of the Global Financial Safety Net (GFSN). A stable IMS is at the core of ensuring global economic stability and growth, but it may break down if large structural shifts reconfigure the world economy (Aiyar et al. 2023). The current weaknesses of the IMS (as discussed in IMF 2016a and 2016b) would risk widening and the IMS would struggle to function efficiently with a high degree of geoeconomic fragmentation. As pointed out by e.g. Perez-Saiz et al. (2023), a fragmented IMS may not be likely in the short or medium term, but the impact of geopolitical developments and rapidly developing new technologies related to digital money is difficult to assess in the longer term.

The established international financial infrastructure and standards are built around the US dollar as the dominant international currency accompanied by a handful of other Western currencies and supported by Western payments infrastructures. Drastic changes in the patterns of trade could mean large structural changes for **the global payment system**. These could arise from redenomination of trade and financial operations in other currencies. Both China and Russia have set up their own alternatives for SWIFT. Both projects have a geopolitical tinge to them, which has been emphasized after the increasing use of SWIFT as a tool for sanctions (Nölke 2022). The exclusion of key Russian banks from using SWIFT may lead other countries with geopolitical disagreement with the West to try to become less reliant on the established international financial infrastructure. The rise of such parallel payment systems lacking inter-operability would lead to higher transaction costs and inefficiencies. However, over 90 % of cross-border transactions are still made using SWIFT, meaning that should there be significant changes happening, they are slow to come.

Changes in the **global reserve currency configuration** are driven by shifts in the patterns of trade, finance, and global value chains, as well as geopolitics. All these will affect the transactional demand and invoicing in different currencies. There is evidence showing that reserve holdings are closely correlated with bilateral trade: Eichengreen et al. (2022) find a strong correlation between bilateral trade with China and a country's renminbi holdings. Further, reserve holdings are shaped by geopolitics: Eichengreen et al. (2019) find that

alliances are associated with a 30 %-point increase of the share of a currency in the reserve holdings of the allied partner. Large shifts in the composition of global foreign exchange reserves could result in significant transition risks and financial volatility. Some countries might prefer diversifying away from the traditional reserve currencies of Western countries, but in doing so they would be likely to face higher transaction costs, riskier reserve portfolios and potential difficulties in carrying out central bank operations. Moreover, significant shifts away from the current configuration will not be possible without viable alternatives for the currencies that are currently dominant (Aiyar et al. 2023). Thus, a dramatic reconfiguration of the current reserve currency system is not very likely. Any potential shift would probably be tilted towards gold, whereas the role of digital money in increasing reserve diversification opportunities is still quite limited. However, even if the data currently does not indicate substantial changes in the use of international currencies as reserves, they do suggest that some changes are already happening: Particularly, central bank purchases of gold have increased markedly (Aiyar et al. 2023). Also the use of renminbi as a reserve currency has increased, but it is still quite marginal.

Mechanisms for crisis prevention, mitigation and resolution would be strained in a deeply fragmented world. This could result in more severe and possibly more frequent crises, depending on what shape the cross-border financial linkages take and how well regulation can be adapted. On the other hand, the financial crisis could also become less likely: Less financial integration (Devereux and Yu 2020), the absence of amplification mechanisms of cross-border credit (Laeven and Valencia 2018, Jorda et al. 2017), and less exposure to the global financial cycle (Rey 2015) could all lead to less frequent crises. Further, Aiyar et al. (2023) argue that geoeconomic fragmentation could reduce the number of crises triggered by external shocks as the transmission of monetary and financial shocks between blocs would be reduced. However, the crises would like be more severe due to lower international risk-sharing, higher financing costs and reduced policy coordination. Crisis risk management and resolution would be more challenging without international policy coordination and a more fragmented creditor base, lead to higher burden on domestic policies and higher risk of beggar-thy-neighbor policies.

Finally, GEF would lead to a weaker, under-resourced and more fragmented **Global Financial Safety Net** (GFSN), diminishing its capacity to support crisis countries and complicating the resolution of future sovereign debt crises. The four layers of GFSN – FX reserves, bilateral swap arrangements between central banks, Regional Financing Arrangements, and the IMF – would all be less efficient as a result of geoeconomic fragmentation.

The role of self-insurance and Regional Financial Arrangements would need to grow, resulting in weaker coordination between the different layers of the GFSN. Bilateral swap arrangements between central banks and regional financing arrangements could also be reconfigured along geopolitical blocs. Such pooling of resources within blocs rather than globally could well lead to inadequate supply of liquidity to address large shocks. Central banks play a crucial role in strengthening the Global Financial Safety Net. Swap lines between central banks influence the dynamics of major international currencies (Tucker 2022). They provide offshore liquidity where needed and can also be used to compensate for the lack of liquid financial markets, as the People's Bank of China has done for renminbi (Eichengreen et al. 2022). Further, as pointed out by Lagarde (2023), the future of dominant currencies will also depend on how central banks manage to navigate the digital era of money, payment systems and currencies.

3.3 Provision of global public goods harder

International cooperation is by definition crucial for the successful **provision of global public goods**. Failure to coordinate multilaterally will make the world worse off from any point of view. E.g., implementing universal regulatory practices, sharing scientific discoveries, agreeing on basic human rights and rules of labor, preventing humanitarian catastrophes, containing financial instability, and fighting climate and biodiversity crises will be much more difficult. Failure to work together on solving challenges as critical as climate change and pandemic preparedness would involve substantial costs to humanity.

Many elements of the International Monetary System are global public goods, such as global financial stability, a common regulatory framework, and a stable and well-functioning Global Financial Safety Net. The GFSN plays an important role in supporting countries vulnerable to financial stress and in addressing the external debt problems faced by many, especially low income and vulnerable countries. This requires cooperation among creditors and recognition that failure to cooperate would entail significant losses on both creditor and borrower countries (Gaspar and Pazarbasioglu 2022). Nölke (2022) points out that the use of SWIFT as a means for economic sanctions has undermined its role as global public good and returning this status will require institutional reforms.

The effects of geoeconomic fragmentation could be especially dramatic for the work against climate change and the green transition. The mitigation of and adapting to climate change requires international cooperation to reach such goals as country-level greenhouse

gas reduction commitments and the needed investments for the green transition. Commodity markets could split along geopolitical lines and make it more difficult to source the critical minerals needed for the green transition. These risks could increase the likelihood of a disorderly climate transition that would magnify the risks to financial systems. It also important to note that some national policies intended to hasten the green transition domestically, can feed GEF globally.

3.4 Costs of GEF likely large, but estimates vary

The various channels via which GEF could affect the economy are clearly interconnected, making analyzing and modelling such a multidimensional phenomenon difficult. Costs of GEF are likely to be very large for the global economy in the aggregate, even if some countries may gain strategic advantage in selected cases. The costs would likely accrue via higher import prices, segmented markets, diminished access to technology, less efficient allocation of labor, reduced total productivity, and increased financial instability. Small open economies dependent on open trade, as well as emerging and developing economies would be hardest hit. Based on existing, albeit preliminary findings, GEF will result in ultimately lower living standards. If GEF significantly reduces the ability of the global community to respond to global challenges such as the climate change or a future pandemic, the costs might become existential.

Preliminary quantitative estimates of aggregate output losses from the impact of GEF differ widely: Depending on assumptions on the degree of fragmentation, the costs could vary from negligible to several percents of global output, with some countries facing reductions of more than 10 % to their output. Models also show that the costs of GEF would be distributed very unevenly, with some countries having to sustain considerable larger costs than others. Cerdeiro et al. (2021) use a set of structural models with different levels of fragmentation, finding that output losses range from limited losses up to 8.5% of GDP. Goes and Bekkers (2022) build a multi-sector multi-region general equilibrium model with dynamic sector-specific knowledge diffusion and find output losses of 5 %, but more than 10 % for low-income regions which are most affected by GEF. Bolhuis et al. (2023) employs a multi-country, multi-sector, general-equilibrium model with characteristics of commodities trade taken into account and find output losses of 0.2 % to 6.9 % depending on trade elasticities and fragmentation scenarios. Campos et al. (2023) make use of a measure of aggregate trade restrictions by Estefania-Flores et al. (2022) and find output losses up to 3.4 % for the most affected region. The scope of the estimates is very large, pointing to the

importance of country characteristics, but also to the difficulties of modelling such a complex process. When estimating the costs of GEF, one needs to make assumptions on the depth, degree and scope of fragmentation.

Models indeed suggest that the costs from trade fragmentation become larger, the higher the degree and wider the scope of fragmentation. Campos et al. (2023) consider countries falling into two competing and non-aligned blocs with trade barriers between them and find trade flows falling by 22-57 % in the most extreme scenarios. If countries outside the dominant blocs have to choose a side, fragmentation is aggravated further and the costs are higher (Cerdeiro et al.; 2021, Bolhuis et al.; 2023). If instead it is possible for countries to stay non-aligned and trade freely with countries in different blocs, the costs of GEF remain lower. GEF is also likely to entail more costs when *the prior level of integration* is high. Cutting trade ties between economies that are highly integrated is very difficult, with UK-EU-relations post-Brexit a case in point. Given that the network of linkages across countries has become highly complex, supply chains are highly internationalized, and the production of many critical commodities is very concentrated, the costs of GEF are likely to rise even further. Crucially, the tight and complex trade linkages between AEs and EMEs, especially China, mean that a decoupling between China and the West would be extremely difficult and costly.

With other channels of effect added, the costs would be even larger. Models point out that technological decoupling significantly amplifies losses from trade restrictions, EMEs and LICs likely to suffer most due to loss of knowledge spillovers, and the transition costs likely to be very large. E.g. Goes and Bekkers (2022) and Cerdeiro et al. (2021) find that technological decoupling would have dramatic effects as productivity growth plummets due to decreased access to technologies. The costs could reach 15 % of GDP for some regions, with the poorest countries standing most to lose. Fragmentation of FDI would be especially detrimental to knowledge spillovers and technology diffusion. A simple model-based quantification of the costs of FDI fragmentation (IMF 2023a) divides the world economy into two blocs led by US and China, and a third group of non-aligned countries. The findings suggest that any splintering of the world economy along geopolitical lines would be very costly and lower world output by up to 2 percent. Long-term GDP losses would be largest for the China-led bloc in Asia, due to their reliance on international trade. The EU would also be among the worst hit for the same reason. Even non-alignment would not be enough to neutralize the economic costs if policy uncertainty is factored into the analysis. Indeed, the cross-border spillover effects of goeconomic fragmentation are likely to be large,

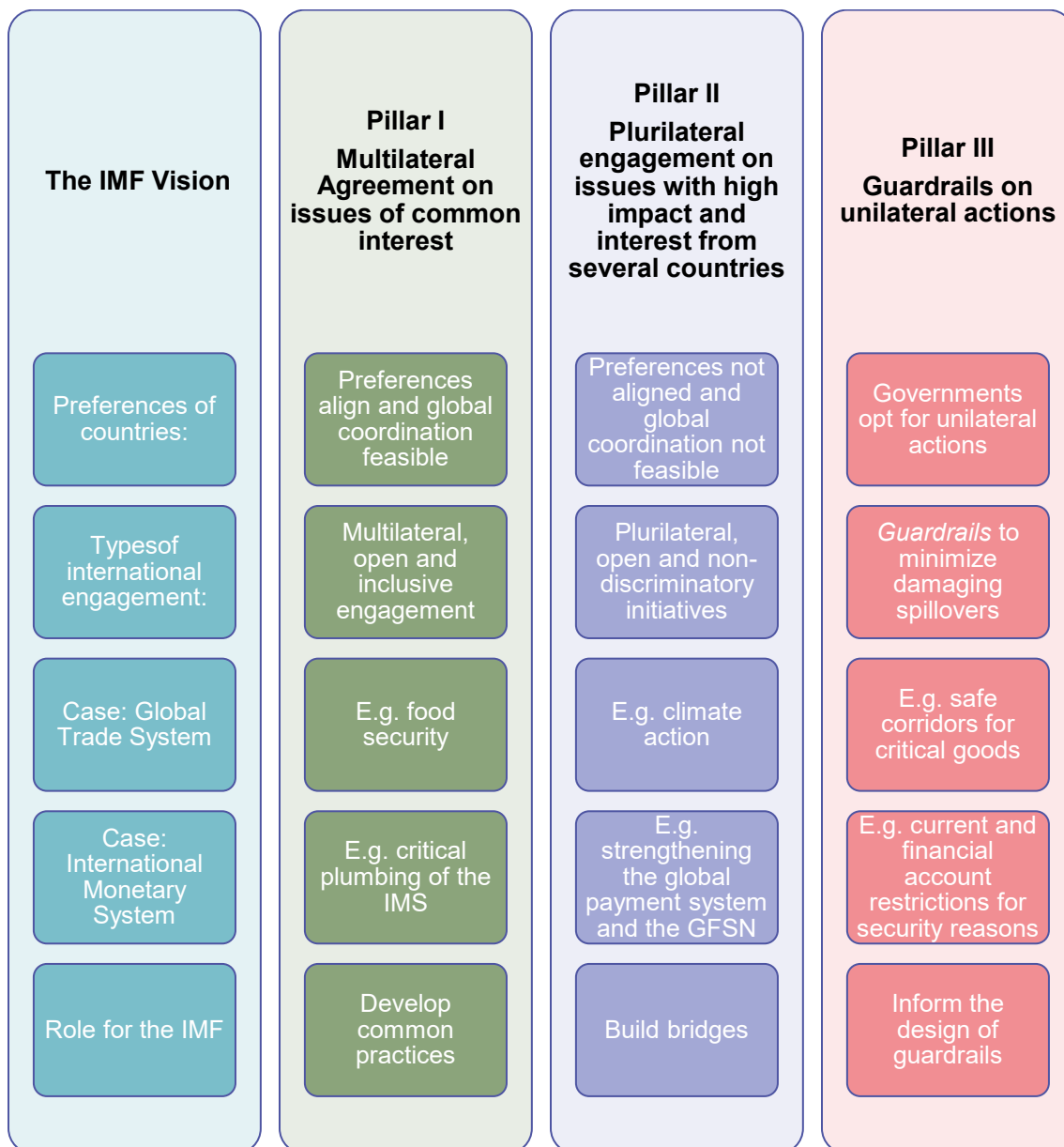
especially when the tensions are between major, globally integrated economies: The macro-financial effects of geopolitical tensions would spill over to other countries not directly involved in the conflicts (Chitu et al. 2022).

4 The future of multilateralism

GEF could constitute a very large challenge for the future of multilateralism, as it pushes countries further away from each other. Further, in an era of strategic competition, the traditional multilateral institutions may risk becoming irrelevant as countries opt for alternative forums and regional multilateralism (Jokela et al. 2023). Overall, it is not clear how the established multilateral institutions can navigate a fragmented world. From the difficulties of the WTO and the paralysis of its Appellate Body to the difficulties of a meaningful governance reform at the IMF, it is clear that the international community is already struggling to find common ground. The **International Monetary Fund** with its global membership has an important role to play in identifying cooperative solutions to promote common interests. The IMF has stressed the need to ensure that cooperation on global public goods, fair competition, and adequate protection of the most vulnerable is still feasible, even if it requires coming up with different layers of engagement when multilateral consensus is not possible. In Aiyar et al. (2023), the IMF sets out a vision for such a multi-layered version of multilateralism (illustrated in figure 10). It stresses pragmatism and focusing on areas where cooperation is essential and delay is not an option, such as strengthening the international trade system, helping vulnerable countries deal with debt and stepping up climate action. The role of the IMF would continue to concentrate on providing surveillance, analytics, and a convening forum for member countries to agree on issues of common interest, to bridge differences over plurilateral initiatives and improve information on unilateral actions. However, advising on e.g. restrictions related to national security concerns would surely prove a very difficult balancing act for the IMF to take. Going forward, legitimacy of the IMF may depend on agreeing on the governance reform and realignment of IMF's quotas. Within the current political environment, realignment of quotas is not feasible, and increasing misalignment between the quota shares of large EMEs and their share of the global GDP is likely to create further tension and risk of irrelevance for the IMF.

The **World Trade Organization** naturally serves as an advocate for open and rules-based international trade, arguing consistently against protectionist measures and restrictions to trade. As the IMF, the WTO has been vocal in debating GEF and warning of its implications. However, with the dispute settlement function paralyzed, all the WTO can do is provide analysis on the effects of GEF and protectionism, as well as arguments for open trade. Substantial reform would be needed to allow the WTO to have real traction, but such reform is also complicated by GEF.

Figure 10: The IMF vision for new multi-layer multilateralism. Source: Aiyar et al. (2023).²³



The difficulties of multilateralism point to long held disagreements between the Global South and Global North. The crises of past years – the Global Financial Crisis, COVID-19 pandemic and Russia’s brutal war of aggression against Ukraine – as well as their

²³ With *guardrails* the Fund means “Multilateral consultations and commonly agreed norms of conduct, such as ex-ante notification of policy intention, an explanation of its rationale and objectives and a discussion of potential cross-border spillovers and how to address them”. (Aiyar et al. 2023)

economic fallout have exacerbated these disparities. The established multilateral organizations, such as the IMF, World Bank and WTO, have all been built in a world dominated by Western powers, who are reluctant to give away their powers to EMEs, that have increased their weight in the world economy. The frustration of EMEs to having representation not aligned with their economic importance is visible in different initiatives of regional multilateralism, such as various new development banks, as well as in the enlargement of the BRICS group. However, even before the enlargement the BRICS countries were not unified enough to punch its weight in the international fora. With an even more diverse group of countries, this is likely to even more difficult. It is one thing to agree that sanctions are not good foreign policy, and the US dollar is too important, quite another to coordinate and build consensus over contentious issues to have any traction on global coordination on economic policy.

For the global community to find a path forward, it is important to acknowledge that the benefits of globalization and multilateralism are worth preserving and that the costs of GEF could be very large, especially for vulnerable countries and households, as well as for small open economies dependent on trade. At the same time, we should acknowledge that to some extent the developments pushing towards geoeconomic fragmentation are rooted in relevant security concerns. It is sensible for policy makers to ensure that their economies are not dependent on the supply of critical inputs from single producers. The case of Europe in 2022 finding itself dependent on one large authoritarian energy producer and the implications of the ensued energy shock should be kept in mind. However, policy makers should be careful that the policies opted with the objective to build resilience really do increase their economies' ability to withstand shocks, not new dependencies. The rules-based multilateral system must adapt to the changing world and find ways to address global threats that require global solutions.

5 Conclusions

This paper has aimed to give an overarching view of the causes, implications, and costs of geoeconomic fragmentation based on discussions and debates at the global economic policy arenas as well as in research. Geoeconomic fragmentation turns out to be a very complex, multidimensional phenomenon that is intertwined with many other developments. This paper aims to show that the preliminary evidence is beginning to pile up. There are potentially profound changes happening in the world economy and the international financial system.

There are a number of important questions still awaiting answers. For example, are we witnessing mainly the reverberates of tensions between US and China, or is there a broader paradigm change afoot? Further, will geoeconomic fragmentation lead to de-globalization or diversion of globalization, i.e., will cross-border economic activity grow slower or even diminish, or is diversion to different countries more likely? If the world economy is fragmented into distinct economic blocs, what will be their composition and dividers? Finally, and perhaps most crucially, how can we say anything definitive about a phenomenon so difficult to disentangle from other developments?

However, analysis and research are paramount to enable discussing and debating these developments. These should continue not least in order to prevent the global community sleepwalking into a fragmented world, not quite knowing how we ended up there. Many of the implications of geoeconomic fragmentation are likely to move slowly and in incremental steps, but they will be very costly and difficult to reverse once momentum has been accrued. The correct time to think about geoeconomic fragmentation and its implications is now – in a fragmented world, we would be too late.

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