Changing Global Linkages: A New Cold War?*

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Abstract

Global linkages are changing amidst elevated geopolitical tensions and a surge in policies directed at increasing supply chain resilience and national security. Using granular bilateral data, we provide new evidence of trade and investment fragmentation along geopolitical lines and compare it to the early years of the Cold War. Gravity model estimates point to significant declines in trade, FDI, and portfolio flows between countries in geopolitically distant blocs since the onset of the war in Ukraine, relative to flows between countries in the same bloc. While the extent of fragmentation is still relatively small, the decoupling between the rival geopolitical blocs during the Cold War suggests it could worsen considerably should geopolitical tensions persist and trade restrictive policies intensify. Different from the early years of the Cold War, a set of nonaligned 'connector' countries are rapidly gaining importance and serving as a bridge between blocs.

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1 Introduction

Over the past decade, the future of global economic integration has been increasingly challenged. Disillusionment with the uneven benefits of trade, fragility of highly specialized global supply chains exposed by the COVID-19 pandemic, and geopolitical frictions heightened by the war in Ukraine are all contributing to rethinking commitments to free trade. New technologies have also triggered a global race to dominate emerging strategic sectors, like artificial intelligence (AI), renewable energy, and biotech. In 2015, the Chinese government announced the 'Made in China 2025' initiative, with the goal of upgrading its manufacturing industry, reducing its reliance on foreign technology, and raising the domestic content of core components and materials. In 2018, the U.S. raised tariffs on a wide range of imports from China. Worldwide, policy measures, which directly or indirectly restrict trade flows, have surged.[1] Yet, despite these changes in the policy environment and public sentiment, there are no significant changes in the extent of globalization, crudely defined as the ratio of global trade to GDP. Since the global financial crisis, when the 2000s hyperglobalization came to an end, the ratio of goods trade to GDP has fluctuated between 41 and 48 percent (Figure 1, Panel A). Foreign direct investment (FDI) has become more subdued: global FDI as a share of GDP declined from around 3.4 before the global financial crisis to 2.5 percent thereafter.[2]

A number of studies have argued that underneath the relatively stable aggregate trends, a redirection of trade and investment flows across countries is taking place, potentially signalling fragmentation (Aiyar *et al.*, 2023a; Alfaro and Chor, 2023; Freund *et al.*, 2024; WTO, 2023). "Geoeconomic fragmentation," referring to policy-induced changes in the sources and destinations of cross-border flows, often guided by strategic considerations, such as national and economic security, may or may not be associated with a decline in world trade relative to GDP. This term, along with "reshoring," "nearshoring" and "friend-shoring," is increasingly mentioned in companies' earnings calls (Figure S1.1, Panel B). And there is by now robust evidence that the trade tensions between the U.S. and China since 2018 have triggered a reallocation of the supply chains that have intertwined the world's two largest economies over the past decades.[3] Alfaro and Chor (2023) and Freund *et al.* (2024) demonstrate that US imports of tariffed products from China have decreased, with low-wage countries linked to China's supply chains and with similar export baskets gaining share in US markets (see also Dang *et al.*, 2023; Utar *et al.*, 2023). However, there is little evidence whether the looming "great reallocation" extends beyond US efforts to de-risk, friendshore and onshore, whether there is broader fragmentation of trade and investment along geopolitical lines, and what its output and welfare costs might be.

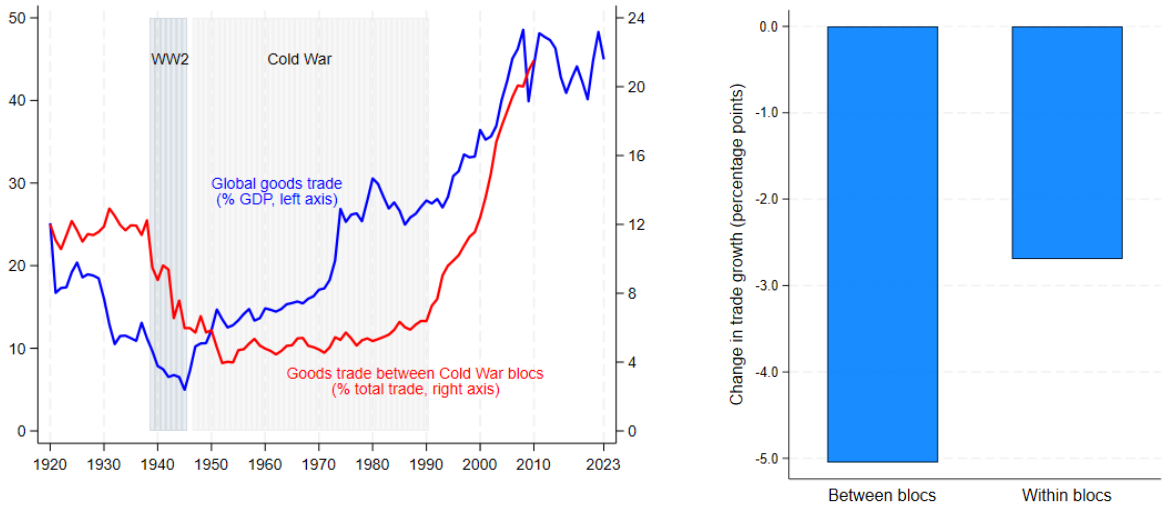
In the absence of a clear theoretical or empirical link between rising geopolitical tensions and

[1] See Figure S1.1, Panel A, in the Annex, and Juhász *et al.* (2024), who argue that the rise in protectionism predates the post-pandemic surge in industrial policies.

[2] For a discussion of deglobalization, see, among others, Antràs (2020) and Goldberg and Reed (2023).

[3] See Fajgelbaum and Khandelwal (2022) and Caliendo and Parro (2023) for a survey of the literature on the economic impacts of the U.S.-China trade frictions and Bown (2021) for a detailed account of its timeline.

Figure 1: Globalization and Trade Fragmentation in the Last Century and Now



(a) Trade between blocs in history

(b) Trade in the current period

Notes: Panel A plots global goods trade as a share of global GDP, and goods trade between blocs of countries as a share of global trade. For the Cold War, a Western and Eastern blocs are defined following Gokmen (2017). Panel B plots the average trade growth during 2022Q2-2024Q1 minus the average trade growth during 2017Q1-2022Q1 within and between blocs. For the current period, bloc definition is based on a hypothetical Western bloc centered around the U.S. and Europe and a hypothetical Eastern bloc centered around China and Russia. Sections 2 and 3 provide further details. Bilateral quarterly growth rates are computed as the difference in log bilateral trade, which are then aggregated using bilateral nominal trade as weights.
Sources: Fouquin and Hugot (2016); CEPII; Gokmen (2017); Jordà-Schularick-Taylor Macrohistory Database; IMF World Economic Outlook; Trade Data Monitor; and authors' calculations.

global trade patterns, we use the change in the share of trade between politically distant groups of countries as a proxy for the extent of geoeconomic fragmentation.[4] In this choice, we are guided by the patterns in global trade observed during the Cold War. The share of trade between the Western-centered and USSR-centered blocs declined sharply during World War II (Figure 1, Panel A).[5] During the Cold War, trade between blocs continued to decline and stayed significantly below trade within blocs until 1990 even though the ratio of global goods trade to GDP increased significantly. Against the backdrop of over a century of data, fragmentation is difficult to detect yet in the aggregate data. Yet, while geopolitical factors have started playing a growing role in driving trade and investment flows since the U.S.-China trade tensions, zooming in on the period after the

[4] There is a sizable literature examining the effects of war and sanctions on trade and investment between countries engaged in conflict or their neighbors (see Glick and Taylor, 2010; Martin, Mayer and Thoenig, 2008, among others). However, how global trade patterns are affected by a rise in geopolitical tension is distinct, and has only recently been tackled by the theoretical literature (Broner *et al.*, 2024; Clayton *et al.*, 2024).

[5] While it is hard to precisely date the beginning of the Cold War, we follow the literature and use the announcement of the *Truman Doctrine* in Congress in March 1947—which established that the U.S. would provide political, military and economic assistance to all democratic nations under authoritarian threats—as its start. Leffler (1984), among others, discusses geopolitical developments at the onset of the Cold War.

onset of the war in Ukraine reveals clear signs of fragmentation. While trade growth has slowed everywhere since the war in Ukraine, growth between more politically distant blocs slowed more (Figure 1, Panel B). Announced FDI projects within a bloc of countries have also become more common, while investments across blocs have fallen sharply.

In this paper, we take these emerging *prima facie* signs of fragmentation as a starting point and uncover a set of novel stylized facts, which, taken together, provide support for the argument that trade, investment, and capital flows may be fragmenting along geopolitical lines. Our focus is the reorientation of trade, financial and capital flows between geopolitical blocs, which may or may not be accompanied by changes in global/aggregate flows. We contrast our findings with the Cold War experience—a notable historical example of geopolitical fragmentation—to put our results in context, speculate about the course of fragmentation should geopolitical tensions and trade policy restrictions continue intensifying, and highlight the role that nonaligned economies could play today—differently from the Cold War—in shaping fragmentation's macroeconomic effects.

First, we find significant reshuffling in countries' sourcing of imports and FDI. Reallocation across import and FDI sources has surged, especially after the onset of the war in Ukraine, reaching levels not seen over the past two decades.

Second, we reveal the cracks that are emerging in cross-border flows by estimating gravity models of trade, investment, and portfolio flows. After accounting for all country-level shocks and time-invariant factors that may shape the extent of trade and investment between country pairs, we document that trade flows and the number of announced FDI projects between a U.S.-centered and a China-centered bloc are, respectively, 11 and 12 percent lower than trade and investment between countries within the same bloc since the war in Ukraine. Consistent with these results, the shares of portfolio holdings between blocs also declined by 0.5 percentage point more than those within blocs after the Russian invasion of Ukraine. The shortfall in cross-border flows is both economically and statistically significant, though still a fraction of the trade shortfall between rival blocs during the Cold War. Importantly, the shortfall is not limited to flows between the U.S. and China. The comparison with the Cold War also highlights a different role for nonaligned countries. While during the Cold War, trade with nonaligned economies declined by around 40 percent (although not to the same extent as trade between opposing blocs), currently we do not observe any relative reduction in trade and investment flows involving nonaligned countries.

Third, zooming in on trade between the U.S. and China, we confirm the adverse effects of the US tariffs on Chinese imports, and the precipitous decline of China as a source for US imports. Recent data also confirm the emergence of 'connector' countries, as exports from a set of nonaligned economies are substituting for declining Chinese imports by the U.S., and those economies tend to have increased their imports from China. Moreover, combining trade and announced FDI projects data, we establish a strong positive correlation between countries' gain in US import market share and their gain in Chinese outward FDI. While establishing the direction of causality is beyond the scope of this paper, this finding adds to the growing anecdotal evidence of Chinese firms investing

in countries, through which they can access US markets (Bloomberg, 2023; Lopez and Vázquez, 2023). This finding is in sharp contrast to the experience during the Cold War. Our analysis suggests that the nonaligned economies at the time did not step in to bridge the gap between the Eastern and Western blocs, perhaps reflecting their much lower degree of integration in the global marketplace, higher trade barriers and transport costs, and the different nature of traded goods. On the other hand, there is large uncertainty about the extent to which the currently nonaligned economies will continue to serve as bridges between geopolitical blocs and maintain ties with both sides should geopolitical tensions and rivalry intensify.

In sum, we find that fragmentation in trade and investment flows is becoming reality. It is hard to speculate whether it will deepen and how longlasting it will be given its recent onset: its evolution will depend on whether geopolitical tensions persist and trade restricting policies continue to mount. But our findings also reveal a conundrum: the more cross-border flows are rerouted via 'connector' countries, the less effective the policies driving fragmentation may be in achieving their stated objectives. Policymakers have motivated measures that restrict trade either directly or indirectly on the grounds of strengthening the resilience of supply chains, de-risking and increasing economic and national security (Bernstein, 2023; Sullivan, 2023; Yellen, 2022). However, the reshuffling that is taking place seems to be lengthening supply chains (Qiu *et al.*, 2023), as connector countries are stepping in to bridge the gap between rival blocs. This could potentially bring new fragilities, in addition to raising inefficiencies. Moreover, even if direct links to less politically aligned partners are severed, exposure may not change substantively if imports and FDI from China underpin the exports by more politically aligned trading partners.

Related Literature. This study relates to several fast growing strands of literature. First, we contribute to recent studies on the impact of geopolitics on global real and financial activity. Clayton *et al.* (2023) introduce a theoretical framework for the interplay between geopolitics and economic competition. Broner *et al.* (2024) show that, as shifts in power relatioships drive internarnational trade, the emergence of a multipolar world could unravel globalization and create winners and losers. Aiyar *et al.* (2023b) provide an overview of recent empirical and modeling work on fragmentation, global trade, investment and financial flows. Geopolitical distance between country pairs tends to be associated with lower bilateral trade, FDI and financial flows, especially since the U.S.-China trade tensions in 2018-2019 (Aiyar *et al.*, 2024; Aiyar and Ohnsorge, 2024; Catalán *et al.*, 2024). While this evidence predates the Russian invasion of Ukraine, a related analysis developed contemporaneously with ours by Blanga-Gubbay and Rubínová (2023) and subsequent work by Qiu *et al.* (2024) find that trade has become more sensitive to geopolitical distance since the start of the war in Ukraine. To the best of our knowledge, our study is one of the first to present comprehensive and recent evidence of emerging geopolitical fault lines globally in trade, investment, and portfolio flows in a common framework, focusing on flows between and within blocs and with nonaligned countries.

Second, we build on studies that examine the realignment of US import sourcing from China towards other countries using product-level (Alfaro and Chor, 2023; Benguria and Saffie, 2024; Fajgelbaum *et al.*, 2024; Freund *et al.*, 2024; Goldberg and Reed, 2023) and firm-level data (Alfaro *et al.*, 2024; Handley *et al.*, 2024; Utar *et al.*, 2023). We expand this literature in two ways. First, we seek broader evidence of fragmentation and supply chain shifts given the surge in trade restrictive measures and elevated geopolitical tensions globally, drawing insights from the Cold War era. Second, we examine both trade, investment and portfolio flows in a comparable manner, contrary to previous studies that have mostly focused on trade (e.g. Freund *et al.*, 2024; Blanga-Gubbay and Rubínová, 2023). We also find robust evidence for both bilateral total and product-level trade of the emergence of 'connector' countries. The finding that fragmentation is occurring in both goods and capital flows in an interrelated manner is novel and brings quantitative substance to mounting anecdotal evidence of FDI used to circumvent trade restrictions, and the broader literature on horizontal versus vertical FDI (Helpman, 1984; Helpman *et al.*, 2004; Antràs and Yeaple, 2014; Ramondo and Rodriguez-Clare, 2013; Tintelnot, 2017). Relatedly, Xue (2023) presents complementary evidence on the connection between US tariffs on Chinese imports, trade and FDI, and develops a general equilibrium model incorporating trade and FDI diversion.

Third, our study also relates to the recent literature on the economic costs of geoeconomic fragmentation (see, among others, Javorcik *et al.*, 2024; Aiyar *et al.*, 2023b; Campos *et al.*, 2023; Hakobyan *et al.*, 2023; Panon *et al.*, 2024). This literature simulates the impact of fragmentation assuming a sharp increase in trade/FDI/technology diffusion costs between blocs of countries. Our study provides estimates of the relative increase in trade/FDI costs between and within blocs, which could guide future modelling work towards more realistic fragmentation scenarios.[6]

Finally, our study adds to the literature on the Cold War (see, for example, Schiller, 1955; Gokmen, 2017; Morrow, Siverson and Tabares, 1998). In a related paper, Campos *et al.* (2024) show that the Cold War had an effect similar to a 48% ad valorem tariff and roughly halved East-West trade flows. We contribute to this literature by examining the role of nonaligned economies. We are also the first to compare the incipient signs of fragmentation to the experience during the early years of the Cold War.

2 Data

The analysis relies on annual and monthly data on bilateral trade flows from the Trade Data Monitor (TDM), a private data provider. TDM sources trade data at the Harmonized Tariff Schedule (HS) level from government offices and agencies of over 115 countries, accounting for more than

[6] Fernandez-Villaverde *et al.* (2024) compute a measure of geopolitical fragmentation based on a broad set of country-level indicators and estimate its GDP and sectoral output effects. Their measure captures both potential onshoring and deglobalization contrary to the bilateral trade and FDI costs our analysis infers. Bonadio *et al.* (2024) rely on a data-driven approach to measure trade fragmentation, based on changes in trade costs with the U.S. and China over the period 2015-23, and use a quantitative trade model to compute the real income effect of the reconfiguration of the global trade costs.

95 percent of world GDP. A key advantage of TDM over the UN COMTRADE database is its timeliness. The Historical Bilateral Trade and Gravity dataset (TRADHIST) by Fouquin and Hugot (2016) allows us to examine bilateral trade during the Cold War.

FDI data are from fDi Markets, a service from the Financial Times, which tracks over 330,000 announcements of new and expansions of existing projects between January 2003 and June 2024 between 186 countries. As the value of capital investment is often estimated, our analysis is mostly based on the number of FDI projects. However, we establish the robustness of our main results to the use of FDI values—see Annex S4 for a discussion of the fDi Markets data and their reliability.

Data on portfolio flows are from the IMF's Coordinated Portfolio Investment Survey (CPIS), which collects bilateral data on countries' holdings of cross-border portfolio investment (equity or debt) securities, excluding cross-border direct investment or reserve assets. The sample covers 84 reporting countries (and 195 counterparts) and with data on portfolio positions at a semi-annual basis from 2015 to the end of 2023.

Bilateral geopolitical distance, which we use to assign countries to hypothetical blocs, is based on voting patterns at the United Nations General Assembly (UNGA). We use the *ideal point distance* (IPD), estimated with "constant" UNGA agenda, and provided by Bailey *et al.* (2017).[7]

3 Findings

3.1 Reallocation

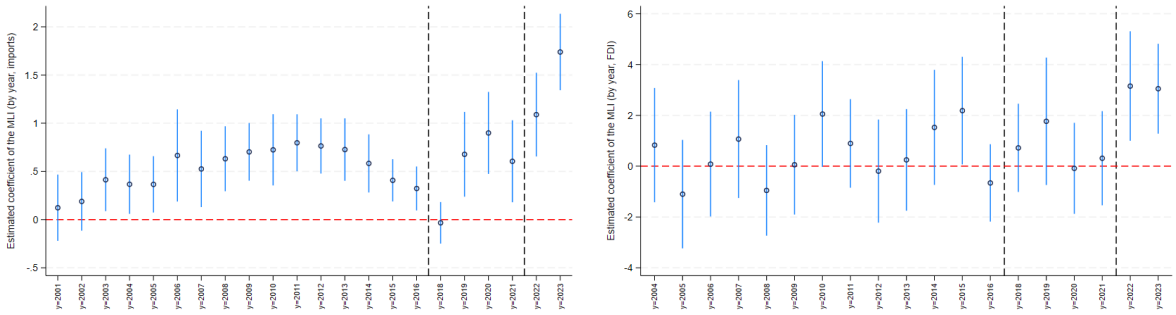
To gauge reallocation across trading and FDI partners, we compute a commonly used measure of structural change—the Lilien (1982) Index—using annual bilateral import data and inward FDI for each country since 2000. Underneath the broadly stable aggregate trends of trade and FDI, there was a sharp uptick in the extent of reallocation across import and FDI sources, especially after Russia's invasion of Ukraine (Figure 2). The increase in the trade Lilien index is especially pronounced among advanced economies (Table S2.1, panel A). For emerging market and developing economies (EMDEs) where the extent of reallocation is structurally higher, the increase is not as noticeable. Compared to the average observed over 2003-2021, import reallocation has increased by roughly 15 percent after Russia's invasion of Ukraine in the full sample, and by almost 40 percent in advanced economies. FDI exhibits striking similarity, with reallocation increasing significantly more for advanced economies (Table S2.1, panel B).

3.2 Fragmentation

Uncovering the patterns underneath the increase in reallocation of import and FDI sources will occupy researchers for years to come as new data on global supply chains, world input-output

[7] For more details on the measurement and estimation, see Bailey *et al.* (2017). The IPD data are available at: https://dataverse.harvard.edu/dataverse/Voeten.

Figure 2: Reallocation across Import and FDI Sources



(a) Reallocation across import Sources

(b) Reallocation across FDI Sources

Notes: The figure plots the estimated coefficients on year indicators along with the 90^{th} percentile confidence intervals from regressing the Modified Lilien Index (MLI) on country and year fixed effects with 2017 the excluded year. The Modified Lilien Index (MLI), often used to measure sectoral shifts in output, is based on the standard deviation of the sectoral growth rates from time period $t-1$ to t:

$$MLI_{rt} = \sqrt{\sum S_{irt} \times (ln(x_{irt}/x_{irt-1}) - ln(X_{rt}/X_{rt-1}))^2}$$

where $ln(x_{irt}/x_{irt-1})$ is the growth of imports (FDI) from partner i, in country r, in time period t, $ln(X_{rt}/X_{rt-1})$ is the growth in overall imports (FDI) of country r, and $S_{irt} = x_{irt}/X_{rt}$ is the average share of imports (FDI) from partner i in total imports (FDI) of country r. The index equals 0 if there is no structural change between $t-1$ and t. The higher the value of the index, the greater is the structural change; in other words, the bigger the reallocation of imports (FDI) across partners.
Sources: Trade Data Monitor; fDi Markets; and authors' calculations.

matrices, and bilateral flows become available. We take a first stab at examining whether the reconfiguration of trade and investment could be related to geopolitical considerations. We remain agnostic about the causal effects of recently announced policy intentions and measures aimed at "de-risking", creating/maintaining strategic advantage, and ensuring national or economic security through "onshoring", "nearshoring" or "friend-shoring." The purpose of this exercise is to use a common approach to establish whether there are signs of fragmentation of trade, FDI, and portfolio flows between groups of countries that are potentially more geopolitically distant.

We define groups of geopolitically aligned countries following recent studies, which use the similarity of countries' voting patterns at the UNGA to capture countries' bilateral political attitudes towards one another (Aiyar *et al.*, 2024). Countries are divided into three groups based on the 2021 Ideal Point Distance: a U.S. leaning bloc, which includes countries in the top quartile in their political proximity to the U.S., a China leaning bloc, which includes countries in the top quartile in their political proximity to China, and a set of nonaligned countries, comprising the remaining economies. We also consider an alternative, narrower definition of blocs, allowing a larger group of nonaligned economies.[8]

[8] In this case, a hypothetical Western bloc includes the U.S., Europe, Canada, Australia and New Zealand, and a

To gauge fragmentation, we estimate standard gravity models, the conventional framework for assessing the determinants of trade, investment, and portfolio flows, which can be derived from many theoretical models:

$$Y_{sdt} = \beta_1 Between\ Bloc_{sd} \times Post_t + \beta_2 Nonaligned_{sd} \times Post_t + \delta_{sd} + \tau_{st} + \phi_{dt} + \epsilon_{sdt}, \quad (1)$$

where the dependent variable is either: i) the value of trade between country s and country d (in USD); ii) the number or the value of announced FDI projects from source country s to destination country d in period t; and iii) the change in the share of portfolio assets held by the reporting country s in the counterpart country d between t and $t-1$. To measure whether flows between blocs have changed differentially over time, we include two dummies—a dummy for country pairs in which the two countries belong to different blocs, $Between\ Bloc_{sd}$, and a dummy for country pairs in which at least one country is nonaligned, $Nonaligned_{sd}$, leaving country pairs in which the two countries are assigned to the same geopolitical bloc as the omitted category. We interact both of these dummies with an indicator equal to 1 after Russia's invasion of Ukraine (from 2022:q1 onward), $Post_t$.[9] The coefficients on these interacted dummies, e.g. β_1, capture whether trade/FDI/portfolio holdings between countries in the two politically distant blocs in the post-war period differs from trade/FDI/portfolio holdings between countries in the same geopolitical bloc (the omitted category). The fully-saturated specification, with country-pair (δ_{sd}) source $\times$ year (τ_{st}) and destination $\times$ year (ϕ_{dt}) fixed effects, accounts for all time-invariant country-pair determinants of trade and investment flows between countries (such as geographical and political distance, contiguity, common language, common colonial past, and the like), and the effect of all source- and destination-specific time-varying factors and shocks, such as GDP growth, change in country risk, implemented and announced policies affecting all partners, and countries' multilateral resistance terms.

We estimate the gravity model using Poisson pseudo-maximum likelihood (PPML), using quarterly data over 2017:q1-2024:q1 for trade and 2008:q1-2024:q2 for FDI.[10] For portfolio holdings, as the dependent variable is the change in the portfolio share, we estimate the gravity model with OLS using semiannual data over 2015:s1-2023:s2. Robust standard errors are clustered at the country-pair level to account for potential correlation in flows over time at the bilateral level.

Table 1 reports the coefficients of interest, β_1 and β_2, estimated using alternative sets of fixed effects and bloc definitions. Across all specifications, there is strong evidence that trade, FDI, and portfolio holdings between blocs have declined relative to trade, FDI, and portfolio holdings

hypothetical Eastern bloc comprises Belarus, China, Eritrea, Mali, Nicaragua, Russia, and Syria, with the other countries considered nonaligned.

[9] We define the $Post_t$ period to start at the onset of the war in Ukraine given the significant increase in reallocation across import and FDI sources described in Section 3.1 in 2022-23 and the evidence presented in Figure S1.2.

[10] Our analysis does not consider domestic trade flows, which are important to estimate the intensive and extensive margins of trade (Yotov, 2022), due to data constraints. We also focus on fragmentation as reorientation of trade flows across trading partners; onshoring production without discriminating across trading partners is not captured in the analysis.

within blocs after Russia's invasion of Ukraine (columns 1-6). Focusing on the fully saturated PPML estimates using the wider bloc definition (panel A, columns 2 and 4), after the Russian invasion of Ukraine, trade and FDI between blocs declined by roughly 11 and 12 percent more than flows within blocs, respectively.[11] The shares of portfolio holdings between blocs declined by 0.5 percentage point more than those within blocs, which is a relatively large variation given that the average portfolio share in the sample (conditional on the share being positive) is 1.5 percent. These patterns are not driven uniquely by the U.S. or China. Results are broadly robust to excluding these countries from the sample, although the decline in FDI between blocs and the resilience of those with nonaligned countries seems to be driven by Chinese and US flows, respectively (Table S2.2). The FDI results are also robust to using the value of the investments (in USD) instead of the count measure (Table S2.3). Overall, these findings are consistent with recent evidence showing geopolitical alignment to be an increasingly important driver of trade (Qiu *et al.*, 2024), FDI (Aiyar *et al.*, 2024), and cross-border portfolio flows (Catalán *et al.*, 2024). However, our findings further demonstrate that, since Russia's invasion of Ukraine, geopolitical alignments are associated with non-trivial fractures in the global system of trade, FDI and portfolio flows.

To examine the exact timing of trade fragmentation, we estimate equation (1) with a full set of time dummies, interacted with the $Between\ Bloc_{sd}$ and $Nonaligned_{sd}$ country-pair indicators, and plot the PPML coefficients along with the 90^{th} percentile confidence interval in Figure S1.2. The divergence in trade between blocs compared to trade within blocs clearly began after Russia's invasion in Ukraine (Panel A). In particular, the war acted as a 'developing agent' for geoeconomic fragmentation: trade between blocs started falling partly because of the collapse of Russia's trade with the euro area and (to a lesser extent) with the U.S., while trade within bloc increased as the share of Russia's trade with China more than doubled since the invasion (Figure S1.3).

To gauge the magnitude of fragmentation along geopolitical lines, we compare the current trade fragmentation with the Cold War period—arguably the most prominent example of fragmentation in recent history. Using bilateral annual trade data from 1920-1990 and a bloc definition centered on a West-East divide as in Gokmen (2017) and Huntington (1998), we estimate equation (1) focusing on the interaction between the $Between\ Bloc_{sd}$ dummy and an indicator that takes on the value of 1 for the Cold War period (1947–1990). Columns 7-8 of Table 1 reveal that trade between the rival Western and Eastern blocs declined by two thirds during the Cold War, relative to trade within these blocs.[12]

[11] Given the functional form, the decline in trade between blocs relative to trade within blocs after Russia's invasion of Ukraine can be computed as $(e^{\beta} - 1) \times 100$. Using the PPML results in columns 2 and 4: $(e^{-0.1212} - 1) \times 100 = -11.4\%$ for trade and $(e^{-0.1309} - 1) \times 100 = -12.3\%$ for FDI.

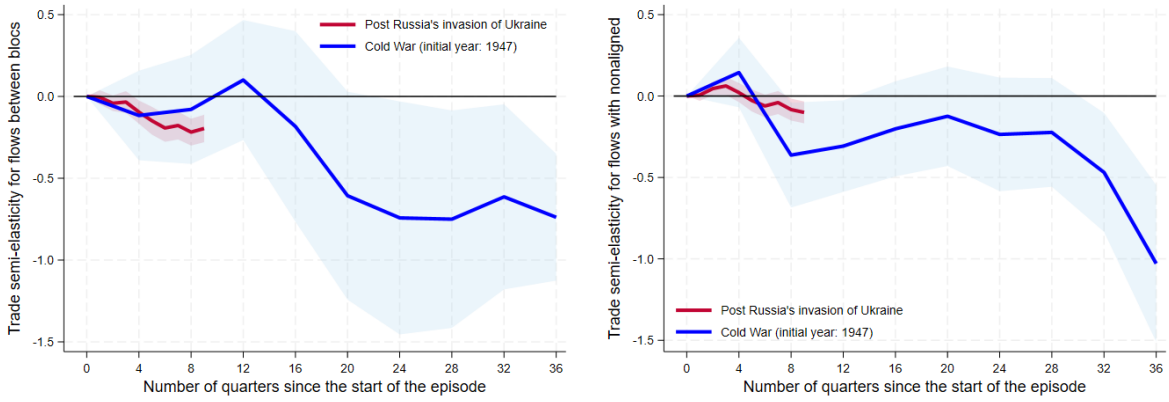
[12] Using the PPML results in column 8: $(e^{-1.11} - 1) \times 100 = -67\%$. This effect is somewhat larger but in the same order of magnitude of the estimates by Campos *et al.* (2024) using a quantitative trade model.

Table 1: Trade, Investment and Portfolio Flows: Between Blocs Relative to Within Bloc

Notes: The table reports the results of a gravity model using Poisson pseudo-maximum likelihood (PPML, columns 1-4, 7-8) and ordinary least squares (OLS, columns 5-6), where the dependent variable is: the bilateral trade in US dollars (columns 1-2 and 7-8); the number of announced FDI projects (columns 3-4); and the change in the share of portfolio assets (columns 5-6). Data are quarterly in columns 1-4, semiannual in columns 5-6, and annual in columns 7-8. The sample spans 2017:q1-2024:q1 (columns 1-2), 2008:q1-2024:q2 (columns 3-4), 2015:s1-2023:s2 (columns 5-6) and 1920-1990 (excluding World War II, 1939-1945, columns 7-8). The FDI analysis excludes country pairs with less than 5 investment projects over the sample period. The Post War variable identifies the period following Russia's invasion of Ukraine and is equal to 1 from 2022:q1 onwards. The Cold War dummy is equal to 1 for the years 1947-1990. The Between Bloc variable equals 1 if the source and destination country do not belong to the same geopolitical bloc, and 0 otherwise. The Nonaligned variable equals 1 if at least one country in the pair is nonaligned. In the current period, blocs are centered around the U.S. and China, with a group of countries remaining nonaligned. The wider bloc definition (panel A) uses the Ideal Point Distance (a measure based on UNGA voting patterns computed by Bailey *et al.* (2017)) to assign countries into blocs. The narrower bloc definition (panel B) is based on a hypothetical Western bloc including the U.S., Europe, Canada, Australia and New Zealand, and a hypothetical Eastern bloc comprising Belarus, China, Eritrea, Mali, Nicaragua, Russia, and Syria, with the rest considered nonaligned. For the Cold War period, we use the bloc definition based on Gokmen (2017). The Western bloc includes Andorra, Australia, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Israel, Italy, Japan, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Philippines, Portugal, San Marino, South Korea, Spain, Taiwan, Thailand, Türkiye, United Kingdom, United States. The Eastern bloc includes Albania, Armenia, Azerbaijan, Belarus, Bulgaria, China, Cuba, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Lao People's Dem. Rep., Latvia, Lithuania, Moldova, Mongolia, North Korea, Poland, Romania, Russia (USSR), Slovakia, Turkmenistan, Ukraine, Uzbekistan, Vietnam. The remaining countries are considered nonaligned. Standard errors in parenthesis are clustered at the source-destination pair level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Trade around the Russian invasion of Ukraine		FDI around the Russian invasion of Ukraine		Portfolio holdings around the Russian invasion of Ukraine		Trade during the Cold War	
	Panel A. Wider bloc definition							
Between Bloc × Post War	-0.1059**	-0.1212**	-0.3614***	-0.1309*	-0.0417*	-0.0540*	-0.6092***	-1.1076***
	(0.041)	(0.058)	(0.071)	(0.074)	(0.025)	(0.028)	(0.163)	(0.110)
Nonaligned × Post War	0.0403	0.0043	-0.0025	-0.0942	-0.0212	-0.0363	-0.2612**	-0.4641**
	(0.030)	(0.051)	(0.046)	(0.077)	(0.021)	(0.031)	(0.110)	(0.235)
Observations	259,840	259,780	170,412	152,088	235,093	235,059	766,007	687,736
	Panel B. Narrower bloc definition							
Between Bloc × Post War	-0.1562***	-0.1194	-0.6869***	-0.2697**	-0.1841**	-0.1763*		
	(0.053)	(0.089)	(0.114)	(0.137)	(0.078)	(0.101)		
Nonaligned × Post War	0.0207	0.0762	0.0129	0.1049	-0.0146	-0.0366		
	(0.031)	(0.077)	(0.041)	(0.071)	(0.034)	(0.042)		
Observations	284,765	284,706	178,464	159,388	260,491	260,457		
Country-pair FE	Y	Y	Y	Y	Y	Y	Y	Y
Time FE	Y	-	Y	-	Y	-	Y	-
Source × Time FE	N	Y	N	Y	N	Y	N	Y
Destination × Time FE	N	Y	N	Y	N	Y	N	Y

Figure 3: Trade Fragmentation: The Cold War and Now



(a) Trade between blocs

(b) Trade with nonaligned countries

Notes: The charts plot the change in global trade between blocs (Panel A) and with nonaligned countries (Panel B) during the Cold War (blue line, with $t_0 = 1947$) and since the Russian invasion of Ukraine (red line, with $t_0 = 2021 : Q4$). For each episode, the charts plot the semi-elasticity of trade for flows (between blocs in panel A and with nonaligned countries in panel B), and the associated 90 percent confidence bands, estimated with PPML and a fully saturated gravity model as in equation 1 in the main text. The missing category is trade within blocs. The Cold War results are obstained using annual data 1920-1990—excluding the World War II years (1939-1945), and with 1947 as excluded year—and the bloc definition based on Gokmen (2017). The results for the most recent period are based on quarterly trade data 2017:Q1-2024:Q1 (with 2021:Q4 as excluded quarter), with the wider bloc definition based on the Ideal Point Distance (a measure based on voting pattern in the UNGA computed by Bailey *et al.* (2017)).
Sources: Trade Data Monitor; Historical Bilateral Trade and Gravity dataset (TRADHIST) prepared by Fouquin and Hugot (2016); and authors' calculations.

Figure 3 directly compares the fall in trade between blocs in the current period and during the Cold War. The findings are naturally sensitive to the choice of the onset date—in the figure, we use 2022:q1 and 1947 as the beginning of fragmentation during the current period and the Cold War, respectively. The chart suggests that the fragmentation observed thus far is not significantly different from the experience in the initial years of the Cold War. However, compared to the average "between-bloc trade shortfall" during the Cold War (Table 1, columns 1-2 and 7-8, panel A), fragmentation so far is an order of magnitude smaller.

This should not foster complacency as trade fragmentation could worsen over time if geopolitical tensions persist and restrictive trade policies continue to mount. During the Cold War, trade between blocs did not collapse overnight. It took at least five years for trade between blocs to significantly decline compared to flows within blocs, and over a decade to reach a nadir relative to within-bloc trade (Figures 3 and S1.2). Moreover, the size of the "treatment" today vs the Cold War is very different. While the ideological and economic rivalry between the U.S. and China is reminiscent of the one between the U.S. and the Soviet Union in the second half of the 20th century and policymakers are emphatic about the need to "de-risk" and "friendshore," (Bernstein, 2023;

Sullivan, 2023; Yellen, 2022), we are (and will hopefully remain) very far from the "Iron Curtain" that descended across Europe in 1946 (Churchill, 1946). US trade policy towards communist countries intensified over time and consisted of a combination of i) high tariffs, which were brought back to the pre-GATT 1930 level (excluding for some raw materials), ii) export controls, especially directed at military and strategic products, and iii) specific sanctions, including total embargo to North Korea and China (Cooper, 2010). Viewed through that lens, the geopolitical cracks that are emerging in trade and investment data—while still shallow—are a source of concern.

On the other hand, the stage on which fragmentation is taking place is fundamentally different (Gopinath, 2024). The economic interdependence between countries is much higher today as effective trade costs have declined substantially, both due to reductions in policy trade barriers, such as gradually dismantled tariffs, and improvements in shipping, information and communication technology. As a result, trade, including in services, has become a much bigger part of economic activity and production is shared through complex global value chains. In the beginning of the Cold War (1947-1952), global goods trade was only 12 percent of GDP, while in 2019-2023, the global goods trade-to-GDP ratio averaged roughly 44 percent. Including services, trade exceeded 60 percent of global GDP in 2022. Moreover, while trade in primary goods accounted for more than 40 percent of total trade during 1947-1952, it was only 14 percent of cross-country goods flows during 2019-2023, reflecting the rise in trade in intermediates and final goods. In other words, despite the extreme levels of fragmentation of trade between blocs during the Cold War, trade within blocs flourished reflecting policies and technological advances that effectively reduced trade costs between countries in the same geopolitical bloc.

3.3 Connectors

The role of nonaligned countries may also be fundamentally different today compared to the Cold War. The gravity equations already suggest interesting differences. As can be seen in Table 1, columns 7 and 8, during the Cold War, trade with nonaligned economies also remained significantly lower (-37 percent) than trade within blocs. In the current period, trade with nonaligned economies has kept up with within-bloc trade (Table 1, columns 1 and 2 and Figure 3, panel B). There is, however, large uncertainty about the extent to which the currently nonaligned economies will continue to keep with trade within blocs. When zooming in on the most recent quarters (Figure S1.2), one can detect a small but statistically significant decline even in trade with nonaligned countries relative to trade between blocs, which may reflect the rising uncertainty regarding the connector role played by the unaligned economies as geopolitical tensions intensify.

The role of nonaligned economies in the U.S.-China trade tensions has been subject to a number of studies. The surge in trade frictions between the U.S. and China and the restrictions imposed since 2018 have significantly hit trade between the two countries. China is no longer the largest trading partner to the U.S.: according to the US Census Bureau data, its share of US goods imports has fallen by roughly 8 percentage points in 6 years: from 22 percent in 2017 to 14 percent in 2023.

China is also no longer a prominent destination for outward US FDI, losing rank to emerging markets such as India, Mexico, and UAE in the number of announced FDI projects.

But there is mounting evidence that direct links between the U.S. and China are simply being replaced by indirect links. As China lost market shares in US imports, other countries, specifically Mexico, Canada, a number of Asian economies, most notably Vietnam, have gained prominence (Dahlman and Lovely, 2023). Countries that have gained the most in US import shares—such as Mexico and Vietnam—have also gained more in China's export shares (Alfaro and Chor, 2023; Dang *et al.*, 2023; Freund *et al.*, 2024; Utar *et al.*, 2023; Kahn *et al.*, 2024). The same countries are also larger recipients of Chinese FDI. While most of this evidence is anecdotal or based on specific case studies, Figure 4 shows that there is a robust and economically sizable association between the increase of Chinese presence in a country—measured either through exports (panel A) or the number of announced greenfield investment (panel C)—and the increase in trade outward linkages of that country with the U.S. The results shown in panel A suggest that a 1 percent increase in the US import share between 2013-17 and 2018-23 is associated with a 1.6 percent higher share of Chinese exports over the same period. When looking at FDI the same 1 percent share in import shares is associated with a 0.7 percent increase in the share of FDI from China.[13]

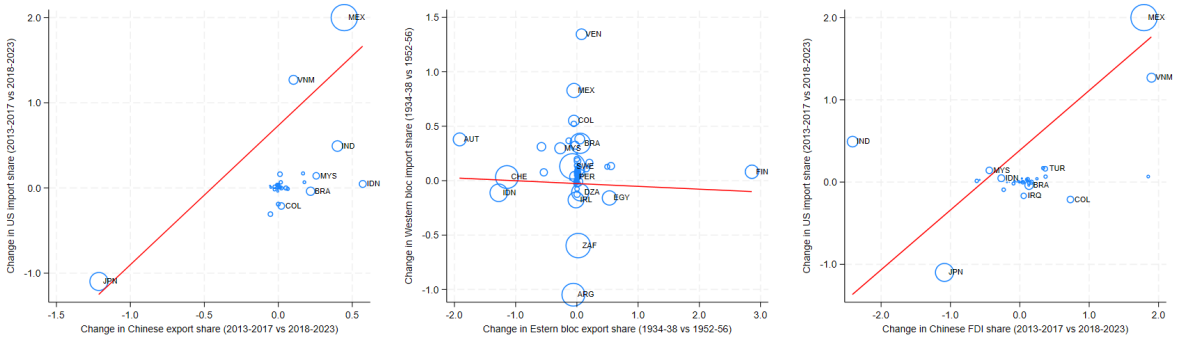
The strong correlation between the rise in imports from China and a rise in exports to the U.S. also holds at various level of disaggregation of products (Figure S1.6 and Table S2.4, panel A) with the correlation declining the more finely the products are defined (from 2-digit to 4-digit and 6-digit HS levels). This is to be expected if trade through nonaligned countries comprises both re-export of Chinese products and value creation using Chinese inputs. Finally, while not conclusive, two pieces of evidence suggest that the observed patterns for unaligned countries do not simply reflect a secular process of fast growing low-cost countries gaining share in the global market place. First, the correlation between gains in US import shares and the rise in imports from China at the 6-digit HS level is particularly strong for products whose imports from China became subject to tariffs in the U.S. in 2018 (Table S2.4, column 7). Second, a placebo test in which we perform the same analysis prior to the escalation of U.S.-China trade tensions reveals no such correlation (Figure S1.7 and Table S2.4, panel B).

In contrast, there is no evidence that nonaligned economies served as connectors between rival blocs during the Cold War. If they did, we would expect to see a similar correlation between the extent to which nonaligned economies gained share in Western markets' imports and the extent to which they increased their imports from the Eastern bloc of countries. As shown in Figure 4, Panel B, the two series are completely orthogonal. The severance of direct links between the Western and Eastern bloc during the Cold War likely led to a severance of economic exposure, unlike what may be happening today.

Why did nonaligned economies not step in as connectors in the 1950s but are doing so currently, at least for now? Rigorously disentangling the drivers of the response of nonaligned

[13] Results are robust to excluding individual countries (e.g. Japan, see Figure S1.4), and controlling for countries' GDP growth. Those on FDI are robust to the use of value rather than count data, see Figure S1.5.

Figure 4: The Emergence of Connector Countries: Now vs the Cold War



(a) Change in US import shares vs Chinese export shares

(b) Change in Western bloc import shares vs Eastern bloc export shares

(c) Change in US import shares vs FDI from China

Notes: All panels include only nonaligned countries. Panel A plots the change in US import shares between 2018-23 and 2013-17 against the change in Chinese export shares over the same period. A weighted regression (with the US imports in the pre-period as weights) with robust standard errors gives a slope equal to 1.634 (p-value = 0.000); n = 57. Panel B plots the change of the Western bloc import shares between 1952-56 and 1934-38 against the change of the Eastern bloc export shares over the same period. A weighted regressions (with the Western bloc imports in the pre-period as weights) with robust standard errors gives a slope equal to -0.026 (p-value = 0.628); n = 81. Panel C plots the change in US import shares between 2018-23 and 2013-17 against the change in Chinese outward FDI over the same period. A weighted regressions (with the US imports in the pre-period as weights) with robust standard errors gives a slope equal to 0.727 (p-value = 0.005); n = 45. In all cases, results are robust to: i) using the Chinese exports (panel A) or FDI (panel B) as weights; ii) using the weights computed in the 2018-23 period; and iii) excluding outliers (see Figure S1.4). For panels A and C results are robust to controlling for the average real GDP growth in period 2018-2023.
Sources: Trade Data Monitor; fDi Markets; and authors' calculations.

economies is beyond the scope of this paper, however, some relevant differences stand out. To begin with, the nonaligned countries at the time of the Cold War had a much smaller economic footprint. In 1950, the Western and Eastern blocs together accounted for roughly 85 percent of global GDP and more than half of the world's population. The nonaligned countries were mostly developing economies, which received foreign aid, technical assistance and military equipment motivated by geopolitical considerations (Cooper, 2010). Depending on whether countries choose to associate themselves with a particular bloc, the group of nonaligned economies today could have much greater economic heft, in terms of market share, and population. Today's nonaligned economies are also much more integrated into the world marketplace: for the median nonaligned economy, the trade-to-GDP ratio was 80 percent in 2019; compared to 40 percent of GDP in 1960. The average most favored nation import tariff of the median nonaligned country was 12 percent in 2019 vs 40 percent in 1960, and the median nonaligned economy in 2015 had free trade agreements with partners equivalent to one fifth of global GDP, compared to 0 percent in 1960.

4 Conclusion

This paper establishes a number of relevant stylized facts about the extent to which geoeconomic fragmentation is reshaping global linkages and draws lessons from the historical experience of the Cold War. We find that, like during the Cold War, trade, FDI, and portfolio flows between blocs are decreasing, compared to trade, investment and portfolio flows within blocs. While the decoupling remains small compared to that earlier episode, it is also in its early stages and could worsen significantly if geopolitical tensions persist and restrictive trade policies continue to mount.

We also find that increasing geoeconomic fragmentation did not give rise to deglobalization, then or now. But the reason is fundamentally different. During the Cold War, active efforts to foster trade integration (within blocs) and technological improvements paved the way for a surge in trade. This process became turbocharged once the countries of the former Eastern bloc joined the global economy in 1991. Now, global trade and investment have been resilient mostly because flows have been re-routed via connector countries. These nonaligned countries could benefit from rising geoeconomic fragmentation. But this finding highlights a fundamental conundrum: the global economy is more resilient in part because it is increasingly substituting away from tariffed or sanctioned trade. But this substitution does not necessarily increase diversification, resilience, or lessen strategic dependence.

The path forward will hinge largely on whether policymakers decide to preserve the gains from an integrated global economy, perhaps turning a blind eye to the re-routed flows, or opt instead for more severe forms of decoupling.

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Supplementary Online Appendix to:

Changing Global Linkages: A New Cold War?

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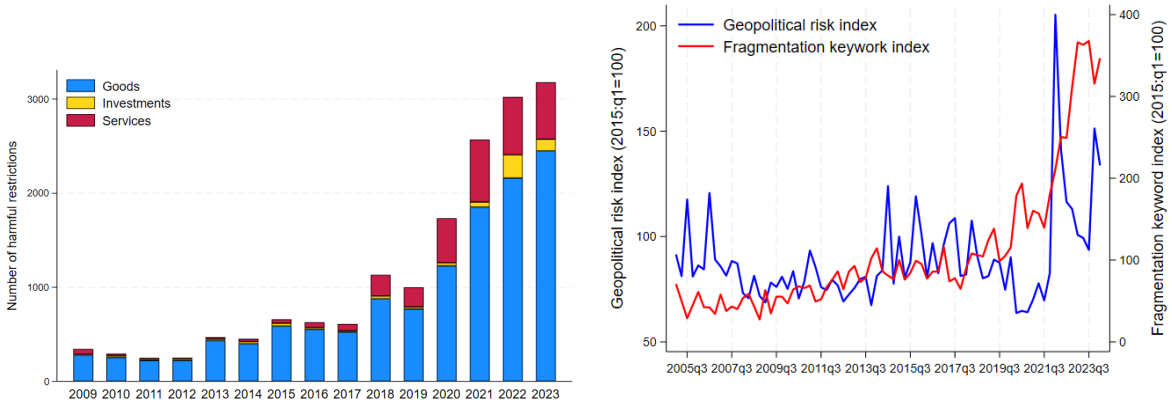
S1 Additional figures

Figure S1.1: Rising Fragmentation Pressures

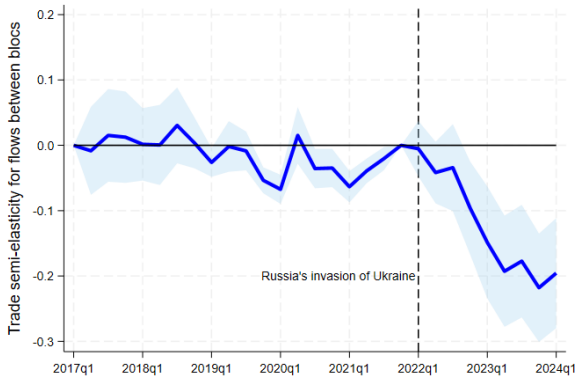


(a) Harmful Restrictions on Trade and Investment

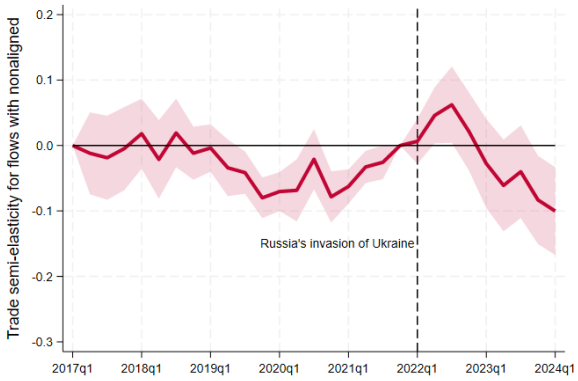
(b) Geopolitical risk and Fragmentation indexes

Notes: Panel A plots the number of harmful restrictions on trade and investment per year. Panel B plots the geopolitical risk developed by Caldara and Iacoviello (2022) (Data downloaded from https://www.matteoiacoviello.com/gpr.htm on September 2024) and the fragmentation risk index, which measures the average number of sentences, per thousand earnings calls, that mention at least one of the following keywords: deglobalization, reshoring, onshoring, nearshoring, friend-shoring, localization, regionalization.
Sources: Caldara and Iacoviello (2022); Global Trade Alert; NL Analytics; and authors' calculations.

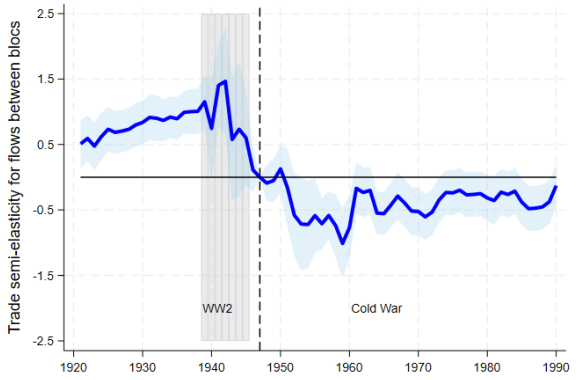
Figure S1.2: Timing of Trade Fragmentation: The Cold War and Now



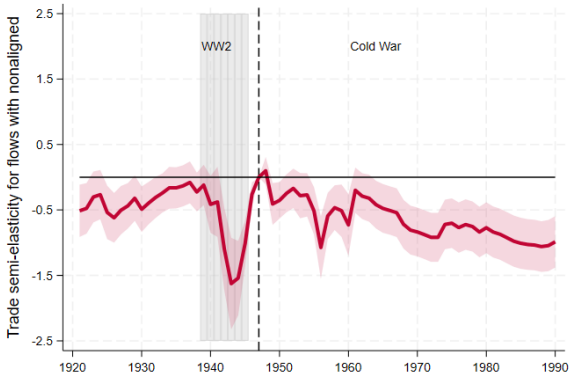
(a) Trade between blocs, now



(b) Trade with nonaligned, now



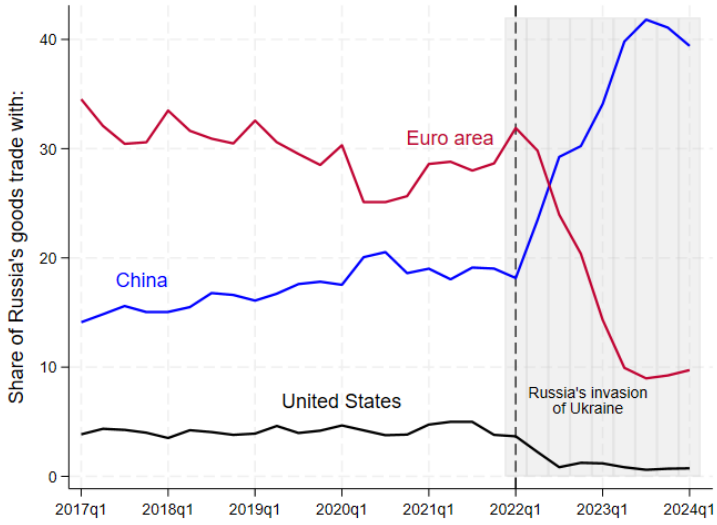
(c) Trade between blocs, Cold War



(d) Trade with nonaligned, Cold War

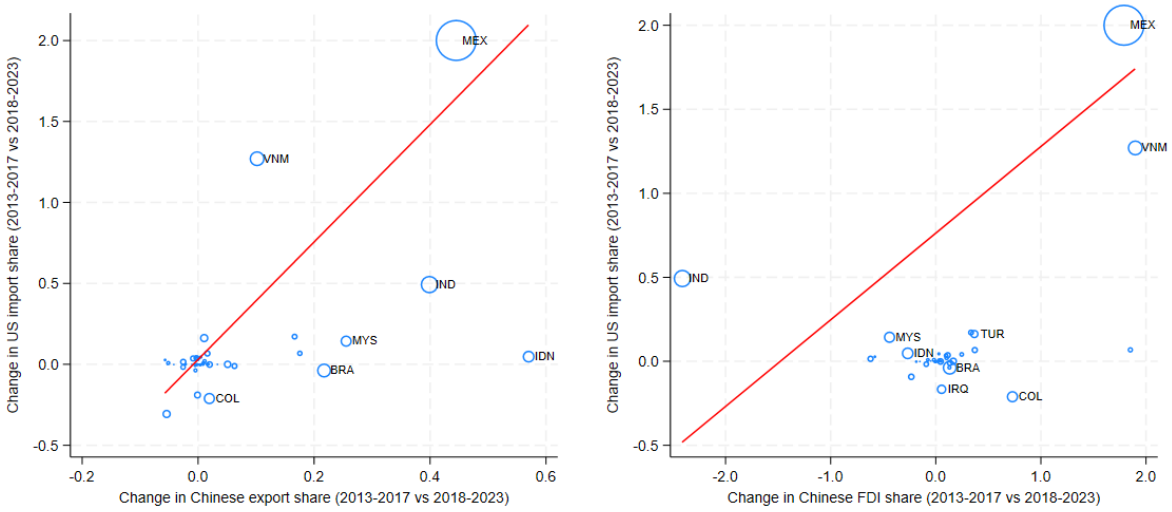
Notes: The charts plot global trade between blocs (panels A and C) and with nonaligned (panels B and D) around the Russian invasion of Ukraine (panels A and B) and the Cold War (dated as starting in 1947). For each episode, the chart plot the semi-elasticity of trade for flows between blocs and with nonaligned, and the associated 90 percent confidence bands, estimated with PPML and a fully saturated gravity model as in equation 1 in the main text. The missing category is trade within blocs. The Cold War results are obstained using yearly data from 1920 to 1990—with 1947 as excluded year—and the bloc definition based on Gokmen (2017). The results for the most recent period are based on quarterly trade data from 2017:Q1 to 2024:Q1 (with 2021:Q4 as excluded quarter), with the wider bloc definition based on the Ideal Point Distance (a measure based on voting pattern in the UNGA computed by Bailey *et al.* (2017)).
Sources: Trade Data Monitor; Historical Bilateral Trade and Gravity dataset (TRADHIST) prepared by Fouquin and Hugot (2016); and authors' calculations.

Figure S1.3: Change in Russia's Trade Flows



Notes: The chart plots the share of Russia's goods trade with China, U.S. and the Euro area, before and after the Russia's invasion of Ukraine.
Sources: Trade Data Monitor; and authors' calculations.

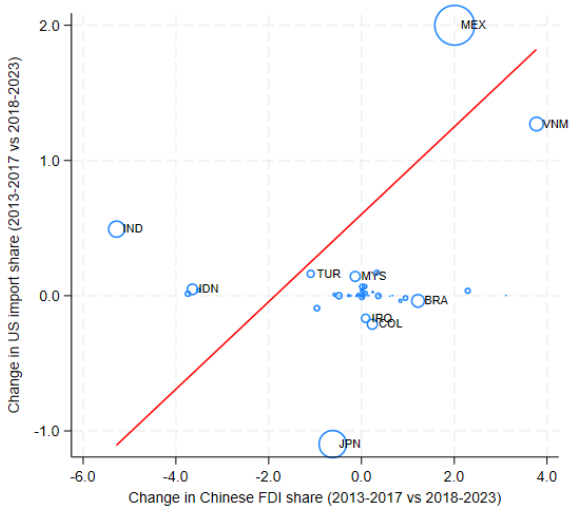
Figure S1.4: The Emergence of Connector Countries: Excluding Japan



(a) Change in US import shares vs Chinese export shares (b) Change in US import shares vs FDI from China

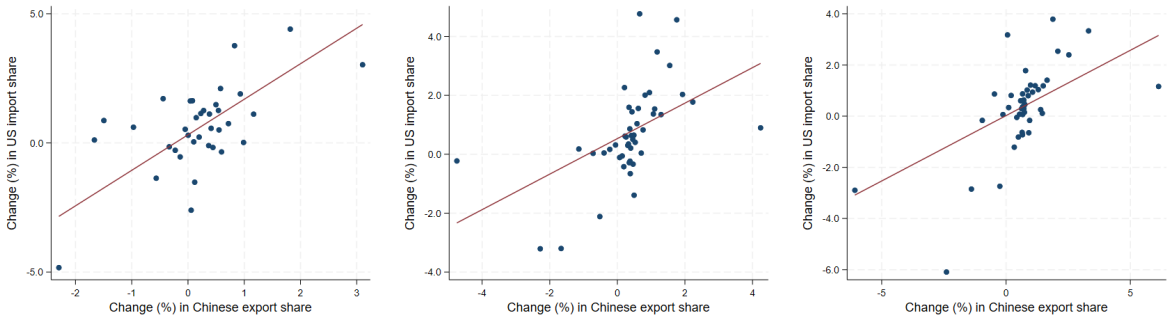
Notes: All panels include only nonaligned countries. Panel A plots the change in US import shares between 2018-2023 and 2013-2017 against the change in Chinese export shares over the same period. A weighted regressions (with the US imports in the pre-period as weights) with robust standard errors gives a slope equal to 3.628 (p-value = 0.001); n = 56. Panel B plots the change in US import shares between the period 2018-23 and the period 2013-17 against the change in Chinese outward FDI over the same period. A weighted regressions (with the US imports in the pre-period as weights) with robust standard errors gives a slope equal to 0.516 (p-value = 0.013); n = 44.
Sources: Trade Data Monitor; fDi Markets; and authors' calculations.

Figure S1.5: The Emergence of Connector Countries: Value Instead of Count FDI Data



Notes: The chart plots the change in US import shares between the period 2018-23 and the period 2013-17 against the change in Chinese outward FDI over the same period, using values (in USD). A weighted regressions (with the US imports in the pre-period as weights) with robust standard errors gives a slope equal to 0.323 (p-value = 0.092); n = 45.
Sources: Trade Data Monitor; and authors' calculations.

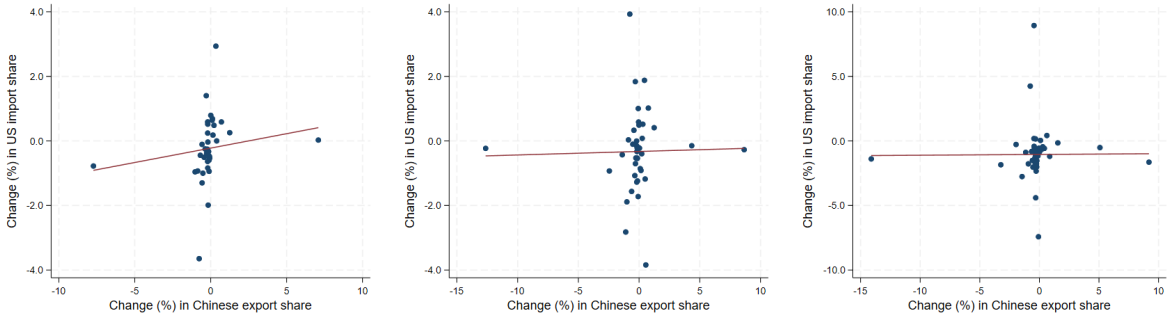
Figure S1.6: The Emergence of Connector Countries: Product-level Analysis



(a) HS2 product level (b) HS4 product level (c) HS6 product level

Notes: All panels include only nonaligned countries and products (defined at the HS 6-digit level) targeted by the tariffs imposed by the US administration on Chinese imports in 2018 and 2019. All panels plot the change in US import shares between 2018-2023 and 2013-2017 against the change in Chinese export shares over the same period. Panel A defines products at the 2-digit HS level, while panels B and C at the 4-digit and 6-digit HS levels, respectively. The charts are binned scatterplots that absorb product-level fixed effects and correspond to the results reported in Table S2.4, panel A, columns 1, 3 and 5.
Sources: UN Comtrade; and authors' calculations.

Figure S1.7: The Emergence of Connector Countries: Placebo Test



(a) HS2 product level (b) HS4 product level (c) HS6 product level

Notes: All panels include only nonaligned countries and products (defined at the HS 6-digit level) targeted by the tariffs imposed by the US administration on Chinese imports in 2018 and 2019. All panels plot the change in US import shares between 2013-2015 and 2010-2012 against the change in Chinese export shares over the same period. Panel A defines products at the 2-digit HS level, while panels B and C at the 4-digit and 6-digit HS levels, respectively. The charts are binned scatterplots that absorb product-level fixed effects and correspond to the results reported in Table S2.4, panel B, columns 1, 3 and 5.
Sources: UN Comtrade; and authors' calculations.

S2 Additional tables

Table S2.1: Reallocation across Import and FDI Sources: Evolution over Time Periods

Notes: The table reports the coefficients from regressing the Lilien Index computed on the value of imports (panel A) and FDI (panel B) on indicators for different time periods, with 2003-2007 being the excluded period. Column (1) includes all countries in the sample, column (2) only advanced economies, while column (3) includes only emerging markets and developing economies. In column (4) the regression is based on the sample of countries hypothetically aligned with the U.S./EUR, while the remaining countries are in column (5). Standard errors in parenthesis are clustered at the country level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1) All	(2) AEs	(3) EMDEs	(4) US bloc	(5) Others
			Panel A. Trade flows		
2008-2012	0.3388**	0.4303***	0.2727	0.3975***	0.2856
	(0.135)	(0.123)	(0.189)	(0.120)	(0.200)
2013-2021	0.0736	0.4728***	-0.1270	0.2748	-0.0622
	(0.119)	(0.165)	(0.155)	(0.164)	(0.163)
2022-2023	0.9899***	1.4318***	0.7507***	1.5973***	0.6116**
	(0.209)	(0.243)	(0.285)	(0.245)	(0.294)
Observations	2,639	785	1,854	893	1,746
R^2	0.491	0.447	0.455	0.403	0.463
			Panel B. FDI flows		
2008-2012	0.1136	-1.0572	0.9119	-0.5016	0.6639
	(0.654)	(0.930)	(0.870)	(0.870)	(0.953)
2013-2021	0.4424	-0.6077	1.1596	-0.3118	1.0977
	(0.672)	(1.039)	(0.865)	(0.919)	(0.964)
2022-2023	2.8543***	5.6496***	1.1920	4.8882***	1.2284
	(0.978)	(1.787)	(1.041)	(1.459)	(1.258)
Observations	1,504	577	927	665	839
R^2	0.287	0.285	0.298	0.274	0.302
Country FE	Y	Y	Y	Y	Y

Table S2.2: Trade, Investment and Portfolio Flows: Excluding the U.S. and China

Notes: The table reports the results of a gravity model using Poisson pseudo-maximum likelihood (PPML, columns 1-4, 7-8) and ordinary least squares (OLS, columns 5-6), where the dependent variable is: the bilateral trade in US dollars (columns 1-2 and 7-8); the number of announced FDI projects (columns 3-4); and the change in the share of portfolio assets (columns 5-6). Data are quarterly in columns 1-4, semiannual in columns 5-6, and annual in columns 7-8. The sample spans 2017:q1-2024:q1 (columns 1-2), 2008:q1-2024:q2 (columns 3-4), 2015:s1-2023-s2 (columns 5-6) and 1920-1990 (excluding World War II, 1939-1945, columns 7-8). The FDI analysis excludes country pairs with less than 5 investment projects over the sample period. Panel A excludes the U.S. from the sample, while panel B excludes China. The Post War variable identifies the period following Russia's invasion of Ukraine and is equal to 1 from 2022:q1 onwards. The Cold War dummy is equal to 1 for the years 1947-1990. The Between Bloc variable equals 1 if the source and destination country do not belong to the same geopolitical bloc, and 0 otherwise. The Nonaligned variable equals 1 if at least one country in the pair is nonaligned. In the current period, blocs are centered around the U.S. and China, with a group of countries remaining nonaligned. The bloc definition uses the Ideal Point Distance (a measure based on UNGA voting patterns computed by Bailey *et al.* (2017)) to assign countries into blocs. Standard errors in parenthesis are clustered at the source-destination pair level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Trade around the Russian invasion of Ukraine		FDI around the Russian invasion of Ukraine		Portfolio holdings around the Russian invasion of Ukraine		Trade during the Cold War	
	Panel A. Wider bloc definition, excluding the U.S.							
Between Bloc × Post War	-0.0904**	-0.0864**	-0.3690***	-0.2039***	-0.0121	-0.0324*	-0.3957***	-1.0171***
	(0.038)	(0.043)	(0.066)	(0.071)	(0.016)	(0.017)	(0.142)	(0.111)
Nonaligned × Post War	0.0710**	0.0329	-0.0166	-0.1986***	0.0034	-0.0269	-0.2546**	-0.5554**
	(0.031)	(0.042)	(0.038)	(0.071)	(0.015)	(0.022)	(0.116)	(0.223)
Observations	254,688	254,572	157,872	139,263	230,639	230,622	749,554	672,430
	Panel B. Wider bloc definition, excluding China							
Between Bloc × Post War	-0.1340**	-0.1300**	-0.3051***	0.0598	-0.0422	-0.0570*	-0.7904***	-1.1139***
	(0.059)	(0.054)	(0.103)	(0.079)	(0.026)	(0.030)	(0.198)	(0.119)
Nonaligned × Post War	0.0453	0.0145	0.0070	-0.0472	-0.0212	-0.0356	-0.2596**	-0.4705**
	(0.028)	(0.041)	(0.046)	(0.074)	(0.021)	(0.032)	(0.110)	(0.236)
Observations	254,660	254,589	160,512	142,297	230,656	230,622	754,667	676,457
Country-pair FE	Y	Y	Y	Y	Y	Y	Y	Y
Time FE	Y	-	Y	-	Y	-	Y	-
Source × Time FE	N	Y	N	Y	N	Y	N	Y
Destination × Time FE	N	Y	N	Y	N	Y	N	Y

Table S2.3: FDI Flows Between Blocs: Value Instead of Count Data

Notes: The table reports the results of a gravity model using Poisson pseudo-maximum likelihood where the dependent variable is the value (in USD) of announced FDI projects. Data are quarterly and the sample spans 2008:q1-2024:q2 and exclude country pairs with less than 5 investment projects over the sample period.The Post War variable identifies the period following Russia's invasion of Ukraine and is equal to 1 from 2022:q1 onwards. The Between Bloc variable equals 1 if the source and destination country do not belong to the same geopolitical bloc, and 0 otherwise. The Nonaligned variable equals 1 if at least one country in the pair is nonaligned. Blocs are centered around the U.S. and China, with a group of countries remaining nonaligned. The bloc definition uses the Ideal Point Distance (a measure based on UNGA voting patterns computed by Bailey *et al.* (2017)) to assign countries into blocs. Standard errors in parenthesis are clustered at the source-destination pair level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
	FDI around the Russian invasion of Ukraine	
Between Bloc × Post War	-0.7613***	-0.3411**
	(0.166)	(0.162)
Nonaligned × Post War	-0.2104*	0.0883
	(0.112)	(0.236)
Observations	170,412	152,088
Country-pair FE	Y	Y
Time FE	Y	-
Source × Time FE	N	Y
Destination × Time FE	N	Y

Table S2.4: The Emergence of Connector Countries: Product-level Analysis

Notes: The table reports the results of the OLS estimation of the following regression:

$$\Delta\ USimport\ share_{ip} = \beta_1 \Delta\ China\ export\ share_{ip} + \beta_2 Growth_i + \phi_p + \epsilon_{ip},$$

where the dependent variable is the percentage change in US import shares computed between the period 2018-2023 and the period 2013-2017 (panel A) or between 2015-2013 versus 2012-2010 (panel B) of country i and product p. The main explanatory variable is the percentage change in Chinese export shares computed over the same periods. Even columns also control for the ex-ante average real GDP growth in country i (computed over the period 2013-2017 in panel A and 2010-2012 in Panel B). The model also include product fixed effects (ϕ_p). Regressions are weighted using the US imports in the pre-period as weights. The sample includes only nonaligned countries and products (defined at the HS 6-digit level) targeted by the tariffs imposed by the US administration on Chinese imports in 2018 and 2019. The sample also excludes country-product pair that account for less than 0.5% of total US imports of that products in the post-period. Columns 1-2 define products at the 2-digit HS level, while columns 3-4 and 5-7 at the 4-digit and 6-digit HS levels, respectively. Column 7 reports results separately for products (defined at the 6-digit HS level) hit or not by the 2018-2019 US tariffs. Standard errors in parenthesis are clustered at the country-product pair level. Annual bilateral product-level trade data are from UN Comtrade. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Change (%) in US import share	HS2 level		HS4 level		HS6 level		
Panel A. Main analysis: Change between 2018-2023 versus 2013-2017							
Change (%) in Chinese export share	1.3758***	1.2361***	0.6028***	0.5048***	0.5108***	0.4329***	
	(0.404)	(0.425)	(0.206)	(0.195)	(0.161)	(0.159)	
Change (%) in Chinese export share × Tariff=0							-0.1038
							(0.148)
Change (%) in Chinese export share × Tariff=1							0.4538***
							(0.166)
Growth		0.3909***		0.5680***		0.6874***	0.6796***
		(0.056)		(0.137)		(0.126)	(0.125)
Observations	1,308	1,308	7,685	7,685	22,021	22,021	22,021
R^2	0.578	0.646	0.611	0.640	0.656	0.674	0.675
Panel B. Placebo: Change between 2013-2015 versus 2010-2012							
Change (%) in Chinese export share	0.0893	0.0770	0.0109	-0.0044	0.0059	-0.0098	
	(0.070)	(0.065)	(0.021)	(0.021)	(0.021)	(0.021)	
Change (%) in Chinese export share × Tariff=0							-0.0061
							(0.013)
Change (%) in Chinese export share × Tariff=1							-0.0201
							(0.063)
Growth		0.1583**		0.3614***		0.5033***	0.5030***
		(0.062)		(0.082)		(0.130)	(0.130)
Observations	1,162	1,161	6,438	6,436	17,016	17,015	17,015
R-squared	0.233	0.263	0.515	0.541	0.674	0.685	0.685
Product FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Weights (US import in the pre-period)	Yes	Yes	Yes	Yes	Yes	Yes	Yes

S3 Reliability of the fDi Markets data

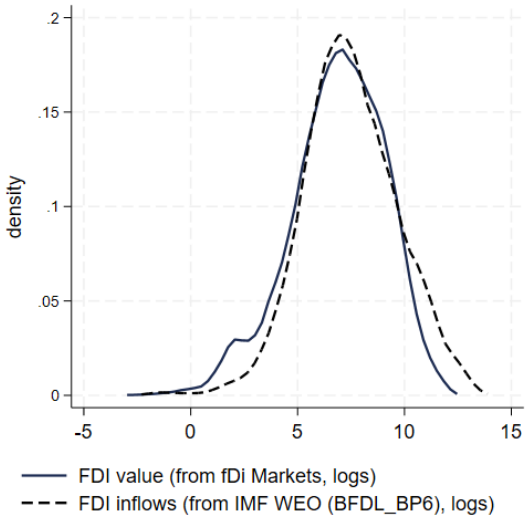
FDI data from fDi Markets track announcements of new and expansions of existing projects that create jobs and capital investment. fDi Markets does not track mergers and acquisitions and other international equity investments, projects that do not create new jobs, or companies, which establish a foreign subsidiary without a physical presence. The data are collected primarily from publicly available sources (e.g., media, industry organizations, investment promotion agency newswires) and report investment-level information for over 330,000 FDI instances between January 2003 and June 2024 between 186 countries. As the value of capital investment is often estimated rather than directly reported, our analysis is mostly based on the number of FDI projects. However, we establish the robustness of our main results to the use of FDI values.

Toews and Vézina (2022) and Aiyar *et al.* (2024) discuss the reliability of the fDi Markets data by comparing the value at the destination country-year level computed from fDi Markets with gross FDI inflows from the IMF's balance of payment statistics. They show: (i) a strong positive correlation between the number of fDi investment projects and value of FDI from balance of payment statistics; and (ii) a strong positive correlation between the count and (estimated) value of investment projects in fDi Markets.

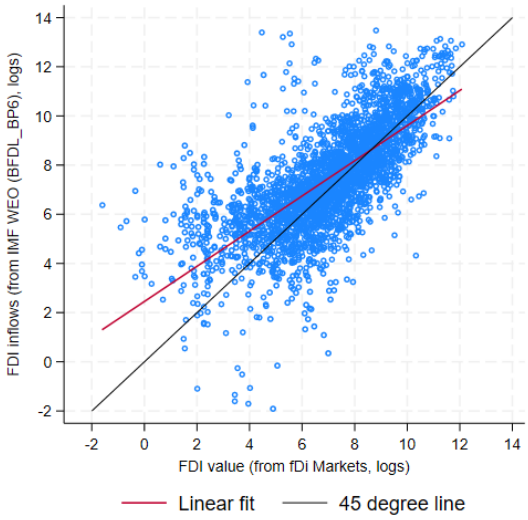
To establish the reliability of the data sourced from fDi Markets, we apply the same analysis to our sample and report a set of statistics that corroborates the quality of the FDI count data. We aggregate the volumes at the destination country-year level and contrast them with gross FDI inflows as published in the World Economic Outlook (WEO) over the period 2003-2023. Figure S3.1 shows that the two distributions present a large degree of overlap (Panel a) and the two sets of data are highly correlated (in Panel b the slope of the linear fit is equal to 0.72 and the R^2 is 0.50). In addition, the count and volume of bilateral investment are highly correlated (in Panel c the slope of the linear fit is equal to 0.96 and the R^2 is 0.66), supporting the choice of using the count data in our baseline analysis.

Finally, to mitigate the possibility that our findings are affected by phantom FDI, we exclude FDI from and to offshore financial centers and tax havens, as defined by Damgaard *et al.* (2024).

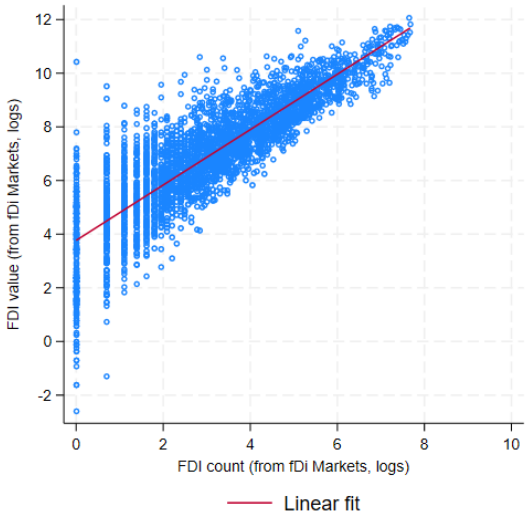
Figure S3.1: FDI data: Micro vs Macro and Count vs Value



(a) Investment-level and aggregate FDI flows, densities



(b) Investment-level and aggregate FDI flows



(c) FDI count (number of individual investments) vs FDI value

Notes: Panels a) and b) plot FDI inflows at the country-year level from the IMF World Economic Outlook database and from the fDi Market database between 2003 and 2023 in USD. Both variables are expressed in logarithms. In panel b) the R^2 of the estimated linear fit is 0.50 and the slope is 0.72 (s.e. = 0.01). Panel c) plots FDI inflows at the country-year level only from fDi Market between 2003 and 2023, comparing flows in value and in number of investments; the R^2 of the estimated linear fit is 0.66 and the slope is 0.96 (s.e. = 0.00). Both variables are expressed in logarithms.

S4 Additional references

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