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Connector Economies in a Fragmenting World

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Keywords: fragmentation, geo-economics, connector economies, FDI, industrial policy

JEL Classification Numbers: F02, F13, F52, F60, L52

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Connector economies in a fragmenting world*

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Abstract

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1 Introduction

Connector economies, those not strongly aligning themselves with the US or China, have been shown to play an increasingly important role in intermediating trade and investment against the backdrop of rapid geopolitical fragmentation. We document these trends for (greenfield) foreign direct investment, illustrate mechanisms underpinning the increased role of connectors and highlight several characteristics of connectors that make them more likely to be chosen as FDI destinations.

We analyze patterns of greenfield foreign direct investment using a comprehensive dataset, fDi Markets managed by Financial Times. It covers announcements of FDI over the period January 2003-March 2024. It includes information about the date of announcement, source country, destination country, sector as well as additional subsector identifiers, for instance, for green technology investments. It also incorporates information on the intended activity (for example, research and development versus production for manufacturing), information about the location of investment in the destination economy including whether it is within a special economic zone (free zone), as well as estimates of capital expenditure and jobs created. The advantage of working with the data on announcements of greenfield FDI is twofold. These data are indicative of future shifts in the geography of production and supply chains. In addition, the timing of announcements is more closely linked to various policy events such as sanctions on Russia or the adoption of the Inflation Reduction Act (IRA) in the US or other industrial policy measures (see, for instance, Juhász et al. (2024), Juhász et al. (2022), Juhász and Lane (2024) on the rise of importance of industrial policies). On the other hand, actual FDI flows, as recorded in the balance of payments data, may lag the respective announcements by months or years.

In a difference-in-difference setting, we confirm that FDI between geo-politically distant blocs fell by around 30% relative to flows within geopolitical blocs following the invasion of Ukraine in February 2022 (as highlighted in Gopinath et al. (2025)). We further show that relative to between-bloc FDI, investment from China to connector economies increased as much, or even more, than within-bloc investment during the same period.

We show that connector economies that saw a rapid increase in inward foreign investment are an eclectic mix of countries enjoying distinct (and occasionally overlapping) competitive advantages.

First, connector investment relies on track-record of capabilities in terms of attracting (manufacturing) FDI. For example, as US investment in China contracted rapidly, US investment in India and Vietnam expanded swiftly in search of alternative destinations that can facilitate cost-effective assembly at scale building on facilities, infrastructure and inexpensive labour.

Second, connector investment is driven by market access considerations, while the value of such market access is amplified by investment screening procedures and industrial policies in major economies such as the Inflation Reduction Act in the US. In this regard, apparent beneficiaries include Hungary and Spain (both EU members with relatively lower production costs), Serbia (benefiting from deep and comprehensive free-trade agreement (FTA) with the EU and strong infrastructure links with the union), Turkiye (part of a customs union with the EU) or Mexico, Chile and Morocco with an FTA with the US. These main beneficiaries tend to be large economies with established track record of manufacturing FDI as discussed above.

In principle, market access considerations could give rise to between-bloc investment rather than inhibit it (following a pattern observed, for instance, in the 1980s when Japan's automotive companies established production in the US). However, direct substitution between trade and investment does not appear to be observed in the data as geopolitical tensions discourage investment links. China's counts of outward FDI, for instance, contracted sharply in the case of investment in the UK, US, Germany, France, other EU, Australia, Japan.

Increased use of investment screening procedures can be an effective mechanism of discouraging cross-bloc investment even as trade barriers go up. In a difference-in-difference setting, we document a drop in the number of FDI projects response to the introduction of investment screening procedures in the recipient economy. At the same time, investment screening has become increasingly common. It may apply to more than 90 percent of cross-bloc investments. Upon closer examination of sectoral patterns of investment, screening procedures appear to be a relatively blunt instrument, discouraging investment across industries and even if they are foreseen for mergers and acquisitions only. Thus the rise of investment screening may complicate direct market access and increase the value of indirect market access. At the same time, we find no evidence that connector economies are used as investment destinations to facilitate market access under economic sanctions imposed on Russia in 2022.

We further show that following the Inflation Reduction Act in the US, (connector) economies with a free-trade agreement with the US saw a differentially higher increase in FDI in green-tech sectors, specifically in economies with a sufficient manufacturing FDI base. These increases were comparable to increases in investment in the US directly. Industrial policy in advanced economies can thus create sizable cross-border economic spillovers in connector economies. To identify any cross-border investment spillovers from IRA we follow a triple-difference approach. In particular, we compare the bilateral sector-specific project counts (i) before and after the passing of the IRA; (ii) across various groups of economies depending on market access to the US, track-record of manufacturing FDI and geopolitical alignment with the US; and (iii) in clean-tech subsectors benefiting from preferential local content provisions treatment under the IRA (such as battery supply chain, carbon capture or critical minerals including lithium) versus other sectors.

Ethno-linguistic, geographical and geopolitical proximity to investor jurisdiction also appears to play a role, in line with the earlier findings based on the augmented gravity models of bilateral FDI (see, for instance, Belgibayeva and Plekhanov (2019)). In particular, China's investment in Vietnam, Singapore, ASEAN and active members of the Belt and Road Initiative increased markedly even though these economies do not provide the same degree of market access with respect to the US or the EU as, say, Mexico, Morocco or Turkiye.

We also document a sustained increase in the share of investment going to SEZs. Examples of destinations with rapid growth in SEZ investment and a high share of SEZ investment in the total project count include the Gulf Cooperation Council (GCC) economies, Egypt and Costa Rica. We further show that SEZs are increasingly housing cross-bloc and connector FDI. Traditional advantages of SEZs are related to infrastructure access, tax treatment and expedited customs procedures. In the context of geopolitical fragmentation and increased investment screening, they also provide the speed of market access and greater predictability of rules governing investment.

We follow a triple-difference approach comparing (i) investments after the invasion of Ukraine and investments during earlier years; (ii) investments within and outside free zones; and (iii) various degrees of geopolitical alignment of source and destination economies. The analysis does not reveal any significant drop in between-bloc investment into SEZs, in contrast with trends in investment outside SEZs. For investment between blocs and connector investment, SEZ option gained popularity after 2022 compared with the earlier period. This differential trend in the use of SEZs is not observed for within-bloc investment. The introduction of investment screening mechanisms has little, if any, effect on investment specifically in SEZs, in contrast with the large negative effect on inward FDI outside SEZs.

These distinct, if somewhat overlapping, considerations (manufacturing capabilities; indirect access to major markets such as the US or the EU with its value amplified by investment screening and other industrial policy measures; geographical, cultural and political proximity to major rival economies; and the use of special economic zones) jointly account for virtually all fastest-rising destinations of China's and US's investment.

We contribute to several rapidly growing strands of literature. Gopinath et al. (2025), Aiyar et al. (2024) and Alfaro and Chor (2023), Campos et al. (2023), among others, document rapid fragmentation of trade and investment flows, in particular following the war on Ukraine and the imposition of comprehensive economic sanctions on Russia by the EU, US and several other economies in February 2022. Aiyar and Ohnsorge (2024) argue that connector economies are well positioned to intermediate trade and investment in a fragmenting world while at the same time pointing towards the decline in various measures of economies' connectedness over time. Chupilkin et al. (2023b) and Corsetti et al. (2024) highlight the role of connector economies in intermediating trade to Russia under sanctions while Chupilkin et al. (2023a) document fragmentation in the use of currencies of invoicing in trade with Russia along geopolitical lines. In this context, we highlight the patterns of connector greenfield foreign investment, its drivers and competitive advantages of connector economies.

We also contribute to the growing literature on industrial policy and its cross-border spillovers (for instance, Goldberg et al. (2024)) as well as the literature on investment promotion (for instance, Harding and Javorcik (2011), Harding et al. (2019)) by documenting sizable spillovers from the US Inflation Reduction Act to selected economies. We also point to the rising use of special economic zones as investment promotion tool in the presence of increasing geopolitical fragmentation.

We also contribute to the literature on the impact of FDI restrictions on investment flows (Mistura and Roulet (2019), Eichenauer and Wang (2024), Bauerle Danzman and Meunier (2023), Mau and Conteduca (2024)) by showing that investment screening procedures can be an effective, if relatively blunt, mechanism for reinforcing geopolitical fragmentation of greenfield investment. Thye also appear to incentive relocation of investment towards SEZs. Mistura and Roulet (2019) show that FDI flows are lower where restrictions on FDI are higher while Eichenauer and Wang (2024) and Mau and Conteduca (2024) show that the presence of investor screening procedures negatively affects M&A flows into the EU, in particular when acquirers are from BRICS economies and state-owned.

The rest of the paper is structured as follows. The next section discusses the setting and the data. Section III highlights broad patterns in the data. Section IV outlines the empirical strategy. Section V presents the findings and discusses their implications. Concluding remarks follow.

2 Data and setting

2.1 Investment projects

The data on foreign direct investments comes from Financial Times fDi Markets Database, which consists of global greenfield FDI at the investment project level. Data are primarily collected from publicly available sources (media, company sources, and investment agencies), and each project is cross-referenced against multiple sources. The data used in the analysis covers the period from January 2003 to March 2024, with details of over 290,000 investment projects and a total of 194 origin and destination economies. For each project the database records an estimate of the total amount of investment, an estimate of jobs created the source country, the destination country, the subregion (administrative area) within the destination country, the industry and the intended activity (distinguishing, for example, between research and development (R&D), sales and marketing, logistics or manufacturing (assembly) within the same manufacturing sector). The dataset also contains a number of special tags related to, for instance, the use of free zone (special economic zone) in the destination economy, clean technology sectors, relevance of the US-China trade war or Brexit).

As in Gopinath et al. (2025), we focus on investment project counts in our primary analysis as those data tend to be more robust and, in the case of pairs of economies with scarce investment flows, less volatile. The results are similar when looking at the estimates of investment project volumes.

2.2 Geopolitical alignment

In the baseline analysis of geopolitical fragmentation of cross-border investment flows, we divide the world into three groups, guided by Gopinath et al. (2025). The first group comprises economies that imposed trade and financial sanctions against Russia after the invasion of Ukraine in February 2022 (see Chupilkin et al. (2023b)). It includes the US, the EU, the UK, Canada and a number of other economies and is referred to as bloc US).[1] The second group includes Belarus, China (including Hong Kong SAR and Macau SAR), Eritrea, Mali, Nicaragua, North Korea, Russia and Syria as

[1] It includes all European Union economies as well as Albania, Australia, Canada, Iceland, Japan, Liechtenstein, Monaco, Montenegro, New Zealand, North Macedonia, Norway, Singapore, South Korea, Switzerland, Taipei China, Ukraine, United Kingdom, and United States.

in Gopinath et al. (2025) (these are largely China, Russia and countries that voted at the United Nations against a resolution condemning the invasion of Ukraine). The rest of the economies are described as connectors (non-aligned economies), serving as a potential bridge between geopolitical rivals. While sanctioning economies account for most of inward and outward FDI projects, the FDI footprints of connector economies and economies in the China bloc are also significant (see Table 1). The connector economies are significantly more likely to be the recipients rather than sources of foreign direct investment (see also Annex Table A1).

Table 1: Number of FDI projects

Geopolitical bloc	Inward FDI count	Outward FDI count
Bloc US [sanctioning economies]	164,994	246,834
Bloc China	31,182	14,986
Connectors [non-aligned]	97,426	31,782
Total	293,602	293,602

Source: FT fDi markets and authors' calculations. Note: The count of FDI projects announced between January 2003 and March 2024.

2.3 Investment screening

We also look at the FDI screening regulations using the PRISM database of the Organisation for Economic Cooperation and Development (OECD), see Bauerle Danzman and Meunier (2023). This database tracks presence of screening requirements for FDI into 38 economies during the period 2007-23 (see Annex Table A8). OECD destination economies account for more than half of the global FDI project count. Their share, if anything, has been steadily rising, before starting to decline after 2021 (see Annex Figure A1). This trend in itself is consistent with geopolitical fragmentation of investment and the rise of connector economies documented in this paper.

Most of the economies covered in the database imposed sanctions on Russia; the connector economies in the dataset comprise Chile, Colombia, Costa Rica, Israel, Mexico and Turkiye. Typically screening mechanisms apply to all economies of origin, although there may be exceptions. For instance, investment between the EU member states is typically exempt.

Investment screening regulations typically require prospective investors to notify the authorities of their intended project if it meets certain criteria such as the sector of investment, the identity of the investor, the type of transaction (for instance, a merger, an acquisition or a greenfield investment), location of acquired assets and so on. Regulations typically require governments to respond within a certain time frame (for instance, 45 days in the case of Italy's regulations adopted in 2012 and updated in 2019, see Mau and Conteduca (2024)). The authorities may approve the transaction, reject it or request additional information for further processing. Regulations typically also foresee penalties for failure to notify transactions subject to screening, prompting investors to err on the side of caution and submit notifications in cases when requirements may be ambiguous.

The database records sector coverage of screening restrictions where available distinguishing between 36 sectors (including real estate investment). Certain screening mechanisms may apply across all sectors but envisage stricter screening procedures for a specific subset of strategic industries. US, Germany, Spain and Australia are examples of major recipients of FDI with cross-sector screening provisions in place. Through a rigorous mapping process guided by the cross-walk Bauerle and Meunier (2021) mapping PRISM Industries to NACE/NAICS codes and subsequently to one or more of the 269 subsectors in the FT fDi database, 129 subsectors in FDI database have been aligned with the 36 industries in PRISM (cross-sector mechanisms have been mapped to all sectors). The remaining 140 subsector in the investment database are subjectively assigned to the closest match in PRISM.

Annex Table A9 lists the number of restrictions across economies and years for each sector. The most restrictive sectors include defense production, transport and telecommunications infrastructure, followed by real estate, media and finance. Tourism and advanced materials are among sectors with fewest restrictions.

The database also records whether screening restrictions were introduced for greenfield investment or brownfield investment (mergers and acquisitions).

For investment in the first quarter of 2024 we apply 2023 restrictions data. To extend this series back to 2003 (the earliest year for which we have FDI observations), we use the event format of the PRISM Database which, for earlier years, records implementation of new investment screening procedures. For instance, if procedures were in place in 2007 and are recorded as introduced in 2005, we record them as present in 2005-06 and absent in 2003-04.

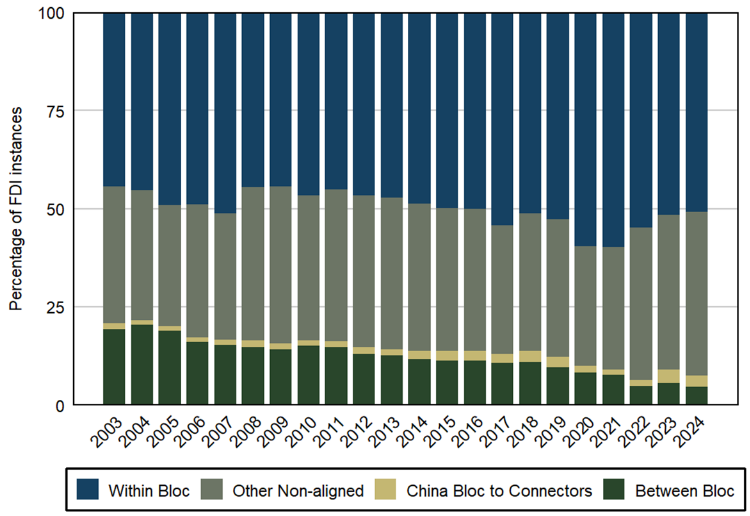
3 First look at the data

3.1 Geopolitical fragmentation of FDI

We start by presenting the stylized facts about geopolitical fragmentation of FDI. Firstly, investment between geopolitically distant blocs has been steadily declining as a share of total number of investment projects (see Figure 1). This decline has been mirrored by the increase in the share of investment into connector economies. While most of those investments come from investment originating in bloc US and connector economies, investment from bloc China into connector economies increased most relative to its low base at the start of the period.

While the trend can be seen throughout the period, it appears to have accelerated markedly since 2022, as noted in Gopinath et al. (2025), when comprehensive sanctions were imposed on Russia and the United States passed an Investment Reduction Act and CHIPS act (we will further examine structural breaks in the data around those points).

Figure 1: FDI project count by geopolitical alignment, per cent of total



Source: FT fDi database and authors' calculations. Note: The figure plots the shares of total FDI by geopolitical alignment of the economies of origin and destination. Other non-aligned investment comprises investment originating from connector economies and investment from bloc US economies in connector economies. 2024 refers to Jan-Mar.

3.2 Shifting patterns of investment from China and the US

Motivated by this observation, we calculate the largest changes in bilateral investment from China and from the United States to individual partner economies. In particular, we compare the average numbers of investment projects announced each quarter in the ten-year period between the second quarter of 2013 and the first quarter of 2022 with the average number of such projects announced in each quarter between Q2 2022 and Q1 2024. The top-20 and bottom-20 changes are presented in Tables 2, 3, 4 and 5. Annex Tables A4, A5, A6 and A7 present similar calculations for relative changes (log-differences in average project counts) rather than absolute changes (differences in average project counts).

Table 2: Top 20 economies by absolute mean change in FDI from China

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ Mean
Vietnam	2.36	8.67	6.31
Mexico	3.72	9.33	5.61
UAE	2.64	7.89	5.25
Spain	2.39	6.00	3.61
Thailand	2.06	5.33	3.28
Malaysia	2.53	5.33	2.81
Saudi Arabia	0.78	3.56	2.78
Uzbekistan	0.72	3.11	2.39
Indonesia	2.53	4.67	2.14
Cambodia	0.78	2.56	1.78
Singapore	4.56	6.11	1.56
Hungary	1.19	2.67	1.47
Egypt	1.39	2.67	1.28
Chile	0.83	2.11	1.28
Türkiye	1.11	2.11	1.00
Brazil	3.25	4.11	0.86
Philippines	0.97	1.67	0.69
Bangladesh	0.36	1.00	0.64
Serbia	1.06	1.67	0.61
Argentina	0.56	1.11	0.56

Source: FT fDi markets and authors' calculations. The table shows the top 20 destinations of China FDI by the change in the average project count between the periods shown.

Table 3: Top 20 economies by absolute mean change in FDI from the US

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ Mean
India	54.92	108.67	53.75
UAE	19.69	45.00	25.31
Saudi Arabia	4.81	13.11	8.31
Spain	21.58	29.78	8.19
Costa Rica	11.28	19.33	8.06
Poland	16.53	22.44	5.92
Malaysia	5.69	9.44	3.75
Italy	7.81	11.44	3.64
Portugal	2.89	6.44	3.56
Qatar	2.11	5.33	3.22
Philippines	7.44	9.89	2.44
Colombia	9.36	10.78	1.42
Serbia	1.58	3.00	1.42
Sweden	3.86	5.22	1.36
Vietnam	5.47	6.78	1.31
Egypt	1.89	3.11	1.22
Cyprus	0.53	1.67	1.14
Uruguay	0.61	1.67	1.06
Nigeria	1.97	2.89	0.92
Dominican Republic	1.22	2.11	0.89

Source: FT fDi markets and authors' calculations. The table shows the top 20 destinations of US FDI by the change in the average project count between the periods shown.

Table 4: Bottom 20 economies by absolute mean change in FDI from China

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ Mean
India	7.86	2.11	-5.75
Russia	4.69	0.33	-4.36
United Kingdom	8.36	5.89	-2.47
United States	18.25	15.89	-2.36
Germany	18.50	16.22	-2.28
France	5.31	3.44	-1.86
Denmark	1.33	0.44	-0.89
Australia	3.00	2.11	-0.89
Netherlands	2.36	1.67	-0.69
Finland	1.00	0.33	-0.67
Belgium	1.92	1.33	-0.58
Japan	2.92	2.33	-0.58
Nigeria	0.94	0.44	-0.50
Kenya	1.11	0.67	-0.44
New Zealand	0.67	0.22	-0.44
Switzerland	0.75	0.33	-0.42
Ethiopia	0.61	0.22	-0.39
Ghana	0.61	0.22	-0.39
Taipei China	0.72	0.33	-0.39
South Africa	1.47	1.11	-0.36

Source: FT fDi markets and authors' calculations. The table shows the bottom 20 destinations of China FDI ranked by the change in the average project count between the periods shown.

Table 5: Bottom 20 economies by absolute mean change in FDI from the US

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ Mean
China	48.61	18.33	-30.28
United Kingdom	98.22	80.78	-17.44
Germany	52.58	40.33	-12.25
Russia	6.22	0.00	-6.22
France	35.11	29.89	-5.22
Brazil	19.14	14.22	-4.92
Hong Kong SAR	10.53	6.22	-4.31
Canada	36.42	32.11	-4.31
Netherlands	20.61	16.56	-4.06
Hungary	4.08	1.67	-2.42
Argentina	5.58	3.22	-2.36
Ireland	26.89	24.67	-2.22
Israel	7.94	5.78	-2.17
Australia	30.17	28.22	-1.94
Finland	4.31	2.44	-1.86
South Korea	9.69	8.11	-1.58
Singapore	27.25	25.67	-1.58
Denmark	4.72	3.33	-1.39
Belgium	9.39	8.00	-1.39
Mexico	35.28	34.00	-1.28

Source: FT fDi markets and authors' calculations. The table shows the bottom 20 destinations of US FDI ranked by the change in the average project count between the periods shown.

Several observations emerge. First, the mix of top-20 and bottom-20 destinations is eclectic, with the leading "winners" among connector recipient economies being a diverse mix of countries. They enjoy one or more distinct competitive advantages, as discussed below.

Second, US investment in China indeed shows a marked contraction. At the same time, a marked rise is seen for US investment in destinations such as India or Vietnam that can provide facilities and inexpensive labour for assembly of manufactured products at scale, thus replacing assembly that would have previously been conducted in China. An example of such relocation would be Apple opening new factories in India while previously its production predominantly followed the "Designed in California, assembled in China" model.

Third, some economies appear to provide effective market access at times of rising trade tensions. Hungary, Spain (both EU members with relatively lower production costs), Serbia (which has a deep and comprehensive free trade agreement (FTA) with the EU and strong infrastructure links with the union via Bulgaria, Croatia and Hungary) and Turkiye (part of a customs union with the EU), for instance, provide access to the EU market while Mexico and Chile benefit from FTAs with the US. These economies also tend to be large and capable of providing cost-effective manufacturing facilities.

In principle, market access considerations could give rise to between-bloc investment rather than inhibit it. For instance, investment by China in the US could conceivably rise in response to higher tariffs in China goods, as was the case with Japan's automotive investment in the US in the 1980s. This direct substitution between trade and investment is not observed in the data, possibly because rising geopolitical tensions discourage such investment links. Indeed, the largest contractions in China's counts of outward FDI were observed for the UK, US, Germany, France, other EU economies, Australia and Japan (in addition to India and Russia). The regression analysis suggests that this observation generalizes for a broader set of economies or origin and destination economies seen as geopolitical rivals.

One mechanism that can be used to effectively discourage inter-bloc investment on the recipient size is investment screening – regulations that require special notifications for certain types of investment. Following a notification, investment project could be selected for lengthy administrative review and / or not given green light to go ahead.

In the analysis that follows, we document the rising use of investor screening over the last two decades in a large sample of economies (predominantly members of the OECD). Towards the end of the period, most inter-bloc investment could be subject to screening procedures.

Fourth, China's investment in Vietnam, Singapore and other members of ASEAN and / or active participants in China-sponsored Belt and Road initiative saw significant increases (see, for instance, Kahn et al. (2024) on recent trends in China's investment into Northern Vietnam). These investments do not provide the same degree of market access with respect to the US or the EU as investments, say, in Mexico, Morocco or Turkiye). They appear to be driven by traditional considerations of linguistic, geographic and cultural proximity that have been commonly validated by augmented gravity models of FDI (for instance Belgibayeva and Plekhanov (2019)).

Next, a number of fast-rising destinations do not obviously enjoy any of the above competitive advantages, notably the UAE, other GCC members and Egypt. These destinations appear to stand out in terms of the use of Special Economic Zones (SEZ) for inward investment. Globally, less than 5 percent of investment projects are located in special economic zones. For China's recent investments in the UAE or Egypt, this ratio ranged between 46 and 60 percent, an order of magnitude above the global averages and a significant increase on the 10-32 percent ratio observed during the preceding ten years. Around half of all inward FDI in the UAE were accounted for by SEZ investment in 2022-24. SEZs also account for 34 percent of US investment in Costa Rica during this period, up from 20 percent in 2013-21.

In addition to infrastructure and favourable tax treatment, SEZs can offer predictability of investment approvals and speed of setting facilities up, both increasingly at a premium at the time of rising geopolitical tensions and rapid reconfiguration of supply chains.

These distinct, if somewhat overlapping, considerations related to (i) manufacturing capabilities; (ii) indirect market access with its value amplified by investment screening and other industrial policy measures; (iii) geographical, cultural and political proximity to major rival economies; and (iv) the use of special economic zones, jointly account for virtually all fastest-rising destinations of China's (and US's) investment. We further investigate these channels by looking at the aggregate data as well as trends in a difference-in-difference and triple-difference settings.

3.3 Trends in clean-tech investment around the adoption of the IRA in the US

We start by looking at ways in which industrial policies in large third-party economies can amplify the value of market access via investment in connector economies. We illustrate this point by zooming in on the United State's Inflation Reduction Act. First introduced as a draft legislation in late September 2021 and signed into law in mid-August 2022, the IRA provides subsidies for US firms and households to purchase clean technologies including electric vehicles and solar panels. To be eligible for subsidies, the production of clean technologies needs to satisfy local content requirements. Inputs from countries with a comprehensive free trade agreement (FTA) with the US can, in turn, be eligible for the subsidy purposes.

Therefore, the policy creates incentives for firms to invest in the US, but it also makes specific types of green investment in other economies with US FTAs more attractive (for instance, production of batteries).

Based on the provisions of the law, we identify the clean-tech investment projects if it is associated with one of the following tags in the database: battery supply chain, carbon capture, cleantech, critical minerals, electric vehicles, hydrogen, lithium, photovoltaic technologies, waste to energy and wind power technologies.

Whether clean-tech investment to the economies with an FTA with the US increases differentially after IRA may depend also on those economies' ability to support the production of clean technologies. Table 6 lists the historical counts of manufacturing FDIs in general and clean-tech sector investments specifically for every economy with an FTA with the US. Whether one looks at total manufacturing investment counts or the numbers of clean-tech investments specifically, nine economies stand out in terms of track record of receiving FDI. Four of them are more closely geopolitically aligned with the US (Canada, Australia, South Korea and Singapore) and a further five are connector economies (Mexico, Morocco, Costa Rica, Colombia and Chile).

Table 6: Economies with FTA with the United States

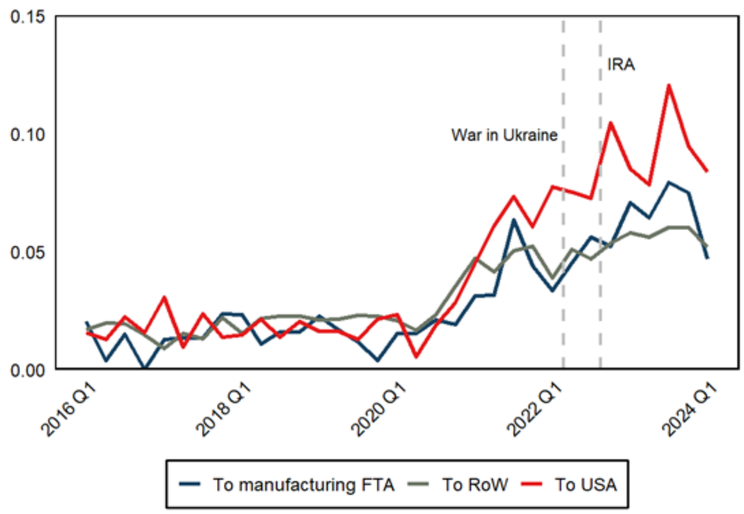
Economy	FTA effective	FDI project count, 2016-21 Manufacturing	Clean-tech
Panel A. *Stronger manufacturing base; US Bloc*			
Canada	1989	228	19
Australia	2005	136	21
South Korea	2012	102	13
Singapore	2004	94	3
Panel B. *Stronger manufacturing base; connectors*			
Mexico	1994	1005	24
Morocco	2009	159	8
Costa Rica	2009	120	4
Colombia	2012	97	2
Chile	2004	51	5
Panel C. *Other FTAs*			
Peru	2009	32	0
Oman	2009	31	1
Dominican Republic	2007	26	0
Guatemala	2006	17	0
Honduras	2006	16	0
Bahrain	2006	14	0
Israel	1985	14	2
Nicaragua	2006	14	0
El Salvador	2006	13	0
Jordan	2002	7	0
Panama	2012	6	0

Source: FT fDi markets and authors' calculations. Note: Project counts refer to the period 2016-21. Clean-tech investments are those tagged with battery supply chain, carbon capture, cleantech, critical minerals, electric vehicles, hydrogen, lithium, photovoltaic technologies, waste to energy and wind power technologies.

Globally, clean-tech FDI (as a share of total number of FDI projects) exhibit a strong upward trend since around early 2020 (see Figure 2 using quarterly data), more than doubling to around 6 percent of the total. These trends are similar for investment in the US, economies with an FTA with the US and a strong manufacturing base and the rest of the world.

In late 2022 the trends diverge, with a stronger pick-up in the number of green-tech investments in the US and US FTA economies compared with investment in the rest of the world (where the share holds steady). This divergence appears to start later in 2022 following the adoption of the IRA as opposed to earlier in 2022 at the time of the invasion of Ukraine and general escalation of geopolitical tensions.

Figure 2: Clean-tech investment as a share of total before and after IRA



Source: FT fDi markets and authors' calculations. Note: The figure plots the share of clean-tech FDI as a share of total number of FDI projects received by country groups shown during the period Q12016-Q12024. Economies with FTA with the US and strong manufacturing base include Australia, Canada, Chile, Colombia, Costa Rica, Mexico, Morocco, Singapore and South Korea. Clean-tech investments are those tagged with battery supply chain, carbon capture, cleantech, critical minerals, electric vehicles, hydrogen, lithium, photovoltaic technologies, waste to energy and wind power technologies.

3.4 The rise of investment screening

Next, we reflect on broad trends in the use of investment screening – an instrument that can be used to deter direct investment in search of market access (that is, investment in the US in response to the IRA in the example discussed in the previous subsection). We look at 4 types of restrictions: procedures for greenfield investment in a specific sector; procedures for brownfield investment in a specific sector; procedures for greenfield investment regardless of sector (with more restrictive sector provisions applying) and procedures for brownfield investment regardless of sectors.

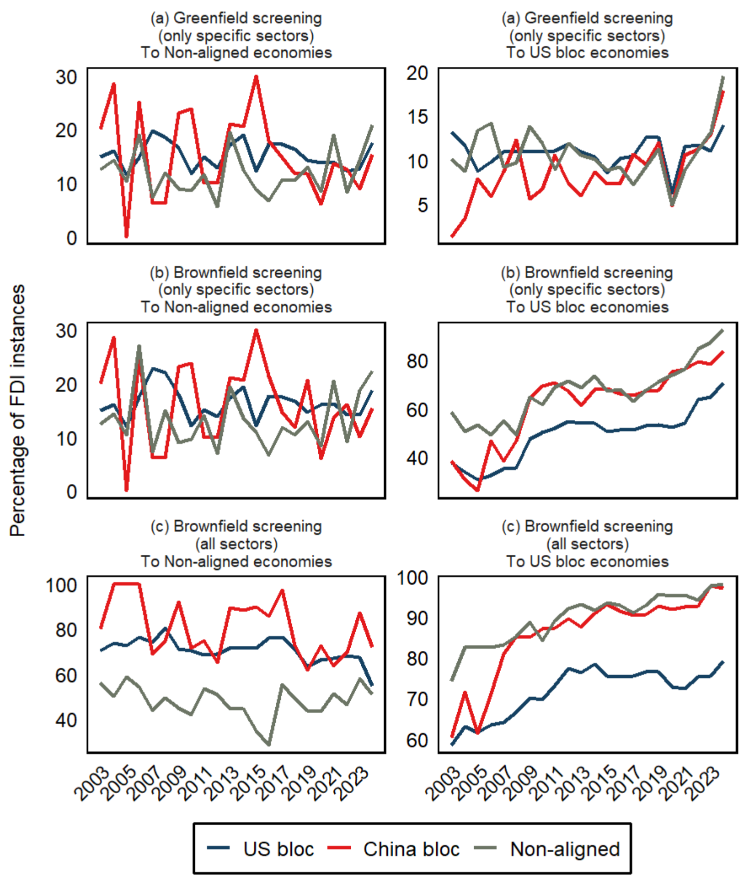
Using the most narrow measure, around 8 percent of China's investments in bloc US economies could be identified as subject to screening (see Figure 3, top right). This share has been rising over time, from around 2 percent towards the start of the period to 20 percent by 2023, with no upward trend for investment within the bloc of sanctioning economies and a notable increase for connector economies towards the end of the period. In the small subset of recipient connector economies, the incidence of screening (narrowly defined) is lower, with no upward trend (Figure 3, top left). Trends are similar for narrow sector application of brownfield screening rules, except the average number of China's investments to bloc US that could be subject to screening rises to 13 percent (Figure 3, second row).

With a broad application of the rules (based on at least one sector and greenfield or brownfield provisions), a steady increase in the share of investment potentially subject to screening is observed (Figure 3, bottom right). For investment from bloc China or connector economies to bloc US economies, more than 90 percent of projects could be subject to screening procedures. This is also the case for around three-quarters of intra-bloc investment and 50 to 75 percent of investment in connector OECD economies.

These empirically observed ratios are all the more striking since they take into account any behavioural responses on the part of economies of origin (in this sense, they are skin to trade-weighted average tariffs). For instance, investment from, say, China to more restrictive jurisdictions may decline with corresponding increases in investment in less restrictive jurisdictions, a response that is further corroborated in the empirical analysis below.

If one looks at individual country-pair-year observations, investments from bloc China economies to sanctioning economies would be subject to some form of screening in two thirds of cases, with more than 9 out of 10 recipient countries have some form of investor screening mechanisms in place by 2023.

Figure 3: Share of inward FDI in OECD economies subject to investment screening



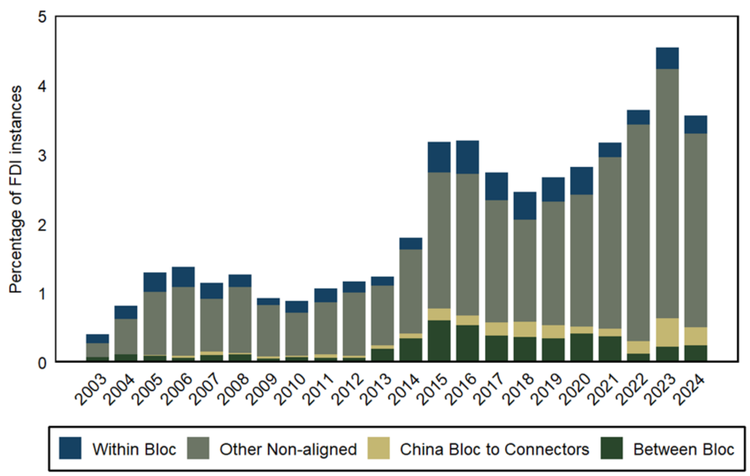
Source: FT fDi markets and authors' calculations. Note: The figure plots the share of FDI subject to screening. The left side displays inward FDI to OECD connector economies by origin blocs, and the right side shows the same for OECD US bloc economies. The top row applies the narrowest definition of screening, based on sectors listed in the PRISM database for greenfield investments. The second row is based on the sector of investment and brownfield restrictions. The bottom row is based on brownfield restrictions with respect to a country independent of sector of investment.

3.5 The rise of investment in Special Economic Zones

Next, we reflect on broader trends in SEZ investment. The share of FDI going into Special Economics Zones has been rising over time (see Figure 4). In 2023, it reached a historical high of around 2 percent of all projects. In the mid-2010s this increase was primarily driven by investments across geopolitically distant blocs. In more recent years, investment from China bloc to SEZs in connector economies and other non-aligned investment played a more prominent role.

These trend may be driven by the increasing value proposition of SEZs that often offer streamlined authorization process and simplified investment screening procedures in addition to tax incentives, supporting infrastructure, expedited customs procedures and other benefits. With geopolitical tensions rising, the value of SEZ proposition becomes greater in the case of cross-bloc investment where investment screening procedures may impose increasingly binding constraints.

Figure 4: Investment in SEZs, per cent of total investment count



Source: FT fDi markets and authors' calculations. Note: The figure plots the number of FDI projects going to free zones as a percentage of the total number of projects; 2024 refers to Jan-Mar.

Annex Table A10 further presents the top SEZs by the number of projects recorded in 2022-24. The sector mix of those investments is broad. For instance, China's recent investments in Egypt's SEZs are primarily concentrated in textiles, metals and consumer electronics while US investment in Costa Rica's SEZs covers software, IT services and medical devices. While connector economies such as the UAE, Costa Rica and Vietnam dominate, the list also includes special economic zones in both blocs (in China and in the EU).

4 Empirical strategy

4.1 Fragmentation of FDI: Difference-in-difference

We continue the analysis of fragmentation of FDI using a difference-in-difference specification. It compares (i) FDI flows between geopolitically aligned economies, geopolitical rivals and FDI flows into connector economies and (ii) FDI flows up to the first quarter of 2022 and flows in the subsequent period (Equation 1).

$$y_{sdt} = \beta_1 Alignment_{sd} \times Post_t + \delta_{sd} + \tau_{st} + \psi_{dt} + \epsilon_{sdt} \quad (1)$$

The dependent variable y_{sdt} is the number of announced FDI projects from a source country s to a destination country d in quarter t. *Alignment* is a categorical variable distinguishing between investment across rival geopolitical blocs, investment in connector economies and investment within blocs, the latter serving as a base group in the analysis. $Post_t$ is an indicator for period from 2022:q1 onwards. Specifications are saturated with a comprehensive set of fixed effects. Country-pair fixed effects take into account investment ties between a pair of economies throughout the period (which may be affected by the distance, cultural proximity, common language, common legal framework, attitudes to corruption and a multitude of other factors, see, for instance, Belgibayeva and Plekhanov (2019)). Source-time fixed effects capture trends specific to a country of origin, including, say the rise of outward FDI from China. Destination-time fixed effects pick up destination-specific trends, including during the Covid-19 pandemic. The coefficient of interest is on the interaction term between the post-war dummy and the variable capturing geopolitical alignment. Standard errors are clustered on country pairs.

To combine the estimates on the extensive and the intensive margins of trade, we use the inverse hyperbolic sine transformation of the number of investments, $log(N + \sqrt{N^2 + 1})$ (see MacKinnon and Magee (1990)). This formula approximates the logarithmic transformation for large project counts while assigning the value of zero to zero investment rather than discarding zero observations. We also run Poisson Pseudo Maximum Likelihood (PPML) estimations on the untransformed values of the numbers of projects (see Silva and Tenreyro (2006)).

4.2 Event studies

Our setting also lends itself well to an event study approach given the unanticipated nature of the war on Ukraine. The event study specifications are similar to Equation 1 except the categorical variable capturing economies' geopolitical alignment is interacted with dummy variables for each time period, with the first quarter of 2022 serving as the baseline period (see Equation 2).

$$y_{sdt} = \sum_t \beta_t Alignment_{sd} \times Quarter_t + \delta_{sd} + \tau_{st} + \psi_{dt} + \epsilon_{sdt} \quad (2)$$

4.3 The role of IRA: Triple-differenced specifications

Next, we investigate the role of IRA in shaping FDI flows in a similar triple-differenced framework. In particular, we compare FDI project counts (i) in various groups of economies depending on FTA status with respect to the US and manufacturing capabilities; (ii) investment in clean-tech sectors eligible for preferential treatment under the IRA versus other sectors; and (iii) investment up to the second quarter of 2022 and investment after the adoption of the IRA (see Equation 3). In these specification we construct project counts separately for clean-tech sectors and other sectors for each country pair and quarter.

$$y_{sdit} = \beta DestinationGroup_d \times Cleantech_i \times PostIRA_t + \delta_{sdi} + \tau_{st} + \psi_{dt} + \phi_{it} + \epsilon_{sdit} \quad (3)$$

The interaction term of interest is between a categorical variable $DestinationGroup$ capturing various country groups of interest (the base group being economies with no FTA with the US), the dummy variable for clean-tech industries ($Cleantech$) and the dummy variable for post-IRA time period ($PostIRA$). In terms of country groupings, we look separately at the United States; recipient economies within bloc US with an FTA with the US and a strong manufacturing base; connector economies with FTA with the US and a strong manufacturing base and other economies with FTA with the US, We also separate the EU and Japan from the base group of economies since they have critical mineral agreement signed (in case of Japan) or in advanced negotiation with the US. Those FTA-light agreements would allow the production of (some) clean technologies to satisfy the local content requirement under the IRA.

As before, the specifications are saturated with comprehensive sets of fixed effects. Source-destination-sector fixed effects absorb average propensity of economy pairs to have FDI linkages in clean-tech (before and after the IRA). Source-time, destination-time and sector-time fixed effects account for various general trends in FDI including gradual rise in the importance of clean-tech investment globally discussed earlier. The next section presents the results of the analysis.

4.4 Investment screening

Next, we investigate how bilateral counts of investment projects respond to the introduction of investment screening mechanisms in recipient OECD economies. The basic specification links project counts to dummy variables for greenfield and / or brownfield investor screening in place (ISM). These are largely specific to destination and time period (with limited variation by source economies, mainly on account of EU membership). Equation 4 includes source-destination fixed effects accounting for bilateral investment linkages as well as source-time fixed effects accounting for overall trends in investment by, say, China or the United States. The difference-in-difference identification thus comes primarily from comparing bilateral investment before and after a country imposes restrictions and comparing contemporaneous investment from the same country of origin to economies with and without investment screening mechanisms in place.

$$y_{sdt} = \beta ISM_{sdt} + \alpha_{sd} + \alpha_{st} + \epsilon_{sdt} \tag{4}$$

We further look at the differences in sector-specific bilateral investment counts in response to sector-specific investment screening mechanisms. Since Equation (5 now also includes source-destination-time fixed effects, the identification comes from a subset of economies that introduced investment screening in some sectors (indexed i) but not others, with cross-sectoral investment mechanisms being differenced out. The specification also controls for source-destination-sector fixed effects picking up any differences in sector composition of bilateral investment flows as well as source-sector-time fixed effects accounting for patterns of investment common to specific source countries and industries (for instance, the rise of battery-related investment from China).

$$y_{sdit} = \beta ISM_{sdit} + \alpha_{sdi} + \alpha_{sdt} + \alpha_{sit} + \epsilon_{sdit} \tag{5}$$

4.5 Special economic zones: Triple-differenced specifications

To look at the role played by special economic zones, we create separate project counts for investment inside and outside SEZs (indexed f) for each pair of economies and each time period. The basic specification is augmented as shown in Equation 6 where $Free$ is a dummy variable for projects involving a special economic zone:

$$y_{sdft} = \beta Alignment_{sd} \times Free_f \times Post_t + \delta_{sdf} + \delta_{sdt} + \tau_{sft} + \psi_{dft} + \epsilon_{sdft} \tag{6}$$

These specifications are saturated with a comprehensive set of fixed effects. Origin-destination-free zone fixed effects pick up the propensity of bilateral investments to use SEZs throughout the period while source-free zone-time and destination-free zone-time fixed effects pick up any general trends in the use of SEZs, including creation of new zones or changes in legal frameworks in the destination economies. Source-destination-time fixed effects pick up overall changes in between-bloc relative to within-bloc investment estimated earlier.

The triple-differences specifications thus compare project counts (i) between pairs of economies depending on their geopolitical alignment; (ii) before and after the second quarter of 2022; and (iii) using a SEZ versus other investments. The primary coefficient of interest is on the triple interaction term, capturing differential trends in changes in investment flows by geopolitical alignment since 2022 depending on the use of special economic zones.

We further investigate trends in the use of SEZs in a simpler difference-in-difference setting by looking separately at subsamples of investments which use and do not use SEZs as well as at subsmaple depending on their geopolitical alignment (for example, looking separately at cross-bloc investments or investments using connector economies). In the latter specifications (Equation 7) we compare project counts (i) up to the first quarter of 2022 versus subsequently and (ii) with or without the use of SEZ while saturating regressions with comprehensive sets of fixed effects (source-destination-time and source-destination-free zone).In particular, the source-destination-time fixed effects account for any general trends related to geopolitical fragmentation estimated in the earlier specifications, with the focus thus being solely on differential trends involving the use of SEZs.

$$y_{sdft} = Free_{dft} \times Post_t + \delta_{sdt} + \tau_{sdf} + \epsilon_{sdft} \tag{7}$$

5 Difference-in-difference analysis: Results

5.1 Geopolitical fragmentation of FDI

The results of baseline estimations are presented in Table 7. They confirm a large and statistically significant drop in between-bloc investment since the early 2022 relative to within-bloc investment. The semi-elasticity suggests that between-bloc investment in later quarters was around 30 percent lower than could be otherwise expected (with similar coefficients obtained using PPML and the inverse hyperbolic sine transformation, statistically significant at the 1 percent level). The decline appears to be more pronounced for outward investment from bloc China than for inward investment to bloc China.

In contrast, investment flows involving non-aligned connector economies experience only a small decline relative to within-bloc investment (of 2-8 percentage points, not statistically significant at the 10 percent level in PPML estimations). These results are consistent with the findings of Gopinath et al. (2025).

The event study analysis shows no significant pre-trend in terms of differential trends across blocs prior to the invasion of Ukraine (see Figure 5 which plots the PPML coefficients estimated based on equation (2)). Between-bloc investment subsequently drops, stabilizing at new lower levels in late 2023-early 2024. The effect observed during the earlier phase of US-China trade tensions (around 2018) is muted, if any. There appears to be no differential trend for connector economies versus within-bloc investment.

Table 7: Geopolitical fragmentation of investment: Difference-in-difference

	(1) PPML	(2) IHS	(3) PPML	(4) IHS
Between bloc × Post	-0.3736***	-0.1397***		
	(0.1076)	(0.0115)		
Connectors (non-aligned) × Post	-0.0095	-0.0677***	-0.0030	-0.0677***
	(0.0817)	(0.0055)	(0.0815)	(0.0055)
US bloc to China bloc × Post			-0.0634	-0.2001***
			(0.1917)	(0.0189)
China bloc to US bloc × Post			-0.5190***	-0.0794***
			(0.1432)	(0.0105)
Observations	3,215,550	3,215,550	3,215,550	3,215,550
Source-time FE	✓	✓	✓	✓
Destination-time FE	✓	✓	✓	✓
Source-destination FE	✓	✓	✓	✓

Source: FT fDi database and authors' calculations. Note: Standard errors in parentheses are clustered at the source-destination level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003:q1 - 2024:q1. Dependent variable is the number of FDI project (PPML) or the inverse hyperbolic sine (IHS) transformation of the number of projects (OLS). Base group is investment within blocs.

Next, we split connector investment flows into flows China (bloc) and the rest of connector investment flows. The base group in this exercise is now investment between blocs (that investment from China to connector economies may potentially seek to replace). The results presented in Table 8 suggested that increases in investment from China bloc to connector economies increased as much relative to between-bloc investment during the post-war period as within-bloc investment (or even more rapidly, based on PPML estimations). The increases for the rest of connector investment are also observed but are smaller and statistically insignificant in PPML estimations.

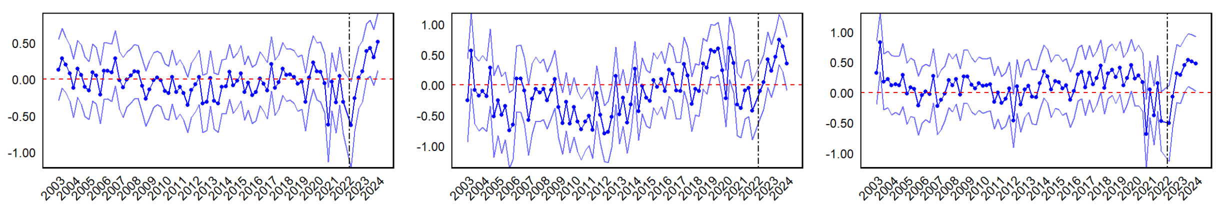
Table 8: Geopolitical fragmentation and investment from China

	(1) PPML	(2) IHS
Within bloc × Post	0.2443**	0.1615***
	(0.1148)	(0.0164)
China bloc to connector × Post	0.5048***	0.0435***
	(0.1553)	(0.0093)
Other connector × Post	0.2298*	0.0965***
	(0.1345)	(0.0161)
Observations	3,215,550	3,215,550
Source-time FE	✓	✓
Destination-time FE	✓	✓
Source-destination FE	✓	✓

Source: FT fDi database and authors' calculations. Note: Standard errors in parentheses are clustered at the source-destination level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003:q1 - 2024:q1. Dependent variable is the number of FDI project (PPML) or the inverse hyperbolic sine (IHS) transformation of the number of projects (OLS). Base group is investment between blocs.

Figure 5: Connector economy FDI: An event study

(a) Within-bloc (b) Bloc China to connectors (c) Other connectors



Source: FT fDi database and authors' calculations. Note: The vertical axis shows the semi-elasticity of investment flows. This figure plots the PPML coefficient estimates from equation 2, and the dashed lines are the associated 90% confidence interval. Base group is investment between blocs.

5.2 Connector investment, market access and the IRA

In the next subsection, we turn to the implications of the IRA for connector investment seeking access to the US market (and subsidies envisaged as part of industrial policy in the US). The results of the triple-differenced analysis are presented in Table 9.

As could be expected, investment in clean-tech sectors eligible for IRA subsidies in the United States itself increased significantly during the post-IRA period relative to a plausible counterfactual. At the same time, differential relative increases of roughly similar magnitude are also observed for clean-tech investment in connector economies with an FTA with the US and a sizable manufacturing FDI base (such as Mexico or Morocco). The effects for FTA economies geopolitically aligned with the US (Canada, Australia, South Korea, Singapore) is smaller and not statistically significant, on the other hand, highlighting the likely interplay between market access and geopolitics (from an investor's perspective, geopolitical "arbitrage" may be limited between the US and, say, Australia or Canada, while the costs of manufacturing in advanced economies are higher). Likewise, the estimated effects for investment in the EU and Japan are much smaller (and statistically significant only in the IHS regressions). The latter effects may also reflect investments in the context of tensions over imports of China's electric vehicles and batteries into the EU at the time. For FTA economies without manufacturing capabilities (such as Jordan, Nicaragua or Oman) the effects are, if anything, negative.

Table 9: IRA investment spillovers to connector economies

	(1) PPML	(2) IHS
US × Cleantech × PostIRA	0.3809^{***}	0.0561^{**}
	(0.1453)	(0.0218)
US Bloc manuf. FTA × Cleantech × PostIRA	0.1178	-0.0084
	(0.1623)	(0.0055)
Connector manuf. FTA × Cleantech × PostIRA	0.6473^{***}	0.0055
	(0.1806)	(0.0040)
Other FTA × Cleantech × PostIRA	-0.6516^{*}	0.0007
	(0.3504)	(0.0014)
EU and Japan × Cleantech × PostIRA	0.1541	0.0025
	(0.0947)	(0.0019)
Observations	2,471,172	2,471,172
Source-time FE	✓	✓
Destination-time FE	✓	✓
Source-destination-sector FE	✓	✓
Sector-time FE	✓	✓

Source: FT fDi database and authors' calculations. Note: Standard errors in parentheses are clustered at the source-destination level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2016:q1 - 2024:q1. Dependent variable is the number of FDI projects (PPML) or the inverse-hyperbolic sine (IHS) transformation of the number of projects. The base group are other economies.

5.3 Investment screening

Next, we look at the impact of introduction of investment screening on bilateral investment flows. The results are presented in Table 10. Following the introduction of investment screening, bilateral investment flows are 5-25 percent smaller than could be otherwise expected and this effect is statistically significant at the 1 percent level, with PPML yielding larger estimates. The magnitudes are similar whether one uses greenfield FDI restrictions specifically or a mix of greenfield and brownfield investment restrictions. If the two sets of restrictions are included jointly, both have negative effects of similar magnitude.

The rationale for looking at both targeted restrictions and broader restrictions (such as brownfield restrictions in any sector) is that investments are often complex and notifications under investment screening procedures would typically be driven by the more restrictive applicable provision. A greenfield project may have a brownfield component, for instance (such as purchase of intellectual property); a project may cover multiple sectors with more restrictive provisions applying (for instance, under real estate). In some cases, assets in specific locations may invite additional screening. Given penalties for failure to notify eligible transactions, investors and their lawyers have incentives to err on the side of caution and, if anything, over-notify.

Next, we repeat the exercise by creating separate total counts for bilateral investment in the more restrictive sectors (the top 13 sectors in Annex Table A9 with more than 100 sector-specific restrictions across country-years) and the remaining sectors. The results presented in Table 10 point to virtually identical effects in the sets of "more strategic" and "less strategic" sectors (see Table 12). In other words, once screening mechanisms are introduced, they work similarly across sectors.

When we look at the differences between investment counts in targeted and non-targeted sectors controlling for destination-year fixed effects that subsume general changes in investment screening regime in a given country. The estimated differential effects on the targeted sectors are negative but relatively small and imprecisely estimated, being statistically significant at the 10 percent (or lower) levels (see Table 11).

Overall, the results suggest that the introduction of investment screening can be a significant deterrent to bilateral investment. The results also tentatively suggest that rather than being surgical (highly sector- or investment-type-specific), these restrictions work as a blunt instrument largely disincentivizing bilateral greenfield investment across the board.

Table 10: Investment screening mechanisms and project counts

	(1)	(2)	(3)	(4)	(5)	(6)
	PPML	PPML	PPML	IHS	IHS	IHS
Brownfield screening	-0.2884***		-0.2413***	-0.0557***		-0.0528***
	(0.0481)		(0.0483)	(0.0078)		(0.0078)
Greenfield screening		-0.2646***	-0.1953***		-0.0315***	-0.0176**
		(0.0457)	(0.0425)		(0.0093)	(0.0088)
Observations	162,184	162,184	162,184	162,184	162,184	162,184
Source-time FE	✓	✓	✓	✓	✓	✓
Source-destination FE	✓	✓	✓	✓	✓	✓

Source: FT fDi database and authors' calculations. Note: Standard errors in parentheses are clustered at the destination-year level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003 - 2024. Dependent variable is the number of FDI projects (PPML) or the inverse hyperbolic sine transformation of the number of projects.

Table 11: Investment screening: Most screened versus least screened sectors

	(1)	(2)	(3)	(4)	(5)	(6)
	Most screened sectors			Least screened sectors		
	PPML	PPML	PPML	PPML	PPML	PPML
Brownfield screening	-0.3101***		-0.2633***	-0.2620***		-0.2123***
	(0.0442)		(0.0451)	(0.0572)		(0.0570)
Greenfield screening		-0.2645***	-0.1820***		-0.2764***	-0.2202***
		(0.0515)	(0.0487)		(0.0493)	(0.0474)
Observations	162,184	162,184	162,184	162,184	162,184	162,184
Source-time FE	✓	✓	✓	✓	✓	✓
Source-destination FE	✓	✓	✓	✓	✓	✓

Source: FT fDi database and authors' calculations. Note: Standard errors in parentheses are clustered at the destination-year level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003 - 2024. Dependent variable is the number of FDI projects (PPML) or the inverse hyperbolic sine transformation of the number of projects. Estimated separately for project counts across sectors with more versus less investment screening regulations applying globally.

Table 12: Investment screening: Sector-specific effects

	(1)	(2)	(3)	(4)	(5)	(6)
	PPML	PPML	PPML	IHS	IHS	IHS
Brownfield screening	-0.0456		-0.0442	-0.0025***		-0.0031***
	(0.0319)		(0.0327)	(0.0008)		(0.0009)
Greenfield screening		-0.0383	-0.0172		0.0012	0.0030***
		(0.0713)	(0.0731)		(0.0006)	(0.0008)
Observations	4,703,336	4,703,336	4,703,336	4,703,336	4,703,336	4,703,336
Source-sector-time FE	✓	✓	✓	✓	✓	✓
Source-destination-sector FE	✓	✓	✓	✓	✓	✓
Destination-year FE	✓	✓	✓	✓	✓	✓

Source: FT fDi database and authors' calculations. Note: Standard errors in parentheses are clustered at the destination-year level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003 - 2024. Dependent variable is the number of FDI projects (PPML) or the inverse hyperbolic sine transformation of the number of projects.

5.4 Investment in special economic zones

Next we look separately at trends for investments with and without the use of special economic zones (see Table 13). In the sample of projects outside SEZs the results are quantitatively and qualitatively similar to those reported earlier. In the sample of projects with free economic zones the estimated coefficients are also negative, pointing to a decline in between-bloc investment relative to within-war investment in the post-war period. The estimated differences, however, are three to six times smaller than in the non-SEZ sample and are not statistically significant at conventional significant levels.

In a triple-differenced analysis (presented in the last two columns), the coefficients on the triple interaction terms are positive and statistically significant. They suggest that project counts increased differentially more post-war for between-bloc investment destined for special economic zones. Similar, albeit somewhat less precisely estimated, effects are also observed for connector economy projects in free economic zones in the later period.

Table 13: Geopolitical fragmentation of investment in versus outside SEZ

	(1)	(2)	(3)	(4)	(5)	(6)
	Without free zone		Within free zone		All	
	PPML	IHS	PPML	IHS	PPML	IHS
Between bloc × Post	-0.3490***	-0.1391***	-0.0514	-0.0012		
	(0.1086)	(0.0115)	(0.3502)	(0.0016)		
Connector × Post	0.0068	-0.0684***	-0.0998	0.0033***		
	(0.0828)	(0.0055)	(0.5412)	(0.0010)		
Between bloc× Free zone × Post					1.0212**	0.1379***
					(0.5185)	(0.0113)
Connector× Free zone × Post					1.2451*	0.0716***
					(0.6922)	(0.0055)
Observations	3,215,550	3,215,550	3,215,550	3,215,550	6,431,100	6,431,100
Source-time FE	✓	✓	✓	✓		
Destination-time FE	✓	✓	✓	✓		
Source-destination FE	✓	✓	✓	✓		
Source-destination-freezone FE					✓	✓
Source-destination-time FE					✓	✓
Source-freezone-time FE					✓	✓
Destination-freezone-time FE					✓	✓

Note: Standard errors in parentheses are clustered at the source-destination level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003:q1 - 2024:q1. Dependent variable is number of FDI project for PPML estimation, and inverse hyperbolic sine (IHS) transformation of the number of projects in OLS estimations.

Another way to look at trends in SEZs investment is presented in Table 14, which provides difference-in-difference estimates separately in subsamples of within-bloc, between-bloc and connector investments. The analysis reveals large increases in the use of special economic zones for between-bloc investment projects after 2022. A sizable increase is also observed in the case of connector investment, although the magnitude is smaller than in the case of between-bloc investment, being statistically significant at the 1 percent level in PPML specifications.[2] In the subsample of within-bloc investment the coefficients are smaller and, if anything, negative. These estimates are consistent with the changes in aggregate numbers of projects presented earlier in Figure 4.

[2]In these small samples sparsely populated with non-zero observations the differences between PPML and IHS estimates are predictably larger, as discussed in Silva and Tenreyro (2006).

Table 14: The rise in the use of SEZs, by geopolitical alignment of investment

	(1)	(2)	(3)	(4)	(5)	(6)
	Within bloc		Between bloc		Connector [non-aligned]	
	PPML	IHS	PPML	IHS	PPML	IHS
Free zone × Post	-0.1104	-0.0868***	1.1133***	0.0629***	0.5019***	-0.0037***
	(0.1819)	(0.0056)	(0.1688)	(0.0106)	(0.0681)	(0.0003)
Observations	348,840	348,840	137,700	137,700	5,944,560	5,944,560
Source-destination-time FE	✓	✓	✓	✓	✓	✓
Source-destination-freezone FE	✓	✓	✓	✓	✓	✓

Source: FT fDi database and authors' calculations. Note: Standard errors in parentheses are clustered at the source-destination level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003:q1 - 2024:q1. Dependent variable is the number of FDI projects (PPML) or the inverse hyperbolic sine transformation of the number of projects (OLS).

Next, we investigate if the impact of investment screening mechanisms differs when it comes to investments inside and outside of SEZs. As before, we construct separate bilateral investment counts and additionally interact the variables of interest with an SEZ dummy. The results are presented in Table 16. For investments outside the SEZ, the estimates of the negative effects of investment screening on project counts are similar to the ones reported before. On the other hand, the interaction terms between ISM and the free zone dummy tend to be large, positive and in many cases statistically significant. The effect of ISM on investment flows to SEZs, represented by the sum of coefficients on the ISM dummy and the respective interaction term, tends to be small and statistically insignificant, being distinct from the effect on FDI outside of SEZ in the same economy.

Table 15: Investment in and outside SEZs and investment screening

	(1)	(2)	(3)	(4)	(5)	(6)
	PPML	PPML	PPML	IHS	IHS	IHS
Brownfield screening	-0.2890***		-0.2421***	-0.0554 ***		-0.0525***
	(0.0482)		(0.0485)	(0.0079)		(0.0078)
Greenfield screening		-0.2647***	-0.1952***		-0.0312***	-0.0174**
		(0.0461)	(0.0428)		(0.0094)	(0.0088)
Brownfield scr × Free zone	0.3699		0.4848	0.0533***		0.0505***
	(0.2514)		(0.2661)	(0.0079)		(0.0078)
Greenfield scr × Free zone		-0.0587	-0.2099		0.0301***	0.0169
		(0.2436)	(0.2507)		(0.0094)	(0.0089)
Observations	324,368	324,368	324,368	324,368	324,368	324,368
Source-time FE	✓	✓	✓	✓	✓	✓
Source-destination FE	✓	✓	✓	✓	✓	✓

Source: FT fDi database, OECD PRISM and authors' calculations. Note: Standard errors in parentheses are clustered at the destination-year level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003 - 2024. Dependent variable is the number of FDI projects (PPML) or the inverse hyperbolic sine transformation of the number of projects (OLS).

Another way of looking at the impact of investment screening on investment in SEZs is to restrict the sample to SEZ projects only (see Table 15). In this small sample, the coefficients of interest tend to be not statistically significant at the 10 percent level and small. The only statistically significant coefficient, the one on brownfield restrictions in IHS estimations, is much smaller than in the sample of non-SEZ investments. It implies that the introduction of investment screening is associated with a 0.2 percent drop in the count of respective FDI going into special economic zones.

Table 16: Investment in SEZs and investment screening

	(1)	(2)	(3)	(4)	(5)	(6)
	PPML	PPML	PPML	IHS	IHS	IHS
Brownfield screening	0.0809		0.2427	-0.0021***		-0.0020***
	(0.2468)		(0.2617)	(0.0007)		(0.0007)
Greenfield screening		-0.3234	-0.4051		-0.0011	-0.0006
		(0.2393)	(0.2471)		(0.0008)	(0.0008)
Observations	162,184	162,184	162,184	162,184	162,184	162,184
Source-time FE	✓	✓	✓	✓	✓	✓
Source-destination FE	✓	✓	✓	✓	✓	✓

Source: FT fDi database, OECD PRISM and authors' calculations. Note: Standard errors in parentheses are clustered at the destination-year level. ***, **, and * indicate significance at 1%, 5%, and the 10% level, respectively. The sample period is 2003 - 2024. Dependent variable is the number of FDI projects (PPML) or the inverse hyperbolic sine transformation of the number of projects (OLS).

5.5 Discussion

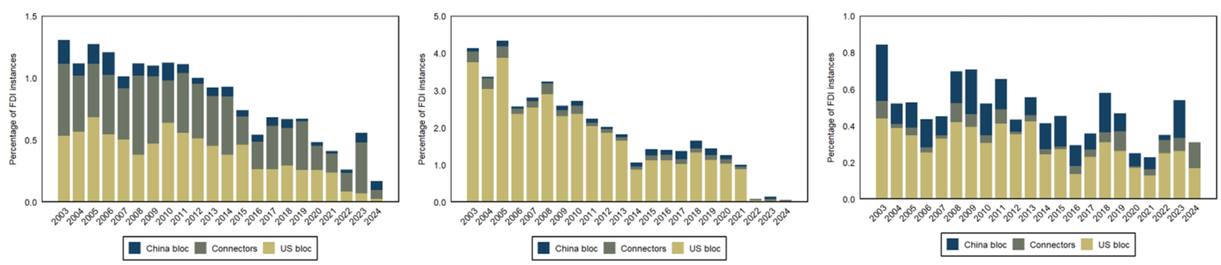
The analysis so far highlighted different considerations that underpin the rise on connector FDI. They include access to large markets (such as the US, the EU or China) against the background of intensifying trade wars and geopolitical fragmentation, the presence of manufacturing capabilities in addition to treaties facilitating such market access; industrial policies such as the IRA making market access more valuable to potential investors; industrial policies in the destination countries such as special economic zones shortening investment cycles and possible providing greater predictability of outcomes with respect to investment screening procedures.

These considerations are not exhaustive. Empirically, for instance, one observes a marked increase in China's investment in Vietnam, Singapore and other members of ASEAN and / or active participants in China-sponsored Belt and Road initiative. These investments do not provide the same degree of market access with respect to the US or the EU as investments, say, in Mexico, Morocco or Turkiye (the latter being part of a customs union with the EU). They are likely driven by linguistic, geographic and cultural proximity considerations.

Market access considerations also appear to have limitations, in particular under comprehensive economic sanctions (see Figure 6). Inward FDI into Russia has all but dried up after the imposition of sanctions, from sanctioning and non-sanctioning economies alike. At the same time, there has been no perceptible change in investment flows into the other member economies of the Eurasian Economic Union (Armenia, Belarus, Kazakhstan and the Kyrgyz Republic) – a customs union from where the Russian market could potentially be served with minimum barriers. While market access to Russia from within the Eurasian Economic Union is documented to have been widely used by trade intermediaries (see, for instance Chupilkin et al. (2023b), Chupilkin et al. (2024)) we find no evidence of intermediated investment using EEU, probably reflecting much larger sunk costs and greater visibility in the case of FDI (the visibility considerations may be important given the threat of future secondary sanctions or consumer backlash (see, for instance Hart et al. (2023)). When it comes to outward FDI from Russia, the downward trend observed since the 2010s continued and accelerated.

Figure 6: Investment to and from the Eurasian Economic Union

(a) From Russia (b) To Russia (c) To EEU-4



Source: FT fDi database and authors' calculations. Note: This figure plots investment into Russia, from Russia and into EEU-4 (Armenia, Belarus, Kazakhstan and the Kyrgyz Republic) as a share of global count of FDI projects. 2024 refers to Jan-Mar.

5.6 Robustness checks

The analysis focuses on the number of FDI projects as those data tend to be of highest quality (see Gopinath et al. (2025)). The main insights hold if one looks at the estimated amounts of capital expenditure associated with the announced projects (in US dollars at market exchange rates).

When looking at the rankings of economies by changes in China and US outward investment, we generalize the analysis to account for historical patterns of investment. We regress bilateral investment counts on a battery of source-destination, source-time and destination time fixed effects. For each pair of economies we compute the average residual since the second quarter of 2022 and over the preceding 10 years. We take the difference between those averages. The resulting rankings are similar to those reported for differences in investment counts.

The results also hold for alternative definitions of blocs (for instance, a narrower definition focusing on China and US specifically or a broader definition based on voting patterns at the United Nations General Assembly). The trends presented in Tables 2 and 3 further indicate that geopolitical fragmentation is centered around tensions between the US and China, world's two largest economies. Although not every sanctioning economy follows similar trend (China-Hungary investment has increased markedly, for instance), investment flows between China and major EU economies as well as Australia and Japan also contracted. The results are indeed robust to ways in which bloc composition is tweaked provided blocs are drawn around the US on the one hand and around China (and Russia) on the other hand.

6 Conclusion

The analysis in this paper highlighted the increasingly important role that connector economies – economies not strongly aligning themselves with the US or China – have been playing as destinations of greenfield foreign direct investment. Patterns of such connector investment are complex, varied and likely fast changing.

In some cases, connector investment is driven by investors seeking new ways of accessing major markets based on existing free trade agreements. Incentives for such indirect market access may be greater when direct investment is discouraged, including through use of investment screening mechanisms which have become increasingly common. Industrial policies such as the IRA may further strengthen market access incentives. At the same time, there appears to be no evidence that connector economies are used as investment destinations to facilitate market access under comprehensive economic sanctions.

Complementary to market access considerations, connector investment relies on prior track-record of attracting (manufacturing) FDI and capabilities to produce goods at scale. This implies that availability of (competitively priced) skilled labour and quality infrastructure remain important.

Connector investment also appears to be increasingly attracted by the speed of setting production up and simplicity and predictability of investment approvals. This is reflected in the increased use of special economic zones, in particular for cross-border investment where geopolitical alignment of the source and destination economies is weaker. Ethno-linguistic, geographical and geopolitical proximity to the investor jurisdiction also plays a role.

The analysis in this paper is based on a relatively short time period, during the time of rapidly fragmenting trade and investment linkages and increasing use of industrial policies across the globe. By sketching broad emerging trends, it invites future research into the nexus of trade, investment, industrial policy and geopolitical rivalry.

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A Data appendix

Table A1: US bloc: 20 economies with the highest FDI project count

Economy	Inward count	Outward count	Total count
United States	30,273	64,667	94,940
United Kingdom	19,696	27,590	47,286
Germany	17,047	25,658	42,705
France	10,453	16,155	26,608
Japan	3,712	18,060	21,772
Spain	8,655	8,452	17,107
Canada	5,774	7,979	13,753
Switzerland	2,361	11,227	13,588
Netherlands	4,429	8,594	13,023
Singapore	7,328	4,054	11,382
Australia	6,725	4,626	11,351
Italy	3,244	6,209	9,453
Sweden	1,741	5,517	7,258
Poland	6,318	919	7,237
Ireland	3,790	3,343	7,133
South Korea	2,290	4,745	7,035
Belgium	3,327	3,275	6,602
Denmark	1,910	3,908	5,818
Austria	1,506	3,855	5,361
Finland	1,866	2,851	4,717

Source: FT fDi markets and authors' calculations. Note: The table shows the number of inward and outward FDI projects for selected countries in the US bloc during the period 2003–2024.

Table A2: China bloc economies

Economy	Inward count	Outward count	Total count
China	20,791	9,287	30,078
Russia	5,391	2,409	7,800
Hong Kong SAR	4,031	3,060	7,091
Belarus	346	160	506
Macau SAR	243	24	267
Syria	168	12	180
Nicaragua	155	20	175
Mali	48	13	61
Eritrea	9	1	10

Source: FT fDi markets and authors' calculations. Note: The table shows the number of inward and outward FDI projects for countries in China bloc during the period 2003–2024.

Table A3: 20 connector economies with the highest FDI project count

Economy	Inward count	Outward count	Total count
India	15,264	6,795	22,059
UAE	8,562	4,017	12,579
Mexico	7,315	953	8,268
Brazil	6,232	1,387	7,619
Vietnam	4,744	483	5,227
Türkiye	3,200	1,823	5,023
Malaysia	3,268	1,411	4,679
Thailand	3,186	1,042	4,228
South Africa	2,515	1,471	3,986
Saudi Arabia	2,238	852	3,090
Israel	880	2,193	3,073
Indonesia	2,656	266	2,922
Philippines	2,315	371	2,686
Colombia	2,345	303	2,648
Chile	1,682	638	2,320
Argentina	1,684	595	2,279
Egypt	1,445	390	1,835
Morocco	1,352	246	1,598
Qatar	1,153	443	1,596
Serbia	1,420	120	1,540

Source: FT fDi markets and authors' calculations. Note: The table shows the number of inward and outward FDI projects for selected non-aligned countries over the period 2003–2024.

Table A4: Top 20 economies by relative mean change in FDI from China

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ asihn (Mean)
Saudi Arabia	0.78	3.56	1.27
Vietnam	2.36	8.67	1.26
Uzbekistan	0.72	3.11	1.18
UAE	2.64	7.89	1.06
Cambodia	0.78	2.56	0.95
Thailand	2.06	5.33	0.91
Mexico	3.72	9.33	0.90
Spain	2.39	6.00	0.89
Chile	0.83	2.11	0.73
Malaysia	2.53	5.33	0.72
Hungary	1.19	2.67	0.69
Indonesia	2.53	4.67	0.59
Egypt	1.39	2.67	0.58
Türkiye	1.11	2.11	0.53
Bangladesh	0.36	1.00	0.53
Kyrgyz Republic	0.22	0.78	0.49
Laos	0.22	0.78	0.49
Argentina	0.56	1.11	0.43
Romania	0.56	1.11	0.43
Philippines	0.97	1.67	0.42

Source: FT fDi markets and authors' calculations. Note: The table shows the top 20 destinations of China FDI ranked by the relative change in the average project count between the periods shown.

Table A5: Top 20 economies by relative mean change in FDI from the US

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ asihn (Mean)
Saudi Arabia	4.81	13.11	0.99
Qatar	2.11	5.33	0.88
UAE	19.69	45.00	0.83
Portugal	2.89	6.44	0.78
Cyprus	0.53	1.67	0.78
Uruguay	0.61	1.67	0.71
India	54.92	108.67	0.68
Uzbekistan	0.22	0.89	0.58
Serbia	1.58	3.00	0.58
Costa Rica	11.28	19.33	0.54
Dem. Rep. of Congo	0.11	0.67	0.51
Malaysia	5.69	9.44	0.50
Dominican Republic	1.22	2.11	0.46
Egypt	1.89	3.11	0.46
Italy	7.81	11.44	0.38
North Macedonia	0.53	1.00	0.38
Georgia	0.44	0.89	0.37
Paraguay	0.17	0.56	0.36
Croatia	0.64	1.11	0.36
Nigeria	1.97	2.89	0.35

Source: FT fDi markets and authors' calculations. Note: The table shows the top 20 destinations of the US FDI ranked by the relative change in the average project count between the periods shown.

Table A6: Bottom 20 economies by relative mean change in FDI from China

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ asihn (Mean)
Russia	4.69	0.33	-1.92
India	7.86	2.11	-1.27
Denmark	1.33	0.44	-0.67
Finland	1.00	0.33	-0.55
France	5.31	3.44	-0.42
Nigeria	0.94	0.44	-0.41
New Zealand	0.67	0.22	-0.40
Switzerland	0.75	0.33	-0.37
Ethiopia	0.61	0.22	-0.36
Ghana	0.61	0.22	-0.36
United Kingdom	8.36	5.89	-0.35
Austria	0.47	0.11	-0.35
Taipei China	0.72	0.33	-0.34
Kenya	1.11	0.67	-0.33
Australia	3.00	2.11	-0.33
Czech Republic	0.69	0.33	-0.32
Myanmar	0.69	0.33	-0.32
Netherlands	2.36	1.67	-0.31
Belgium	1.92	1.33	-0.31
Ukraine	0.31	0.00	-0.3

Source: FT fDi markets and authors' calculations. Note: The table shows the bottom 20 destinations of China FDI ranked by the relative change in the average project count between the periods shown.

Table A7: Bottom 20 economies by relative mean change in FDI from the US

Destination	Mean Q2 2013-Q1 2022	Mean Q2 2022-Q2 2024	Δ asihn (Mean)
Russia	6.22	0.00	-2.53
China	48.61	18.33	-0.97
Hungary	4.08	1.67	-0.83
Slovak Republic	1.28	0.44	-0.63
Myanmar	0.67	0.00	-0.63
Finland	4.31	2.44	-0.54
Argentina	5.58	3.22	-0.53
Panama	1.75	0.89	-0.53
Hong Kong SAR	10.53	6.22	-0.52
Estonia	0.53	0.00	-0.51
Jamaica	0.89	0.33	-0.47
Cuba	0.44	0.00	-0.43
Belarus	0.42	0.00	-0.41
Macau SAR	0.67	0.22	-0.40
Honduras	1.06	0.56	-0.39
Iraq	0.36	0.00	-0.35
Denmark	4.72	3.33	-0.34
Malta	0.33	0.00	-0.33
Mozambique	0.44	0.11	-0.32
Israel	7.94	5.78	-0.31

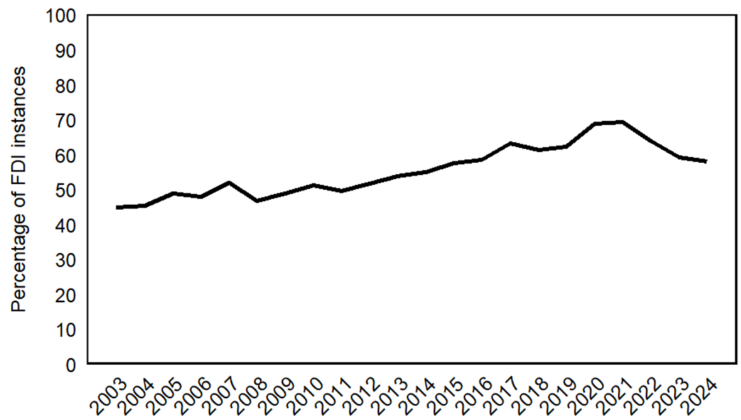
Source: FT fDi markets and authors' calculations. Note: The table shows the bottom 20 destinations of the US FDI ranked by the relative change in the average project count between the periods shown.

Table A8: Economies covered in PRISM database

US bloc			
Australia	Austria	Belgium	Canada
Czech R	Denmark	Estonia	Finland
France	Germany	Greece	Hungary
Iceland	Ireland	Italy	Japan
Latvia	Lithuania	Luxembourg	Netherlands
New Zealand	Norway	Poland	Portugal
South Korea	Slovak R	Slovenia	Spain
Sweden	Switzerland	United Kingdom	United States
Connectors			
Chile	Colombia	Costa Rica	Israel
Mexico	Turkiye		

Source: OECD PRISM and authors. Note: US bloc (sanctioning economies) are those that imposed trade sanctions on Russia in 2022.

Figure A1: Investment in OECD economies as a share of global FDI project count



Source: FT fDi database and authors' calculations. Note: The figure plots the number of FDI projects directed to OECD economies as a percentage of the total number of projects. 2024 refers to January–March.

Table A9: Frequency of screening mechanisms targeting specific sectors

Industry	Frequency of screening
Defense Production	283
Transportation Infrastructure	275
Telecommunications Infrastructure	269
Real Estate	239
Energy Infrastructure	232
Media	215
Finance	186
Water Infrastructure	168
Agriculture/Food Security	153
Energy Storage	146
Healthcare Infrastructure	134
Defense Technologies	127
Controlled Dual-Use	122
Quantum Information and Sensing Technology	83
Civil Nuclear	76
Mineral Resources	75
Sensitive Persona Data	66
Space	65
Education and Training	61
Cyber Security	60
AI and Machine Learning	58
Microprocessor Technology	56
Robotics	54
Biotechology	49
Critical Supplies	49
Advanced Surveillance Technologies	46
Logistics Technology	40
Gambling	36
Advanced Computing Technology	31
Research Institutions	30
Data Analytics Technology	29
Additive Manufacturing	11
Hypersonics	10
Advanced Materials	5
Brain-Computer Interfaces	0
Tourism	0

Source: OECD PRISM and authors' calculations. Note: The number of times (country-years) a sector is covered by sector-specific restrictions during 2003-2024.

Table A10: Top SEZs by number of FDI projects

	Period: 2003Q1-2022Q1				Period: 2022Q2-2024Q1		
Rank	Country	Free zone	Number of projects	Rank	Country	Free zone	Number of projects
1	UAE	Dubai International Financial Centre	624	1	UAE	Dubai International Financial Centre	233
2	UAE	Jebel Ali Free Zone	306	2	Qatar	Qatar Financial Centre	72
3	UAE	Dubai Internet City	171	3	UAE	Abu Dhabi Global Market	71
4	UAE	Abu Dhabi Global Market	160	4	UAE	Business Bay	71
5	Qatar	Qatar Financial Centre	138	5	UAE	Dubai Silicon Oasis	45
6	China	Suzhou Industrial Park	126	6	UAE	Jebel Ali Free Zone	41
7	UAE	Dubai Silicon Oasis	123	7	UAE	Dubai Internet City	40
8	UAE	Dubai Airport Free Zone	120	8	UAE	Jumeirah Lakes Towers Free Zone	33
9	UAE	Business Bay	106	9	UAE	Dubai World Trade Centre	32
10	UAE	Dubai Media City	96	10	Egypt	Suez Canal Special Economic Zone	30
11	UAE	Dubai Multi Commodities Centre	96	11	UAE	Dubai Multi Commodities Centre	30
12	UAE	Jumeirah Lakes Towers Free Zone	71	12	UAE	Dubai Media City	18
13	Poland	Walbrzych Special Economic Zone	67	13	UAE	Dubai Airport Free Zone	15
14	UAE	Dubai South	66	14	UAE	Dubai Science Park	13
15	UAE	Dubai World Trade Centre	56	15	Costa Rica	America Free Zone (AFZ)	12
16	Myanmar	Thilawa Special Economic Zone	54	16	Costa Rica	Coyol Free Zone	12
17	Costa Rica	Coyol Free Zone	52	17	Costa Rica	La Lima Free Zone	11
18	Poland	Lodz Special Economic Zone	50	18	UAE	Dubai Design District	11
19	Poland	Katowice Special Economic Zone	48	19	UAE	Dubai South	11
20	Vietnam	Vietnam Singapore Industrial Park	44	20	UAE	Masdar City Free zone	11

Source: FT fDi database and authors' calculations. Top SEZ by the number of FDI projects announced during the period shown.