WORLD ECONOMIC OUTLOOK

RESEARCH

Geoeconomic Fragmentation and Foreign Direct Investment

April 2023 World Economic Outlook

Collegio Carlo Alberto – Torino

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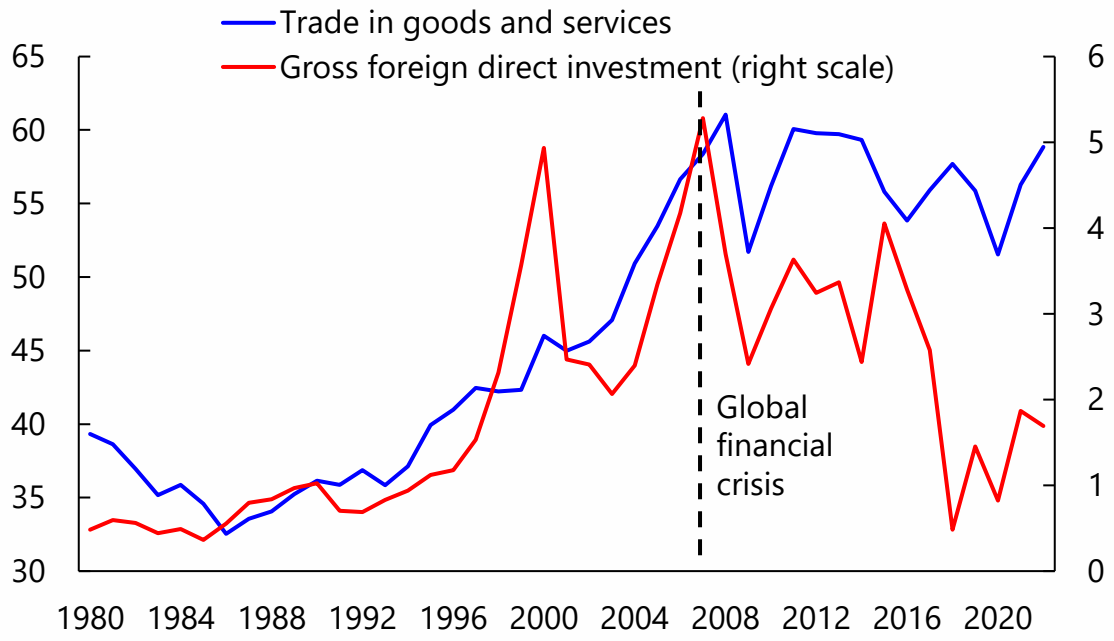
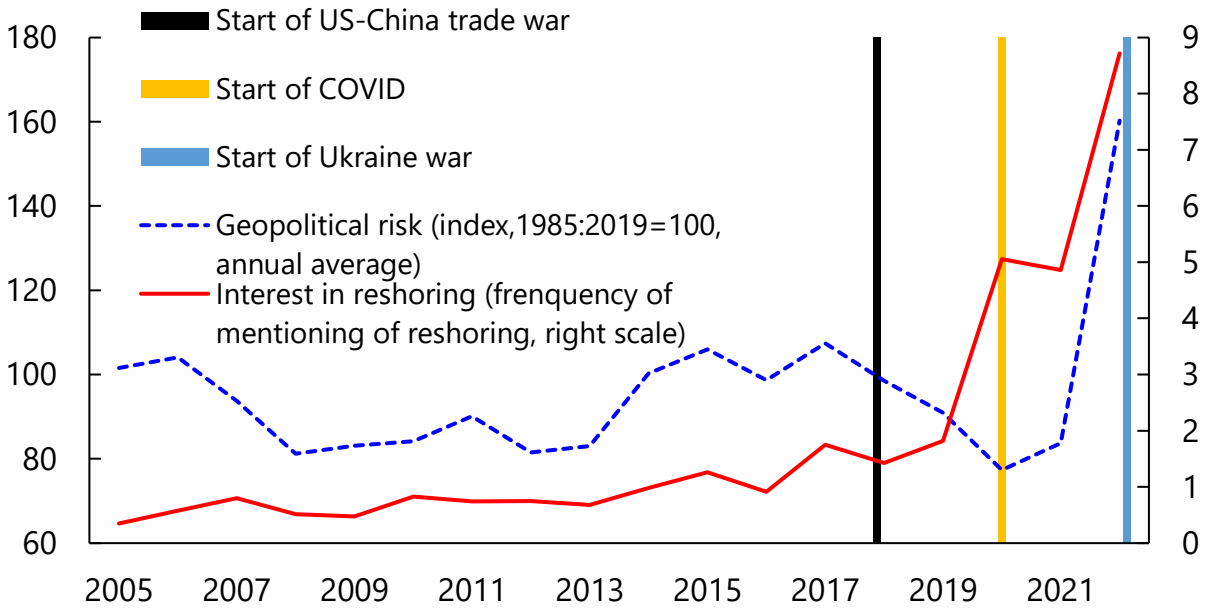
Growing interest in friend-shoring amid rising geopolitical tensions

"Slowbalization"
(Percent of GDP)



Rising geopolitical tensions and foreign direct investment fragmentation 1/
(Index; frequency of mentions of reshoring on right scale)

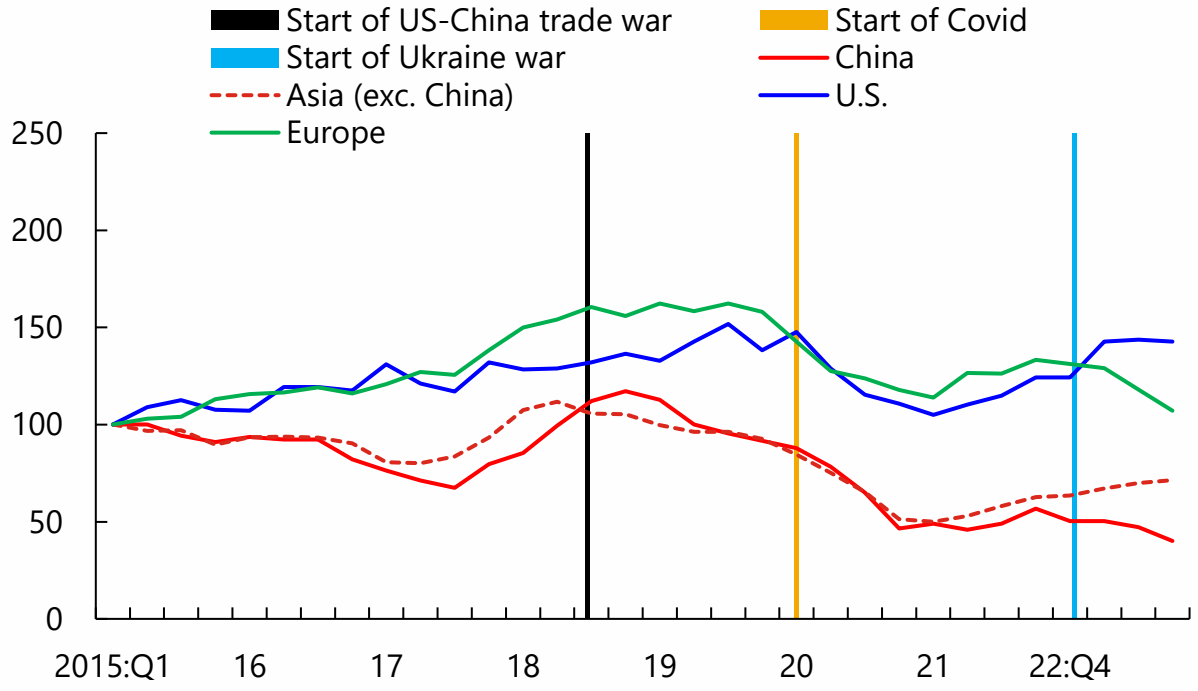


Sources: IMF, *World Economic Outlook;* Bailey, Strezhnev, and Voeten (2017); Hassan and others (2019); NL Analytics; and IMF staff calculations.
1/ Measures the frequency of mentions of reshoring, friend-shoring , or near-shoring in firms' earnings calls.

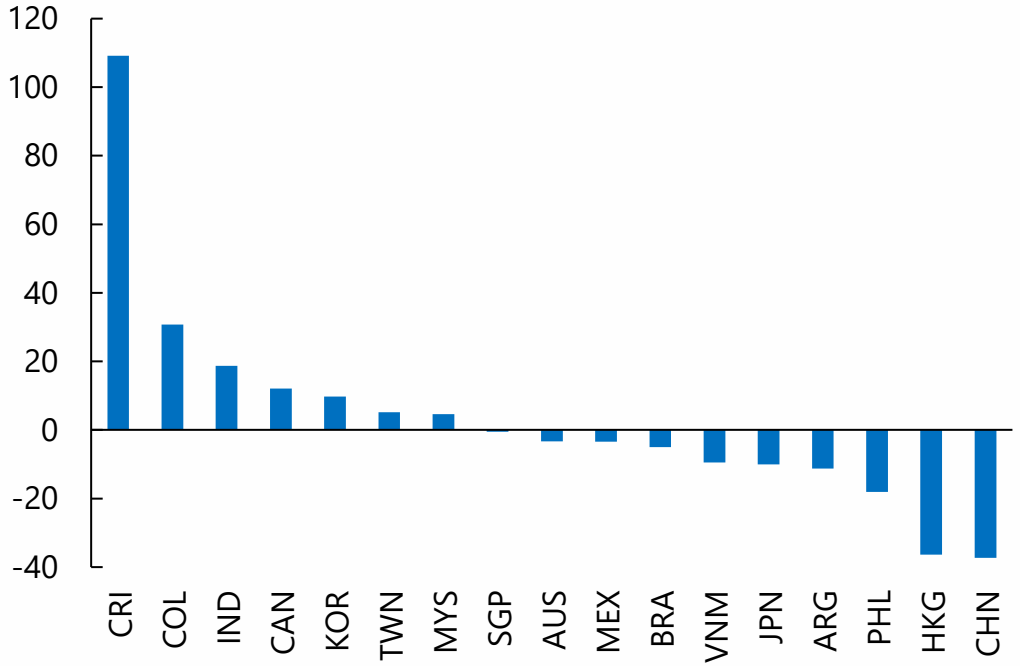
Evidence on FDI Fragmentation

Investment-level data point to FDI fragmentation

Foreign direct investment in strategic sectors
(Number of investments, four-quarter moving average, 2015:Q1 = 100)



Change in Outward US Foreign Direct Investment, 2020:Q2–22:Q4 versus 2015:Q1–20:Q1 1/
(Percentage point deviation from aggregate change)

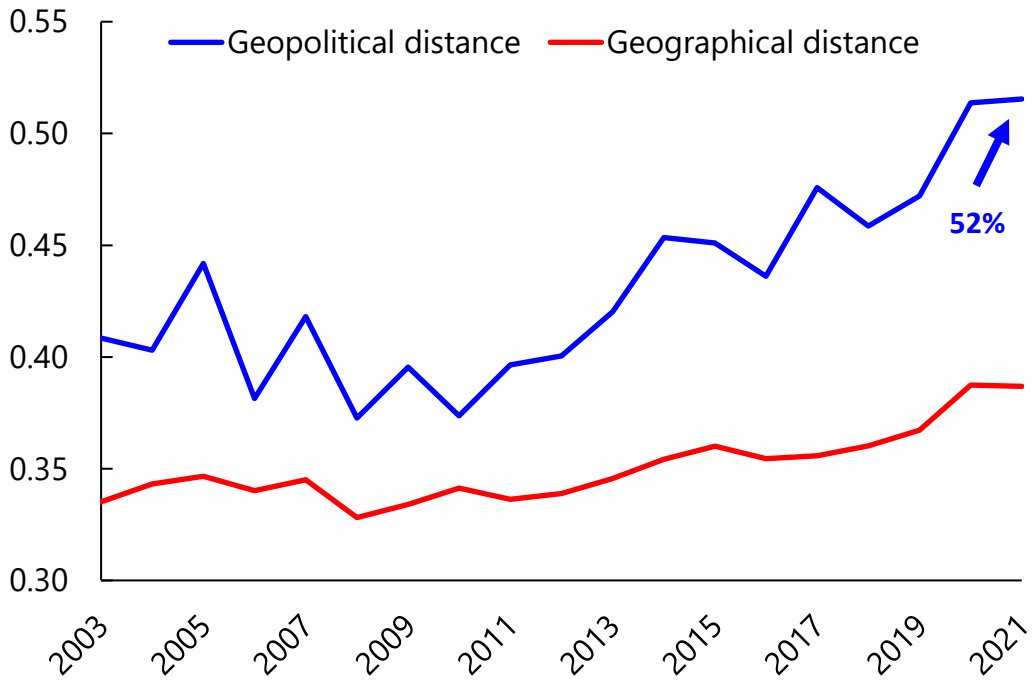


Sources: fDi Markets Database; and IMF staff calculations.

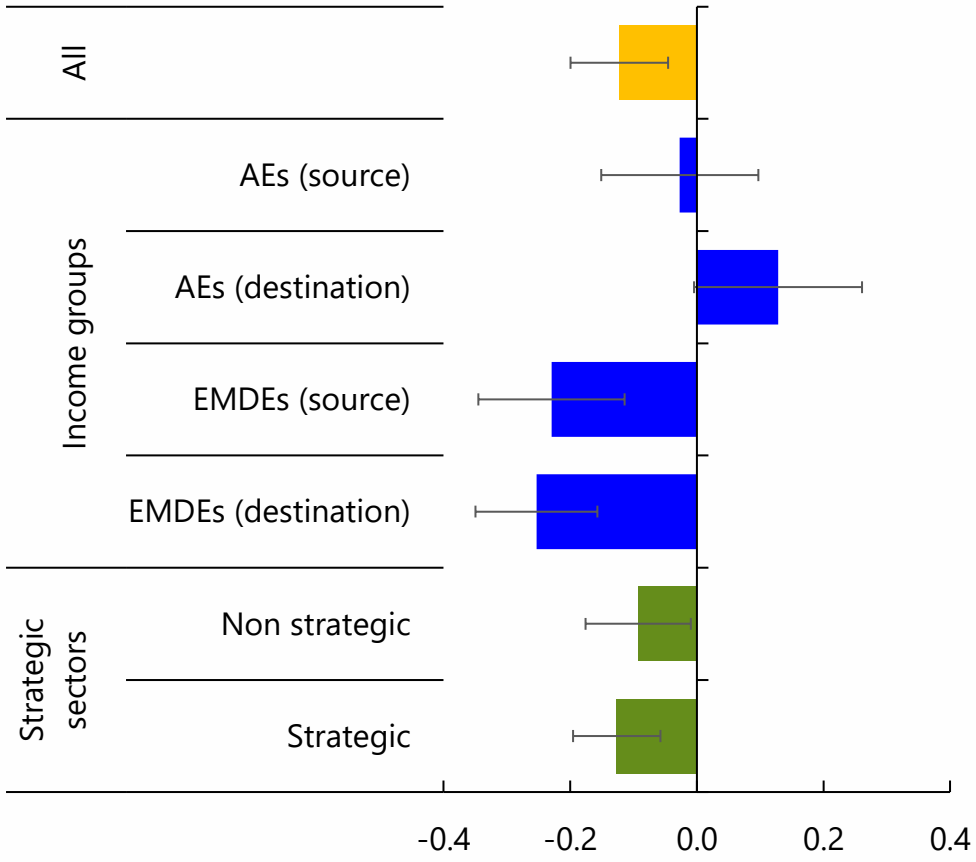
1/ Figure shows the deviation of outward US foreign direct investment change by destination from aggregate change (24 percent decline). Changes are computed using the number of greenfield foreign direct investments from the United States to Europe and Asia in 2020:Q4–22:Q2 and average number in 2015:Q1–20:Q1. Economy Labels on the x-axis uses ISO country codes.

FDI is increasingly directed to geopolitically aligned countries

Foreign direct investment between geographically and geopolitically close countries
(Percent)



Gravity model geopolitical alignment and FDI
(Semielasticities)



Sources: Atlantic Council; Bailey, Strezhnev, and Voeten (2017); Centre d'études prospectives et d'informations internationales, Gravity database; fDi Markets; and IMF staff calculations.
Note: Figure shows the annual share of total foreign direct investments between country pairs that are similarly distant (that is, in same quintile of distance distribution), geopolitically and geographically, from the United States. Coefficients of ideal point distance are estimated from gravity model for number of FDI. AEs = advanced economies; EMDEs = emerging market and developing economies.

Many economies—especially EMDE—are vulnerable to FDI relocation

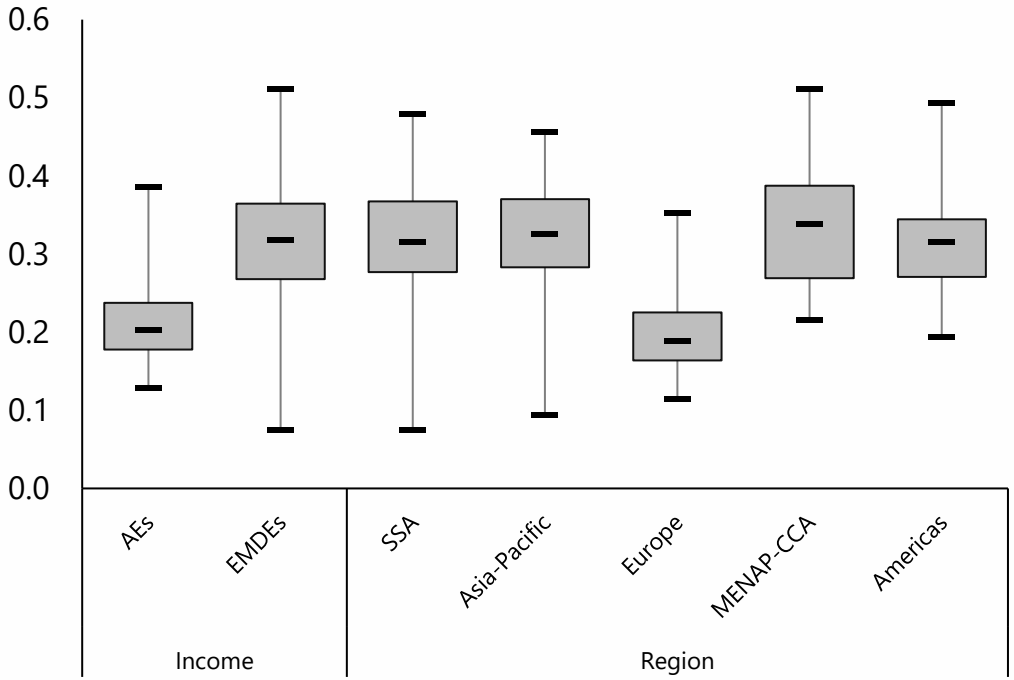
A **multidimensional index of vulnerability** captures different dimensions of risks from GEF to FDI stocks

1. Geopolitical: FDI from source economies that are more geopolitically distant is more vulnerable to reshoring

2. Market power: A host economy's vulnerability to relocation in a sector is lower if the host is a large player in that sector

3. Strategic: A host's vulnerability may be particularly high in sectors deemed strategic

Vulnerability index, aggregate
(Index)

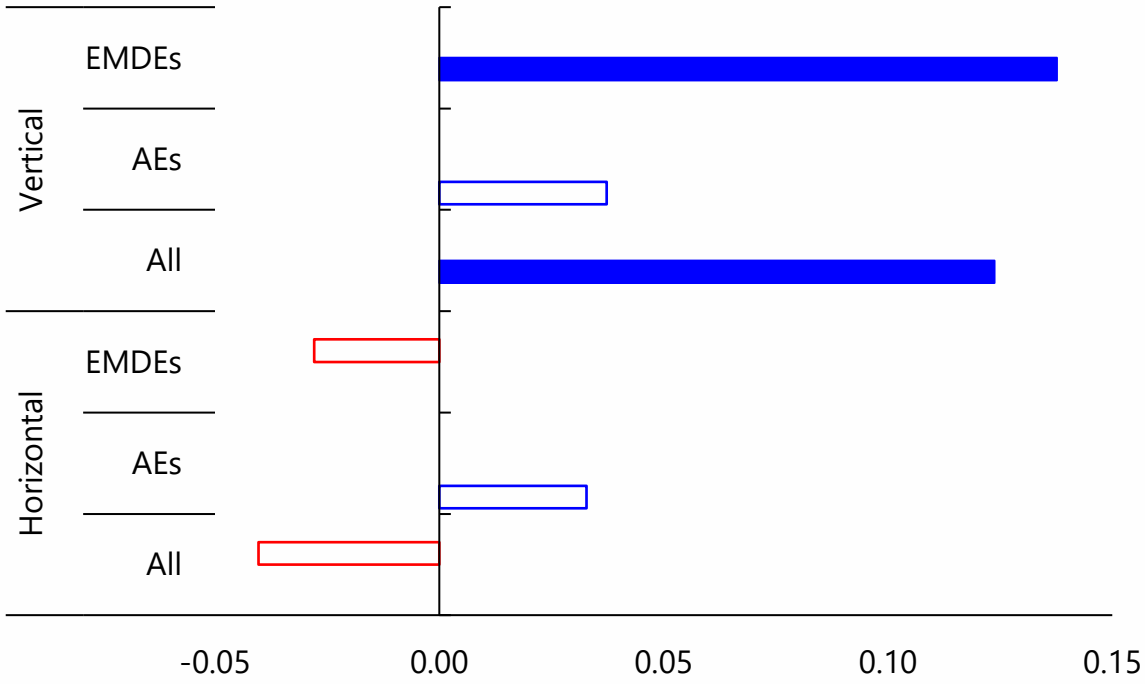


Sources: Atlantic Council; Bailey, Strezhnev, and Voeten (2017); fDi Markets; NL Analytics; Trade Data Monitor; and IMF staff calculations.
Note: Figure shows distribution of vulnerability index by income and regional groups, based on post-2009 foreign direct investment flows. AEs = advanced economies; EMDEs = emerging market and developing economies; MENAP-CCA = Middle East, North Africa, Afghanistan, Pakistan, Caucasus, and Central Asia; SSA = sub-Saharan Africa.

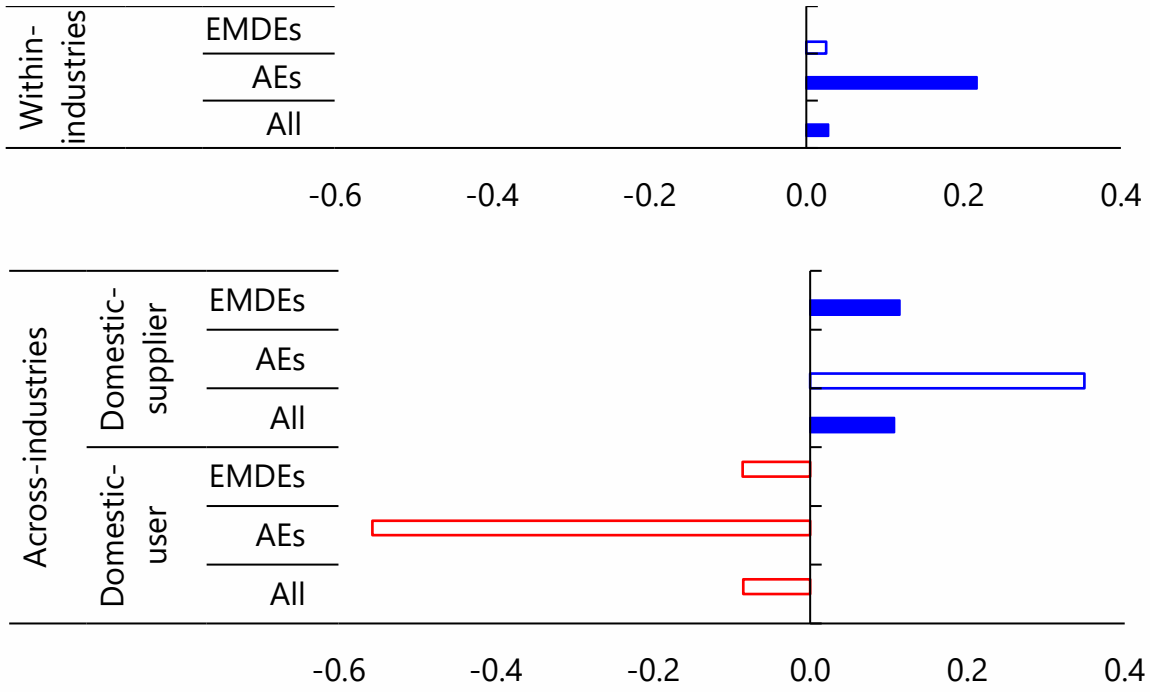
The Costs of FDI Fragmentation

FDI has positive spillovers on host countries

Foreign direct investment and growth: horizontal versus vertical 1/
(Standardized coefficients)



Firm-level foreign direct investment spillovers: Within-industries versus across-industries 2/
(Standardized coefficients)



Sources: Export-Import Bank of Korea; and IMF staff calculations.

1/ Figure reports the standardized coefficients obtained from cross-country growth regression estimated separately for countries with horizontal foreign direct investment and those with vertical. Solid bars indicate statistical significance at 1 percent level. See Online Annex 4.3 for details. AEs = advanced economies; EMDEs = emerging market and developing economies.

2/ Figure reports the standardized coefficients obtained from firm-level regression of labor productivity growth as a function of foreign direct investment within and across industries. Solid bars indicate statistical significance at 1 percent level. See Online Annex 4.3 for details. AEs = advanced economies; EMDEs = emerging market and developing economies.

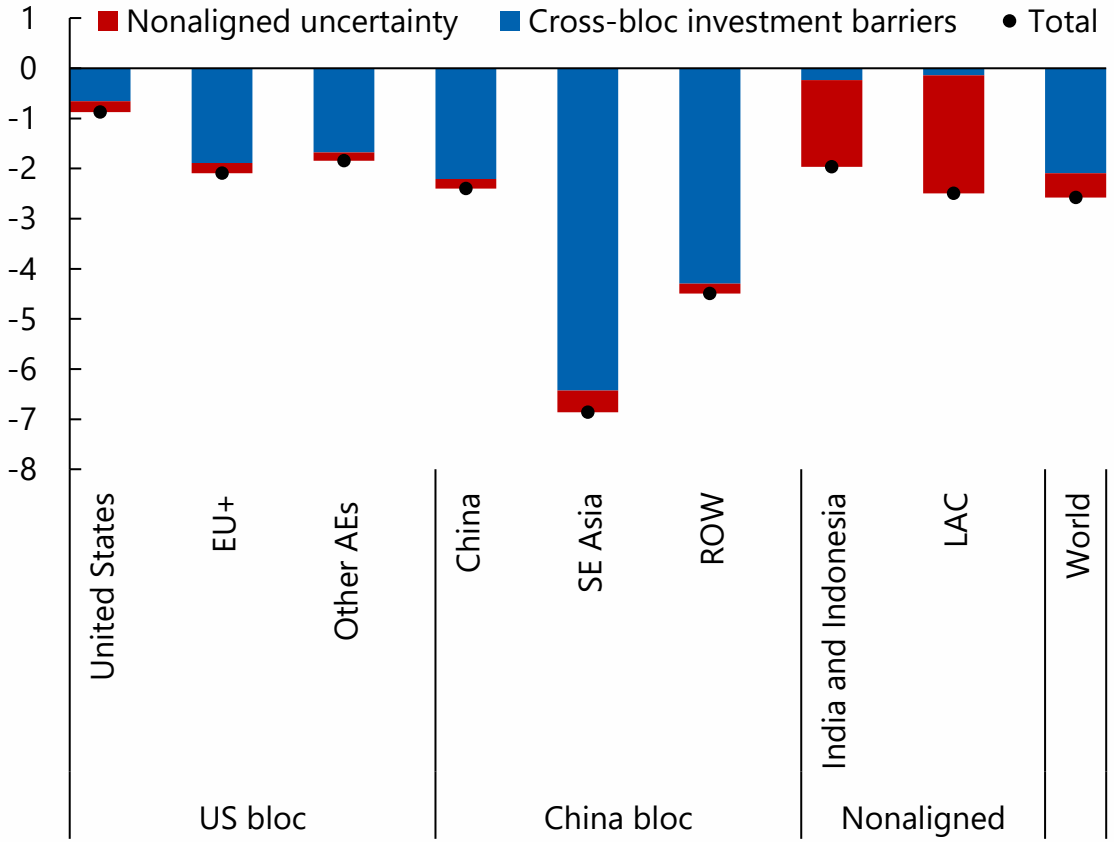
FDI fragmentation yields significant output losses

Long-term impacts of FDI fragmentation:

- ✓ Rising barriers between geopolitical blocs, centered around the two largest economies—China and the U.S..
- ✓ Other regions are assigned to a geopolitical bloc, or are non-aligned

Model regions	Closer to United States	Closer to China	Nonaligned
1. United States	✓		
2. China		✓	
3. Europe	✓		
4. Other AEs	✓		
5. India and Indonesia			✓
6. Other SE Asia		✓	
7. LAC			✓
8. ROW		✓	

Long-term GDP losses, with uncertainty for nonaligned economies
(Percent deviation from no-fragmentation scenario)



Source: IMF staff calculations.
Note: AEs = advanced economies; EU+ = European Union and Switzerland; LAC = Latin America and the Caribbean; ROW = rest of the world; SE = Southeast.

Conclusions

Policy recommendations

Widespread economic costs from strategic decoupling—about 2 percent of world GDP—provide **a rationale for a robust defense of global integration**, at a time when several actors are advocating for inward-looking policies

- Preserving a multilateral dialogue is needed to avoid increasing FDI fragmentation

<u>In a more fragmented world</u>:

- Developing a **framework for international consultations**—e.g., on the use of subsidies for reshoring or friend-shoring—could help identify unintended consequences and *reduce uncertainty* on policy options, mitigating cross-border spillovers
- Policies to **promote private sector development** could reduce vulnerability to FDI relocation
- Some countries could take advantage of diversion and attract FDI, by undertaking **structural reforms**, establishing **investment promotion agencies**, and **improving infrastructures**