Economics of Globalization

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Last weeks

- We have studied the main trade models.
  - Trade arises as the result of productivity differences, endowment differences, increasing returns to scale.
  - We have seen that trade creates winners and losers.
- Countries want to regulate trade and globalization.
  - Trade policy is an important area of the regulation of globalization.
  - Tariffs are generally seen as negative but can be beneficial.
  - New trade agreements try to regulate the international legal rules beyond trade.

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  - Strategic dependencies.
- Globalization have increased global threats (*global threats narrative)*

This week

- Not all firms are the same.
- Dive into the heterogeneity of firms.
  - Multinational firms are particularly important in today's globalization.
- Why are firms multinational?
- What is their role in globalization.
  - Roberts and Lamp's narrative about globalization: *the corporate power narrative* according to which MNEs have captured most gains from globalization.
  - Why? Enormous *market power* and *bargaining power* vis-a-vis governments and workers
    - Corporate tax competition, regulatory and cost arbitrage, IP protection, standard-setting, etc.

Firm heterogeneity

- The first heterogeneity comes from size.

TABLE 1—AGGREGATE IMPORTANCE OF THE TOP 100 FIRMS

Share of the top 100 in aggregate:	
Value added	0.219
Exports	0.220
Imports	0.183
Value added of foreign MNEs' affiliates	0.152
Value added of firms with foreign affiliates	0.828

Note: This table reports the share of the aggregates accounted for by the top 100 firms.

Source: Di Giovanni, Levchenko and Mejean, 2017

- This translates into different abilities to trade.
  - Only a few firms trade: less than 20% in France.
  - Even within exporters, most exports are due to very few firms.
- Even less firms are multinational.

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- MNEs come from an headquarter country, produce in multiple source countries and sell their products in multiple destination countries.
- FDI: flow of cross-border investment aimed at buying or enlarging a durable interest in a company and gaining influence on its management ($\geq$ 10% of ownership according to IMF BoP standards).

Multinational firms

Definition

- Greenfield FDI: creation of a foreign subsidiary vs. Acquisition: taking ownership of an existing foreign company.

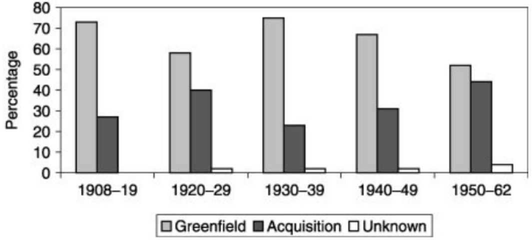


Fig. 6.1 Mode of entry used by US manufacturing companies to enter Britain, 1908–62.

Source: Jones and Bostock (1996).

Source: Jones, 2003

Multinational firms

History

- Who were the first multinationals?
  - Sumerian merchants, 2500BC that realized they needed men stationed abroad to receive, store and sell their goods? (Wilkins, 1970)
  - 13th century Italian bankers? (Wilson, 1976)
  - East India Company and Dutch East India Company?
- Trade has been early associated with long-distance firm activities.
- Internalizing activities helped for coordination and control.
- Pre-Modern MNEs: traders, shippers, bankers, family groups with investment abroad in manufacturing, mining or plantations.
- No single company expanded abroad to sell or manufacture its products before the 19th century.

Multinational firms

History

- From the 19th century and the Industrial revolution: rise in cross-border capital flows out of chartered companies monopoly rights.
- From $\approx$ 1820, companies began to expand abroad (mine in a border country, or in a colony, factories).
    - Siemens opened its first foreign affiliate in 1850 and Singer in 1867 (part assembly imported from the U.S. in Glasgow).
- By 1914: wide range of manufactured products, including chemicals, pharmaceuticals, electricals, machinery, motor cars, tires, branded food products, and cigarettes were undertaken by MNEs.
- From one-off cross-border transfers of knowledge to more sustained investments and continuous flow of knowledge and other resources across borders within the boundaries of firms: transition from manufacturing to services.
- Linked to the communications infrastructures.

Multinational firms

History

Box 4.2 Some large multinational manufacturing enterprises, *c.* 1914

Company	Nationality	Product	No. of foreign factories in 1914	Location of foreign factories
Singer	US	Sewing machines	5	UK, Canada, Germany, Russia, Austria-Hungary
J & P Coats	UK	Cotton thread	20	US, Canada, Russia, Austria-Hungary, Spain, Belgium, Italy, Switzerland, Portugal, Brazil, Japan
Nestlé	Swiss	Condensed milk/ baby food	14	US, UK, Germany, Netherlands, Norway, Spain, Australia
Lever Brothers	UK	Soap	33	US, Canada, Germany, Switzerland, Belgium, France, Japan, Australia, South Africa
Saint-Gobain	France	Glass	8	Germany, Belgium, Netherlands, Italy, Spain, Austria-Hungary
Bayer	Germany	Chemicals	7	US, UK, France, Russia, Belgium
American Radiators	US	Radiators	6	Canada, UK, France, Germany, Italy, Austria-Hungary
Siemens	Germany	Electricals	10	UK, France, Spain, Austria Hungary, Russia
L. M. Ericsson	Sweden	Telephone equipment	8	US, UK, France, Austria-Hungary, Russia

(*Source*: author's estimates)

Source: Jones, 2003

Why are multinational firms important to understand globalization?

Source: World Investment Report, 2023

- 79k MNEs with 790k foreign subsidiaries (2007).
- Employment went from 20,5 millions in 1990 to 80 millions in 2020 (x2.9).
- Turnover went from \$5000bn in 1990 to \$30000bn in 2020 (x6).
- World GDP has been multiplied by 2.75 over the period.
- Top 100 largest MNEs represent 30% of total MNEs sales and 25% of total employment

Largest MNEs

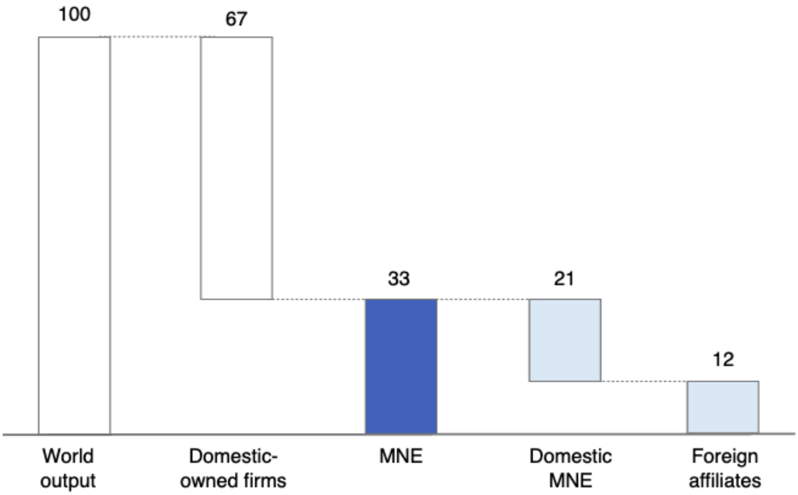
List Rank	Company Name	Revenues ($b)	Profits ($b)
3	Exxon Mobil	449.9	44.9
19	Apple	156.5	41.7
21	Gazprom	153.5	38.1
29	Industrial & Commercial Bank of China	133.6	37.8
50	China Construction Bank	113.4	30.6
9	Volkswagen	247.6	27.9
1	Royal Dutch Shell	481.7	26.6
11	Chevron	233.9	26.2
64	Agricultural Bank of China	103.5	23.0
70	Bank of China	98.4	22.1

Largest MNEs

93	Tunisia	Africa	46,282	2022
94	Cameroon	Africa	44,212	2022
95	Bahrain	Asia	43,544	2022
96	Bolivia	Americas	43,431	2022
97	Sudan	Africa	42,762	2022
98	Paraguay	Americas	41,855	2022
99	Libya	Africa	40,836	2022
100	Latvia	Europe	40,588	2022
101	Estonia	Europe	39,054	2022
102	Nepal	Asia	39,028	2022
103	Zimbabwe	Africa	38,280	2022
104	El Salvador	Americas	31,989	2022
105	Papua New Guinea	Oceania	31,362	2022
106	Honduras	Americas	30,568	2022
107	Trinidad and Tobago	Americas	29,337	2022
108	Cambodia	Asia	28,330	2022
109	Iceland	Europe	27,702	2022
110	Yemen	Asia	27,594	2022

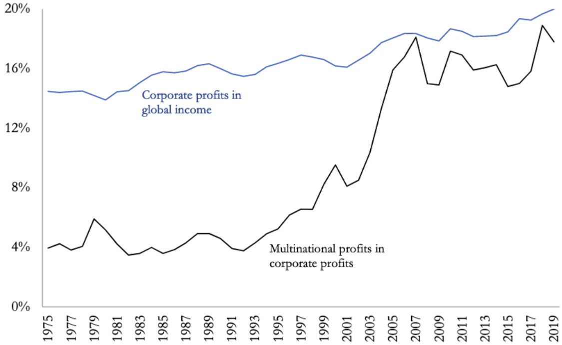
Why are multinational firms important to understand globalization?

Figure 3. Decomposition of global gross output by ownership status, 2014



Why are multinational firms important to understand globalization?

Figure 3: Global corporate profits and multinational profits, 1975–2019



Note: the blue line shows the evolution of the share of global corporate profits in global income (defined as global GDP minus global depreciation). The black line shows the share of global multinational profits (as defined in the text) in global corporate profits.

Source: for 1975–2015: Tørsløv et al. (2022a), Data Appendix Table C7; for 2016–19 figures: Data Appendix, Table 1.

Where do FDI go? Where do they come from?

Table 2.1 Affiliates Relative to Local Firms (Percentage Accounted for by Affiliates)

	Finland	France	Ireland	Holland	Poland	Sweden
Enterprises	1.6	2.0	13.4	3.4	16.0	2.8
Employment	17.2	26.2	48.0	25.1	28.1	32.4
Sales	16.2	31.8	81.1	41.1	45.2	39.9
R&D Expenditure	13.1	27.4	77.3	35.8	20.9	52.0
Exports	17.5	39.5	92.3	60.0	69.1	45.8

Source: OECD (2007).

Where do FDI go? Where do they come from?

Figure I.4. | **FDI inflows, top 20 host economies, 2021 and 2022** (Billions of dollars)

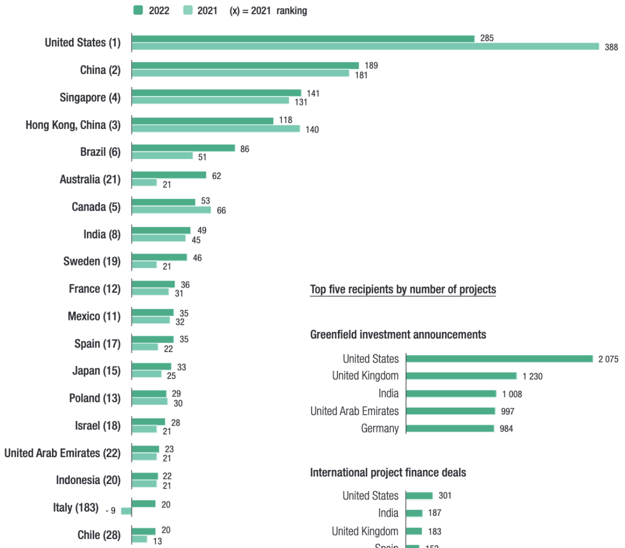


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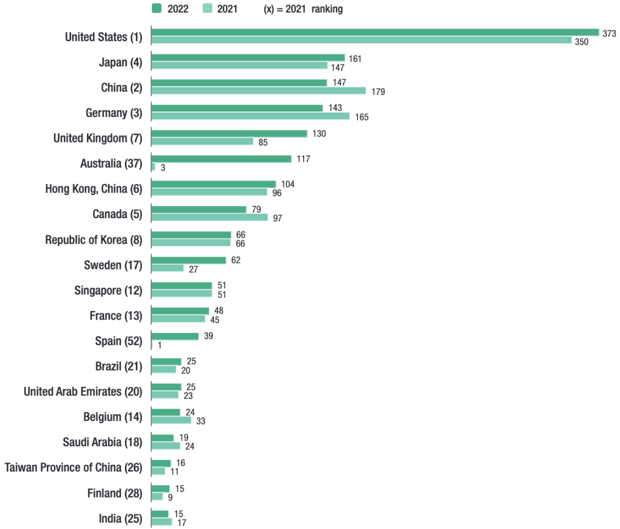
Figure I.12. FDI outflows, top 20 home economies, 2021 and 2022 (Billions of dollars)



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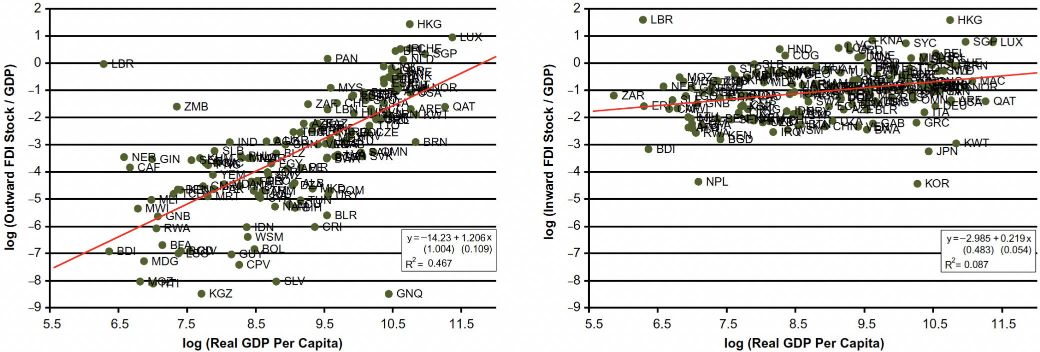


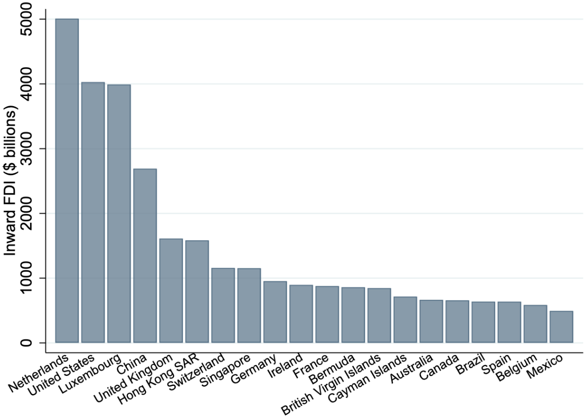
Sources: UNCTAD and World Bank

Figure 2.1 Aggregate FDI Stocks and Development

Where do FDI go? Where do they come from?

Measurement issues: Phantom FDI

Figure 1 – Largest inward FDI positions in 2017. The figure shows the 20 economies with largest inward FDI positions in 2017. For economies reporting to CDIS, the figure shows the reported numbers. For non-reporting economies, the figure shows our estimates.



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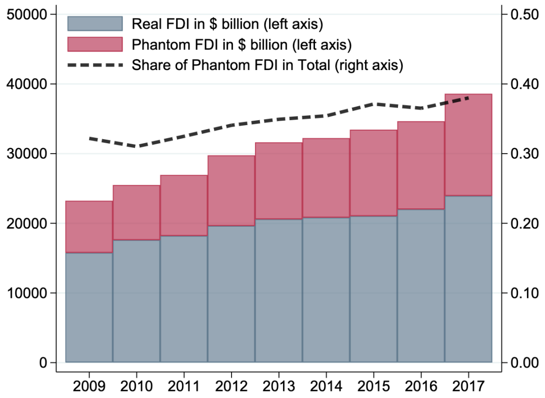
Measurement issues: Phantom FDI

Figure 6 – **Global Real and Phantom FDI.** The figure shows the evolution of inward FDI positions aggregated over all economies in the world over the period 2009-2017. Total FDI is decomposed into Real FDI (blue bars) and Phantom FDI (red bars).



Horizontal *vs.* Vertical FDI

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  - Historically larger phenomenon.
- Vertical FDI
  - The firm acquires a company that acts as a supplier or distributor
  - The idea is to take advantage of production costs differentials.

Why becoming a MNEs: the proximity-concentration trade-off

- Import trade-off between proximity and concentration.
- Proximity:
  - Produce close to consumers, low transport costs.
  - Lower benefits from IRS.

  Concentration:
  - Produce in a single plant.
  - Large transport costs and large benefits from IRS.

Why becoming a MNEs: the proximity-concentration trade-off

- Let us consider a domestic firm:
  - Q: Quantity that will be sold on the foreign market.
  - m_D: Marginal cost of production in the domestic country.
  - m_F: Marginal cost of production in the foreign country.
  - τ: Marginal transport cost.
  - F: Fixed Cost to settle abroad

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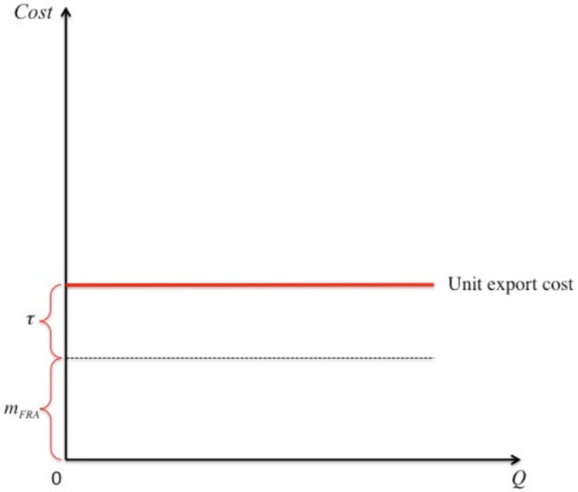

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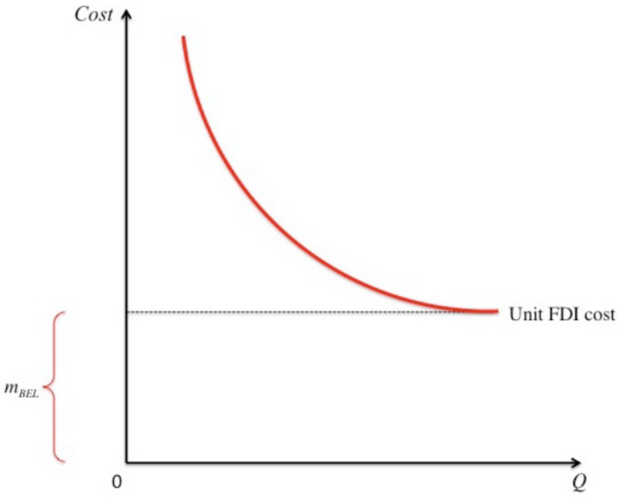

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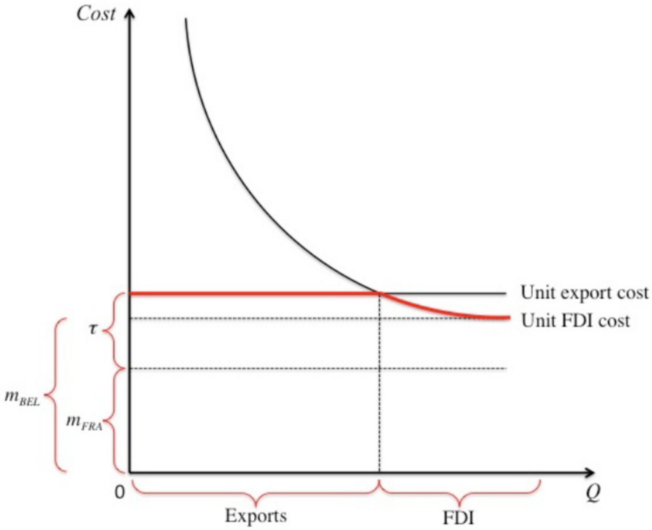

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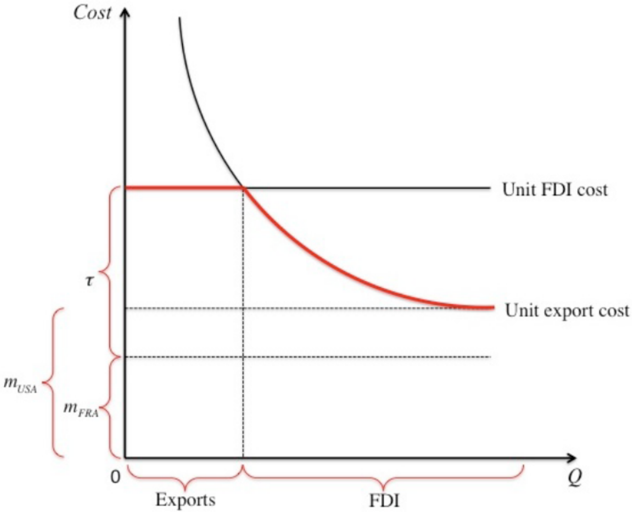


Why becoming a MNEs: the proximity-concentration trade-off

- FDI is preferred if:
  - The fixed cost is small (F).
  - The foreign market is large (Q).
  - The market is remote or there are high trade barriers (large τ).
  - The comparative advantage of the foreign country if large ($m_f - m_D$ if large).

Why becoming a MNEs: the proximity-concentration trade-off

$\longrightarrow$ FDI is a fixed-cost strategy and can be use to avoid variable costs (*e.g.* tariff-jumping FDI).

$\longrightarrow$ Export is a variable-cost strategy, more suited for risky or short-term operations, or to reach small markets.

- In between: Export-platform FDI is also suitable.
  - Do FDI and reach neighboring markets through exports: regionalization of activities.

Going beyond the proximity-concentration trade-off

- This trade-off explains the choice between exporting and serving markets domestically.
- But it does not really explain FDI in itself.
- A firm could for instance contracts with a foreign firm to produce domestically its products.
  - Coca-Cola does not produce itself (all of) its beverages.
  - It sells its recipe to contractors that produce, market and distribute beverages in foreign countries.

Going beyond the proximity-concentration trade-off

- The question of the boundaries of the firm and the choice of controlling and managing the firm abroad.
- Coase Theorem: If contracts were complete, the firm structure should not matter.
- There are costs to incomplete contracts *e.g.* the risk of intellectual expropriation.
  - One cannot totally force someone not to use a given technology.
    - *e.g.* DuPont suspects its Chinese partner to infringe its IP and launches a dispute in China. At the same time China launches an antitrust investigation against DuPont and ask DuPont to drop its infringement case to resolve the antitrust investigation.

$\longrightarrow$ If the cost of doing it through the market is too large, then do it within the firm.

The impact of MNEs on host markets

Positive effects

- Foreign ownership have a positive impact on productivity which spills over to domestic affiliates.
- MNEs presence help domestic firms increasing the quality of their products.
- MNE tend to pay higher wages.
    - Setzler and Tintelnot (2021): MNEs have higher wages by 7% in the U.S. This premium is larger for high-skill workers.
    - Indirect gains for domestic firms that also increase wages: MNEs have positive effects on local activity, there are knowledge spillovers from workers moving between firms (Poole, 2013).

The impact of MNEs on host markets

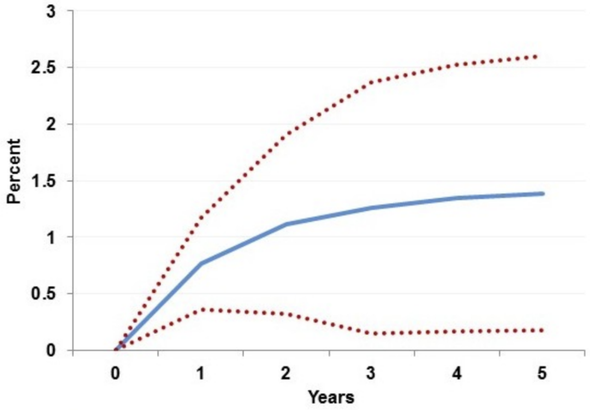
Adverse effects

- Capital account opening is associated (on average) with increasing inequalities.
- This effect if larger when the liberalization is not well managed and followed by a crisis.

The impact of MNEs on host markets

Adverse effects

Chart 1
Impact of Capital Account Liberalization on Inequality



Source: Furceri and Loungani, 2015.
Notes: The chart shows the impact over a five-year period of capital account liberalization on inequality. The blue line shows the impact and

The impact of MNEs on host markets

Adverse effects

- MNEs are powerful companies and can use their corporate power to capture rents.
  - Lobbying: MNEs tend to lobby more than their domestic counterparts. They influence foreign policy and the content of deep trade agreements.
  - Tax avoidance: MNEs use their network of affiliates in tax havens to avoid paying taxes in other countries. Tax losses are estimated around $200bn per year (Torslov et al., 2022).
  - Globalization has been associated with a rise in market concentration and market power. This is associated with a rise in the remuneration of capital compared to labor and a rise in mark-ups.

The impact of MNEs on host markets

Adverse effects

- Environment: MNEs use gap in local regulations to shift pollution to less-regulated countries $\longrightarrow$ regulatory arbitrage.
- Developing countries: MNEs can help development but at the same time repatriate gains to their home country $\longrightarrow$ harder for the host economy to benefit from economic gains.
- Security and sovereignty concerns, Natural resource capture, *etc.*

The impact of MNEs on host markets

Adverse effects

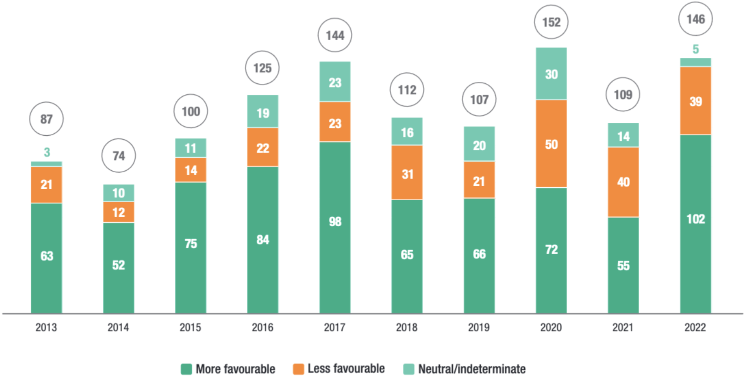
- The capacity of regulatory arbitrage by MNEs give them an important power and affect State regulation.
- Said differently, state regulation is endogeneous to MNE power.
    - Investor-State Dispute Settlement (ISDS) can limit State environmental and social policies (UNCTAD, 2023).
    - Tax competition: race to the bottom in terms of corporate taxation: each countries tries to attract foreign MNEs by lowering its tax rate.
    - Subsidy competition: Countries offer larger and larger subsidies to foreign firms to attract them.

Regulating MNEs

- States put in place different types of policies to regulate MNEs.
- Two core objectives: facilitation of business activity and regulation of its impacts.
- Recent rise in regulations aiming at regulating MNEs impact.
  - Many policies (40% of ”less-favourable” policies) related to national security concerns (critical infrastructure, core technologies, sensitive assets).
  - Surge in investment screening mechanisms (from 3 countries in 2005 to 37 in 2022). Concerns about strategic industries (*e.g.* critical minerals in Canada, ernegy, transport and communication in Italy).
  - Withdrawal of M&A deals (*e.g.* the Chinese acquisition of Forbes media in the U.S.).
  - Windfall profits taxes.
  - Managing social impacts: law on MNEs’ duty of care in 2017 in France. MNEs can be held responsible of their social and environmental adverse impacts in foreign countries.

Regulating MNEs

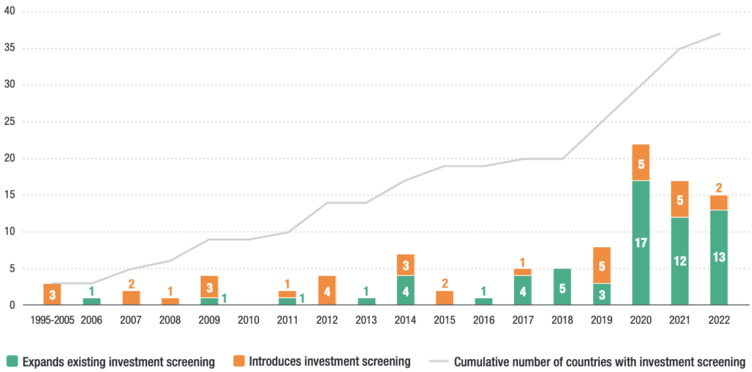
Figure II.1. | **Changes in national investment policies, 2013–2022** (Number of measures)



Source: UNCTAD, Investment Policy Monitor.

Regulating MNEs

Figure II.4. | **Countries introducing or expanding security-related investment screening, 1995–2022** (Number)



Source: UNCTAD.

Regulating MNEs

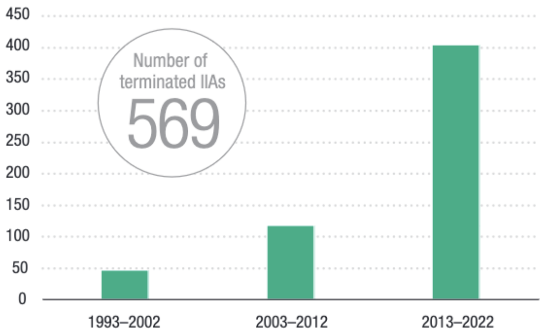
- Favorable laws are still implemented, in particular for promoting green industries or strategic areas..
  - *e.g.* 40% capital contribution for investments in sustainable biomethane or electricity plants in Italy, cash reimbursement of investment in chips, batteries and vaccines in Korea, U.S. IRA ($400bn over 10 years) to boost the clean energy industry.
  - Developing countries generally do not target green industries.
  - Fossil fuel subsidies have reached a record on $1tn (8 times the level of green subsidies).

Regulating MNEs

- Bilateral investment treaties
  - Large renegotiation and terminations of investment treaties.
  - Create dispute mechanisms between MNEs and States (ISDS): limits state hability to regulate, in particular in the Energy sector (due to the Energy Charter Treaty).
  - Affects the capacity and will of countries to regulate these areas.
  - New investment treaties try to facilitate (green) policies.
  - 80% of investment arbitration are based on treaties signed in the 1990' or earlier.

Regulating MNEs

Figure II.9. **Number of terminated IIAs, 1993–2022** (By date of effective termination)



Source: UNCTAD, IIA Navigator.