

Foreign Direct Investment (FDI)

Import substitution (IS) or Export orientation (EO)? Exchange rate matters

- Importance of exchange rate: Incentives for domestic producers
- If one good (1\$) is traded and the exchange rate is fixed at $1\$ = 140 \text{ ¥}$, and for the domestic producer's cost and profit is $145 \text{ ¥} \rightarrow$ No export, No import for survival
- How about 10% import tariff?
- How about 5% of export subsidies?

Trade policies and Protection Indicators (1)

- Prices are affected by **TRADE POLICIES** (t_M) and **EXCHANGE RATE**(e)
- $p^{\$}$ = world market price in foreign currency 1US\$, p^b =border price in local currency units (LCU), p^d =domestic price in LCU, e =nominal exchange rate in LCU/\$
- Tradable goods(T) price: $p^d = p^b(1+t)$, $p^b = ep^{\$}$
($t = t_M$: import tariff rate, $t = -t_E$: export tax rate)
- ***Nominal Protection Coefficients*** $NPC = p^d/p^b = 1+t$
- If $NPC > 1$, producers are protected, consumers are dis-protected (taxed) , $NPC < 1$ (vice versa)

Trade policies and Protection Indicators (2)

- *Effective Protection Coefficient (EPC)*
- Better than NPC by reflecting the intermediate input
- Production + Intermediate inputs
- p =unit value of output, c =cost of intermediate goods in production, VA =Value added, cost of labor, financial capital per unit of production, then $p=c+VA$ ($VA=p-c$)
- $EPC = VA^d / VA^b = p^d - c^d / p^b - c^b$
- If $EPC > 1$, producers are protected and consumers are taxed, $EPC < 1$ (vice versa)

Trade policies and Protection Indicators (3)

- *Real Protection Coefficient (RPC)*

☞ *Exchange rate policy and/or Trade policy can protect tradable goods, changing the incentives for domestic producers*

- Import substitutes price: $p^d = ep^{\$}(1+t_M)$

- Export price: $ep^{\$(1-t_E)}$

- If e^* = equilibrium exchange rate, and $p^{b*} = e^* p^{\$}$
then, $RPC = p^d / p^{b*} = ep^{\$(1+t)} / e^* p^{\$} = e / e^* (1+t)$:

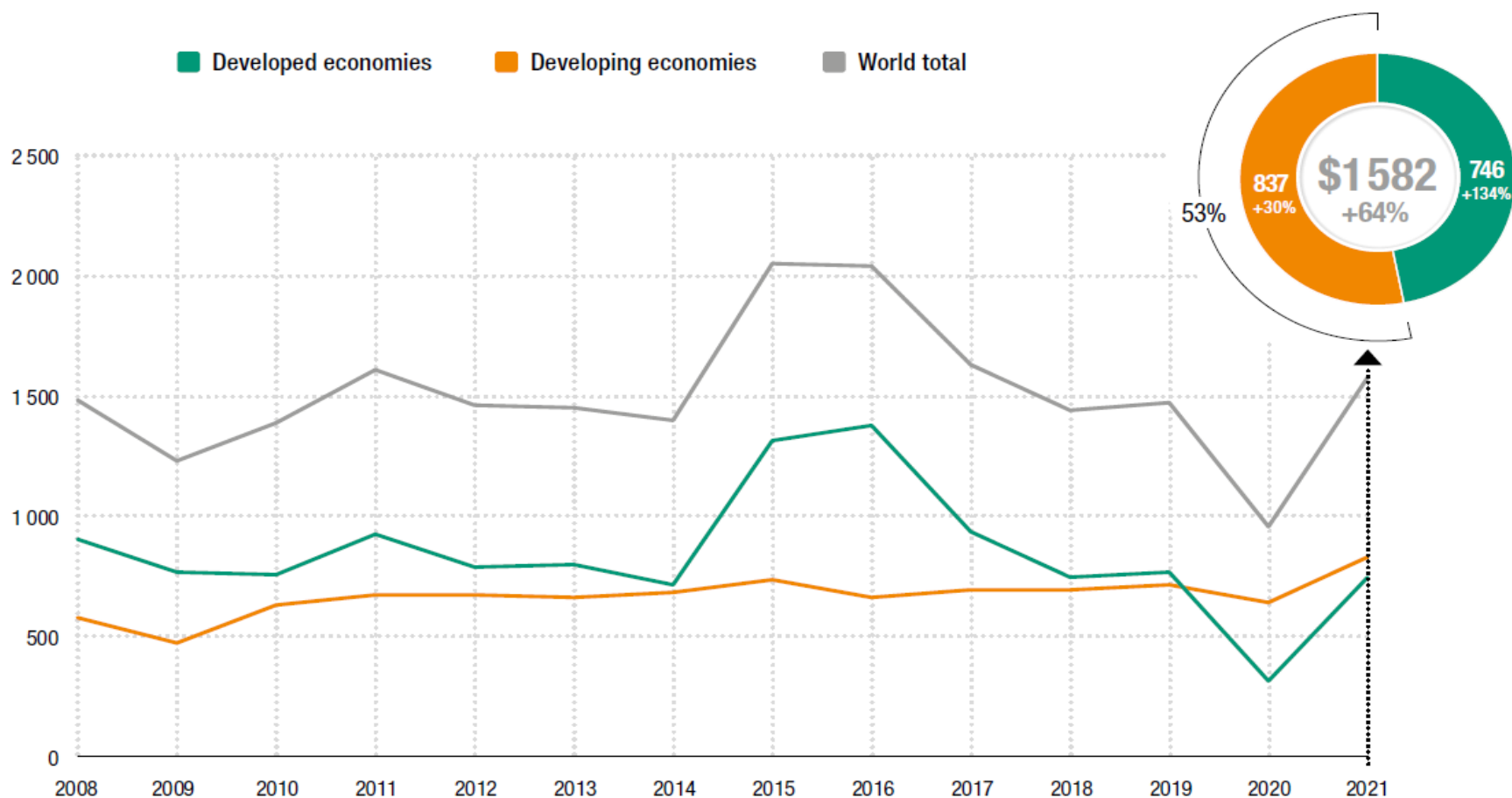
Exchange rate distortion * NPC

Foreign Direct Investment (FDI)

- Direct investment \neq Portfolio Investment
- Cross-border Investment for managerial participation by Multi-National Enterprise :MNE
- Dunning (1977): OLI theory (Ownership-specific advantage, Location-specific variables, and Internalization incentives)
- FDI includes transfer of managerial resources: Firm specific knowledge/ technologies, managerial skills, Brands, Marketing/ Sales capabilities... (“Knowledge capital”)
 - Intra-firm transactions, Internalizing profits
- Acquisition of location advantage
- Types: Green Field investment, M&A

FDI peak-out? (Source: UNCTAD: World Investment Report 2022)

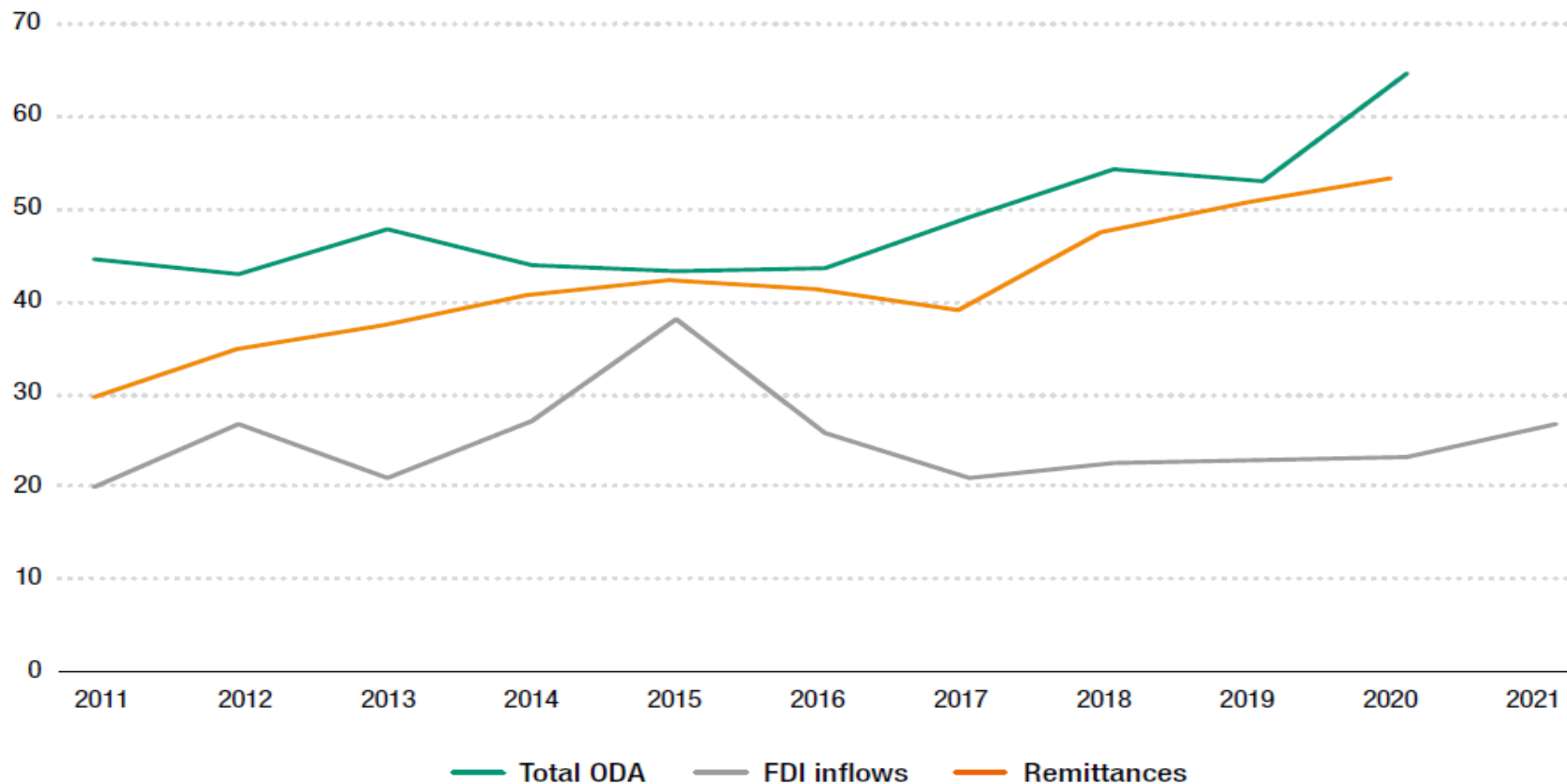
Figure I.1. FDI inflows, global and by economic grouping, 2008–2021 (Billions of dollars and per cent)



Source: UNCTAD, FDI/MNE database (<https://unctad.org/fdistatistics>).

FDI as the largest capital inflow to developing economies (Source: the same as P.3)

Figure I.13. LDCs: FDI inflows, ODA and remittances, 2011–2021 (Billions of dollars)



Source: UNCTAD, FDI/MNE database (<https://unctad.org/fdistatistics>) (for FDI inflows), OECD (for ODA flows) and World Bank (for remittances).

Development and FDI

- FDI: Long-term, stable capital without re-imbursement
⇒ May increase saving rate
- Transaction of managerial resources and the Spill-over effects : Positive externalities and production gains
(←ex. Spill-over of technologies and skills by business transactions and/or movement of workers/ employees *without fees*)
- Intra-firm managerial transfer (≠Market transaction)
- Good access to latest technologies
- Employee education may contribute to human capital
→ Implications from endogenous growth theory
- Trade promotion (Export processing Zones) : Textile, Apparel, Semi-conductors, Electronics (≠ Capital intensive industries: Steel, Petrochemical)

Gov.'s supports for FDI

- Business environment reform \Rightarrow MNEs (Smaller Value Chains for production and distribution networks), Location fragmentation in global competition
- Infrastructure investment (Electricity, Water, Telecommunication, Legal framework to protect investors, Service (One-stop window), Transparency (Public comments))
- Maximizing agglomeration effects
- Positive externalities for local firms (\neq Export enclave), Supporting industries
- MNE's contributions for national economy (Adjusting profit maximization, monitoring)

Horizontal / Vertical FDI

- Access to foreign markets: Export? Or Local production (FDI)? (Trade cost or Production cost?)
- Horizontal FDI: Supplying the same goods to the foreign markets (Local production), typically in responding to trade frictions
(Responding to high tariffs / Import restriction under IS strategy)
- Vertical FDI: Producing the different goods at the foreign market, Division of labor processes for efficiency or cost reduction
→ Typically observed in “flying gees” patterns of production change in export-led growth in Asia

Horizontal FDI (Markusen, Brainard)

- Investment to enter into the host country market
 - Substitutional relations between trade and FDI
 - 1) If trade cost is higher (High tariffs, High transportation costs), then FDI
 - 2) Deregulations of FDI control, Investment climate change (Pro-business)
 - 3) Business with smaller economy of scale (No concentration benefits in original market)
 - 4) Size of host country market: FDI with decreasing average costs
 - 5) Institutional reasons by trade friction, environment standards, regulations....
- ⇒ Usually positive impact on host country's employment, but not sure about the investor economies

Vertical FDI (Helpman, Krugman)

- Cost reduction purposes by local production
 - Complementary relations with trade: Exporting intermediate goods for assembling, Importing the finished goods, or Exporting to the 3rd destination
- ⇒ Typically labor industries in developing countries (Positive impacts) but unknown impacts on investor countries (Negative impacts if “hollowing out”)
- 1) Domestic production cost > Foreign production cost
⇒ Division of labor in process
 - 2) Cheaper managerial costs (Wage/Productivity, Business establishments, generous incentives....)
 - 3) Cheap trading costs for the final goods for export (Soft/
Hard infrastructure)

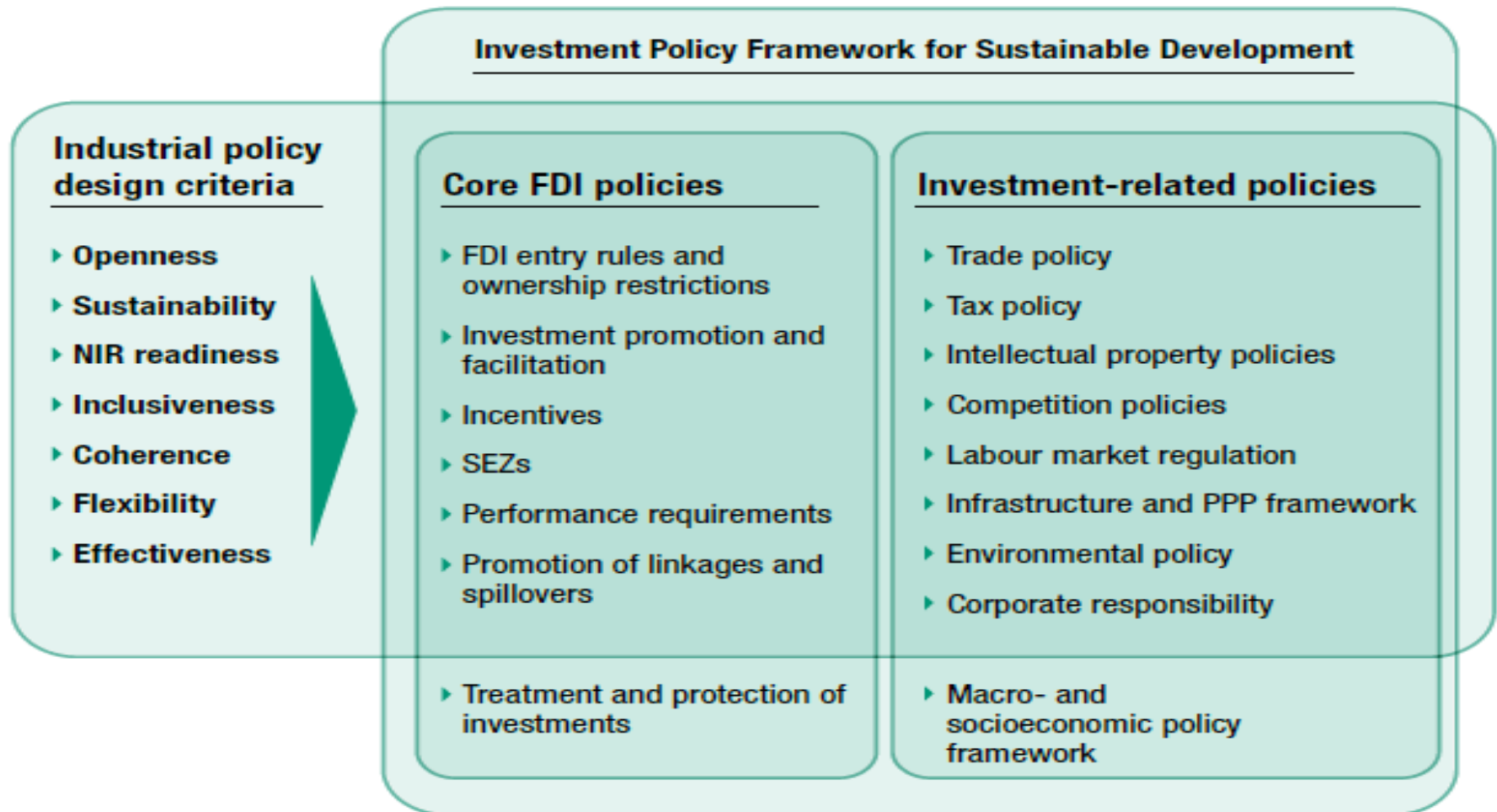
Gov.'s concerns for FDI(2)

- Transfer pricing: Manipulating prices in intra-company trade for tax evasive purposes, Profit transferring
- Market monopoly: Avoiding technology transfer, Controlling product development, Export control, Competition control...(Host gov. vs. MNEs: Investor-States Dispute Settlement (ISDs))
- Crowding-out local firms (Brand power, Job market...)
- Balance of payment: Income transfer, Overseas remittance
- Migrating MNEs for cheaper labor

Host governments and FDI

- Host gov. vs. Investors (Sovereignty vs. MNEs)
 - ⇒ FDI control and industrial policy tool
 - ex. Linking foreign share and export ratio
 - Local content requirement, Foreign exchange control
 - Latest technology transfer
 - ⇒ 1995: TRIMs (Trade Related Investment Measures) in WTO
 - ⇒ Bi-lateral investment treaty (Investor protection from expropriation (socialist countries), IPR and others)
 - ⇒ OECD: Multilateral Agreement on Investment (MAI) for MFN and National treatment
 - ⇒ FTA + Bilateral Investment Treaty (BIT)
 - ⇒ FTA + ISDs

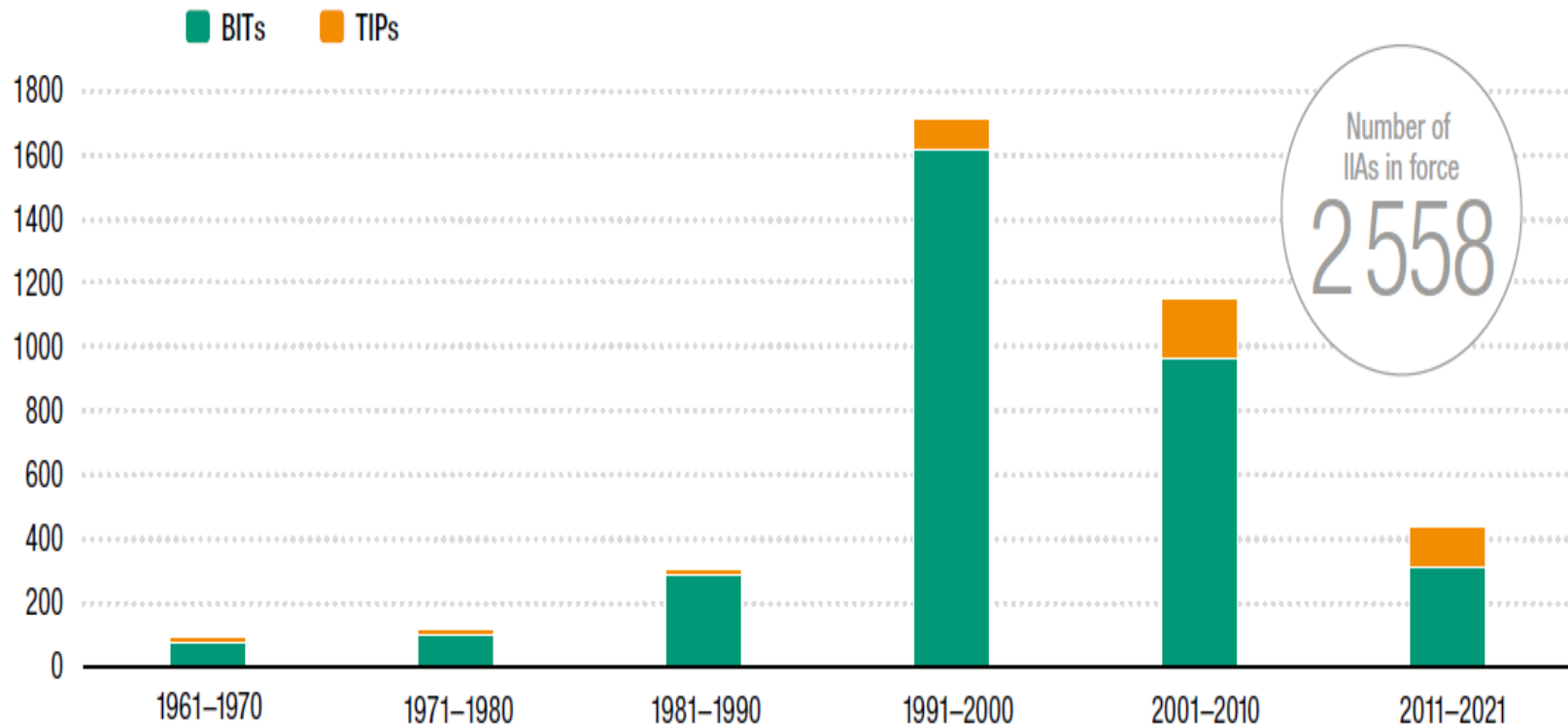
FDI and Industrial Policies (Source: UNCTAD(2018))



Source: UNCTAD.

BIT to attract FDI

Figure II.4. Number of IIAs signed, by decade, 1961–2021



Source: UNCTAD, IIA Navigator.

Suggested Readings

- Dunning, John H. (1977) “Trade, Location of Economic Activity and the MNE: A Search for an Eclectic Approach”, in B. Ohlin, Bertil, Hesselborn, Wijkman (Eds.), *The International Allocation of Economic Activity*, Palgrave Macmillan
- Geoffrey Jones (2004) *Multinationals And Global Capitalism: From the Nineteenth to the Twenty-first*, Oxford University Press
- Markusen, James R.(2002) *Multinational Firms and the Theory of International Trade*, MIT Press
- Elhanan Helpman, 2006. "Trade, FDI, and the Organization of Firms," *Journal of Economic Literature*, American Economic Association, vol. 44(3), pages 589-630, September.
- United Nations Conference on Trade and Development(UNCTAD) World Investment Report (Various years)