Economics of Industrial Policies and International Rules

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Main Takeaways

1. China excels in doing industrial policy
2. “International market failure” in unavoidable
3. New rules are needed to mitigate the “impact of scale” and ensure fair competition

1. China excels in doing industrial policy

- Learning from MITI of Japan in the 1980s,
- Established an efficient planning and implementation system in 1990s.
- The process accelerated in the 2000s
- “Targeting industrial policies” operate under the centralized bureaucracy and local governments competition
- This approach crash with fair competition policies

2. “International market failure” is unavoidable

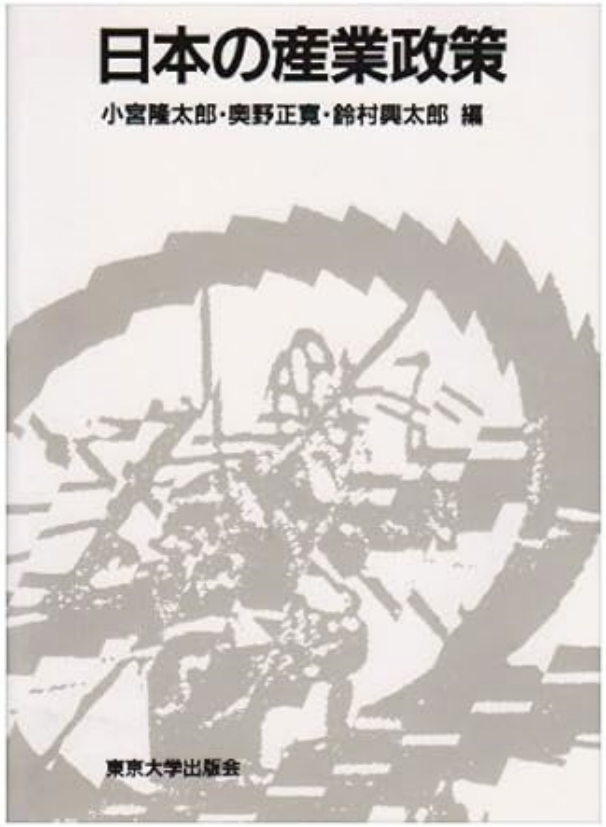
- A surge in exports can disrupt industrial base of other countries
  - Automobiles/steels/shipbuilding are notably suffered
  - Conflicts like Japan vs US is repeating China vs US/EU
- Profit of scale economies might be monopolized bylarge country
  - Digitals/Electronics accomplished “sharing profit of scale economies” by the zero tariffs in ITA and /or FTAs

3. New rule is needed

- New rule is needed to
  - mitigate the “impact of scale”
  - ensure fair competition

Economics of Industrial Policy

Komiya, et.al ed, Industrial Policy of Japan, 1984, Academic Press (1988)



Ito, et.al, Economic Analysis of Industrial Policy,1988, Academic Press (1991)

Remarks of Japanese Economists in 40 years ago

1. "Given that market failures are likely to occur in industries where learning and technological development are important, **government support and policy intervention in these industries cannot be universally denied.**
2. **The issue arises when only one country engages in extreme policy intervention, pushing aside already established industries in other countries**—in other words, when a country secures its own interests at the expense of others.
3. Therefore**, it is necessary to establish international rules regarding policy interventions** for research and development and learning, and it is desirable to form international agreements on horizontal division of labor between nations, or on international dispersion of production bases through direct investment and industrial cooperation**, so that no single country monopolizes advantageous industries** (Komiya, 1984, p. 242)."

Cores: Economies of scale

- Economy of scale
  - is a phenomenon where **average or marginal costs decreases in proportion to scale.**
    - Impacts on marginal cost is more significant.
  - This leads to market failures, including
    - Domestic market failures (widely discussed)
    - International market failures (not fully considered)

Economy of scale justifies industrial policy

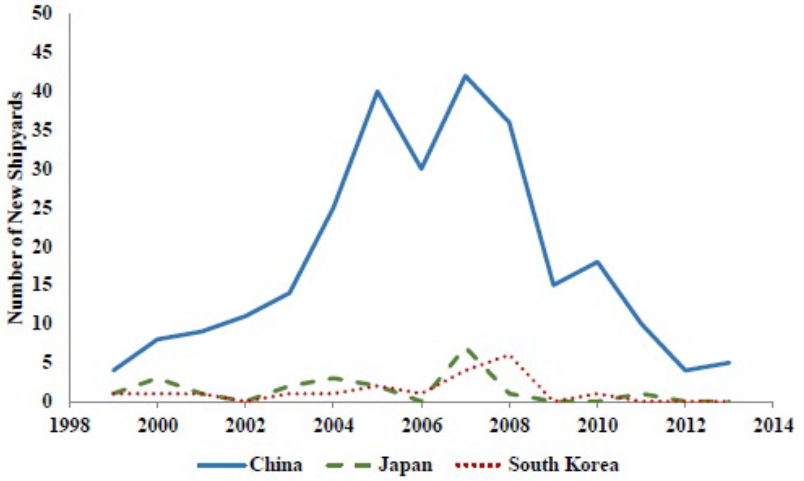
1. Fostering Industries

- Setting up industry involves enormous cost
  - A single firm cannot bear
  - Market failure due to the economy of scale
  - (Well planned systematic) Industrial policies are necessary

- Aiginger and Rodrik(2020) , Juhaz, Rodrik et.al (2023), Lin, Justin Yifu (2010, 11, 24), Naughton(2021)
  - Currently very popular
  - EU's industrial policy, USA's IRA

A flood of new entrants

Figure 3: Entry of New Shipyards



Source: Clarksons Research. Number of new shipyards.

Jia-Barwick, et.al (2019)

Economy of scale affects terms of trade

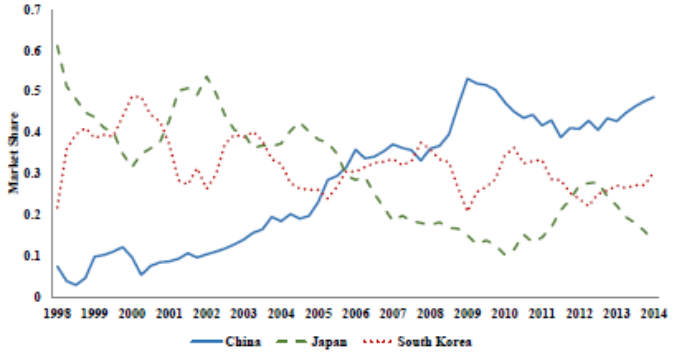
2. Economic Friction

- "Scale" of Large country improves terms of trade,
  - resulting in "overproduction"
  - industrial bases of less large countries are destroyed.
  - This leads social and political tensions.

- Ito et.al (1988), Krugman(1984) , Panagariya(1981)

Drastic changes of market share

Figure 2: China's Market Share Expansion



Source: Clarkson Research. Market shares computed from total quarterly ship orders.

Jia-Barwick, et.al (2019)

Remedies to the friction

- **Ex Ante:**
  - **Profit-sharing schemes for scale economies**
  1. FDI & Industrial Cooperation (Komiya, 1984)
  2. Global Value Chains development (since 2000s)
     - IT Agreement: Zero Tariffs
  3. FTAs/RTAs (e.g., CPTPP): Effective for sharing profits in emerging industries & technologies
- **Ex Post:**
  1. WTO Trade Remedies (Anti-dumping, CVD, Safeguards)
  2. **(NEW)** Disciplines to Prevent Abuse of Power
  3. **(NEW) Appropriate Linkage with National Security Exception**

Three sources of economies of scale

1. **Setting up cost: R&D**
   - Supported by subsidies.
   - **WTO subsidy agreement** discipline.
2. **Internal economy of scale;** Learning by doing
   - Result of the firm's internal effort.
     - No ex ante disciplines
   - Abuses by firms ⇒ Ex post disciplines
3. **External economy of scale** (Inter-industry externalities)**;**
   - Arise from external factors affecting firms.
   - Disciplines to firms are ineffective.
   - Abuses by nations ⇒ Ex-post discipline."

Ex post discipline to firms level action

1. Subsidies
   – WTO CVD, Anti-dumping, Safeguard
2. Internal economy of scale
   – Abuse of monopoly power needs discipline
     - **(New) Competition policy harmonization**

Ex post discipline by national level

3. Marshallian externalities
   - WTO Safeguard
   - **(NEW) Scale Based Rules**
     - **Differentiated ex post enforcement for high market share in Specific Industries**
       - **CVD, AD Tariffs/ Safeguard measures**
   - **(NEW) Rigorous / flexible enforcement of the Security Exemption**
     - Targeting Economic Coercion
     - **Urgent: Separation of Securities and Trade and Investment**

- CPTPP : A testing ground for the new consolidated set of the rules

THANK YOU