

# Prospects for India-Japan Economic Cooperation: Evidence from the Activities of Japanese Multinational Companies in India

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# Japanese Multinationals in India:

Evidence from Unit-Level Data of Ministry of Economy, Trade and Industry's *Survey of Overseas Business Activities*

- Aim of this talk (1): To give statistical abstract of Japanese multinationals in India for the last two decades from 1995-96 to 2017-18 by employing the METI's unit-level data of *Survey of Overseas Business Activities*.
- Difficulty of data access: Double screening, e.g. Grant-in-Aid for Scientific Research accepted by JSPS and in-house screening by METI.
- Aim of this talk (2): To show our research results on FDI spillover effect on the productivity of the Indian manufacturing industries.

# Definition of Japanese Multinationals as Overseas Affiliates

- a. Parent Companies: Japanese corporations which, as of the end of March, own or have owned overseas affiliates in the past, **excluding those in the financial and insurance industry or real estate industry** (hereinafter referred to as "Parent Companies").
- b. **Overseas affiliate**: the following overseas affiliates are surveyed. "Subsidiaries" and "Sub-subsidiaries" are collectively referred to as "overseas affiliates."
  - Subsidiaries: A foreign affiliate in which a Japanese corporation has invested **capital of 10% or more**.
  - Sub-Subsidiaries: A foreign affiliate in which a "subsidiary," funded **more than 50%** by a Japanese corporation, has invested **capital of more than 50%**.
  - Sub Subsidiaries: A foreign affiliate in which a Japanese corporation and a subsidiary funded **more than 50%** by a Japanese corporation have invested **capital of more than 50%**.

Source: <http://www.meti.go.jp/english/statistics/tyo/kaigaizi/index.html>

- **This study focuses on overseas affiliates located in India only.**

# Advantage and Disadvantage of *Survey of Overseas Business Activities*

- Toyo Keizai Inc., *Directory of Japanese Companies Abroad (Kaigai Shinshutsu Kigyo Soran)*.

Advantage: 1) easy access, 2) availability of company name (easy application to other data sources, and 3) information of local location within a country.

Disadvantage: 1) poor data quality partially due to voluntary-based answer, and 2) a lot of missing variables.

- The Embassy of Japan and JETRO, *Japanese Business Establishments in India (Indo Shinsyutu Nikkei Kigyo Risuto)*

Advantage: 1) free access, 2) comprehensive coverage, 3) availability of company name, 4) information of not only companies but also establishments, 5) availability of district-level location.

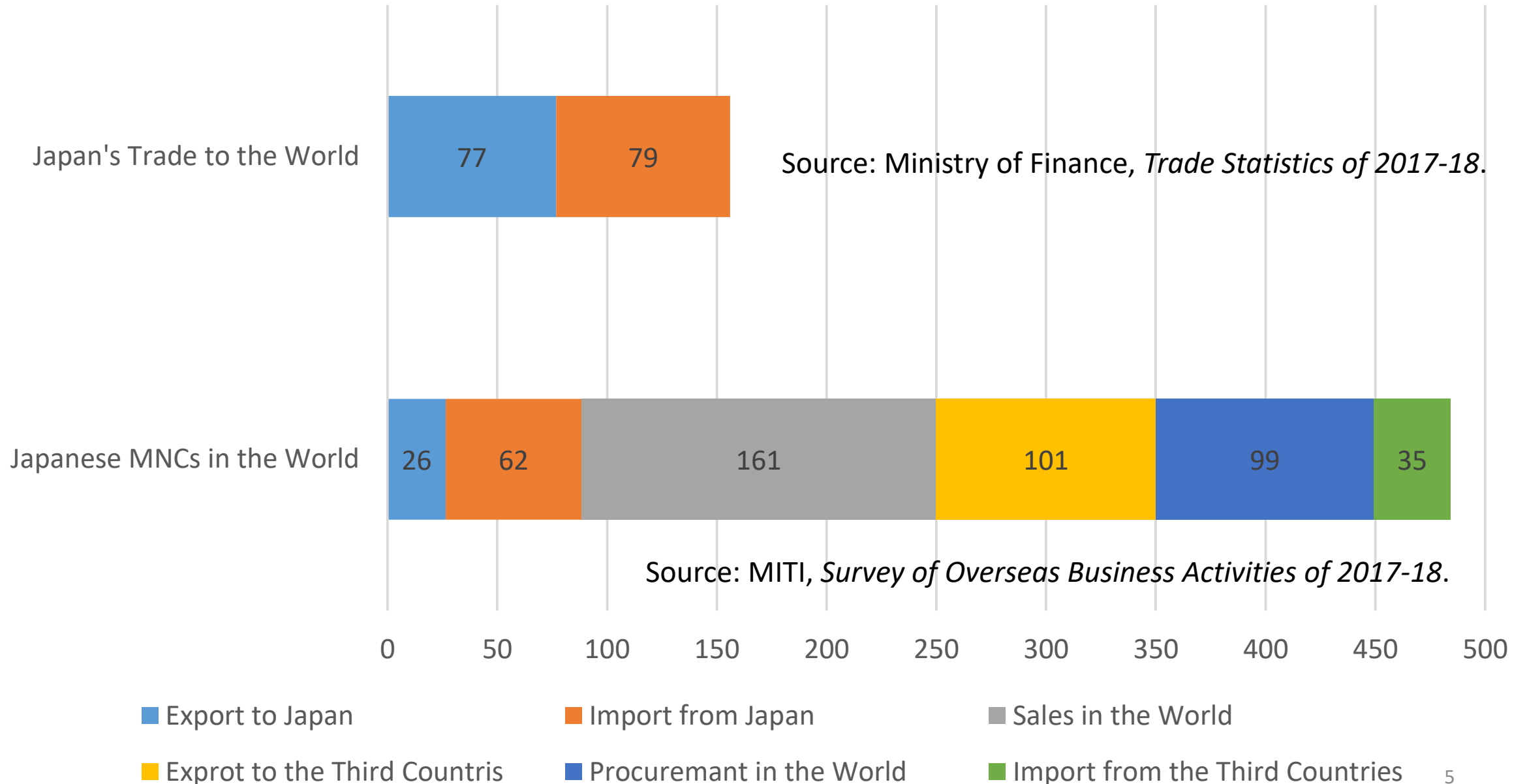
Disadvantage: 1) Very few items such as company name, industry engaged, and location, and 2) Shorter surveyed periods.

- METI, *Survey of Overseas Business Activities*.

Advantage: 1) **good data quality** partially because of statutory requirement from Statistics Act, and 2) **a lot of items** surveyed.

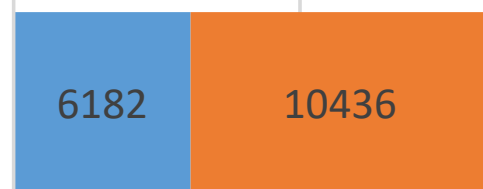
Disadvantage: 1) difficult access, 2) non-availability of company name, 3) **no information of local location within a country**, and 4) limited coverage by excluding finance, insurance and real estate business.

# Size of Japanese MNCs in the World (Trillion Yen)



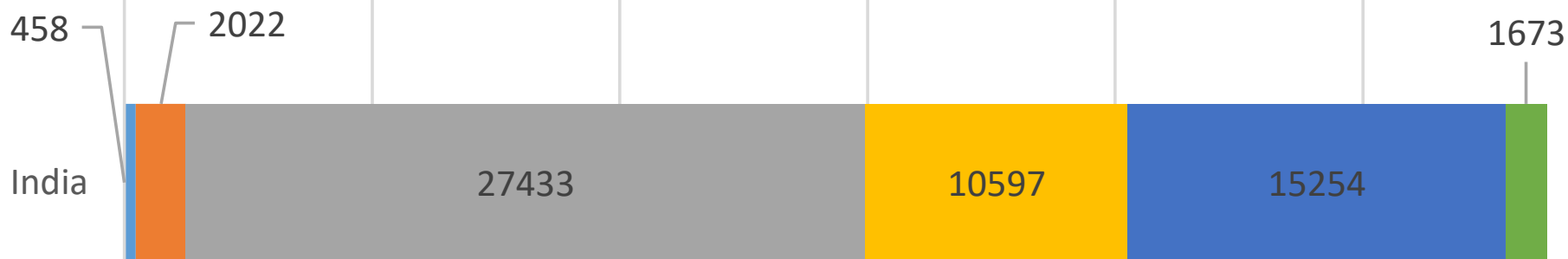
# Size of Japanese MNCs in India (10 Crore Yen)

Japan's Trade to India



Source: Ministry of Finance, *Trade Statistics of 2017-18*.

Japanese MNCs in India



Source: MITI, *Survey of Overseas Business Activities of 2017-18*.

■ Export to Japan

■ Import from Japan

■ Sales in India

■ Exprot to the Third Countris

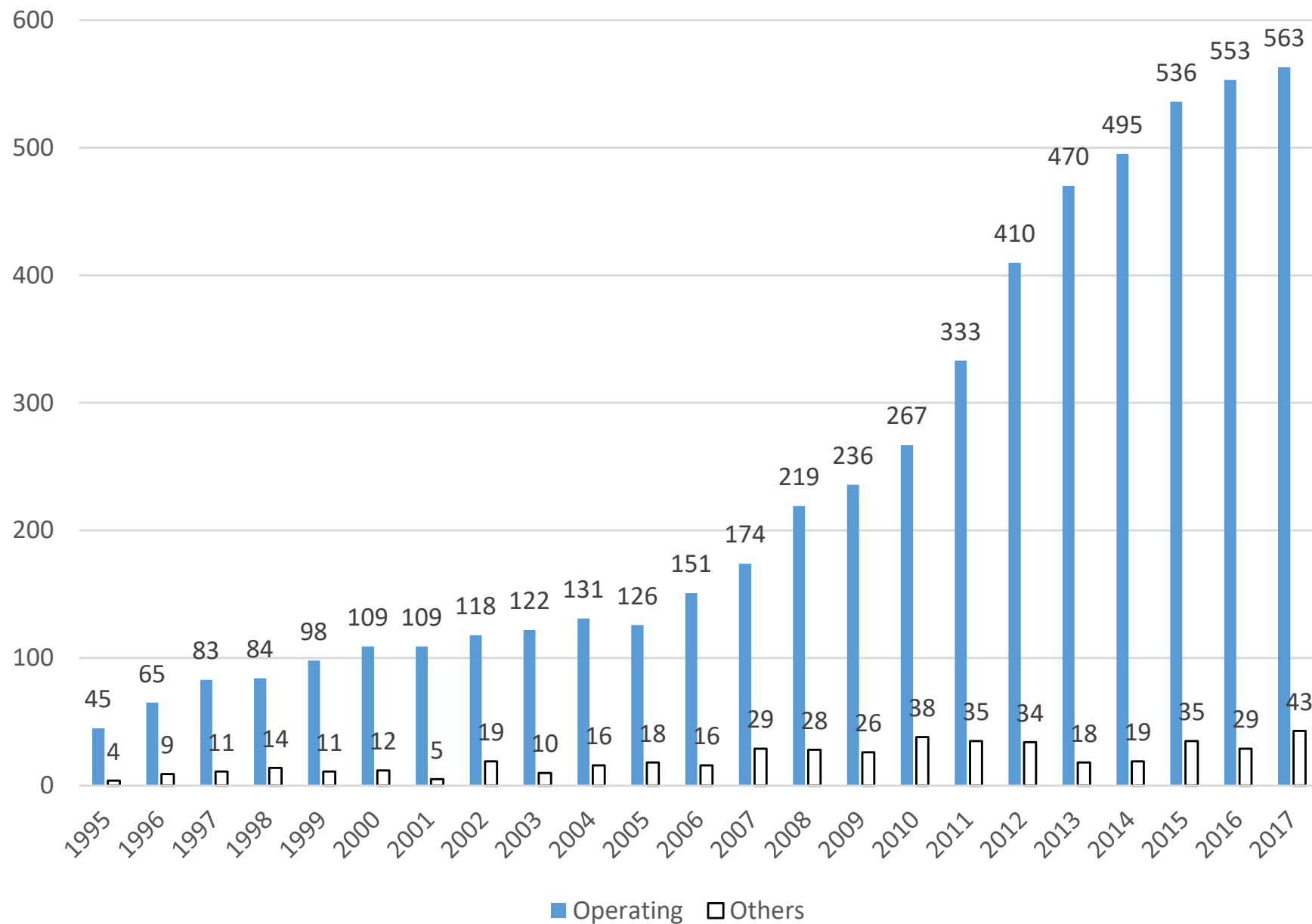
■ Procuremant in India

■ Import from the Third Countries

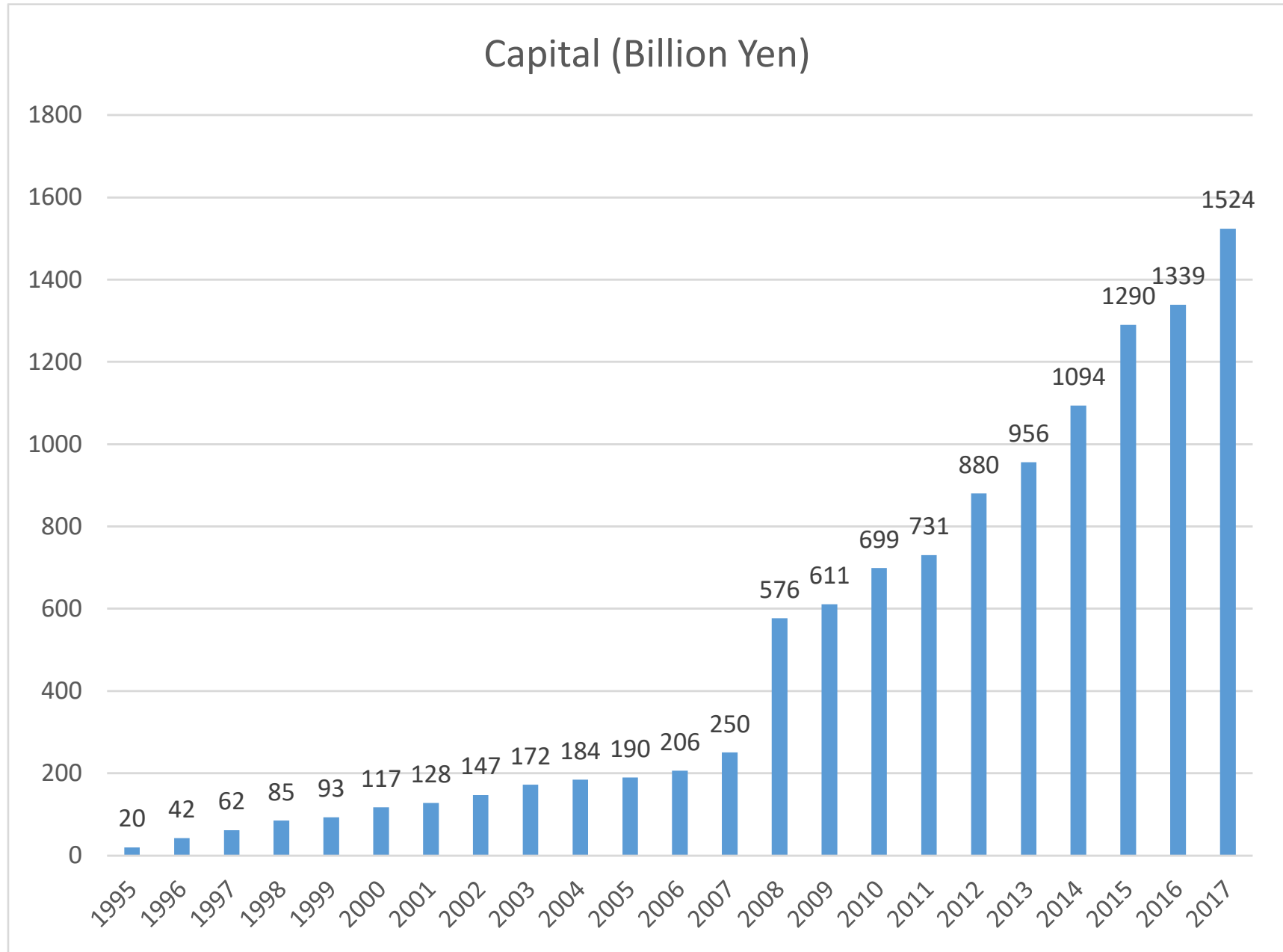
# Importance of Japanese MNCs

- The scale of Japanese companies operating overseas is extremely large.
- Structural change in the Japanese economy: from the stage of "earning" from international trade to the stage of "earning" from foreign investment  
← Global economic activities of Japanese companies.
- Japanese companies for the Indian economy ← Suzuki and Honda lead the Indian auto industry
  - 4th largest producer of 4-wheelers in the world
  - The world's largest two-wheeled vehicle market, surpassing China.
- For both the Japanese and Indian economies, the trends of Japanese multinational companies are already important and may become even more so in the future.

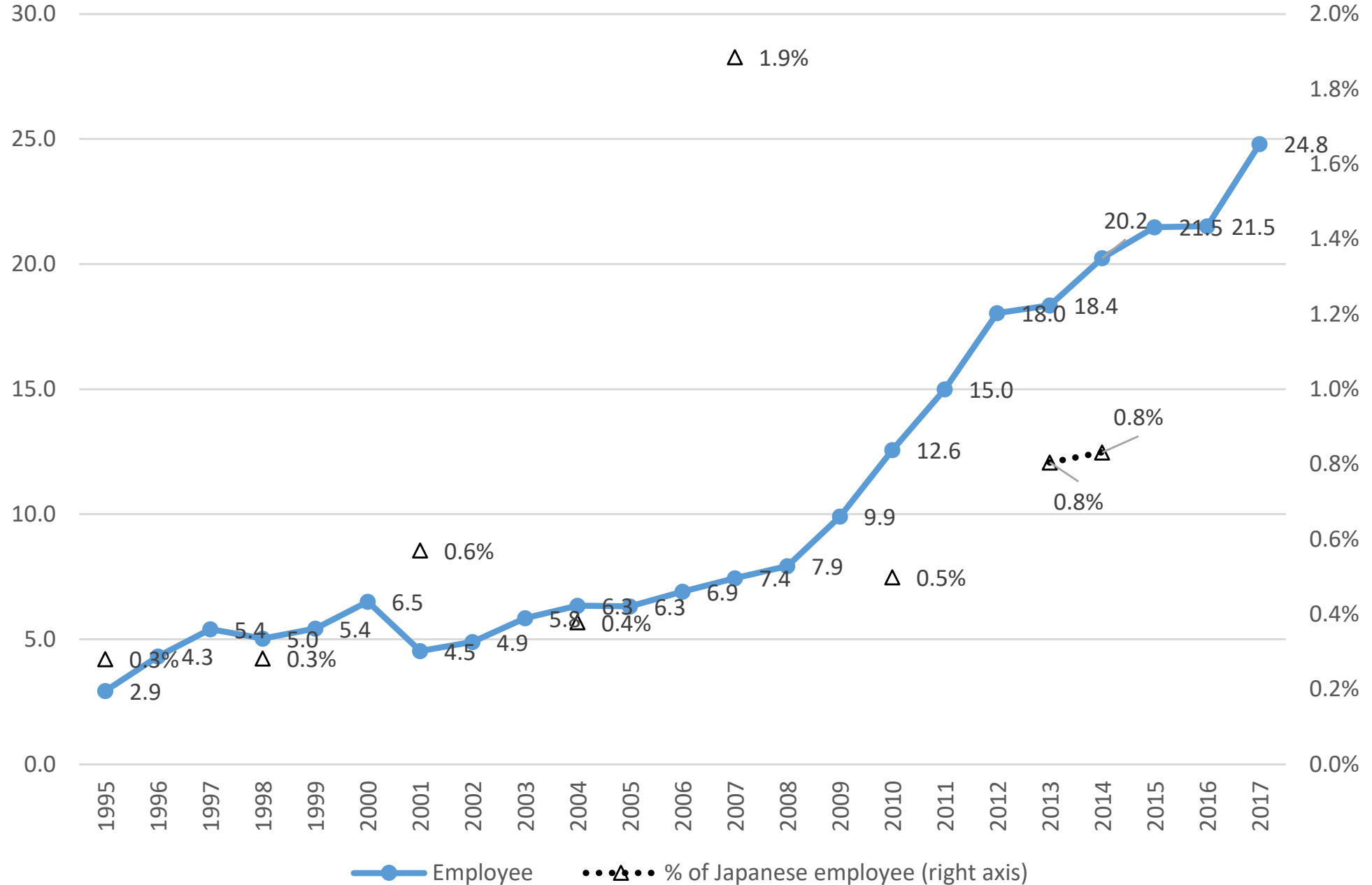
## Number of Japanese MNCs in India



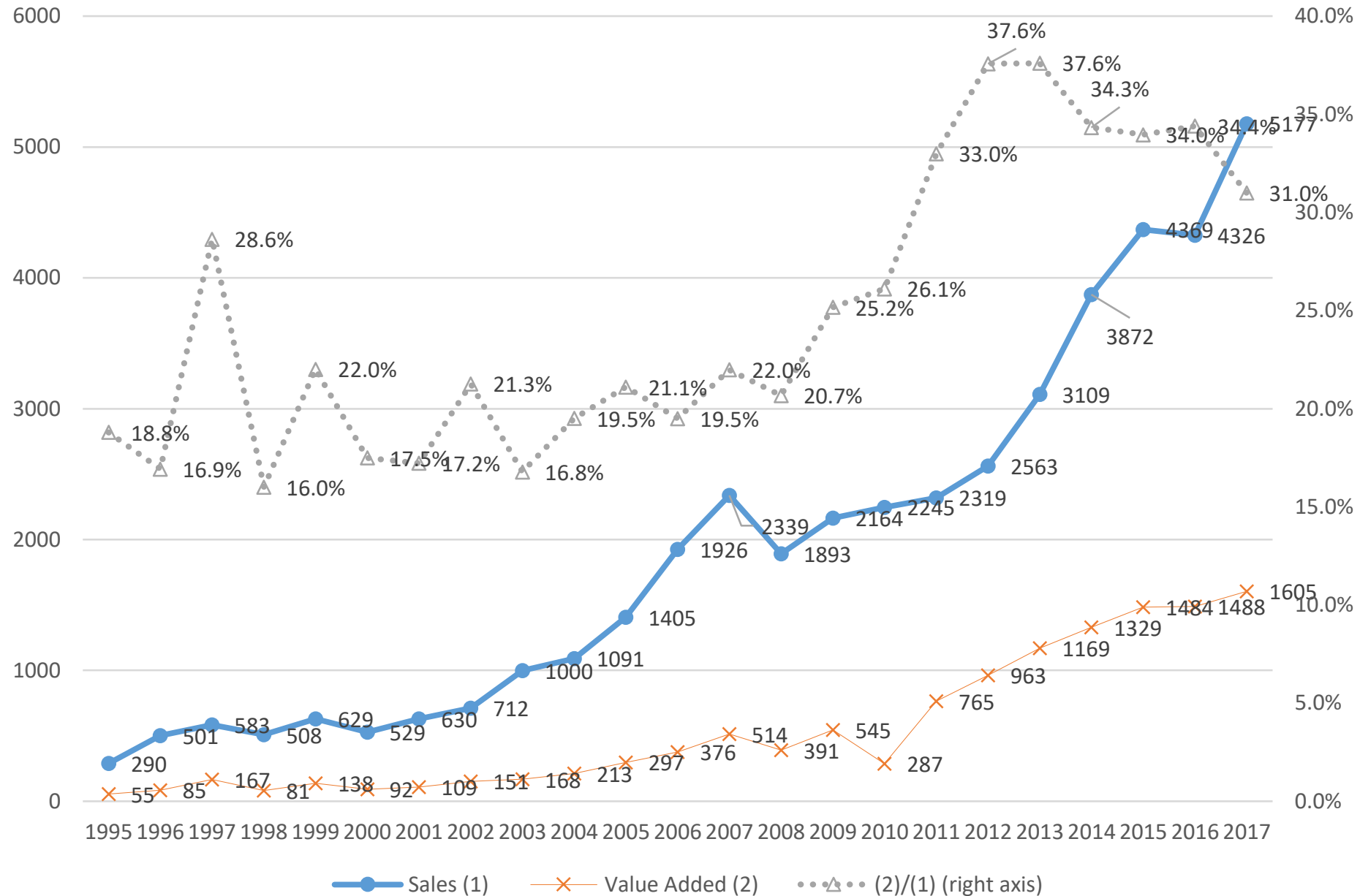




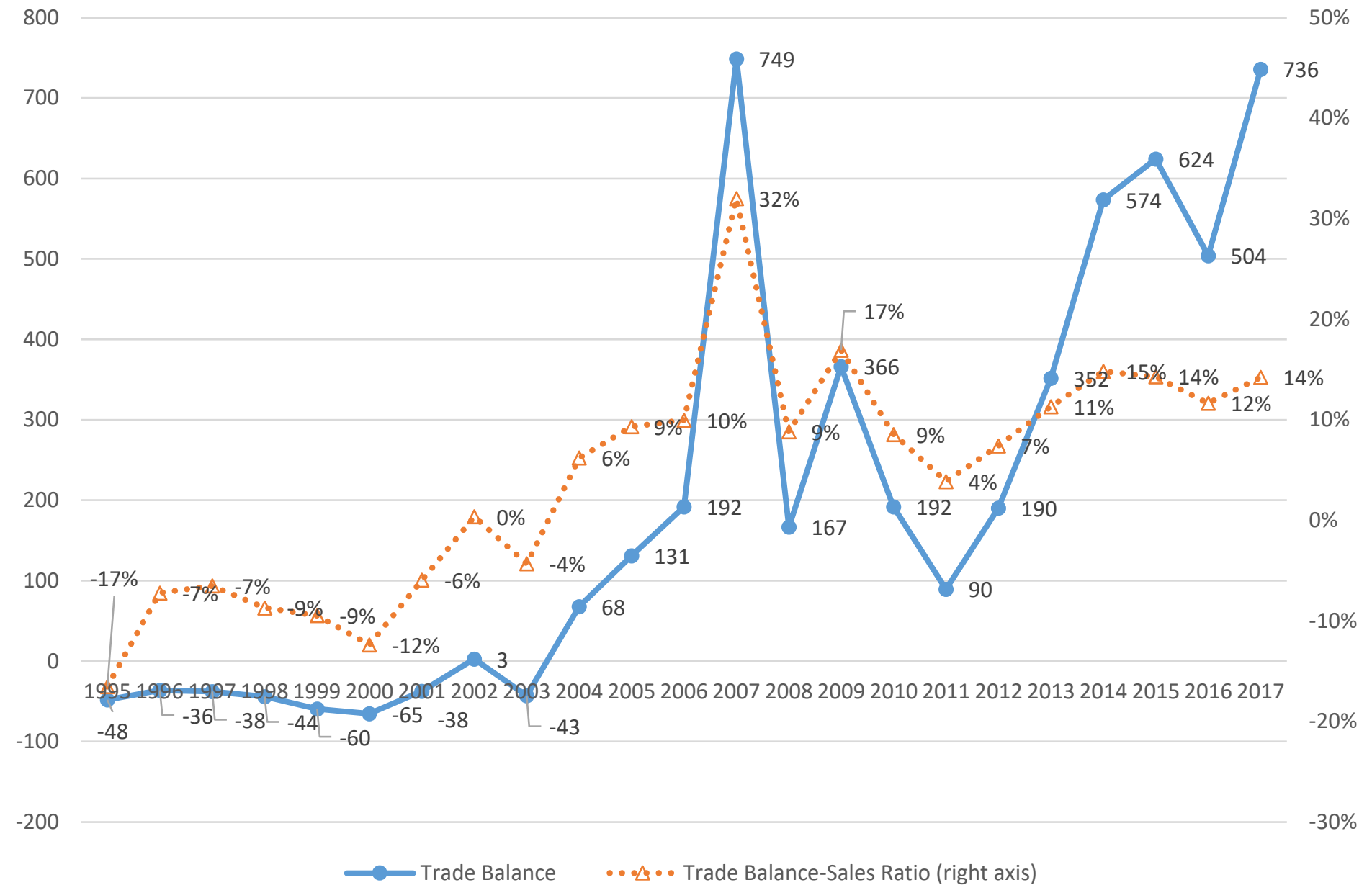
# Employment (10 Thousands)

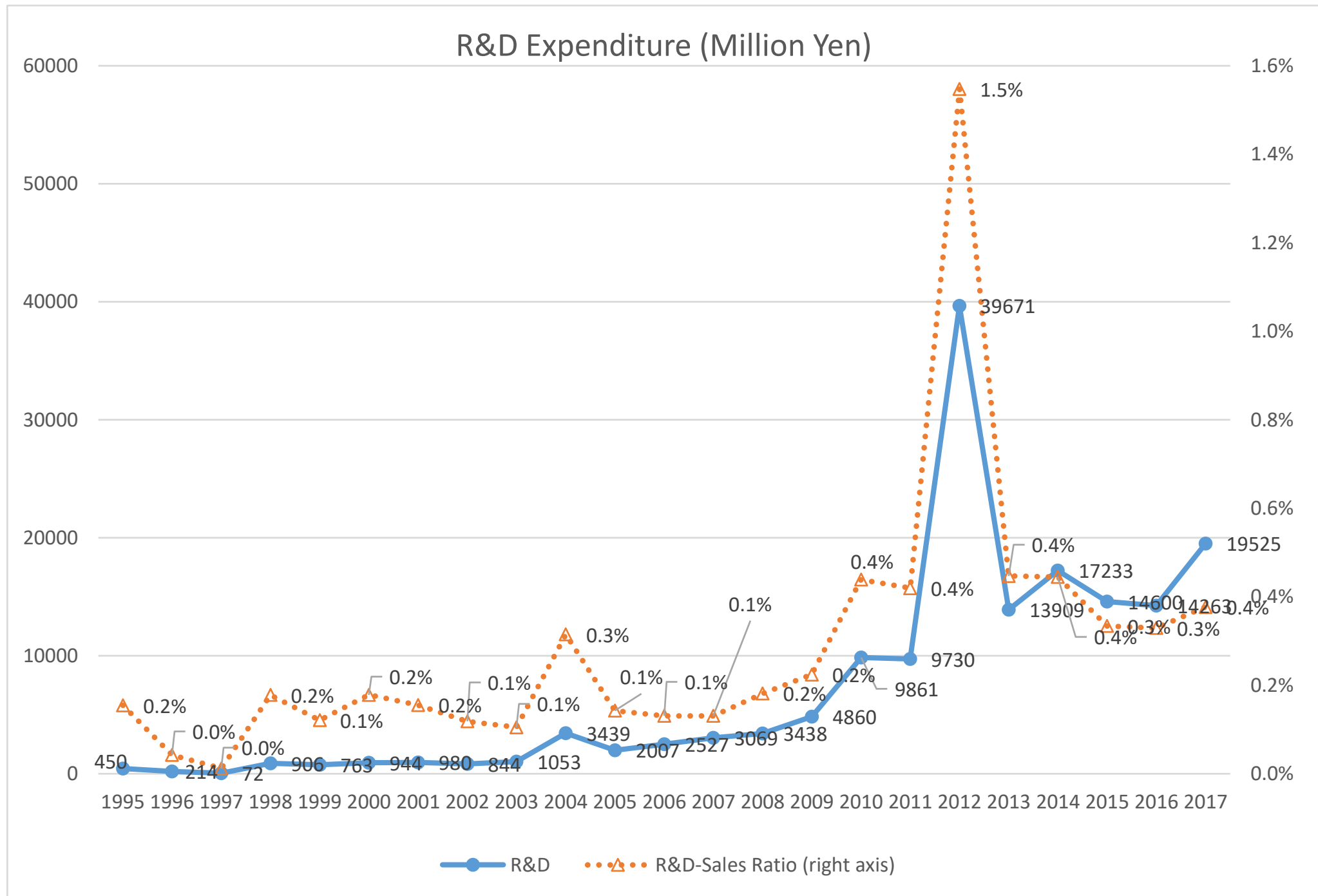


# Sales and Value Added (Billion Yen)

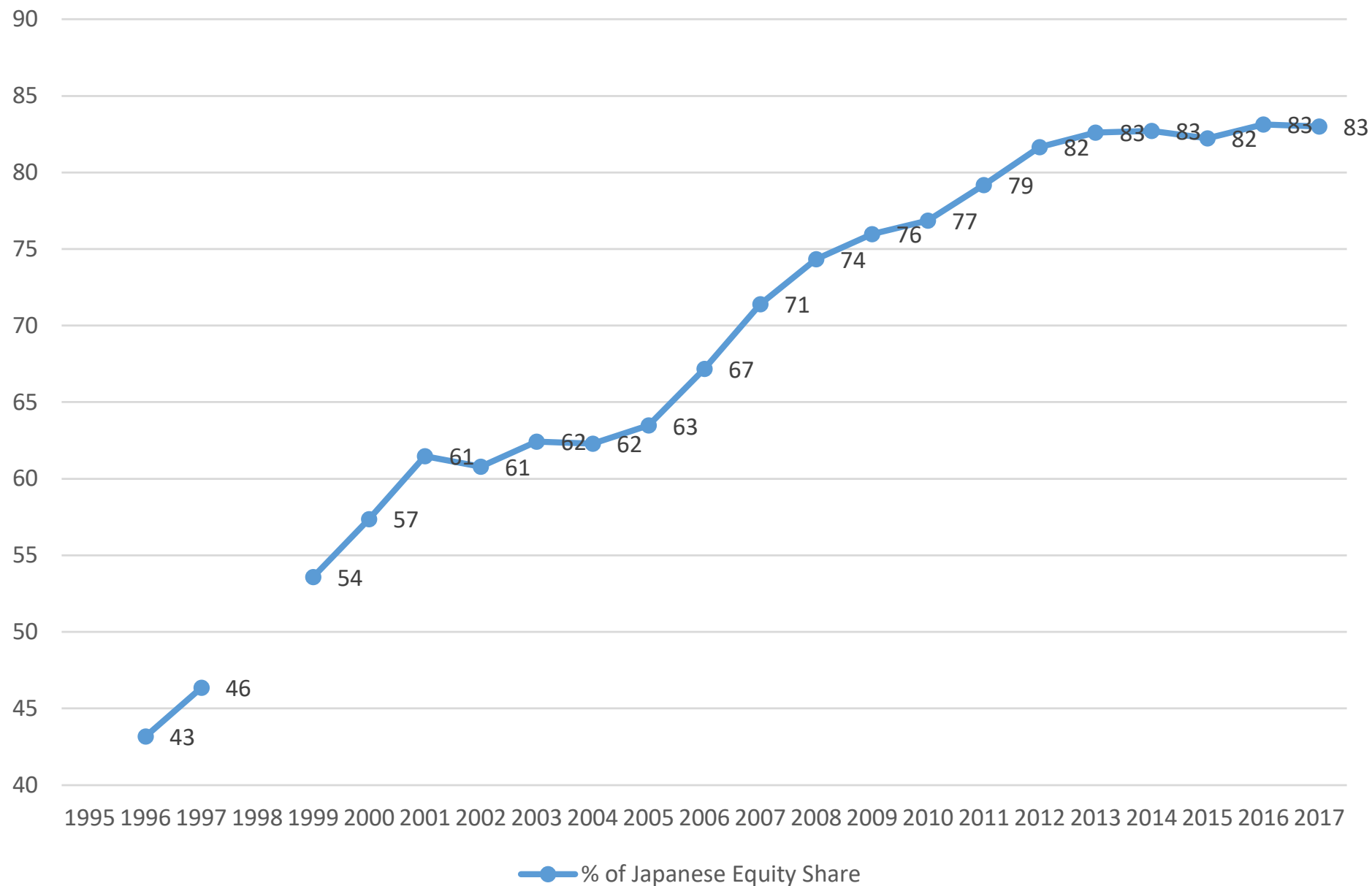


Trade Balance (Billion Yen)

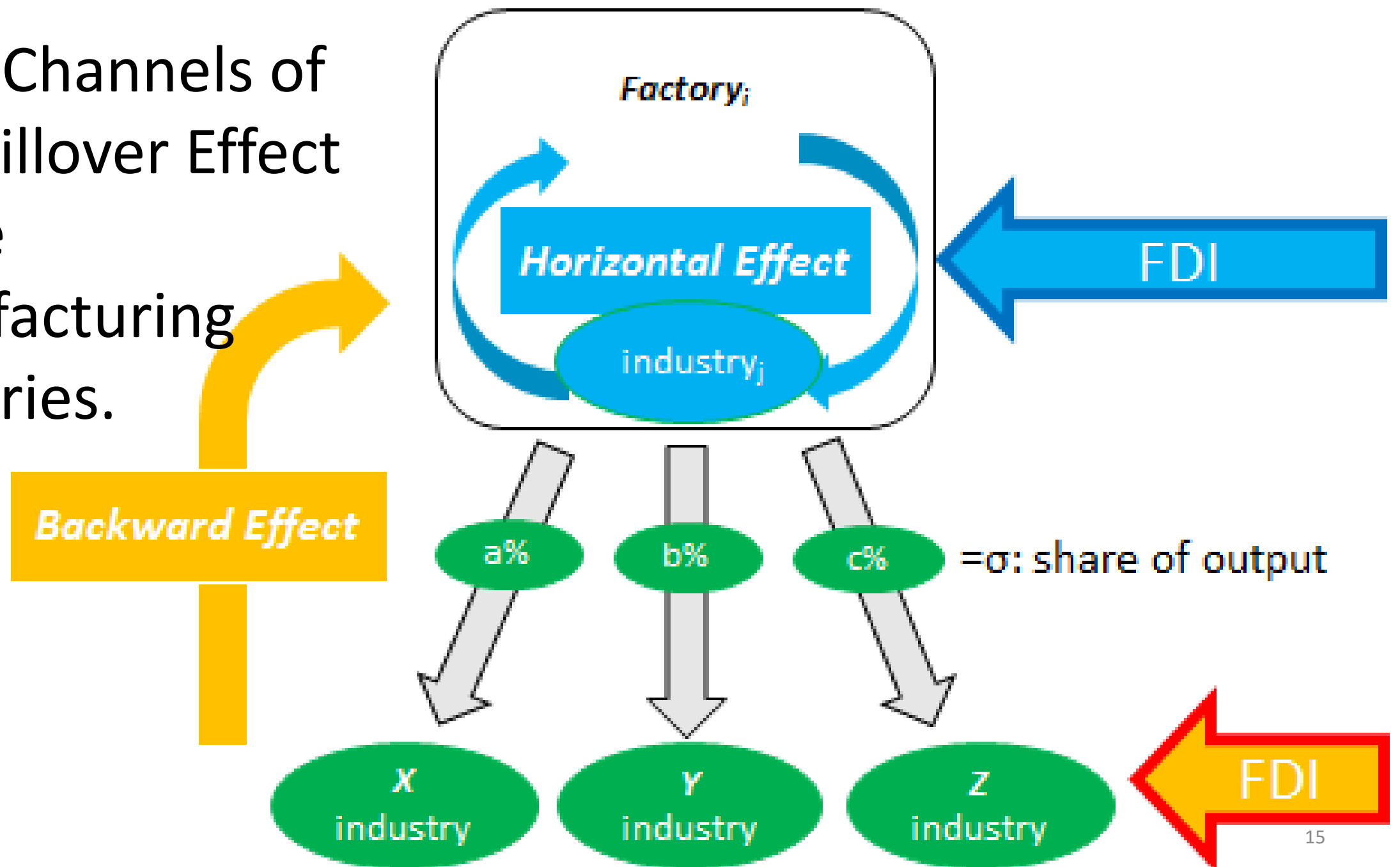


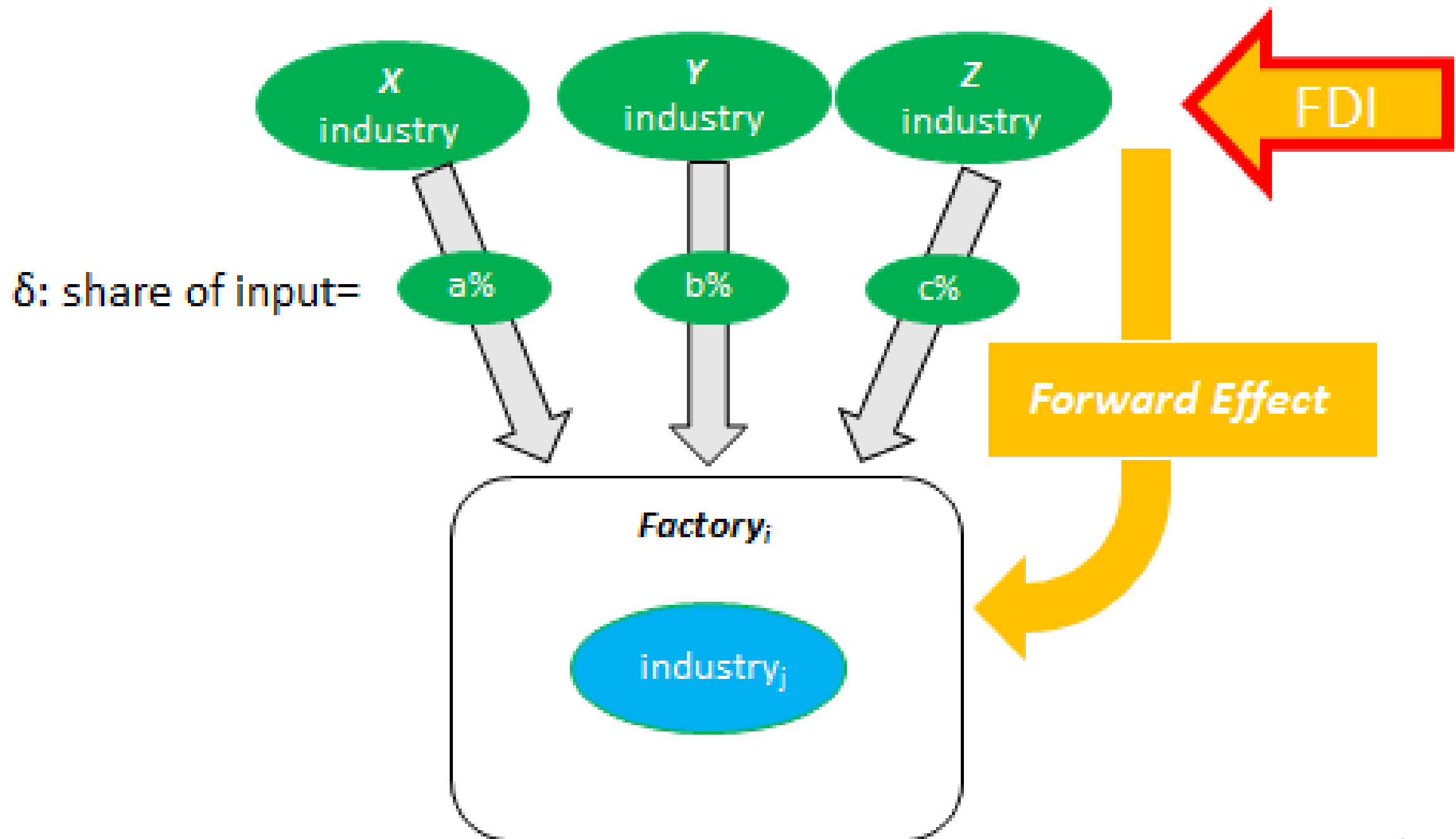


% of Japanese Equity Share



# Three Channels of FDI Spillover Effect on the Manufacturing Industries.



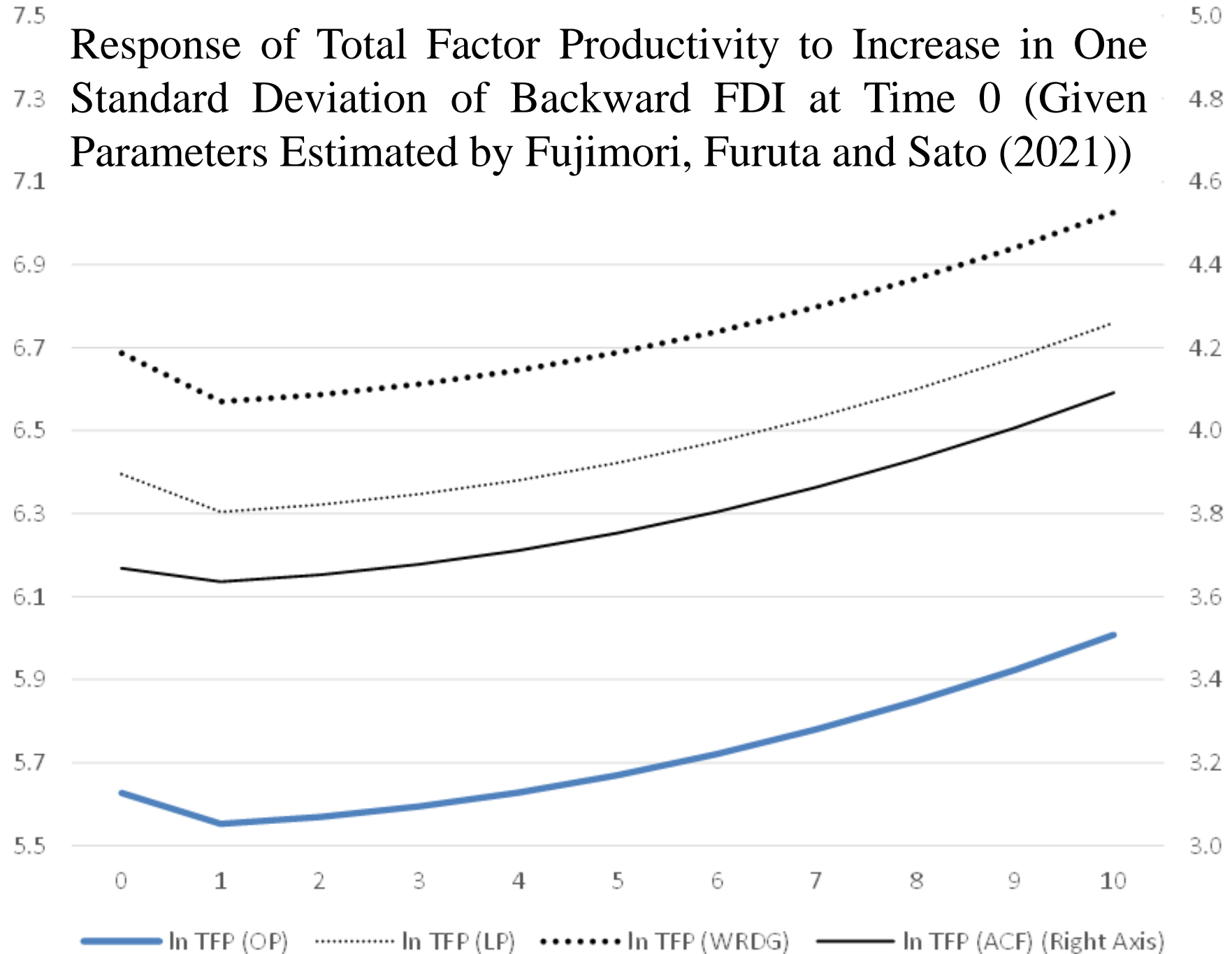




# Research on the FDI Spillover Effect in Indian Manufacturing Industries

	Fujimori and Sato (2015) in <i>Journal of Policy Modeling</i> .	Fujimori, Furuta and Sato (2021) in <i>Economic and Political Weekly</i> .
Reference Period	1995-96 to 2004-05	2000-01 to 2007-08
Number of Observations	Around 300	More than 80,000
Data Source	Annual Survey of Industries	Annual Survey of Industries
Type of Data	Aggregated industry-level	Factory-level data
Estimation Methods as 1st Step	LP: Levinsohn and Petrin (2003)	OP: Olley and Pakes (1996), LP: Levinsohn and Petrin (2003), WRDG: Wooldridge (2009), ACF: Akerberg, Caves and Frazer (2015).
Variables for FDI	Horizontal and Backward	Horizontal, Backward and Forward
Results	▪ Significant Backward Effect, 1. Short-Run: Negative, 2. Long-Run: Positive	▪ Significant Backward Effect: The Same as Fujimori and Sato (2015) ▪ Significant Negative Horizontal Effect in Short-Run

# Response of Total Factor Productivity to Increase in One Standard Deviation of Backward FDI at Time 0 (Given Parameters Estimated by Fujimori, Furuta and Sato (2021))



# Conclusion

- Japanese MNCs have sales of 5 trillion yen (42 billion dollar) and generate 2.5 lakh employment. Since 2003, the trade balance has been in surplus, now reaching 736 billion yen (620 million dollar). They have increased their shareholdings to over 80% while moderately increasing R&D.
- According to implication drawn from our research on FDI spillover effect, Japanese MNCs, especially, Suzuki and Honda as OEM manufactures, seem to be having a tremendous positive impact on the productivity of Indian auto component industries.
- Japanese MNCs will have both quantitative and qualitative contribution for enhancing “Make in India” as well as “Self-Reliant India”.