

ASEAN's Potentials in Semiconductors and Digital

Lili Yan Ing

*Secretary General (International Economic Association)
Lead Advisor, Southeast Asia Region (ERIA)*

National University of Singapore, 26 August 2024

ASEAN in Global Economic Shifts: 1970-2022

Economic Shifts: 1970—2022

Over the last half century we have witnessed a global economic transformation.

A few countries that once held predominant influence in the world's economic landscape during the early 1970s have gradually relinquished their positions to emerging economies. These emerging economies have increased their shares in the world economy, both in significance and pace.

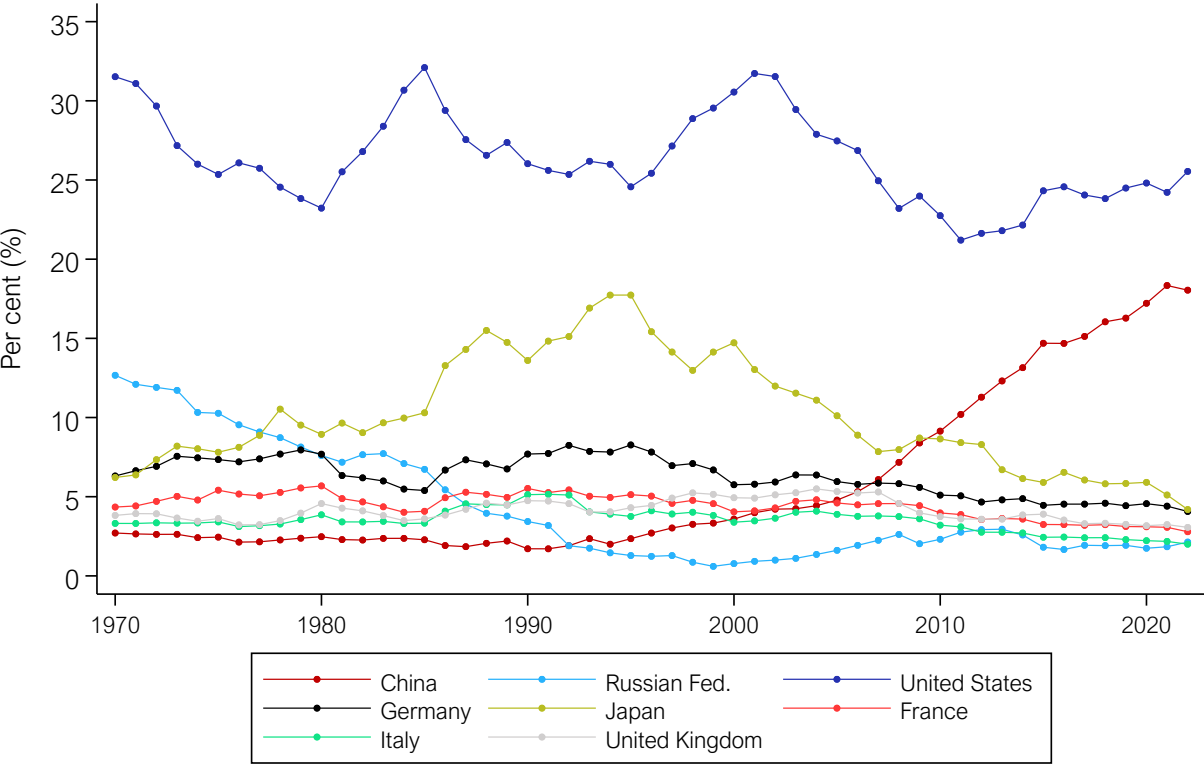
The shift is evident in their declining global shares across three key economic metrics:

- Total output (gross domestic output, GDP)
- Trade in goods
- Manufacturing value added

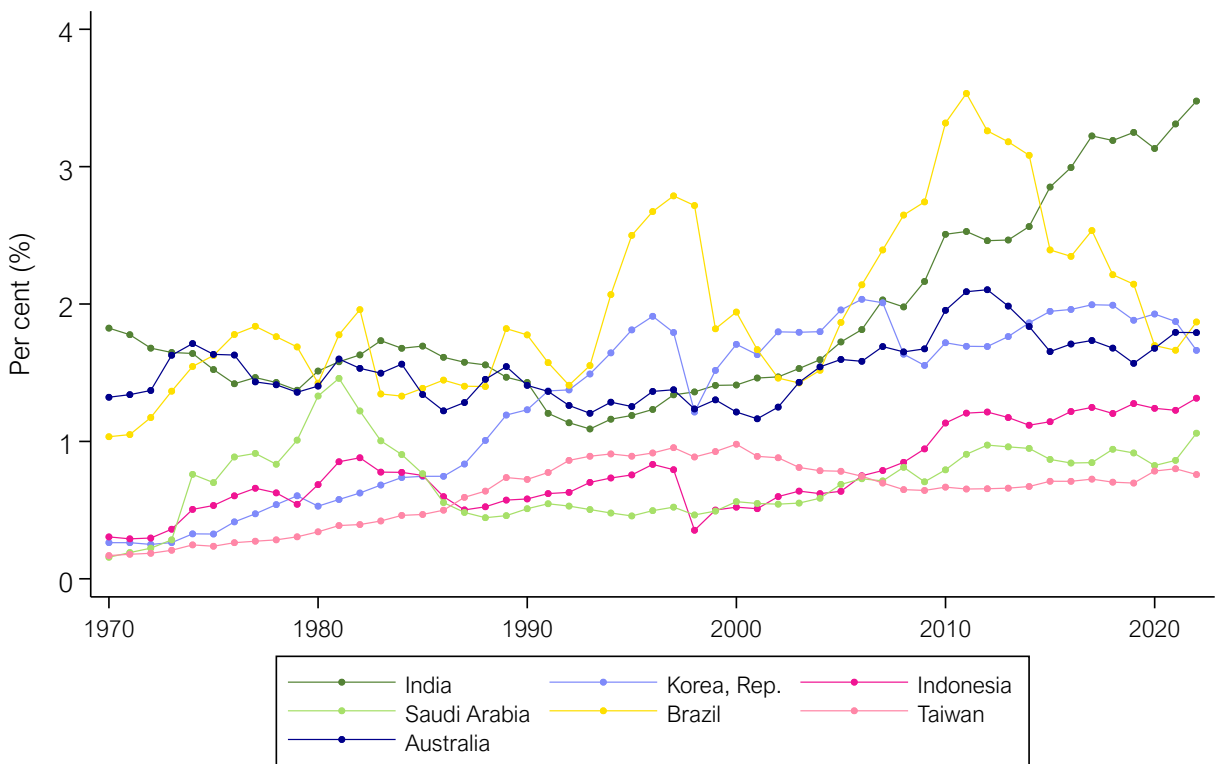
Source: Ing and Lin, Economic Transformation in 'New Global Economic Order' <https://www.eria.org/research/economic-transformation-and-a-new-economic-order>

Share (%) in World's Nominal GDP, 1970-2022

Top 7 Decliners, except China



Top 7 Gainers (excluding China)

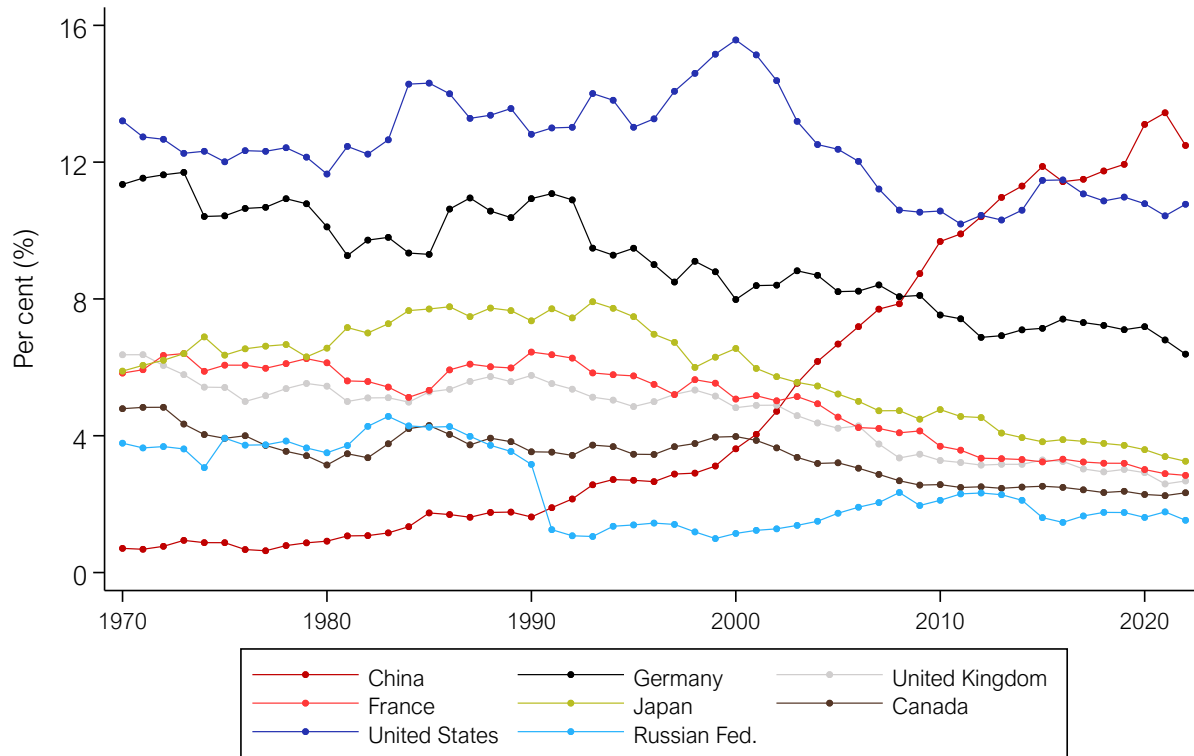


Notes: GDP is Gross Domestic Product or total outputs

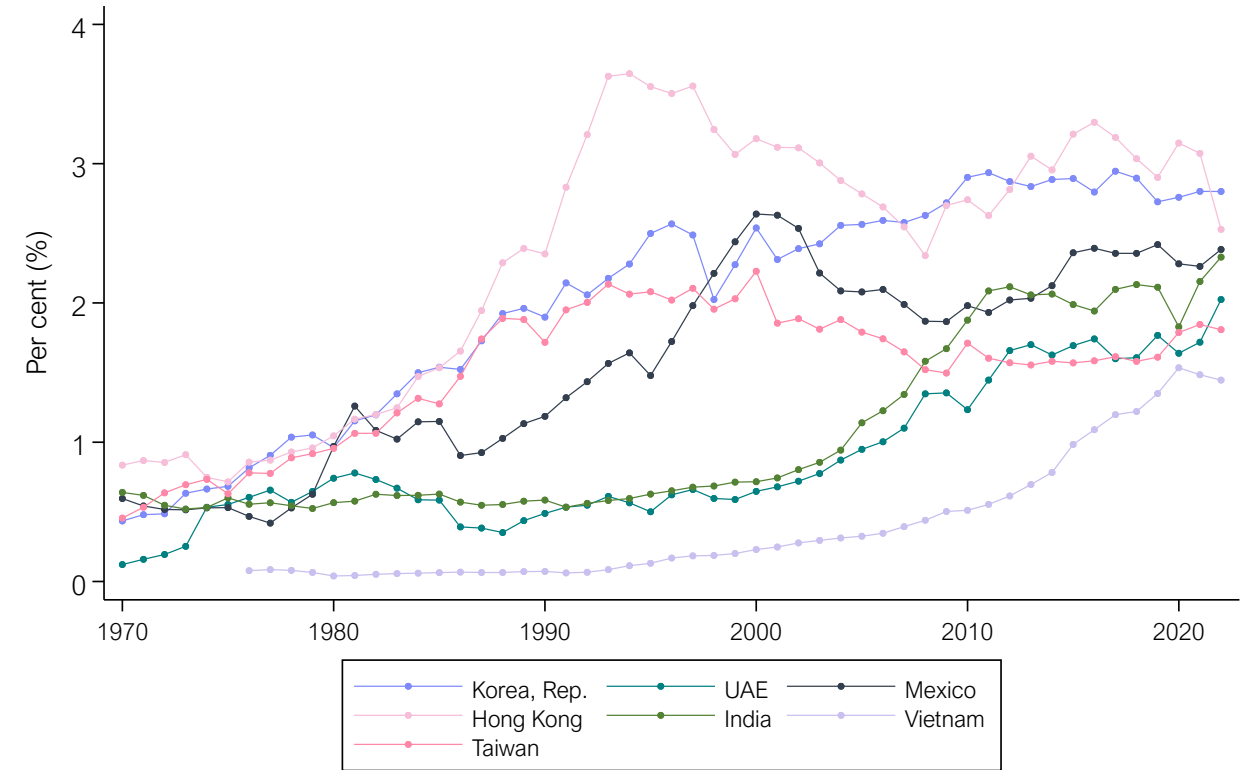
Source: Ing and Lin, Economic Transformation in 'New Global Economic Order' <https://www.eria.org/research/economic-transformation-and-a-new-economic-order>

Share (%) in World's Trade Value, 1970-2022

Top 7 Decliners, except China



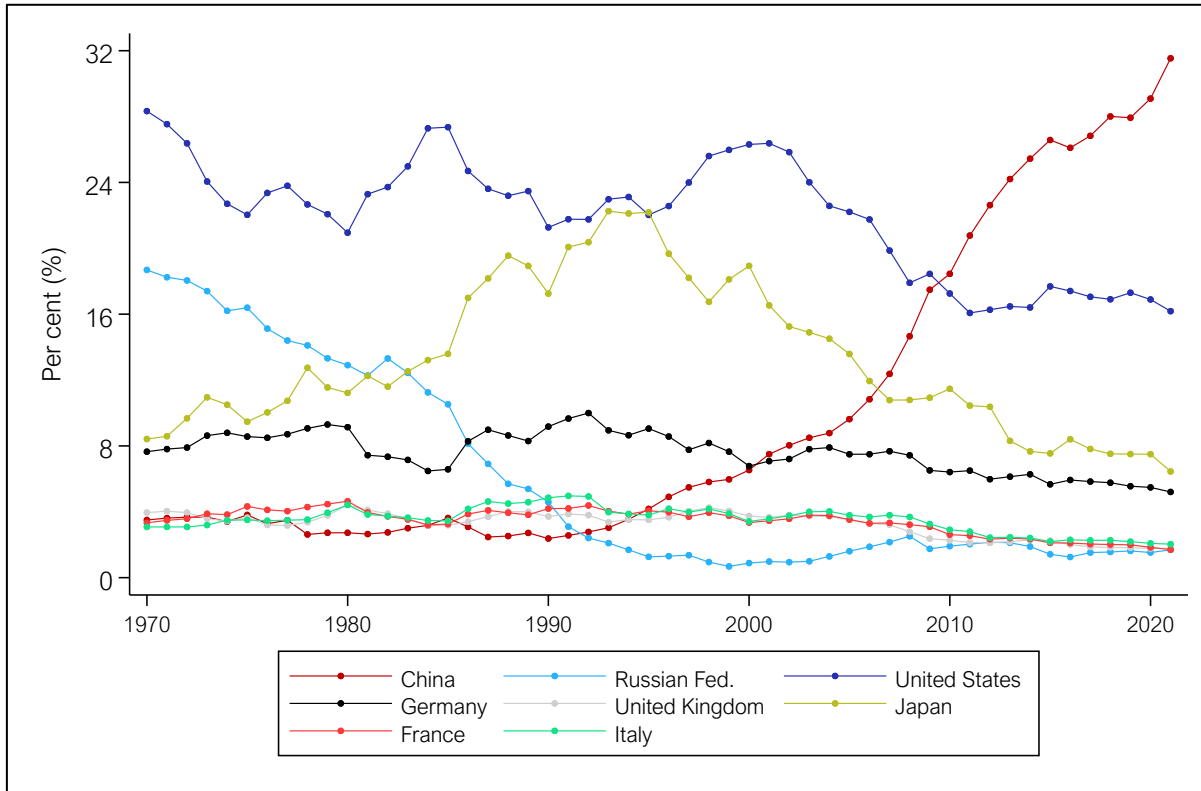
Top 7 Gainers (excluding China)



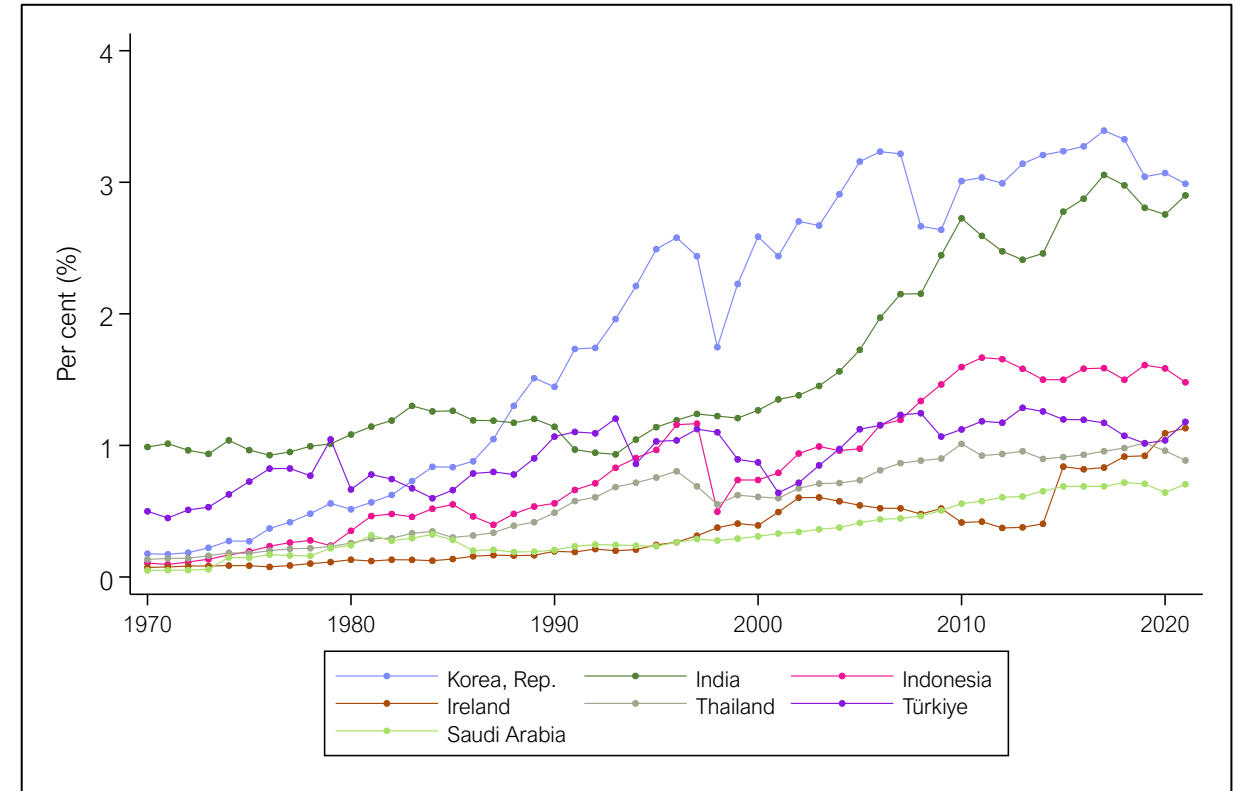
Source: Ing and Lin, Economic Transformation in 'New Global Economic Order' <https://www.eria.org/research/economic-transformation-and-a-new-economic-order>

Share (%) in World's Manufacturing Value Added, 1970-2022

Top 7 Decliners, except China



Top 7 Gainers (excluding China)

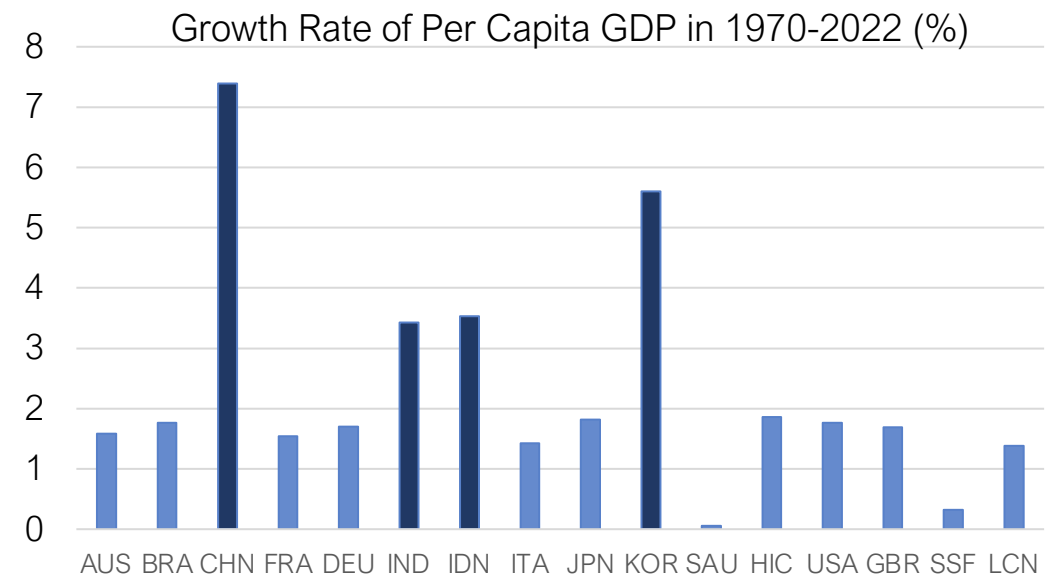
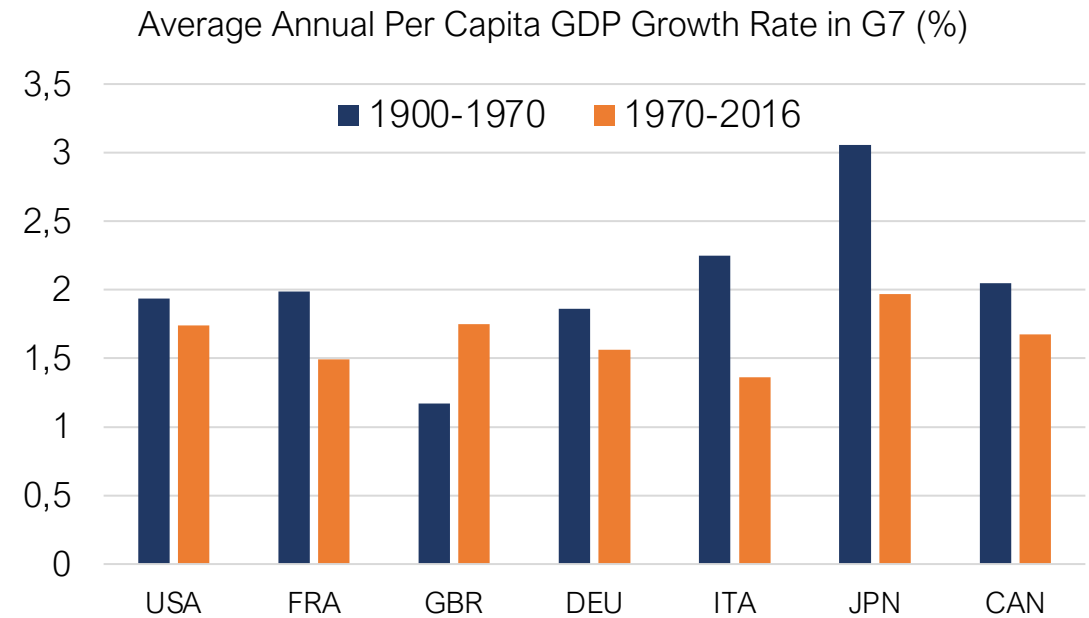


Source: Ing and Lin, Economic Transformation in 'New Global Economic Order' <https://www.eria.org/research/economic-transformation-and-a-new-economic-order>

Lessons from the Shifts

- The economic shifts in the last half century are not caused by significant changes in the growth performance of developed countries but rather by the rapid catching up of a few emerging market economies, such as China, India, Indonesia, and South Korea.
- Economic development is a process of continuous structural transform in industries and technology (and human capital), which raise productivity, as well as hard infrastructure and soft institutions, that reduce transaction costs.
- The governments of those few successful countries adopted pragmatic approaches to turn their countries' comparative advantage from “*latent*” to “*actual*” and exploited the latecomer advantages throughout their industrialization and technology catching up process.

Source: Ing and Lin, Economic Transformation in ‘New Global Economic Order’



Global Trade Outlook

Global Trade Outlook

Rising protectionism continues...

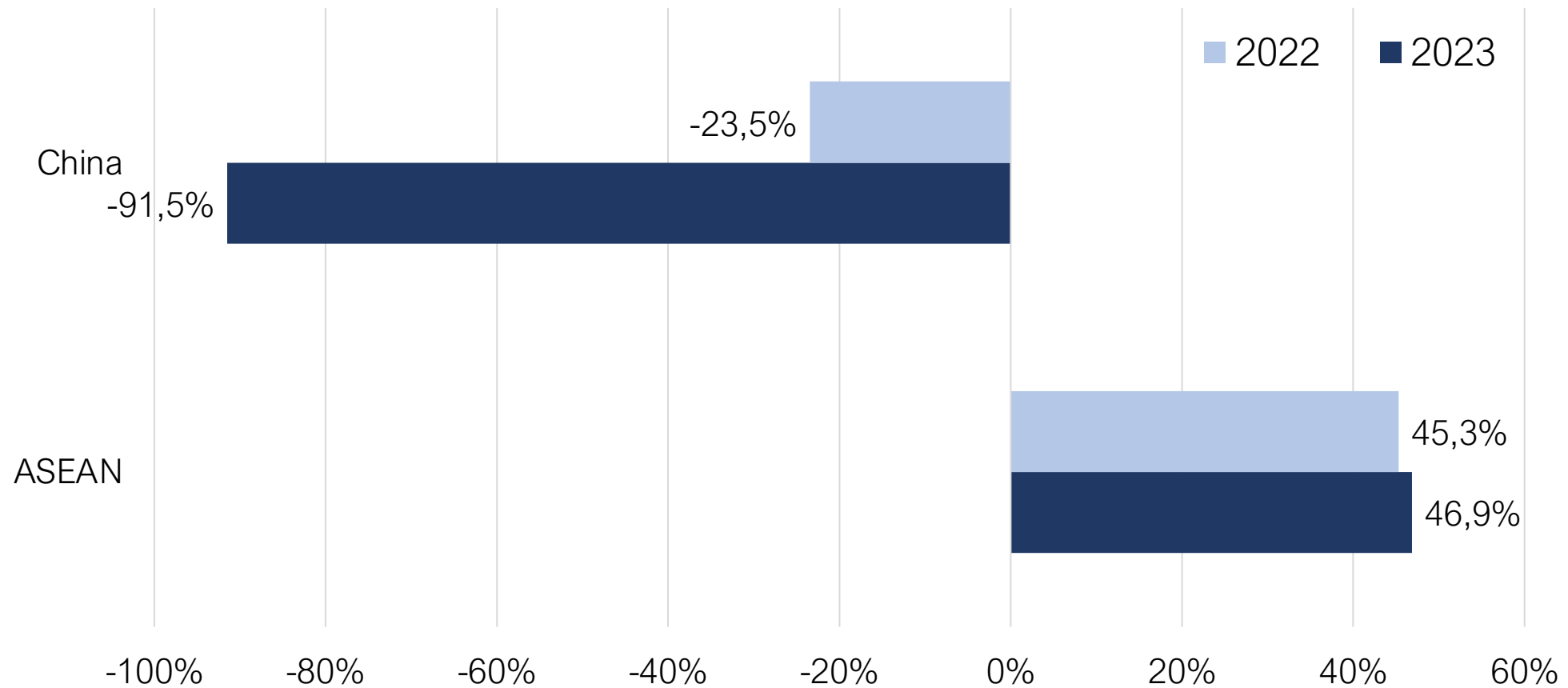
- Geopolitical tensions
 - US —China trade tensions (now extended to technology, strategic industries, and security)
 - US's Friend shoring strategy—China's Dual Strategy
- Rising anti-globalization and protectionism
 - Stalled Multilateral Trading System (WTO)
 - Trade coercions, sanctions, and protectionism
 - World's Defragmented Value Chains

ASEAN's Potential

in Semiconductor and Digital Economy

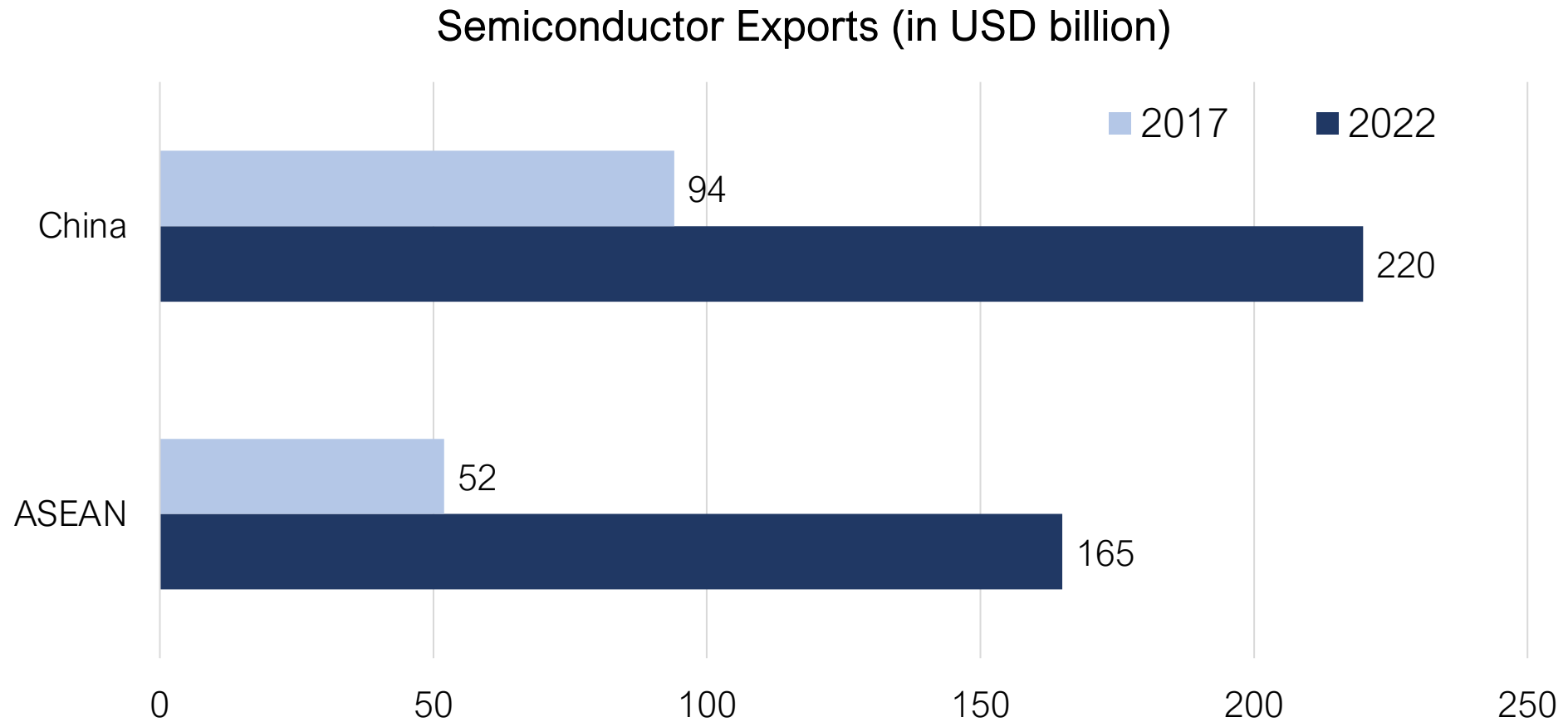
Changes in Total FDI, after and before US—China tensions

2022 and 2023 compared to 2018



Source: ERIA Staff Calculations from EIU Database [accessed 8 January 2024]

ASEAN's Potential in Semiconductor



Source: ERIA Staff Calculations based on WITS Database [accessed 12 September 2023], semiconductor exports: HS 8541 and 8542

ASEAN's Potential in Digital Economy

- In 2023, ASEAN has 679mn population, 70% of which are internet users
- In 2023, the digital economy was recorded at USD 259 billion
- By 2030, ASEAN's digital economy will reach USD 1 trillion.

Way Forward

Open for Discussions

Way Forward

Solid macro and micro economy

1. Development Strategy:

- Optimize comparative advantage and effective infrastructure
- Accumulate capital and ensure gradual economic and political transition
- Fiscal: *wise spending* (max ratio of fiscal debt to GDP of 3%)
- Advance the use of digital technologies and ensure sustainability
 - Invest in physical and digital connectivity (develop, upgrade, and decarbonize ports, shipping, logistics, electricity, and data center infrastructure)
 - Optimize the use of digital technologies to increase productivity ensure sustainable development across all sectors

Way Forward (trade and Investment)

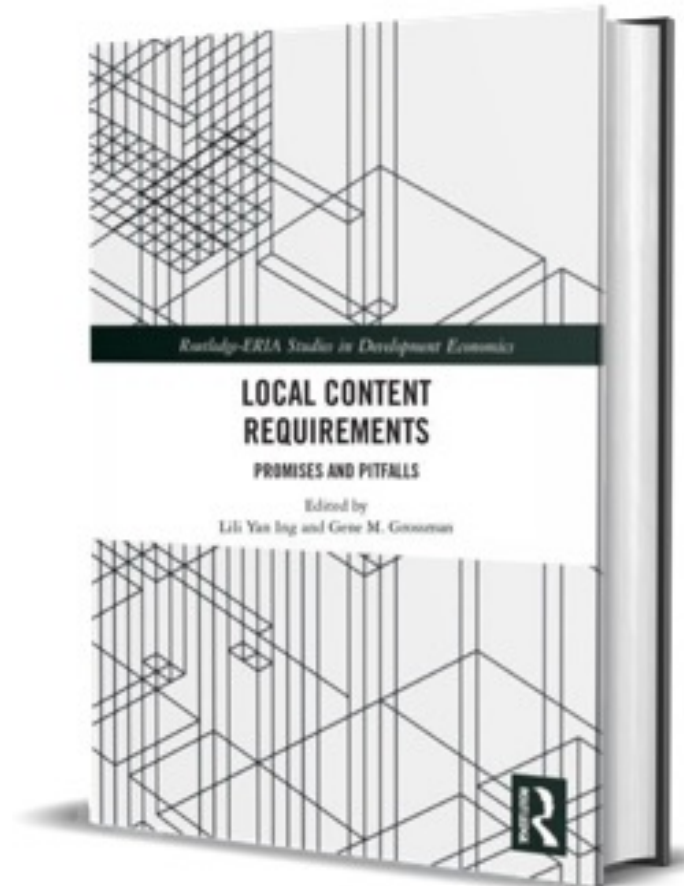
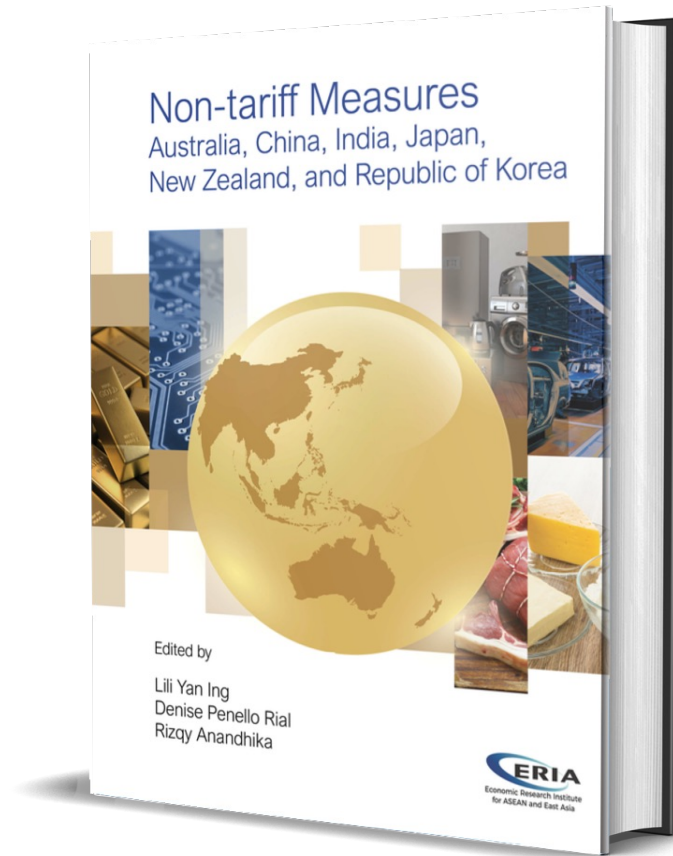
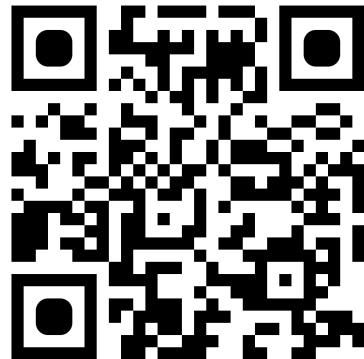
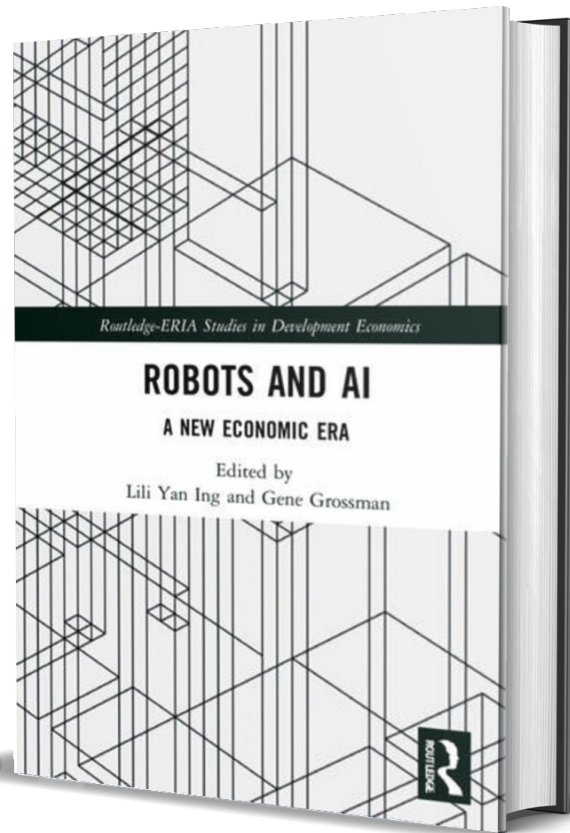
Maintain neutral ground of ASEAN and improve cooperation

2. Deepen trade and investment ties with existing and potential partners

- Ensure the effective functioning of the multilateral trading system
- Optimize the use of ASEAN FTAs: Intra ASEAN, ASEAN+1 FTAs, and the RCEP

3. Improve trade and investment climate

- Create conducive environment to all sectors and industries (*Not picking the winners*)
- Improve transparency in licensing, permits, and regulatory process by implementing corporate governance standards



Thank You

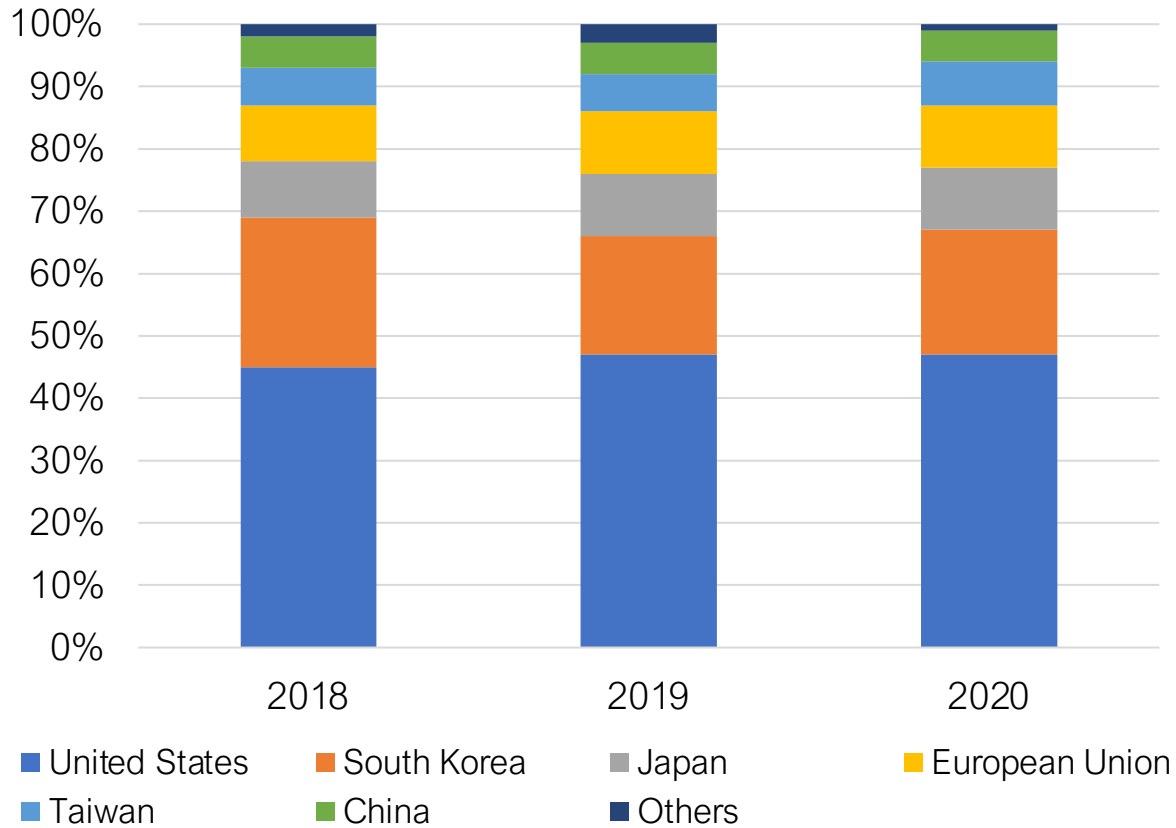
Lili Yan Ing

liliyan.ing@eria.org

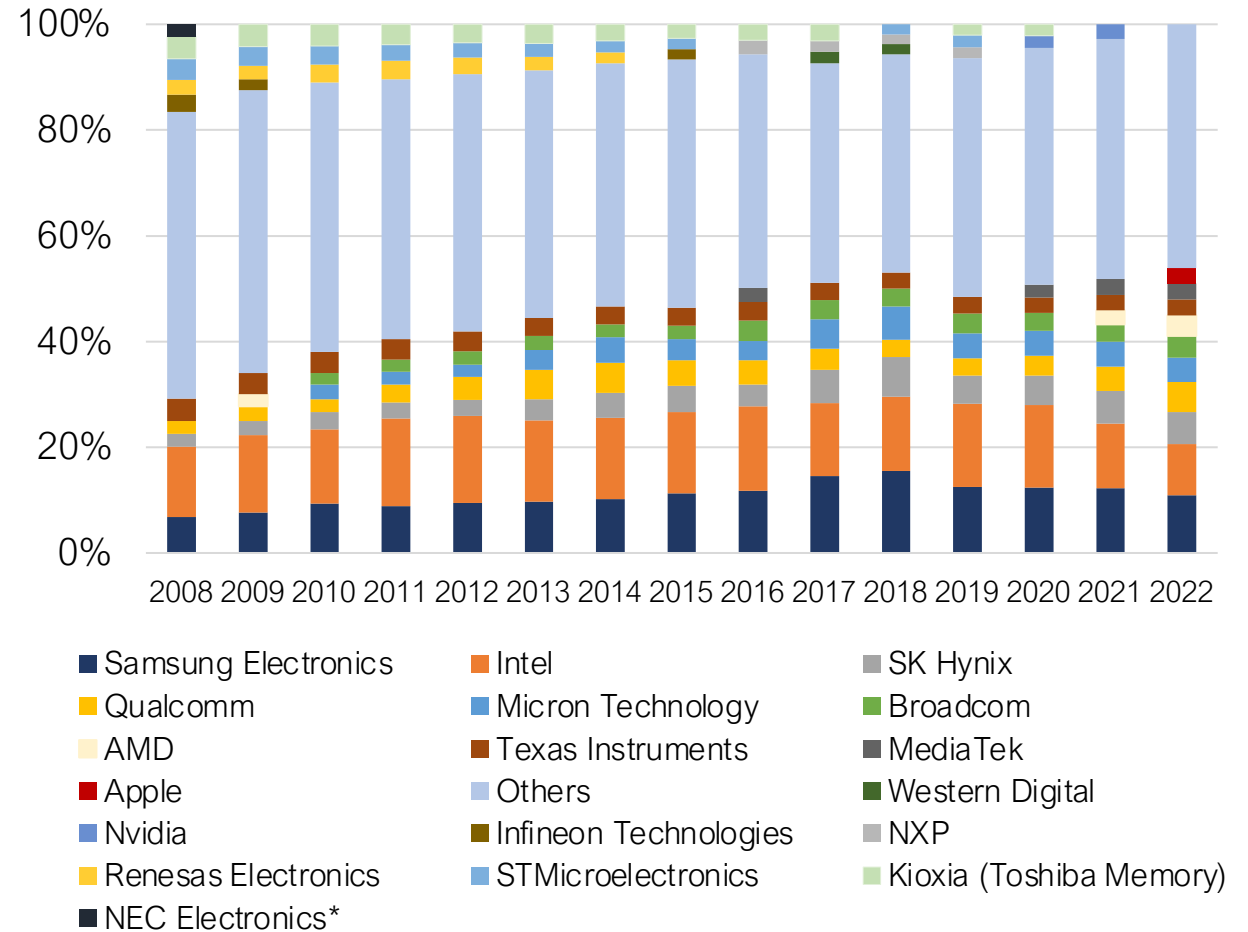


Global Semiconductor Market

Share of Global Semiconductor Industry



Semiconductor Companies Market Revenue Share Worldwide



Source: ERIA Staff Calculations based on Statista Data [accessed 14 May 2023]