The Resurgence and Proliferation of Industrial Policy: Explaining the Race to the Bottom

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Navigating Challenges:
Industrial Policy, Competitiveness and Development
January 8-10, 2025

Why Measure Industrial Policy?

- Economic effectiveness
- Public goods
- National security
- Fairness and global governance

Table 1.1: Industrial Policy Instruments

Policy Domain	Instruments	
	Market-Based	**Public Goods / Direct Provision**
Product Market	Import tariffs Export subsidies Tax credits Investment/FDI incentives	Government procurement Product standards Localization requirements Product subsidies, tax incentives Investment promotion agencies, trade fairs
Labor Market	Wage tax credits, subsidies Training grants	Training institutes Skills councils
Capital Market	Directed credit Interest rate subsidies Loan guarantees	Development bank lending State investment funds Export credit agencies
Land Market	Subsidized rent Below-market sales	Infrastructure Special economic zones Incubator programs
Technology	R&D subsidies, grants, finance coordination	Support for technology transfers Public-private research consortia Public research institutes

Source: Adapted from John Weiss, "Taxonomy of Industrial Policy," United Nations Industrial Development Organization, 2015, Inclusive and Sustainable Industrial Development Working Paper Series, Working Paper 8, https://www.unido.org/api/opentext/documents/download/9925558/unido-file-9925558.

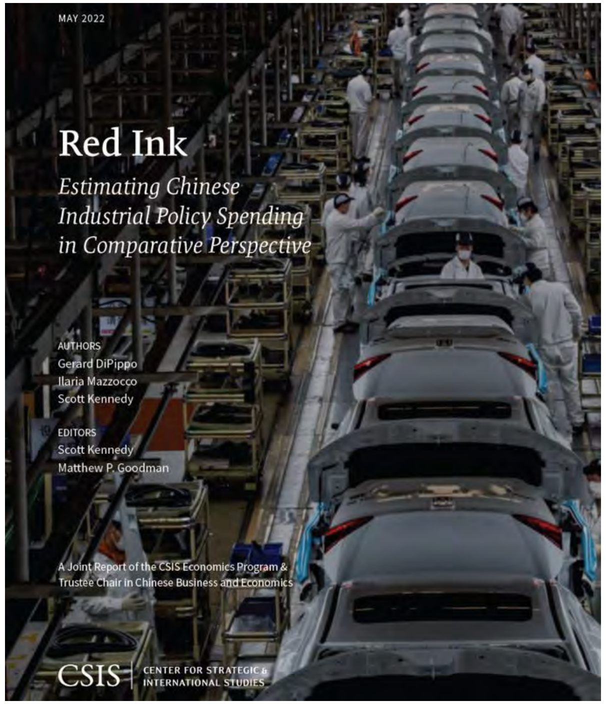


Table 3.1: Estimated Instruments

Instrument	Description
Direct subsidies	Explicit subsidies to firms, excluding those for R&D projects.
Tax incentives for R&D	Tax credits and rebates to encourage business R&D spending.
Government support for R&D	Direct government funding of R&D activities conducted by business enterprises, such as research grants for national projects.
Other tax incentives	Business tax incentives and rebates unrelated to R&D.
Below-market credit	Loans from state policy or development banks and export credit agencies to firms in relevant sectors. Implied credit subsidy estimated with a credit spread (explained below).
State investment funds	New state equity investments in domestic firms, including private euqity and venture capital funds. Implied equity premium estimated (explained below).

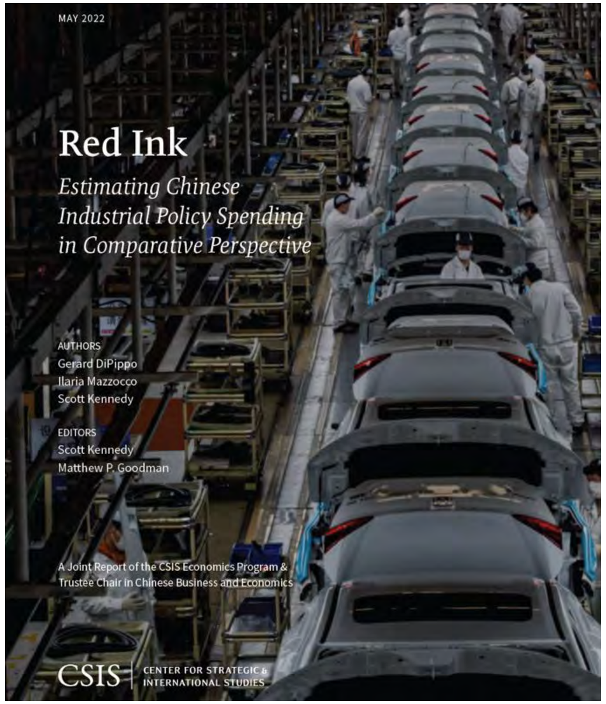
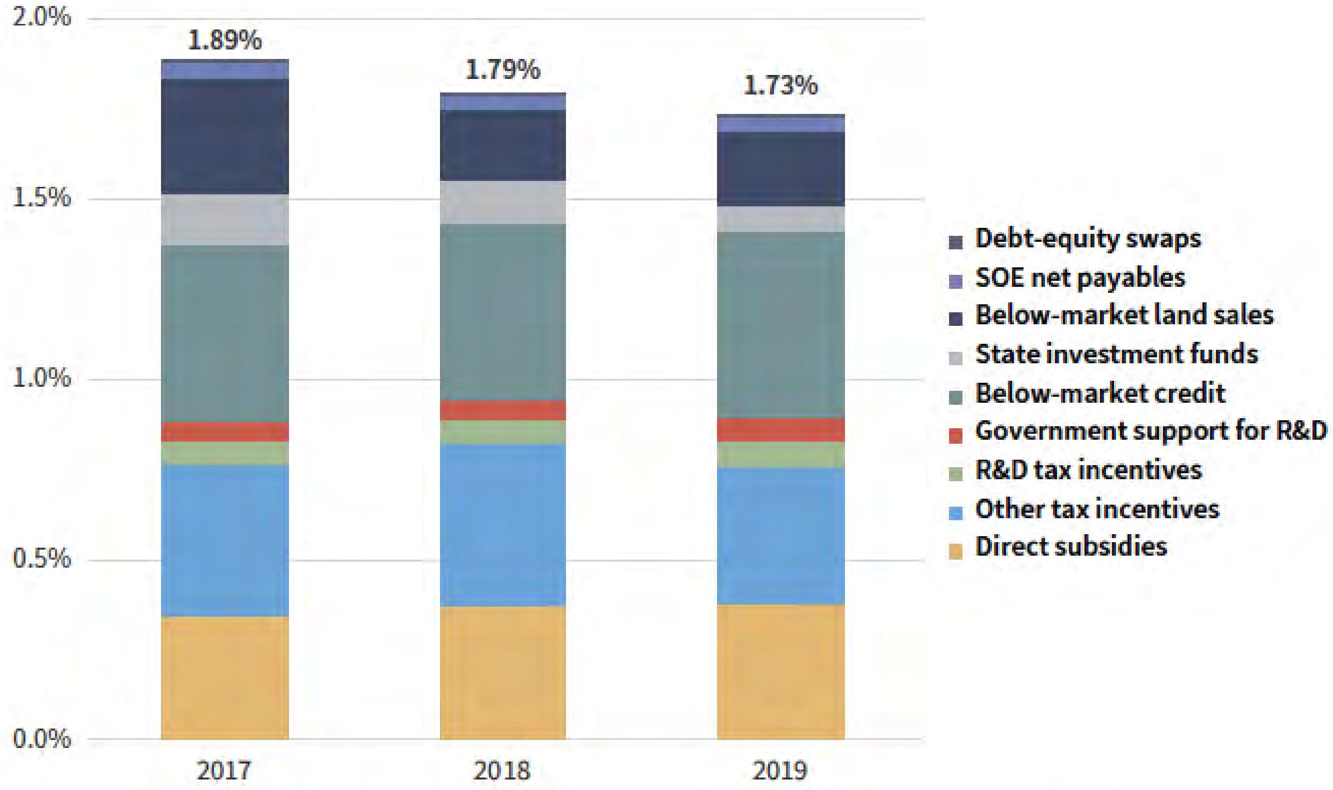


Figure 2.2: China's Quantifiable Industrial Policy Spending, 2017–2019

% of GDP



Note: Estimates are conservative and only include instruments with sufficient data for quantification.

Source: Authors' calculations; please refer to the appendix for detailed information.

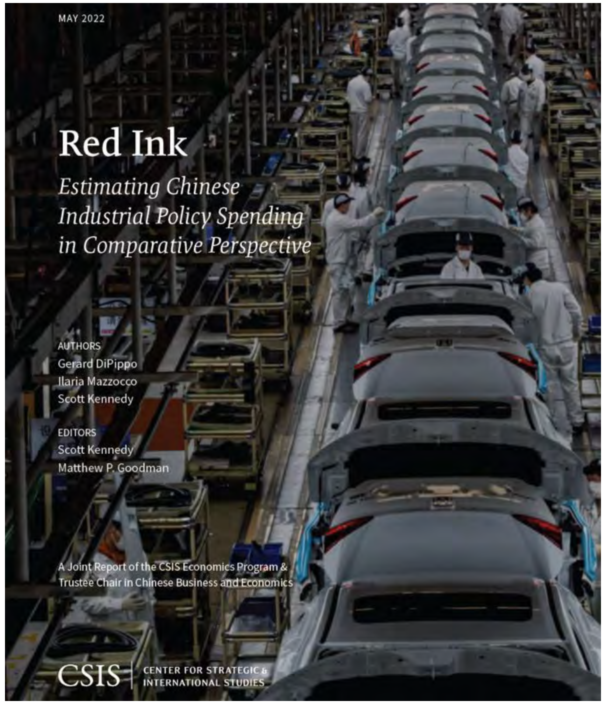
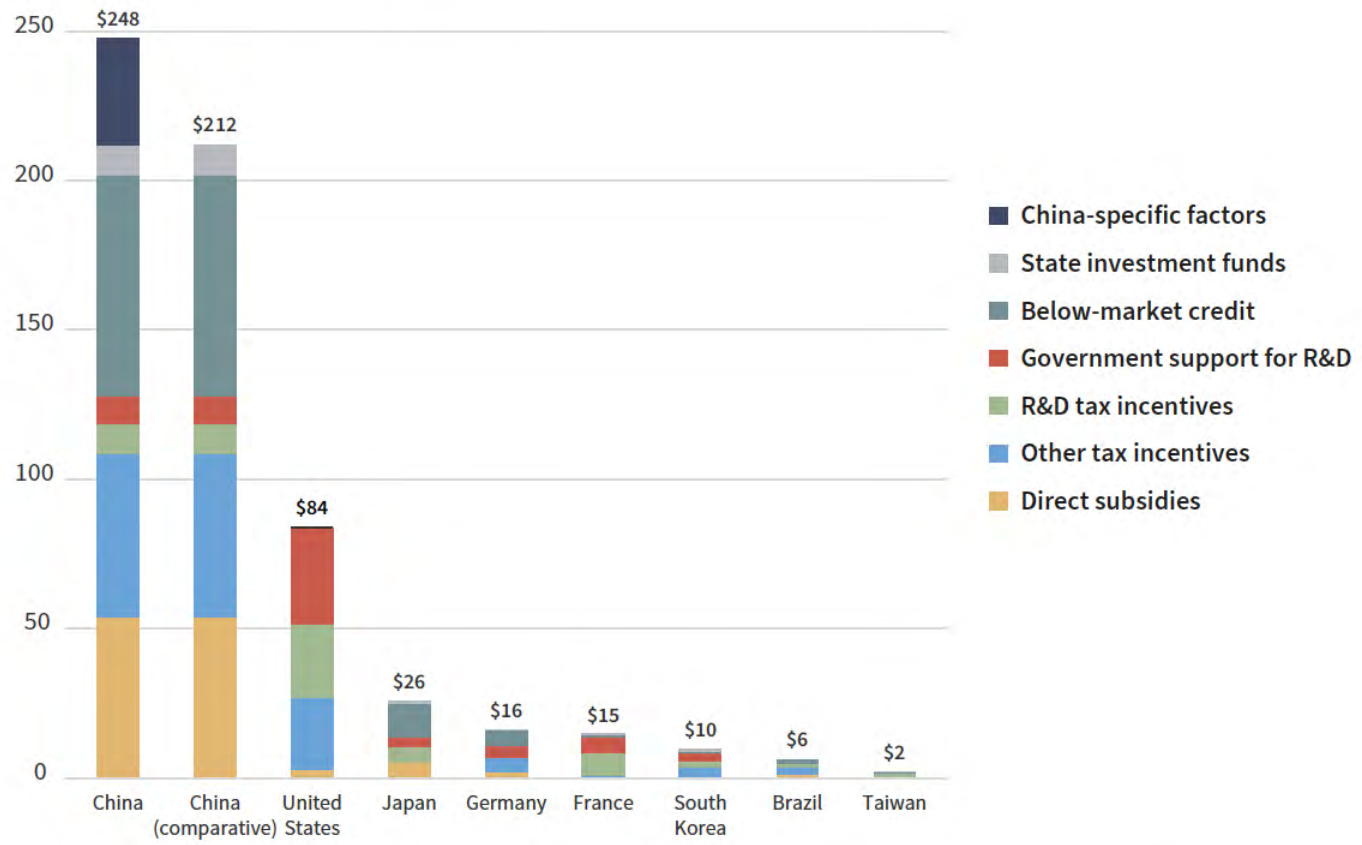


Figure 3.5: Industrial Policy Spending in Key Economies, 2019

USD, billions, market exchange rates



Note: Estimates only include instruments with sufficient data for quantification. China estimates are conservative.

Source: Authors' calculations; please refer to the appendix for detailed information.

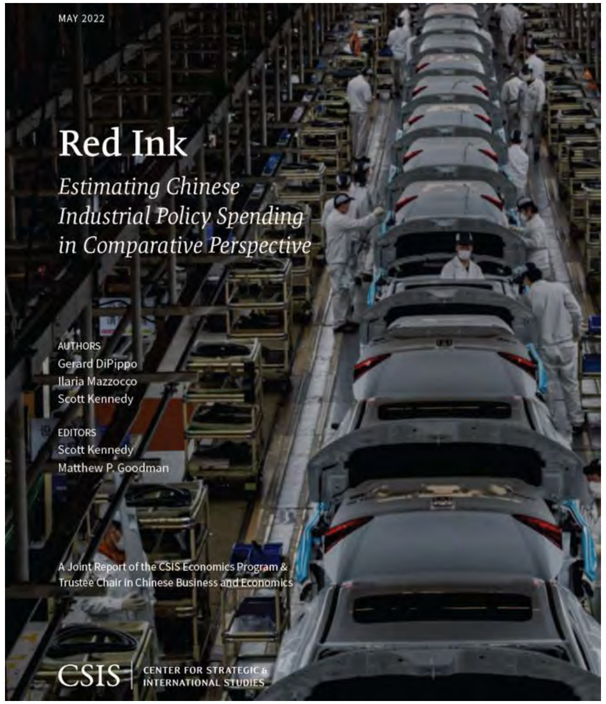
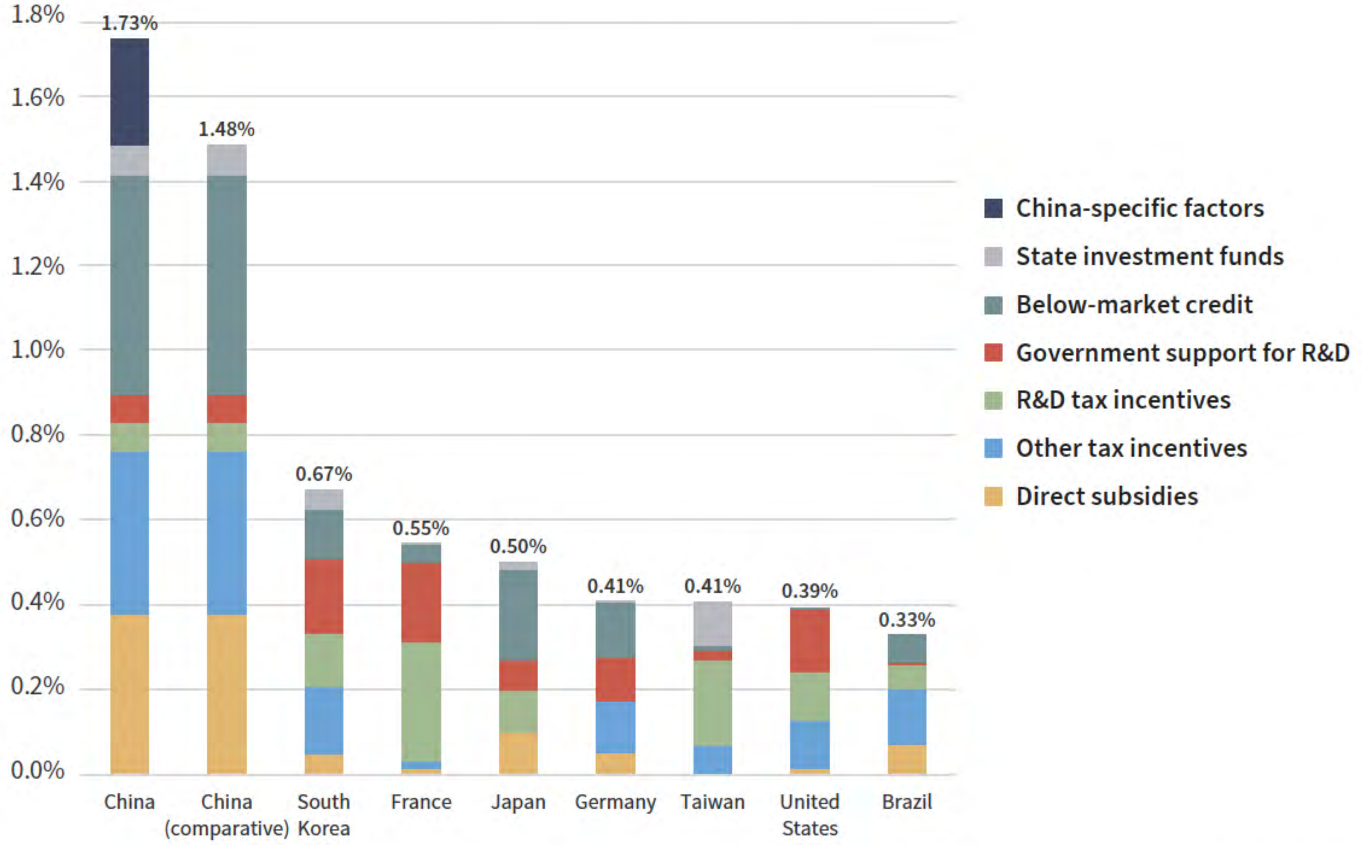
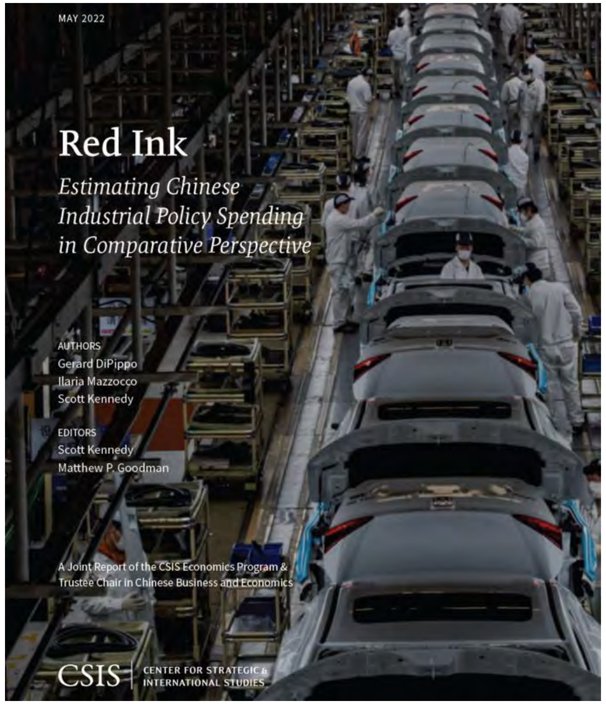


Figure 3.4: Industrial Policy Spending in Key Economies, 2019

% of GDP



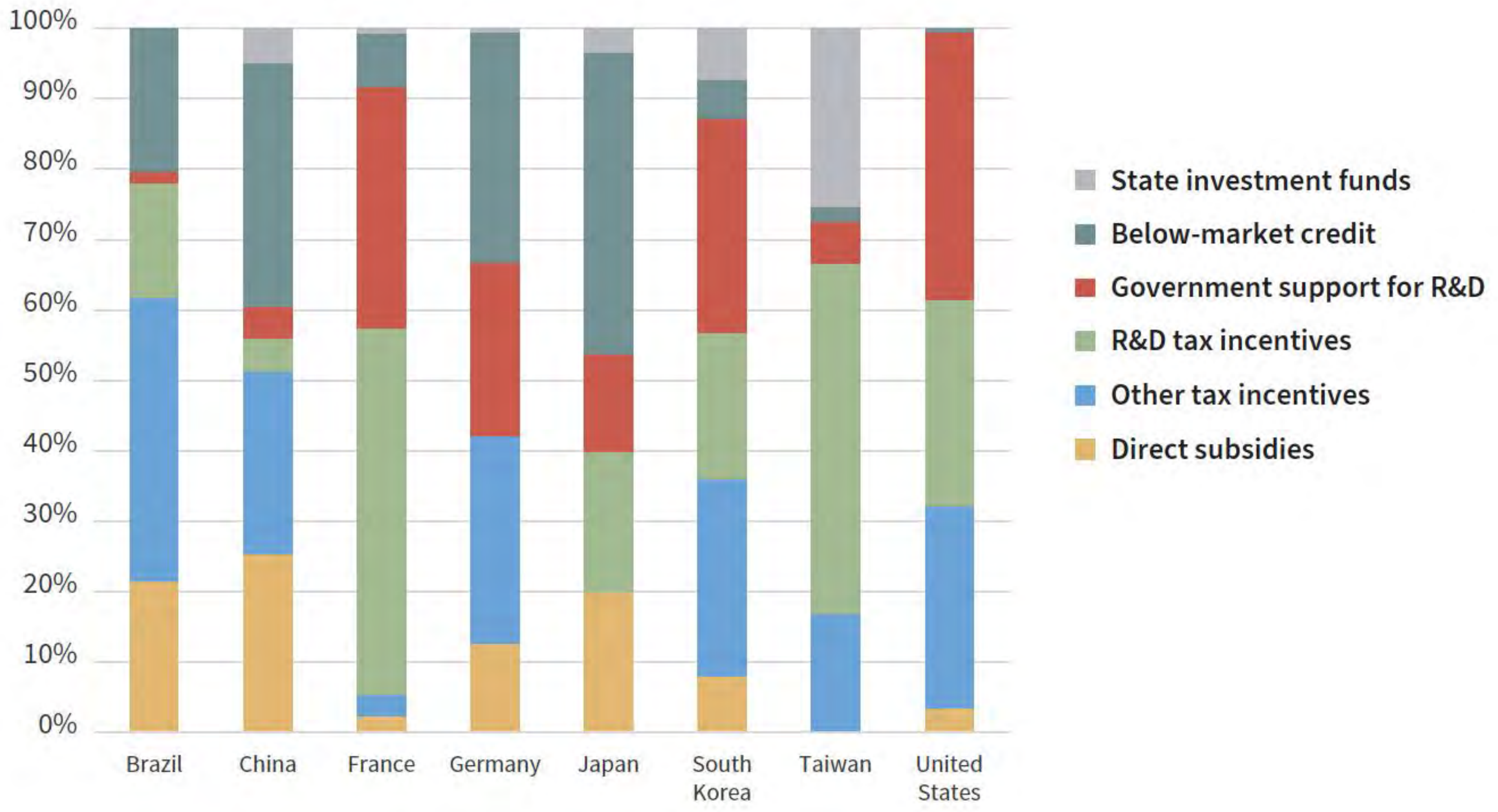


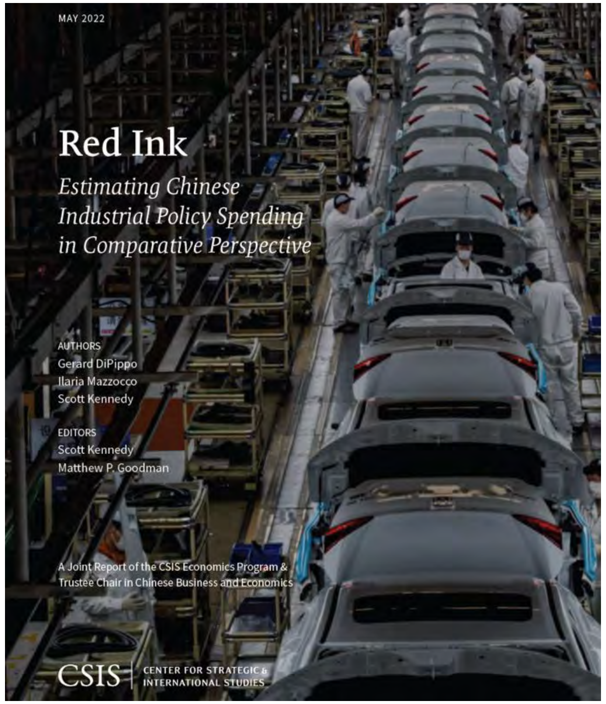
Note: Estimates only include instruments with sufficient data for quantification. China estimates are conservative.

Source: Authors' calculations; please refer to the appendix for detailed information.

Figure 3.7: Industrial Policy Spending in Key Economies, 2019

% of total spending





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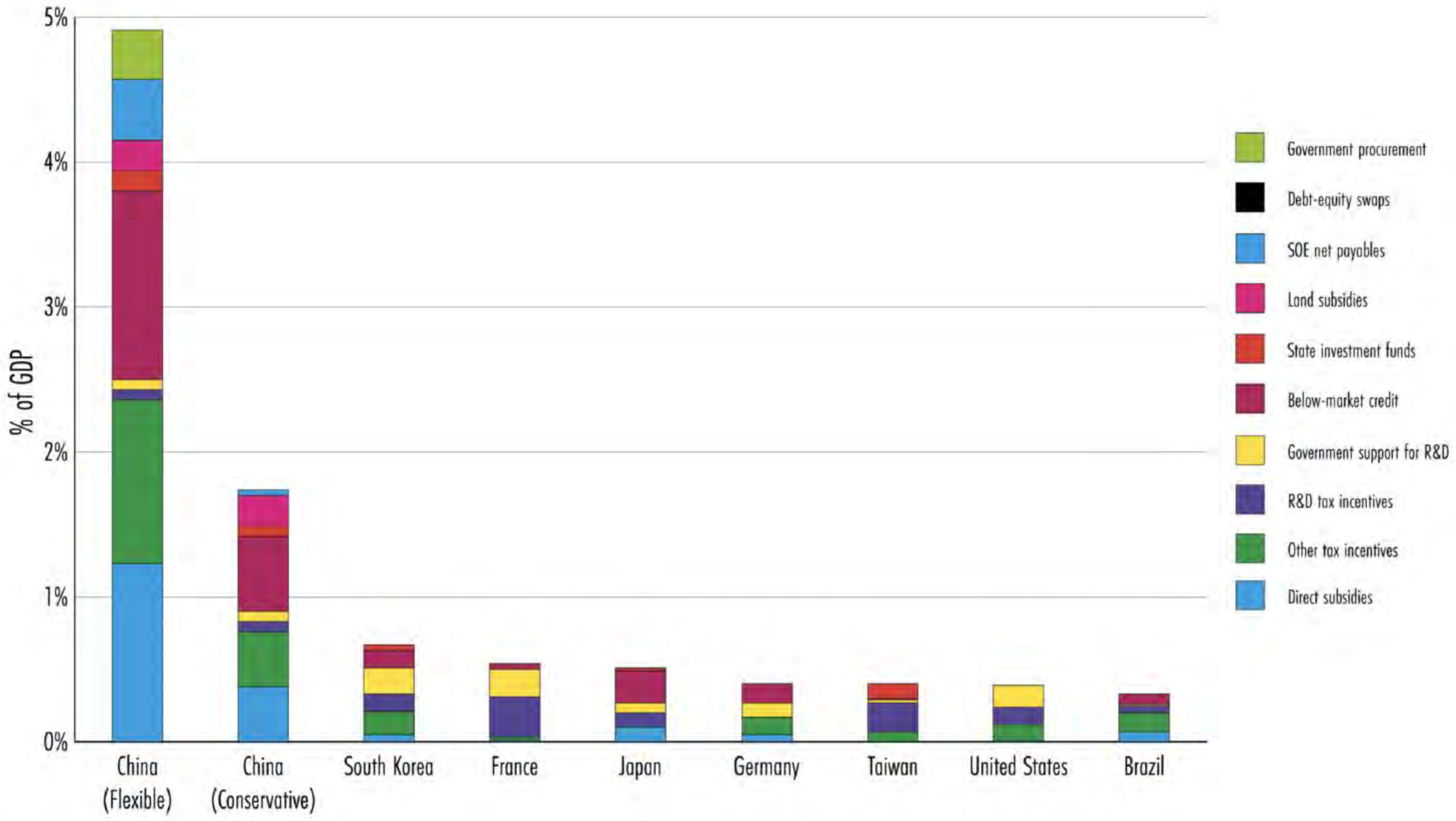

Data: Scott Kennedy, Center for Strategic and International Studies

The Wire China

THE BIG PICTURE

Big Spender

A look at China's industrial policy: how much it spends, how it stands out, and what lessons the U.S. should learn.

BY ELIOT CHEN — SEPTEMBER 4, 2022

Critiques of Our Work

From the US/West

- Should include more kinds of policy support, e.g., oral guidance, govt procurement.
- Inappropriate to compare China & other non-market economies' systems with market economies' individual interventions.

From China

- Over-count for China (cheap credit for SOEs, govt procurement)
- Under-count for the US (AD/CVD tariffs, states, IRA, CHIPS).

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The Chinese EV Dilemma: Subsidized Yet Striking

Blog Post by **Scott Kennedy**
Published June 20, 2024

Caixin GLOBAL

Weekend Long Read: What to Do About the Influx of China's Subsidized, Yet High Quality EVs

By Scott Kennedy

Gift this article

Figure 1: Industrial Policy Spending for China's EV Sector (US$, billions)

Type of Support	2009-2017	2018	2019	2020	2021	2022	2023	Total
Rebate	37.8	4.3	3.3	3.5	7.4	9.2	0.0	**65.7**
Sales Tax Exemption	10.8	7.7	6.4	6.6	16.4	30.3	39.6	**117.7**
Infrastructure Subsidies	2.3	0.2	0.2	0.3	0.3	0.6	0.6	**4.5**
Research & Development	2.0	3.6	3.4	3.5	4.3	3.9	4.3	**25.0**
Government Procurement	7.8	1.6	1.4	2.9	1.7	1.8	0.8	**18.0**
Total	**60.7**	**17.4**	**14.8**	**16.8**	**30.1**	**45.8**	**45.3**	**230.9**
Spending as Share of Total Sales	42.4%	22.7%	23.3%	25.4%	18.3%	15.1%	11.4%	**18.8%**
Subsidy per Vehicle (US$)	-	13,860	12,311	12,294	8,538	6,656	4,764	-

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FIGURE 1

Sum of grants to listed companies

RMB billions

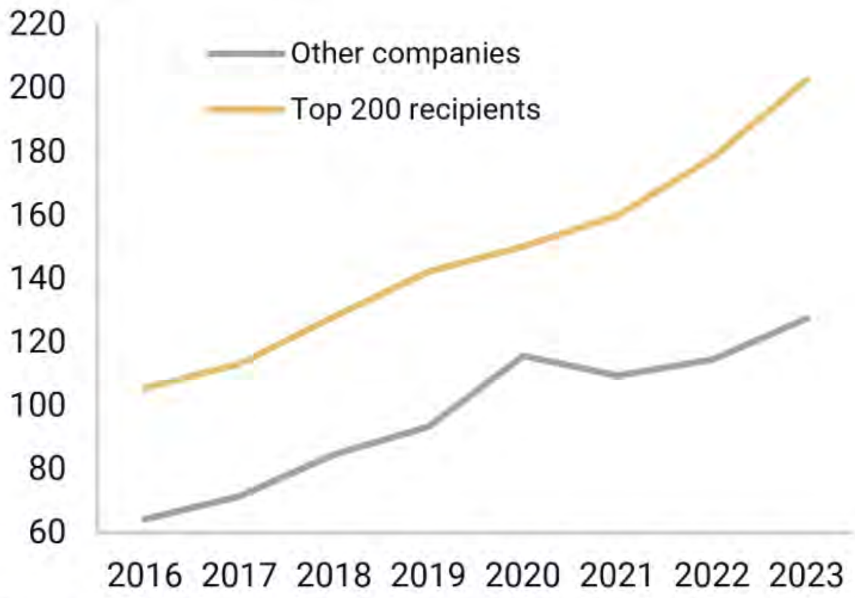
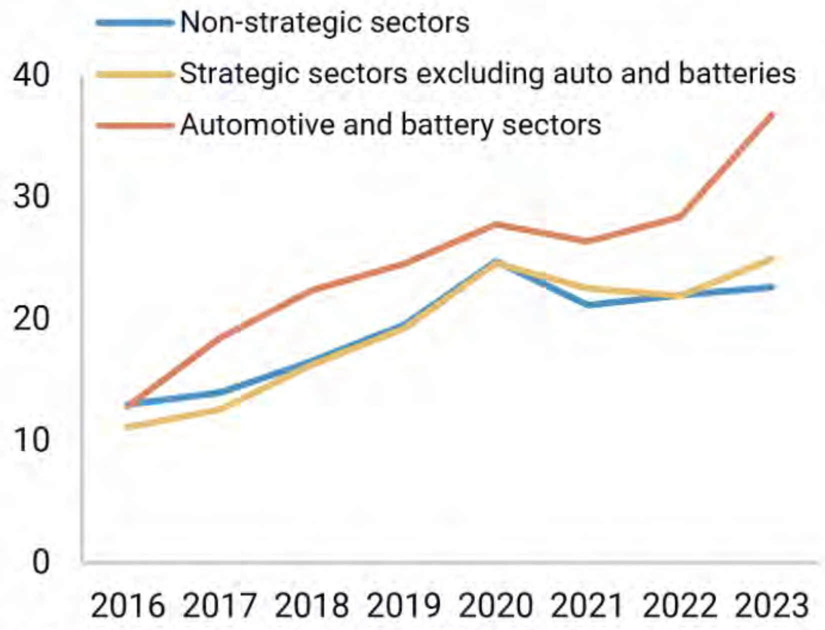


FIGURE 2

Median grant received by sector

RMB millions

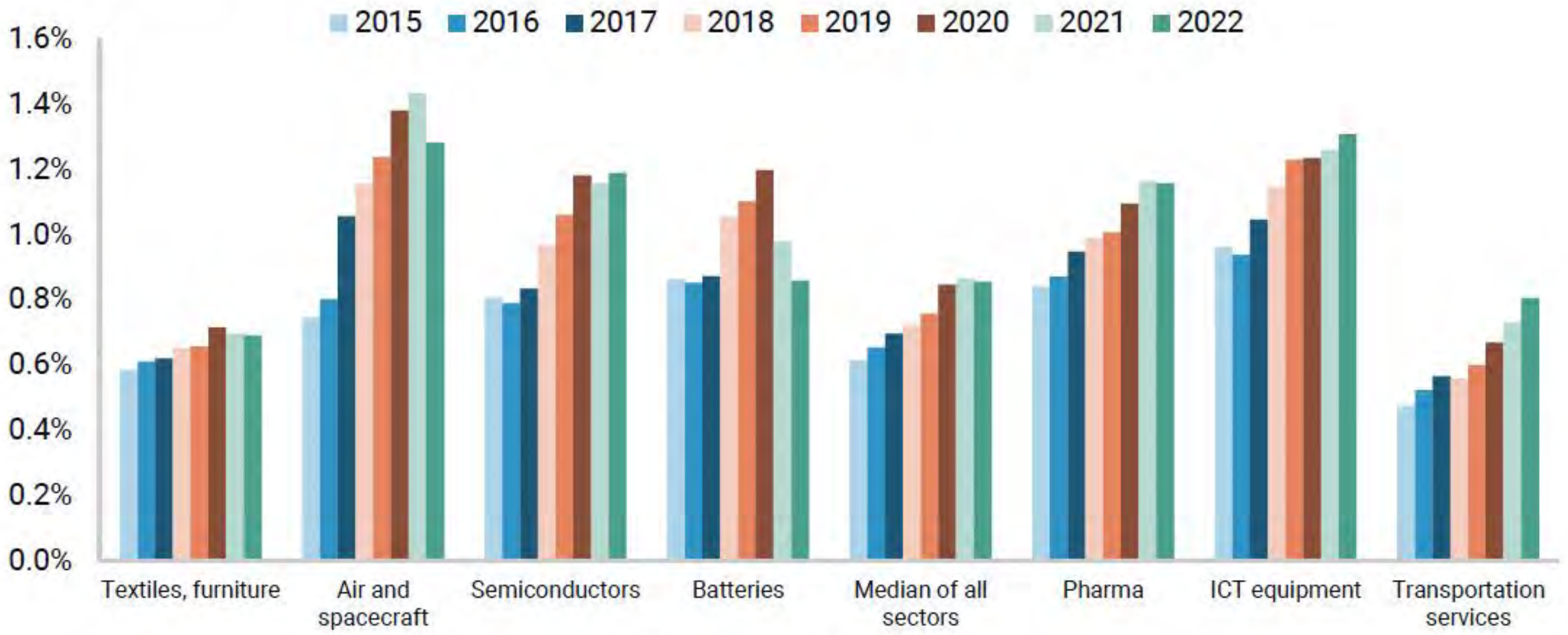


Source: Listed companies' financial disclosures. Only companies with data for all years between 2016-2023 are counted. N=3,141 companies.

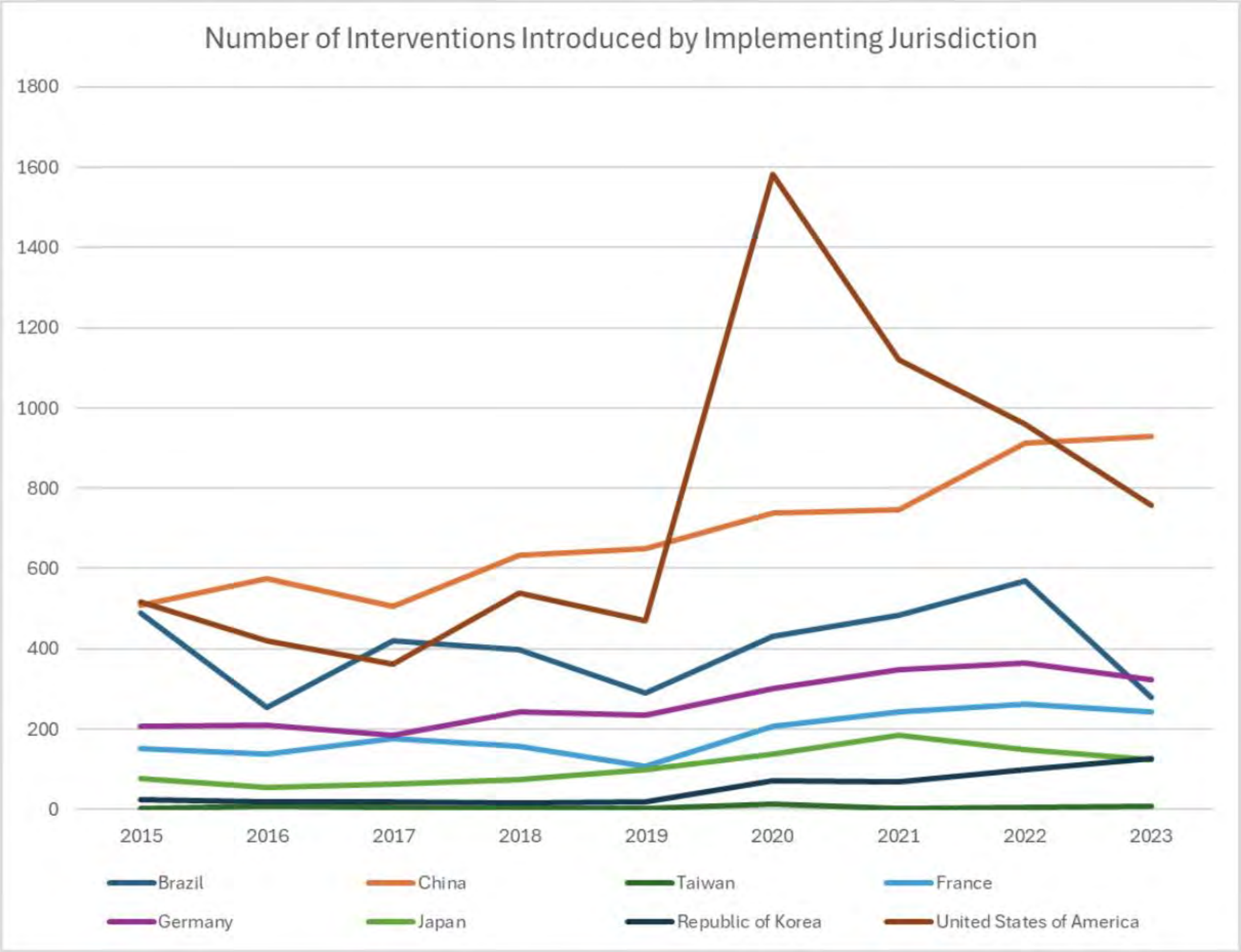
FIGURE 3

Median value of grants received as a share of revenues, of all Chinese listed companies in a sample of sectors, 2013-2022

Percent (3-year moving average)

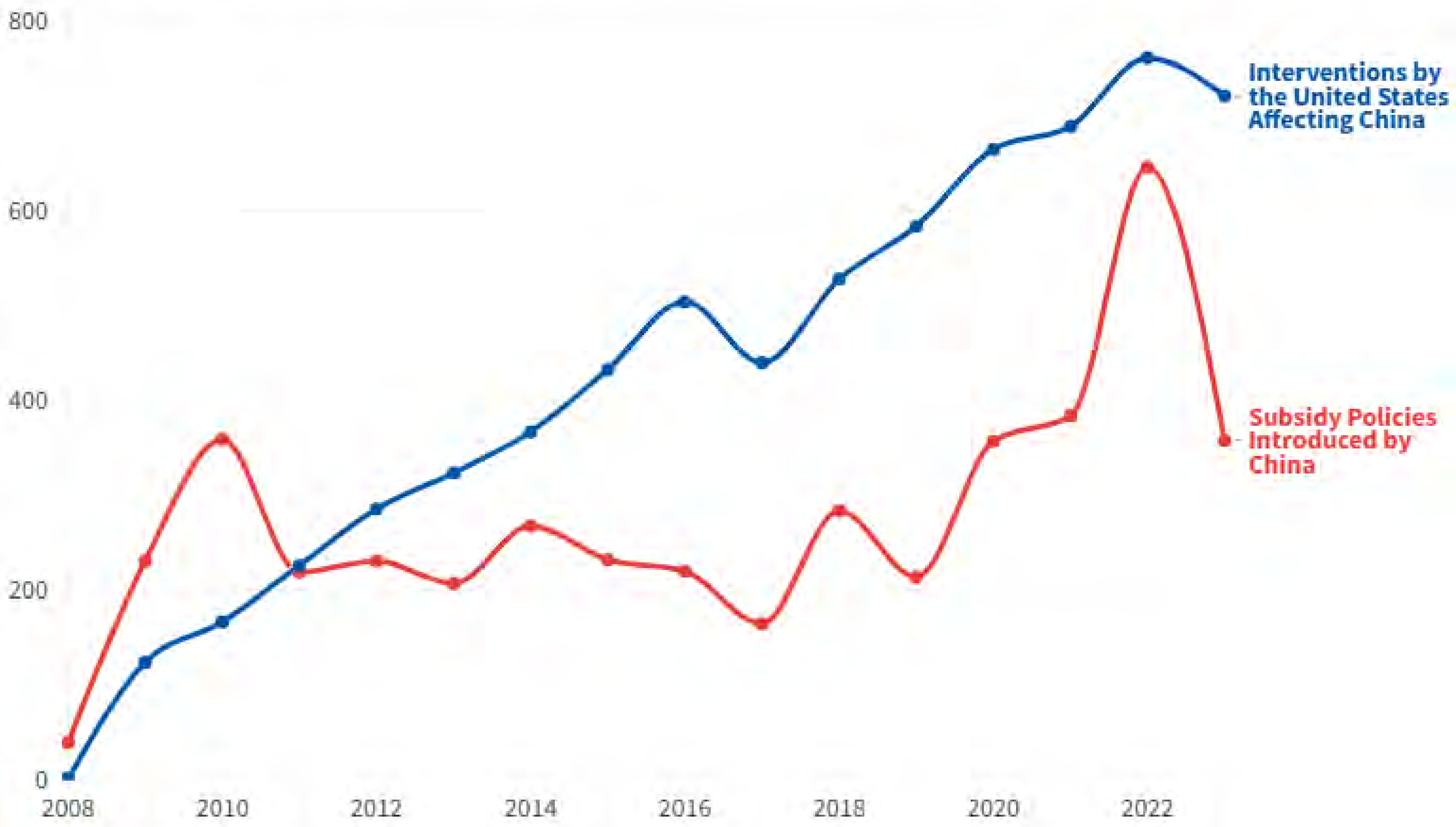


Source: Rhodium Group analysis of firm financial statements accessed via Bloomberg.



Source: Global Trade Alert database

Number of Subsidy Policies Introduced in China vs. U.S. Trade Interventions Affecting China



Source: Global Trade Alert

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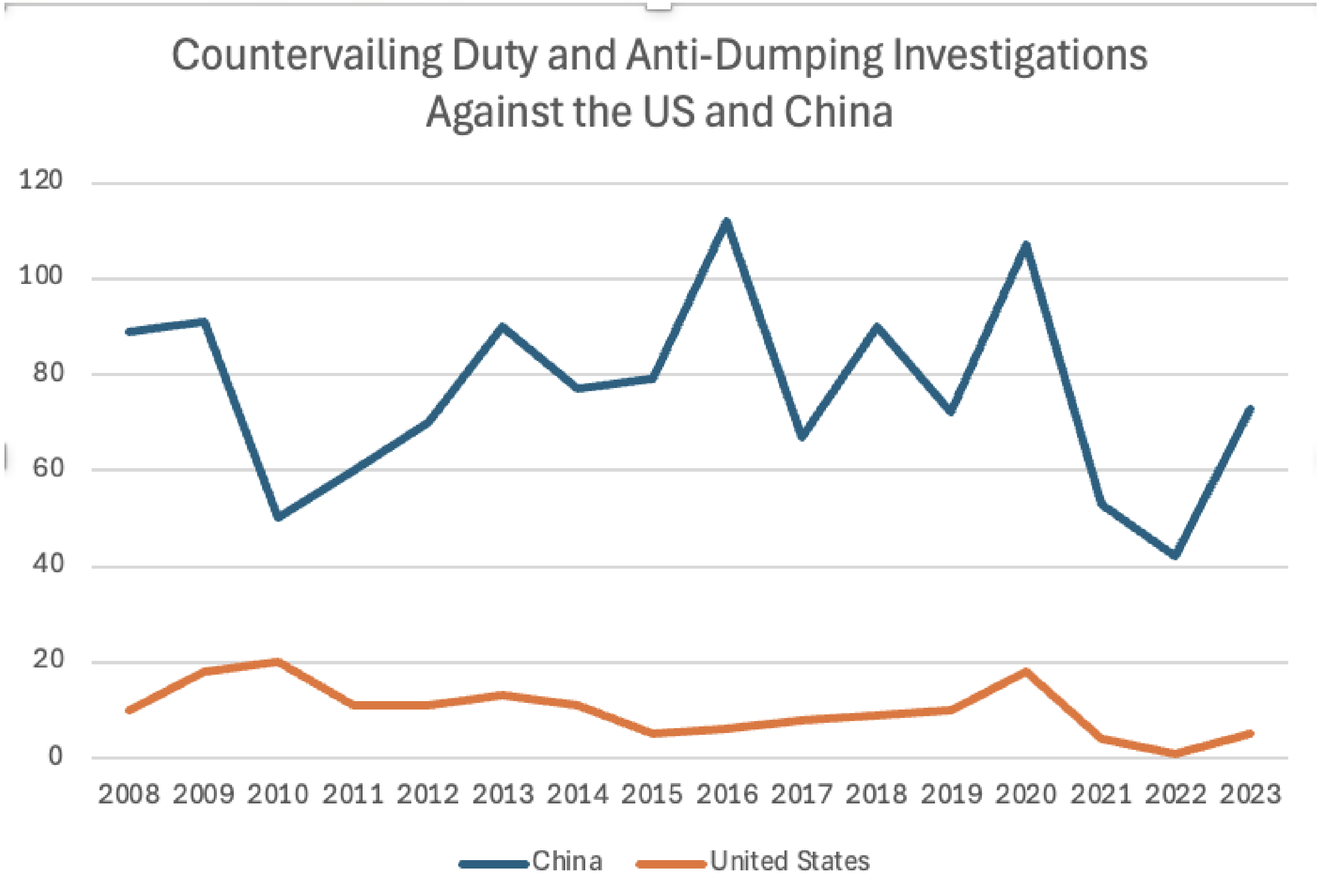

World Trade Organization

Takeaways

- It is valuable to quantify in a comparative way the extent of industrial policy, both expenditures and regulatory tools.
  - Economic effectiveness
  - Public goods
  - National security
  - Fairness and global governance
- Quantification is both difficult and controversial.
- Whether seen as positive or unfair, governments should embrace transparency.
- We need greater collaboration among scholars on this effort.

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