

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



BYD's one millionth car, the Han EV, rolling off the production line in Shenzhen, May 20, 2021. Credit: [BYD](#)

How much does Beijing spend on its industrial policy goals? A new estimate suggests the figure could be much larger than first realized.

In May, a team of researchers at the Center for Strategic and International Studies (CSIS), a Washington, D.C., think tank, [calculated](#) that China spent around 1.7 percent of GDP — about \$250 billion — in 2019 on supporting various industries, an amount that dwarfed that of any other major economy.

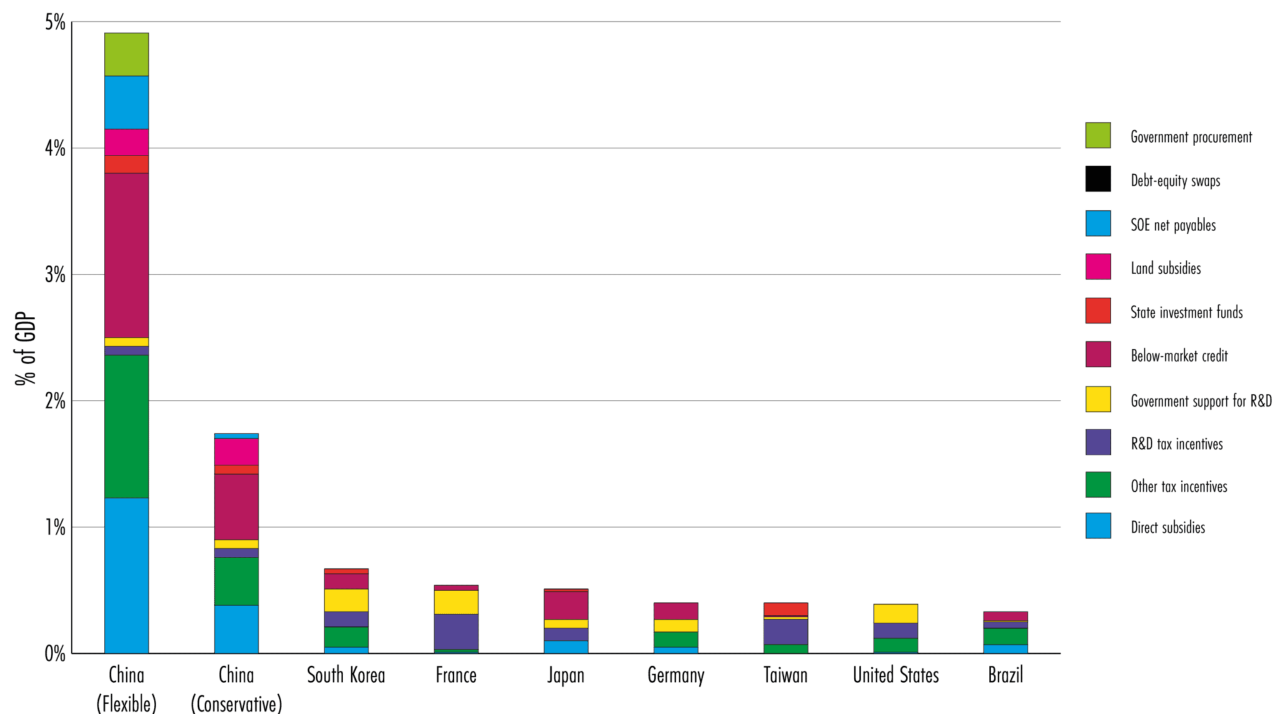
Now, a revised estimate shared with *The Wire* puts that figure even higher. By adjusting the assumptions made in CSIS's original calculation, [Scott Kennedy](#), its chair in Chinese Business and Economics, estimates that China could be spending an amount roughly equivalent to 4.9 percent of its GDP (\$700 billion) annually on pursuing its industrial policy aims, a figure some 12 times greater than that of the United States.¹

This week, *The Wire* takes a closer look at China's industrial policy spending: how much it spends, how it stands out, and what lessons the U.S. should take away from China's activities.

A League of Its Own

Even using the most conservative estimate, China's spending on industrial policy eclipses any other major economy.

2019 data



Data: Scott Kennedy, Center for Strategic and International Studies

WHAT CHINA SPENDS

How industrial policy spending is defined and quantified varies greatly between countries. Some standardization is imposed by reporting requirements to institutions like the World Trade Organization, but governments are not fully transparent about the extent and methods of their outlays.

Most economists agree that industrial policy has long been a key tool of “developmental states,” where interventionist governments closely guide economic development. In the 1970s and 80s, fast-growing economies such as Taiwan and South Korea employed subsidized loans and favorable tax rates to promote strategic sectors and drive down the cost of exports, giving rise to industrial giants such as [Taiwan Semiconductor Manufacturing Company](#) (TSMC).

China’s use of industrial policy stands out in several ways. Even as China has grown richer and transitioned away from a planned economy, its use of industrial policy hasn’t significantly declined, and in recent years has actually expanded. Another feature is its scope: while Beijing has singled out some industries for support in strategies such as [“Made in China 2025,”](#) it actually supports “hundreds of industries,” says CSIS’s Kennedy. “This is not finely used for just a few top priorities. It’s really across the board.”

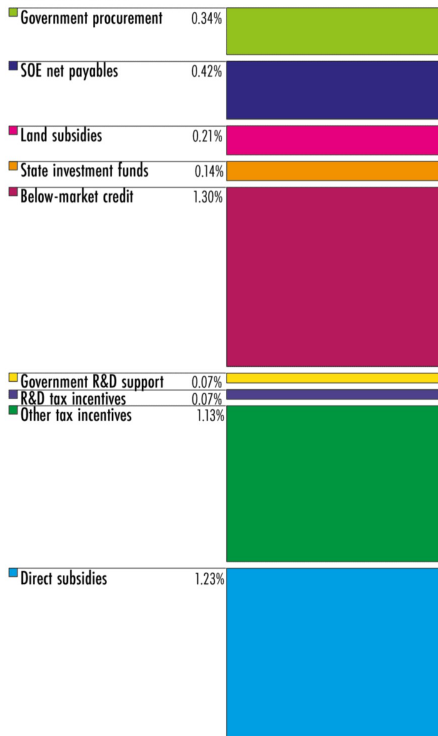
China’s heavy use of the financial sector is also exceptional. Tools include [government guidance funds](#) (GGFs), state investment funds that channel capital into priority sectors: China had created over 1,800 of these by the end of 2020. Providing below-market credit to state-owned enterprises is another heavily employed tool, while SOEs are often allowed to defer loan paybacks, another form of subsidy. Kennedy’s revised estimates of how much gets spent on these financial tools is the main reason for his higher calculation of total China industrial policy spending.

Putting a Number on China’s Industrial Policy Spending

Knowing precisely how much China spends on industrial policy is hard because Beijing isn’t transparent with its data reporting. But a new estimate provides an upper bound for that figure.

Flexible Estimate

Total: 4.9% of GDP



Definition	Calculation Method
Government procurement Goods and services purchased by the government	10% of China's total government procurement reported to the World Trade Organization
SOE net payables Delayed payments by SOEs to private suppliers. Function as an implicit zero-interest loan	External estimate
Land subsidies Below-market sales of land-use rights, an implicit subsidy	Difference between the average bidding price and the negotiated price of Chinese land
State investment funds Government guidance funds which channel capital to priority sectors	20% of total government guidance funds raised
Below-market credit Loans offered to SOEs with favorable interest rates relative to non-state firms	SOE credit subsidies estimated by the IMF
Government R&D support Direct expenditure on research and development	Government financed business R&D expenditures
R&D tax incentives Private research and development incentivized with tax incentives	R&D tax incentives
Other tax incentives Tax and fee refunds	All SOEs and private firms' tax rebates
Direct subsidies Subsidies and grants that go directly to firms	All SOEs & private firms' direct subsidies

Data: Scott Kennedy, Center for Strategic and International Studies

CASE STUDY: ELECTRIC VEHICLES

A new addition to Kennedy's revised estimate is government procurement. "A great deal of government procurement is normal everyday things like buying paper cups and pencils, but in the case of electric vehicles, it is a very large portion of overall industrial policy support for that sector," Kennedy says.

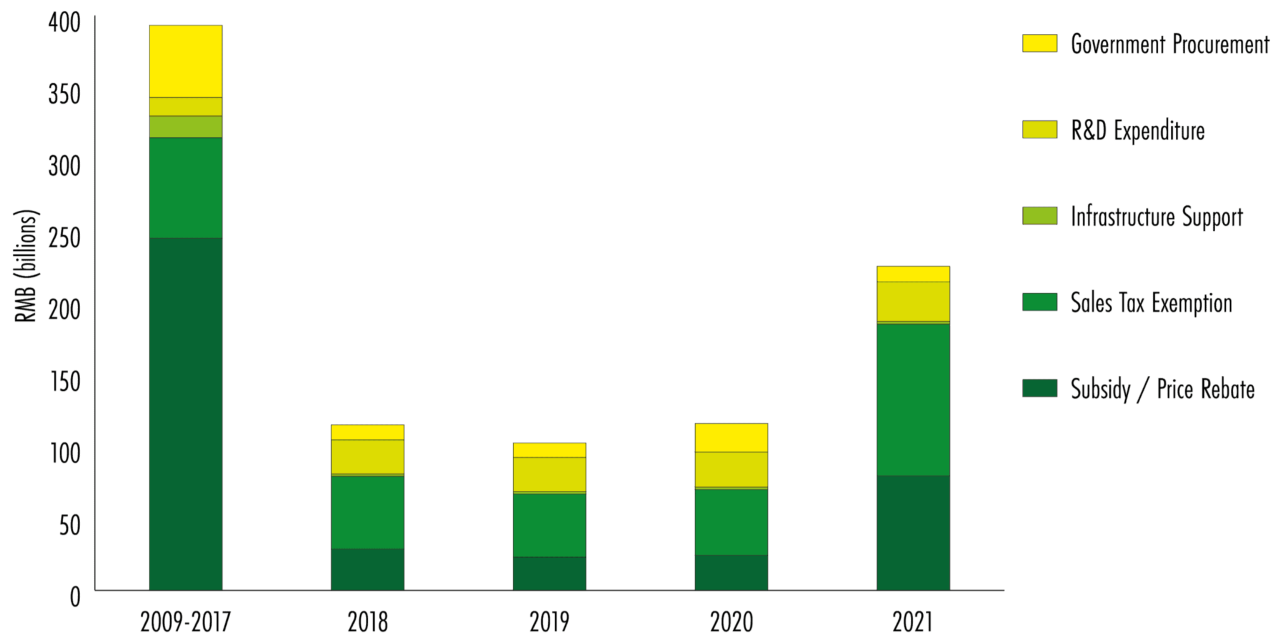
Government departments accounted for more than 40 percent of China's electric vehicle (EV) sales between 2009 and 2017, providing a massive boost to the industry, then still in its infancy. Almost all of Chinese EV giant BYD's early models, for example, were picked up by municipal governments for their own use or for taxi fleets.

Domestic automobile industries worldwide are no strangers to state support, but China stands out for the sheer volume of government spending on the EV sector, as well as its tying of future subsidies to technological advancements such as extending battery ranges — a strategy which has encouraged domestic producers to invest in research and development.

Here's how Chinese government spending on the EV sector has changed over time:

Getting Charged Up

Chinese government expenditure on the electric vehicle (EV) industry, 2009-2021



Data: Center for Strategic and International Studies (forthcoming report)

LESSONS FOR THE U.S.

The new estimate comes amid renewed debate about the merits of industrial policy in Washington following the recent passage of two landmark spending bills, the [CHIPS & Science Act](#) and the Inflation Reduction Act. [Some](#) economic conservatives have decried the federal government's record spending as taking a page out of China's economic playbook.

Not so, argues Kennedy. "Even if Congress and local governments allocate everything that is included within these new pieces of legislation, the U.S. still won't come anywhere close to spending as much as China."

He adds that Washington's use of industrial policy is also restrained in scope. "The U.S. has identified a very small number of sectors deserving of priority support, whereas China provides money like a wild venture capitalist willing to support any and all potential industries in hopes that some win."

Putting a number to China's industrial policy spending could help Washington and multilateral organizations decide how to respond to China's long-term economic strategy. While countries like Korea and Japan were historically free to employ industrial policy as they pleased, China is bound by certain rules as a member of the WTO that prohibit it from employing tools such as export subsidies. A better understanding of China's government spending could inform whether it's broken any trade rules, as well as future U.S. investigations into China's trade practices.

Kennedy says he and CSIS are not drawing any conclusions about whether China's spending constitutes unfair practice.

"The ultimate goal is, can we come up with norms about industrial policy spending that the world thinks is fair for our economies?" he says. "Or are we going to just simply say the train is out of the station and there should be no rules and norms? We want to put some kind of constraints on industrial policy spending, but that's not feasible until we have some sense of what the scale of industrial policy spending is."



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COVER STORY



Insuring Engagement

BY BRENT CRANE

At age 97, Maurice "Hank" Greenberg, the former CEO of AIG, has advocated for deeper U.S. engagement with China for longer than perhaps any living American businessman. While his positioning as a private sector statesman seems out of touch given the current state of U.S.-China relations, his son, Evan Greenberg, who is CEO of Chubb, is updating the Greenberg engagement slogan for the current moment.

Q & A

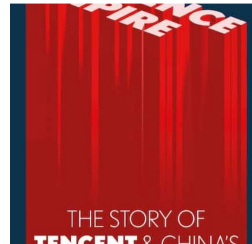


Louisa Lim on the Erosion of Democracy in Hong Kong

BY JORDYN HAIME

The journalist and author talks about the uncertainty of Hong Kong's political red lines; what it's like to report there now; the lack of possibility for resistance; and the 'King of Kowloon.'

BOOKS



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BY ALEC ASH

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