COUNCIL on FOREIGN RELATIONS

February 25, 2025

SFS | GEORGETOWN UNIVERSITY Walsh School of Foreign Service

China as a Manufacturing Superpower: For the Hearing "Examining Policies to Counter China"

Prepared statement by
Dr. Rush Doshi
Assistant Professor of Security Studies, Georgetown University Walsh School of Foreign Service
C.V. Starr Senior Fellow and Director of the China Strategy Initiative, Council on Foreign Relations

Before the
U.S. House Committee on Financial Services
United States House of Representatives
1st Session, *119th* Congress

The following represents Dr. Doshi's prepared oral testimony:

Chairman Hill, Ranking Member Waters, distinguished members of the Committee, thank you very much for the opportunity to testify at today's hearing.

I will focus my remarks on four questions related to China.

1. First, what are Beijing's economic and technology ambitions?
2. Second, what is its strategy to achieve them?
3. Third, how is its strategy working?
4. Fourth, what should we do about it?

First, what are Beijing's ambitions?

The PRC has a grand strategy to displace U.S.-led order.[1] It seeks to "catch up and surpass" the U.S. technologically; to reduce dependence on others while increasing their dependence on China economically; and to acquire the capability to defeat U.S. forces militarily.

Beijing believes economic and technology competition is about power, not just prosperity. It believes there have been four industrial revolutions that determined the fate of nations. The first industrial revolution was steam power and it led to British dominance. The second and third were electrification and mass manufacturing which led to American dominance. And now we are in the fourth – which includes AI, quantum, smart manufacturing, biotechnology, and which China aims to win.[2]

Second, what is Beijing's economic and technology strategy?

There are three parts. First, Beijing acquires technology. It buys foreign companies to access it, forces them to transfer it in exchange for market access, or steals it outright through human intelligence and cyber espionage. Second, Beijing protects its companies. It uses tariffs, non-tariff barriers, and exchange rate manipulation to keep out foreign competition. Third, Beijing wields industrial policy. Beijing uses massive industry support – subsidies, tax breaks, R&D support, cheap credit, state investment – so its companies can undercut rivals on price.[3]

Taken together, PRC companies will lose money but win their home market, then leverage that domestic market dominance to win foreign markets. PRC companies can generally stay solvent longer than foreign rivals without similar state backing. Dominance in one sector helps them reach the next rung of the ladder.

The scale is breathtaking. Beijing has likely stolen more than $1 trillion worth of U.S. intellectual property.[4] Its industrial support is conservatively estimated at two percent of the PRC economy every year, more than any other country around the world, and twice as much as U.S. support.[5] Beijing probably spends at least $400 billion every year to support industry; in comparison, the U.S. Chips and Science Act was approximately $50 billion across multiple years.[6]

Third, is this strategy working?

In short, yes. In the two decades after China joined the WTO, the U.S. share of global manufacturing fell by half from 30% to 15%.[7] That "China shock" cost millions of manufacturing jobs and shuttered thousands of factories.[8] Meanwhile, in the exact same time period, China's share global manufacturing quintupled from 6% to 30%. China is a manufacturing superpower whose capacity exceeds that of the next nine countries combined.[9] It can leverage that manufacturing dominance to innovate and gain military advantage.

With respect to innovation, China is at the leading edge in fields like robotics, AI, and quantum computing.[10] It leads the United States in high-impact scientific papers and patents.[11] And it accounts for half of all industrial robot installations worldwide, 60% of global EV production, 75% of global battery production, and 90% of solar panel, rare earth, and antibiotic production.[12] And with respect to military advantage, the PRC has two hundred times more shipbuilding capacity than the United States and is leading in new technologies like hypersonics.[13]

Beijing's economy is slowing, and its population is aging. But to address these challenges, Beijing is pouring money into industry and exports to find growth and to reduce reliance on its dwindling supply of cheap labor. This approach may not return China to high-level GDP growth, but it is causing a "second China shock" deindustrializing economies around the world.[14]

Fourth, what do we do?

First, and most importantly, we cannot succeed on our own. China surpasses the US on many metrics. But the United States – combined with its allies and partners – has three-times China's GDP size, half of all global manufacturing, more than twice China's likely military spending, twice as many patents and top-cited publications, and massive market power. If we pool our markets, protect our technology, coordinate our research, and create defensive barriers to PRC excess capacity, we can handily weather the "second China shock," reindustrialize, and lead in technology.

Second, we need new institutions. The United States would benefit from a federal industrial investment bank that can make long-term loans and possibly equity investments in strategic industries and coordinate with private capital markets. This kind of bank could even fund reshoring from China to the United States or to allied countries.

Third, we need to change incentives. China can play the long game while our companies focus on quarterly earning cycles. We could consider tax policies that encourage shareholders to hold equity positions for longer.

Fourth, and of particular relevance to this committee, we need to improve our defenses. A number of general proposals follow below:

The United States needs stronger controls on outbound investment to ensure it does not fund PRC companies that support the PRC military or come at the expense of American competitiveness. Congress or the Administration could close existing gaps, expand the scope to industries like biotechnology, strengthen penalties so they are not seen as the cost of doing business, and improve enforcement capability.

The United States needs to strengthen CFIUS too. The Trump Administration has taken some actions that may limit PRC investment in sensitive sectors through the America First Investment Policy National Security Memorandum, but more needs to be done. Congress or the Administration should consider broadening CFIUS review to passive non-controlling investment as well as preventing mitigation agreements with the PRC that are unlikely to be effective given the PRC's policy of integration between he civilian and military sectors. Closing key loopholes is also essential. For example, the PRC only has to pre-disclose a planned investment if it is into export-controlled technology. The statutory definition of technology that requires such pre-disclosure should be widened so that the PRC cannot make an investment into any sensitive technology (e.g., in the semiconductor industry), transfer the intellectual property, and then notify CFIUS after the fact, at which point remedy is effectively impossible.

The United States requires calibrated tariffs to protect industry from PRC excess capacity, as well as regulatory instruments that restrict the import and sale of PRC products that may pose national security risks. The Information and Communications Technology and Services Supply Chain Executive Order is particularly important in this respect, and the office that administers it will need adequate funding given growing threats.

The United States needs stronger export controls, significant improvements to the export licensing system to expedite the process while cracking down on circumvention, and a greatly enhanced ability to monitor compliance with and enforce controls. This will require adequate funding at the Bureau of

Industry and Security. The United States also needs to strengthen research protection to maintain its technological lead as well as to increase funding for scientific research rather than cut it. The PRC likely exceeds US government spending on research.

The US has never faced an adversary as formidable economically, technologically, and militarily as China. But we have everything we need to succeed if we make the right choices.

Thank you for your time, and I look forward to your questions.

---

[1] Rush Doshi, *The Long Game: China's Grand Strategy to Displace American Order* (Oxford University Press, 2021).

[2] Ibid.

[3] Gerard DiPippo, Ilaria Mazzocco, Scott Kennedy, and Matthew Goodman, *Red Ink: Estimating Chinese Industrial Policy Spending in Comparative Perespective* (Center for Strategy and Economic Studies, 2022); Joe Weisenthal and Tracy Alloway, "Almost 10 Years Later, China's 'Made In 2025' Has Succeeded," *Bloomberg*, October 31, 2024, https://www.bloomberg.com/news/articles/2024-10-31/almost-10-years-later-china-s-made-in-2025-has-succeeded; Office of Senator Marco Rubio, *The World China Made: "Made in China 2025" Nine Years Later*, May 18, 2024, https://www.americanrhetoric.com/speeches/PDFFiles/Marco-Rubio-The-World-China-Made.pdf.

[4] Estimates vary, but all align around roughly at least $1 trillion in losses is conservative. See, Commisson on the Theft of American Intellectual Property, *Update to the IP Commission Report*, February 27, 2017, http://ipcommission.org/report/IP_Commission_Report_Update_2017.pdf; Nicole Sganga, "Chinese Hackers Took Trillions in Intellectual Property from About 30 Multinational Companies," *CBS News*, May 4, 2022, https://www.cbsnews.com/news/chinese-hackers-took-trillions-in-intellectual-property-from-about-30-multinational-companies/.

[5] One conservative estimate comes from DiPippo et al., *Red Ink*.; see also OECD data for sectoral subsidies.

[6] If *Red Ink* estimates are correct for 2019, and subsidies are roughly two percent of PRC GDP, that would be $360 billion in 2024 not adjusting for purchasing power. With such adjustments, the figure rises dramatically.

[7] Estimates for shares of global manufacturing vary. See, U.S. Library of Congress, Congressional Research Service, *U.S. Manufacturing in International Perspective*, by Marc Levinson, R42135 (February 21, 2018), https://sgp.fas.org/crs/misc/R42135.pdf.

[8] For a summary of the literature on the China shock, see Peter Dizikes, "Q&A: David Autor on the Long Afterlife of the 'China Shock,'" MIT News, December 6, 2021, https://news.mit.edu/2021/david-autor-china-shock-persists-1206; See also Robert D Atkinson," Why Foreign Competition, Not Productivity, Is More to Blame for Job Losses in U.S. Manufacturing: A Primer for Policymakers," Information Technology and Innovation Foundation, February 26, 2018, https://itif.org/publications/2018/02/26/why-foreign-competition-not-productivity-more-blame-job-losses-us/

[9] Richard Baldwin, "China is the World's Sole Manufacturing Superpower: A Line Sketch of the Rise," VoxEU (Column), Centre for Economic Policy Research, January 17, 2024, https://cepr.org/voxeu/columns/china-worlds-sole-manufacturing-superpower-line-sketch-rise.

[10] For one assessment, see Robert D. Atkinson, *China Is Rapidly Becoming a Leading Innovator in Advanced Industries*, Hamilton Center on Industrial Strategy, Information Technology and Innovation Foundation, September 16, 2024, https://itif.org/publications/2024/09/16/china-is-rapidly-becoming-a-leading-innovator-in-advanced-industries/.

[11] "China Has Become a Scientific Superpower," *Economist*, June 12, 2024, https://www.economist.com/science-and-technology/2024/06/12/china-has-become-a-scientific-superpower.

[12] Atkinson, *China Is Rapidly Becoming a Leading Innovator in Advanced Industries*; Brad Setser, "Xi Is Making the World Pay for China's Mistakes," *New York Times*, February 18, 2025, https://www.nytimes.com/2025/02/18/opinion/china-xi-jinping-trade-manufacturing-tariffs.html; China also produces roughly half the worlds steel, aluminum, and ships. Its exports are growing three times faster than global trade.

[13] Joseph Trevithick, "Alarming Navy Intel Slide Warns Of China's 200 Times Greater Shipbuilding Capacity," *Warzone*, July 11, 2023, https://www.twz.com/alarming-navy-intel-slide-warns-of-chinas-200-times-greater-shipbuilding-capacity.

[14] Setser, "Xi Is Making the World Pay for China's Mistakes,"