Rhodium Group

U.S. Chamber of Commerce

Was Made in China 2025 Successful?

Prepared for the US Chamber of Commerce

China

May 5, 2025

Camille Boullenois, Malcolm Black, Daniel H. Rosen

The Made in China 2025 (MIC25) initiative: A blueprint for global competitiveness

A ten-year action plan published in 2015, MIC25 was designed to propel Chinese companies to the forefront of technological innovation and global competitiveness.

Main objectives and strategies in MIC25

Objectives	Strategy
Decreasing China's import dependency	Encourage foreign firms to localize production in areas where China still cannot make its own products
Decreasing China's dependence on foreign firms	As domestic firms become strong enough to produce on their own, drive foreign companies out of the market through market access restrictions
Achieving global competitiveness	As domestic companies develop a large domestic market share, increase support and steer their activities to help them become globally competitive
Becoming a technological leader	As domestic companies become globally competitive, target specific technological bottlenecks for policy support

Source: Rhodium Group

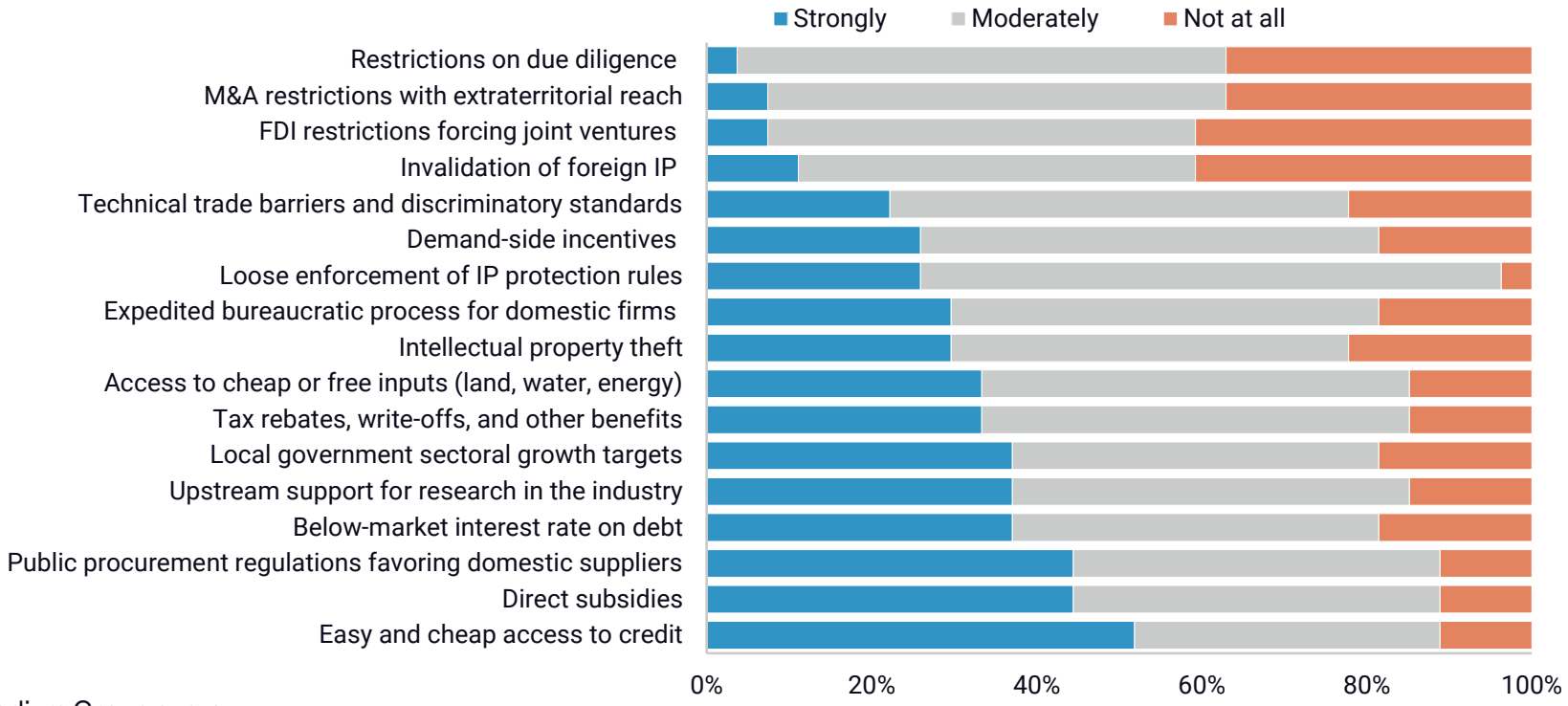
Industries covered by MIC25

- New generation information technology
- High-end CNC machine tools and robots
- Aerospace equipment
- Marine engineering equipment and high-tech ships
- Advanced rail transit equipment
- Energy saving and new energy vehicles
- Electric power equipment
- New materials
- Biomedicine and high-performance medical devices
- Agricultural equipment

MIC25 prompted unprecedented growth in Chinese state support

In the years following the policy's launch, financial state support intensified, mainly through indirect channels like tax concessions, government guidance funds, market barriers, and discriminatory practices against foreign firms.

Survey results: *"Did the following forms of government support help your Chinese competitors gain domestic and/or global market shares strongly, moderately, or not at all?"*



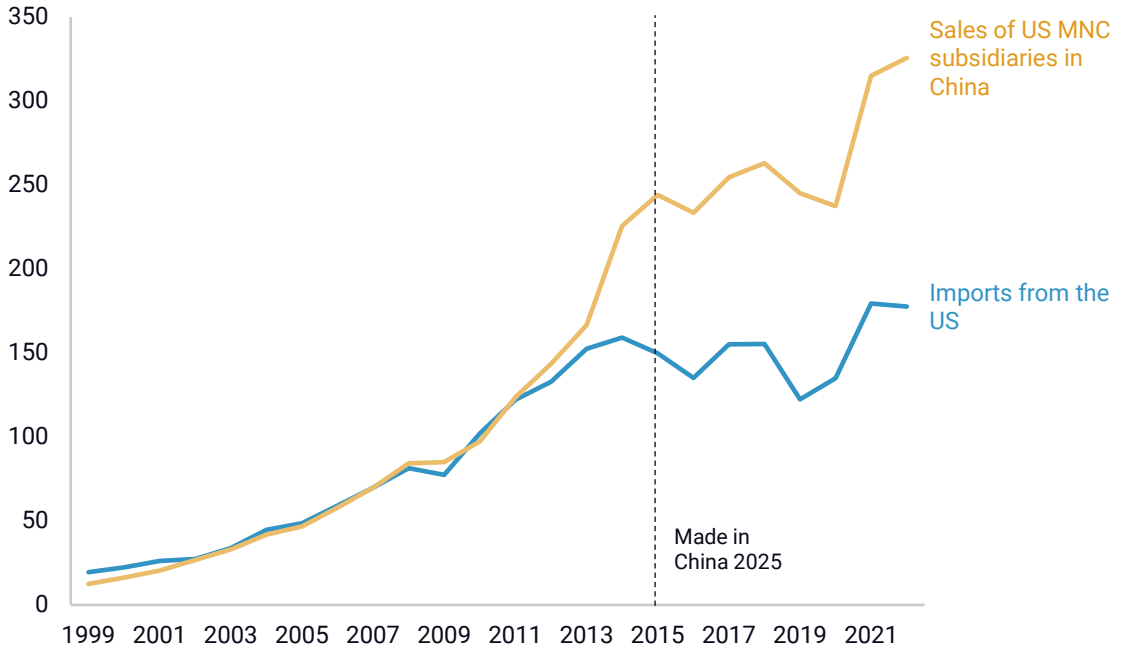
Source: Rhodium Group survey

MIC25 lowered import dependencies by pressuring foreign companies to localize

China has largely succeeded in reducing its import dependencies by leveraging foreign firms. Beijing has pressured foreign firms to localize high-tech production and research as a condition for continued access to the market—thereby compelling them to reduce exports as local production grew.

Sales of US multinationals in China and Chinese imports from the US

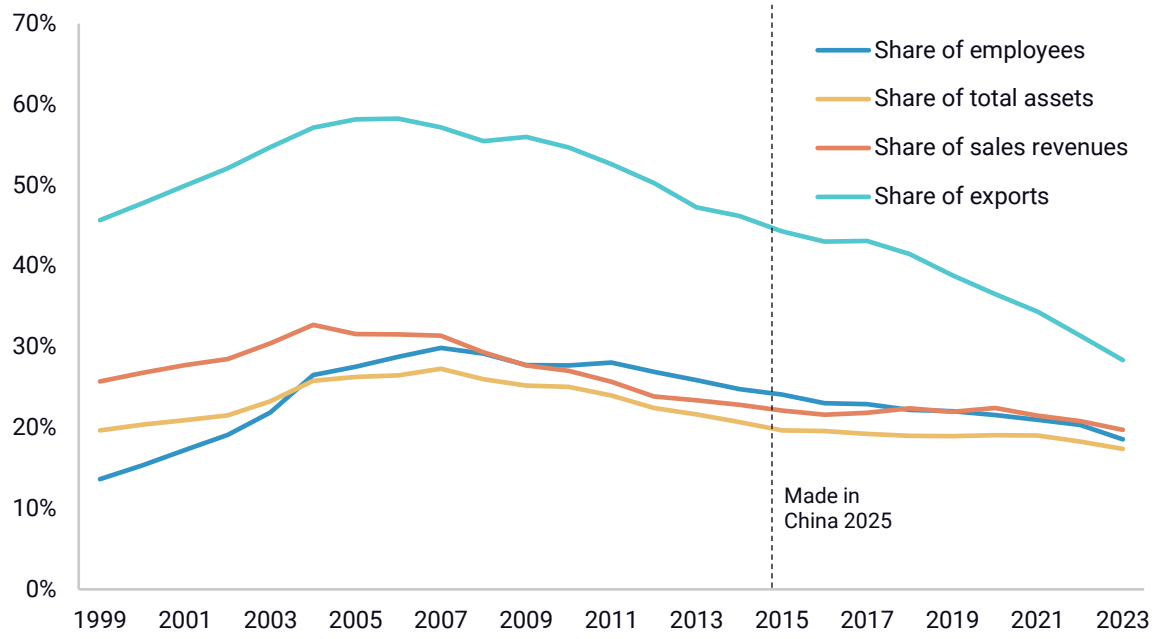
USD billion



Source: BEA (US Direct Investment Abroad), ITC/Comtrade

Share of foreign firms in China's industrial enterprise assets, sales, and exports

Percent



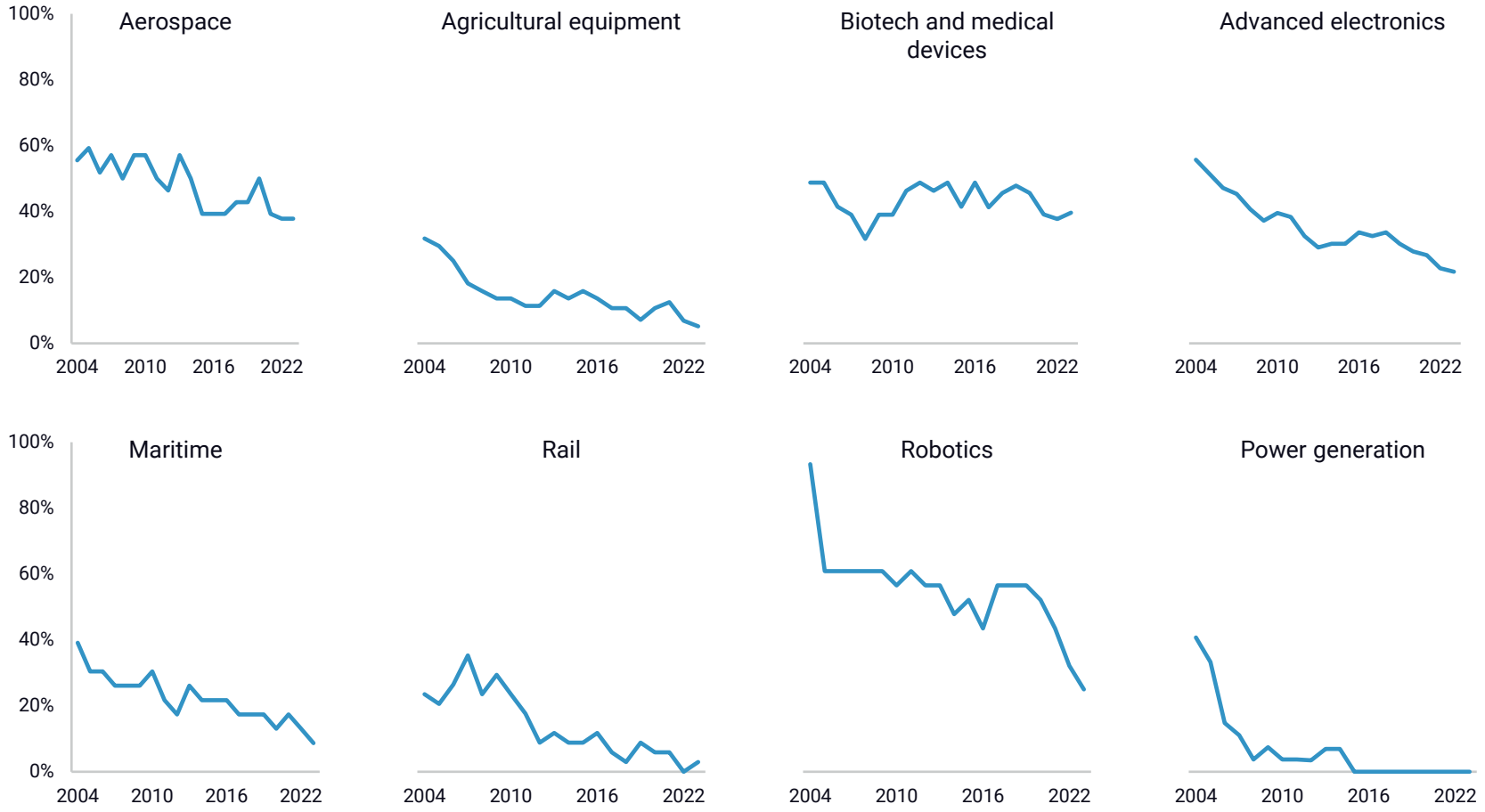
Source: Chinese Customs, NBS

Import dependencies reduced in all sectors in the plan

Import dependencies have declined across most sectors since 2015. In sectors like rail and power generation, import dependencies have been virtually eliminated.

Declining import dependencies across MIC25 sectors

Share of HS-6 codes in key sectors where China imports twice as much as it exports



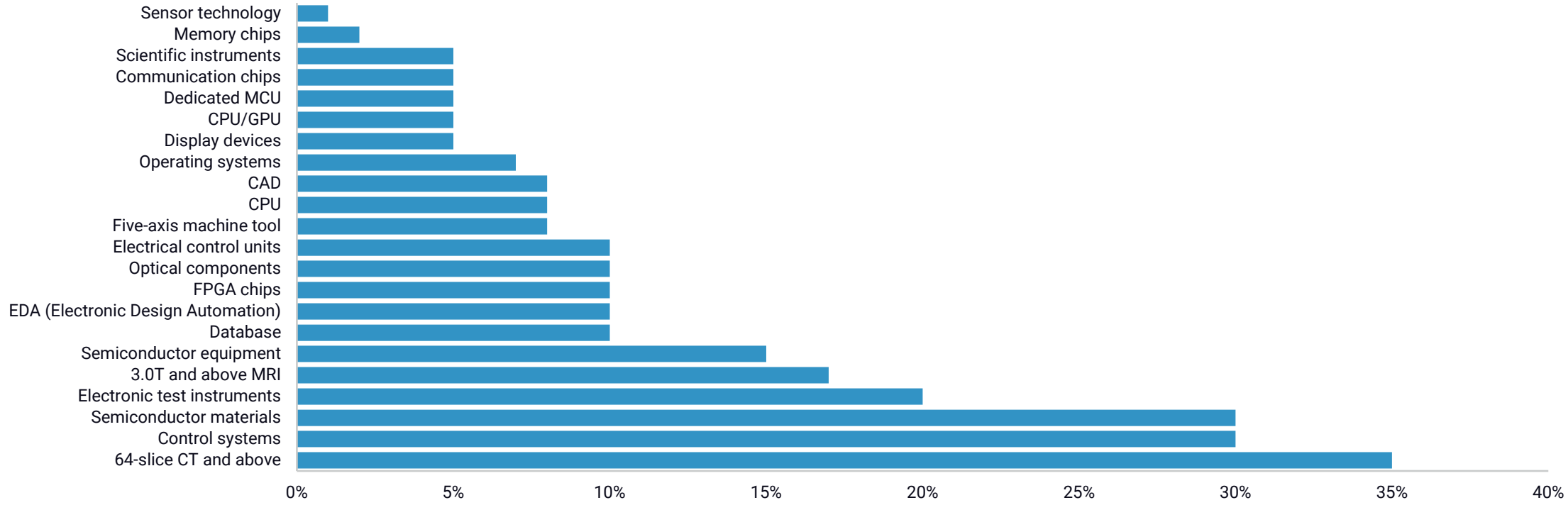
Source: ICT, Comtrade

While reliance on foreign firms was reduced, there are still vulnerabilities

In many products, Chinese firms have achieved significant successes, sometimes more than doubling their domestic market share in the past decade. However, China's progress in reducing reliance on foreign companies has been uneven and less striking than its progress in reducing import dependencies.

China's biggest vulnerabilities: Chinese company market share in selected products, 2022

Percent



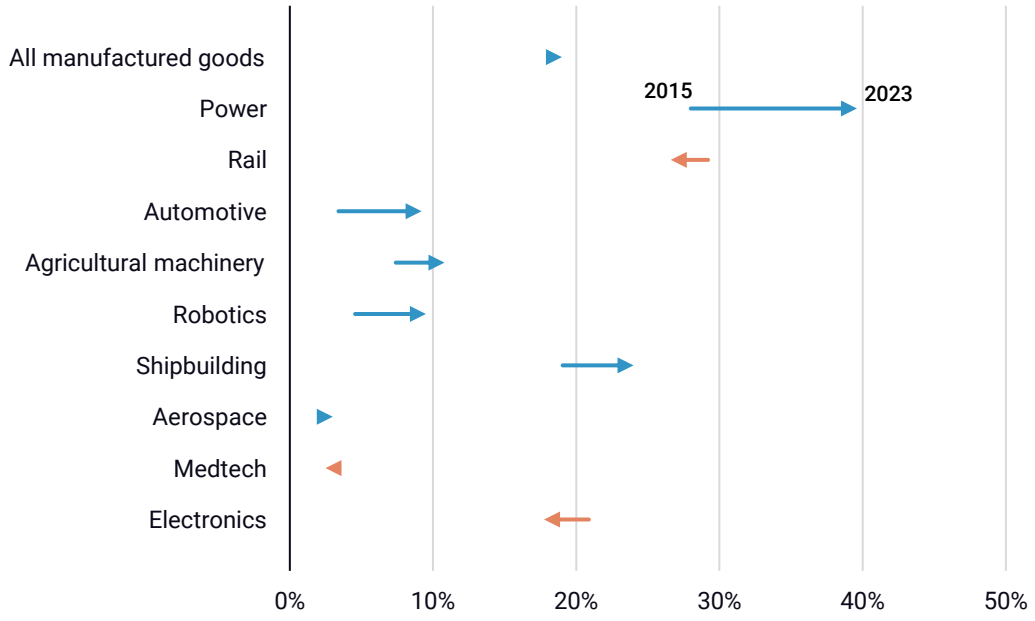
Source: Sinolink Securities

China has expanded its global manufacturing dominance…

China's expanding share of global exports has strengthened its already dominant position in global manufacturing trade, with particularly rapid growth since 2019. This surge has been driven in part by rising overcapacity, which has fueled an export boom and a sharp increase in the country's trade surplus.

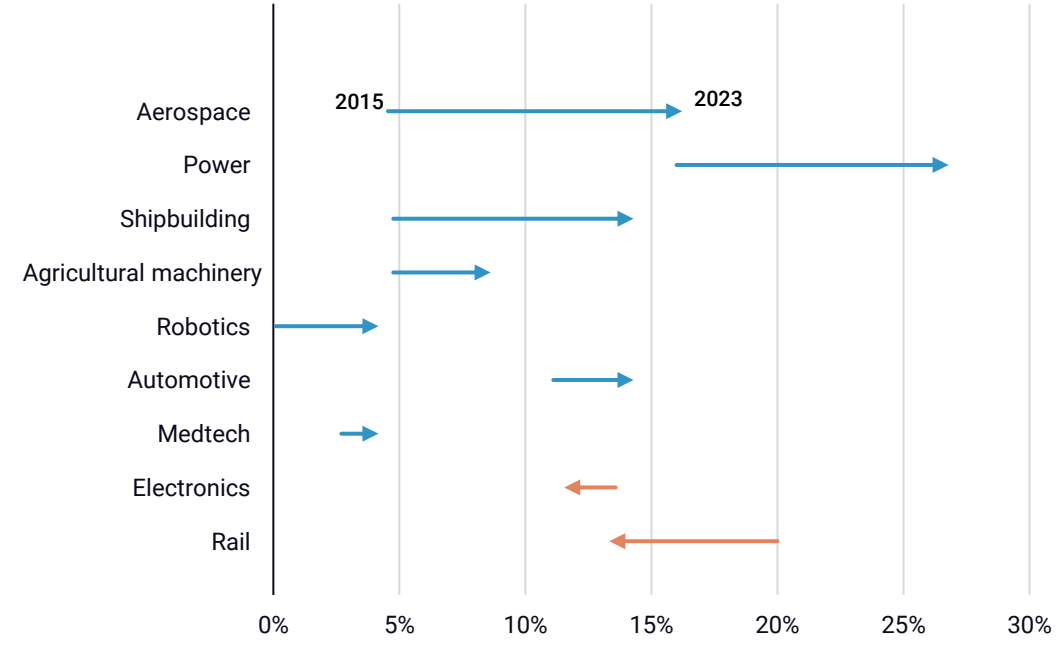
China's share of global exports in MIC25 sectors

Percent



Share of HS-6 product categories where China holds more than 30% share of global exports

Percent



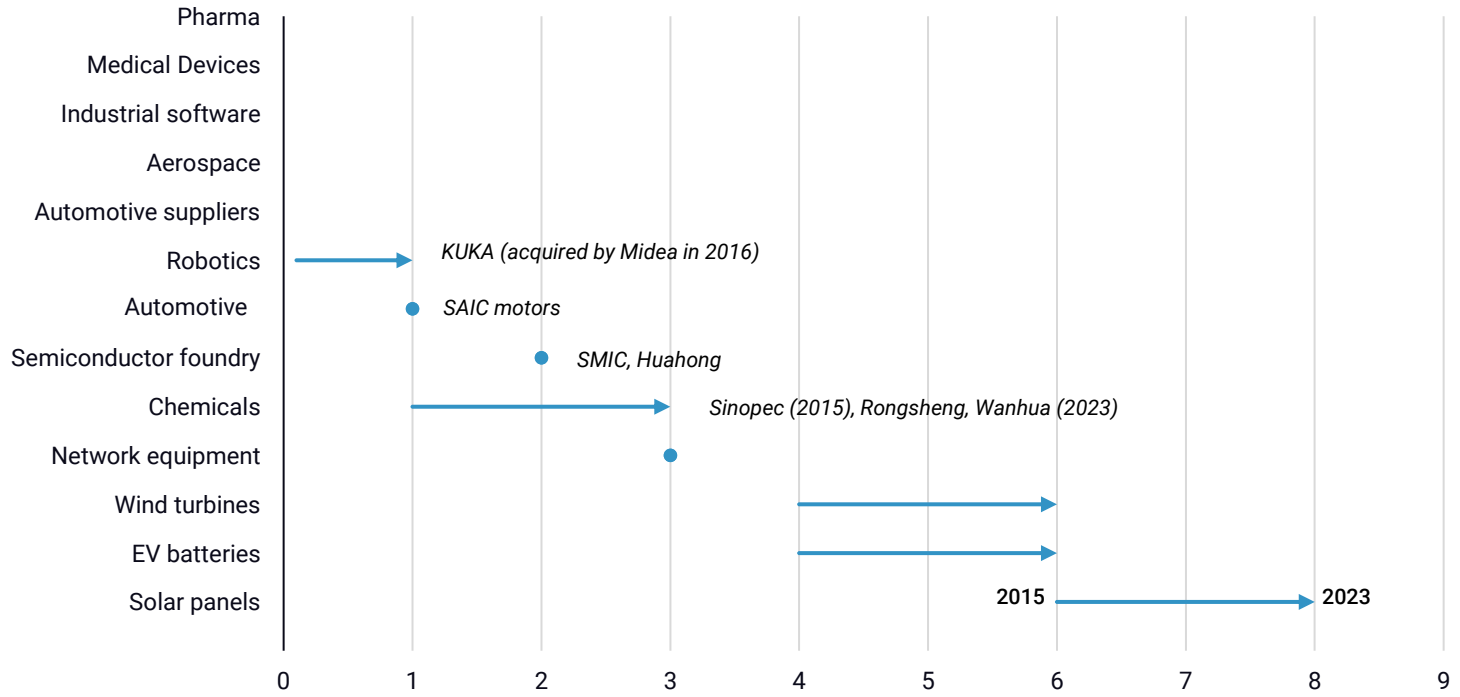
Source: International Trade Center. Note: New materials is excluded as it does not neatly correspond to a set of HS codes.

…but Chinese high-tech firms still lag in global competitiveness

In most sectors, including high-end semiconductors, medical devices, and aerospace equipment, Chinese companies lag in their share of global revenues, profits, and market share.

Number of Chinese companies in the global top 10, 2015-2023

Ranking by shipment volume (solar), global sales in mwh (EV batteries, wind turbines), revenues (other companies)



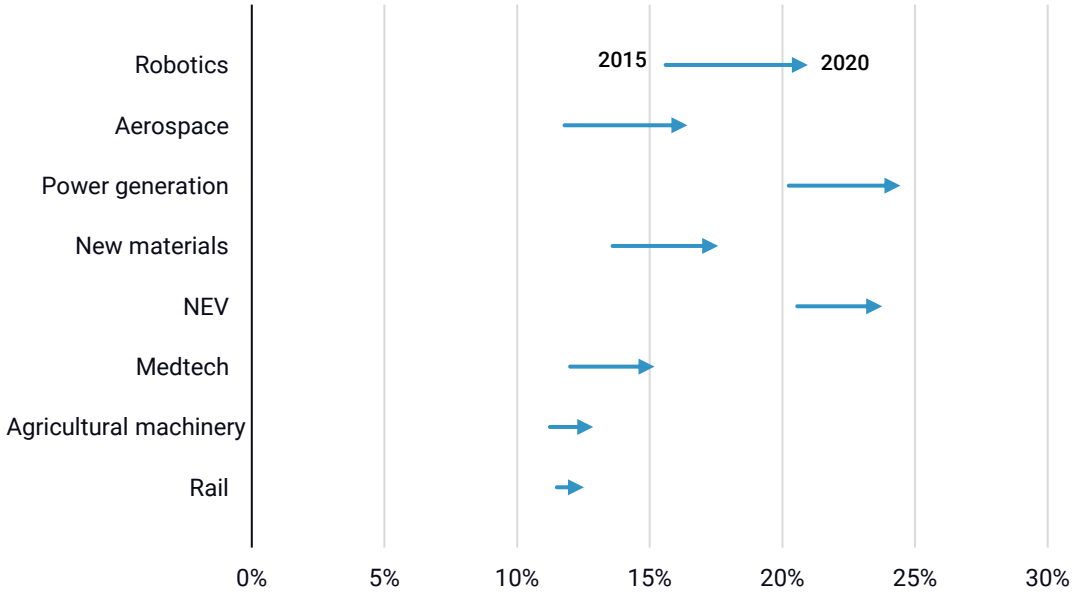
Source: Rhodium Group compilation of industry reports and companies' financial disclosures

Despite rapid technological progress, Chinese firms are still behind in key areas

China is harnessing huge momentum to close the gap with leaders like the US and Japan and already pulling ahead by some innovation output indicators. However, 62% of surveyed foreign firms estimated their Chinese competitors would only reach technological parity within 5 to 10 years.

China's share of global PCT patents

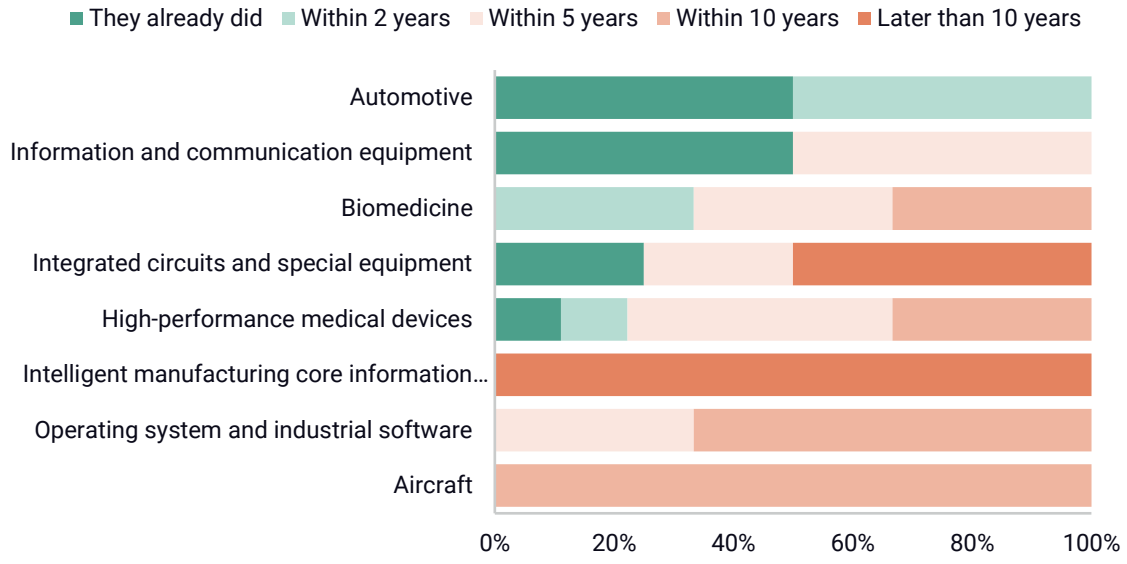
Percent



Source: PATSTAT

Survey results: "In how many years do you expect your Chinese competitors to catch up technologically?"

Share of respondents



Source: Rhodium Group survey

Overall, MIC25 has reached many, but not all, of its goals

Chinese firms have become increasingly competitive, both domestically and globally. While their early strengths lay in low- and medium-tech industries, they are now making significant inroads into some high-tech sectors, with real success stories emerging.

China's achievements in key MIC25 objectives as of 2023

	Reducing import reliance	Reducing reliance on foreign firms	Becoming a technological leader	Achieving global competitiveness
Advanced rail transit equipment	Strong	Strong	Strong	Strong
Electric power equipment	Strong	Strong	Strong	Strong
Agricultural equipment	Strong	Strong	Mixed	Mixed
Marine engineering equipment and high-tech ships	Mixed	Mixed	Mixed	Strong
New generation information technology	Mixed	Mixed	Mixed	Mixed
Energy saving and new energy vehicles	Mixed	Mixed	Mixed	Mixed
High-end CNC machine tools and robots	Mixed	Mixed	Mixed	Weak
New materials	n/a	Weak	Weak	Mixed
Aerospace equipment	Weak	Weak	Weak	Mixed
Biomedicine and high-performance medical devices	Weak	Weak	Mixed	Mixed

Source: Rhodium Group analysis

Outlook

- Beijing's industrial policies have had unintended consequences. Prioritizing industrial policy over consumer-driven development has created structural domestic imbalances that are now constraining future economic growth.
- Despite these inefficiencies, Beijing appears to remain committed to an industrial policy strategy focused on self-sufficiency, security, and growing dominance in global technology markets.
- Chinese companies are poised to benefit from the momentum generated by past industrial policies, which may enable them to achieve self-sufficiency, technological parity, and even global dominance in several sectors (including biotechnology, robotics, and some medical devices) within the next few years.
- Overlapping technological achievements across multiple sectors, including AI, are likely to have a compounding effect, further amplifying China's progress and influence within global supply chains.
- But China's progress will likely be hindered by growing restrictions on investment and exports in sensitive industries.
- Growing opacity surrounding China's technological capabilities and vulnerabilities will make it increasingly difficult to assess China's innovation funding and technological progress.

Rhodium Group

U.S. Chamber of Commerce

Was Made in China 2025 Successful?

New York | California | Washington, DC | Paris
Website: www.rhg.com