



Updated August 29, 2018

The Made in China 2025 Initiative: Economic Implications for the United States

Summary

China's incomplete transition to a free market economy stands out as one of the biggest sources of trade friction with the United States. Recent proposals by the Chinese government, such as its "Made in China 2025" (MIC 2025) initiative, appear to signal an expanded role by the government in the economy, which many fear could distort global markets and negatively affect U.S. firms. The Trump Administration has made MIC 2025 a major focus of its Section 301 actions (including increased tariffs) against China over its alleged distortive policies related to technology transfer, intellectual property, and innovation.

What Is MIC 2025 and Why Did China Propose It?

Introduced by China's State Council (the highest Chinese executive organ of state power) in May 2015, the MIC 2025 initiative is the latest in a series of ambitious state-led programs introduced by the Chinese government that seek to modernize the Chinese economy, boost productivity, and make innovation a driver of economic growth. One key Chinese motivation for MIC 2025 is to avoid hitting the so-called "middle-income trap," a phenomenon that often occurs to low-income countries that initially experience rapid economic growth after implementing certain reforms. Many such countries are able to reach middle-income levels, but eventually the factors that produced that growth can no longer be sustained or the economic returns began to diminish. Without new sources of growth, much slower economic growth rates (or stagnation) can occur, preventing a country from transitioning to a high-income economy (hence the "trap"). While China is currently a high middle-income economy, it faces several economic challenges, including unbalanced economic growth, high corporate debt, severe pollution, and a declining working age population, which could sharply slow future growth.

The MIC 2025 plan notes that "China's manufacturing sector is large but not strong, with obvious gaps in innovation capacity, efficiency of resource utilization, quality of industrial infrastructure and degree of digitalization. The task of upgrading and accelerating technological development is urgent." China seeks to upgrade its economic model from a system where products are largely assembled in China by foreign multinational firms to a system where products made in China are invented there. MIC 2025 seeks to move China up the manufacturing value chain by utilizing innovative manufacturing technologies or "smart manufacturing." MIC 2025 is the first stage of a larger three-step strategy to transform China into a leading manufacturing power. The first step is for China to improve the overall quality of manufacturing, boost innovation and labor productivity, obtain an advanced level of information technology integration, reduce energy and material consumption, and

develop multinational enterprises and industrial clusters with strong international competitiveness. Next, by 2035, China seeks to reach "an intermediate level" among world "manufacturing powers," greatly improve innovation capability, make "breakthroughs" in major areas, boost competitiveness, and become a global leader in various innovation industries. By 2049, and coinciding with the 100th anniversary of the founding of the People's Republic of China (PRC), China aims to "become the leader among the world's manufacturing powers," have the "capability to lead innovation and possess competitive advantages in major manufacturing areas," and "develop advanced technology and industrial systems."

"China's government is aggressively working to undermine America's high-tech industries and our economic leadership through unfair trade practices and industrial policies like Made in China 2025"—
USTR Robert Lighthizer, June 15, 2018

The MIC 2025 establishes nine priority tasks, including (1) improving manufacturing innovation, (2) integrating technology and industry, (3) strengthening the industrial base, (4) fostering Chinese brands, (5) enforcing green manufacturing, (6) promoting breakthroughs in 10 key sectors, (7) advancing restructuring of the manufacturing sector, (8) promoting service-oriented manufacturing and manufacturing-related service industries, and (9) internationalizing manufacturing. The 10 sectors identified in the State Council's 2015 plan are (1) next-generation information technology, (2) high-end numerical control machinery and robotics, (3) aerospace and aviation equipment, (4) maritime engineering equipment and high-tech maritime vessel manufacturing, (5) advanced rail equipment, (6) energy-saving and new energy vehicles, (7) electrical equipment, (8) agricultural machinery and equipment, (9) new materials, and (10) biopharmaceuticals and high-performance medical devices. The plan also seeks to establish 40 manufacturing innovation centers by 2025.

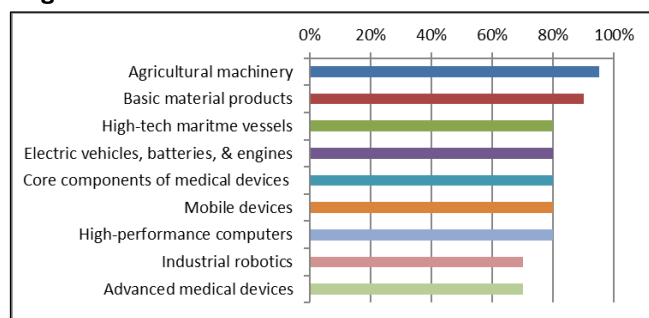
Why Has the MIC 2025 Generated Concern Among U.S. Policymakers and Stakeholders?

While the MIC 2025 plan states as a basic principle that the government will "comprehensively deepen reform" and give markets the "decisive role in allocating resources," critics contend that the plan represents a state-directed industrial policy intended to reduce not only China's dependence on foreign technology but to help Chinese firms become dominant global players in numerous advanced industries. Concerns have been raised that the Chinese government will provide extensive financial assistance to Chinese firms involved in the plan, such as through state-directed investment funds and preferential

access to credit from state banks. Another concern is that the Chinese government is funding and directing acquisitions of foreign technology firms and intellectual property (IP) to advance MIC 2025 goals.

Another major aspect of the MIC 2025 plan that raises considerable concern among foreign businesses has been the listing of date-specific percentage targets for the domestic content value of certain products that are sold in China. The 2015 State Council's document outlining MIC 2025 specified that by 2020, 40% of essential spare parts and key materials will "have domestic sources," and will rise to 70% by 2025. In September 2015, the Chinese government released the "Made in China 2025 Key Area Technology Roadmap," which includes domestic content goals for several of the 10 sectors targeted (see **Figure 1**). Some critics contend that such targets constitute an import substitution plan that will likely hurt foreign high-technology suppliers and appears to violate World Trade Organization rules. Chinese officials contend that the MIC 2025 plan is transparent, open, and nondiscriminatory, and that the domestic content numbers are goals, not mandates.

Figure 1. Various MIC 2025 Domestic Content Goals



Source: U.S.-China Business Council.

Note: Dates for domestic content goals range from 2020 to 2030.

Some assessments of the MIC 2025 plan warn of possible negative outcomes. For example, a 2016 study by the Mercator Institute for China Studies warned: "Chinese high-tech investments need to be interpreted as building blocks of an overarching political program. It aims to systematically acquire cutting-edge technology and generate large-scale technology transfer. In the long term, China wants to obtain control over the most profitable segments of global supply chains and production networks." A 2017 study by the U.S. Chamber of Commerce concluded that "MIC 2025 aims to leverage the power of the state to alter competitive dynamics in global markets in industries core to economic competitiveness. By targeting and channeling capital to specific technologies and industries, MIC 2025 risks precipitating market inefficiencies and overcapacity, globally."

The Section 301 Case Against China and MIC 2025

In August 2017, the U.S. Trade Representative (USTR) launched a Section 301 investigation to determine if China's policies on IP, innovation, and technology were unfair and harmed U.S. stakeholders. On March 22, 2018, the USTR announced action against four broad Chinese policies, including (1) forced technology transfer, (2) unfair

licensing requirements, (3) government-backed cyber-theft of U.S. trade secrets, and (4) efforts by China to acquire U.S. technology and IP through acquisitions to support its industrial plans. On May 4, a high-level U.S. government delegation visiting China called on it to "immediately cease providing market distorting subsidies and other types of support" that could create excess capacity in the industries targeted by the MIC 2025 plan. On June 15, the USTR issued a two-tier list of products imported from China (totaling \$50 billion) that would be subject to increased 25% tariffs in response to China's forced IP and technology policies. The first list of tariff hikes were applied on July 6. The second list of U.S. tariff hikes, which the USTR said targeted products "benefiting from Chinese industrial policies, including the 'Made in China 2025' industrial policy," went into effect on August 23.

Many U.S. business groups support the Administration's goals of addressing China's distortive economic policies, but oppose its methods. For example, critics of the USTR-targeted lists argue that the increased tariffs will likely have a greater negative impact on U.S.-related sectors that utilize China as part of their global supply chain network. For example, the Section 301 actions increase tariffs on a number of information and communications technology (ICT) imports from China. According to the U.S. Census Bureau, U.S. ICT imports from China totaled \$156 billion in 2017, accounting for 60% of U.S. global ICT imports and 31% of total U.S. merchandise imports from China. A March 2018 study by the Information Technology Innovation Foundation stated that "blanket tariffs applied across entire categories of productivity-boosting capital goods, especially on ICT, would reduce investment in these technologies in the United States, thus decreasing U.S. productivity, competitiveness, and economic growth." Others note that a significant share of the USTR's implemented and/or proposed tariff increases affect intermediate goods (such as parts) and consumer products, which may have little to do with targeted Chinese MIC 2025 sectors. Another concern is that punishing China with increased tariffs over its industrial policies might induce the Chinese government to increase its involvement in the economy rather than adopt free market reforms.

In the 115th Congress, H.R. 6001 (Conaway), S. 2826 (Rubio), and S. 3361 (Rubio) would require the USTR to issue a list of products from China that are determined to have received support from the Chinese government to promote MIC 2025, and would subject U.S. imports of such products to countervailing duties. In addition, the Department of Commerce would be directed to use export controls to restrict sales by U.S. firms of technology or IP that may assist the MIC 2025 plan.

Wayne M. Morrison, Specialist in Asian Trade and Finance

IF10964

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.