China's Technological Rise

Convergences, divergences, and risks in the U.S. and EU policy responses

→ The United States views China's technological rise as an existential security threat, wielding sanctions and export controls like a "sledgehammer," while the EU has adopted a more cautious approach to ensure it can continue to reap the economic benefits from China despite its increasing concerns about economic competitiveness and national security.

→ Beijing is exploiting the EU's divisions, and the bloc's fragmented policies will leave some Member States vulnerable and dependent on Chinese technology.

Introduction

China's long-term development strategy is based on its technological growth. It aims to promote domestic consumption and reduce reliance on external markets, particularly in technology.

Chinese firms have copied and adapted Western innovations, such as the German machine-tool designs,[1] European high-speed rail technology,[2] electric vehicles (EVs), wind turbines, and telecom to help China advance technologically, achieve self-reliance, and surpass the United States.[3] Beijing also now invests significant resources to accelerate domestic innovation into its capabilities, especially in semiconductors and AI. The country often uses ideas developed in state-run labs and universities and turns them into commercial products through a process called "innovation chain."[4] This has helped the country make rapid advances and become a rival innovator in EVs, batteries, AI, and robotics.[5]

China's adoption of Western technologies and rapid technological rise have triggered a range of concerns in Washington and Brussels, from national security to economic competitiveness to market distortion. In response, the United States and the EU are pursuing parallel, but different approaches.

The U.S. approach: Security first

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The United States treats China as a direct competitor and a national security threat. U.S. policymakers believe the country must maintain a significant technological lead, particularly in military applications.

In 2024, China was the United States' third-largest trading partner in goods after Mexico and Canada, and the U.S.-China trade deficit reached nearly USD

300 billion.[6] The trade deficit, however, is projected to drop after Trump increased tariffs on China to an average of 58 percent, covering all exports.[7]

The United States responds with a mix of sanctions, export controls, and strategic alliances. In a rare case of bipartisan consensus, Democratic and Republican administrations have recently pursued offensive measures, such as export controls on advanced semiconductors and AI chips, sanctions on Chinese firms, restrictions on outbound investment into sensitive Chinese sectors, and entity lists to prevent Chinese companies from accessing U.S. technology. The government also takes measures to promote a defensive industrial policy to bolster domestic capabilities and reduce supply chain vulnerabilities. It is increasing scrutiny of Chinese foreign investments, friend-shoring and reshoring supply chains, and pursuing diplomatic partnerships to deny Beijing critical technologies. The CHIPS and Science Act, adopted by the Biden administration in 2022, allocated USD 53 billion to support domestic semiconductor manufacturing and research.[8] The United States also recently accused three Chinese firms of helping Beijing conduct an "unrestrained campaign of cyber attacks" on infrastructure in the United States and around the world.[9]

In a significant change in U.S. industrial policy, the Trump administration announced in late August that it acquired a 10 percent stake in Intel to help the troubled chipmaker and bolster semiconductor manufacturing. Since then, Trump has signaled he would pursue similar deals with other tech companies involved in chips and AI, likening it to a sovereign wealth fund.[10]

The U.S. approach, sometimes described as a "sledgehammer," is intended to slow China's progress in critical areas; however, transactional politics and gaps undercut implementation. In July, President Trump permitted Nvidia to resume selling its less advanced chips to China, allowing China to overcome one of its most significant constraints to compete with U.S. AI.[11] The Chinese black market for restricted chips also undermines the impact of U.S. export controls.[12]

The EU approach: Economic dependence and policy ambivalence

The EU, by contrast, balances its economic dependence with its growing concerns about Chinese technology. Brussels defines China as a "partner, competitor, and systemic rival," an ambiguous formula that reflects its bloc's diverse interests. China is the EU's third-largest trading partner in goods and services, after the United States and the United Kingdom.[13] Its trade deficit in goods reached just over EUR 300 billion in 2024, a slight increase over 2023 levels.[14]

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Brussels has sought to be a global technology regulatory leader to serve as the standard bearer for a responsible approach to regulation. These policies apply regardless of country or actor. It also increasingly focuses on developing economic security strategies that link trade policy to national security and seeks to ensure a level playing field for European companies.[15] It has developed cyber

policy recommendations and conducts foreign investment screening. And to ensure a level playing field, it is pursuing anti-subsidy investigations into Chinese EVs and solar panels.[16] It also adopted an Anti-Coercion Instrument in 2023 in response to the attempted political blackmail of Lithuania by China for its Taiwan policy, yet it has yet to deploy the tool.[17]

Nonetheless, implementation across the 27-member bloc is fragmented. Hungary actively courts Chinese investment while Germany's carmakers are dependent on the Chinese market. And Spain–despite warnings from Brussels and Washington–awarded a EUR 12 million contract in July to Huawei for storing sensitive judicial and intel wiretaps, underscoring how national decisions undermine European resilience.[18]

Several factors explain Europe's less aggressive approach to Chinese technology compared with the United States. First, Europe does not perceive itself as the global frontrunner in semiconductors, AI, or telecoms. Without the need to defend, Chinese technological advances are seen as less existential. Second is economic dependence. Although the flood of cheap Chinese EVs and solar panels threatens the EU industry, it also aligns with Europe's climate goals. Third is institutional myopia. EU national governments often prioritize immediate economic or political gains over long-term security. Last is Chinese lobbying. Beijing invests heavily in cultivating lobbies by funding academic programs, sponsoring policy forums, and developing relationships with policymakers and business leaders to mitigate concerns about Chinese technology.

China's response: Support domestic industry and divide the EU-U.S. approach

The Chinese government seeks to accelerate domestic innovation and self-reliance through initiatives like Made in China 2025 and its Dual Circulation Strategy. It also channels billions of dollars in government-backed funds to support domestic industry and support national champions, like Huawei and ZTE, to develop alternatives to Western suppliers.

Beijing also exploits EU divisions by engaging bilaterally with Member States, recognizing that a fragmented EU is easier to manage than a unified Brussels

China uses rhetorical condemnation and diplomatic pressure to frame U.S. and European controls as protectionist and a violation of international trade rules. It is pushing global diplomacy through initiatives like the Digital Silk Road and offering open-source large language models to win goodwill in developing countries and challenge U.S. dominance. Beijing also exploits EU divisions by engaging bilaterally with Member States, recognizing that a fragmented EU is easier to manage than a unified Brussels.

The government also pursues retaliatory economic and legal measures, deploying targeted countermeasures. In April, it restricted exports of rare earths and critical minerals needed for manufacturing advanced chips and military equipment, to remind Europe and the United States of their supply chain vulnerabilities.[19] It also targets specific U.S. and European companies to retaliate against U.S. and EU policies. Many concluded that Beijing's anti-dumping probe in October 2024 into French brand imports was a response to France's vote to support the EU investigation of Chinese subsidies for EVs.[20]

China has pursued this approach for a few reasons. First, achieving self-sufficiency in core technologies is viewed as essential to protect the country from foreign pressure. Second, it responds more forcefully to U.S. efforts because it believes the United States seeks to undermine its growth to preserve U.S. hegemony. And lastly, it hopes to exploit the internal divisions between the EU bloc and prevent a more unified transatlantic front by using a less controversial tone with Brussels and emphasizing areas of mutual interest.

Conclusion

Although the EU has been slow to recognize the potential threats posed by Chinese technology, Brussels and Washington are moving gradually toward alignment in diagnosing the challenges. Both sides of the Atlantic have increasingly aligned on the need to counter China's non-market economic practices and mitigate security risks and they are increasingly focused on building resilient supply chains and domestic industrial bases. The EU's rhetoric also now places a greater emphasis on economic security as national security.

Trump's return to the White House in 2025 and damage to transatlantic relations could have proven to be a helpful wedge for China to reverse this trend. However, the EU's mistrust of China makes such a change unlikely in the near term.[21] Moreover, the recently inked U.S.-EU trade deal commits the EU to align its technological security with the United States.[22]

There are, however, still divergences on the best remedies to address China's technological advances. Major European economies are heavily reliant on Chinese technology, making them more cautious about taking a more antagonistic approach.

Europe's approach to Chinese tech risks underestimating the scale of the challenge

Europe's approach to Chinese tech risks underestimating the scale of the challenge. For Europe, the risk is not immediate technological displacement, but a gradual hollowing-out of strategic industries. And even if Europe does not want to lead globally in technology, it should still safeguard its industrial base. Otherwise, it risks sliding into a world where Chinese technology is indispensable.

The EU should consider additional measures to respond to the potential risks associated with Chinese technology, such as:

- Empowering the European Commission to act more swiftly and assertively on economic security matters.
- Pursuing a bolder EU investment strategy in foundational technologies for the future, such as quantum computing, advanced AI, biotech, and next-generation materials.
- Coordinating EU Member State investments in emerging tech.
- Developing more incentives for European technological innovation to leverage the region's human capital and prevent brain drain.

- Creating a high-skilled visa for foreign nationals to support technological research, innovation, and investment in the EU; and, .
- Strengthening cooperation with like-minded countries on technology policy, research and development, the development of common standards, investment, and the creation of more secure and resilient supply chains.

EXHIBIT 7.0 – U.S. AND EU APPROACHES TO CHINA'S TECHNOLOGICAL RISE

	United States	European Union
View of China	Direct competitor and national security threat	Partner, competitor, and systemic rival
Main tools deployed	Export controls, tariffs, sanctions, entity lists, outbound investment screenings, FDI screenings, grants to support domestic tech industry, acquiring a U.S. government stake in tech companies	Anti-subsidy and anti-dumping investigations, Anti-Coercion Instrument, FDI screenings, European Chips Act, setting global standards through regulations
Diplomatic engagement	Friend-shoring supply chains, strengthening partnerships to hinder Chinese tech growth	Bilateral summits with China, coordinating with the United States

Notes

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