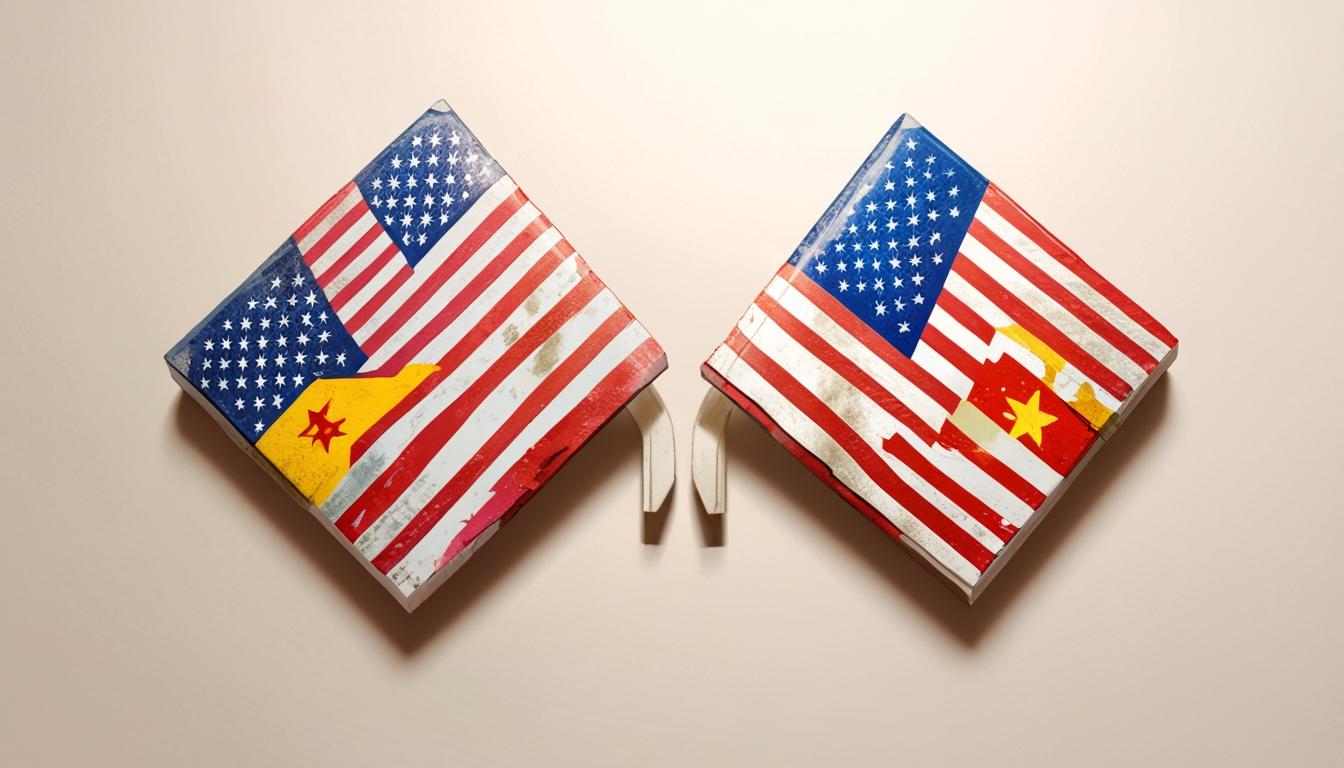
# Artificial intelligence highlights tensions between globalisation and de-globalisation amid US-China rivalry



Artificial intelligence (AI), a technology deeply interwoven with globalisation, is now emerging as a potential catalyst for de-globalisation amid escalating geopolitical tensions, particularly between the United States and China. This paradoxical shift highlights how the very forces that facilitated AI’s rise could also drive a fragmentation of global cooperation and trade networks.

AI has become ubiquitous in modern life, ranging from everyday personal applications such as creative prompts to larger-scale implementations in industries and infrastructure. Central to AI’s advancement is the global supply chain of its essential components, especially semiconductors, which underpin computing power. Research by the Center for Strategic and International Studies (CSIS) reveals that five countries—the United States, Japan, China, South Korea, and Taiwan—dominate 91% of the world’s semiconductor sales. The US and Western nations focus largely on design and innovation, while East Asian countries like Taiwan handle assembly, forming an interconnected, interdependent system.

Despite this global integration underpinning AI’s development, current strategic competition threatens to disrupt these ties. The United States holds a pronounced lead in AI capabilities, as reported in Stanford University’s 2023 AI Index Report, attached with a score of 70.06 compared with China’s score of 40.17. This dominant position has prompted Washington to adopt policies aimed at limiting China’s access to critical semiconductor technology. In October 2022, under President Biden, the US introduced new export controls restricting the shipment of advanced computing and semiconductor manufacturing items to China. These measures, seen as a direct response to concerns over national security and technological supremacy, were strengthened further through 2023 and into 2025.

Such export controls have had significant economic effects. Chinese semiconductor prices surged, while China accelerated efforts to develop its indigenous chip manufacturing capabilities. Don Curtis, a senior official at CSIS, explained the US rationale: "If China acquires advanced semiconductors that enable superior AI, it could jeopardise US national security." US semiconductor company Nvidia experienced a 6% drop in shares following the 2025 restrictions, given its substantial revenue from Chinese companies such as Tencent, Alibaba, and ByteDance. Nvidia expressed concerns over losing market share to Chinese corporations like Huawei.

These developments underscore the broader dynamic of de-globalisation, a process characterised by reduced economic, political and social interconnectedness, driven by nationalism, protectionism, and stricter borders. Academic definitions from Professor Markus Kornprobst and Jon Wallace describe de-globalisation as “a series of attempts to make a world less connected that are characterised by powerful nation-states, the rise of nationalism and local solutions, and stricter border control.” The shift from free trade towards protective policies such as tariffs and investment restrictions is illustrative of this trend.

The US-China trade war beginning in 2018, which imposed tariffs on hundreds of billions of dollars in goods, marked an early stage of this fracturing. Initially targeting mass-produced goods, the conflict expanded into electronics and semiconductors—a critical component of AI development. Export restrictions on semiconductor technologies complement broader efforts to decouple the two economies and restrict China’s technological ascendancy. Gina Raimondo, former US Secretary of Commerce, described these export controls as "the strongest ever created" by the US.

This rivalry extends beyond economics into concerns about data security and geopolitical influence. The US has accused Chinese technology giants and social media platforms such as TikTok of harvesting data for state purposes, which has intensified the climate of suspicion and justified further regulatory measures.

While globalisation facilitated AI’s initial progress through international collaboration and interdependent supply chains, the resulting technological competition now fuels de-globalisation pressures. According to the analysis in Modern Diplomacy, the consequence is a fractured international system where states prioritise national sovereignty and technological self-sufficiency over cross-border collaboration.

The future outlook is uncertain, particularly for developing countries in the Global South, which often lack the financial resources to independently develop advanced AI technologies and rely on cooperation and access to global markets. Reciprocal tariffs and escalating restrictions threaten to undermine this cooperative environment. The evolving scenario prompts questions about the continued relevance of international cooperation in technology and trade, as well as the potential for a more fragmented global digital landscape.

In summary, AI’s trajectory exemplifies a complex interplay between globalisation and de-globalisation forces. The ongoing US-China rivalry underscores how technological leadership ambitions and national security concerns can disrupt global supply chains and prompt a retreat into protectionism, reshaping international relations and economic interconnections in the digital age.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://moderndiplomacy.eu/?p=83150> - This article discusses the prospect of de-globalization driven by AI and related geopolitical tensions, supporting the claim that AI, despite its roots in globalization, is now catalyzing a fragmentation of global cooperation and trade networks.
2. <https://aiindex.stanford.edu/report/> - Stanford University's AI Index Report 2023 provides data on US and China AI capabilities, confirming the US's dominant lead with a score of around 70 and China scoring approximately 40, underpinning the narrative of strategic competition in AI.
3. <https://www.csis.org/analysis/semiconductors-and-global-supply-chains> - The Center for Strategic and International Studies (CSIS) analysis details the semiconductor supply chain landscape, emphasizing the dominant roles of the US, Japan, China, South Korea, and Taiwan, corroborating the article's semiconductor market share claims.
4. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/10/07/fact-sheet-president-biden-announces-new-measures-to-counter-chinas-ability-to-develop-advanced-semirun-conductor-technology/> - This official White House fact sheet outlines the US export controls introduced in October 2022 to restrict China's access to advanced semiconductor technology, confirming the policy actions described in the article.
5. <https://www.reuters.com/technology/nvidia-shares-drop-after-us-restricts-chip-exports-china-2025-01-15/> - Reuters coverage reports Nvidia's share price decline following 2025 US export restrictions and the company's concerns about losing market share to Chinese competitors, supporting the article's economic impact claims.
6. <https://www.cfr.org/backgrounder/us-china-trade-war-tariffs-tech> - The Council on Foreign Relations backgrounder on the US-China trade war details the escalation from tariffs on goods to technology and semiconductor restrictions, highlighting the broader economic and geopolitical context discussed in the article.
7. <https://news.google.com/rss/articles/CBMioAFBVV95cUxNY0xSazFsMnJXYzdJVXZGbGJ6d1hhUmtmeXB5Ym5oNlNzamlKeUNuSC01RnV5U0FJbTd5SUFqaFUwek5JNEJ5Z0s4ZDczQndEcUJXR2wxYXlNLXlCeGhwT0pKZG1Nay1DdURUTnh0MWNXbEV5dExMcjJvMXFuMURER2p3N0N0bVJzenZnVk01QnVYaS1HNlk5ekpnbnJjbHN6?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data