DEEPSEEK:

WHAT IT MEANS FOR CHINESE AND U.S. COMPANIES' STRATEGIES IN THE AI RACE

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The launch of DeepSeek's R1 AI model on January 27, 2025 shook global markets, wiping out $1 trillion from the tech and energy industry players.[1]

The arrival of DeepSeek's model exposes at least three fundamental developments in the U.S.-China tech race. First, it shows that it is possible to develop more efficient AI models with less advanced chips and with models training at a fraction of the cost.[2] Second, it highlights that China's tech ecosystem is capable of innovating and working around constraints from U.S. export controls on chip manufacturing equipment in the race for AI dominance.[3] Third, it indicates that China has developed an open model that is catching up with the well-known OpenAI proprietary products.[4]

As the pressure for both American and Chinese tech companies to deliver the latest AI breakthrough increases, they are asked to do so in an increasingly fractured global economy – fraught with a tech trade war, volatile protectionist policies, and ever-shifting supply chains. Just twelve days after DeepSeek's launch, U.S. President Donald Trump

DeepSeek output comparisons on the query of territories of India and China. | Bookish Worm | public domain

U.S. President Donald Trump holds up a chart while speaking during a "Make America Wealthy Again" trade announcement event in the Rose Garden at the White House on April 2, 2025 in Washington, DC. | Chip Somodevilla | Getty Images

introduced a fresh set of 10 percent tariffs on Chinese goods that were swiftly followed by China imposing 10 to 15 percent tariffs on American coal, liquified natural gas (LNG), crude oil, and agricultural machinery, as well as the launching of an antitrust probe against Google.[5, 6, 7, 8] The tech trade fight continues to quickly escalate, with the United States raising levies on Chinese imports to 145 percent and China retaliating by raising tariffs on U.S. goods to 125 percent in early April 2025.[9, 10] In sharp contrast with 2018, when Chinese tech giants ZTE and Huawei were the first companies brutally hit by U.S. trade bans, 2025 shows a more resilient and agile Beijing that has updated its laws and learned its lessons from the early tech trade war to now be able to respond in time.[11]

"Export controls have only delayed, not stopped, Chinese AI supply chain innovation, meaning that Washington will need to reassess its strategy."

Additionally, the tech trade war and the case of DeepSeek has renewed national security concerns in the White House and Congress regarding economic and technological dependency with China.[12] White House Press Secretary Karoline Leavitt notes that DeepSeek "is a wake-up call to

ChatGPT and Deepseek—AI artificial intelligence companies. gguy | Adobe Stock

the American AI industry... The last administration sat on their hands and allowed China to rapidly develop this AI program," and that the U.S. National Security Council was "looking into" the national security implications of DeepSeek's model to the United States.[13] The White House announcement came right after R1's launch and was followed by Australia,[14] South Korea,[15] Italy,[16] and the State of New York deciding to ban the app from locally hosted app stores due to privacy and "unacceptable" national security concerns.[17]

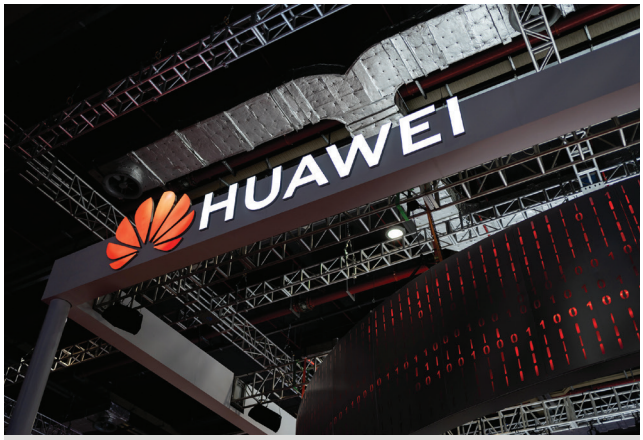
As U.S. and Chinese industries grapple with measures to deter each other's AI development, it is tempting to focus on government action and narratives in the tit-for-tat tech trade war. Ultimately, any response will rely on the capacity of these governments to effectively leverage and create the conditions for competition among private companies, which begs the following questions: How have companies in China and the United States responded to the "DeepSeek moment?" Are companies in China ready for the pressure of a post-DeepSeek push? What is Silicon Valley's response—and is it at all coordinated? What are the implications of the tech trade war for other countries in the Indo-Pacific?

THE PRESSURE OF RENEWED OPTIMISM IN CHINA

DeepSeek has injected a renewed momentum and morale in Chinese industry amid the AI race. It has not only promoted a sense that China is no longer constantly lagging behind the United States, but also that DeepSeek's cost-effectiveness could outmaneuver U.S. competitors. Since DeepSeek's R1 launch, Beijing has pushed for a nationwide dissemination of the model's use, which has led to at least 13 city governments, 10 state-owned energy companies, and three state-owned telecommunications operators deploying the AI model into their systems.[18, 19]

Companies in China now face renewed pressure to accelerate adoption of models such as DeepSeek's while trying to develop equal or superior models and products. DeepSeek itself is in the frontline of innovation pressures. Less than a month after announcing its R1 model, the Chinese company had already indicated its ambition to release a new R2 model planned for May 2025.[20]

Despite DeepSeek's domestic and international impact, China's competitiveness will rely on how avidly the Chinese government decides to push



Huawei at Shanghai Automobile Industry Exhibition on April 27, 2021 in shanghai China. | THINK b | Adobe Stock

other parts of the AI supply chain to deliver more rapidly. This includes meeting its ambition to become less reliant on Nvidia chips following U.S. export controls measures limiting access to high-end chips since 2022.[21]

"Since the first Trump term, export controls and tariffs – also tightened during the Biden administration – have forced companies to swiftly reshuffle supply chains while maintaining competitive prices."

The positive momentum in Beijing has also provided the stage for Huawei to more boldly promote their own Ascend chips and increase the yield – the percentage of functioning chips in the line of production to make them profitable.[22] After the U.S. Department of Commerce blocked Huawei from accessing manufacturing that used U.S. technology in 2020, chipmaker TSMC had to stop producing Huawei's Ascend chips, which led Huawei to partner with also-sanctioned Chinese Semiconductor Manufacturing International Corp (SMIC) in order to relaunch Ascend.[23] In February 2025, the chip achieved a yield of 40 percent, bringing it closer to the 60 percent yield of Nvidia.[24] While Huawei's progress is unlikely to change Nvidia's prominence in the short and medium term, Huawei's chips can boost competition in specific subfields of the market, especially inference chips that are usually used for lightweight AI applications in smartphones.[25, 26]

The accelerated pace from Beijing to narrow the U.S.-China gap on AI modelling also means that companies in China will compete among themselves for the spotlight with the government.[27] Chinese companies benefit from government backing if they demonstrate they can overcome Washington's export controls and help China enhance self-sufficiency in AI supply chains. Days before the R1 model was announced, Chinese premier Li Qiang invited DeepSeek founder Liang Wenfeng to represent the AI sector in a closed-door meeting with other businessmen.[28] A year earlier, Baidu's CEO Robin Li attended a similar meeting when Baidu was still considered a top Chinese contender to rival OpenAI's ChatGPT model.[29, 30]

On the one hand, the post-DeepSeek moment has left the Chinese tech sector with renewed confidence that should be handled with caution. As they compete for their own DeepSeek-like moment in the sun, Chinese firms risk overselling potential and under delivering. That is the case of Chinese startup Butterfly Effect's release of Manus AI in March 2025. Unlike ChatGPT, Manus

Liang Wenfeng, founder of Deepseek. | ChinaIk Media/Sohu.

AI has been described by its co-founder Yichao Ji as "the world's first general AI agent," meaning it could independently perform tasks without human prompts for every step.[31] While some media outlets, such as Forbes, portrayed Manus AI as a breakthrough similar to DeepSeek, it has so far received mixed reviews.[32] The Economist and Tech Crunch have criticized it for not delivering on its promise: "[i]n releasing it, its makers have obviously prized a job done first over a job done well."[33, 34]

On the other hand, DeepSeek's open weights model has also provided a first-step opportunity for public and private services in China to use it as a baseline. While AI and tech companies will continue to develop their own models and become more competitive, many have nonetheless rushed to integrate DeepSeek as part of their existing products. This includes big tech companies such as Alibaba, Tencent, and Huawei, as well as electric vehicles companies such as BYD.[35, 36]

Export controls have only delayed, not stopped, Chinese AI supply chain innovation, meaning that Washington will need to reassess its strategy.[37] There are now three important trends for the United States to watch: First, with slightly optimistic Hong Kong market performance in the tech sector, foreign investors might look more favorably at the Chinese market. Analysts at Morgan Stanley note that DeepSeek's rise has led investors to start further scrutinizing companies' AI investments with the hopes that it will lead to more efficient and accountable spending from AI companies.[38] Second, as argued by Tobias Feakin, former Australian cyber and tech ambassador, the emergence of cheaper high-performance models could redefine cost structures and lower subscription prices, making them more competitive in developing country markets.[39] Moreover, Feakin argues that DeepSeek has shown that competitiveness does not rely solely on access to the high-end chips.[40]

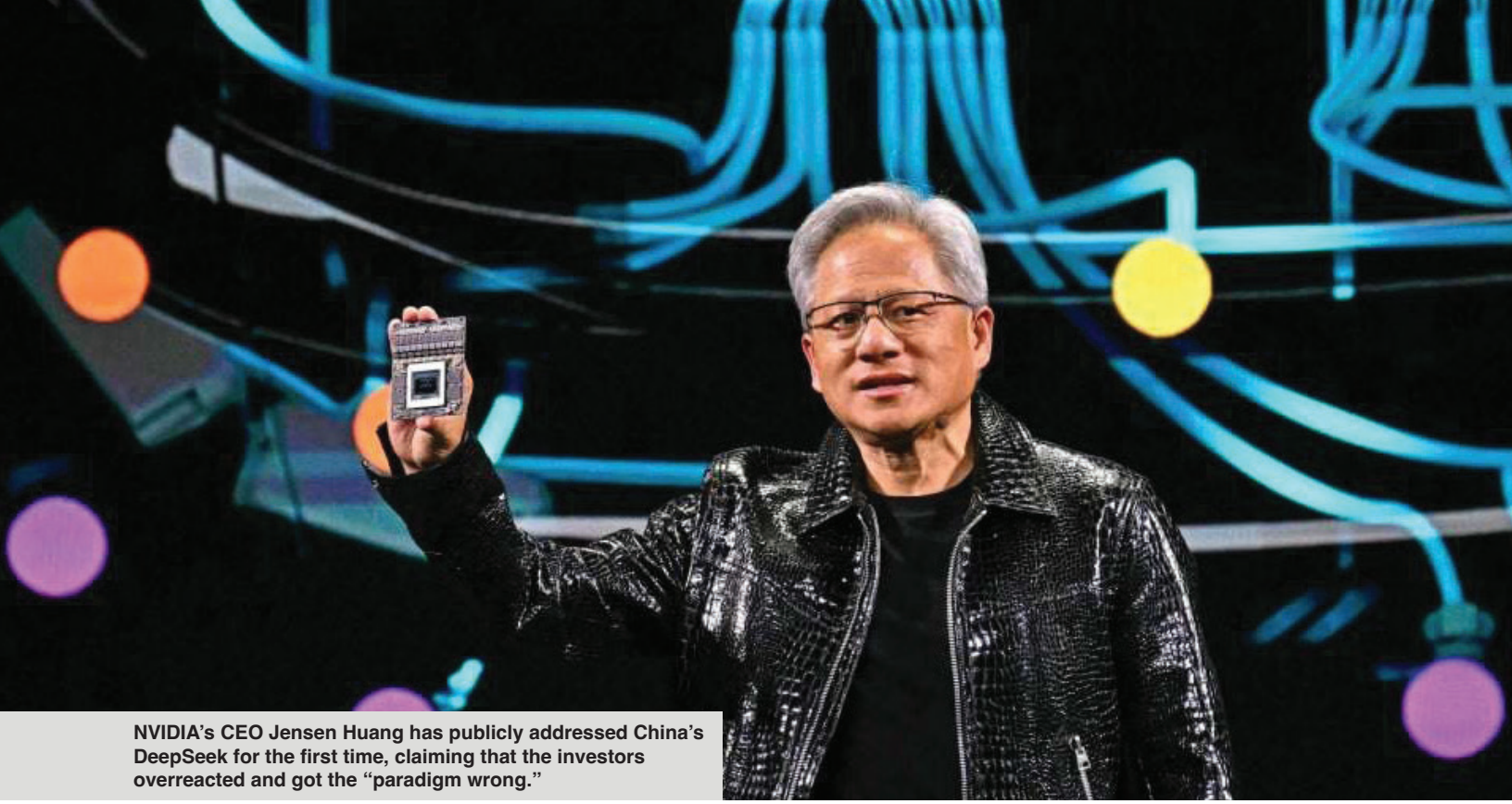
Trump announces a $500 billion AI infrastructure investment in the US. | AP Photo Julia Demaree Nikhinson

TWISTED INCENTIVES IN SILICON VALLEY

DeepSeek's shock came only a few days after OpenAI, Oracle, and Japanese investor SoftBank Group lined up behind President Trump at the White House as he announced Stargate, a massive $100 billion joint private venture to develop data centers in Texas.[41, 42]

Even though such efforts indicate that companies are coming together to pursue a U.S. strategic advantage in the AI race, make no mistake: these companies are still market players who will seek to maximize their own gains – and that became clear in the different ways in which they reacted to the DeepSeek moment.

Sam Altman, CEO of OpenAI, stated on X that it was "legit invigorating to have a new competitor."[43] 24 hours later, the company stated that they were concerned that their proprietary model had been used to train DeepSeek's model, thus raising fears of breaches of OpenAI intellectual property and terms of use.[44] OpenAI's terms of use note that users are prohibited from "using the Output to develop models that compete with OpenAI" – this section provides the initial basis for determining whether DeepSeek's use of OpenAI's service was inappropriate.[45] However, in 2023, Twitter owner Elon Musk cut off both Microsoft and OpenAI



NVIDIA's CEO Jensen Huang has publicly addressed China's DeepSeek for the first time, claiming that the investors overreacted and got the "paradigm wrong."

for "illegally" using Twitter data and API to train its own AI technologies.[46, 47] The difference with DeepSeek is that, for OpenAI, it rapidly went from a "legit competitor" to being accused of intellectual property theft via distillation.[48]

Other U.S. tech giants shrugged off DeepSeek's achievements and impact, seeing them as a temporary blip. Two days after DeepSeek's release, Zuckerberg dismissed the low-cost training efficiency narrative and announced that Meta would spend $60 billion on capital expenditure.[49] Nvidia joined the "shrugging off" momentum by welcoming DeepSeek's open model innovation only a few weeks after its market valuation plunge. Moreover, Nvidia CEO Jensen Huang noted that R1 was an "excellent innovation" during an earnings call while also noting that this is a business opportunity for fewer chips to be used more efficiently.[50] Anthropic's CEO, Dario Amodei, also notes that even if the cost of training a specific model declines, the overall investments would be "eaten up" immediately to train other more sophisticated and efficient models.[51]

Reactions from tech companies also make it clear that the benefits of the U.S.-China AI competition are not evenly distributed across Silicon Valley. Some tech companies benefit from stronger restrictions on Chinese tech while others benefit from the shock of Chinese innovation. As CEO of Tesla, Musk is potentially caught in the crossfire: tariffs and export controls on Chinese-made electric vehicles (EV) hurt Tesla's Shanghai-based EV factory production – a key source for European supply of EVs.[52] At the same time, U.S.-China competition creates opportunities for securing competitiveness in global markets for the Starlink satellite communications service – also owned by Musk.[53]

Companies such as Microsoft and Amazon Web Services have taken a more acquiescent approach and integrated DeepSeek's R1 model into their cloud and AI platforms. These platforms provide developers with access to a library of AI models and environments to test them.[54, 55]

Apple experienced the other side of the DeepSeek's shock as it saw its shares rise right after the R1 release. Small and efficient models such as DeepSeek's provide a glimpse at what could make Apple more competitive.[56] By engaging not in a crowded market of Big Tech investments in capital expenditure, but as a distribution platform for smaller AI models in smartphones, Apple could become less vulnerable to any potential AI bubble burst.

"Whether through regulatory frameworks, investment incentives, or fostering homegrown AI innovation, regional players will be crucial in shaping the trajectory of AI development beyond the immediate contest between Washington and Beijing."

As with any shock, DeepSeek's market disruption is temporary but sends purposeful waves, and there are two clear messages resulting from DeepSeek's conundrum. The first message is that models can be potentially developed at a lower cost. The second message is that if it can be done more cheaply, it raises concerns that investors – who have so far been generous – might wonder whether it is a question of *when, not if* the AI bubble might burst.[57]

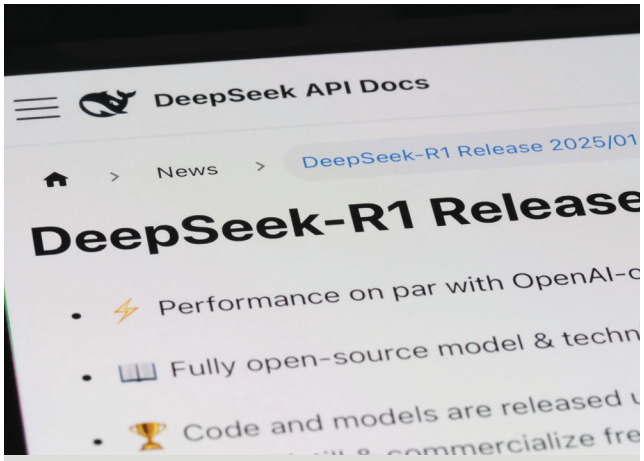
The low-cost efficiency presented by DeepSeek has renewed concerns about the sustainability of continuous injections of capital into AI supply chains and infrastructure. Meta and Nvidia's persistent investment show that there is no immediate change to the investment mantra. This continuous cash flow is important in maintaining the market perceptions about the value of these companies, but it is not necessarily driving actual results. As hedge fund investor Ray Dalio noted: "there's a major new technology [AI] that certainly will change the world and be successful. But some people are confusing that with the investments being successful."[58]

Despite Trump's apparent support, his fluctuating trade policies have also significantly impacted the AI supply chain market, with some tech companies delaying going public due to expectations of tariffs and export controls.[59, 60] Since the first Trump term, export controls and tariffs – also tightened during the Biden administration – have forced companies to swiftly reshuffle supply chains while maintaining competitive prices.

Many unicorns, such as OpenAI, have oddly been able to delay going public and continue receiving rounds of bigger investments – growing their speculative private valuation. This has also excused them from certain levels of accountability that come with the pressures and volatility of publicly trading in the open market.[61] The trend of delayed initial public offerings (IPOs) has also meant that there might be a discrepancy between firms' real value and the value set by the private market – which only feeds the speculative AI bubble.[62]

IMPLICATIONS IN THE INDO-PACIFIC

Both the U.S. and Chinese markets have developed their own government-backed investment strategies. That is the case of China's Digital Silk Road or groupings such as the Quadrilateral Security Dialogue (Quad) informally leveraging such fora to discuss AI.[63, 64] However, across the Indo-Pacific – as in other parts of the Global South – countries have continuously used hedging strategies to manage risks and avoid exclusive entanglements with the U.S. or China by being more opportunistic about Washington and Beijing's offers.[65] Strategic ambiguity and pragmatism is something that has also benefited tech development in the region. For example, Singapore and Malaysia have partnered



Shanghai,China-Feb.16th 2025: DeepSeek R1 AI model on website. | Robert | Adobe Stock

USA and China Chip and Technology war, America and China innovation war in the technology chip semiconductor competition global economy geopolitics and innovation race created with generative AI. | BeeSee | Adobe Stock

with both OpenAI and Alibaba to boost domestic AI companies and local capacities, as well as with Nvidia to develop AI infrastructure.[66, 67, 68]

AI models such as DeepSeek R1 can further stimulate AI innovation across the Indo-Pacific in at least two ways. First, the cost-effectiveness of DeepSeek's R1 model training provides a benchmark against which companies in the region can further optimize and test at smaller scales through partnerships with U.S. and Chinese companies. Second, rather than being seen as national security threats, open weights models such as DeepSeek's R1 can further stimulate innovation around other open models or innovative applications. Local and regional Large Language Models (LLMs) in Southeast Asian countries have been built on top of Big Tech LLM architectures. From 2020 to 2024, cross-regional and country-based initiatives in Malaysia, Indonesia, Vietnam, Thailand have released 35 LLMs, with 21 in 2024 alone.[69]

More importantly, rather than solely taking foreign technologies from China and the United States, countries in the region have sought to develop their own models as well. AI companies in the region have been harnessing the potential to develop models more sensitive to other languages and dialects. That is the case of homegrown indigenous LLMs such as AI Singapore's SEA-LION, VinAI's PhoGPT, Mesolitica's MaLLaM, and India's Sarvan AI.[70]

CALIBRATING RESPONSES

At the start of 2025, all eyes were focused on understanding what the new Trump administration's posture would be on the U.S.-China trade tech war. Trump started his second term by easing Biden-era regulations on the domestic AI industry before tightening on China.[71] Then, starting on February 27, 2025, Trump announced an extra set of tariffs on Chinese goods, accounting for a total of 20 percent tariffs in less than two months since his start – all of which escalated following his reciprocal tariffs announcement on "Liberation Day" on April 2, 2025.[72]

Despite DeepSeek-triggered turbulence, this context might be good news for tech companies working on AI. Growing competition will push innovation on both sides, with China more actively seeking to mainstream and test services such as DeepSeek and the United States promoting their own companies in conjunction with what could be further tariffs (and potentially export controls) at

the heart of Trump's strategy to economically and technologically deter China.[73]

However, it is clear that China has been making the most out of its DeepSeek moment by emboldening private companies across the AI supply chain, encouraging local deployment of the model, and savoring advances in the semiconductor supply chain. The clock is ticking on how long the economic coercion tools in the U.S. toolbox can endure, or whether we are slowly reaching a tipping point where intended economic disruption has boosted innovation in China – making them rapidly more competitive than before.

"As the pressure for both American and Chinese tech companies to deliver the latest AI breakthrough increases, they are asked to do so in an increasingly fractured global economy – fraught with a tech trade war, volatile protectionist policies, and ever-shifting supply chains."

From a regional perspective, the Indo-Pacific remains a dynamic arena where countries seek to balance opportunities and risks amid the U.S.-China tech rivalry. With DeepSeek's model setting new benchmarks, Indo-Pacific nations will need to carefully assess their engagement with both U.S. and Chinese AI ecosystems. Whether through regulatory frameworks, investment incentives, or fostering homegrown AI innovation, regional players will be crucial in shaping the trajectory of AI development beyond the immediate contest between Washington and Beijing.

Trump's second term also inaugurates another phase in the long-term power struggle between the United States and China, with economic deterrence at its forefront. However, both sides face risks that can critically affect the AI race: American protectionism stifling Silicon Valley growth and provoking and exodus of investors; economic coercion measures backfiring if they remain the primary tool for delaying Chinese innovation; China's overconfidence in the AI race amid the DeepSeek moment leading them to favor rapid delivery over quality; and a lack of agility in adjusting and responding to growing tariffs and export controls inhibiting Chinese progress in the AI race.

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The Nvidia Corporation logo is displayed on a smartphone screen, with a graphic representation of the stock market in the background. I Rafael Henrique I Adobe Stock

ENDNOTES

1 Matchett, Karl. "Nvidia Stocks: DeepSeek AI Model Launch Sees a Trillion Dollars Wiped off World's Biggest Tech Companies' Share Prices." *The Independent*, January 28, 2025. https://www.independent.co.uk/business/deepseek-ai-nvidia-meta-google-share-price-news-b2687448.html.

2 Orland, Kyle. "How Does DeepSeek R1 Really Fare against OpenAI's Best Reasoning Models?" Ars Technica, January 28, 2025. https://arstechnica.com/ai/2025/01/how-does-deepseek-r1-really-fare-against-openais-best-reasoning-models/.

3 Jockims, Trevor Laurence. "In Fighting AI Chip Trade War with China, There's One Big Mistake U.S. Can't Afford to Make." CNBC, February 11, 2025. https://www.cnbc.com/2025/02/11/deepseek-ai-chip-export-ban-trade-war-us-wont-win.html.

4 Edwards, Benj. "Cutting-Edge Chinese 'Reasoning' Model Rivals OpenAI O1—and It's Free to Download." Ars Technica, January 21, 2025. https://arstechnica.com/ai/2025/01/china-is-catching-up-with-americas-best-reasoning-ai-models/.

5 White House, "Fact Sheet: President Donald J. Trump Imposes Tariffs on Imports from Canada, Mexico and China." The White House, 1 February 2025. https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-imposes-tariffs-on-imports-from-canada-mexico-and-china/.

6 McMorrow, Ryan, Arjun Neil Alim, William Sandlund, Cheng Leng, and Joe Leahy. "China Hits Back at Donald Trump with Tariffs on US." *Financial Times*, February 4, 2025. https://www.ft.com/content/5653e2d6-2316-4316-9a7c-72cf4f7d86e5.

7 Race, Michael. "Five Ways China Is Hitting Back against US Tariffs." BBC News, February 4, 2025. https://www.bbc.co.uk/news/articles/czj31l4p7vzo.

8 Soo, Zen. "China Launches an Antitrust Probe into Google. Here's What It Means." Associated Press, February 4, 2025. https://apnews.com/article/google-china-antitrust-investigation-tariffs-ab02b906733666cb0d348d2b416b7fa5.

9 The White House. "Further amendment to duties addressing the synthetic opioid supply chain in the People's Republic of China," The White House, 3 March 2025. https://www.whitehouse.gov/presidential-actions/2025/03/further-amendment-to-duties-addressing-the-synthetic-opioid-supply-chain-in-the-peoples-republic-of-china/.

10 Cash, Joe, and Yukun Zhang. "China Raises Duties on US Goods to 125%, Calls Trump Tariff Hikes a 'Joke.'" Reuters, April 11, 2025. https://www.reuters.com/world/china/china-increase-tariffs-us-goods-125-up-84-finance-ministry-says-2025-04-11/.

11 See anti-foreign sanctions law (2021) and the Chinese Ministry of Commerce provisions on the Unreliable Entities List (2020): Reuters. "China rolls out new rules to step up countermeasures to foreign sanctions," Reuters, 24 March 2025. https://www.reuters.com/world/china/china-rolls-out-new-rules-step-up-countermeasures-foreign-sanctions-2025-03-24/;

Ministry of Commerce. "MOFCOM Order No. 4 of 2020 on Provision on the Unreliable Entity List," Ministry of Commerce–People's Republic of China, 2020. https://english.mofcom.gov.cn/Policies/GeneralPolicies/art/2020/art_1889a241340545b5b8411134c3fba44654.html.

12 U.S. House of Representatives. "DeepSeek Unmasked: Exposing the CCP's Latest Tool for Spying, Stealing, and Subverting U.S. Export Control Restrictions," The Select Committee on the CCP, 16 April 2025. https://selectcommitteeontheccp.house.gov/media/reports/deepseek-unmasked-exposing-ccps-latest-tool-spying-stealing-and-subverting-us-export.

13 The White House. "Press briefing by press secretary Karoline Leavitt," The White House, 29 January 2025. https://www.whitehouse.gov/briefings-statements/2025/01/press-briefing-by-press-secretary-karoline-leavitt/.

14 Canales, Sarah Basford. "DeepSeek Banned from Australian Government Devices over National Security Concerns." *The Guardian*, February 4, 2025. https://www.theguardian.com/technology/2025/feb/04/deepseek-banned-from-australian-government-devices-over-national-security-concerns.

15 Silva, João da, and Jean Mackenzie. "South Korea Bans New Downloads of China's DeepSeek AI." BBC News, February 17, 2025. https://www.bbc.co.uk/news/articles/clyzymovn8go.

16 Smalley, Suzanne. "Italy Blocks Chinese AI Tool DeepSeek over Privacy Concerns." *The Record*, 2025. https://therecord.media/italy-blocks-chinese-ai-tool-deepseek-over-privacy-concerns.

17 Katersky, Aaron. "DeepSeek Banned from Government Devices in New York State." ABC News, February 10, 2025. https://abcnews.go.com/US/deepseek-banned-government-devices-new-york-state/story?id=118653885.

18 Baptista, Eduardo, Julie Zhu, and Fanny Potkin. "DeepSeek Rushes to Launch New AI Model as China Goes All In." Reuters, February 25, 2025. https://www.reuters.com/technology/artificial-intelligence/deepseek-rushes-launch-new-ai-model-china-goes-all-2025-02-25/.

19 Bao, Anniek. "Beijing Embraces DeepSeek to Lead AI Adoption as It Looks for New Growth Drivers." CNBC, February 21, 2025. https://www.cnbc.com/2025/02/21/deepseek-led-ai-adoption-offers-china-opportunity-to-boost-growth.html.

20 Baptista, Zhu, and Potkin, "DeepSeek rushes to launch new AI model as China goes all in."

21 Nellis, Stephen, and Jane Lanhee Lee. "U.S. Officials Order Nvidia to Halt Sales of Top AI Chips to China." Reuters, September 1, 2022. https://www.reuters.com/technology/nvidia-says-us-has-imposed-new-license-requirement-future-exports-china-2022-08-31/.

22 Olcott, Eleanor, and Zijing Wu. "Huawei Improves AI Chip Production in Boost for China's Tech Goals." *Financial Times*, February 25, 2025. https://www.ft.com/content/f46b7f6d-62ed-4b64-8ad7-2417e5ab34f6.

23 U.S. Department of Commerce. "Commerce Department Further Restricts Huawei Access to U.S. Technology and Adds Another 38 Affiliates to the Entity List." U.S. Department of Commerce, August 17, 2020. https://2017-2021.commerce.gov/news/press-releases/2020/08/commerce-department-further-restricts-huawei-access-us-technology-and.html.

24 Ibid.

25 Ibid.

26 O'Brien, Matt, and Barbara Ortutay. "Nvidia Rivals Focus on Building a Different Kind of Chip to Power AI Products." Associated Press, November 19, 2024. https://apnews.com/article/ai-inference-chips-nvidia-dmatrix-corsair-groq-914b9a33faf865080eaf7d9ca4096de3.

27 IBM. "DeepSeek's Reasoning AI Shows Power of Small Models, Efficiently Trained." IBM, January 27, 2025. https://www.ibm.com/think/news/deepseek-r1-ai.

28 Baptista, Eduardo. "What Is DeepSeek and Why Is It Disrupting the AI Sector?" Reuters, January 27, 2025. https://www.reuters.com/technology/artificial-intelligence/what-is-deepseek-why-is-it-disrupting-ai-sector-2025-01-27/.

29 Ibid.

30 Kwan, Rhoda. "Chinese ChatGPT Rival from Search Engine Firm Baidu Fails to Impress." *The Guardian*, March 16, 2023. https://www.theguardian.com/world/2023/mar/16/chinese-chatgpt-rival-search-engine-baidu-fails-impress-ernie-bot.

31 Manus AI. "Introducing Manus: The General AI Agent," YouTube, March 5, 2025. https://youtu.be/K27diMbCsuw?si=jxv8iLrU9PtYbPRB.

32 Smith, Craig S. "China's Autonomous Agent, Manus, Changes Everything," *Forbes*, March 8, 2025. https://www.forbes.com/sites/craigsmith/2025/03/08/chinas-autonomous-agent-manus-changes-everything/.

33 The Economist. "With Manus, AI experimentation has burst into the open," *The Economist*, March 13, 2025. https://www.economist.com/leaders/2025/03/13/with-manus-ai-experimentation-has-burst-into-the-open.

34 Wiggers, Kyle. "Manus probably isn't China's second 'DeepSeek moment'," TechCrunch, March 9, 2025. https://techcrunch.com/2025/03/09/manus-probably-isnt-chinas-second-deepseek-moment/.

35 Bao, "Beijing embraces DeepSeek to lead AI adoption as it looks for new growth drivers."

36 Cheng, Evelyn. "BYD Shares Hit Record High after EV Maker Rolls out Driver Assistance Tech with DeepSeek's AI Help." CNBC, February 11, 2025. https://www.cnbc.com/2025/02/11/byd-rolls-out-driver-assist-tech-for-evs-with-deepseeks-ai-help.html.

37 Creemers, Roger and Louise Marie Hurel, "Limits of Economic Deterrence in the US-China Tech Competition," Royal United Services Institute, March 14, 2025. https://rusi.org/explore-our-research/publications/commentary/limits-economic-deterrence-us-china-tech-competition.

38 Morgan Stanley. "A Watershed Moment for AI," Morgan Stanley, February 25, 2025. https://www.morganstanley.com/insights/articles/deepseek-ai-watershed-moment.

39 Feakin, Tobias "DeepSeek's Disruption: Geopolitics and the Battle for AI Supremacy," Royal United Services Institute, February 7, 2025. https://www.rusi.org/explore-our-research/publications/commentary/deepseeks-disruption-geopolitics-and-battle-ai-supremacy.

40 Ibid.

41 Steakin, Will and Soo Rin Kim, "OpenAI's Sam Altman once warned America about Trump. Now he's partnering with him," ABC News, January 27, 2025. https://abcnews.go.com/US/openais-sam-altman-warned-america-trump-now-partnering/story?id=118145337.

42 De Chant, Tim. "Stargate will use solar and batteries to power $100B AI venture," Tech Crunch, January 24, 2025, https://techcrunch.com/2025/01/24/stargate-will-use-solar-and-batteries-to-power-100b-ai-venture/.

43 Altman, Sam (@sama). "deepseek's r1 is an impressive model, particularly around what they're able to deliver for the price." Twitter, January 27, 2025. https://x.com/sama/status/1884066337103962416

44 Olcott, Eleanor, and Cristina Criddle. "OpenAI Says It Has Evidence China's DeepSeek Used Its Model to Train Competitor." *Financial Times*, January 29, 2025. https://www.ft.com/content/a0dfedd1-5255-4fa9-8ccc-1fe01de87ea6.

45 OpenAI,. "Terms of Use," OpenAI, December 11, 2024, https://openai.com/policies/terms-of-use/.

46 Conger, Kate, Ryan Mac, and Cade Metz. "Twitter Accuses Microsoft of Improperly Using Its Data." *New York Times*, May 18, 2023. https://www.nytimes.com/2023/05/18/technology/twitter-microsoft-misusing-data.html.

47 Musk, Elon (@elonmusk). "They trained illegally using Twitter data. Lawsuit time." Twitter, April 19, 2023. https://x.com/elonmusk/status/1648784955655192577.

48 Winston & Strawn LLP. "Is AI Distillation by DeepSeek IP Theft?" Winston & Strawn LLP, March 12, 2025. https://www.winston.com/en/insights-news/is-ai-distillation-by-deepseek-ip-theft.

49 Charles Rollet, "Zuck shrugs off DeepSeek, vows to spend hundreds of billions on AI," Tech Crunch, 29 January 2025, https://techcrunch.com/2025/01/29/zuck-shrugs-off-deepseek-vows-to-spend-hundreds-of-billions-on-ai/.

50 Rollet, Charles. "Zuck Shrugs off DeepSeek, Vows to Spend Hundreds of Billions on AI | TechCrunch." TechCrunch, January 29, 2025. https://techcrunch.com/2025/01/29/zuck-shrugs-off-deepseek-vows-to-spend-hundreds-of-billions-on-ai/.

51 Amodei, Dario. "On DeepSeek and Export Controls." Dario Amodei, January 28, 2025. https://darioamodei.com/on-deepseek-and-export-controls.

52 Jolly, Jasper. "Tesla Takes EU to Court over Tariffs on EVs Made in China." *The Guardian*, January 27, 2025. https://www.theguardian.com/technology/2025/jan/27/tesla-takes-eu-to-court-over-tariffs-on-evs-made-in-china-elon-musk.

53 Feldstein, Steven. "Why Catching up to Starlink Is a Priority for Beijing." Carnegie Endowment for International Peace, September 3, 2024. https://carnegieendowment.org/emissary/2024/08/china-starlink-qianfan-satellite-internet-launch-priority?lang=en.

54 Oberoi, Herain. "Securing DeepSeek and Other AI Systems with Microsoft Security | Microsoft Security Blog." Microsoft, February 13, 2025. https://www.microsoft.com/en-us/security/blog/2025/02/13/securing-deepseek-and-other-ai-systems-with-microsoft-security/.

55 Amazon Staff. "DeepSeek-R1 Now Available as a Fully Managed LLM Model in Amazon Bedrock." Amazon, March 10, 2025. https://www.aboutamazon.com/news/aws/aws-deepseek-r1-fully-managed-generally-available.

56 Bradshaw, Tim, and Michael Acton. "Does DeepSeek Offer Apple's Faltering AI Strategy a Lifeline?" *Financial Times*, January 29, 2025. https://www.ft.com/content/3b932083-e459-4db6-a8da-7e636b159412.

57 Samson, Adam, and John Foley. "Wall Street's AI 'Bubble' Echoes Dotcom Excesses, Ray Dalio Warns." *Financial Times*, January 28, 2025. https://www.ft.com/content/eef8dbc9-bd04-4502-bdc2-1092aa4251b2.

58 Ibid.

59 Hammond, George. "Silicon Valley's Largest Start-Ups to Shun IPOs in 2025." *Financial Times*, January 10, 2025. https://www.ft.com/content/b9d7b633-c611-4c09-b02e-5855dfaa0dfb.

60 Griffith, Erin. "They've Been Waiting Years to Go Public. They're Still Waiting." *New York Times*, February 18, 2025. https://www.nytimes.com/2025/02/18/technology/tech-ipo-delays.html.

61 Hammond, "Silicon Valley's largest start-ups to shun IPOs in 2025."

62 Hughes, Jennifer. "The Trouble with IPOs." *Financial Times*, February 19, 2025. https://www.ft.com/content/8c10966e-f7cb-4793-a7e5-7e8ff59a8909.

63 Patil, Sameer, and Prithvi Gupta. "The Digital Silk Road in the Indo-Pacific: Mapping China's Vision for Global Tech Expansion." Observer Research Foundation, January 3, 2024. https://www.orfonline.org/research/the-digital-silk-road-in-the-indo-pacific-mapping-china-s-vision-for-global-tech-expansion.

64 U.S. Mission Vietnam. "Fact Sheet: 2024 Quad Leaders' Summit," U.S. Embassy and Consulate in Vietnam, September 21, 2024. https://vn.usembassy.gov/fact-sheet-2024-quad-leaders-summit/.

65 Spektor, Matias. "In Defense of the Fence Sitters." *Foreign Affairs*, April 18, 2023. https://www.foreignaffairs.com/world/global-south-defense-fence-sitters.

66 Kao, Kimberley. "OpenAI to Open Asia-Pacific Hub in Singapore," *Wall Street Journal*, October 9, 2024. https://www.wsj.com/tech/ai/openai-to-open-asia-pacific-hub-in-singapore-3f26eb32.

67 Online Bureau, "Alibaba Cloud unveils AI offerings to advance Malaysia's AI agenda," ET CIO, February 28, 2025, https://ciosea.economictimes.indiatimes.com/amp/news/next-gen-technologies/alibaba-cloud-unveils-ai-offerings-to-advance-malaysias-ai-agenda/118615252.

68 Latiff, Rozanna, and Fanny Potkin. "Nvidia to Partner Malaysia's YTL Power in $4.3 Bln AI Development Project." Reuters, December 8, 2023. https://www.reuters.com/technology/nvidia-talks-with-malaysias-ytl-data-center-deal-sources-2023-12-08/.

69 Noor, Elina, and Binya Kanitroj. "Speaking in Code: Contextualizing Large Language Models in Southeast Asia." Carnegie Endowment for International Peace, January 6, 2025. https://carnegieendowment.org/research/2025/01/speaking-in-code-contextualizing-large-language-models-in-southeast-asia?lang=en.

70 Ibid.

71 The White House. "Fact Sheet: President Donald J. Trump takes action to enhance America's AI leadership," The White House, January 23, 2025, https://www.whitehouse.gov/fact-sheets/2025/01/fact-sheet-president-donald-j-trump-takes-action-to-enhance-americas-ai-leadership/.

72 Barath Harithas et al., "'Liberation Day' Tariffs Explained," Center for Strategic and International Studies, April 3, 2025, https://www.csis.org/analysis/liberation-day-tariffs-explained. At the time of publication, Trump administration tariffs on China continued to rapidly evolve and expand.

73 Creemers and Hurel, "Limits of Economic Deterrence in the US-China Tech Competition."