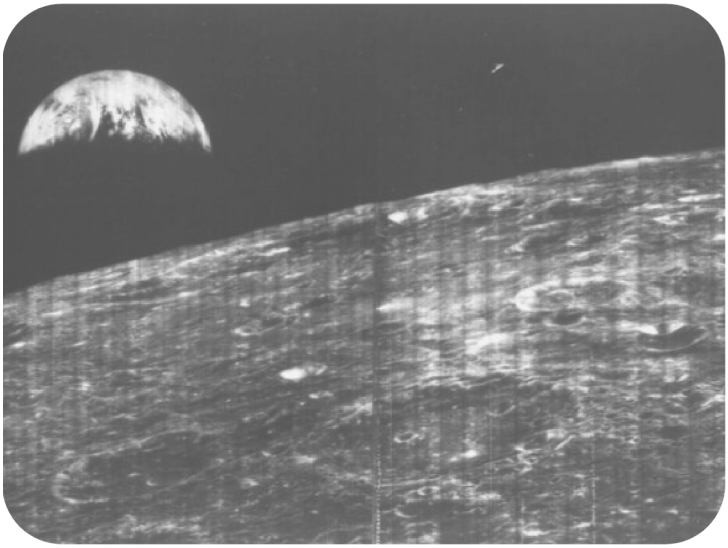
AINOW



US-China AI Race: AI Policy as Industrial Policy

AI Now Institute

Apr 11, 2023

The so-called “AI race” between the US and China is increasingly used by a constellation of industry and national security actors to push back against regulatory intervention targeting US Big Tech companies. In turn, there has been rapid policy movement towards greater state support for large-scale AI development.

This has surfaced in at least three policy domains: antitrust or pro-competition regulation; data privacy; and industrial policy that increases government support for AI development.

The rhetoric around the US-China AI race has evolved from a sporadic talking point to an increasingly institutionalized position, represented by collaborative initiatives between government, military, and tech-industry actors and reinforced by legislation and regulatory debates.

These initiatives crystallize the notion of AI systems (and the companies that produce them) not merely as commercial products but foremost as strategic national assets.

In the 2019 AI Now Report, we flagged the emergence of the so-called “AI arms race” between US and China as a lens gaining currency in public discourse.[1] Identifying the loudest proponents of this narrative—predominantly voices from the tech industry and the US defense establishment—

illuminated the interests and interlocking power structures that are bolstered by this particular view of technological progress. In the US, it was clear that the so-called "AI race" against China not only kindled an appetite, across party lines[2], for increased support of escalated AI development and deployment, but also served to push back against calls for slower, more intentional development and stronger regulatory protections.

Since then, this rhetoric has not just persisted, but has expanded in influence, and is being more deliberately wielded in the policy sphere to advocate for interests aligned with the biggest tech corporations. Efforts to stoke the fear that this is a race (or an "AI-accelerated competition"[3]) in which the US is already lagging behind—or, in the words of the Special Competitive Studies Project (SCSP), an organization chaired by Eric Schmidt, former CEO of Google (now Alphabet), is "perilously and unwittingly close to ceding"[4]—are designed to emphasize urgency and spur policy action.[5] The timeline below shows that the AI race against China has evolved from a sporadic talking point to an increasingly institutionalized position, represented by collaborative initiatives between government, military, and tech-industry actors and reinforced by legislation and regulatory debates. We see, for example, the seamless evolution of the congressionally mandated National Security Commission on Artificial Intelligence (NSCAI)[6] to the privately funded SCSP[7], founded in October 2021, with the same leadership (Eric Schmidt and former NSA official Ylli Bajraktari) and stated goals as the NSCAI. The SCSP explicitly builds on the legacy of the 1956 Rockefeller Cold War Special Studies Project and is framed around adapting Cold War-era thinking to "the age of AI."[8]

These initiatives crystallize the notion of AI (and a growing list of other technologies like 5G, quantum computing, and blockchain) as strategic technologies that must be viewed not merely as commercial products but foremost as strategic national assets, along with the companies that produce them. (The SCSP refers to tech platforms as "tools of statecraft too powerful to ignore."[9]) This logic translates into the policy sphere as a way to push back against regulatory intervention targeting these companies and in pursuit of greater state support for a specific kind of large-scale AI innovation. This is most noticeable in at least three policy domains: antitrust or pro-competition regulation; data privacy regulation; and industrial policy measures that allocate public funding toward AI development.

Arguments against antitrust based on the US-China "AI race" are being cynically promoted by industry interests—yet the Biden administration, with its Executive Order on Promoting Competition in the American Economy, offers a clear refutation to this logic: it proposes a competitive tech industry as the clearest path to advocating for the national interest. For those genuinely working toward that goal, competition enforcement is a key part of how we get there.

In 2019, Sheryl Sandberg (then COO at Facebook) warned that the backlash against American tech companies like her employer ignored that Chinese companies weren't under similar scrutiny: "While people are concerned with the size and power of tech companies, there's also a concern in the United States with the size and power of Chinese companies, and the realization that these companies are not going to be broken up."[10] Mark Zuckerberg's personal notes for a congressional hearing, photographed by the Associated Press[11], were even more explicit: "Break up FB? US tech companies key asset for America; break up strengthens Chinese companies."

As renewed antitrust enforcement and pro-competition regulation gain global momentum[12], not least in the Biden administration[13], this defense and its proponents have only grown louder. One version of this argument exploits the bipartisan concern about Chinese economic dominance and warns that anyone considering "dismantling US firms that invest heavily in AI [...] should think twice."[14] More notable has been the proliferation of a national security-focused rationale for this same argument. In 2021, CCIA, an industry lobby group whose members include Amazon, Apple, Google, Facebook, and others, published a white paper called "National Security Issues Posed by House Antitrust Bills"[15] that canvases several reasons why pro-competition legislation threatens the national interest, including:

- The American Innovation and Choice Online Act[16] would affect companies' ability to resist malicious activity.
- The Augmenting Compatibility and Competition by Enabling Service Switching (ACCESS) Act[17] could impact national security by compelling leading US tech companies to share data and ensure interoperability with other organizations, including foreign entities.
- The Platform Competition and Opportunity Act[18] would severely restrict US companies' ability to make mergers and acquisitions but would not apply to foreign rivals.
- The Ending Platform Monopolies Act[19] would also disadvantage US firms compared to their international competitors due to restrictions on mergers and acquisitions.

These lobbyists argue that together, these bills would threaten national security by risking the misuse of US intellectual property and data; reducing US law enforcement's access to effective data; reducing the US's ability to combat foreign misinformation; impeding cybersecurity efforts; giving foreign companies an advantage over US companies without any reciprocity; and "undermining U.S. tech leadership."[20]

This lobbying attempt was followed by a similarly worded letter[21] from former senior defense officials. A subsequent *Politico* investigation exposed that all twelve signatories were tied to organizations linked to or funded by Big Tech.[22]

However, there are also promising signals that this narrative is not being internalized wholesale within the US government. In a bold pro-competition statement in July 2021, the Biden administration's Executive Order on Competition took direct aim at the logic of this kind of anti-competition lobbying, declaring that "the answer to the rising power of foreign monopolies and cartels is not the tolerance of domestic monopolization, but rather the promotion of competition and innovation by firms small and large, at home and worldwide." [23]

Meanwhile, and rather awkwardly for those using the argument that China's threat should preclude pro-competition regulation in the US, the Chinese government has made several public moves toward tougher antitrust enforcement of its own national champions such as Alibaba and Tencent.[24] Some argue this signals the Chinese state reasserting control over private industry, by using the threat of competition enforcement to nudge the companies to align their business strategies with the government's industrial policy.[25] FTC chair Lina Khan, when asked to make sense of China's growing and aggressive stance toward its own Big Tech players, tacitly gestured to this analysis: "There's been a recognition across jurisdictions that if you allow unfettered monopoly power to concentrate, its power can rival that of the state."[26]

Loosely backed claims around Chinese approaches to privacy regulation are being used to advocate for a race to the bottom.

In the sphere of data privacy and AI accountability, similar to the conversation around antitrust, the US-China "AI race" is wielded as a lever advocating against further regulation. In this case, any restrictions or added friction proposed in how companies utilize the data of its users is contrasted against the notion that Chinese companies operate with unfettered access to citizen's data, and that the Chinese state exclusively supports rather than hinders this access.[27] Mark Zuckerberg noted that consent requirements for facial recognition create the risk of "falling behind Chinese competitors."[28] More recently, the vice president of the US Chamber of Commerce argued that the proposed federal privacy bill, American Data Privacy and Protection Act, intended to bring the US in line with the EU and a growing number of countries with data privacy laws, could hinder the competitiveness of US companies at a time when "the US is in a global race with China to lead the world in AI."[29] While the Chinese government's record of surveillance and intrusion into its citizens' lives is well documented, these claims that frame China as a regulatory vacuum are contradicted by the growing body of data security and data protection regulation in China.[30] While these analysts neither endorse Chinese privacy regulation as sufficient nor equate these laws with guaranteeing meaningful enforcement, they do dispel any lazy assertions that Chinese companies have unregulated access to the personal data they are permitted to collect and use.[31] They also draw more attention to the US as a global outlier when it comes to the lack of federal privacy protections.[32]

The other loosely backed argument in policy circles is that Chinese tech companies benefit from the claim that Chinese society doesn't care as much about privacy.[33] Kai-Fu Lee (a venture capitalist and

former Big Tech engineer), for example, notes that "Chinese users tend to be more willing to trade some degree of privacy for security or convenience."[34] Indeed, policy experts point out that US legislative proposals to counter Chinese data collection do not address the enormous amounts of user data collected and monetized by the likes of US-based Google, Apple, Facebook, and Amazon.[35] This assertion, too, is contradicted by the growing consumer and worker activism in China that resists technology-related concerns, such as the hotly debated issue of the use of facial recognition in public spaces and residential areas.[36]

We're starting to see similar anti-regulation arguments emerge in the context of algorithmic or AI accountability frameworks. The SCSP (the privately funded lobbying organization run by former tech industry executives and national security officials), for example, distances the US from the EU, which is debating legislation intended to regulate AI technologies. Instead, one argument goes, the US should aim for "non-regulatory approaches to governance" for AI, without clearly defining what those approaches are or how they might work in practice.[37]

Increasing bipartisan consensus favors greater government intervention for developing AI as a strategic technology to ensure future prosperity.

While policy initiatives often pitch this as a means to "democratize" and deconsolidate the AI industry, without a deliberate effort, this claim is on shaky ground. Current industrial policy proposals claim to "democratize AI," but risk being ultimately structured to in ways that entrench Big Tech firms' advantage and power.

The "AI race" with China has perhaps been the single most productive argument behind the proliferation of policy instruments that increase government support and funding for the development of AI and other ancillary strategic technologies like semiconductors.[38] While the phrase "industrial policy" has historically been an uncomfortable and polarizing term in US politics given its associations with centrally directed economies (the SCSP has called it a "fraught label"), it is receiving increasing bipartisan support—a reflection of a growing trend in US politics to associate the national interest with the promotion of certain sectors of the economy.[39]

Notably, this argument in favor of greater government support to develop the AI industry originally took shape in the form of a critique of private-sector consolidation in the tech industry. The NSCAI was forthcoming in its 2022 final report that the consolidation of the AI industry is a "threat" to US competitiveness, with a detailed analysis of how the "brain drain" from other sectors of the economy (from small AI startups to local, state, and federal government) to a few big Silicon Valley tech firms, alongside the astronomical compute costs required to train large-scale AI models means that "AI startups have narrowing paths to growth in the United States."[40] They even argue that a highly

concentrated tech industry is contributing to the lack of diversity in the AI field, which limits the ability to "build equitable, inclusive systems."[41] This is a problem, the argument goes, because commercial priorities are driving the technology agenda rather than an organized public-private effort, and so the eventual recommendations are to "blend" public and private resources into these strategic technology domains.

This concern with consolidation in private industry, however, has remained superficial in policy proposals that have followed from other organizations in the space. The National AI Research Resource (NAIRR), an initiative designed by the National Science Foundation and the White House Office of Science and Technology Policy, cites the NSCAI's report while proposing a kind of AI data and compute infrastructure commons that researchers around the country can access, with the aim of "democratizing AI" and addressing consolidation.[42] However, as we pointed out in an official submission to the NAIRR task force, the NAIRR project as it is currently envisioned falls back on "leveraging public-private partnerships" to provide this resource rather than the government creating these compute resources themselves, building an alternative to Big Tech infrastructure.[43] This reinforces that the only plausible short- to mid-term scenario is that the infrastructure required for NAIRR would be licensed from the very same Big Tech companies that currently control them. The director of the Stanford Institute for Human-Centered Artificial Intelligence (HAI), which credits itself with first conceptualizing the NAIRR project, makes these dependencies explicit, arguing that "the commercial cloud providers are already doing the innovation, and they invest massive amounts of money to keep it up-to-date," and that therefore there is no need for the government to create these resources themselves.[44] The NSCAI and SCSP's recommendations have also paved the way for a slew of legislation that explicitly focuses on bolstering government R&D spending toward American tech development (including subsidies for manufacturing) with no discernible focus on reducing the dependencies on Big Tech data or compute infrastructures.[45]

The inherent contradictions abound, though they are rarely broken down in any detail. On the one hand, rhetorical moves that draw on the "arms race" narrative position the "command and control" Chinese economy with its often-caricatured lack of state-private divide in contrast to the freedom of private enterprise in the Western liberal political economy (this is a key justification for the recent restrictions on Americans investing in Chinese technology.[46]) But policy recommendations designed to address the arms race are designed around the development of US industrial policy in the sphere of AI and related strategic technologies, putting this differentiator on increasingly shaky ground. While the infusion of public investment has been loosely conflated with the "democratization" of AI, in practice the identification of AI as a strategic national asset would end up bolstering the advantage of the largest tech companies and eventually protect these companies from structural regulation. All of these movements are presently unfolding largely unchecked, and deserve close scrutiny.

See a timeline of events related to the US / China AI Arms Race below.

Footnotes

1. See Kate Crawford, Roel Dobbe, Theodora Dryer, Genevieve Fried, Ben Green, Elizabeth Kaziunas, Amba Kak, Varoon Mathur, Erin McElroy, Andrea Nill Sánchez, Deborah Raji, Joy Lisi Rankin, Rashida Richardson, Jason Schultz, Sarah Myers West, and Meredith Whittaker, *AI Now 2019 Report*, AI Now Institute, December 2019; see also Meredith Whittaker, Shazeda Ahmed, and Amba Kak, "China in Global Tech Discourse," AI Now Institute, Medium, May 27, 2021. ↩

2. See Peter Thiel, "Good for Google, Bad for America," *New York Times*, August 1, 2019; Jake Harrington and Riley McCabe, "What the U.S. Innovation and Competition Act Gets Right (and What It Gets Wrong)," Center for Strategic and International Studies (CSIS), July 1, 2021; and David E. Sanger, Catie Edmondson, David McCabe, and Thomas Kaplan, "Senate Poised to Pass Huge Industrial Policy Bill to Counter China," *New York Times,* June 7, 2021. ↩

3. National Security Commission on Artificial Intelligence, *Final Report*, 2021. See page 8. ↩

4. Special Competitive Studies Project, "Mid-Decade Challenges to National Competitiveness," September 2022. See page 18. ↩

5. See Meredith Whittaker and Lucy Suchman, "The Myth of Artificial Intelligence," *American Prospect*, December 8, 2021. ↩

6. The National Security Commission on Artificial Intelligence, accessed March 3, 2023. Note that the NSCAI ceased operations on October 1, 2021. Permanent archive of the NSCAI website. ↩

7. Special Competitive Studies Project, accessed March 3, 2023. ↩

8. See "What We Do," Special Competitive Studies Project, accessed March 3, 2023; see also Henry Kissinger, Eric Schmidt, and Daniel Huttenlocher, *The Age of AI: And Our Human Future* (New York: Back Bay Books, 2022). ↩

9. Special Competitive Studies Project, "Mid-Decade Challenges to National Competitiveness." See page 22. ↩

10. Nitasha Tiku, "Big Tech: Breaking Us Up Will Only Help China," *Wired*, May 23, 2019. ↩

11. See Alix Langone, "The Photojournalist Who Took a Picture of Mark Zuckerberg's Notes Reveals Why He Did It," *Time*, April 11, 2018, https://time.com/5236407/mark-zuckerberg-notes-testimony-photo; and Andrea Woo (@AndreaWoo), "Mark Zuckerberg's notes today, from AP photojournalist Andrew Harnik," Twitter, April 10, 2018, 8:36 p.m. ↩

12. See Sam Shead, "The Walls Are Closing in on Big Tech as Global Regulators Crack Down," CNBC, December 15, 2020; European Commission, "Digital Markets Act: Rules for Digital Gatekeepers to Ensure Open Markets Enter into Force," press release, October 31, 2022; Ivan Mehta, "South Korea to Probe Apple and Google Over In-App Payment Rule Break," TechCrunch, August 9, 2022; and Australian Competition & Consumer Commission, "Digital Platform Services Inquiry 2020–25: Project Overview," n.d., accessed March 3, 2023. ↩

13. See White House, "Executive Order on Promoting Competition in the American Economy," July 9, 2021; American Innovation and Choice Online Act, S. 2992, 117th Congress (2021–2022); and Ending Platform Monopolies Act, H.R. 3825, 117th Congress (2021–2022). ↩

14. See Theadora Soter, "Direction of Antitrust Enforcement Could Harm American Global Competitiveness, Says Head of Think Tank," Broadband Breakfast, April 11, 2022; Robert D. Atkinson, "Why the United States Needs a National Advanced Industry and Technology Agency," Information Technology & Innovation Foundation (ITIF), June 17, 2021; Robert D. Atkinson, "Advanced Industries Are Essential for U.S. Competitiveness," Information Technology & Innovation Foundation (ITIF), February 3, 2023; and Ian Clay and Robert D. Atkinson, "Wake Up, America: China Is Overtaking the United States in Innovation Capacity," Information Technology & Innovation Foundation (ITIF), January 23, 2023. ↩

15. Computer & Communications Industry Association, "National Security Issues Posed by House Antitrust Bills," September 2021. ↩

16. American Innovation and Choice Online Act, S. 2992. ↩

17. ACCESS Act of 2021, H.R. 3849, 117th Congress (2021–2022). ↩

18. Platform Competition and Opportunity Act of 2021, H.R. 3826, 117th Congress (2021–2022). ↩

19. Ending Platform Monopolies Act, H.R. 3825, 117th Congress (2021–2022). ↩

20. Computer & Communications Industry Association, "National Security Issues Posed by House Antitrust Bills." ↩

21. Zachary Basu and Margaret Harding McGill, "Ex-intel officials claim antitrust could hurt U.S. in China tech race," Axios, September 15, 2021. ↩

22. Emily Birnbaum, "Group Backed by Tech Giants Claims Thousands of Members. Many Have Never Heard of It," *Politico*, March 30, 2022. ↩

23. White House, "Executive Order on Promoting Competition in the American Economy." ↩

24. See Jana Kasperkevic, "Chinese Antitrust 2.0: Why Is China Going After Its Big Tech?" ProMarket, April 9, 2021; and "Alibaba And Tencent Fined In China Tech Crackdown," *Forbes*, July 13, 2022. ↩

25. See Angela Huyue Zhang, "What Does Beijing Achieve from Regulating Its Big Tech?" U.S.-Asia Law Institute (USALI), April 20, 2021; and see generally Angela Huyue Zhang, *Chinese Antitrust Exceptionalism* (Oxford: Oxford University Press, 2021). ↩

26. "CNBC Transcript: Federal Trade Commission Chair Lina Khan Speaks Exclusively with Andrew Ross Sorkin and Kara Swisher Live from Washington, D.C. Today," CNBC, January 19, 2022. ↩

27. See Graham Webster and Scarlet Kim, "The Data Arms Race Is No Excuse for Abandoning Privacy," Foreign Policy, August 14, 2018; and "AI Arms Race: China and the Confucian-Communist Edge," Eye on AI, March 8, 2019. ↩

28. Natasha Lomas, "Zuckerberg Urges Privacy Carve Outs to Compete with China," TechCrunch, April 10, 2018. ↩

29. Jordan Crenshaw, "What Should and Should Not Be Included in a National Privacy Bill," U.S. Chamber of Commerce, September 13, 2022. ↩

30. See Rogier Creemers, "China's Emerging Data Protection Framework," *Journal of Cybersecurity* 8, no. 1 (2022); Amba Kak and Samm Sacks, "Shifting Narratives and Emergent Trends in Data-Governance Policy: Developments in China, India, and the EU," policy memo, Yale Law School, Paul Tsai China Center, August 2021; Samm Sacks, Qiheng Chen, and Graham Webster, "Five Important Takeaways From China's Draft Data Security Law," New America, July 9, 2020; Graham Webster, "Chinese Experts Push Data Privacy as Epidemic Systems Proliferate," New America, March 2, 2020; and Graham Webster and Rogier Creemers, "A Chinese Scholar Outlines Stakes for New 'Personal Information' and 'Data Security' Laws (Translation)," New America, May 28, 2020. ↩

31. Samm Sacks and Lorand Laskai, "China's Privacy Conundrum," *Slate*, February 7, 2019. ↩

32. Ralph Jennings, "What the US Might Learn From China's Data Privacy Rules," Voice of America (VOA), March 28, 2022. For example, the US government's proposed ban on Chinese social media company TikTok, based on potential theft or misuse of American's data, has prompted many to point out that a federal privacy law, much more than an app ban, would go further to protect and mitigate the abuse of personal data in the US. See Glenn S. Gerstell, "The Problem with Taking TikTok Away from Americans," *New York Times*, February 1, 2023; and Evan Greer (@evan_greer), "Let's say the Chinese government was using TikTok to surveil Americans. If you ban TikTok, the Chinese gov can just legally purchase the same info from data brokers, because the US has almost no privacy laws. Don't ban TikTok, pass a damn privacy law," Twitter, February 1, 2023, 6:42 p.m. ↩

33. See "AI Arms Race: China and the Confucian-Communist Edge"; and Qian Zhecheng, "Chinese Consumers Most Willing to Trade Privacy for Convenience," Sixth Tone, June 15, 2018. ↩

34. Lee also argues that "views about privacy are deeply embedded culturally. In China, there's pretty strong enforcement of laws against those who sell users' private data. The punishments are probably stronger even than in the U.S. or Europe. At the same time, Chinese users tend to be more willing to trade some degree of privacy for security or convenience." See Peter Schwartz, "Dr. Kai-Fu Lee on Why AI Redefines What It Means to Be Human," Salesforce, September 7, 2018. ↩

35. See Alexandra S. Levine, "A U.S. Privacy Law Seemed Possible This Congress. Now, Prospects Are Fading Fast," *Politico*, June 1, 2022; and Danny Crichton, "GDPR, China and Data Sovereignty Are Ultimately Wins for Amazon and Google," TechCrunch, May 29, 2018. ↩

36. See Lakshmi Iyengar, "Major Chinese City Pushes Back Against Widespread Facial Recognition," Radii, October 30, 2020; and Whittaker, Ahmed, and Kak, "China in Global Tech Discourse." ↩

37. Special Competitive Studies Project, "Mid-Decade Challenges to National Competitiveness." See page 35. ↩

38. Joel Mathis, "The CHIPS Act and Industrial Policy, Explained," *The Week*, August 2, 2022. ↩

39. See David Leonhardt, "An Investment With a Big Return," *New York Times*, June 8, 2021; Scott Lincicome, "Conservative Industrial Policy and the 'China Threat'," Cato Institute (blog), August 28, 2020; Scott Lincicome and Huan Zhu, "Questioning Industrial Policy: Why Government Manufacturing Plans Are Ineffective and Unnecessary," Cato Institute, 2021; and David E. Sanger, Catie Edmondson, David McCabe, and Thomas Kaplan, "Senate Poised to Pass Huge Industrial Policy Bill to Counter China," *New York Times*, June 7, 2021. ↩

40. National Security Commission on Artificial Intelligence, *Final Report*. See page 187. ↩

41. Ibid. ↩

42. See Amba Kak, Brittany Smith, Sarah Myers West, and Meredith Whittaker, "Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource," AI Now Institute and Data and Society, October 1, 2021; and NAIRR Task Force, "Envisioning a National Artificial Intelligence Research Resource (NAIRR): Preliminary Findings and Recommendations, NAIRR-TF-Interim-Report-2022.pdf. ↩

43. Kak, Smith, West, and Whittaker, "Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource." ↩

44. See Jeffrey Mervis, "U.S. Law Sets Stage for Boost to Artificial Intelligence Research," Stanford Human-Centered Artificial Intelligence, January 19, 2021; John Etchemendy and Fei-Fei Li, "National Research Cloud: Ensuring the Continuation of American Innovation," Stanford Human-Centered Artificial Intelligence, March 28, 2020; and John Thornhill, "A Public Research Cloud Would Stimulate Innovation," *Financial Times*, October 18, 2020. ↩

45. See United States Innovation and Competition Act of 2021, S. 1260, 117th Congress (2021–2022), (passed Senate); United States Innovation and Competition Act of 2021, H.R. 4521, 117th Congress (2021–2022), (passed Senate); and Advancing American AI Act, S. 1353, 117th Congress (2021–2022), (reported to Senate). ↩

46. White House, "Executive Order on Addressing the Threat from Securities Investments That Finance Certain Companies of the People's Republic of China," June 3, 2021. ↩