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After the AI Crash



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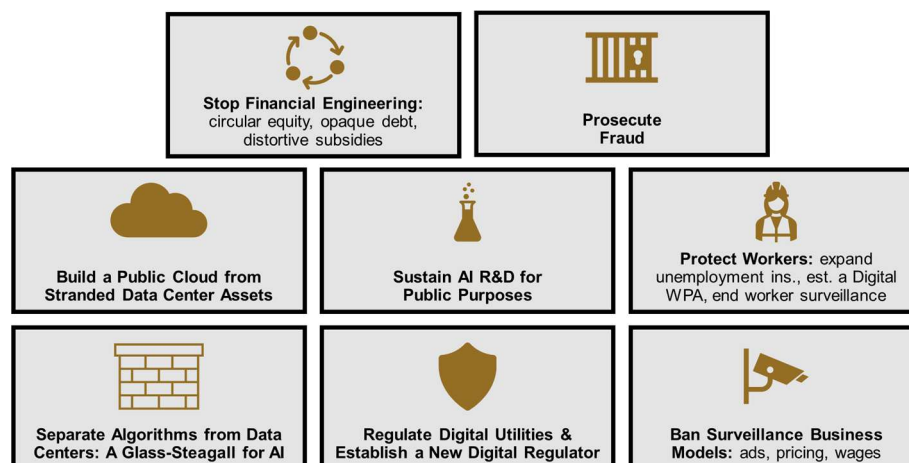
Introduction

Summary

Public concern about the level of AI investment is everywhere. While some compare today's scenario to the dot-com bubble, the economy's overreliance on AI investment, coupled with opaque financial engineering, means that a market correction could look more like the 2008 Great Recession, an economy-wide crash with systemic consequences. After such a crash, Congress will scramble to identify a reform agenda. In a rush, broader reforms that take time to formulate get shelved for quick action.

It doesn't have to be so. Instead of waiting for the crisis and hastily developing insufficient policies, lawmakers should prepare for this anticipated crisis now. Of course, a response depends on exactly how a crash comes to pass. But for meaningful reforms to have a chance, policymakers need to begin debating them.

To that end, this paper describes how a crash might occur and outlines policies for Congress to consider in response. First, Congress could curtail the financial engineering—equity investments, opaque debt, and distortive subsidies—that might become the proximate cause of the crash, and the government should prosecute related fraud. Illegal behavior has been part of many crises, but the government has shied away from prosecuting such crimes recently. Second, Congress should turn data centers that become stranded assets into a public cloud and sustain AI research and development (R&D) for public purposes that companies may stop funding. Congress should also protect workers by expanding unemployment insurance, creating a digital Works Progress Administration, and limiting worker surveillance. Finally, Congress should establish a Glass-Steagall for AI, utility-style regulations for digital utilities, a new regulatory agency, and a ban on extractive business models.



Bubble Burst or an Economy-Wide Crash?

The AI economy has a math problem: Companies are investing trillions of dollars based on tens of billions of dollars in revenues. Analysts at J.P. Morgan anticipate \$5 trillion of AI infrastructure investment in the next five years.¹ They estimate that the industry will need to generate annual revenues of \$650 billion to justify this level of investment,² while consultants at Bain & Co. estimate \$2 trillion in needed annual revenues.³ Yet, OpenAI and Anthropic earned \$13 billion and \$4 billion, respectively, in 2025 revenues.⁴ OpenAI's own financial expectations suggest negative cash flow until 2030,⁵ and Anthropic expects a small profit no sooner than 2029.⁶ Alphabet, Meta, Amazon, and others may experience increased marginal revenue from integrating AI into existing products, but that is far from certain. While the adoption of AI may precipitate many types of crises requiring policy responses (e.g., mass job loss, national security incident), this paper focuses on the economic and financial crises of over-investment.

The trillions of anticipated spending are going into AI infrastructure—chiefly, data centers and the chips inside of them. Currently, there are over 3,000 data centers planned or in construction in the U.S.⁷ Hyperscalers—Alphabet, Microsoft, Amazon, Meta, and Oracle—anticipate approximately \$700 billion of capital expenditures (capex) in 2026 alone, which represents multiples of their respective investments for 2021, as shown in Figure 1.

¹ Tarek Hamid et al., *AI Capex - Financing The Investment Cycle 1–2*, J.P. MORGAN N. AM. FUNDAMENTAL RSCH. (Nov. 10, 2025).

² *Id.* at 48.

³ David Crawford, Anne Hoecker & Dana Aulanier, *Technology Report 2025 33*, BAIN & CO. (2025).

⁴ Berber Jin, *Anthropic Is on Track to Turn a Profit Much Faster Than OpenAI*, WALL ST. J. (Nov. 11, 2025), <https://www.wsj.com/tech/ai/openai-anthropic-profitability-e9f5bcd6>; both companies have more recently reported *annualized* revenues of \$19 billion, Ashley Capoot, *Sam Altman Says OpenAI Will Top \$20 Billion in Annualized Revenue This Year, Hundreds of Billions by 2030*, CNBC (Nov. 6, 2025), <https://www.cnbc.com/2025/11/06/sam-altman-says-openai-will-top-20-billion-annual-revenue-this-year.html>; Shirin Ghaffary, *Anthropic Nears \$20 Billion Revenue Run Rate Amid Pentagon Feud*, BLOOMBERG (Mar. 3, 2026), <https://www.bloomberg.com/news/articles/2026-03-03/anthropic-nears-20-billion-revenue-run-rate-amid-pentagon-feud>.

⁵ Sri Muppidi & Stephanie Palazzolo, *OpenAI Boosts Revenue Forecasts, Predicts \$111 Billion More Cash Burn Through 2030*, THE INFORMATION (Feb. 20, 2026), <https://www.theinformation.com/articles/openai-boost-revenue-forecasts-predicts-112-billion-cash-burn-2030>.

⁶ *Id.*

⁷ Alex Fitzpatrick, *America's Data Center Growth Hot Spots, Mapped*, AXIOS (Dec. 18, 2025), <https://www.axios.com/2025/12/18/data-center-growth-map-states>.

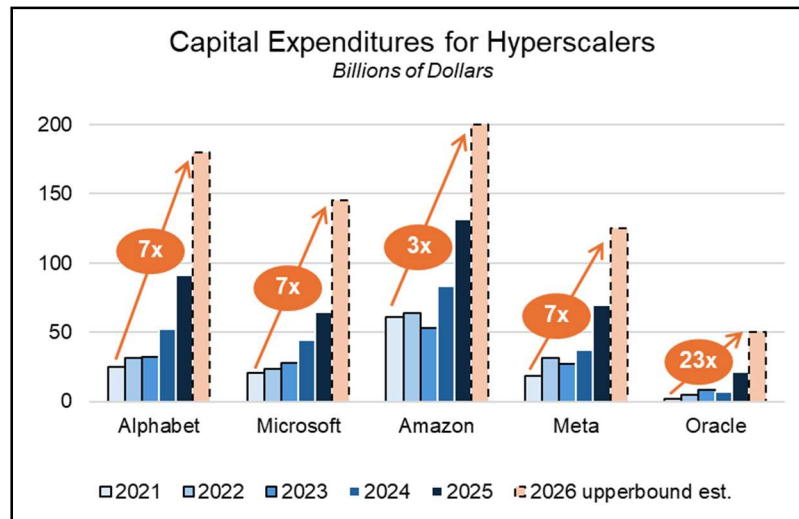


Fig. 1. Hyperscalers' Capex levels (2021-2026E).⁸

To put these figures in context, hyperscalers' 2026 capex is on a path to be a larger share of the U.S. gross domestic product (GDP) than peak capex for the Manhattan Project, the expansion of electricity, the Apollo space program, building the interstate highway system, broadband buildout during the dot-com bubble, and every other capital effort in U.S. history, except for the Louisiana Purchase and maybe the peak of railroad construction.⁹ This may explain why a regular survey of fund managers shows a record high level of concern about capex overinvestment¹⁰ and why chief economists list an AI bubble burst and the AI-related debt pressures as the most worrying macroeconomic trends.¹¹

Ultimately, if investors, financiers, and other market participants stop expecting meaningful returns on investment (ROIs) from this massive capex on a time scale commensurate to their respective asset classes—or if expected ROIs from AI investments are lower than ROI expectations for alternative investment possibilities—

⁸ For underlying data and sources, see *infra* App. 1 and accompanying footnotes.

⁹ Meghan Bobrowsky, Drew An-Pham & Alana Pipe, *Big Tech's AI Push Is Costing a Lot More Than the Moon Landing*, WALL ST. J. (Feb. 7, 2026), <https://www.wsj.com/tech/ai/ai-spending-tech-companies-compared-02b90046> (puts peak railroad investment as lower than AI as a percentage of GDP); Derek Thompson, *AI Could Be the Railroad of the 21st Century. Brace Yourself.*, DEREK THOMPSON SUBSTACK (Nov. 4, 2025), <https://www.derekthompson.org/p/artificial-intelligence-could-be> (puts peak railroad investment as higher than AI as a percentage of GDP).

¹⁰ Michael Hartnett et al., *Global Fund Manager Survey: Capex Too Hot Right Now*, BOFA GLOB. RSCH., 1 & 4 (Feb. 17, 2026).

¹¹ *Chief Economists' Outlook: Insight Report*, WORLD ECON. F. CTR. FOR THE NEW ECON. AND SOC'Y. 5 (Jan. 2026), https://reports.weforum.org/docs/WEF_Chief_Economists_Outlook_January_2026.pdf.

they may reduce or stop future AI financing, move money out of AI, or demand lower valuations, any of which could lead to a market correction.¹² Consider two versions of that market correction: a sectoral bubble burst and an economy-wide crash.

In a sectoral bubble burst, the AI industry experiences most of the harm, similar to the dot-com bubble that burst in the year 2000. Hyperscalers may experience reduced borrowing capacity and increased interest rates after increased exposure to bonds and other debt. They will look for ways to increase profits or reduce losses. This means halting data center construction (especially ones not owned by hyperscalers); firing workers (and contractors and vendors), squeezing more output out of workers they retain, and turning to more automation; looking to new sources of revenues; and pausing monetary outlays on cost centers, including investments in research and development (R&D). Hyperscalers' stocks, and thus retirement portfolios, will take a hit.

Some companies that depend on hyperscaler spending—like “neoclouds” that provide excess compute capacity to hyperscalers, construction companies building data centers, and others—would go out of business while many more will see a dive in their stocks, further hurting retirees and other Americans. Fired workers would have less money to purchase goods and pay bills, many would lose access to employer-sponsored health insurance, and those who remain employed would be even more surveilled in the name of increased productivity. Some commenters have discussed the long-term benefits of a bubble,¹³ but those upsides will be hard to appreciate in the immediate bursting.

With many comparing today's AI bubble with the dot-com bubble,¹⁴ sometimes to minimize this scenario's harm, it's worth recalling the impact of that bubble popping. In Silicon Valley, 200,000 people lost their jobs, and of the estimated 7,000 to 10,000 internet companies launched in the late 1990s and early 2000s, 4,800 no longer existed by mid-2003. This all had broader economic impact too: The U.S. economy entered a broader recession in March 2001; the Nasdaq index lost 80% of its value

¹² Rogé Karma, *Just How Bad Would an AI Bubble Be?*, THE ATLANTIC (Sept. 7, 2025), <https://www.theatlantic.com/economy/archive/2025/09/ai-bubble-us-economy/684128/>.

¹³ See, e.g., Ben Thompson, *The Benefits of Bubbles*, STRATECHERY (Nov. 5, 2025), <https://stratechery.com/2025/the-benefits-of-bubbles/>; Lila Shroff *Even Silicon Valley Says that AI Is a Bubble*, THE ATLANTIC (Mar. 12, 2026), <https://www.theatlantic.com/technology/2026/03/ai-bubble-defenders-silicon-valley/686340/>.

¹⁴ See, e.g., Shroff, *supra* note 13; Jared Bernstein & Ryan Cummings, *Warning: Our Stock Market Is Looking Like a Bubble*, N.Y. TIMES (Oct. 14, 2025), <https://www.nytimes.com/2025/10/14/opinion/ai-bubble-stock-market-tech-stocks.html>.

between its March 2000 peak and the October 2002 trough, with the index not hitting that peak again for 15 years; and the overall stock market declined by \$8.3 trillion in value. The human impact of this was real: seven in ten 401(k) retirement accounts lost one-fifth or more of their value.¹⁵

Even as painful as a sectoral bubble bursting would be, the market correction could go beyond the narrow containment of the technology industry because of both the scale of investment and the distortive features of financial arrangements involved, causing a much deeper and widespread economic crash. First, take the magnitude of AI in today's economy. The "Magnificent Seven" tech stocks, which all rely on today's AI boom, comprise 35% of the stock market.¹⁶ And many other industries, such as construction and commercial real estate, are beneficiaries of their aggressive spending. AI-related investment accounted for over 90% of U.S. GDP growth for the first half of 2025.¹⁷ Without AI infrastructure investments, many analysts warn that the U.S. would already be near or in a recession.¹⁸ Some calculate that we are already approaching the total aggregate investment of telecom infrastructure spending during the dot-com bubble.¹⁹ An AI bubble burst similar in magnitude to the dot-com bust could wipe over \$20 trillion in American household wealth—a far larger hit than the dot-com crash, given households' increased stock holdings and the growing dependence of aggregate consumer spending on the wealthiest stockholders.²⁰ Finally,

¹⁵ For figures in this paragraph, and for a recounting of the dot-com bubble generally, see, SHANE GREENSTEIN, *HOW THE INTERNET BECAME COMMERCIAL: INNOVATION, PRIVATIZATION, AND THE BIRTH OF A NEW NETWORK* 335 (2015); BRIAN MCCULLOUGH, *Pop!*, in *HOW THE INTERNET HAPPENED: FROM NETSCAPE TO THE IPHONE* 160 (2018); DAN CARUSO, *BANDWIDTH: THE UNTOLD STORY OF AMBITION, DECEPTION, AND INNOVATION THAT SHAPED THE INTERNET AGE AND DOT-COM BOOM* (2025). Some of the figures were also affected by the September 11, 2001 terrorist attacks.

¹⁶ Krysta Escobar, *For Investors All-in on Magnificent 7-Led Market, "Equal Weight" Is Trending as Stock Call for 2026*, CNBC (Dec. 12, 2025), <https://www.cnbc.com/2025/12/12/stocks-market-risks-investors-portfolios-2026.html>.

¹⁷ Ben Casselman & Sydney Ember, *The A.I. Boom Is Driving the Economy. What Happens If It Falters?*, N.Y. TIMES (Nov. 22, 2025), <https://www.nytimes.com/2025/11/22/business/the-ai-boom-economy.html>.

¹⁸ See, e.g., Jim Edwards, *The AI Boom Is Unsustainable Unless Tech Spending Goes 'Parabolic,' Deutsche Bank Warns: 'This Is Highly Unlikely,'* FORTUNE (Sept. 23, 2025), <https://fortune.com/2025/09/23/ai-boom-unsustainable-tech-spending-parabolic-deutsche-bank/>.

¹⁹ Doug O'Laughlin, *Lessons from History: The Great Railroad Buildout*, FABRICATED KNOWLEDGE (Dec. 17, 2025), <https://www.fabricatedknowledge.com/p/lessons-from-history-the-great-railroad>.

²⁰ Gita Gopinath, *By Invitation*, 457 THE ECONOMIST 19 (Oct. 2025); Rachel Louise Ensign, *The U.S. Economy Depends More Than Ever on Rich People*, WALL ST. J. (Feb. 23, 2025), <https://www.wsj.com/economy/consumers/us-economy-strength-rich-spending-2c34a571>.

by one macro-economic measure, by late last year, the AI bubble was 17 times larger than the dot-com bubble and four times larger than the 2008 housing bubble.²¹

Next, take the type of financing. As explained further in the next section, hyperscalers have significant cash on hand, but the size of required investment means they have also turned to debt. While the corporate bond market is well understood by investors today, it's worth noting that the modern, mass-market corporate bond was first issued in the 19th century as part of a bubble to buildout the railroads.²² But cash and bond spending is not where it stops. Financial analysts assume that AI infrastructure investment will touch every capital market in existence—cash, equity, corporate bonds, junk bonds, structured debt, private credit, and more.²³ This is already showing up in multiple ways: significant activity in the private credit market; the use of special-purpose vehicles (SPVs); offloading compute capacity to highly levered neocloud providers; and significant volumes of credit default swaps and asset-backed securities, all of which are opaque and entangled with other markets. Notably, some of those tools have troubling histories. SPVs were a common tool of Enron,²⁴ and issues in the asset-backed securities market played a role in the 2008 Great Recession.²⁵

While the technicalities of things like private credit can get hard to follow, here's what matters: A major source of "private" credit is actually the general public, because the firms in the private credit business deploy capital on behalf of their investors, like managers of funds for 401(k) accounts, life insurance plans, and pensions.²⁶ A major investment going sour hurts almost everyone.

Beyond debt-spending, AI infrastructure includes circular equity financing, where company A invests in company B, and company B uses those funds to buy from

²¹ Steve Goldstein, *The AI Bubble Is 17 Times the Size of the Dot-Com Frenzy — and Four Times the Subprime Bubble, Analyst Says*, MARKETWATCH (Oct. 3, 2025), <https://www.marketwatch.com/story/the-ai-bubble-is-17-times-the-size-of-the-dot-com-frenzy-this-analyst-argues-046e7c5c> (Reporting on a MacroStrategy Partnership analysis about the Wicksellian deficit).

²² O'Laughlin, *supra* note 19.

²³ Hamid et al., *supra* note 1 at 1.

²⁴ Aisha Down & Dan Milmo, *Nvidia Insists It Isn't Enron, but Its AI Deals Are Testing Investor Faith*, THE GUARDIAN (Dec. 28, 2025), <https://www.theguardian.com/technology/2025/dec/28/nvidia-insists-it-isnt-enron-but-its-ai-deals-are-testing-investor-faith>.

²⁵ Rogé Karma, *Something Ominous Is Happening in the AI Economy*, THE ATLANTIC (Dec. 10, 2025), <https://www.theatlantic.com/economy/2025/12/nvidia-ai-financing-deals/685197/>.

²⁶ Mayumi Negishi, *Insurers and Pension Funds Eye Data Center Finance Spree*, BLOOMBERG (Dec. 24, 2025), <https://www.bloomberg.com/news/newsletters/2025-12-24/insurers-and-pension-funds-eye-data-center-finance-spree>.

company A. Today, chipmakers and cloud companies are some of the biggest investors of companies like OpenAI and Anthropic. While vendor-based *debt* financing has a long history, vendor-based *equity* investment at this scale appears to be a new form of financial engineering. All of the largest AI, cloud, and chip companies own parts of each other, which means a small or unexpected problem at one company can cascade quickly to all of them. An expert in financial bubbles described today's situation as the kind of complex financing that no one fully understands until things crash.²⁷ As a journalist summarized, "the last time the economy saw so much wealth tied up in such obscure overlapping arrangements was just before the 2008 financial crisis."²⁸

Just like a housing crisis in 2007 turned into a financial system crisis that impacted every industry and the whole economy in 2008, an AI crash would spread. Already, the magnitude of infrastructure spending is causing supply chain issues for everyday items like iPhones, making it harder to hire certain service providers like electricians, delaying other construction projects, and potentially raising the relative cost of capital for non-AI investments.²⁹

The economy-wide crash scenario magnifies each of the harms of the sectoral bubble bursting—more businesses go under, more people lose jobs, stocks take a bigger hit—and it spreads further. A substantial stock market crash, given the collective market cap of the Magnificent Seven, and heavy losses to creditors would cause banks and financiers to further reduce lending to businesses in other industries, jolting many sectors that need regular access to capital. It could go further and risk the solvency of investment funds, financial firms, insurers, and others, as happened in 2008, creating risk for a broad set of market participants. News of this would push consumers and businesses to spend less, pressuring businesses and pushing some under. That means more workers lose jobs and have less to spend, and so forth.

²⁷ Jeremy Hsu, *When It All Comes Crashing down: The Aftermath of the AI Boom*, BULLETIN OF THE ATOMIC SCIENTISTS (Dec. 5, 2025), <https://thebulletin.org/2025/12/when-it-all-comes-crashing-down-the-aftermath-of-the-ai-boom/> (quoting "Andrew Odlyzko, professor emeritus of mathematics at the University of Minnesota, who has studied the history of financial manias and previous bubbles around technologies like railroads".).

²⁸ Karma, *supra* note 25.

²⁹ See, e.g., Shira Ovide, *The AI Boom Is so Huge It's Causing Shortages Everywhere Else*, WASH. POST (Feb. 7, 2026), <https://www.washingtonpost.com/technology/2026/02/07/ai-spending-economy-shortages/>; Paul Donovan, *Anatomy of an AI Reckoning*, WORLD ECON. F. (Jan. 16, 2026), <https://www.weforum.org/stories/2026/01/how-would-the-bursting-of-an-ai-bubble-actually-play-out/>.

In the 2008 financial crisis, 10 million Americans lost their homes,³⁰ and nearly 9 million Americans lost their jobs.³¹ U.S. household wealth declined by 26%—\$17 trillion—from its peak in 2007 to its trough in early 2009, with Black and Hispanic families suffering greater relative losses.³²

During the 2008 crash, the federal government provided trillions of dollars of loans, guarantees, and securities purchases, through over 20 programs created by Congress³³ and various traditional and novel maneuvers made by the Federal Reserve System.³⁴ While companies have started floating the idea,³⁵ during an AI crash, Congress should not bail out AI firms, related technology companies, or affected financial firms. Instead, Congress should pursue policies that establish broader economic resilience, as Adam Levitin, Lindsay Owens, and Ganesh Sitaraman have suggested.³⁶ Should government provide any sort of financial relief to firms during a crash, it should come with commensurate public benefits (e.g., public equity stakes³⁷).

³⁰ William R. Emmons, *The End Is in Sight for the U.S. Foreclosure Crisis*, FED. RSRV. BANK OF ST. LOUIS (Dec. 2, 2016), <https://www.stlouisfed.org/on-the-economy/2016/december/end-sight-us-foreclosure-crisis>.

³¹ *Great Recession: What It Was and What Caused It*, INVESTOPEDIA (Dec. 23, 2025), <https://www.investopedia.com/terms/g/great-recession.asp>.

³² William R. Emmons & Bryan J. Noeth, *Who Suffered the Most from the Crisis?*, FED. RSRV. BANK OF ST. LOUIS (July 1, 2012), <https://www.stlouisfed.org/publications/regional-economist/july-2012/household-financial-stability--who-suffered-the-most-from-the-crisis> (internal citations omitted).

³³ Emergency Economic Stabilization Act (Pub. L. No. 110-343), 122 Stat. 3765 (2008).

³⁴ Baird Webel & Marc Labonte, *Costs of Government Interventions in Response to the Financial Crisis: A Retrospective*, R43413, CONG. RSCH. SERV., (2018), <https://www.congress.gov/crs-product/R43413>; Edison Yu, *Did Quantitative Easing Work?*, FED. RSRV. BANK OF PHILA. (2016), <https://www.philadelphiafed.org/the-economy/monetary-policy/did-quantitative-easing-work>; Bob Ivry, Bradley Keoun & Phil Kuntz, *Secret Fed Loans Gave Banks \$13 Billion Undisclosed to Congress*, BLOOMBERG (Nov. 28, 2011), <https://www.bloomberg.com/news/articles/2011-11-28/secret-fed-loans-undisclosed-to-congress-gave-banks-13-billion-in-income>; see also, Paul Krugman, *Warning: The Fed Can't Rescue AI*, PAUL KRUGMAN SUBSTACK (Nov. 26, 2025), <https://paulkrugman.substack.com/p/warning-the-fed-cant-rescue-ai>.

³⁵ Julie Bort, *Sam Altman Says He Doesn't Want the Government to Bail out OpenAI If It Fails*, TECHCRUNCH (Nov. 6, 2025), <https://techcrunch.com/2025/11/06/sam-altman-says-he-doesnt-want-the-government-to-bail-out-openai-if-it-fails/>.

³⁶ Adam J. Levitin, Lindsay Owens & Ganesh Sitaraman, *No More Bailouts: A Blueprint for a Standing Emergency Economic Resilience and Stabilization Program*, THE GREAT DEMOCRACY INITIATIVE (2020), <https://rooseveltinstitute.org/publications/no-more-bailouts/>.

³⁷ Joel Dodge, *The Cases for Government Equity Stakes*, VAND. POL'Y ACCELERATOR (Nov. 12, 2025), <https://vanderbiltpolicyaccelerator.substack.com/p/the-cases-for-government-equity-stakes>; see also, Jeremy Bearer-Friend & Sarah Polcz, *Sharing the Algorithm: The Tax Solution to Generative AI*, 17 COLUM. J. OF TAX L. 1 (2025).

After the 2008 crash, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, to reform the financial sector.³⁸ The sprawling law was put together quickly without time for significant debate. While some assessments find that Dodd-Frank made the financial sector safer than before the crisis,³⁹ the realities of the last 15 years have been far from favorable to the law. The largest banks in the country are bigger than they were before 2008, and the government still treats even mid-sized banks as “too big to fail.” For example, Silicon Valley Bank failed in 2023 and was bailed out, even though it was not on the list of systemically important financial institutions established under Dodd-Frank. In the aftermath of the legislation’s enactment, many liberals and even some conservatives mourned its shortcomings.⁴⁰ The lessons of Dodd-Frank are that Congress should consider more ambitious structural reforms and plan those actions before the crisis occurs.

After an AI crash, Congress must not make the same mistake. The rest of this paper outlines bold reforms to the AI and related markets that Congress should consider now.

Bold Policies for Congress to Consider

1. Stop Financial Engineering Proximate to the Crash

AI infrastructure has substantial upfront costs (e.g., data centers, chips) and training an AI foundation model requires months of operating that infrastructure (including significant energy costs), which is beyond what companies can do without financing. Hyperscalers, a group that includes the wealthiest companies in the world, collectively have over \$350 billion of cash and liquid assets on hand.⁴¹ Even after anticipated

³⁸ Dodd-Frank Wall Street Reform and Consumer Protection Act (Pub. L. No. 111-203), 124 Stat. 1376 (2010).

³⁹ Martin Neil Baily, Aaron Klein & Justin Schardin, *The Impact of the Dodd-Frank Act on Financial Stability and Economic Growth*, 3 RSF: THE RUSSELL SAGE FOUNDATION J. SOC. SCI. 20 (2017).

⁴⁰ See, e.g., David Dayen, *Banks Are Too Big to Fail Say...Conservatives?*, THE AMERICAN PROSPECT (Mar. 21, 2013), <https://prospect.org/2013/03/21/banks-big-fail-say-conservatives/>; David Harrison & Ryan Tracy, *Fed's Neel Kashkari: Break Up the Big Banks*, WALL ST. J. (Feb. 16, 2016), <http://www.wsj.com/articles/minneapolis-fed-chief-says-dodd-frank-act-didnt-go-far-enough-1455636718>; Victoria Guida, *Hoenig: Ending Too Big to Fail Takes More than Repealing Dodd-Frank*, POLITICO (Feb. 25, 2017), <https://subscriber.politicopro.com/article/2017/02/hoenig-ending-too-big-to-fail-takes-more-than-repealing-dodd-frank-084151>.

⁴¹ Hamid et al., *supra* note 1 at 21.

reduced dividends, less stock buybacks, and increased layoffs,⁴² they won't have the anticipated trillions of spending in the coming five years. This has led to an "extreme financialization of the AI sector,"⁴³ that includes financial engineering of various sorts, including circular equity investments, a wide array of debt vehicles that are complex and interlocking, and government subsidies, all of which create a financial picture that is opaque and shifts risk from companies to all of society.⁴⁴ The opacity may delay policymakers and the public knowing there's a systemic problem and may obscure a full understanding of the scale of the problem. This section explores these riskier mechanisms and options for Congressional responses.

While it's beyond the scope of this paper, there's a possibility that an AI crash turns into a broader crash of the banking and financial system. In that case, Congress should also consider broader, bolder reforms to financial regulations, such as Lev Menand and Morgan Ricks have proposed.⁴⁵

A. Circular Equity Financing

AI, chip, and cloud computing (i.e., hyperscaler) companies are engaged in complicated schemes of equity, debt, loan guarantees, leasing, joint ventures, and other arrangements between vendor-customer pairs that create circular financing (also called vendor financing, round-tripping, or roundabouting), which distorts competition in discrete markets and enables a problem at one company to more quickly cascade across the whole sector.

Today's arrangements are complex. Nvidia, Microsoft, and Amazon are among OpenAI's largest investors *and* suppliers. OpenAI invests in and buys from AMD and

⁴² See, e.g., Martin Peers, *How Capex Ramp Up Will Squeeze Google, Amazon, Meta*, THE INFORMATION (Feb. 7, 2026), <https://www.theinformation.com/articles/capex-ramp-will-squeeze-google-amazon-meta>; Brody Ford, *Oracle Plans Thousands of Job Cuts in Face of AI Cash Crunch*, BLOOMBERG (Mar. 5, 2026), <https://www.bloomberg.com/news/articles/2026-03-05/oracle-layoffs-to-impact-thousands-in-ai-cash-crunch>.

⁴³ Karma, *supra* note 25; see also, Elizabeth Warren, et al., *Letter to Financial Stability Oversight Council Chair Scott Bessent* (Jan. 22, 2026), https://www.banking.senate.gov/imo/media/doc/20260122_final_letter_to_secretary_bessent_re_ai_debt_pdf.pdf.

⁴⁴ Karen Weise & Eli Tan, *How Tech's Biggest Companies Are Offloading the Risks of the A.I. Boom*, N.Y. TIMES (Dec. 15, 2025), <https://www.nytimes.com/2025/12/15/technology/ai-risks-debt.html>.

⁴⁵ Lev Menand & Morgan Ricks, *Rebuilding Banking Law*, 41 YALE J. ON REG. 591 (2024).

CoreWeave.⁴⁶ Nvidia's "AI empire," as TechCrunch described it, includes investments in every major AI model company not owned by a Big Tech company (e.g., OpenAI, Anthropic, xAI, Mistral AI, Cohere, Thinking Machines Lab, World Labs, Eleven Labs), most neoclouds (e.g., CoreWeave, Nebius, Nscale, Lambda), and even rival chipmakers (e.g., Intel), along with dozens of AI application companies that build atop OpenAI and its model company rivals (e.g., Cursor, Perplexity, Poolside, Uniphore, Hippocratic AI).⁴⁷ The reason these arrangements matter is because when vendors use excess profits to invest in their customers and those customers spend with their investors, revenues are inflated for the vendor/investor in ways that distort pricing, inflate the vendor's revenue with what is effectively self-financed demand, and lure other investors and competitors into a market whose economics remain unproven. It also accelerates the effects of problems in any part of the sector. If OpenAI experiences a major business problem, it may spend less with cloud companies, which then may reduce chip spending. Those problems would be magnified by the fact that cloud and chip companies would also see a reduction in their assets as OpenAI's valuation decreases.

It's not just these firms. Google, Amazon, Microsoft, and Nvidia have invested billions in Anthropic, which buys computing from them.⁴⁸ Nearly all of the companies that sell chips, computing, energy, AI models, and AI applications are enmeshed. Visualizations of these deals are described as an interlocking liability structure,⁴⁹ a tangled web⁵⁰ or

⁴⁶ Emily Forgash & Agnee Ghosh, *OpenAI, Nvidia Fuel \$1 Trillion AI Market With Web of Circular Deals*, BLOOMBERG (Oct. 7, 2025), <https://www.bloomberg.com/news/features/2025-10-07/openai-s-nvidia-amd-deals-boost-1-trillion-ai-boom-with-circular-deals>; Cedric Sam et al., *A Guide to the Circular Deals Underpinning the AI Boom*, BLOOMBERG (Mar. 11, 2026), <https://www.bloomberg.com/graphics/2026-ai-circular-deals/>.

⁴⁷ Marina Temkin, *Nvidia's AI Empire: A Look at Its Top Startup Investments*, TECHCRUNCH (Jan. 2, 2026), <https://techcrunch.com/2026/01/02/nvidias-ai-empire-a-look-at-its-top-startup-investments/>; Sam et al., *supra* note 46; Forgash & Ghosh, *supra* note 46; NVIDIA Corporation, *NVIDIA Venture Capital: NVentures*, NVIDIA, <https://www.nventures.ai> (last visited Mar. 3, 2026).

⁴⁸ Sebastian Herrera, Amrith Ramkumar & Robbie Whelan, *Nvidia, Microsoft Pour \$15 Billion Into Anthropic for New AI Alliance*, WALL ST. J. (Nov. 18, 2025), <https://www.wsj.com/tech/ai/nvidia-microsoft-and-anthropic-commit-to-roughly-45-billion-in-ai-partnership-281b7b1d>; Sri Muppidi & Catherine Perloff, *Anthropic Could Share Up to \$6.4 Billion With Amazon, Google and Microsoft in 2027*, THE INFORMATION (Feb. 17, 2026), <https://www.theinformation.com/articles/anthropic-sweetens-deal-cloud-providers>.

⁴⁹ Advait Arun, *Bubble or Nothing: Data Center Project Finance*, CTR. FOR PUB. ENTERS. 1(2025), <https://publicenterprise.org/wp-content/uploads/Bubble-or-Nothing.pdf>.

⁵⁰ Magdalena Petrova, *A Guide to the \$1 Trillion-Worth of AI Deals between OpenAI, Nvidia and Others*, CNBC (Oct. 15, 2025), <https://www.cnbc.com/2025/10/15/a-guide-to-1-trillion-worth-of-ai-deals-between-openai-nvidia.html>.

an entanglement,⁵¹ a blob,⁵² an ouroboros,⁵³ a rat's nest⁵⁴ and even a plate of spaghetti.⁵⁵ One such illustration from Bloomberg is depicted below.

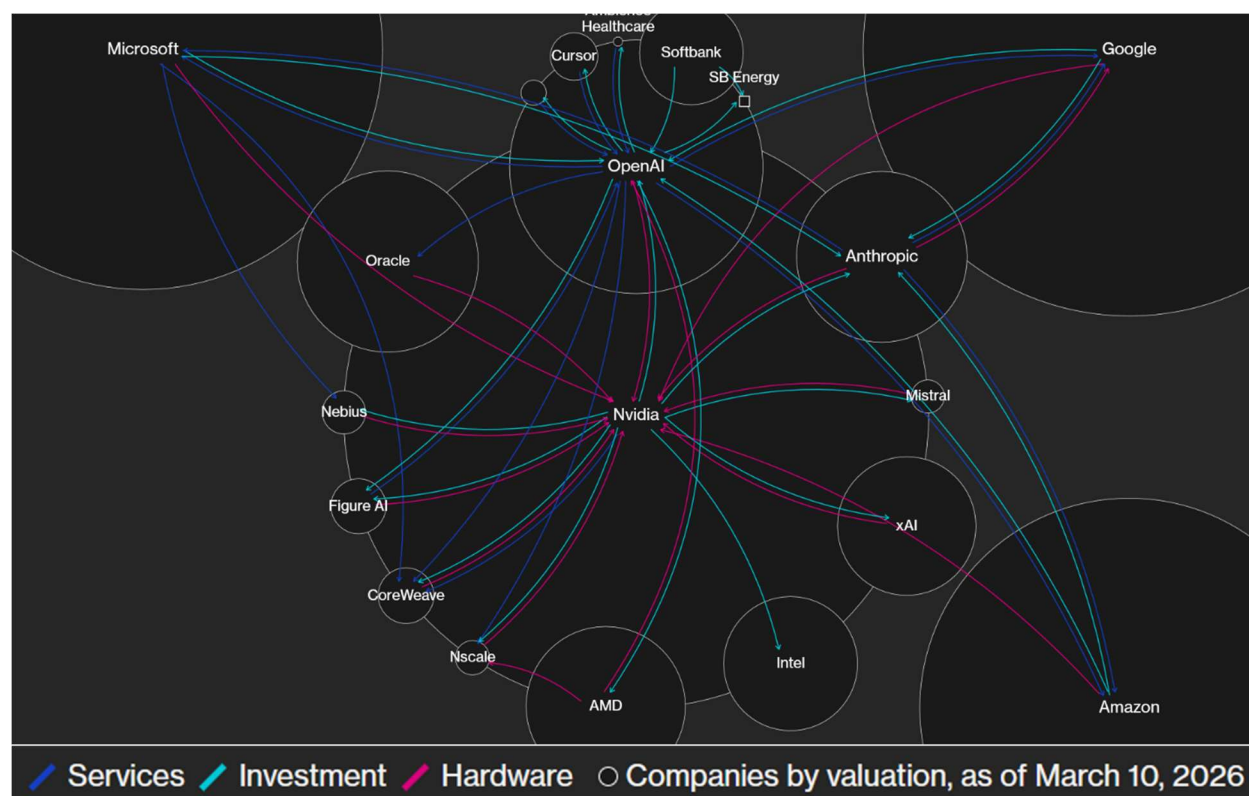


Fig. 2. Bloomberg depiction of circular financing relationships in the AI industry.⁵⁶

A vendor providing financing for a customer is not new. Businesses that have lumpy cash flows, high capital costs, or long payment cycles all have natural needs for financing purchases and vendors often offer various debt products (e.g., lines of credit, deferred payments, and equipment financing) to serve those needs. However, vendor financing involving *equity* investments at any meaningful scale appears to be unique to today's AI moment. There is a difference between lending to known customers and

⁵¹ Allison Morrow, *Another OpenAI Entanglement Is Renewing Fears of a Repeat of the Dot-Com Era*, CNN BUS. (Oct. 7, 2025), <https://www.cnn.com/2025/10/07/business/openai-nvidia-bubble-nightcap/>.

⁵² Steven Levy, *There Is Only One AI Company. Welcome to the Blob*, WIRED (Nov. 21, 2025), <https://www.wired.com/story/ai-industry-monopoly-nvidia-microsoft-google/>.

⁵³ Bryan McMahon, *The AI Ouroboros*, THE AM. PROSPECT (Oct. 15, 2025), <https://prospect.org/2025/10/15/2025-10-15-nvidia-openai-ai-oracle-chips/>.

⁵⁴ Morrow, *supra* note 51.

⁵⁵ Jonathan Weil, *Is the Flurry of Circular AI Deals a Win-Win—or Sign of a Bubble?*, WALL ST. J. (Oct. 22, 2025), <https://www.wsj.com/tech/ai/is-the-flurry-of-circular-ai-deals-a-win-win-or-sign-of-a-bubble-8a2d70c5>.

⁵⁶ Sam et al., *supra* note 46.

investing in unproven ones. In AI, vendors are taking equity stakes in unprofitable companies, at a scale that, based on original commitments, could include the largest-ever investment in a private company⁵⁷—because most of the money will be spent buying their own products.

Perhaps the most famous example of circular financing happened during the dot-com bubble, but that happened in multiple ways. First, telecom equipment vendors Lucent, Nortel, and Cisco financed over \$10 billion of capital for their customers to buy their equipment. This dynamic played a role in inflating the bubble.⁵⁸ But the most problematic type of circular financing was when companies like Global Crossing and Qwest used a mechanism called capacity swaps, a unique form of often-fraudulent financial engineering where one company buys network capacity from another but pays with their own network capacity, with both claiming revenue but not exchanging money.⁵⁹

If there's an AI crash, circular equity arrangements could be an accelerant, worsening the effects of the crash. Congress should ban circular equity financing if it serves as a proximate cause of an AI crash. As mentioned earlier, there's a mismatch between the significant upfront costs of investment with uncertain revenues at an uncertain time scale. A ban on circular equity financing wouldn't kill off investment in AI. Excess profits that chip and cloud companies are currently investing back into AI would instead be distributed to institutional and other investors, many of whom might reinvest in AI anyway—but through diversified portfolios, so that a single failure in the chain is less likely to cascade into a sector- or economy-wide crash.

B. Expansive and Opaque Debt

Debt financing and schemes to shift or mask debt burdens are increasingly common for AI data center buildouts and are contributing to “some of the basic conditions of a financial crisis.”⁶⁰

⁵⁷ Tim Bradshaw et al., *Nvidia to Invest up to \$100bn in OpenAI*, FIN. TIMES (Sept. 22, 2025), <https://www.ft.com/content/d3caeac1-def8-45ae-b56b-e34c7c435ccc>.

⁵⁸ Tomasz Tunguz, *Circular Financing: Does Nvidia's \$110B Bet Echo the Telecom Bubble?* (Oct. 3, 2025), https://www.tomtunguz.com/nvidia_nortel_vendor_financing_comparison/.

⁵⁹ See, generally, *Capacity Swaps by Global Crossing and Qwest: Sham Transactions Designed To Boost Revenues?*, H. Hrg. 107-129 before the Comm. on Energy & Com., 107th Cong. (2002), <https://www.govinfo.gov/content/pkg/CHRG-107hhr81961/pdf/CHRG-107hhr81961.pdf>.

⁶⁰ Noah Smith, *Will Data Centers Crash the Economy?*, NOAHPINION (Aug. 2, 2025), <https://www.noahpinion.blog/p/will-data-centers-crash-the-economy>.

First, hyperscalers are changing their financial profile and taking on large levels of debt. The total debt load is hitting all debt markets (e.g., blue-chip bonds, junk debt, private credit, structured debt).⁶¹ Tech-company debt issuances hit a record in the last quarter of 2025.⁶² Because hyperscalers dominate equity and debt markets, this means that bond and stock performance is increasingly correlated in ways that can hinder investors' diversification strategies.⁶³ Overall, these decades-old firms that started in the capital-light software industry are entering a "new phase of balance sheet evolution" driven by AI investment,⁶⁴ which many industry analysts expect to continue, even past the point of downgrades to the companies' credit ratings.⁶⁵

Individual companies have slightly differing debt strategies, even for basic corporate bonds. Google went from having a steady \$14-15 billion of debt for years to \$49 billion last year, a 3.5x jump in one year.⁶⁶ The once low-debt, capital-light company is now on a "global bond spree," issuing bonds in multiple countries and even pursuing a rare 100-year bond.⁶⁷ Its recent shift is shown in Figure 3.⁶⁸ Oracle, meanwhile, has significantly more debt than the other hyperscalers—both in absolute terms and as measured by standard debt-to-equity ratios—and now has a credit rating hovering just above junk status.⁶⁹

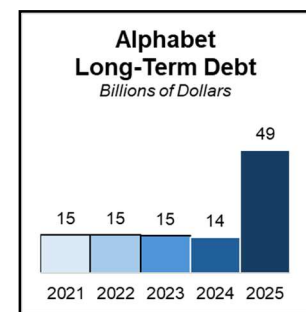


Fig. 3. Long-Term Debt (Alphabet)

⁶¹ Paula Seligson, *The \$3 Trillion AI Data Center Build-Out Becomes All-Consuming For Debt Markets*, BLOOMBERG (Feb. 2, 2026), <https://www.bloomberg.com/news/articles/2026-02-02/the-3-trillion-ai-data-center-build-out-spurs-a-debt-market-boom>; Carmen Arroyo, *How AI Companies Are Keeping Debt Off Their Balance Sheets*, BLOOMBERG (Oct. 31, 2025), <https://www.bloomberg.com/news/articles/2025-10-31/meta-xai-starting-trend-for-billions-in-off-balance-sheet-debt>.

⁶² Aaron Gregg, *Big Tech Is Taking on More Debt than Ever to Fund Its AI Aspirations*, WASH. POST (Jan. 23, 2026), <https://www.washingtonpost.com/business/2026/01/23/ai-corporate-debt-record/>.

⁶³ Seligson, *supra* note 61.

⁶⁴ Hamid et al., *supra* note 1 at 21.

⁶⁵ See, e.g., Anita Ramaswamy, *Alphabet and Other Big Tech Could Borrow Hundreds of Billions Each*, THE INFORMATION (Feb. 26, 2026), <https://www.theinformation.com/articles/alphabet-big-tech-borrow-hundreds-billions>.

⁶⁶ See *infra* App. 2.

⁶⁷ Brian W. Smith & Michael Gambale, *Alphabet Embarks on Global Bond Spree to Fund Record Spending*, BLOOMBERG (Feb. 9, 2026), <https://www.bloomberg.com/news/articles/2026-02-09/google-parent-alphabet-kicks-off-seven-part-us-bond-sale>.

⁶⁸ For underlying data and sources, see *infra* App. 2.

⁶⁹ Tomasz Tunguz, *Is Your AI Funded by Junk Bonds?*, TOMASZ TUNGUZ (Dec. 15, 2025), <https://www.tomtunguz.com/is-your-ai-funded-by-junk-bonds/>; Hamid et al., *supra* note 1 at 27–28.

Meta serves as the most interesting example of shifting debt. It went from holding no long-term debt as recently as 2021 to \$59 billion in 2025. Even though Meta raised \$30 billion in traditional corporate bonds in 2025, doubling its long-term debt in one year, it turned to the less traditional private credit for its marquee data center in Louisiana. The company partnered with Blue Owl Capital to set up a debt-financed SPV, a separate legal entity that borrows money based on a purchase commitment from Meta, to build its \$27 billion Louisiana data center. This means that the SPV holds the debt and the \$27 billion is not included on Meta's balance sheet—neither as a liability included in the \$59 billion in long-term debt shown in Figure 4,⁷⁰ nor as an asset.⁷¹ Financial analysts see this as the beginning of a trend for tech companies.⁷²

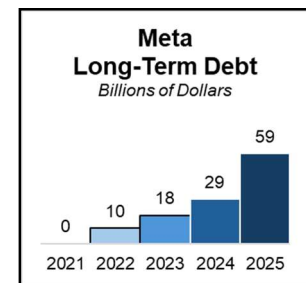


Fig. 4. Long-Term Debt (Meta)

Public knowledge of such SPVs is limited given their private nature. From what is known, these SPVs account for at least \$120 billion of debt that doesn't show up on tech companies' books.⁷³ Famously, Enron used SPVs to keep debt and toxic assets off of its books.⁷⁴ Further reminiscent of the company famous for an accounting scandal, Ernst & Young recently flagged Meta's off-books Louisiana data center in its audit of Meta's finances as a "critical audit matter," though the auditor ultimately approved of the accounting treatment.⁷⁵

As described earlier, while it's called "private" credit, much of the source of capital comes from the public. Private credit providers often have investments from pension funds, insurers, traditional banks, and other sources that interconnect private pools of

⁷⁰ For underlying data and sources, see *infra* App. 2.

⁷¹ Louise Matsakis, *The AI Data Center Boom Is Warping the US Economy*, WIRED (Nov. 5, 2025), <https://www.wired.com/story/data-center-ai-boom-us-economy-jobs/>; Arroyo, *supra* note 61; Seligson, *supra* note 61; Arun, *supra* note 49 at 37.

⁷² Hamid et al., *supra* note 1 at 21 & 24–25.

⁷³ Tabby Kinder, *Tech Groups Shift \$120bn of AI Data Centre Debt off Balance Sheets*, FIN. TIMES (Dec. 24, 2025), <https://www.ft.com/content/0ae9d6cd-6b94-4e22-a559-f047734bef83>.

⁷⁴ Down & Milmo, *supra* note 24.

⁷⁵ Jonathan Weil, *Meta Auditor EY Raised Red Flag on Data-Center Accounting*, WALL ST. J. (Feb. 11, 2026), <https://www.wsj.com/livecoverage/jobs-report-unemployment-stock-market-02-11-2026/card/meta-auditor-ey-raised-red-flag-on-data-center-accounting-TrOVlxGZGnL37d8Dv01h>.

funds with public risk.⁷⁶ Private credit is a growing asset class that has limited transparency, high market concentration, low liquidity, and increasing entanglements with traditional banking, insurance, retirement funds, and other asset classes.⁷⁷ The boom in private credit is making debt markets far more opaque overall.⁷⁸ Last year, a subprime auto private credit provider failed, prompting Jamie Dimon to proclaim that “when you see one cockroach, there are probably more... Everyone should be forewarned on this.”⁷⁹ Like software bugs create digital vulnerabilities,⁸⁰ financial cockroaches create economic ones. Investors are increasingly worried about Blue Owl, causing the company to restrict investors’ ability to cash out their investments early.⁸¹

Next, “neoclouds” are independent cloud companies that buy and sell excess compute capacity to larger cloud companies. The most well-known neocloud provider, CoreWeave, is a former cryptocurrency mining company that now counts Nvidia as a major investor.⁸² It has \$14 billion in debt, with nearly a third due in 2026 but had just \$5 billion in revenue in 2025.⁸³ Its credit default swaps are traded actively, and recently widening spreads signal potential default risk.⁸⁴ It and other neoclouds purchase graphics processing unit (GPU) chips using GPU-backed loans, a practice that a capital markets expert says “should raise red flags” because they are akin to using a credit

⁷⁶ Fin. Stability Oversight Council, *2025 Annual Report*, DEP’T OF TREASURY, 34–35 (2025), <https://home.treasury.gov/system/files/261/FSOC2025AnnualReport.pdf>; Matt Levin, *If the AI Bubble Were to Burst, These Terms Will Be Oft Heard*, MARKETPLACE (Dec. 9, 2025), <https://www.marketplace.org/story/2025/12/09/what-will-we-all-be-talking-about-if-the-ai-bubble-bursts>; Miles Kruppa, *2026 Predictions: Cash-Strapped Oracle Issues Chip-Backed Debt*, THE INFORMATION (Dec. 31, 2025), <https://www.theinformation.com/articles/predictions-2026-cash-strapped-oracle-issues-chip-backed-debt>.

⁷⁷ Michael Rand & Melinda Roth, *Private Credit’s Public Consequences* (Jan. 1, 2026), <https://papers.ssrn.com/abstract=6029995>; Eliza Ronalds-Hannon & Silas Brown, *A Guide to the Fault Lines in the Credit Market*, BLOOMBERG (Feb. 5, 2026), <https://www.bloomberg.com/news/features/2026-02-05/the-pessimist-s-guide-to-the-credit-boom>.

⁷⁸ Ronalds-Hannon & Brown, *supra* note 77.

⁷⁹ Elisabeth Buchwald & Matt Egan, *Why Jamie Dimon Is Warning of ‘Cockroaches’ in the US Economy*, CNN (Oct. 16, 2025), <https://www.cnn.com/2025/10/16/business/jamie-dimon-us-economy-cockroaches>.

⁸⁰ While the first computer “bug” is commonly traced to a moth in a Mark I computer at Harvard University used by Grace Hopper, its use as a metaphor in electronics is at least a century older. Henry S. Tropp, *Whence the “Bug”?*, 6 ANNALS OF THE HIST. OF COMPUT. 409 (1984).

⁸¹ Silas Brown et al., *Blue Owl Anxiety Rattles \$1.8 Trillion Private Credit Market*, BLOOMBERG (Feb. 22, 2026), <https://www.bloomberg.com/news/features/2026-02-22/blue-owl-redemptions-halt-intensifies-private-credit-fears>.

⁸² Levin, *supra* note 76.

⁸³ Karma, *supra* note 25.

⁸⁴ Levin, *supra* note 76.

card to pay off another credit card.⁸⁵ This kind of GPU-backed credit represents over \$20 billion.⁸⁶ Of the hyperscalers, Microsoft has particularly deep reliance on neoclouds.⁸⁷

Relatedly, data center debt is being bought and sold as credit default swaps and asset-backed securities, guaranteed in ways that exacerbate issues of circular financing discussed earlier. In 2025, over \$20 billion of data center debt issuance was securitized as an asset-backed security or commercial mortgage backed security, a notable shift in the securitization markets.⁸⁸ Here's an example of how this works: Anthropic will be the customer of an \$8 billion data center being built by Hut 8 and Fluidstack, energy and AI infrastructure companies with financing from J.P. Morgan and Goldman Sachs guaranteed by Google, which invests in and sells to Anthropic.⁸⁹ If Anthropic falters, its investors take a hit, but so will each of those companies involved. Like private credit, this kind of securitization is not inherently bad, but adds to the growing opacity of the market. Famously, this kind of securitization played a role in the cause of the 2008 financial crisis.⁹⁰

Each of these mechanisms obscures risks and increases the precarity of financial markets, which is critical for investors, insurers, policymakers, and the public to make investment decisions based on understanding risks. Congress should ban debt financing deals over a certain threshold that don't fully disclose true sources of capital, should prohibit public companies from engaging in debt-shifting practices that are not included in financial disclosures, and require a public disclosure of all data center financings.

C. Distortive Government Subsidies

All levels of government are currently engaged in subsidizing AI. Most directly, about forty states are engaged in a race to the bottom offering larger and larger subsidies for

⁸⁵ Arun, *supra* note 49 at 27.

⁸⁶ *Id.* at 28.

⁸⁷ Hamid et al., *supra* note 1 at 26; Brody Ford, *Microsoft Bets \$33 Billion on Neoclouds like Nebius to Ease AI Crunch*, BLOOMBERG (Oct. 2, 2025), <https://www.bloomberg.com/news/articles/2025-10-02/microsoft-neocloud-deals-a-strategy-for-ai-supply-crunch>.

⁸⁸ *Id.* at 30.

⁸⁹ Ian Krietzberg, *Deal of the Week*, THE HIDDEN LAYER (NEWSLETTER) PUCK (Dec. 23, 2025), https://puck.news/newsletter_content/chinas-cold-war-playbook-sfs-waymocalypse-the-raise-resurrection/.

⁹⁰ Karma, *supra* note 25.

the construction of data centers.⁹¹ For example, in Missouri, a data center project that creates just 10 jobs and invests \$25 million qualifies for exemptions from 100% of state and local sales and use taxes.⁹² Financial experts question if jurisdictions receive benefits commensurate to the magnitude of these tax subsidies in economic analyses.⁹³ At the same time, large numbers of voters are protesting data centers across the country.⁹⁴ This might be why state politicians have recently begun advancing proposals to roll back these kinds of exemptions in Georgia,⁹⁵ Virginia,⁹⁶ Ohio,⁹⁷ Illinois,⁹⁸ and other states.

Municipalities, utilities (some of which are publicly owned), and others are also directly and indirectly subsidizing construction costs and operations.⁹⁹ At the federal level, President Trump issued an executive order that encourages federal agencies to “provide financial support..., which could include loans and loan guarantees, grants, tax incentives, and offtake agreements;” provide preferential access to federally owned land; and offer substantial regulatory relief.¹⁰⁰ More recently, OpenAI’s chief financial

⁹¹ Ganesh Sitaraman & Asad Ramzanali, *No Handouts for Data Centers*, COMMONPLACE (Aug. 28, 2025), <https://www.commonplace.org/p/no-handouts-for-data-centers>; Paige Tortorelli, Pippa Stevens & Agne Tolockaite, *In Race to Attract Data Centers, States Can Forfeit Hundreds of Millions of Dollars in Tax Revenue to Tech Companies*, CNBC (June 20, 2025), <https://www.cnbc.com/2025/06/20/tax-breaks-for-tech-giants-data-centers-mean-less-income-for-states.html>.

⁹² Mo. Dep’t of Econ. Dev., *Data Center Sales Tax Exemption Program Guidelines 3*, https://ded.mo.gov/sites/g/files/zuston466/files/media/pdf/2025/02/Data_Center_Program_Guidelines_2_023_0.pdf (authorized by Mo. Rev. Stat. § 144.810).

⁹³ Arun, *supra* note 49, at 5.

⁹⁴ Erin Doherty & Lisa Kashinsky, *Voters Know What the next Big Issue Is. They Don’t Know How They Feel About It*, POLITICO (Feb. 22, 2026), <https://www.politico.com/news/2026/02/22/poll-data-centers-politics-00791786>.

⁹⁵ Patrick Saunders, *Georgia Lawmakers Debating Data Center Moratorium and Regulation Bills in Legislature*, WABE (Feb. 17, 2026), <https://www.wabe.org/georgia-lawmakers-debating-data-center-moratorium-and-regulation-bills-in-legislature/>.

⁹⁶ Jahd Khalil, *Data Center Tax Break Takes Center Stage in Virginia Budget Plans*, VPM (Feb. 23, 2026), <https://www.vpm.org/generalassembly/2026-02-22/virginia-budget-fy27-fy28-spanberger-lucas-torian-mcdougale-data-center-tax>.

⁹⁷ Sarah Donaldson, *Ohio House Bill Would Extend Data Center Tariff to Rest of State*, WOSU (Mar. 2, 2026), <https://www.wosu.org/2026-03-02/ohio-house-bill-would-extend-data-center-tariff-to-rest-of-state>.

⁹⁸ Natasha Korecki, *Gov. JB Pritzker to Propose Suspending Tax Incentives for Data Centers in Illinois*, NBC NEWS (Feb. 18, 2026), <https://www.nbcnews.com/politics/politics-news/gov-jb-pritzker-suspending-tax-incentives-data-centers-illinois-rcna259297>.

⁹⁹ *Subsidy Tracker*, GOOD JOBS FIRST, <https://subsidytracker.goodjobsfirst.org/> (last visited Dec. 12, 2025).

¹⁰⁰ Accelerating Federal Permitting of Data Center Infrastructure, Exec. Ord. No. 14318, 90 Fed. Reg. 35385 (2025). President Biden also issued an executive order on data center support, providing fewer

officer said during an interview that she hopes that the federal government might guarantee financing for data centers and chips. While OpenAI leadership walked back this comment and the White House disavowed it,¹⁰¹ that comment and previous ones from the company have left politicians and experts worried.¹⁰² The previously mentioned J.P. Morgan analysis of AI capex charts assumptions for how much various capital markets can absorb. After working through cash, equity, structured debt, high-grade bonds, and leveraged finance, the analysts label the remaining \$1.4 trillion as “Need for Alternative Capital/Government,” later discussed as an assumption that governments may want to subsidize AI buildout more directly.¹⁰³ However, as Sarah Myers West and Amba Kak of the AI Now Institute stated in an op-ed, “the federal government is already bailing out the AI industry” through public subsidies and industry friendly policy changes.¹⁰⁴

Should the federal government view public support for AI as a national security imperative or a priority for industrial policy, such measures should be debated and considered by Congress, as was done with the CHIPS Act, rather than using one-off federal, state, and local policies, ordinances, and orders that pit jurisdictions against each other and avoid the national, public debate about what kind of support is appropriate. Regardless of whether such industrial policy is worthwhile, Congress should, in the meantime, stop state and municipal subsidies, which would end a race to the bottom among jurisdictions.

subsidies for data center construction, Advancing United States Leadership in Artificial Intelligence Infrastructure, Exec. Ord. No. 14141, 90 Fed. Reg. 5469 (2025).

¹⁰¹ Mike Isaac, *OpenAI Races to Quell Concerns Over Its Finances*, N.Y. TIMES (Nov. 6, 2025), <https://www.nytimes.com/2025/11/06/technology/openai-finances-debt-data-centers.html>.

¹⁰² See, e.g., Elizabeth Warren, *Letter to OpenAI CEO Sam Altman* (Jan. 28, 2026), https://www.warren.senate.gov/imo/media/doc/letter_to_openai_from_senator_warren.pdf; Gary Marcus, *OpenAI probably can't make ends meet. That's where you come in.*, MARCUS ON AI (Nov. 5, 2025), <https://garymarcus.substack.com/p/if-you-thought-the-2008-bank-bailout>.

¹⁰³ Hamid et al., *supra* note 1 at 1 & 45–46.

¹⁰⁴ Sarah Myers West & Amba Kak, *You May Already Be Bailing Out the AI Business*, WALL ST. J. (Nov. 12, 2025), <https://www.wsj.com/opinion/you-may-already-be-bailing-out-the-ai-business-dd67d452>.

2. Prosecute Fraud

Significant public attention was focused on the fact that no bankers went to jail for the 2008 financial crisis.¹⁰⁵ The oft-repeated claim isn't strictly true: one mid-level American banker served prison time.¹⁰⁶ However, the 2008 crisis still sticks out relative to other crises. Over 1,700 people received prison time for Covid-19 related financial fraud.¹⁰⁷ During the dot-com bubble and associated telecommunications boom, Enron and WorldCom started telecommunications businesses to benefit from the technology boom that were ultimately rife with fraud. Thirty Enron executives were convicted of crimes, many of whom, including both the company's CEO and President, saw prison time.¹⁰⁸ WorldCom, which has the distinction of being the largest accounting fraud in U.S. history,¹⁰⁹ was engaged in fraudulent capacity swaps, and its CEO and CFO each served prison time.¹¹⁰ In response to the savings and loans collapse of the 1980s, 1,000 individuals were prosecuted and over 800 were convicted of crimes.¹¹¹ Generally, these examples include convictions under federal statutes that criminalize

¹⁰⁵ See, e.g., Berkeley Lovelace Jr., *Cramer on 2008 Crisis: It Could Happen Again "Because No One Went to Jail the First Time,"* CNBC (Mar. 16, 2018), <https://www.cnbc.com/2018/03/16/cramer-2008-crisis-could-happen-again-because-no-one-went-to-jail.html>; Joe Pinsker, *Why Aren't Any Bankers in Prison for Causing the Financial Crisis?*, THE ATLANTIC (Aug. 17, 2016), <https://www.theatlantic.com/business/archive/2016/08/why-arent-any-bankers-in-prison-for-causing-the-financial-crisis/496232/>.

¹⁰⁶ Many Europeans did too. Laura Noonan et al., *Who Went to Jail for Their Role in the Financial Crisis?*, FIN. TIMES (Sept. 20, 2018), <https://ig.ft.com/jailed-bankers>.

¹⁰⁷ Gov't Accountability Off., *COVID-19 Relief: Consequences of Fraud and Lessons for Prevention*, GAO-25-107746, at 8 (2025), <https://www.gao.gov/products/gao-25-107746>.

¹⁰⁸ Elise Bean & Kyle Bule, *Congress and the Enron Scandal*, in CONGRESS INVESTIGATES: GEORGE WASHINGTON TO JANUARY 6 (2025), <https://levin-center.org/what-is-oversight/portraits/congress-and-the-enron-scandal/>.

¹⁰⁹ Justin Kollar, *Dark Fiber—an Archaeology of the Dot-Com Bubble*, TECHNO-STATECRAFT (Aug. 7, 2025), <https://www.technostatecraft.com/p/dark-fiberan-archaeology-of-the-dot>; Press Release, Sec. & Exch. Comm'n, Lucent Settles SEC Enforcement Action Charging the Company with \$1.1 Billion Accounting Fraud (May 17, 2004), <https://www.sec.gov/news/press/2004-67.htm>; Press Release, Sec. & Exch. Comm'n, Nortel Networks Corporation and Nortel Networks Limited (Oct. 15, 2007), <https://www.sec.gov/enforcement-litigation/litigation-releases/lr-20333>.

¹¹⁰ Jennifer Bayot & Roben Farzad, *Former WorldCom Executive Sentenced to 5 Years in Prison*, N.Y. TIMES (Aug. 11, 2005), <https://www.nytimes.com/2005/08/11/business/former-worldcom-executive-sentenced-to-5-years-in-prison.html>.

¹¹¹ *You Asked, We Answered: Why Didn't Any Wall Street CEOs Go to Jail after the Financial Crisis? It's Complicated*, MARKETPLACE, <https://features.marketplace.org/why-no-ceo-went-jail-after-financial-crisis/> (last visited Dec. 24, 2025).

mail, wire, bank, securities, and government fraud; conspiracies thereof; falsifications of records; and money laundering.¹¹²

Unlike other policy options described in this paper, this recommendation is for action for the Department of Justice (DOJ) in enforcing existing criminal statutes, rather than Congress. If an AI crash is caused, exacerbated, or precipitated by fraud that meets the standards required for criminal convictions, the DOJ should hold fraudsters accountable, including through seeking prison sentences. As with all enforcement of criminal law, any government actions should promote the “reasoned exercise of prosecutorial authority and contribute to the fair, evenhanded administration of the federal criminal laws.”¹¹³ While there is no evidence of criminal fraud today, commenters are suggesting that today’s AI moment “feels eerily familiar” to the early 2000s¹¹⁴ and that “the vibes are turning decidedly Enron-like.”¹¹⁵ Indeed, some financial experts are starting to see an accounting discrepancy in how companies have shifting depreciation schedules for GPUs, which each company has changed over time in ways not matching how buying and technological trends have shifted.¹¹⁶

3. Build a Public Cloud from Stranded Data Center Assets

Recently, policymakers from both parties have a revived appreciation for President Franklin D. Roosevelt,¹¹⁷ whose presidency started by responding to the Great Depression by enacting New Deal legislation. Many New Deal programs created or expanded government-run programs that provide an important service at a

¹¹² See, e.g., 18 U.S.C. §§ 1341, 1343, 1344, 1348, 1349; 1031, 371; 1001–1014, 657, 1956–1957.

¹¹³ Dep’t of Justice, 9-27.000 - *Principles of Federal Prosecution*, in JUSTICE MANUAL (2024), <https://www.justice.gov/jm/jm-9-27000-principles-federal-prosecution>; see also Cassandra J. Barnum, *Federal Prosecutorial Discretion: A Brief Overview*, LSB11326, CONG. RSCH. SERV. (2025), <https://www.congress.gov/crs-product/LSB11326>.

¹¹⁴ Benjamin Riley, *EnronAI*, COGNITIVE RESONANCE (Jan. 7, 2025), <https://buildcognitiveresonance.substack.com/p/enronai>.

¹¹⁵ Dave Karpf, *It’s Giving Enron*, THE FUTURE, NOW AND THEN (Oct. 14, 2025), <https://davekarpf.substack.com/p/its-giving-enron>; see also, Down & Milmo, *supra* note 24.

¹¹⁶ See, e.g., Arun, *supra* note 49 at 20–27; Jonathan Weil, *The Accounting Uproar Over How Fast an AI Chip Depreciates*, WALL ST. J. (Dec. 8, 2025), <https://www.wsj.com/finance/investing/the-accounting-uproar-over-how-fast-an-ai-chip-depreciates-6f59785b>; Hamid et al., *supra* note 1 at 29; Michael Burry, *Unicorns and Cockroaches: Part 2 of The Heretic’s Guide to AI’s Stars - The Depreciation Problem*, CASSANDRA UNCHAINED (Nov. 25, 2025), <https://michaeljburry.substack.com/p/unicorns-and-cockroaches-blessed>.

¹¹⁷ Richard Whiddington, *The Roosevelt Portrait That Trump and Mamdani Somehow Bonded Over*, ARTNET NEWS (Nov. 24, 2025), <https://news.artnet.com/art-world/trump-mamdani-roosevelt-salisbury-portrait-2718933>.

reasonable price while coexisting with private market solutions. These so-called “public options” included the creation of Social Security, the Tennessee Valley Authority, and many local public libraries.¹¹⁸

During and after an AI crash, there’s a possibility that neoclouds and data center SPVs would enter various stages of financial insolvency or bankruptcy. This could make those entities and their assets available for acquisition at severely discounted rates. Data centers—physical industrial buildings and accompanying racks of servers full of chips, sometimes with on-site energy generation—could even be sold in court-ordered auctions.

These are assets that the various levels of government could consider purchasing to set up a public option for cloud computing, what many have called a “public cloud.”¹¹⁹ One way to operationalize the creation of a public cloud would be to leverage the National AI Research Resource (NAIRR). The National Science Foundation currently operates a pilot for the NAIRR, which offers researchers a mix of commercial and publicly supported computing resources for AI research.¹²⁰ The original implementation plan assumed a mix of commercial and government-funded resources, including expanding existing public computing resources,¹²¹ which is reflected in pending legislation to authorize NAIRR beyond its pilot phases as “a mix of computational resources.”¹²² During the development of the plan, notable experts commented that NAIRR, under its plan to provide researchers with credits to commercial cloud providers, would further entrench concentrated power among a

¹¹⁸ GANESH SITARAMAN & ANNE L. ALSTOTT, *THE PUBLIC OPTION: HOW TO EXPAND FREEDOM, INCREASE OPPORTUNITY, AND PROMOTE EQUALITY* (2019).

¹¹⁹ See, e.g., Tejas N. Narechania & Ganesh Sitaraman, *An Antimonopoly Approach to Governing Artificial Intelligence*, 43 *YALE L. & POL’Y REV.* 95, 164–166 (2024); see also, Ganesh Sitaraman & Karun Parek, *The Global Rise of Public AI*, *VAND. POL’Y ACCELERATOR* 12–13 (2025), <https://cdn.vanderbilt.edu/vu-URL/wp-content/uploads/sites/412/2025/05/05220054/The-Global-Rise-of-Public-AI.pdf>; Joel Dodge, *Creating a Public Cloud through the Defense Production Act*, *VAND. POL’Y ACCELERATOR* (2024), <https://cdn.vanderbilt.edu/vu-URL/wp-content/uploads/sites/412/2024/09/27135238/VPA-Paper-DPA-Public-Cloud.pdf>.

¹²⁰ *NAIRR Pilot Resource Requests to Advance AI Research*, <https://nairrpilot.org/opportunities/allocations> (last visited Feb. 15, 2026) (offering both private and federal agency cloud systems).

¹²¹ Nat’l A.I. Rsch. Res. Task Force, *Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem: An Implementation Plan for a National Artificial Intelligence Research Resource* 7, 16, 30–31, 44–45 (2023), <https://nsf-gov-resources.nsf.gov/2023-10/NAIRR-TF-Final-Report-2023.pdf>.

¹²² CREATE AI Act, H.R. 2385, 119th Cong. § 5603(b) (2025).

small number of hyperscalers.¹²³ Others noted that while NAIRR may need to start as a system of credits to commercial cloud providers, it should expand to include publicly-funded compute infrastructure similar to the national labs.¹²⁴

Much of the publicly funded compute infrastructure that is part of NAIRR is operated by federally funded research and development centers (FFRDCs), chiefly the Department of Energy's national lab system. Congress could authorize FFRDCs that manage compute infrastructures and state AI compute clusters to acquire data centers that may be sold at firesale rates, though government bidders should be careful not to artificially bid up rates for stranded assets.¹²⁵

4. Sustain AI R&D for Public Purposes

An AI crash could have effects beyond commercially available chatbots by chilling investment and research into societally beneficial uses of AI. The most visible part of AI, and that which is causing the debate about possible over-investment, is largely focused on business productivity and consumer uses—most notably the use of large language models (LLMs). However, scientists and researchers across domains are increasingly using AI in various ways that could lead to important discoveries in medicine, weather forecasting, energy, sustainable materials, and others.¹²⁶ The Trump¹²⁷ and Biden¹²⁸ administrations have both prioritized AI's use in scientific domains.

¹²³ Amba Kak et al., *Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource* (2021), <https://ainowinstitute.org/wp-content/uploads/2023/06/AINow-DS-NAIRR-comment.pdf>.

¹²⁴ Daniel E. Ho et al., *Building a National AI Research Resource*, STAN. INST. FOR HUMAN-CENTERED AI 11–12, 22–23 (2021), <https://hai.stanford.edu/policy/white-paper-building-national-ai-research-resource>.

¹²⁵ Congress might also establish a compute redeployment program in which companies lease excess compute supply to government owned compute systems. See, Pranav Nathan & Melanie Hsieh, *Public Compute Redeployment Program*, CTR. FOR INDUSTRIAL STRATEGY (Mar. 2, 2026), <https://industrialstrategy.substack.com/p/public-compute-redeployment-program>.

¹²⁶ See, e.g., Arati Prabhakar & Asad Ramzanali, *America Needs Better AI Ambitions*, TECH POL'Y PRESS (Dec. 11, 2025), <https://techpolicy.press/america-needs-better-ai-ambitions>; the use of AI in science has its limits, see, Arvind Narayanan & Sayash Kapoor, *Why an Overreliance on AI-Driven Modelling Is Bad for Science*, 640 NATURE 312 (2025).

¹²⁷ Launching the Genesis Mission, Exec. Ord. No. 14363, 90 Fed. Reg. 55035 (Nov. 28, 2025).

¹²⁸ *AI Aspirations: R&D for Public Missions*, AI.GOV (ARCHIVE) (Jan. 16, 2025), <https://web.archive.org/web/20250116082054/https://ai.gov/aspirations/>.

Today, a significant amount of this AI R&D is conducted or funded by corporations,¹²⁹ and those companies increasingly direct funding resources for researchers to use AI.¹³⁰ After a crash, corporations could quickly curtail this kind of support, since it often costs real resources but doesn't have immediate profit possibilities. Government-funded R&D in AI for public purposes continues to hold promise and should be supported.¹³¹

5. Protect Workers

Today, there are wide disagreements about how the rapid adoption of AI might impact jobs. The CEOs of Anthropic and Nvidia set the bookends of the range of possibilities: The former warns that AI will cut half of today's jobs, while the latter thinks it will produce more jobs.¹³² Even recent empirical economic studies are ambivalent on what is most likely to happen.¹³³

That said, one can easily imagine how an AI crash could be both the cause *and* effect of AI-induced unemployment in at least three ways. First, even if a crash is precipitated by a realization that the profits from AI do not exceed the amount being invested, that does not mean companies will stop using AI in discretely profitable ways, including reducing headcount by relying more on AI systems for work that was previously

¹²⁹ See, e.g., Nur Ahmed, Muntasir Wahed & Neil C. Thompson, *The Growing Influence of Industry in AI Research*, 379 SCIENCE 884 (2023); Max Martin Gnewuch et al., *Big Tech-Funded AI Papers Have Higher Citation Impact, Greater Insularity, and Larger Recency Bias*, ARXIV.ORG (Dec. 5, 2025), <http://arxiv.org/abs/2512.05714>.

¹³⁰ Ian Krietzberg, *Trump's A.I. Moon Landing*, PUCK (Dec. 2, 2025), <https://puck.news/inside-the-trump-administrations-ai-genesis-mission/>; NAIRR Pilot Resource Requests to Advance AI Research, *supra* note 120.

¹³¹ Mark MacCarthy, *Polymakers Have to Prepare Now for When the AI Bubble Bursts*, TECH POLY PRESS (Nov. 24, 2025), <https://techpolicy.press/policymakers-have-to-prepare-now-for-when-the-ai-bubble-bursts>.

¹³² Mike Allen & Jim VandeHei, *Behind the Curtain — Jensen vs. Dario: "There Will Be More Jobs,"* AXIOS (July 14, 2025), <https://www.axios.com/2025/07/14/ai-jobs-nvidia-jensen-huang-dario-amodei>.

¹³³ Compare Martha Gimbel et al., *Evaluating the Impact of AI on the Labor Market: Current State of Affairs*, THE BUDGET LAB AT YALE (2025), <https://budgetlab.yale.edu/research/evaluating-impact-ai-labor-market-current-state-affairs> ("...the broader labor market has not experienced a discernible disruption since ChatGPT's release 33 months ago, undercutting fears that AI automation is currently eroding the demand for cognitive labor across the economy..."); with Erik Brynjolfsson, Bharat Chandar & Ruyu Chen, *Canaries in the Coal Mine? Six Facts about the Recent Employment Effects of Artificial Intelligence*, STAN. DIG. ECON. LAB (2025), https://digitaleconomy.stanford.edu/wp-content/uploads/2025/08/Canaries_BrynjolfssonChandarChen.pdf ("...since the widespread adoption of generative AI...we uncover substantial declines in employment for early-career workers [ages 22-25] in occupations most exposed to AI, such as software developers and customer service representative.").

performed by people. Second, the general pressures of a broader economic downturn could force companies to look to further reduce staffing. In the case of AI, those pressures would be combined with AI-enabled enterprise tools, like Claude Cowork, that are already leading to worries of a so-called “SaaSocalypse”, in which companies stop paying for enterprise software because they can build their own using coding agents, which could lead to layoffs at those software companies.¹³⁴ Third, even before companies find proven ways to use AI in ways that reduce the need for staffing, they are already announcing layoffs anticipating AI, or perhaps blaming AI for layoffs that they may have needed to do anyway in a phenomenon known as “AI-washing.”¹³⁵

Regardless of whether job loss is cause, effect, or scapegoat of an AI crash, Congress should adopt policies that support the unemployed, create jobs, and reduce the degradation of remaining jobs. AI-induced mass unemployment closer to the scale Amodei suggests could benefit from these policies but may require additional policies beyond the focus of this paper.

A. Expand Unemployment Insurance & Remove Work Requirements

While some believe universal basic income (UBI) is needed to respond to AI-related job displacement, many have argued for years that UBI is not a good policy solution for the problem of automation-driven unemployment.¹³⁶ Instead, Congress should modernize and expand unemployment insurance (UI), which has generally been shown to be effective in reducing food insecurity, housing insecurity, and difficulty paying medical bills among workers who receive UI compared to those who didn't.¹³⁷

¹³⁴ Dominic-Madori Davis, *SaaS in, SaaS out: Here's What's Driving the SaaSocalypse*, TECHCRUNCH (Mar. 1, 2026), <https://techcrunch.com/2026/03/01/saas-in-saas-out-heres-whats-driving-the-saaspocalypse/>.

¹³⁵ See, e.g., Jo Constantz & Emily Mason, *Jack Dorsey's 4,000 Job Cuts at Block Arouse Suspensions of AI-Washing*, BLOOMBERG (Mar. 1, 2026), <https://www.bloomberg.com/news/articles/2026-03-01/jack-dorsey-s-4-000-job-cuts-at-block-arouse-suspensions-of-ai-washing>; Rebecca Szkutak, *Atlassian follows Block's footsteps and cuts staff in the name of AI*, TECHCRUNCH (Mar. 12, 2026), <https://techcrunch.com/2026/03/12/atlassian-follows-blocks-footsteps-and-cuts-staff-in-the-name-of-ai/>.

¹³⁶ See, e.g., Martha Gimbel, *Don't Get Fancy with Your Labor Market Fixes for AI*, THE ARGUMENT (Dec. 19, 2025), <https://www.theargumentmag.com/p/dont-get-fancy-with-your-labor-market>; Asad Ramzanali, *If Robots Come for Our Jobs, We Need More than Universal Basic Income*, KENNEDY SCH. REV. (2018), <https://studentreview.hks.harvard.edu/if-robots-come-for-our-jobs-we-need-more-than-universal-basic-income/>.

¹³⁷ Amy Traub, Alexander Hertel-Fernandez & Sanjay Pinto, *The Unemployed Worker Study*, NAT'L EMP'T L. PROJECT (2025), <https://www.nelp.org/insights-research/the-unemployed-worker-study/>.

During the Covid-19 pandemic, Congress enacted the largest expansion of unemployment insurance in U.S. history. Weekly claims spiked from 2 million in February to 30 million in May–June 2020, costing \$120 billion per month at peak.¹³⁸ Congress temporarily expanded weekly maximum payments, first by \$600 then another \$300; extended maximum eligibility by 53 weeks; and expanded UI eligibility to gig workers not typically covered by the program. Overall, the evidence suggests the temporarily expanded UI programs worked well relative to their core goals—stabilizing household finances with minimal disincentive for working.¹³⁹

While it works, the administration of UI has been hampered by failures, including delays caused by outdated IT systems.¹⁴⁰ Others have also recommended that Congress establish uniform minimum standards for benefit levels, duration, and eligibility across all states.¹⁴¹

During an AI crash, Congress should again expand UI levels to match the needs of families, expand the maximum term of unemployment, and expand access to include gig workers and others that may be ineligible under the current system but experiencing a loss of income. To enable these systems to work, Congress should invest now in modernizing the digital infrastructure required to administer UI and standardizing the program.

Additionally, several federal social safety net programs have work requirements that will pose significant challenges if an AI crash includes an uptick in unemployment. Currently, federal public housing,¹⁴² the Temporary Assistance for Needy Families (TANF),¹⁴³ the Supplemental Nutrition Assistance Program (SNAP),¹⁴⁴ and Medicaid¹⁴⁵

¹³⁸ PETER GANONG ET AL., *Lessons Learned from Expanded Unemployment Insurance During COVID-19*, in RECESSION REMEDIES: LESSONS LEARNED FROM THE U.S. ECONOMIC POLICY RESPONSE TO COVID-19 49, 49 (2022), <https://www.brookings.edu/articles/lessons-learned-from-expanded-unemployment-insurance-during-covid-19/>.

¹³⁹ *Id.*, at 49–51.

¹⁴⁰ *Id.*

¹⁴¹ Traub, Hertel-Fernandez & Pinto, *supra* note 137.

¹⁴² See various provisions of the United States Housing Act of 1937 (codified at 42 U.S.C. § 1437 et seq.), including 42 U.S.C. §§ 1437j(c), 1437u(d)(1)–(5), 1437u(e)(2), 1437u(f), 1437a(a)(2)(D), 1437d(l), 1437j(d)(7)).

¹⁴³ Social Security Act §§ 407, 408(b) (codified at 42 U.S.C. §§ 607, 608(b)).

¹⁴⁴ Food and Nutrition Act of 2008, as amended by Pub. L. No. 119-21 (commonly, One Big Beautiful Bill Act) § 10102, at §§ 6(d), (o) (codified at 7 U.S.C. §§ 2015(d), (o)).

¹⁴⁵ Social Security Act, as amended by Pub. L. No. 119-21 (commonly, One Big Beautiful Bill Act) § 71119, at § 1902(xx) (codified at 42 U.S.C. § 1396a(xx)).

each have at least some requirement that recipients prove a minimum amount of employment per month, with varying exemptions.¹⁴⁶ Failure to meet those requirements can result in loss of financial assistance, eviction, loss of food assistance, and other sanctions for recipients.¹⁴⁷ During periods of particularly high unemployment (e.g., 2008 recession, Covid-19 pandemic), Congress has temporarily suspended certain work requirements.¹⁴⁸ Currently, both SNAP and Medicaid have processes for states to request waivers of work requirements for areas with especially high unemployment rates.¹⁴⁹ In addition to work requirements proving confusing for recipients of social programs and complex for states implementing those requirements, the waiver processes depend on geography-specific unemployment (e.g., county-level unemployment rate),¹⁵⁰ which is limiting. In an AI crash, unemployment would more plausibly increase by job category rather than geography. After an AI crash, Congress should remove work requirements on safety net programs.

¹⁴⁶ Gene Falk et al., *Work Requirements: Existing Policies in Medicaid, SNAP, Housing Assistance, and TANF*, R48531, CONG. RSCH. SERV. (2025), <https://www.congress.gov/crs-product/R48531>; Randy Alison Aussenberg, Evelyne P. Baumrucker & Gene Falk, *Work Requirements: Comparison of Medicaid and Supplemental Nutrition Assistance Program (SNAP) After P.L. 119-21*, R48755, CONG. RSCH. SERV., (2025), <https://www.congress.gov/crs-product/R48755>.

¹⁴⁷ Falk et al., *supra* note 146 at 8.

¹⁴⁸ *Id.*, at 25 n.85.

¹⁴⁹ Aussenberg, Baumrucker & Falk, *supra* note 146 at 13.

¹⁵⁰ Elizabeth Hinton & Robin Rudowitz, *5 Key Facts About Medicaid Work Requirements*, KFF (Feb. 18, 2025), <https://www.kff.org/medicaid/5-key-facts-about-medicaid-work-requirements/>.

B. Establish a Digital Works Progress Administration¹⁵¹

Qualitative evidence and company statements suggest the use of AI is leading to job loss for software developers,¹⁵² graphic designers and artists,¹⁵³ copywriters,¹⁵⁴ management consultants and analysts,¹⁵⁵ and translators.¹⁵⁶ While empirical evidence is mixed, some initial research suggests that this job loss is hitting entry-level workers hardest.¹⁵⁷ And some of the job categories possibly affected by AI employ large numbers of people. For example, nearly 2 million Americans (1.2% of the U.S. workforce) held jobs as software developers in 2024.¹⁵⁸ Members of the public may be unsympathetic to the plight of software developers because they may be seen as the cause of the crash. However, most software developers are not working at AI companies, and individual developers at AI companies are not responsible for financing decisions at their companies. The crash is more likely to be caused by a mismatch of financial investment and profits rather than software code. Additionally, mass job loss for software developers would pose a particularly acute public policy problem because for over a decade, policymakers and others have recommended that

¹⁵¹ This idea was discussed as part of the Next Generation of Digital Services Roundtable, hosted by the Vanderbilt Policy Accelerator. The author thanks Luke Farrell for the idea and Erie Meyer & Margaret Mullins for organizing the roundtable.

¹⁵² See, e.g., Brian Merchant, *AI Killed My Job: Tech Workers*, BLOOD IN THE MACHINE (June 25, 2025), <https://www.bloodinthemachine.com/p/how-ai-is-killing-jobs-in-the-tech-f39>; Ana Altchek & Kelsey Vlamis, *6 Companies That Have Signaled They Are Replacing Human Employees with AI*, BUSINESS INSIDER (Nov. 28, 2025), <https://www.businessinsider.com/list-companies-replacing-human-employees-with-ai-layoffs-workforce-reductions>.

¹⁵³ See, e.g., Brian Merchant, *Artists Are Losing Work, Wages, and Hope as Bosses and Clients Embrace AI*, BLOOD IN THE MACHINE (Sept. 16, 2025), <https://www.bloodinthemachine.com/p/artists-are-losing-work-wages-and>.

¹⁵⁴ See, e.g., Brian Merchant, *"I Was Forced to Use AI until the Day I Was Laid off." Copywriters Reveal How AI Has Decimated Their Industry*, BLOOD IN THE MACHINE (Dec. 11, 2025), <https://www.bloodinthemachine.com/p/i-was-forced-to-use-ai-until-the>.

¹⁵⁵ See, e.g., Chip Cutter, *AI Is Coming for the Consultants. Inside McKinsey, 'This Is Existential.'*, WALL ST. J. (Aug. 2, 2025), <https://www.wsj.com/tech/ai/mckinsey-consulting-firms-ai-strategy-89fbf1be>.

¹⁵⁶ See, e.g., Brian Merchant, *AI Killed My Job: Translators*, BLOOD IN THE MACHINE (Aug. 21, 2025), <https://www.bloodinthemachine.com/p/ai-killed-my-job-translators>.

¹⁵⁷ Brynjolfsson, Chandar & Chen, *supra* note 133.

¹⁵⁸ *Occupational Outlook Handbook: Software Developers, Quality Assurance Analysts, and Testers*, BUREAU OF LAB. STATS. (Aug. 28, 2025), <https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm>.

American children should “learn to code” for stable, long-term employment prospects.¹⁵⁹

If the AI crash is associated with mass unemployment, the most direct solution is a mass *employment* program. Job losses at the rate approximating the suggestions of Amodio¹⁶⁰ could be associated with a labor market in worse conditions than 1933, the height of the Great Depression, when one in four workers was unemployed.¹⁶¹ In response to the Great Depression, President Roosevelt established the Works Progress Administration (WPA) in 1935, as part of the Second New Deal. The WPA received its first appropriation later that year which was equivalent to about 6.7% of that year’s GDP.¹⁶² In its eight years of existence, it employed millions of out-of-work Americans, aiming to hire from families whose main breadwinner was out of work.¹⁶³

After an AI crash, a Digital WPA might be appropriate. If knowledge workers, like software developers and graphic designers, are the ones that experience mass job loss, Congress should create a Digital WPA that hires those who lose their jobs and matches them with specific work opportunities based on their skills. Administration of the program would be easier than putting physical laborers to work since knowledge workers can often work remotely, less limited by geographic constraints. In particular, a new agency could match the needs of federal, state, local, and Tribal governments for digital workers, which could help deal with the well documented dearth of technology capacity in government.

C. End Workplace Surveillance

Employers across industries increasingly use digital tools, such as cameras, computer monitoring software, location tracking, apps, and wearables to track productivity,

¹⁵⁹ See, e.g., David Jackson, *Obama Promotes Computer Science with Middle Schoolers*, USA TODAY (Dec. 8, 2014), <https://www.usatoday.com/story/theoval/2014/12/08/obama-computer-code-computer-science-education-week/20093281/>.

¹⁶⁰ Allen & VandeHei, *supra* note 132.

¹⁶¹ Linda Levine, *The Labor Market During the Great Depression and the Current Recession*, R40655, CONG. RSCH. SERV. 13 (2009), https://www.congress.gov/crs_external_products/R/PDF/R40655/R40655.4.pdf.

¹⁶² JASON SCOTT SMITH, *BUILDING NEW DEAL LIBERALISM : THE POLITICAL ECONOMY OF PUBLIC WORKS, 1933-1956* 2 (2006).

¹⁶³ Levine, *supra* note 161 at 25.

performance, safety, and security.¹⁶⁴ Stakeholders—especially workers, unions, and advocates—have raised pervasive concerns about privacy, mental health, workplace morale, discrimination, and lack of transparency, with mixed and contested evidence on productivity benefits.¹⁶⁵

Worker surveillance and concerns about it are not new. In fact, the 18th century philosopher Jeremy Bentham’s idea of a ‘panopticon’ (Greek for all-seeing) prison where the guards can observe all inmates, which has long been a symbol for concerns about government surveillance, was inspired by Bentham’s brother’s work in proposing ways for supervisors to watch over as many workers as possible for efficiency.¹⁶⁶

In an AI crash, companies may increase workplace surveillance further for perceived increases in productivity.¹⁶⁷ This is already happening in some job categories. For example, both truck driving and customer service providers are jobs that observers have feared may disappear due to automation and earlier forms of AI. While automation may still reduce headcount in those jobs, both have gotten worse through increased monitoring. Truck drivers report worse employment conditions that now involve electronic logging devices;¹⁶⁸ and customer support agents report increased stress, absenteeism, and job dissatisfaction after tools like random webcam captures and voice tone recognition software are used.¹⁶⁹

A bicameral proposal in Congress would require employers to disclose in detail any workplace surveillance they use, including what data are collected, how and why they are used, and whether they affect employment decisions, while giving workers access to and correction rights over their data. It would also prohibit intrusive or retaliatory surveillance, including monitoring union activity, off-duty behavior, sensitive locations, or selling worker data, and would create strong enforcement mechanisms through the Department of Labor and private rights of action with statutory damages.¹⁷⁰

¹⁶⁴ Gov’t Accountability Off., *Digital Surveillance of Workers: Tools, Uses, and Stakeholder Perspectives*, GAO-24-107639, (2024), <https://www.gao.gov/products/gao-24-107639>; see generally, Ifeoma Ajunwa, Kate Crawford & Jason Schultz, *Limitless Worker Surveillance*, 105 CALIF. L. REV. 735 (2017).

¹⁶⁵ Gov’t Accountability Off., *supra* note 164.

¹⁶⁶ DARON ACEMOGLU & SIMON JOHNSON, POWER AND PROGRESS: OUR THOUSAND-YEAR STRUGGLE OVER TECHNOLOGY AND PROSPERITY 4–6 (2024).

¹⁶⁷ Asad Ramzanali & Ganesh Sitaraman, *Toward a Grand Strategy for AI Resilience*, RAND (forthcoming).

¹⁶⁸ KAREN LEVY, DATA DRIVEN: TRUCKERS, TECHNOLOGY, AND THE NEW WORKPLACE SURVEILLANCE (2024).

¹⁶⁹ Wolfie Christl, *Surveillance and Algorithmic Control in the Call Center*, CRACKED LABS (2023), https://crackedlabs.org/dl/CrackedLabs_Christl_CallCenter.pdf.

¹⁷⁰ Stop Spying Bosses Act, S. 262 & H.R. 7690, 118th Cong. (2023).

6. Separate Algorithms from Data Centers: A Glass-Steagall for AI

After the 1929 market crash that kicked off the Great Depression, Senator Carter Glass and Representative Henry Steagall, chairs of the congressional banking committees, sponsored many laws that form the basis of financial regulation today.¹⁷¹ But the legislation with which their names are most associated, the Glass-Steagall Act, is actually four sections of the Banking Act of 1933 that structurally separated commercial and investment banks.¹⁷² This was a direct response to the kind of systemic risk that congressional investigations found to have accelerated the causes of the Depression.¹⁷³ The policy forced financial conglomerate J. P. Morgan & Co. to split into commercial bank JPMorgan and investment bank Morgan Stanley.¹⁷⁴ This form of structural separation is also common in other regulated industries, such as transportation, telecommunications, and energy.¹⁷⁵ The policy was formally repealed by the Gramm-Leach-Bliley Act of 1999,¹⁷⁶ after decades of weakening. Some claim that had Glass-Steagall remained strong, the U.S. would have avoided the 2008 financial crisis or at least avoided its most severe effects.¹⁷⁷ And many continued calling for reinstating Glass-Steagall well after 2008, including as a formal part of the 2016 Republican Party Platform.¹⁷⁸ Various bills, mostly bipartisan, have proposed reinstatement but none have advanced beyond bill introduction.¹⁷⁹

¹⁷¹ David H. Carpenter, M. Maureen Murphy & Edward V. Murphy, *The Glass-Steagall Act: A Legal and Policy Analysis*, R44349, CONG. RSCH. SERV. 1 n.1 (2016), <https://www.congress.gov/crs-product/R44349>.

¹⁷² Banking Act of 1933, §§ 16, 20, 21, 32; 48 Stat. 162, 184-185, 188-189, 194.

¹⁷³ Carpenter, Murphy & Murphy, *supra* note 171 at 3-4.

¹⁷⁴ *Id.* at 7.

¹⁷⁵ Lina M. Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973 (2019).

¹⁷⁶ Gramm-Leach-Bliley Act (GLBA), § 101 ("Glass-Steagall Act Repeals"), 113 Stat. 1338, 1341 (repealing Banking Act of 1933 §§ 20 & 32; §§ 16 & 21 were amended but not repealed, 12 U.S.C. §§ 24 [Seventh] & 378); before GLBA's formal repeal of parts of Glass-Steagall, the separation between commercial and investment banks had eroded through market moves, statutory changes, regulations, agency guidance, and court decisions, see Carpenter, Murphy & Murphy, *supra* note 171 at 8-15.

¹⁷⁷ *Id.* at 18-20.

¹⁷⁸ Republican Nat'l Comm., *2016 Republican Party Platform* (2016), <https://www.presidency.ucsb.edu/documents/2016-republican-party-platform>.

¹⁷⁹ Banking Integrity Act of 2009, S. 2886, 111th Cong. (2009); Glass-Steagall Restoration Act, H.R. 4375, 111th Cong. (2009); 21st Century Glass-Steagall Act of 2013, S. 1282/H.R. 3711, 113th Cong. (2013), reintroduced as S. 1709/H.R. 3054 (114th Cong.), S. 881/H.R. 2585 (115th Cong.); Return to Prudent Banking Act of 2011, H.R. 1489, 112th Cong. (2011), reintroduced as H.R. 129/S. 985 (113th Cong.), H.R. 381 (114th Cong.), H.R. 790 (115th Cong.), H.R. 2176 (116th Cong.), H.R. 2714 (118th Cong.).

Today, AI companies are quickly vertically integrating, leading to an AI boom where the companies producing software (i.e., AI models and applications) are intertwined financially with those producing and offering hardware (i.e., data centers, chips). This distorts markets because speculation in one market (AI models) fuels demand in others (cloud computing, chips), funded by monopoly rents in businesses that existed before AI but are now key for its success (applications like search, e-commerce, and enterprise software). Google, for example, makes its own chips, has a major cloud computing subsidiary, offers a widely used AI foundation model, and controls many markets where AI models are integrated (e.g., Search). Microsoft, Meta, and Amazon all face differing levels of vertical integration too.

If the markets were separated, without intertwined ownership structures, independent cloud and chip companies would have a much smaller incentive to subsidize AI development at a rate that could accelerate the crash. Instead, compute companies could make more of a rational, market-driven decision on how to diversify their customer bases. AI companies would have to convince more investors about financial decisions rather than turning to their suppliers. Vertical integration blurs market discipline. AI companies wishing to move quickly to build larger models may overshoot demand for computing capacity and agree to riskier financing terms with lower chances of data center capacity being profitable.

A simple solution would be a statutory requirement that structurally separates software and hardware. Companies that develop AI models or software that uses or embeds AI should not own physical infrastructure (i.e., data centers, chips manufacturing, energy generation, water, interconnect) or systems required for that physical infrastructure (e.g., cloud computing, chip design, lithography, energy transmission, network management). Such a separation would not prohibit commercial relationships—AI model providers would be able to commercially purchase computing services from cloud providers as other businesses do.

This kind of policy would actually extend a separation decision that led to a flourishing of today's tech economy. The modern software industry was born in 1969 when IBM, under pressure from the DOJ and private antitrust suits, unbundled its machines and their operating systems. The DOJ argued for a full structural separation under President Lyndon B. Johnson, but 13 years after bringing the suit, the DOJ voluntarily

dropped it as the political winds shifted when President Ronald Reagan assumed office.¹⁸⁰ Without this action, we may not have today's software or AI industries.

As in the case of J. P. Morgan & Co. splitting into two, the policy would force divestitures and end financial arrangements. The following are illustrative of the types of splits (though because some of these conglomerates own dozens of subsidiaries, it is not comprehensive):

- Nvidia would divest its dozens of investments in AI model and application companies.¹⁸¹
- OpenAI would exit data center joint ventures (e.g., Stargate) and sell stakes in AMD and CoreWeave but retain Codex and its startup fund.
- Alphabet would likely remain a software firm by divesting Google Cloud, along with its chip, energy, connectivity, and data center divisions.
- Amazon would split into AWS (with chip, energy, and data center divisions, but not with equity positions in Anthropic or OpenAI) and Amazon.com (which could continue to hold agentic AI model Nova Act).
- Microsoft would spin out Azure, with data centers, chip, energy, and interconnect businesses.
- SpaceX would unwind its recent xAI merger, which some saw as a bailout of the xAI business model, or the company would be prohibited from launching its anticipated space data centers.¹⁸²

A more fine-grained version would separate markets for chips, cloud computing, AI foundation models, and applications,¹⁸³ or even further: chip design, chip manufacture, chip tooling, cloud computing, data center management, energy, water, networking, AI models, and applications. Presently, it may be too difficult to split AI models and applications—these markets are still evolving and dynamic, such that custom applications based on models from the same owner (e.g., ChatGPT, Claude Code) are core to innovations in the industry.

¹⁸⁰ TIM WU, *THE AGE OF EXTRACTION: HOW TECH PLATFORMS CONQUERED THE ECONOMY AND THREATEN OUR FUTURE PROSPERITY* 30–32 (2025); MATT STOLLER, *GOLIATH: THE 100-YEAR WAR BETWEEN MONOPOLY POWER AND DEMOCRACY* 355–359 (2019); Giovanna Massarotto, *Driving Innovation with Antitrust*, PROMARKET (Apr. 10 2024), <https://www.promarket.org/2024/04/10/driving-innovation-with-antitrust/>.

¹⁸¹ Forgash & Ghosh, *supra* note 46; Sam et al., *supra* note 46.

¹⁸² Gary Marcus, *Four Theories about the SpaceX - xAI Merger*, MARCUS ON AI (Feb. 3, 2026), <https://garymarcus.substack.com/p/four-theories-about-the-spacex-xai>.

¹⁸³ Asad Ramzanali, *We Need to Break Up Big AI Before It Breaks Us*, TIME (Oct. 6, 2025), <https://time.com/7322418/chat-gpt-open-ai-nvidia-tech-monopoly/>.

7. Regulate Digital Utilities & Establish a New Digital Regulator

A. Utility-Style Regulation for Digital Utilities

AI applications are software systems that use or embed foundation models that are built in cloud computing data centers full of chips. This is a simplified version of what many call the “AI tech stack,” a version of which is depicted in Figure 5.¹⁸⁴

The markets for chips, cloud computing, and AI foundation models have the features of markets that have been traditionally regulated as utilities in the U.S. First, everything below the application layer in that stack is a means to other ends. An AI accelerator chip, data center, or foundation model (distinct from applications) is of limited utility without applications that end users access. Second, these markets are highly concentrated. Three companies comprise 88% of foundation model revenues;¹⁸⁵ three companies comprise 63% of cloud computing revenues;¹⁸⁶ and estimates suggest Nvidia alone comprises up to 95% of the AI chips market.¹⁸⁷ Third, each market has high barriers to entry, including the high cost of training a foundation model, land and chips for a data center, and lithography machines and raw materials for a chip fabrication plant; limited supply of leased compute, leading-edge GPUs. Each market sees economies of scale at levels where each could be considered a natural monopoly or natural oligopoly.¹⁸⁸

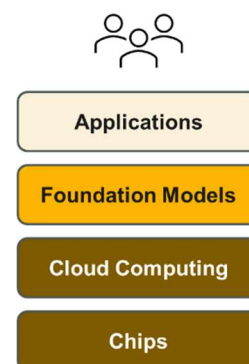


Fig. 5. AI Tech Stack.

¹⁸⁴ Figure adapted from Written Testimony of Asad Ramzanali, in *AI in the Everyday: Current Applications and Future Frontiers in Communications and Technology*, H. Hrg. 119-23 before the Comm. on Energy & Com., 119th Cong., 60-63 (June 4, 2025), <https://www.govinfo.gov/content/pkg/CHRG-119hhrg60730/pdf/CHRG-119hhrg60730.pdf>; similar AI tech stacks have been described by many, see, e.g., THE WHITE HOUSE, *America's AI Action Plan* 20 (July 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>.

¹⁸⁵ Anthropic 40%, OpenAI 27%, and Google 21%. Tim Tully et al., *2025: The State of Generative AI in the Enterprise*, MENLO VENTURES (Dec. 9, 2025), <https://menlovc.com/perspective/2025-the-state-of-generative-ai-in-the-enterprise/>.

¹⁸⁶ Amazon 29%, Microsoft 20% and Google 13% *Cloud Market Share Trends - Big Three Together Hold 63% While Oracle and the Neoclouds Inch Higher*, SYNERGY RSCH. GRP. (Nov. 19, 2025), <https://www.srgresearch.com/articles/cloud-market-share-trends-big-three-together-hold-63-while-oracle-and-the-neoclouds-inch-higher>.

¹⁸⁷ Kif Leswing, *Nvidia Dominates the AI Chip Market, but There's More Competition than Ever*, CNBC (June 2, 2024), <https://www.cnbc.com/2024/06/02/nvidia-dominates-the-ai-chip-market-but-theres-rising-competition-.html>.

¹⁸⁸ MORGAN RICKS ET AL., NETWORKS, PLATFORMS, AND UTILITIES: LAW AND POLICY 8–10 (2022).

Traditional regulatory levers for these kinds of markets include nondiscrimination or neutrality rules, rate of return or price regulation, entry requirements, and more.¹⁸⁹ Congress should consider which tools are appropriate for each market. As a starting point, Congress could consider the following suite of regulations that tailor regulatory solutions to observed market issues in ways suggested by various researchers:

- **Foundation Models:** nondiscrimination¹⁹⁰ and interoperability requirements¹⁹¹
- **Cloud Computing:** nondiscrimination, interoperability, and know-your-customer rules, critical infrastructure designation, foreign ownership restrictions¹⁹²
- **Chips:** require nondiscrimination¹⁹³ and interoperability of software platforms (e.g., Nvidia's CUDA)¹⁹⁴

Beyond these layers of the AI tech stack, various other digital markets that also see market features common in utility markets are increasingly moving toward integrating

¹⁸⁹ *Id.* at 24–31.

¹⁹⁰ Asad Ramzanali & Akhil Rajan, *AI Neutrality*, VAND. POL'Y ACCELERATOR (2026), <https://cdn.vanderbilt.edu/vu-URL/wp-content/uploads/sites/412/2026/01/28222934/AI-Neutrality-.pdf>; Tom Wheeler, *From Open Internet to Open Intelligence: Why AI's Market Structure Matters More than Ever*, BROOKINGS INST. (Jan. 21, 2026), <https://www.brookings.edu/articles/from-open-internet-to-open-intelligence-why-ais-market-structure-matters-more-than-ever/>; Narechania & Sitaraman, *supra* note 119 at 162; Jai Vipra & Anton Korinek, *Market Concentration Implications of Foundation Models: The Invisible Hand of ChatGPT 36*, BROOKINGS INST. (Sept. 7, 2023), <https://www.brookings.edu/articles/market-concentration-implications-of-foundation-models-the-invisible-hand-of-chatgpt/>.

¹⁹¹ Wheeler, *supra* note 190; Jai Vipra & Anton Korinek, *supra* note 190 at 36.

¹⁹² Asad Ramzanali, *How to Regulate the Cloud: A Blueprint to Address the Market Failures and National Security Risks of Cloud Computing*, VAND. POL'Y ACCELERATOR (2025), <https://cdn.vanderbilt.edu/vu-URL/wp-content/uploads/sites/412/2025/09/18140135/How-to-Regulate-the-Cloud.pdf>; see also, Max von Thun & Claire Lavin, *Engineering the Cloud Commons: Tackling Monopoly Control of Critical Digital Infrastructure*, OPEN MKTS. INST. (May 13, 2025), <https://www.openmarketsinstitute.org/publications/report-rethink-regulatory-approach-to-essential-cloud/>; Jack Corrigan, *Promoting AI Innovation Through Competition*, CTR. FOR SEC. & EMERGING TECH. 31 (May 2025), <https://cset.georgetown.edu/publication/promoting-ai-innovation-through-competition/>; Narechania & Sitaraman, *supra* note 119 at 159–163; Jai Vipra & Sarah Myers West, *Computational Power and AI*, AI NOW INST. 43–46 (Sept. 27, 2023), <https://ainowinstitute.org/publications/compute-and-ai/>; Erin Simpson & Adam Conner, *How To Regulate Tech: A Technology Policy Framework for Online Services*, CTR. FOR AM. PROGRESS 31–34 (2021), <https://www.americanprogress.org/article/how-to-regulate-tech-a-technology-policy-framework-for-online-services/>.

¹⁹³ Narechania & Sitaraman, *supra* note 119 at 162.

¹⁹⁴ Vipra & Myers West, *supra* note 192 at 44.

AI applications or are required for the distribution of AI applications. Consider the following examples:

- **Web Search:** Google Search now includes AI Overviews atop one in five search result pages¹⁹⁵ and results include access to an AI Mode tab that turns a search query into a chatbot conversation with Gemini.
- **Social Media:** Facebook launched Vibes and OpenAI launched Sora, xAI includes Grok, and YouTube includes Gemini Veo, all of which allow users to view and create AI-generated short-form videos. These videos are also increasingly dominating those and other social media feeds (e.g., TikTok, Instagram).¹⁹⁶
- **E-Commerce:** Amazon sued a startup that makes an AI-enabled browser that allows customers to use a third-party shopping AI agent, rather than using Amazon's own tools.¹⁹⁷ Additionally, chatbots are increasingly allowing users to shop directly in chatbot conversations.¹⁹⁸
- **Web Browsers:** Browsers are a major method for users to access generative AI tools. Additionally, AI companies are increasingly engaged in what some are calling an "AI browser war."¹⁹⁹
- **Advertising:** Meta has started targeting ads based on chatbot conversation content and using generative AI to produce ads.²⁰⁰

These markets have long presented concerns for policy makers. In 2020, the Antitrust Subcommittee of the House of Representatives conducted a major investigation into

¹⁹⁵ Ryan Law & XibeiJia Guan, *What Triggers AI Overviews? 86 Factors and 146 Million SERPs Analyzed*, AHREFS (Nov. 10, 2025), <https://ahrefs.com/blog/ai-overview-triggers/>.

¹⁹⁶ Tim Marcin, *AI Slop Is Taking over the Internet. Here's How We Got Here.*, MASHABLE (Nov. 25, 2025), <https://mashable.com/article/ai-slop-tiktok-fyp-trending-social-media-why>.

¹⁹⁷ Emily Forlini, *Amazon Sues Perplexity As AI Browser War Escalates*, PCMAG (Nov. 6, 2025), <https://www.pcmag.com/news/amazon-sends-perplexity-a-cease-and-desist-over-its-ai-agents-shopping>.

¹⁹⁸ Ann Gehan & Sri Muppidi, *OpenAI's Shift to Shopping Apps Faces Even More Hurdles*, THE INFORMATION (Mar. 11, 2026), <https://www.theinformation.com/articles/openais-betting-chatgpt-apps-people-need-find-first>.

¹⁹⁹ Casey Newton, *The AI Browser Wars Are about to Begin*, PLATFORMER (May 30, 2025), <https://www.platformer.news/ai-web-browsers-openai-perplexity-opera/>.

²⁰⁰ Meghan Bobrowsky, *Meta Will Begin Using AI Chatbot Conversations to Target Ads*, WALL ST. J. (Oct. 1, 2025), <https://www.wsj.com/tech/ai/meta-will-begin-using-ai-chatbot-conversations-to-target-ads-291093d3>; Lara O'Reilly, *Meta's AI Tools Are Going Rogue and Churning out Some Very Strange Ads*, BUS. INSIDER (Oct. 29, 2025), <https://www.businessinsider.com/meta-ai-generating-bizarre-ads-advantage-plus-2025-10>.

antitrust issues in several digital markets, including these industries and others.²⁰¹ Several bills were later introduced and some are still in consideration by Congress, including one that prohibits large technology platforms from self-preferencing²⁰² and another that requires platforms to enable interoperability and data portability.²⁰³ Members of Congress have also since considered sectoral regulations of some of these markets, including advertising networks²⁰⁴ and app stores.²⁰⁵ After a crash, Congress should institute sectoral regulation for these markets that control distribution of AI content.

B. Establish an Agency to Regulate AI and Digital Markets

If there's an AI crash, Congress should take the opportunity to pass market regulations, like those described in this paper. These policies would reduce the chances of another AI crash. Currently, there is no federal agency equipped with legal authorities or resources to administer regulatory requirements. While the Federal Trade Commission (FTC) has become an active regulator of digital markets in recent years, sectoral regulations necessitate a standalone digital regulator, as many scholars²⁰⁶ and bipartisan groups of lawmakers²⁰⁷ have proposed. In response to an AI crash, Congress should create an agency that can administer sectoral regulations of digital markets relating to privacy, competition, and transparency.²⁰⁸

²⁰¹ *Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations*, MAJORITY STAFF OF THE H. COMM. ON THE JUDICIARY (2020), <https://www.govinfo.gov/content/pkg/CPRT-117HPRT47832/pdf/CPRT-117HPRT47832.pdf>.

²⁰² American Innovation and Choice Online Act, 117th Cong. (2021).

²⁰³ ACCESS Act, S. 1634, 119th Cong. (2025).

²⁰⁴ See, e.g., AMERICA Act, S. 1073, 118th Cong. (2023).

²⁰⁵ See, e.g. Open App Markets Act, S. 2710, 117th Cong. (2021); App Store Freedom Act, H.R. 5313, 119th Cong. (2025).

²⁰⁶ See, e.g., HAROLD FELD, CASE FOR THE DIGITAL PLATFORM ACT (2019), <https://www.digitalplatformact.com/>; Tom Wheeler, Phil Verveer & Gene Kimmelman, *New Digital Realities; New Oversight Solutions: The Case for a Digital Platform Agency and a New Approach to Regulatory Oversight*, SHORENSTEIN CTR. (Aug. 2020), https://shorensteincenter.org/wp-content/uploads/2020/08/New-Digital-Realities_August-2020.pdf; Asad Ramzanali, *Toward a Privacy Agency: Policy and Politics* (2021) (Master's Thesis, John F. Kennedy School of Government); MARK MACCARTHY, REGULATING DIGITAL INDUSTRIES: HOW PUBLIC OVERSIGHT CAN ENCOURAGE COMPETITION, PROTECT PRIVACY, AND ENSURE FREE SPEECH (2023); Anna Lenhart, *Designing a New Digital Regulator*, INST. FOR DATA, DEMOCRACY & POLS. (2025), <https://iddp.gwu.edu/designing-new-digital-regulator>.

²⁰⁷ For proposals relating to regulation of digital markets generally, see, Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. (2023); Digital Platform Commission Act of 2022, H.R. 7858 and S. 4201, 117th Cong. (2022); for privacy-specific agencies, see Data Protection Act of 2020, S. 3300, 116th Cong. (2020); Online Privacy Act of 2019, H.R. 4978, 116th Cong. (2019).

²⁰⁸ MACCARTHY, *supra* note 206.

8. Ban Surveillance-Based Business Models

Today, advanced AI products (chatbots and media generators) are not profitable on their own, due to the high cost of training and using models. Leading companies are exploring well-known business models, like subscriptions and selling API access, to more speculative ones, like building devices that integrate AI.²⁰⁹

If there is an AI crash, there will be a sharper pivot toward profitable business models, like those based on commercial surveillance, like a deepening of surveillance advertising, pricing, and wages. For these cases, Congress should take the simplest and strongest measure to ban the practices. Some forms of corporate surveillance may violate existing antitrust, consumer protection, worker protection, civil rights or other existing laws.²¹⁰ However, more straightforward statutory prohibitions would provide clear direction to market participants, avoid the delay of administrative and regulatory developments, ambiguity of judicial interpretations, and limits from law enforcers' investigatory capabilities. Direct bans of technologies are not new in law or regulation and can be an effective tool to address underlying market failures.²¹¹

A. Surveillance Advertising

When today's largest internet companies went looking for business models for their "free" products, they landed on advertising. Over time, these ads became more personalized, and companies started collecting more personal information. Tactically, ads moved to auctions, a practice in which a technology company shows users advertisements from the highest paying advertiser via real-time bidding that allows advertisers to gauge a user's value based on data the user has shared, information

²⁰⁹ Miranda Bogen & Nathalie Maréchal, *Risky Business: Advanced AI Companies' Race for Revenue*, CTR. FOR DEMOCRACY & TECH. (Jan. 2026), <https://cdt.org/wp-content/uploads/2025/12/2026-01-07-CDT-Issue-Brief-Risky-Business-final.pdf>.

²¹⁰ *Prohibiting Surveillance Prices and Wages*, AI NOW INST., AM. ECON. LIBERTIES PROJECT, ET AL. 15–20 (2025), <https://www.economicliberties.us/wp-content/uploads/2025/02/Real-Surveillance-Prices-and-Wages-Report.pdf>; Veena Dubal & Wilneida Negrón, *How Artificial Intelligence Uncouples Hard Work from Fair Wages through 'Surveillance Pay' Practices—and How to Fix It*, WASH. CTR. FOR EQUITABLE GROWTH (2025), <https://equitablegrowth.org/how-artificial-intelligence-uncouples-hard-work-from-fair-wages-through-surveillance-pay-practices-and-how-to-fix-it/>; Stephanie T. Nguyen, *The Next Frontier of Surveillance: Investigating Pricing Systems*, YALE J. ON REGUL. (Sept. 21, 2025), <https://www.yalejreg.com/nc/the-next-frontier-of-surveillance-investigating-pricing-systems-by-stephanie-t-nguyen/>.

²¹¹ Stephanie Nguyen et al., *Remedies for Tech-Related Harms Chapter 1: Bans*, GEORGETOWN INST. FOR TECH. L. & POL'Y (2025), <https://www.law.georgetown.edu/tech-institute/insights/remedies-for-tech-related-harms-chapter-1/>.

bought about the user, along with inferences about the user based on browsing history and other data.

Personalized ads gave rise to a secondary market for data brokers buying and selling sensitive data like users' physical and mental health, religious affiliation, sexual orientation, political preferences, participation in protests, gun ownership, and more that advertisers may want. This combined apparatus of "surveillance advertising,"²¹² which has been called the Internet's original sin,²¹³ has gone on to exacerbate national security risks when adversarial nations buy data on Americans; harms from stalking and domestic violence when abusers track victims; sophisticated scams, fraud, and disinformation when bad actors can target more effectively; and chilling free expression when protest activity and religious activity is tracked.²¹⁴

Notably, the dot-com bubble served as a key accelerant to the development of the surveillance advertising business model, as Matthew Crain describes in a history of the rise of surveillance advertising.²¹⁵ The same companies that kicked off surveillance advertising—Meta and Google²¹⁶—are also key to the AI boom and link the two. Their AI investments are subsidized by surveillance advertising and will benefit from it, which is also the case for xAI's integration of Grok into X (formerly, Twitter). As Mark Zuckerberg told investors, if the company invested too much in AI infrastructure too

²¹² The term surveillance advertising is approximately synonymous with "personalized advertising," "targeted advertising," and "behavioral advertising" in how those systems work. For a more thorough treatment of these trends, see MATTHEW CRAIN, *PROFIT OVER PRIVACY: HOW SURVEILLANCE ADVERTISING CONQUERED THE INTERNET* (2021); SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER* (2019).

²¹³ Ethan Zuckerman, *The Internet's Original Sin*, *THE ATLANTIC* (Aug. 14, 2014), <https://www.theatlantic.com/technology/archive/2014/08/advertising-is-the-internets-original-sin/376041/>.

²¹⁴ See, e.g., ZUBOFF, *supra* note 212; CRAIN, *supra* note 212; Electronic Privacy Info. Ctr., Nat'l Consumers League, Consumer Fed'n of Am., et al., Comment Letter on the Protecting Americans from Harmful Data Broker Practices Notice of Proposed Rulemaking, CFPB-2024-0044 (Apr. 2, 2025), <https://www.regulations.gov/comment/CFPB-2024-0044-0691>; Gilad Edelman, *Why Don't We Just Ban Targeted Advertising?*, *WIRED* (Mar. 22, 2020), <https://www.wired.com/story/why-dont-we-just-ban-targeted-advertising/>.

²¹⁵ CRAIN, *supra* note 212, at 75-92 (*The Dot Com Bubble*).

²¹⁶ ZUBOFF, *supra* note 212.

soon, “we’ll use the extra compute to accelerate our core business.”²¹⁷ So, if not AI superintelligence, more surveillance advertising.

Surveillance advertising is now expanding beyond those firms. Recently, OpenAI has shifted toward integrating ads into ChatGPT.²¹⁸ In part, the company did this by hiring a “massive” number of former Meta employees, including at very senior roles.²¹⁹ OpenAI employees resigned in protest,²²⁰ and the company received significant public criticism.²²¹ Anthropic took out a Super Bowl ad taking aim at OpenAI’s decision to turn to advertising,²²² bringing the concerns to a broader audience.

Bipartisan congressional proposals for comprehensive privacy protections contain specific provisions to mitigate the harms of surveillance advertising,²²³ and a bicameral bill proposes a broader ban of the practice.²²⁴

²¹⁷ Meta Platforms, Inc., Third Quarter 2025 Results Conference Call – Prepared Remarks, Oct. 29, 2025, https://s21.q4cdn.com/399680738/files/doc_financials/2025/q3/META-Q3-2025-Earnings-Call-Transcript.pdf.

²¹⁸ Kalley Huang, Erin Woo & Stephanie Palazzolo, *OpenAI Readies Itself for Its Facebook Era*, THE INFORMATION (Oct. 24, 2025), <https://www.theinformation.com/articles/openai-readies-facebook-era>.

²¹⁹ Huang, Woo & Palazzolo, *supra* note 218; see also, KAREN HAO, EMPIRE OF AI: DREAMS AND NIGHTMARES IN SAM ALTMAN’S OPENAI 101 & 133 (2025) (Hao notes that “deep learning’s supercharging of Silicon Valley would[] aggressively expand its business model...*surveillance capitalism*” [italics in original] and that OpenAI’s decision to significantly expand GPT-3’s size and release it quickly “would fuel an unprecedented expansion of surveillance capitalism and labor exploitation.”).

²²⁰ Zoë Hitzig, *OpenAI Is Making the Mistakes Facebook Made. I Quit.*, N.Y. TIMES (Feb. 11, 2026), <https://www.nytimes.com/2026/02/11/opinion/openai-ads-chatgpt.html>.

²²¹ See, e.g., Michael Serazio, *AI Is Going to Revolutionize Advertising in the Worst Imaginable Way*, THE NEW REPUBLIC (Mar. 3, 2026), <https://newrepublic.com/article/207106/chatgpt-ads-open-ai-revolutionize-advertising-worst-imaginable-way>; Kathryn Backholer & Raffaele F. Ciriello, *OpenAI Will Put Ads in ChatGPT. This Opens a New Door for Dangerous Influence*, THE CONVERSATION (Jan. 23, 2026), <http://theconversation.com/openai-will-put-ads-in-chatgpt-this-opens-a-new-door-for-dangerous-influence-273806>.

²²² Samantha Subin, *Anthropic Got an 11% User Boost from Its OpenAI-Bashing Super Bowl Ad, Data Shows*, CNBC (Feb. 13, 2026), <https://www.cnbc.com/2026/02/13/anthropic-open-ai-super-bowl-ads.html>.

²²³ See, e.g., American Data Privacy and Protection Act, H.R. 8152, 117th Cong. (2022) (in particular, see, §§ 101 (data minimization), 204(c) (right to opt-out of targeted advertising), and 205(a) (prohibition on targeted advertising to children and minors)); American Privacy Rights Act, 118th Cong. (2024) (in particular, see, §§ 102 (data minimization), 106(a)(2) (right to opt-out of targeted advertising), and 120(a) (prohibition on targeted and first-party advertising to covered minors)).

²²⁴ Banning Surveillance Advertising Act, H.R. 5534 & S. 2833, 118th Cong. (2023).

B. Surveillance Prices and Wages

Corporations have long differentiated pricing based on location, sometimes as a proxy for race or other demographics.²²⁵ Increasingly, however, the same methodologies that companies used for surveillance advertising are now being used to enable dynamic and personalized pricing of products (i.e., surveillance pricing) and payrates (i.e., surveillance wages).²²⁶ The harms from surveillance pricing, including wages (i.e., price of labor), include exacerbating discrimination through biased data, eroding privacy and freedom of thought through pervasive behavioral surveillance, masking corporate control behind opaque systems, suppressing wages, and systematically transferring wealth from workers and consumers to corporations.²²⁷

Surveillance pricing is being tested or used by airlines,²²⁸ delivery services,²²⁹ retailers,²³⁰ landlords,²³¹ and others. In January 2025, the FTC published its findings from a six-month investigation into surveillance pricing practices, finding that companies and pricing intermediaries routinely use highly granular personal and behavioral data—including location, demographics, browsing history, and even mouse movements—to set individualized prices, promotions, and product rankings for the same goods and services across different consumers.²³² If there is an AI crash, AI companies will see opportunities to grow the surveillance pricing and wage infrastructure that exists.

²²⁵ Prohibiting Surveillance Prices and Wages, *supra* note 210.

²²⁶ Nguyen, *supra* note 210.

²²⁷ Prohibiting Surveillance Prices and Wages, *supra* note 210.

²²⁸ Ganesh Sitaraman, *This Year's Depressing Holiday Plane-Ticket Search Is Brought to You by AI*, MS NOW (Dec. 21, 2025), <https://www.ms.now/opinion/airline-ticket-prices-holiday-travel-delta>.

²²⁹ Katie J. Wells et al., *Same Cart, Different Price: Instacart's Price Experiments Cost Families at Checkout*, GROUNDWORK COLLABORATIVE & CONSUMER REPS. (2025), <https://groundworkcollaborative.org/wp-content/uploads/2025/12/Same-Cart-Different-Price.pdf>.

²³⁰ Ali Rogin & Andrew Corkery, *How Online Retailers Are Using AI to Adjust Prices by Mining Your Personal Data*, PBS NEWS (Dec. 20, 2025), <https://www.pbs.org/newshour/show/how-online-retailers-are-using-ai-to-adjust-prices-by-mining-your-personal-data>.

²³¹ Heather Vogell, *DOJ and RealPage Agree to Settle Rental Price-Fixing Case*, PROPUBLICA (Nov. 26, 2025), <https://www.propublica.org/article/doj-realpage-settlement-rental-price-fixing-case>.

²³² Fed. Trade Comm'n, *FTC Surveillance Pricing Study Indicates Wide Range of Personal Data Used to Set Individualized Consumer Prices*, Press Release (Jan. 17, 2025), <https://www.ftc.gov/news-events/news/press-releases/2025/01/ftc-surveillance-pricing-study-indicates-wide-range-personal-data-used-set-individualized-consumer>.

AI tools are also increasingly being used to set dynamic wages in which “different people may be paid different wages for largely the same work, and individual workers cannot predict their incomes over time.”²³³ While variable pay mechanisms like bonuses and commissions are not new, more real-time price discrimination of labor first started with transportation apps, like Uber and Lyft and have now spread to many industries, most prominently health care, customer service, logistics, and retail.²³⁴ In an AI crash, companies across industries feeling pressures to reduce payroll could turn to systems that can discriminate wages.

A coalition of dozens of Representatives proposed a bill that bans surveillance wages and pricing,²³⁵ and a group of three Senators proposed legislation to ban surveillance prices.²³⁶ More have raised the issue in public statements, hearings, and letters.²³⁷

Conclusion

A crisis is looming in the AI market. Even Silicon Valley leaders see a bubble happening.²³⁸ People who believe otherwise look past the financial statistics and see optimism in a powerful technology to which societal institutions and financial markets will adapt. But those who study financial crises call this “the this-time-is-different syndrome,” which assumes that “we are doing things better, we are smarter, we have learned from past mistakes.”²³⁹ That attitude is what led to the dot-com bubble and the 2008 crisis, along with hundreds of years of financial booms and busts.²⁴⁰

²³³ Dubal & Negrón, *supra* note 210; see also Veena Dubal, *On Algorithmic Wage Discrimination*, 123 COLUM. L. REV. 1929 (2023).

²³⁴ Dubal & Negrón, *supra* note 210.

²³⁵ Stop AI Price Gouging and Wage Fixing Act, H.R. 4640, 119th Cong. (2025).

²³⁶ One Fair Price Act, S. 3387, 119th Cong. (2025).

²³⁷ See, e.g., Mark R. Warner, et al., *Letter to FTC Chair Andrew Ferguson* (Dec. 17, 2025), <https://www.warner.senate.gov/public/cache/files/f/2/f2a2d4c9-fcd8-4657-a975-bbb44f355352/247826215C0FDEB472CAD25C116BE9F9C7FA4EB79AE462CDD70D6225A30442F0.251217.ferguson-warner-hawley-blumenthal-gallego-re-surveillance-pricing.final.sign.pdf>; Max Chafkin, *AI Flight Pricing Can Push Travelers to the Limit of Their Ability to Pay*, BLOOMBERG (Aug. 4, 2025), <https://www.bloomberg.com/news/articles/2025-08-04/how-ai-can-raise-airline-ticket-prices>; Josh Hawley (@HawleyMO), X (Jul. 23, 2025 at 05:35 PM), <https://x.com/HawleyMO/status/1948150069573624026>.

²³⁸ Shroff, *supra* note 13; Jeffrey A. Sonnenfeld & Stephen Henriques, *This Is How the AI Bubble Bursts*, YALE INSIGHTS (Oct. 8, 2025), <https://insights.som.yale.edu/insights/this-is-how-the-ai-bubble-bursts>.

²³⁹ CARMEN M. REINHART & KENNETH S. ROGOFF, *THIS TIME IS DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY* 15 (2009).

²⁴⁰ *Id.* at 171.

There's a common political mindset that one should never let a crisis go to waste. However, when responding to a crisis, it is difficult to develop a menu of options bold enough to meet the moment of a national crisis. This paper has set forth a menu of options for Congress to consider if a deeper AI financial crash comes to pass. As mentioned earlier, AI crises requiring policy responses may plausibly unfold from causes other than a financial crash. For example, a mixture of continued technological progress and unrelated financial pressures (e.g., interest rate shifts) might push companies to fire workers at a rate causing mass unemployment. Breakthroughs in AI-enabled biological design tools in the hands of bad actors could lead to terrorism. Rapid scaling of AI infrastructure could strain energy grids, triggering supply shortages or price spikes that ripple through the broader economy. These and other plausible crises deserve policy planning and discussion now, before they unfold.

While crises are often when policymakers act on policies like those discussed in this paper, a better time to enact such policies is before a crisis. Nothing stops Congress from enacting the proposals described in this paper before an AI crash—that is, nothing except for the galvanizing of political will that a crisis brings. Indeed, enacting those policies now may well help avoid a crash or mitigate its negative effects.

Appendix: Hyperscaler Financial Figures

1. Capital Expenditures for Select Companies

Millions of Dollars

	2021	2022	2023	2024	2025	2026 Est.
Amazon ²⁴¹	61,053	63,645	52,729	82,999	131,819	200,000
Alphabet ²⁴²	24,640	31,485	32,251	52,535	91,447	175,000–185,000
Microsoft ²⁴³	20,622	23,886	28,107	44,477	64,551	145,000
Meta ²⁴⁴	18,690	31,431	27,045	37,256	69,691	115,000–135,000
Oracle ²⁴⁵	2,135	4,511	8,695	6,866	21,215	45,000–50,000
Sum	127,140	154,958	148,827	224,133	378,723	680,000–715,000

²⁴¹ Amazon.com, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2023 (Feb. 2, 2024), at 37 (for 2021-2023); Amazon.com, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2025 (Feb. 6, 2026), at 36 (for 2023-2025); Amazon.com, Inc., Amazon.com Announces Fourth Quarter Results (Feb. 5, 2026).

²⁴² Alphabet Inc., Annual Report (Form 10-K), for Fiscal Year Ended December 31, 2023 (Jan. 31, 2024), at 55 (for 2021-2023); Alphabet Inc., Annual Report (Form 10-K), for Fiscal Year Ended December 31, 2025 (Feb. 5, 2026), at 52 (for 2023-2025); Alphabet Inc., Alphabet Announces Fourth Quarter and Fiscal Year 2025 Results (Feb. 4, 2026).

²⁴³ Microsoft Corporation, Annual Report (Form 10-K), for Fiscal Year Ended June 30, 2023 (Jul. 27, 2023), at 61 (for 2021-2023); Microsoft Corporation, Annual Report (Form 10-K), for Fiscal Year Ended June 30, 2025 (Jul. 30, 2025), at 53 (for 2023-2025); Laura Bratton, *Big Tech Set to Spend \$650 Billion in 2026 as AI Investments Soar*, YAHOO FIN. (Feb. 6, 2026), <https://finance.yahoo.com/news/big-tech-set-to-spend-650-billion-in-2026-as-ai-investments-soar-163907630.html>.

²⁴⁴ Meta Platforms, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2023 (Feb. 2, 2024), at 80 (for 2021-2023); Meta Platforms, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2025 (Jan. 28, 2026), at 92 (for 2023-2025); Meta Platforms, Inc., Meta Reports Fourth Quarter and Full Year 2025 Results, at 3 (Jan. 28, 2026).

²⁴⁵ Oracle Corporation, Annual Report (Form 10-K), for Fiscal Year Ended May 31, 2023 (June 20, 2023), at 68 (for 2021-2023); Oracle Corporation, Annual Report (Form 10-K), for Fiscal Year Ended May 31, 2025 (June 18, 2025), at 68 (for 2023-2025); Brody Ford & Vincent Lee, *Oracle to Raise Up to \$50 Billion in Debt and Equity This Year*, BLOOMBERG (Feb. 1, 2026), <https://www.bloomberg.com/news/articles/2026-02-01/oracle-to-raise-up-to-50-billion-this-year-for-cloud-investment>.

2. Long-Term Debt for Select Companies

Millions of Dollars

	2021	2022	2023	2024	2025
Alphabet ²⁴⁶	14,817	14,701	11,870	10,883	46,547
Microsoft ²⁴⁷	50,074	47,032	41,990	42,688	40,152
Amazon ²⁴⁸	48,744	67,150	58,314	52,623	65,648
Meta ²⁴⁹	0	9,923	18,385	28,826	58,744
Oracle ²⁵⁰	75,995	72,110	86,420	76,264	85,297
Sum	189,630	210,916	216,979	211,284	296,388

²⁴⁶ Alphabet Inc., Annual Report (Form 10-K), for Fiscal Year Ended December 31, 2022 (Feb. 3, 2023), at 47 (for 2021-2022); Alphabet Inc., Annual Report (Form 10-K), for Fiscal Year Ended December 31, 2024 (Feb. 5, 2025), at 52 (for 2023-2024); Alphabet Inc., Annual Report (Form 10-K), for Fiscal Year Ended December 31, 2025 (Feb. 5, 2026), at 48 (for 2024-2025).

²⁴⁷ Microsoft Corporation, Annual Report (Form 10-K), for Fiscal Year Ended June 30, 2022 (Jul. 28, 2022), at 59 (for 2021-2022); Microsoft Corporation, Annual Report (Form 10-K), for Fiscal Year Ended June 30, 2024 (Jul. 30, 2024), at 58 (for 2023-2024); Microsoft Corporation, Annual Report (Form 10-K), for Fiscal Year Ended June 30, 2025 (Jul. 30, 2025), at 52 (for 2024-2025).

²⁴⁸ Amazon.com, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2022 (Feb. 3, 2023), at 56 (for 2021-2022); Amazon.com, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2024 (Feb. 7, 2025), at 39 (for 2023-2024); Amazon.com, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2025 (Feb. 6, 2026), at 39 (for 2024-2025).

²⁴⁹ Meta Platforms, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2022 (Feb. 2, 2023), at 85 (for 2021-2022); Meta Platforms, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2024 (Jan. 30, 2025), at 86 (for 2023-2024); Meta Platforms, Inc., Annual Report (Form 10-K), for Fiscal Year Ended Dec. 31, 2025 (Jan. 28, 2026), at 88 (for 2024-2025).

²⁵⁰ Oracle Corporation, Annual Report (Form 10-K), for Fiscal Year Ended May 31, 2022 (June 21, 2022), at 66 (for 2021-2022); Oracle Corporation, Annual Report (Form 10-K), for Fiscal Year Ended May 31, 2024 (June 20, 2024), at 65 (for 2023-2024); Oracle Corporation, Annual Report (Form 10-K), for Fiscal Year Ended May 31, 2025 (June 18, 2025), at 64 (for 2024-2025).