If the AI Bubble Bursts

1 DECEMBER 2025

Pedro Gradvohl and Hasan Seyidli



If the AI Bubble Bursts: the Effects on the US and Chinese Economies

The AI hype experienced in recent years appears to be crumbling, as evidenced by a chart shared by Bloomberg on the US AI market. AI has been one of the most recurring topics in economics, policymaking, industry, and technology over the last 3 years. At the forefront of the effort to develop this new technology are the United States and China, rival powers that are constantly at odds with one another. From 2021 onwards, both have invested heavily in the development and implementation of AI, aiming to form a strong market and aggregate value to their respective economies. However, these investments seem to be threatened if the market decides

AI is not the tool it was imagined to be. Under these premises, what would happen to the economies of the USA and China if the AI bubble burst?

To understand the effects of such an event, it is first necessary to understand how the supposed bubble originated. This recent explosion in the AI sphere began with OpenAI's launch of GPT-3 in 2020, which completely changed how the market viewed AI and large language models. Later in 2022, ChatGPT was released and quickly went mainstream, reaching 100 million users in two months and introducing the general public to the perks of AI-imbued tools. Gains in productivity and accuracy are things every professional and business strives for. AI has shown promise that it will be able to provide insights and help transform data in impactful ways, not to mention that it can be trained to take on tasks by itself. A PwC report estimated that by 2030, AI could raise global GDP by 14%, adding over 15 trillion USD (PwC, 2025). Likewise, a McKinsey Global Institute study projects AI could deliver around 13 trillion USD in additional economic output by 2030, an annual global GDP growth of about 1.2 percentage points (McKinsey, 2018).

The "fear of missing out" factor is a factor that pushed for the investment boom; the mentality is that the first to invest and participate early on will reap the highest returns. This "FOMO" investment wave came from the perception that funds have underestimated the impact of new technology in the past and missed the opportunity to become early investors (Méndez-Suárez, Ćukušić & Ninčević-Pašalić, 2025). In 2024, US private AI investment alone grew to US$109.1 billion, reaching a total global amount of US$252.3 billion in corporate investments (Stanford, 2025).

However, despite the advancements, the favourable reports, the investments, and, above everything else, the hype, the AI promise has started to show its first cracks. A strong showcase of these cracks came this August with a report from MIT, which stated that 95% of companies that have adopted AI as a tool have failed to achieve a good return on investment (MIT, 2025). This study dealt a significant blow to the industry, which had been quietly receiving criticism for its lack of innovation over the past few months. Earlier this year, some magazines and sites were discussing an apparent stall in the progress of AI technology (Lovely, 2025).

Experts explain that there have been noticeable improvements in AI, but that they are felt primarily by researchers and academics who implement the tool daily to aid their research. However, the average casual user will still see and be annoyed by the system's hallucinations and simple recurrent mistakes. This misinterpretation can lead shareholders to misread AI's potential and sell their stocks, devaluing the companies' share values and causing more people to sell their shares before the price drops (Widder & Hicks, 2024).

Nonetheless, the perception of AI progress stalling was not the information that changed the way the market is seeing AI, but a Bloomberg chart shared this October (Forgash & Ghosh, 2025). In the chart, Bloomberg dis-

played how the top 10 companies listed in the S&P 500 have been investing billions of USD in one another. For example, Nvidia, OpenAI, and Oracle seem to be just passing money around to one another, as earlier this year, OpenAI signed a US$300 billion deal with Oracle, which later spent billions on Nvidia chips, which had just invested US$100 billion in OpenAI (Jadhav, 2025). Aside from private investors, governments are taking an interest in developing this new technology and becoming major stakeholders themselves.

Both the US and China have invested heavily in developing their national markets and companies, passing a myriad of laws and incentives to support businesses and investors. To put it in perspective, the US created policies such as the National AI Initiative Act of 2021 and the US$200 billion for AI investments through the Chips and Science Act. Washington's main aim with AI is to use it as a cornerstone to maintain its economic and military superiority in relation to the rest of the world, especially Beijing (Mouton & Lucas, 2023). Furthermore, following the objective to maintain itself ahead of China, the US has created policies with the intention of halting Chinese technological growth. Since 2018, the US has imposed restrictions on the export of semiconductors and other technologies to China to halt the development of its industries (Miller, 2025). So far, the US has a noticeable edge over China, having a more mature industry and the biggest companies in the sector. However, China seems to be on a winning streak of its own.

AI investment for the US is focused on maintaining its own national security, both in the economic and military aspects. China, in contrast, sees AI as a doorway to further its national development and modernise its economy. In 2017, China announced the Next-Generation AI Development Plan, which set a goal for China to achieve world-leading status in AI by 2025 and be the industry's global leader by 2030 (Jochheim, 2021). Furthermore, unlike the US, China is making clear efforts to regulate AI, creating standardisation guidelines to guide the usage and development of AI tools to best fit the government's plans and priorities (Na & Zhu, 2025).

As these dynamics play out, the enthusiasm behind AI investment begins to collide with mounting concerns about the sector's true economic basis. This tension produces a critical situation in which both opportunities and vulnerabilities become increasingly apparent. Given this backdrop, it is critical to analyse how a hypothetical AI bubble burst could alter broader economic and geopolitical trajectories.

The United States, China, and the larger global system would all be impacted by a simultaneous economic and geopolitical shock if the AI bubble burst. A rapid loss of market confidence would require both nations to reevaluate goals, reallocate financial resources, and reevaluate the political importance of technology in their international standing because they have linked artificial intelligence to their technological and industrial agendas. (Lee, 2018).

From model developers and cloud service providers to semiconductor makers and AI-dependent software platforms, the most immediate economic impact would be a significant drop in the valuation of AI-related businesses. The fall of the bubble would probably mirror a mildened version of the post-dot-com downturn in the United States, where venture capital has aggressively focused resources on AI. As a result, the U.S. would lose its position as the world's leading centre for cutting-edge digital technology, hiring would decline, and innovation would be slowed (OECD, 2023).

China would face comparable economic pressure, but via different avenues. Because its AI ecosystem primarily depends on state-directed investment, public budgets rather than private resources would be strained in the event of a market collapse. The central government would have to reevaluate the scope and direction of technology subsidies because the regions that have formed their development policies around AI clusters would be under the most financial strain. A decline in AI investment would probably shift focus to more resilient industries like robotics, semiconductor manufacturing, and quantum technologies, which are already essential to long-term industrial strategy in both nations (Bown & Irwin, 2023).

These economic changes would also have geopolitical ramifications. The premise that AI will support future military prowess, economic might, and worldwide influence is the foundation of the technological rivalry between the United States and China. This contest would not end if AI's strategic appeal decreased, but it would change its emphasis. By lessening reliance on AI as a single pillar of competitiveness, this change could expedite existing efforts in the United States to diversify federal R&D funding across a wider range of developing technologies (National Science Board, 2022). China's "military-civil fusion" approach, which depends on steady access to cutting-edge semiconductors and rapid private-sector innovation, both of which would be interrupted during a bubble collapse, would be complicated by slower AI advancement (Kania, 2019).

Moreover, all of that would have an impact on supply chains as well. Today's AI development is largely dependent on international semiconductor networks, where China leads in assembly, rare-earth processing, and lower-end fabrication, while the United States controls intellectual property and high-end design (Miller, 2022). The fragility of this dependency would be exposed by a bubble bust. The strategic motivations for both nations to pursue semiconductor self-sufficiency would only increase, even though a decrease in AI demand may momentarily ease pressure on chip supplies. The global economy would become even more fragmented as a result, strengthening current trends toward export restrictions, reshoring, and investment screening (Lindsay & Kim, 2022).

Speaking about the investment flows, as global investors move toward lower-risk industries, frontier-technology markets that have drawn significant venture capital inflows would see a dramatic turnaround. This would make Silicon Valley and other innovation hubs less appealing to the US. Ac-

cording to McBride and Chatzky (2019), it would increase China's already-existing obstacles to global finance, strengthening financial decoupling and preventing Chinese tech companies from expanding internationally. Project cancellations and capital flight would jeopardise continuing digitisation efforts in emerging nations that depend on U.S. and Chinese investment in their digital sectors, particularly in Southeast Asia, Africa, and Latin America (UNCTAD, 2022).

The collapse of the AI bubble will mean not only a financial fix but also a strategic turning point in global technological competition. For the US and China, a bubble rupture would expose structural dependencies, exaggerate existing vulnerabilities, and force long-term national strategies to recalibrate. Analysis shows that the immediate economic consequences – falling valuations, disrupted investment flows, and tight public budgets – have quickly shifted into broader geopolitical shifts. Washington would be forced to diversify technological priorities beyond AI, rebalancing its innovation agenda toward semiconductors, quantum computing, and new defence technologies. Beijing, at the same time, would face a slowdown in the dynamics of its AI-led development model, putting pressure on state planners to strengthen alternative pillars of technological progress, simultaneously coping with tighter financial conditions and limited access to global finance.

At the global level, a reversal of AI market development would reinforce the continuing fragmentation of supply chains and accelerate the policy of technological self-sufficiency. Countries in the global south that rely on digital investments from the US and China will face uncertainty, leading to delays in digital transformation and widening technological inequality. Finally, the AI bubble explosion will not end the technological rivalry between the US and China, but it will change it. Competition will continue, but on a more diversified technological front, so that both powers adjust their ambitions to a tougher and less risky global environment.

This shift may temporarily slow down innovation, but it can also lead to more sustainable, strategically balanced technological development around the world.

References

Miller, C. (2025, July 7). How US Export Controls Have (and Haven't) Curbed Chinese AI. AI Frontiers. https://ai-frontiers.org/articles/us-chip-export-controls-china-ai

Lovely, G. (2025, January 8). Why AI Progress Is Increasingly Invisible. TIME; Time. https://time.com/7205359/why-ai-progress-is-increasingly-invisible/

Forgash, E., & Ghosh, A. (2025, October 7). OpenAI's Nvidia, AMD Deals Boost $1 Trillion AI Boom With Circular Deals. Bloomberg.com; Bloomberg. https://www.bloomberg.com/news/features/2025-10-07/openai-s-nvidia-amd-deals-boost-1-trillion-ai-boom-with-circular-deals?utm_source=chatgpt.com

Stanford University. (2025). Artificial intelligence index report 2025. https://hai.stanford.edu/assets/files/hai_ai_index_report_2025.pdf

Mouton, C. A., & Lucas, C. (2023, September 20). Taking the Measure of AI and National Security. Rand.org; The National Interest. https://www.rand.org/pubs/commentary/2023/09/taking-the-measure-of-ai-and-national-security.html

Jochheim, U. (2021). China's Ambitions in Artificial Intelligence. https://www.europarl.europa.eu/RegData/etudes/ATAG/2021/696206/EPRS_ATA(2021)696206_EN.pdf

Bughin, J., Seong, J., Manyika, J., Chui, M., & Joshi, R. (2018, September 4). Notes from the AI frontier: Modeling the impact of AI on the world economy. McKinsey & Company. https://www.mckinsey.com/featured-insights/artificial-intelligence/notes-from-the-ai-frontier-modeling-the-impact-of-ai-on-the-world-economy

Widder, D., & Hicks, M. (2024, November 20). Watching the Generative AI Hype Bubble Deflate – Ash Center. Ash Center. https://ash.harvard.edu/resources/watching-the-generative-ai-hype-bubble-deflate/

Méndez-Suárez, M., Maja Ćukušić, & Ninčević-Pašalić, I. (2025). AI FoMO (fear of missing out) in the workplace. Technology in Society, 84, 103052–103052. https://doi.org/10.1016/j.techsoc.2025.103052

Jadhav, A. (2025, November 4). AI's trillion dollar deal wheel bubbling around Nvidia, OpenAI. Theregister.com; The Register. https://www.theregister.com/2025/11/04/the_circular_economy_of_ai/Na, N., & Zhu, S. (2025, January 23). Transforming industries with AI: Lessons from China's journey. World Economic Forum. https://www.weforum.org/stories/2025/01/transforming-industries-with-ai-lessons-from-china/

PricewaterhouseCoopers. (2025). PwC Value in Motion | PwC. PwC. https://www.pwc.com/gx/en/news-room/press-releases/2025/ai-adoption-could-boost-global-gdp-by-an-additional-15-percentage.html

Lee, K. F. (2018). AI superpowers: China, Silicon Valley, and the new world order. Houghton Mifflin Harcourt.

OECD. (2023). Artificial intelligence in science, innovation, and the economy: Global trends and policy challenges. OECD Publishing, https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/06/artificial-intelligence-in-science_4f3d6efd/a8d820bd-en.pdf

Bown, C. P., & Irwin, D. A. (2023). The semiconductor wars: Industrial policy and global trade. Peterson Institute for International Economics.

National Science Board. (2022). Science and engineering indicators 2022. National Science Foundation, file:///C:/Users/Admin/Downloads/nsb20221.pdf

Kania, E. (2019). Battlefield singularity: Artificial intelligence, military innovation, and China's future military power. Center for a New American Security, https://www.uscc.gov/sites/default/files/June%207%20Hearing_Panel%201_Elsa%20Kania_Chinese%20Military%20Innovation%20in%20Artificial%20Intelligence.pdf

Miller, C., Chip war: The fight for the world's most critical technology, https://www.researchgate.net/publication/379390833_Chip_war_the_fight_for_the_world's_most_critical_technology_By_Chris_Miller_Simon_Schuster_2022_464_pp_ISBN_978-1982172008

Lindsay, J., & Kim, S. (2022). Decoupling in high-tech sectors: U.S.–China tensions and supply chain security, https://carnegieendowment.org/research/2022/04/us-china-technological-decoupling-a-strategy-and-policy-framework?lang=en

McBride, J., & Chatzky, A. (2019). The U.S.–China economic relationship. Council on Foreign Relations.

UNCTAD. (2022). Technology and innovation report 2022: Frontier technologies in developing countries. United Nations, https://unctad.org/system/files/official-document/dtlstict2021d5_en.pdf

EPIS