DeepSeek: The AI Shockwave Redefining Big Tech and Market Dynamics

February 2025

DeepSeek Overview

Two weeks ago, the Chinese tech company DeepSeek revealed that it had developed an AI model that either matched or outperformed top U.S. rivals at a fraction of the cost. Specifically, the company claimed it took just two months and cost under $6 million to build the AI model using Nvidia's less-advanced H800 chips. For context, many Western competitors like OpenAI, Meta, Microsoft, and other large tech companies have been spending hundreds of millions on similar AI ventures using the more advanced H100 chip from Nvidia.

Now that markets have had time to digest this news, some have started to question these initial claims from DeepSeek. Notably, skeptics point out that the $6 million figure likely does not include research, model refinement, data processing, or overall infrastructure costs, which could push the total investment to over $500 million. Additionally, the company has not confirmed access to Nvidia’s H100 chips (currently under U.S. export controls), though many believe they might be using them.

While the final figures may still be up for debate, we felt it necessary to address a situation in which we see a potential asymmetry forming in the markets. Whether it will be positive or negative remains to be seen, but for the following reasons, it warrants close attention.

Markets, Implications for Big Tech, and Jevons Paradox

Potential Negative Asymmetry:

The Magnificent 7 (“Mag 7”)—Apple (AAPL), NVIDIA (NVDA), Microsoft (MSFT), Amazon (AMZN), Tesla (TSLA), Alphabet (GOOGL), and Meta Platforms (META)—have been the market’s engine. In 2024, the S&P 500 returned 25.0%, with these seven stocks responsible for 53.7% of that gain. Together, they command 30.5% of the index’s market cap and account for 21.6% of forward earnings. AI enthusiasm has been the primary driver of strong stock performance. The Mag 7 have justified futures earnings growth estimates by attempting to deepen their moat in the AI space through aggressive investments in data centers, GPUs, and infrastructure.

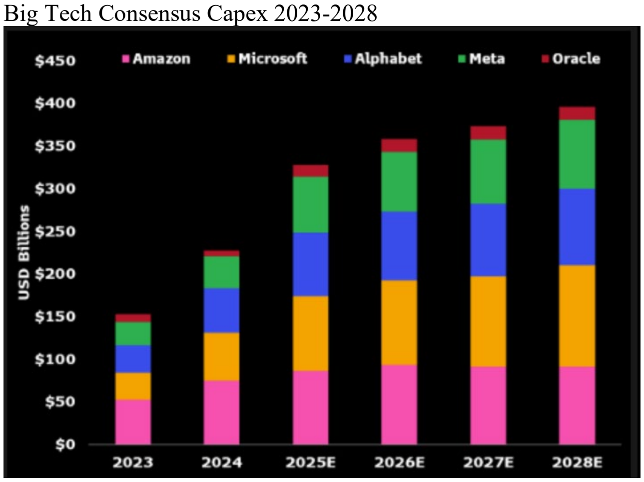
But DeepSeek throws a wrench in this narrative. If AI leadership can be achieved for a fraction of the cost, does that weaken the Mag 7’s justification for relentless capital expenditures? If leaner competitors emerge, do these giants lose their edge?

Market concentration remains a serious risk. When DeepSeek news surfaced two weeks ago, Nvidia suffered the largest single-day market cap loss in history, erasing $590 billion and other AI-linked stocks joined the rout, wiping out over $1 trillion from markets in one day. If cracks appear in the Mag 7's AI thesis, the asymmetry tilts negative. And that is something we cannot ignore.

Potential Positive Asymmetry:

Tech giants remain committed to massive AI investments. Amazon, Google, Microsoft, and Meta are on track to spend over $320 billion in 2025—up from $246 billion in 2024—on data centers, AI chips, and cloud capacity. Capital expenditures for the largest U.S. hyperscalers could approach $400 billion by 2028.

Big Tech Consensus Capex 2023-2028



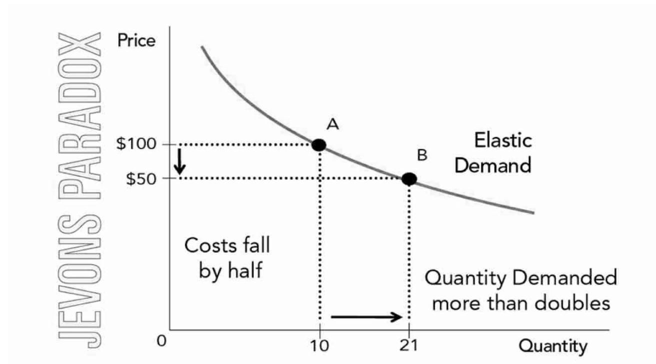
Data as of February 2025
Source: Bloomberg

Despite investor concerns about ROI timelines, if AI follows Jevons Paradox, massive investments today may yield even larger returns tomorrow.

Jevons Paradox, first introduced by 19th-century economist William Stanley Jevons in *The Coal Question,* suggests that when efficiency improves, consumption increases instead of decreasing. This principle played out during the Industrial Revolution when steam engines became more efficient—rather than reducing coal use, industries expanded and burned even more. The same dynamic could unfold in AI.

Microsoft CEO Satya Nadella put it succinctly: *"As AI gets more efficient and accessible, we will see its use skyrocket, turning it into a commodity we just can't get enough of."*

AI's increasing accessibility could drive exponential adoption across industries, fueling further economic growth, giving a first mover advantage to the Mag 7, and reinforcing the tech giants' dominance. That is the kind of positive asymmetry worth watching.



Conclusion:

In their latest earnings call Amazon CEO Andy Jassy stated "AI represents…probably the biggest technology shift and opportunity in business since the internet." Moments like these remind us of Henry Ford, who didn't invent the engine but made cars accessible to everyone, and Sputnik, which signaled the dawn of an innovation race. DeepSeek may be reshaping AI's foundation, and the markets are already taking notice.

At Hollow Brook, our investment approach is to exploit favorable asymmetries, and to avoid negative asymmetries where we can identify them. We position portfolios to limit downside risk and capitalize on long-term opportunities. But where will the real value in AI be captured? Will it accrue to the infrastructure giants, or will the biggest winners emerge at the application layer—those building the tools that harness AI's power? That is the question we are looking at closely, and that is where the next great opportunity may lie.

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