

An AI Challenge to the Midstream Sector

By Thomas Kalb, Director October 6, 2025

A Wall Street Journal <u>article</u> highlights the vast and speculative investments of the artificial intelligence boom, as well as a big problem: "No one is sure how they will get their investment back — or when."

The authors, Eliot Brown and Robbie Whelan, describe dramatic financial speculation by tech companies, opportunistic new entrants, and financial institutions. The mantra of "one of the costliest building sprees in world history" reminds me of what a competitor in the energy space once said to me: "You've got to pay to play, and if you're not in the game, you're dead."

This struck me as <u>Other People's Money (OPM) syndrome</u>, which more or less equates to the scoundrel's maxim: "tails I win, heads you lose."

Some facts from the WSJ article:

- Meta CEO Mark Zuckerberg estimates the company's spending on AI through 2028 would total \$600 billion.
- In an agreement with Oracle, OpenAI agreed to pay an average of \$60 billion per year for cloud computing services over the next five years. OpenAI's total revenues in 2025 are expected to reach only \$13 billion.
- Alphabet, Microsoft, Amazon, and Meta are expected to spend about \$400 billion in 2026 alone on AI-related initiatives.
- An obscure cryptocurrency miner that changed its name to CoreWeave a few
 years ago is now a major AI sector middleman. The company leases data
 centers built and owned by others, installs servers (chips), and rents them out to
 tech companies. It has been flooded with money from Wall Street and now has a
 market value greater than GM.
- CoreWeave has about \$15 billion of debt, \$56 billion of lease payment obligations on data centers that run 10 years, and \$42 billion worth of 2-5 year

- contracts from tech companies renting its servers, because servers (chips) become technologically obsolete in 2-5 years.
- David Cahn, partner at venture capital firm Sequoia, estimates that capital invested in 2023 and 2024 alone requires consumers to buy about \$800 billion of AI products over the life of the chips and data centers to generate an acceptable return. To repeat, the lifespan of chips is 2-5 years.
- Morgan Stanley estimates 2024 total revenue for AI products was about \$45 billion. Even using the highest forecast for revenue growth (37% annually), revenues would fall short of that \$800 billion figure by more than 40%.
- Consultants at Bain & Co. predict that AI infrastructure spending will require \$2 trillion in annual AI revenue by 2030. As the Wall Street Journal article points out, that's more than the combined 2024 revenue of Amazon, Apple, Alphabet, Microsoft, Meta, and Nvidia and more than five times the entire global subscription software market.

The mind-boggling amount of cash flowing into AI means that society will have to spend a similarly mind-boggling amount of money purchasing AI services to make those investments worthwhile. This is speculative investing that might more accurately be described as gambling. But as my friend in the energy sector said: "You've got to pay to play..."

As a long-time investor and investment analyst, I am bothered by the use of long-term financing to support short-term contracts that recognize the 2-5 year life of data center servers (chips). New hardware can be purchased to keep a data center viable, but that likely entails new investments of many billions of dollars for a single data center.

This brings me to the midstream industry. A May 2025 article in <u>DCD Magazine</u> describes the AI-driven growth in energy demand and how tech companies are turning to natural gas to meet that demand. Midstream companies are being asked to invest substantial capital in the next few years to build new pipelines and infrastructure to service the data center demand.

But what happens to midstream project economics when some data centers, born in an environment of hysterical expansion, inevitably become unprofitable because of early overbuilding, poor siting, a lower-than-expected rate of AI revenue growth, or when a data center's servers become obsolete? There will be winners and losers in this AI gold rush. There will be AI data center bankruptcies.

Midstream companies could find their investments stranded. Much of this infrastructure investment opportunity will be burdened by a lack of the positive portfolio effects of a large customer base. In other words, many AI-driven pipeline

investments lack alternative customers in the scenario where AI data centers do not need the forecasted energy due to market failure. In the rush to build data centers, the AI sector likely will be overbuilt, and some data centers will fail.

The investment and credit analysis that goes into the final investment decision of pipeline infrastructure driven by the data center sector should be more robust than in the past. The midstream industry is being asked to invest in long-life pipeline assets to serve relatively short-life chip and server assets in an environment of almost hysterical expansion. It bears repeating: The AI sector is characterized by short-lived contracts being financed with long-term debt and speculative equity. That's a combination that cries out for caution — especially in these early days of data center growth.

AI sector participants, both established tech giants and new entrants, are racing to seize the day. Midstream companies should carefully weigh AI sector risks because, as is the case in any speculative bubble, some of the investors will find themselves on the losing end of a very large bet.