

MARKET COMMENTARY – March 1, 2025

Deeper Dive into DeepSeek & its Implications

Only on occasion do we spend two months in a row discussing the same issue. Given the world-changing nature of AI and therefore its effects on the investment landscape, we think this should be one of those times.

In last month's commentary, we teased out several possible interpretations and ramifications of the flashy news that a Chinese-backed AI company had constructed its own large language model at roughly 0.10% the cost of the current major players like OpenAI, Google, Meta, and others. Our dear readers might recall that AI-related stocks swooned like an antebellum Southern Belle on a hot July day on the news. They might also recall our take was one of skepticism.

With a little more time and reading, we are more confident in our initial incredulity. It turns out that DeepSeek, other less-capitalized startups, and research labs are using several techniques that we'll summarize under the banner of "piggybacking." While these tiny competitors aren't *necessarily* stealing proprietary code (some *are* stealing code), they are in fact utilizing the tier one models from the world's largest technology companies to fashion their own, smaller models.

These piggybacking techniques go by various names, ranging from distillation to scraping and extraction. Regardless of the name, these methods seek to exploit the previous efforts of their massive technology peers by wresting knowledge from a larger AI model to build a smaller one. Picture the small model from DeepSeek as the student who pings the larger, teacher model with questions at digital speeds. In short order, the smaller model has mopped up what took the larger model years and billions of dollars to accumulate.

This fact could be devastating for large, heavily invested players. But only if it continues.

OpenAI and other entrenched participants are NOT going to roll over. They are aware of distillation, scraping, and extraction. They've already incorporated safeguards.

- The first layer of defense is legal. Licensing and copyright rules offer a significant level of protection in those countries with an established rule of law.

Digital fingerprints within the data will make enforcement more reliable. But legal defenses won't always work, especially in countries from parts of the world that are hostile to the West.

- Hence, the need for purely technological solutions:
 - Rate Limiting – When large models detect suspicious usage patterns, massive data extraction, or strange activity, they can immediately clamp down on the output rate.
 - Adversarial Defenses – Large models can intentionally introduce noise into their outputs when they detect automated data scraping.
 - Closed Source – Companies may keep their model access controlled to prevent model downloads. Think of this like Windows (closed) versus Linux (open) in the 1990s. Which one became the more profitable?
 - Moats – Even if the prior technological and legal means fail to prevent all “piggybacking” techniques and therefore some small, capable models are built; by definition, these student models will always be narrower in scope than the teacher.

And so, always with an eye toward quality and price, we hold these AI-related stocks (And many other companies, too. You know, unsexy ones like beverage or insurance companies). Love it or hate it, AI will change the way we live. And so, we selectively place investment dollars into their arena. But remember, it is not just the technology companies themselves that will profit from the introduction of AI. All sectors will put AI to use. From medical imaging to manufacturing. From robotic surgeries to real estate. From entertainment to energy. AI will disrupt industries the world over.

In fact, we used AI and one minute of our time to create the picture at the top of this month's commentary. Welcome to the future.

Stirling Bridge Wealth Partners, LLC is fortunate to count many of you as clients. In the good times and bad, we remain committed to providing customized investment solutions and robust financial planning wrapped in a package of exceptional service. We thank each of you for your dedication to us and for your trust.

Sincerely
Jason Born, CFA
President