By Saurav Sen, CFA | ssen@gimmecredit.com

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China Tech: The DeepSeek Effect

In a January full of shock and awe, DeepSeek managed to hold its own. DeepSeeek's new R1 model turned the AI world upside down on January 20th, 2025 (coincidently or not). Until then, American dominance in AI, both in hardware and software looked invincible. **DeepSeek** proved that the Chinese are ready to take on the challenge, at least on the software side. DeepSeek claims that the R1 LLM (large language model) is significantly more efficient, measured by cost per millions of tokens, than the most recent OpenAI model, GPT-4o. We are in no position to confirm or challenge this claim on technical grounds. However, even if the numbers are off, it's safe to say that DeepSeek came up with some clever software acrobatics to get around their hardware limitations – cost and availability of the latest American AI chips. And since its open source, their claims are verifiable.

DeepSeek put a dent in maybe the greatest AI success story of the last few years – Nvidia – which makes specialized semiconductor chips for AI inference and training. Nvidia's seemingly insurmountable moat was challenged, perhaps ironically, as DeepSeek used Nvidia's older chips to train its models to be good enough to not need the latest-and-greatest Nvidia chips. The market ignored the irony by sending Nvidia's stock down about 20% (it has recovered partially since). The rough thesis was that everyone would emulate DeepSeek's efficient models thereby reducing the need for advanced Nvidia GPUs and deflating Nvidia's baked-in (often lofty) growth projections. On the flip side, Chinese tech stocks have had a great couple of weeks. The Big 3 – **Alibaba, Baidu, and Tencent** – saw their stocks appreciate by roughly 35%, 16% and 15% respectively since Jan 20th.

Equity markets may have been surprised, but the writing was on the wall. Firstly, DeepSeek has been at it for a while – it's first release was in January 2024 (V1) followed by V2 in June and V3 in later in the year. R1 was the latest step in this evolution (where "R" stands for Reasoning). Secondly, AI independence has been one of the main priorities of the Chinese Communist Party – in their view, this is a matter of economic and military security for China, further reinvigorated after President Trump was elected. Thirdly, and perhaps partly because of the CCP, 2 of the Big 3 Chinese tech firms have ramped up their capital expenditures significantly in 2024 (more than double, on average), most of which is directed towards cloud computing and AI. Baidu is the odd one out because its capex has decreased. But it's even more odd because we believe that AI is (or should be) Baidu's core competency (*please see our report "The Importance Of Being Ernie", 11/27/24*). But it was Alibaba that recently stepped up. Just days after DeepSeek's big announcement, Alibaba released the Qwen2.5-Max model, which makes similar efficiency claims. Baidu and Tencent also have their own models – ERNIE and Hunyan – that will no doubt evolve, perhaps with renewed vigor now. The fact that the Chinese would come up with a "software workaround" to their hardware limitations shouldn't be surprising either – Tencent's management mentioned this phenomenon as early as August 2024 (*please see our 8/16/24 "Fun & Games" report*).

On the bonds side, the reaction was more muted and, perhaps, more rational. Spreads on Alibaba's bonds have tightened since January 20th; however, that could be largely because of 1) Alibaba's new AI model release and 2) rumors that Alibaba held a stake in DeepSeek (which have since been debunked). Spreads on Baidu and Tencent bonds haven't moved much. Perhaps there is no wiggle room with medium-duration bonds, yielding an unexciting 5% or less. Or perhaps it's because it's hard to quantify how much DeepSeek or Qwen or Hunyan will move the revenue needle. In the latest quarter, Alibaba's and Tencent's cloud businesses made up roughly 13% and 32% (this includes fintech) of revenue respectively. AI is not their base business – Alibaba's is online retail and Tencent's is media (videogames, social media). Sure, most of their capex is directed towards cloud and AI, but the ROI on that is unquantifiable in this ever-changing landscape. And lastly, it's too early to declare a winner in the US vs. China competition – the AI league tables will probably keep changing every few months.

We don't find a compelling reason to change our credit scores before the December quarter results and earnings are released. For now, we will leave Alibaba's credit score of "0" (stable) and "outperform" on the 2035 bonds unchanged but that is subject to review after next week's earnings call and further tightening of spreads. Tencent is our favorite of the Big 3, with a "+1" (improving) credit score and an "outperform" rating on the bonds, especially the longer-dated ones – both on a spread-per-unit-of-risk and total return basis. And on both counts, our current rating on the Baidu bonds is "underperform", which is likely to remain unchanged.