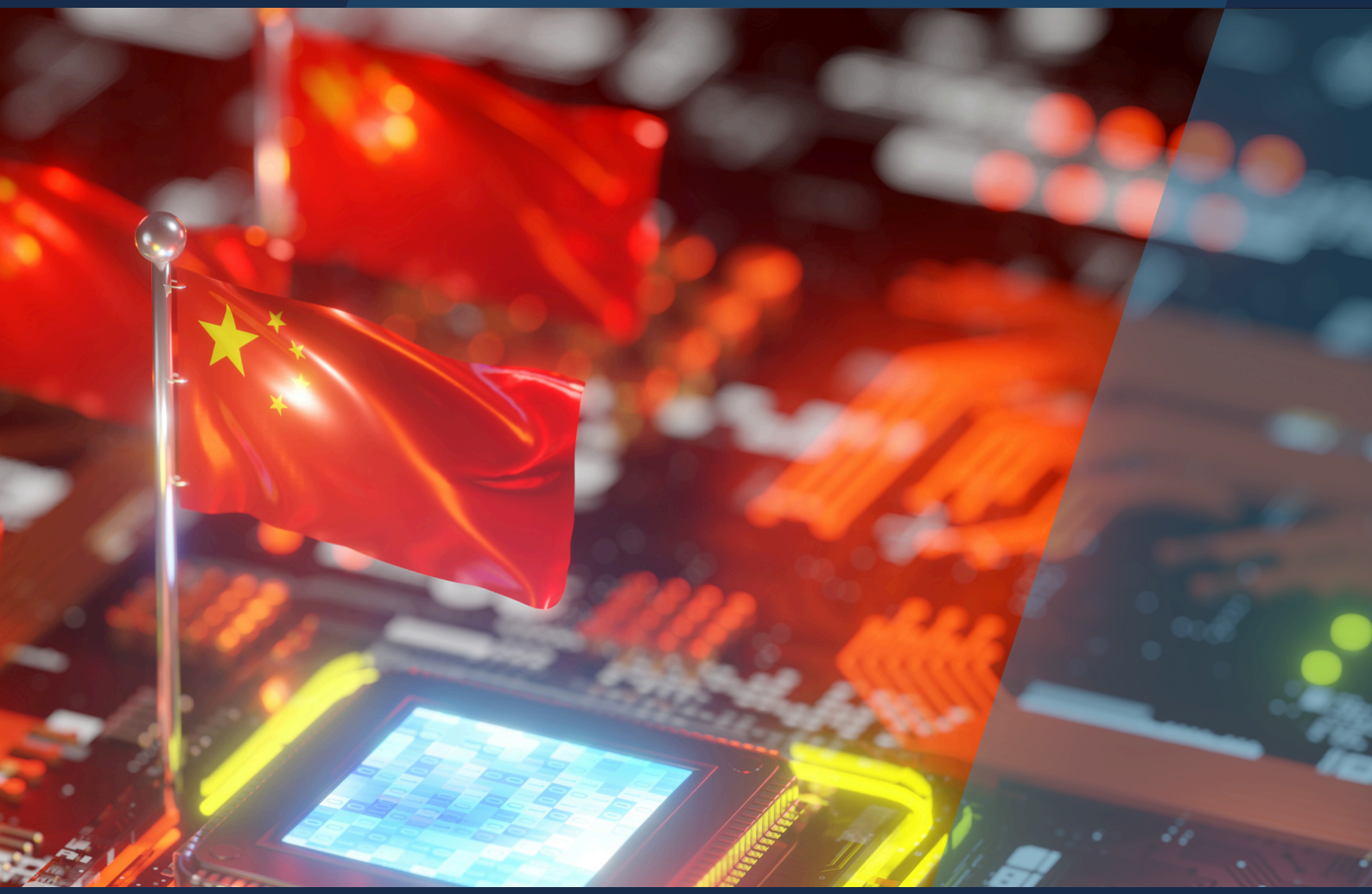
UC San Diego
RADY SCHOOL OF MANAGEMENT
The Brandes Center

2025

China Tech Innovation:

Promise or Peril for Global Investors?



by Navya Khurana

China Tech Innovation: Promise or Peril for Global Investors?

In late March 2025, Brandes Center Advisory Board members Yingbin Chen, CFA and Rick Carew hosted a webinar where they discussed investment opportunities among technology stocks in China. The recording of the event is available *here* at The Brandes Center's YouTube channel. In this article, we provide a summary of their conversation.

Executive Summary

China's rise as a global, low-cost technology innovator has transformed industries across sectors from electric vehicles and renewable energy to artificial intelligence and e-commerce. Yingbin Chen, CFA and Rick Carew explored the foundations, momentum, and risks surrounding China's innovation economy. Drawing on decades of experience in China's financial and technological ecosystems, both experts challenged negative assumptions about the investability of Chinese firms and highlighted emerging opportunities for long-term investors.

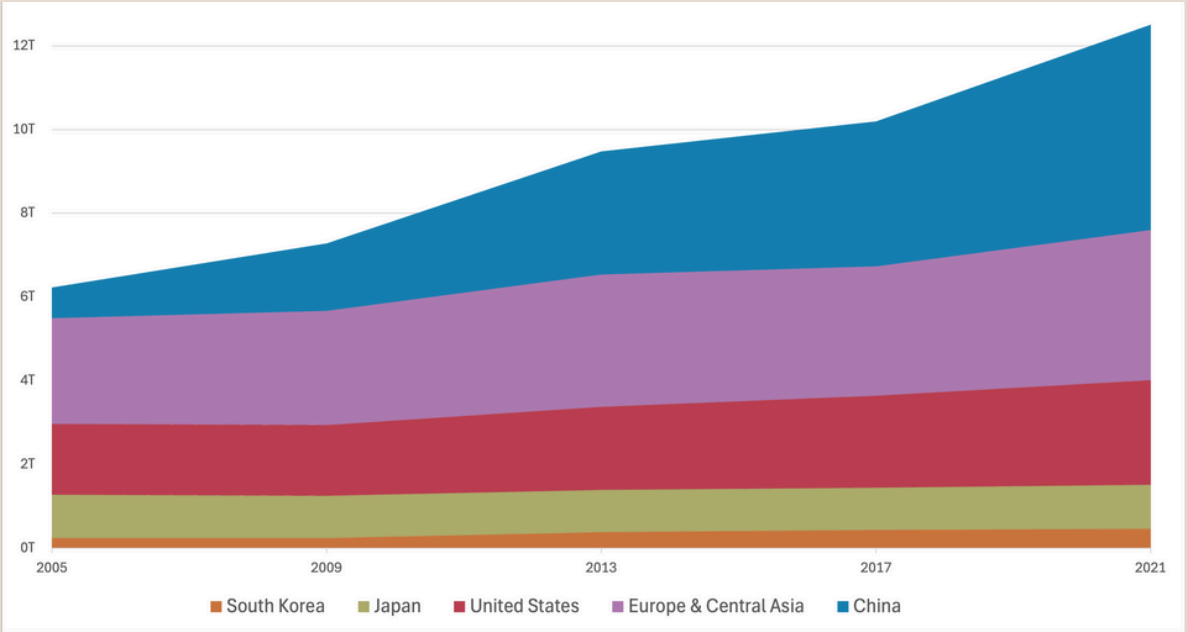
While regulatory overhangs and geopolitical tensions remain, China's internal innovation machine, driven by talent, competition, supply chain depth, and government policy, continues to advance. For value investors, the question is less about whether to invest in China and more about how to discern durable franchises with strong competitive moats.

PANELISTS

Yingbin Chen, CFA is a Director in Brandes Investment Partner's Research Department. She also is a limited partner of the firm's parent company, a voting member of the firm's Small-Cap and Global Opportunity Investment Committees. As a Senior Analyst, she researches and values companies in several technology sectors, including software, hardware, communication infrastructure equipment and devices. Born in China, she earned a BS degree from Shanghai Jiotong University, an MS from the John Hopkins University and an International MBA with high honors from the University of Chicago Booth School of Business.

Rick Carew is Adjunct Professor of Finance & Economics at Fordham University's Gabelli School of Business, where he teaches value investing. He also advises investors and executives on Asia's financial markets and U.S.-China economic relations. Based in Hong Kong and China for a dozen years, he was a Reporter and Senior Editor for The Wall Street Journal and advised companies including e-commerce giant Alibaba Group and private equity firm KKR & Co. Carew holds an M.B.A. from Columbia Business School and a B.A. with High Honors in Economics and Chinese Language & Literature from the University of Virginia.

Exhibit 1| Value-Added Manufacturing, Trillions of US$



Source: World Bank Group, as of 2022 https://data.worldbank.org/indicator/NV.MNF.OTHR.ZS.UN

Foundations of China's Innovation Economy

"Innovation in China is low-cost with rapid cycle time" said Chen, Director at Brandes Investment Partners and senior analyst covering the global technology sector. She outlined three foundational pillars of the innovation ecosystem:

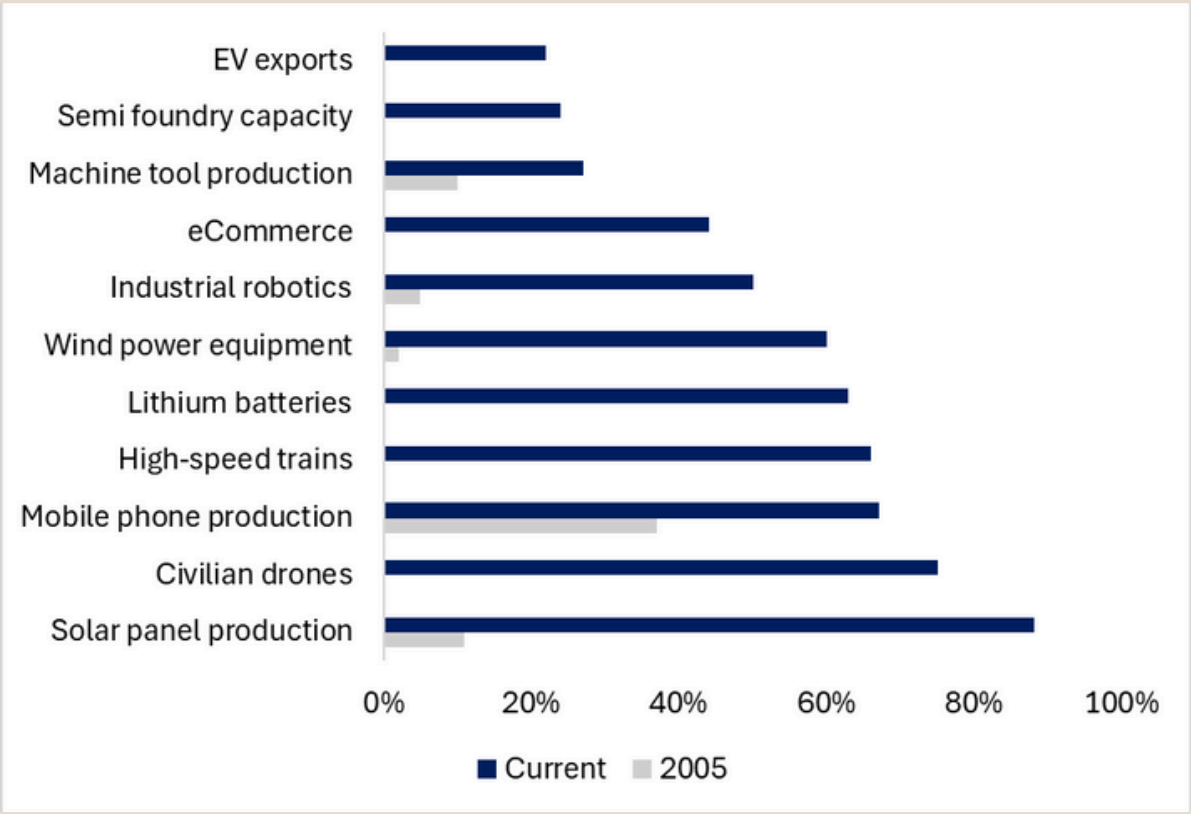
- world-leading manufacturing
- ubiquitous digitization and
- growing strength in scientific research

In January 2025, it seemed much of the world awakened to China's capabilities with the launch of Chinese startup DeepSeek's AI platform that rivals ChatGPT and other Western models. According to KPMG, "DeepSeek not only makes advanced AI technology accessible, but also demonstrates a unique approach to AI development, emphasizing performance, cost-effectiveness and transparency."

But the country's rise as a compelling, innovative environment has been years in the making–and complements its more traditional perception as a manufacturing hub.

1. China now accounts for approximately 35% of global gross manufacturing output—more than the next 10 countries combined. But more telling is the shift from low-value manufacturing (e.g., textiles and toys) to high-value sectors such as EVs, solar panels, and electronics. From Exhibit 1, Chen explained, "China represents about 29% of global value-added manufacturing, and that value-added portion is driven by innovation." As shown in Exhibit 2, China leads globally in the production of solar panels (88%), civilian drones (75%), and mobile phones (67%). Although its share of EV exports was last reported at 22%, Chen noted that this figure has likely increased in recent years.

Exhibit 2| Manufacturing–Where China Leads (China's Global Share in %) 2005 vs. 2023



Sources: Weijian Shan "Can China Continue to Grow?" 2023 and Shan's research drawn from KKR's 2023 publication, "Thoughts from the Road –Asia"

2. China's strength in digitization—powered by internet infrastructure, wireless connectivity, and software—further enhances its innovation capacity. This digital ecosystem spans e-commerce platforms like Alibaba, social media apps such as Tencent's WeChat and ByteDance's Douyin (known globally as TikTok), mobile payment systems like Alipay, as well as public transportation, government services, and more.

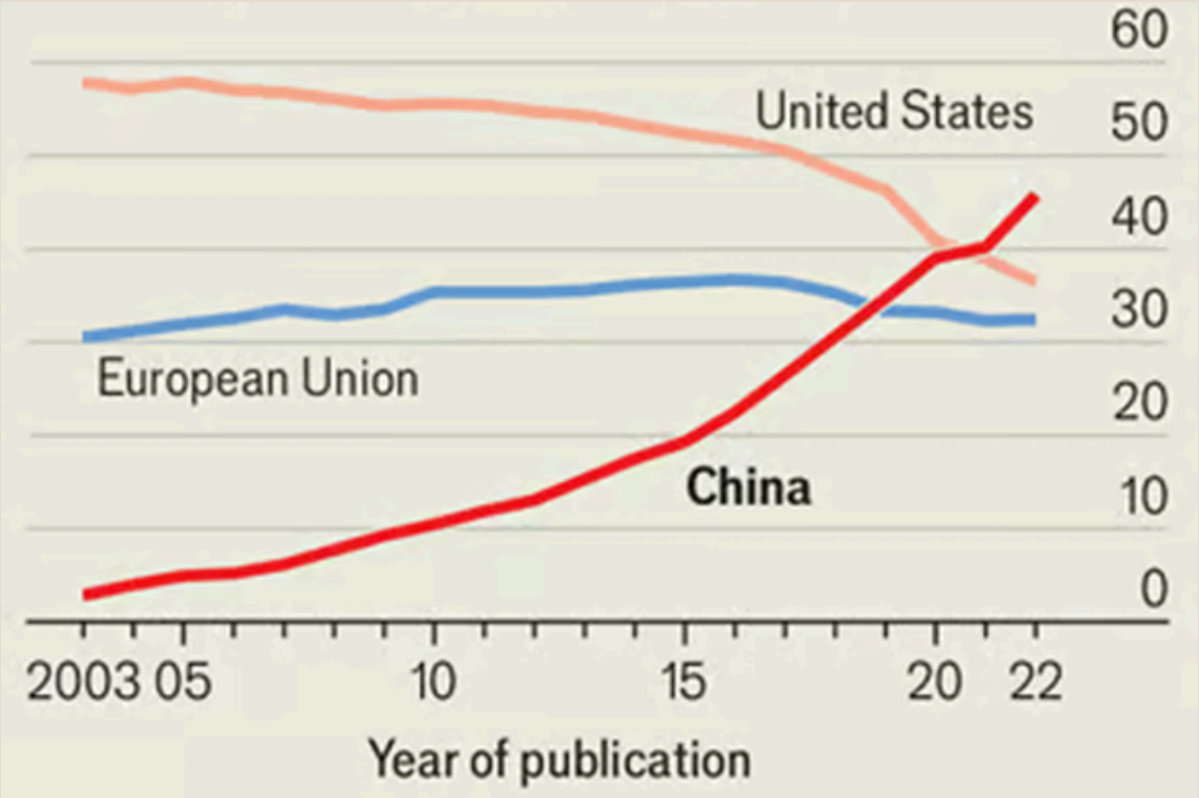
3. In addition, China has delivered a surge in scientific research output. The country now leads in high-quality academic publications and dominates in AI paper citations.

From Exhibit 3, China has now surpassed the US and European Union in the share of global high-impact papers. All this combined, Chen noted that "the DeepSeek moment was decades in the making."

> "...the DeepSeek moment was decades in the making."
> --Yingbin Chen, CFA

Exhibit 3| China Has Become a Scientific Research Superpower

*Share of Global High-Impact Papers (in %)**



Sources: Nature, Clarivate, Web of Science, as reported in *The Economist* article, "China Has Become a Scientific Superpower." June 12, 2024. Top 1% by number of citations in Web of Science platform. *Percentages can add up to more than 100 due to co-authorships.

Case Studies: Tesla vs. BYD and Apple vs. Xiaomi

To illustrate China's innovation engine, Chen highlighted two, company-level comparisons.

Tesla vs. BYD: From Exhibit 4, Tesla and BYD were neck and neck in global EV sales in late 2021/early 2022. As of May 2025, BYD's sales volume was nearly triple that of Tesla's in the fourth quarter of 2024, before declining in the first quarter of this year. Much of this outperformance comes from BYD's fast-paced product development cycles, supported by two core platforms—one for plug-in hybrids and another for battery EVs. "Each platform gets refreshed every three years, and BYD produces over 25 models with annual facelifts," Chen explained. What's more, nearly all innovations are developed in-house, reducing costs and increasing speed.

Exhibit 4| Tesla and BYD Case Study–Sales Volume (1Q20 to 1Q25)

Source: Investor's Business Daily, May 26, 2025. BYD sales include all-electric and plug-in hybrid sales.
https://www.investors.com/news/tesla-vs-byd-ev-sales-robotaxis/

Apple vs. Xiaomi

While Apple scrapped its autonomous EV project after a decade and over $10 billion in costs, Xiaomi launched its first car just three years after entering the EV space. Designed and manufactured internally, the new Xiaomi EV matched, and in some cases surpassed, Tesla's Model 3 sales in China within months of launch (see Exhibit 5). "It was a reminder of how fast Chinese firms can execute," said Chen.

Exhibit 5| Apple and Xiaomi Case Study--Experience with EVs

Apple	Xiaomi
2014: Launched Project Titan seeking to build an autonomous EV	2021: Entered EV business to diversify its business away from smartphones
2024: After 10 years, 2000 employees and $10 billion, Apple abandoned Project Titan without successfully delivering an EV.	2024: Xiaomi delivered its first EV, the SU7. It outsold the Tesla 3 in China during the last few months of 2024.
	Summer 2025: Its SUV (the YU7) expected.
	2027: Global sales expected.

Source: https://www.nytimes.com/2024/02/28/technology/behind-the-apple-car-dead.html

Traits of China's Innovation Ecosystem

Chen attributed China's innovation prowess to several key features:

- Human capital: With over 1.4 million engineering graduates annually, China has a deep bench of technical talent like engineers and scientists.

- End-to-end supply chain: While many attribute China's manufacturing success to cheap labor, Chen noted that rising labor costs in recent years have made the country's end-to-end supply chain a more critical driver of its competitive advantage. She said, "When people have an idea, they want to have a prototype made, and in China you can have it made in a week or two and fairly cheaply. This helps commercialize innovative ideas."

- Information speed: "People in China always seem to know what's happening, locally and globally," she stated, referencing the constant buzz of shared insights.

- Infrastructure and logistics: High-speed rail, efficient ports, and smart cities facilitate workforce mobility and all commercial activities. faster commercialization.

- Policy direction: Government policies, always strategic, has become more effective as implementation has become more targeted and refined.

The result is a hyper-competitive landscape of low-cost innovation with fast iteration time. Compared to companies in the United States, Chinese companies seem to innovate at:

- ⅕ to ⅓ of the cost
- 2x+ as fast
- Rapid iterations of small steps of improvements accumulating quickly over time.

Global Tech Investing Through a Value Lens: Tencent and Alibaba

Tencent and Alibaba are the two largest publicly-traded Chinese tech companies.

Rick Carew, adjunct professor at Fordham University's Gabelli School of Business and former *Wall Street Journal* Asia finance editor, analyzed them to illustrate how value investors can approach Chinese tech investing.

"Volatility has scared many investors away from Chinese tech. But from a value investing standpoint, that's a signal to lean in—not out," Carew said. He laid out a framework familiar to value investors: look for dominant franchises with temporary problems, essential roles in the economy, and strong insider alignment.

> *"When people have an idea, they want to have a prototype made, and in China you can have it made in a week or two and fairly cheaply."*
> *--Yingbin Chen, CFA*

In addition, he pointed to:

1. Disappointing Events: Alibaba and Tencent, once top-ten global companies, lost over half their market cap between 2020 and 2024 due to regulatory crackdowns and geopolitical fears. Yet both continue to grow revenue and maintain solid margins in their core operations. Carew compared Alibaba to Amazon and Tencent to Meta, highlighting similar fundamentals but much lower valuations. (See Exhibit 6.) He attributes their long-term prospects to high economic growth in China and barriers to entry, which lead to revenue growth and sustainable margins.

2. Incentives Matter: Supportive government policies and management actions, such as opportunistic share buybacks and insider purchases, can serve as indicators of intrinsic value and commitment to shareholder-friendly policies.

3. Examine the Moat: Are the problems permanent or temporary? How has customer behavior changed, if at all? Tencent's WeChat is the digital gateway to Chinese consumers and Alibaba's core e-commerce platform and digital payments business - Alipay - continue to be favored by Chinese merchants.

Carew applied Peter Thiel's framework of monopoly characteristics to identify great global business models: *Proprietary Technology* (10x better) - Nvidia, Google; *Network Effects* - Meta, Microsoft; *Economies of Scale* - Amazon; and *Branding* - Apple

Exhibit 6 | Investors Have Soured on Alibaba & Tencent Valuation Despite Revenue Growth

	Alibaba	Tencent
Share Price	$317.14 / share	HK $776.20 / share
Market Cap	$859 Billion	$951 Billion
Revenue (2020)	$71.9 Billion	$69.9 Billion
Date	October 2020	January 2021

	Alibaba	Tencent
Share Price	$84.69 / share	HK $374.80 / share
Market Cap	$203 Billion	$443 Billion
Revenue (2024)	$130.4 Billion (+81% from 2020)	$91.9 Billion (+31% from 2020)
Date	September 2024	September 2024

Source: Company financial reports, Capital IQ data.

These traits are evident in the world's six most valuable tech companies: Apple, Microsoft, Nvidia, Amazon, Alphabet, and Meta, reinforcing the framework's relevance across internet services. Applying this model to China, Carew argued that "Alibaba and Tencent are, in ways, even stronger than their Silicon Valley counterparts." While he noted no Chinese tech companies have emerged with 10x better proprietary technology than Western peers, he did share the following instances where the Chinese tech giants exhibit exceptional economic characteristics:

- Network Effects - Tencent (WeChat), Alibaba (Alipay)
- Economies of Scale - Alibaba (Taobao, TMall), Tencent Games (League of Legends, Clash of Clans, Fortnite)
- Branding - Tencent (WeChat), Alibaba

Rebounding from the Crackdown

The Chinese government's 2020–2022 crackdown on tech, especially Jack Ma's public clash with regulators, sent a chilling message to investors. But the recent return of Ma to public view and government statements supporting private enterprise suggest a thaw. "We're seeing efforts to restore investor confidence," said Carew. Alibaba's aggressive share buybacks and Tencent's focus on profitability signal internal conviction. From Exhibit 7, Tencent trades at a discount to Meta; Alibaba trades at an even more dramatic discount to Amazon.

Exhibit 7 | Tencent & Alibaba Trade at Discounts Relative to US-Based Meta & Amazon

Tencent			Meta		
Forward Multiples	**2025**	**2026**	**Forward Multiples**	**2025**	**2026**
PE	18.9x	16.7x	**PE**	24.5x	21.2x
Price/Sales	6.3x	6.7x	**Price/Sales**	8.5x	7.5x
Alibaba			**Amazon**		
Forward Multiples	**2025**	**2026**	**Forward Multiples**	**2025**	**2026**
PE	20.6x	14.9x	**PE**	33.9x	29.7x
Price/Sales	2.4x	2.4x	**Price/Sales**	3.2x	2.9x

Sources: Company financial reports, Morningstar projections.

Carew also pointed to catalysts like renewed stimulus, AI advancements (e.g., DeepSeek and Alibaba's Qwen), and a potential Ant Group IPO revival as drivers of future revaluation.

Navigating Risk and Opportunity

When asked about the effect of tariffs on investment opportunities, Chen explained that many Chinese firms are domestically focused or globally diversified outside the U.S. (Remember, this conversation took place in late January 2025.) "We're seeing companies adapt—through localization, onshoring, and end-to-end control," she said.

Carew added that most of the leading companies, including Alibaba and Tencent, benefit more from the domestic economy and domestic consumer than traditional exporters.

On semiconductors, Chen acknowledged short-term limitations due to export bans on advanced chips and equipment. Still, "China is making progress every day," she said, citing AI applications in drones and precision agriculture as areas where China is already strong.

Carew compared the U.S. and Chinese landscape by noting the distinct capital market structure in China compared to the single market in the U.S. For instance, Alibaba is traded in both New York and Hong Kong, but not in the mainland. Therefore, unlike the U.S. where the Magnificent Seven stocks have dominated the S&P 500, there is less concentration of tech stocks in the Hang Seng Index, which is often used as a proxy for global investor's returns from China stocks. Capital controls limit fund flows from the mainland to Hong Kong, meaning there is pent up demand for these Chinese tech giants from domestic investors. Summing up, he said, "There is less concentration in the index, but Tencent and Alibaba are two of the highest quality companies in China and a big focus for investors in the market."

Conclusion

In a market often perceived as either 'the next superpower' or 'completely uninvestable,' the experts featured in this webinar urged nuance. China's innovation economy continues to evolve, built on speed, cost efficiency, and engineering depth. For long-term investors, especially those grounded in fundamental analysis and patient capital, the question is not whether China is investable, but how to distinguish enduring innovators from short-lived, speculative ventures.

As Carew put it, "We need to imagine a world that could look very different in 12 or 24 months. The ingredients are there for sentiment and valuation to shift."

References

https://kpmg.com/us/en/media/news/insights-on-deepseek.html

Navya Khurana is a Research Analyst with The Brandes Center.

Disclosures

Past performance is not a guarantee of future results.

This document is for general information and educational purposes only, and must not be considered investment advice or a recommendation that the reader is to engage in, or refrain from taking, a particular investment-related course of action. Any such advice or recommendation must be tailored to your situation and objectives. You should consult all available information, investment, legal, tax and accounting professionals, before making or executing any investment strategy. You must exercise your own independent judgment when making any investment decision.

All information contained in this document is provided "as is," without any representations or warranties of any kind. We disclaim all express and implied warranties including those with respect to accuracy, completeness, timeliness, or fitness for a particular purpose. We assume no responsibility for any losses, whether direct, indirect, special or consequential, which arise out of the use of this presentation.

All investments involve risk. There can be no guarantee that the strategies, tactics, and methods discussed in this document will be successful.

Diversification does not assure a profit or protect against a loss in a declining market.

International and emerging markets investing is subject to certain risks such as currency fluctuation and social and political changes; such risks may result in greater share price volatility.

Data contained in this document may be obtained from a variety of sources and may be subject to change. We disclaim any and all liability for such data, including without limitation, any express or implied representations or warranties for information or errors contained in, or omissions from, the information. We shall not be liable for any loss or liability suffered by you resulting from the provision to you of such data or your use or reliance in any way thereon.

Nothing in this document should be interpreted to state or imply that past results are an indication of future performance. Investing involves substantial risk. It is highly unlikely that the past will repeat itself. Selecting an advisor, fund, or strategy based solely on past returns is a poor investment strategy.

The Regents of the University of California and UC San Diego are not connected or affiliated with, nor do they endorse, favor, or support any product or service of Brandes Investment Partners, L.P.

UC San Diego

RADY SCHOOL OF MANAGEMENT
The Brandes Center

CONNECT WITH US

rady.ucsd.edu/brandes
brandes@rady.ucsd.edu

To receive new research and information about upcoming events, contact us at brandes@rady.ucsd.edu to sign up for our emails.

2Q25