

Ted and Logan Webinars on High-Tech Industries

The (Not So) Magnificent Seven? **Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, Tesla**

Edward A. Snyder and Logan Bender

April 24, 2025

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Edward A. Snyder



Ted is the William S. Beinecke Professor of Economics and Management at the Yale School of Management. He has applied IO frameworks to over thirty industries and product markets in the course of his academic and professional career. This set includes liquid crystal displays, video streaming, payment systems, pharmaceuticals, optical disk drives, and modem chips used in smartphones. He studied economics at the University of Chicago. He served as Dean of three business schools and founded the Global Network for Advanced Management.

Logan Bender

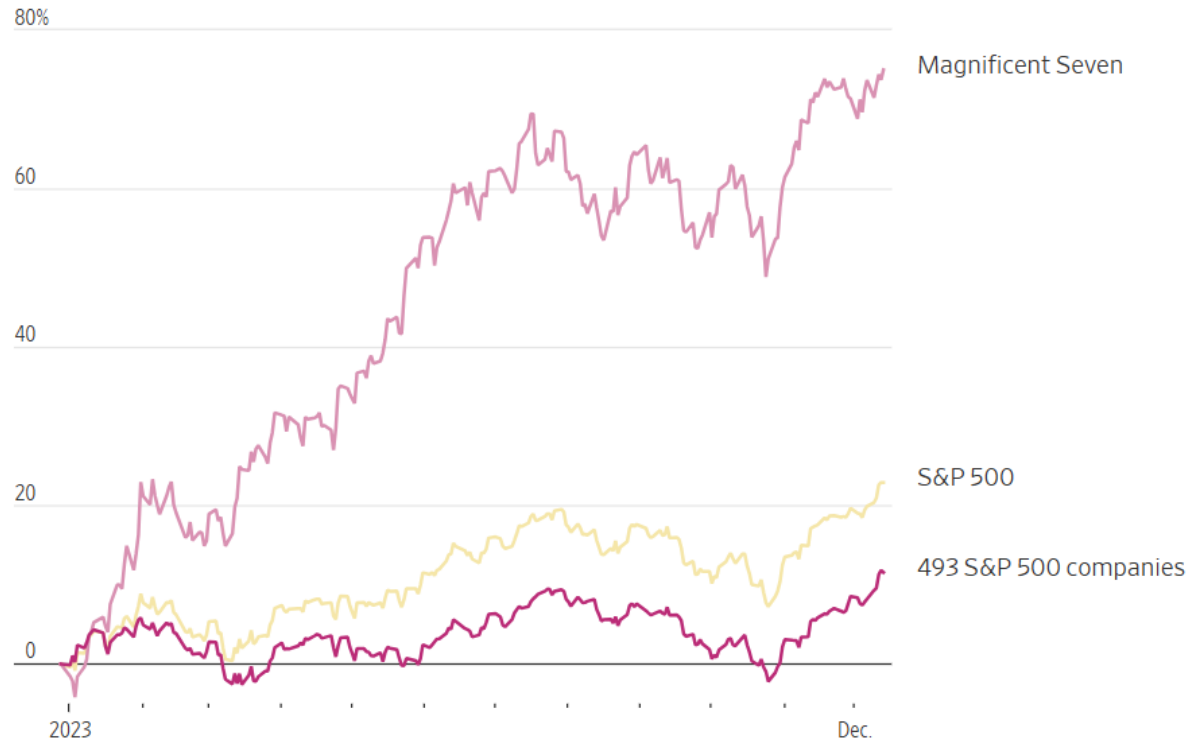


Logan is a CFA charter holder and Yale MBA (specialization in asset management). During his career as a global technology investor and research analyst at Putnam and First Analysis, Logan has specialized in high-tech industries including software, internet platforms, and semiconductors, with particular emphasis on the U.S. and China. Logan also has experience with venture investment focusing on series A and B stage investments in vertical SaaS, human capital technology, and other high growth differentiated software businesses.

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Rise of the Mag 7 versus Rest of S&P 500

Cumulative return



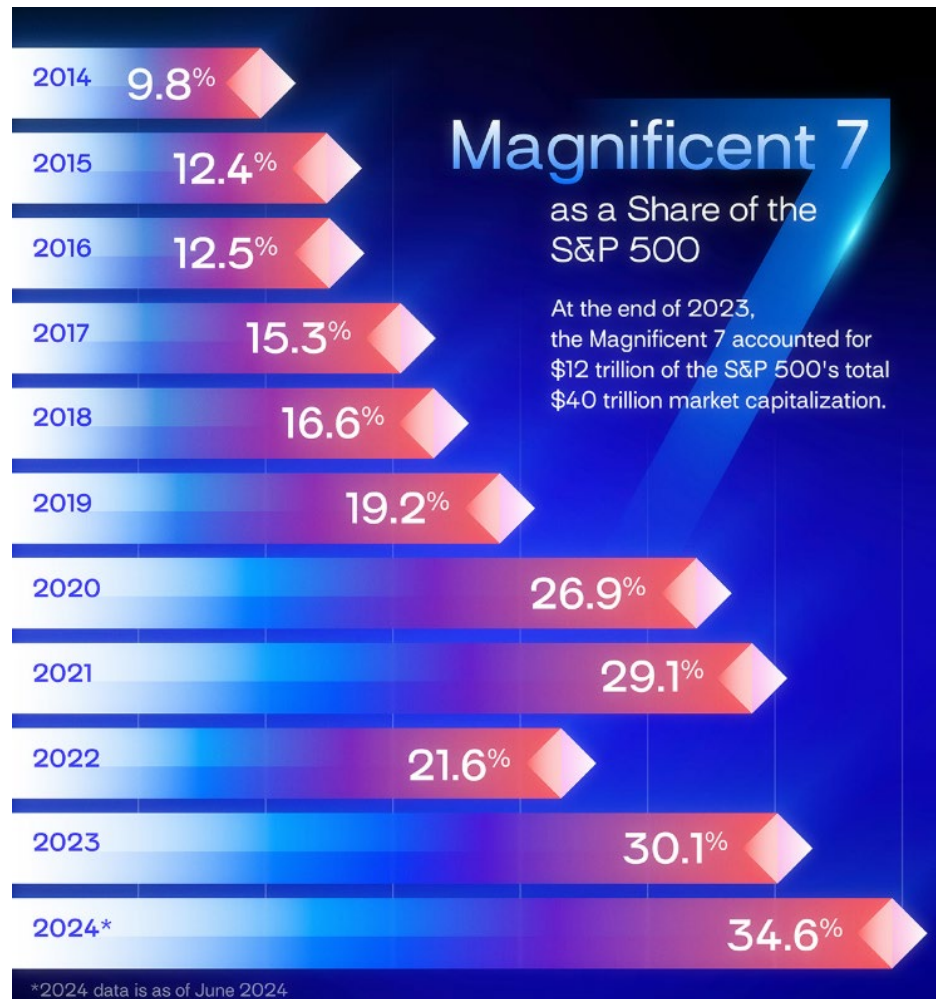
Source: Dow Jones Market Data; FactSet

Market value



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Rise of the Mag 7

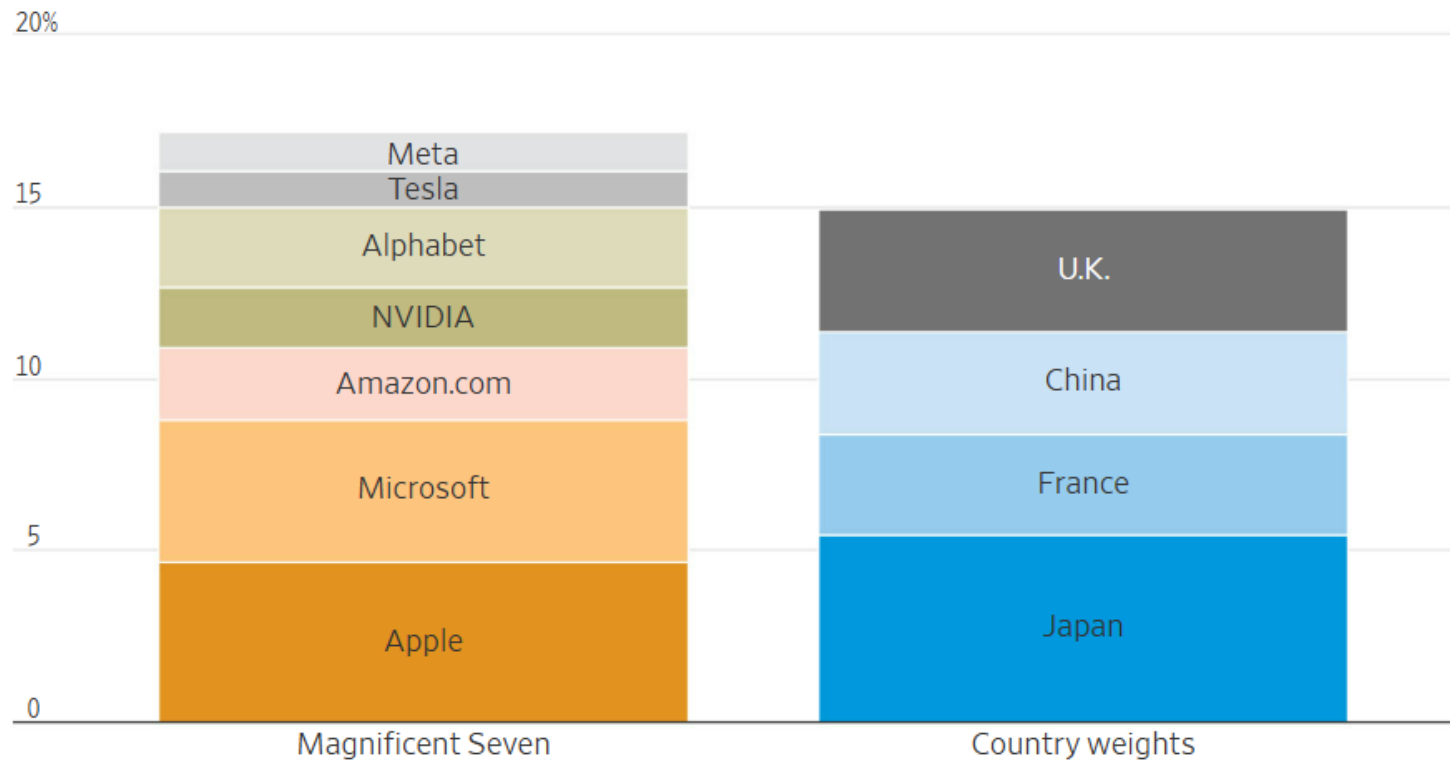


- ❖ In 2014, aggregate market capitalization of the Mag 7 was less than **10%** of the S&P 500.
- ❖ In 2024, it was **34.6%**.
- ❖ Growth of computing demand, eCommerce, and the AI boom fueled an unparalleled increase in market capitalizations of these tech leaders.
- ❖ Among them, NVIDIA became the most valuable company in the world.

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Market cap of Mag 7 relative to aggregate indices

Weighting in the MSCI All Country World index



The market value of the Mag 7 exceeded the market value of all public companies in each of these major economies.

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What happened since January 1, 2025?

Alphabet: -21.4%

Amazon: -24.0%

Apple: -20.8%

Nvidia: -29.9%

Tesla: -40.0%

Microsoft: -14.2%

Meta: -19.1%

S&P 500: -12.1%

NASDAQ Composite: -17.7%

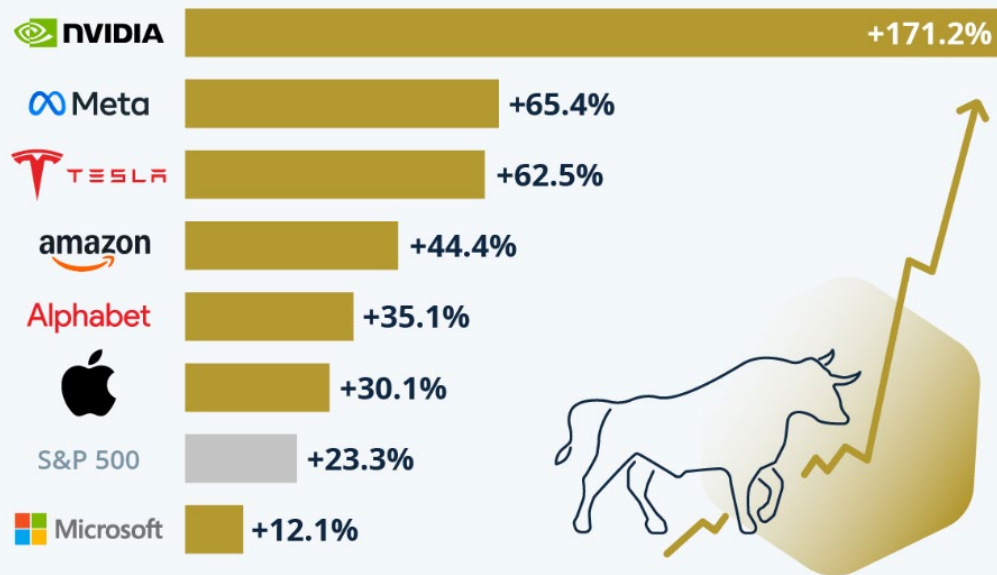
as of April 21, after market close

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Sharp Contrast between 2024 and 2025

Another Great Year for Six of the 'Magnificent Seven'

Stock price change of selected U.S. tech companies in 2024

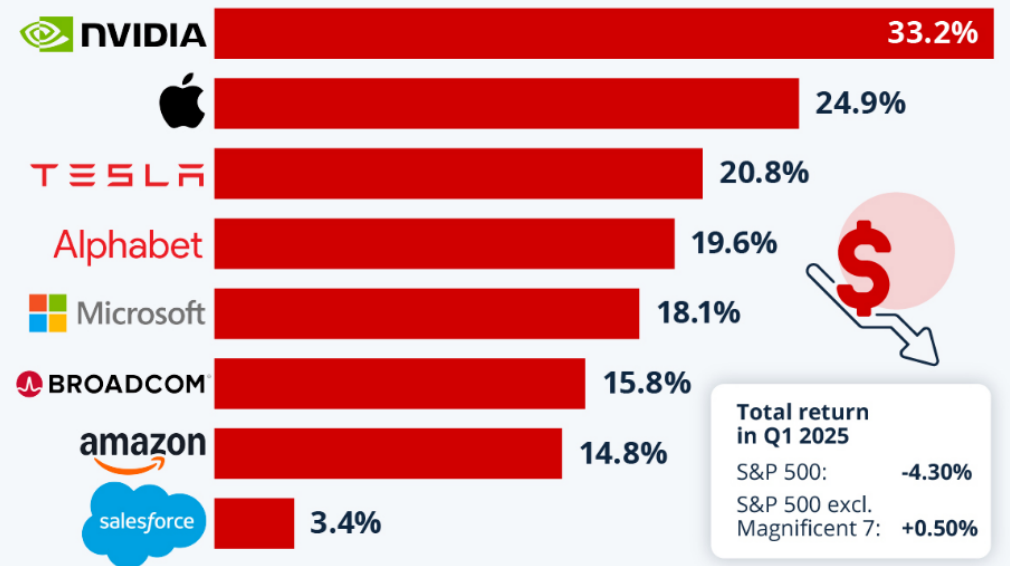


Source: Yahoo Finance

statista

Tech Giants Drag Down Market in Not So Magnificent Q1 2025

Top negative contributors to the S&P 500's total return in Q1 2025 (as a percentage of the index's total return)*



* Contributions are expressed in positive terms as the overall return was negative

Source: Howard Silverblatt, S&P Dow Jones Indices

statista

statista

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NVIDIA STANDS OUT

Nvidia: **-29.9%**

NVDA responsible for 8 of the 10 largest single day market cap losses in history...

as of April 21, after market close



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EXPLANATIONS

1. Greater Risk of Recession in U.S.
2. Tariffs and Rising Global Tensions
3. Competition
 - Greater competition *among* Mag Seven
 - Greater competition *from* other rivals

Source: ...

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Greater competition

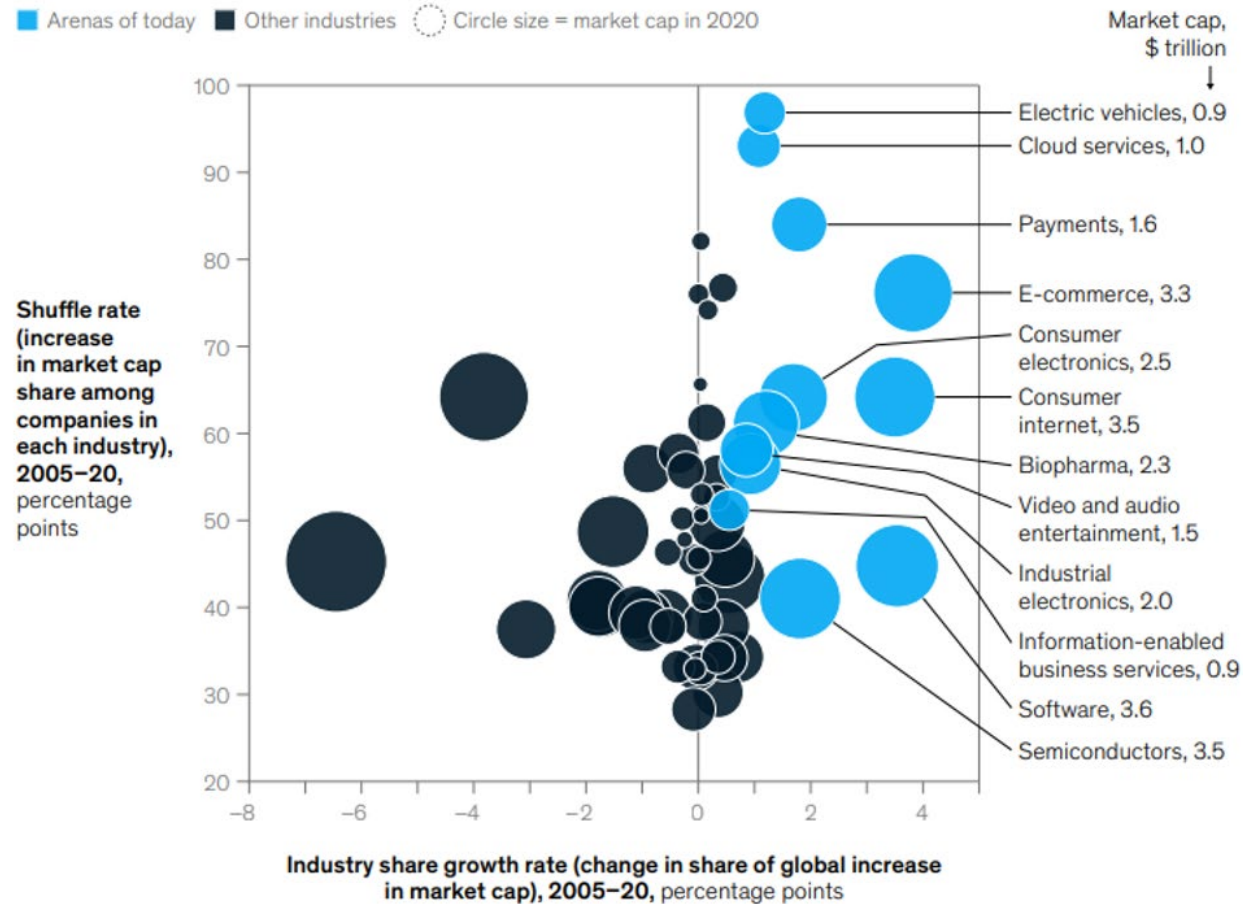
Mag Seven used to have *distinct competitive lanes*:

Alphabet:	Internet Services – Search, Maps, YouTube, Cloud, etc.
Amazon:	eCommerce, AWS
Apple:	Devices, complementary services, software
Meta:	Social Media Platforms
Microsoft:	Software for businesses, platforms
Nvidia:	Chips, complementary software (CUDA)
Tesla	EVs

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“Lanes” have Merged and Overlap

Market cap shuffle rates and growth share for 57 industries



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“Lanes” have Merged and Overlap

EXAMPLES

- Social Commerce (Meta, Microsoft) now competes with eCommerce (Amazon)
- Alphabet (Waymo) and Tesla compete in autonomous driving
- Data Centers: Amazon (AWS) and Microsoft (Azure)
- Apple and Amazon compete over devices for individuals and homes
- Ad tools (Alphabet, Microsoft, Amazon, and Meta)
- Search engines (Alphabet and Microsoft)
- Alphabet’s YouTube competes with Meta for ad revenue

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Amazon is an example

AMZN SOTP ANALYSIS SUMMARY					
SOTP (Price Target)	Enterprise Value	Per Share Value	% of EV	EV/EBITDA	
				NTM	2026E
AWS	\$1,047,547	\$97	41.3%	22x	20x
Advertising services	\$638,873	\$59	25.2%	19x	17x
Core retail (Online + 3P)	\$759,776	\$71	30.0%	12x	10x
Online stores	\$415,600	\$39		12x	10x
Third-party seller services	\$344,177	\$32		11x	10x
Subscription services	\$81,176	\$8	3.2%	16x	15x
Physical stores	\$4,071	\$0.4	0.2%	9x	9x
Other	\$5,018	\$0.5	0.2%	8x	8x
Enterprise Value	\$2,536,461	\$235		17x	14.5x
Net Debt	(\$48,579)	(\$5)			
Equity Value	\$2,585,040	\$240			

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Mag 7 now compete in New Competitive Space: **ARTIFICIAL INTELLIGENCE**

Data Centers

AI Models

- Alphabet's Gemini, Meta's Llama, Microsoft's Copilot
- Apple Intelligence:

Training of models

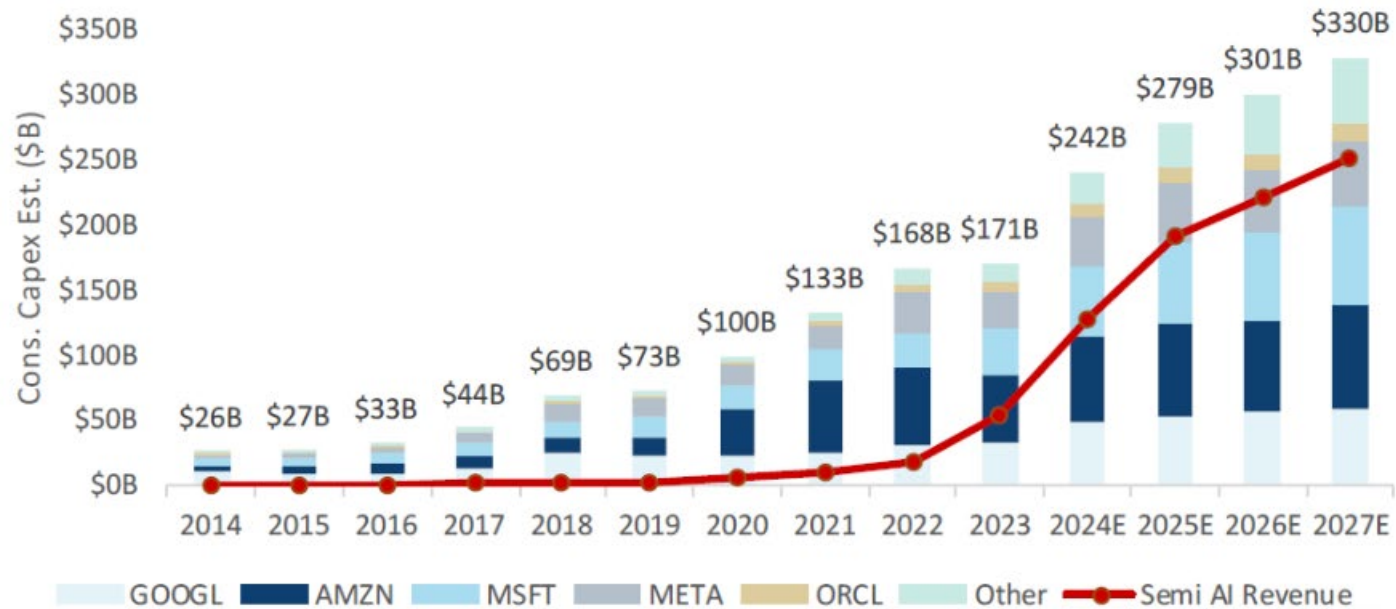
AI applications

- Customer experiences
- Operations

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AI SPEND

Figure 12: Hyperscaler Capex Plans Growing with AI Spend



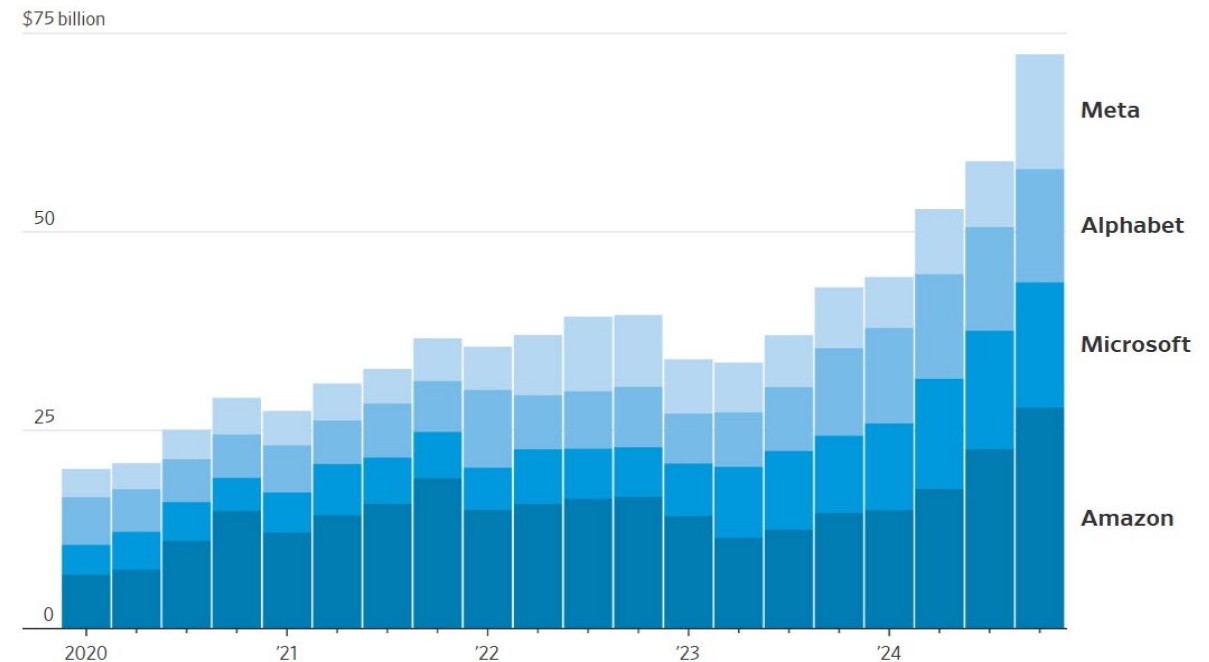
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UNPRECEDENTED INVESTMENTS IN AI BY MAG 7

- Massive Capital Spending
- Amazon, Google, Microsoft and Meta alone are bound to spend at \$200 billion on “CAPEX” in 2025.

=> Will their investments pay off?

Capital spending, quarterly

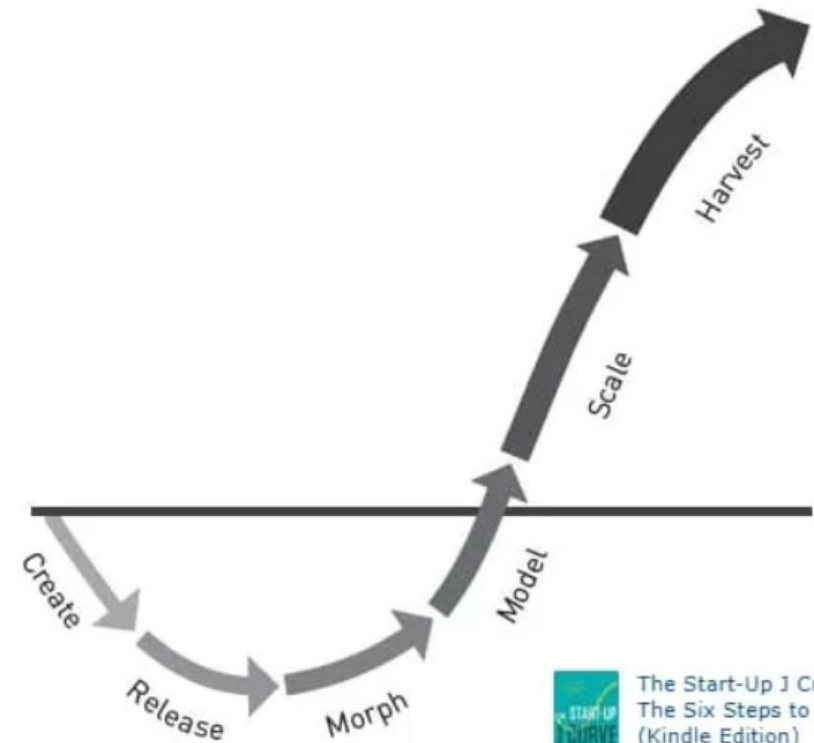


Note: Data in this chart and those below reflect purchases of property and equipment. This chart shows data for each calendar quarter. Microsoft's fiscal year ends June 30.
Source: the companies

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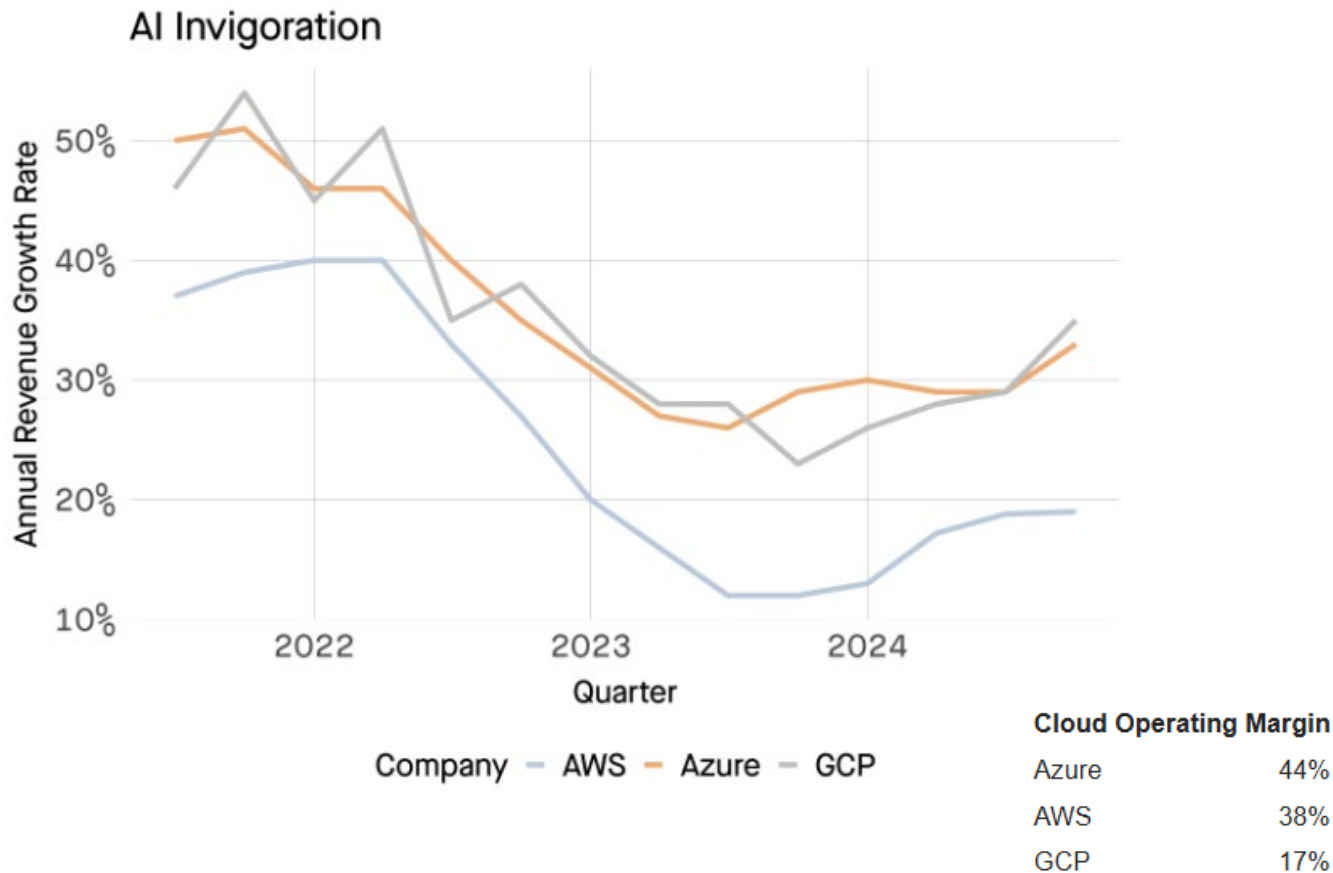
Hockey Stick

THE SIX PHASES OF THE J CURVE



The Start-Up J Curve:
The Six Steps to Entrep...
(Kindle Edition)
by Howard Love

Hockey sticks?



“AWS’ AI business is a multibillion-dollar revenue run rate business that continues to grow at a triple-digit year-over-year percentage and is growing more than 3x faster at this stage of its evolution as AWS itself grew, and we felt like AWS grew pretty quickly.”

“Our AI business is on track to surpass an annual revenue run rate of \$10 billion next quarter, which will make it the fastest business in our history to reach this milestone.”

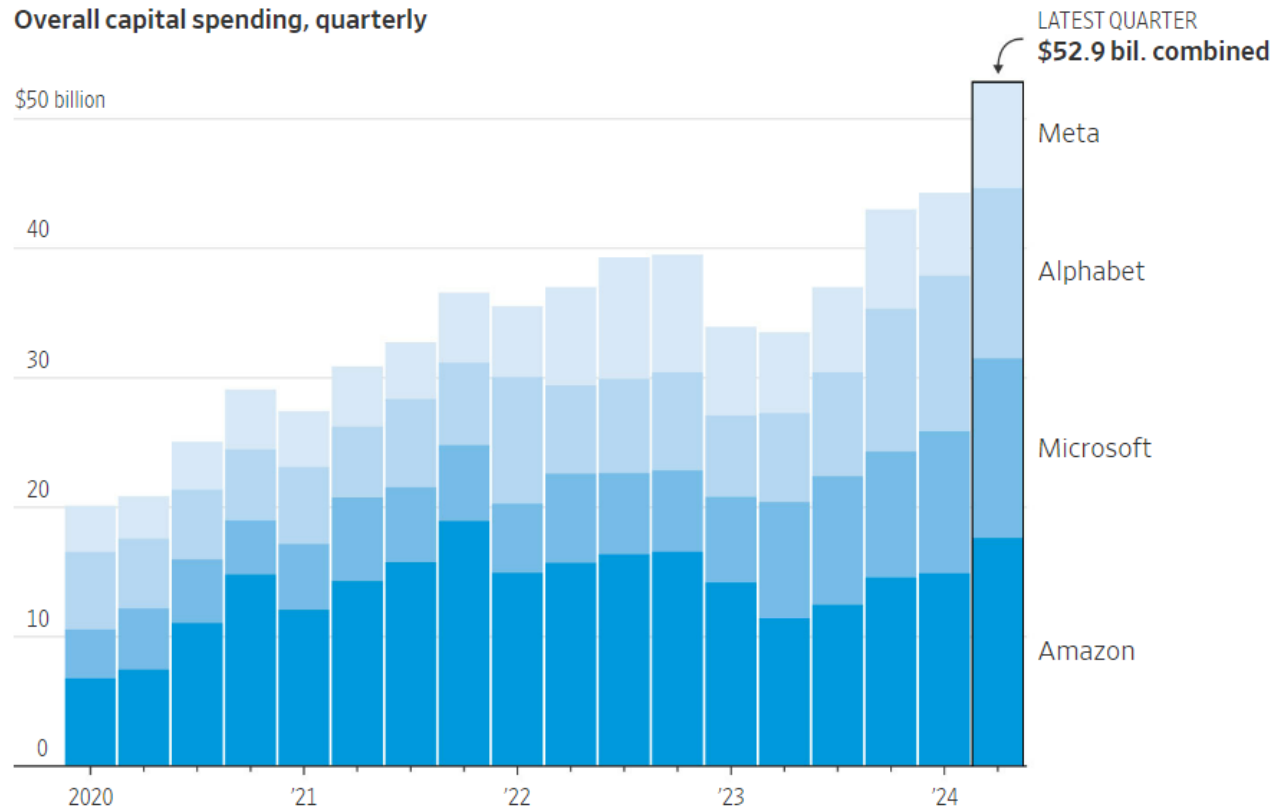


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The AI Spending Spree, in Charts

Tech giants and investors are shoveling cash into artificial intelligence amid questions about whether it will pay off

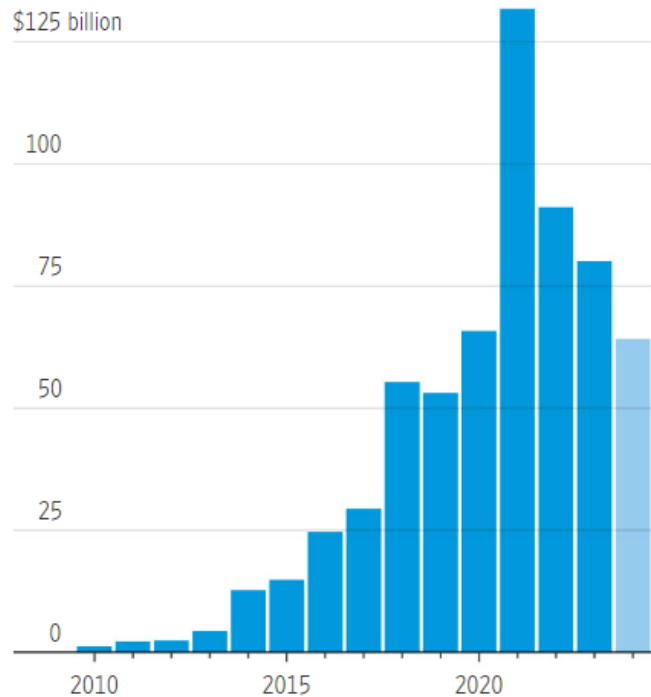
Overall capital spending, quarterly



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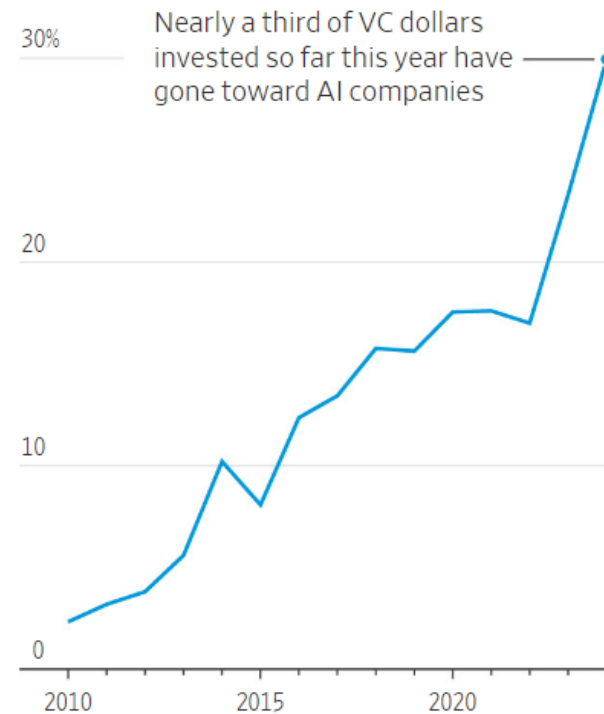
AI – Valuation vs Revenue

Venture-capital investment in artificial intelligence startups...



Note: 2024 data as of Aug. 27
Source: PitchBook

...as a share of total VC deal value each year



Nearly a third of VC dollars invested so far this year have gone toward AI companies

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Individual Analyses

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Nvidia

1. AI bet
 1. DeepSeek
2. How big / deep is Nvidia's "competitive moat"
 2. Nvidia's software is a complement to its chips
 3. Do software engineers in China use CUDA / Switching costs
3. Can Nvidia stay on leading edge?
4. What will Nvidia be allowed to sell in China (Not H20, H100)

Source: ...

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Tesla

- 1) AI bet
- 2) BYD takes the lead position plus shorter cycle to develop new models
- 3) EV market dynamics
- 4) Political risk
- 5) Low MC of EVs / Tesla's gross margin down to 11% (Tuesday's print)
- 6) Tesla's locations
- 7) The 20/80 Rule? Tesla's value depends on the "20% of revenue"

Source: ...

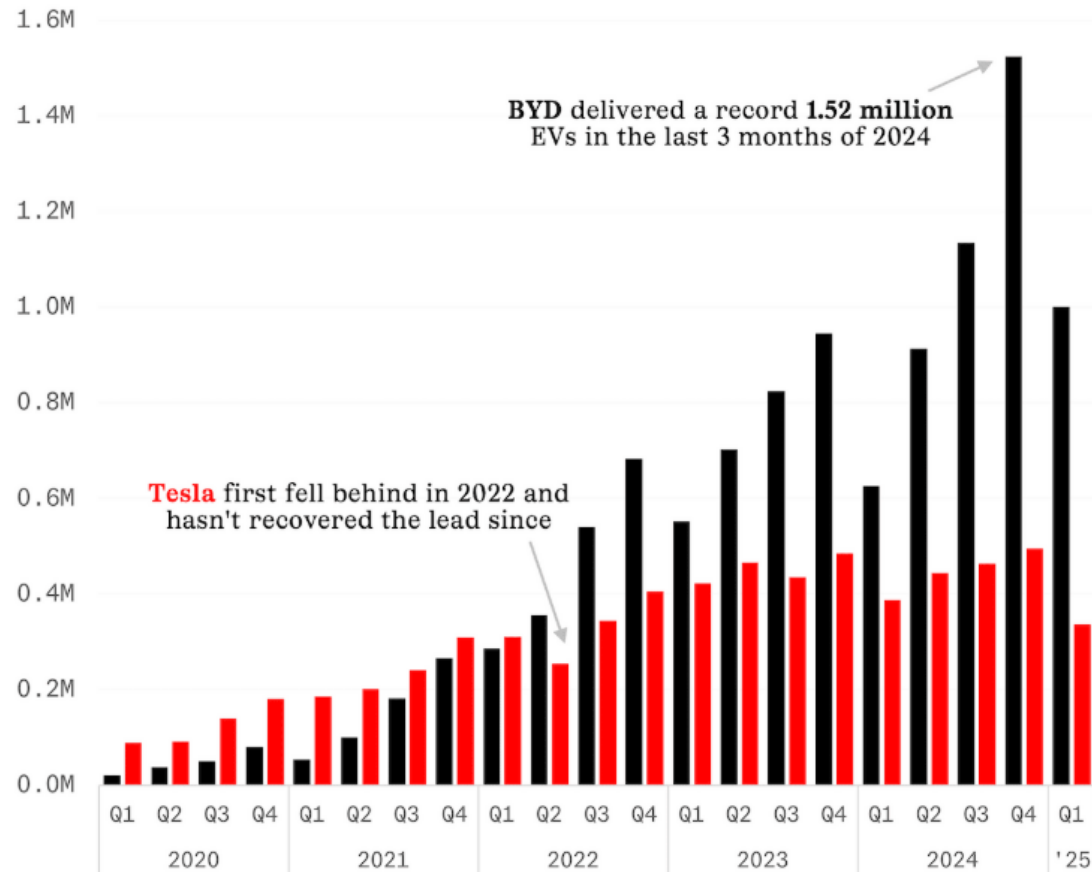
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BYD and TSLA

CHARGING AHEAD

BYD Leaves Tesla In The Dust On Deliveries

Passenger EV Unit Sales for BYD and Tesla [Global, annual, BEV & plug-in hybrids*]



CHART

Source: CnEV, company reports | *Tesla quarterly figures, BYD 3-month totals

BYD increasing its lead over TSLA...

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Apple

- 1) AI bet
- 2) Apple's strong hold on Apps for iOS
- 3) China exposure: Q: How many times has Tim Cook visited China recently?
- 4) Huawei and Xiaomi / together overtake Apple in China. (Government signals preference for China smart devices)

Source: ...

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Amazon

- 1) AI bet
- 2) AWS: Slowing margins and growth
- 3) How will tariffs help / hurt?

Q: How could they help? Constrain Shein and Temu.
(Only 5% of US Ecommerce but DISRUPTIVE).

- 4) Amazon's position in US eCommerce is super strong

Source: ...

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Microsoft

- 1) AI bet
- 2) Can its amazing run with office software and the subscription model continue?
- 3) Security issues

[Source: ...](#)

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Alphabet

- 1) AI bet
- 2) First major antitrust case (Search). Liable. What remedies will US DOJ pursue?
- 3) Second major antitrust case (Ad Stack) underway.
- 4) Earnings this past Tuesday

[Source: ...](#)

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Meta

- 1) AI bet
- 2) Antitrust exposure in US. Will FTC undo acquisitions of WhatsApp and Instagram?
- 3) Antitrust exposure in EU / UK.
- 4) Greater competition from whom? TikTok; Snapchat?
- 5) Immature governance. Mark Z's bet on Metaverse.

Source: ...

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INSIGHTS AND TAKEAWAYS

1. The MAG 7 have been truly magnificent. Nothing like them in our lifetimes. Speaks to tech advances and globalization. (Rf. McKinsey Chart on “Arenas”).
2. The downturns in their market caps have multiple explanations (recession risk, tariffs), but our analysis underscores that **competition is unrelenting**. “Dominance” is often short-lived.
3. For each of the 7, company-specific factors are relevant, e.g., antitrust risk, China exposure, etc.
4. The Competition in the AI space is fierce. This raises the Q of whether the Mag 7 are developing profiles within their companies that look like *Hockey Sticks*.
5. Economics:.

Marginal Costs are low in high-tech, even in EVs.

Pay attention to Switching Costs, Network Effects, Economies of Scale, Economies of Scope.

Source: ...

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What to pay attention to going forward?

- Can globalization in high tech be stopped?
- AI ecosystems in China
- Will Nvidia just be a chip seller in China?
- Carve out for Apple? Others?
- China-US competition in AI

Source: ...

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