

# THINGS THAT MAKE YOU GO HMMM...

By Grant Williams

AI, AI...OHHHHH



**“Gen AI is probably the most overhyped technology I’ve ever witnessed in my 45 years following tech stocks. It has provided, at best, some evolutionary advantages, versus the Internet, which was revolutionary.”**

Fred Hickey, The High Tech Strategist

## **“Welcome to the AI Trough of Disillusionment”**

The Economist, May 21, 2025

“The fundamental issue with LLM AI is that you can’t make money building an LLM, you can’t make any money running an LLM, you can’t make any money creating an app that uses an LLM, and you can’t make any money building a datacentre to service firms that train and run inference for LLMs. Worse than that, you not only can’t make money, you are guaranteed to lose money, and a lot of it. This is an ecosystem on the edge of extinction.”

Andy Lees/Julian Garran, May 6, 2025

“AI is real - just as the internet was a quarter century ago. But it is overhyped and the related stocks are grossly overvalued - as they were during the dotcom mania. Human behavior never changes and investors are once again excitedly “buying the dips” as they’ve been trained to do.”

Fred Hickey, The High Tech Strategist

**“Even if there is a correction, it won’t derail the overall upward trajectory of AI adoption. Instead of a devastating bust, we might get a more contained “valuation reset” or a series of mini-busts in certain segments (say, overly hyped startups quietly dying off) while the main storyline—AI getting better and more integrated into business—continues.”**

ChatGPT



# THIS MONTH

Table of Contents

**THINGS THAT MAKE YOU GO HMMM... 04**

Middle-class vigilantes are turning against the State .....25

Trouble is brewing in China for the West's retail giants ..... 26

TACO, the trade that ate itself ..... 28

Dollar-obsessed Argentines have a newfound love for buying gold ..... 29

Yale is rushing to sell billions in private equity investments ..... 31

Germany puts rail first in €500bn investment spree .....33

Gold overtakes Euro as global reserve asset, ECB says ..... 34

Walmart and Amazon are exploring issuing their own stablecoins .....35

King dollar's crown wobbles. Brace for fallout ..... 36

How Wall Street offloaded \$13bn of debt tied to Elon Musk's Twitter deal .....37

**CHARTS THAT MAKE YOU GO HMMM... 40**

**WORDS THAT MAKE YOU GO HMMM... 43**

**AND FINALLY... 44**



p. 04



p. 37



The AI arms race is in full flow, but is this latest mania a one-way ticket to the moon or is there another, less promising outcome in store—one reminiscent of the events of the late-1990s?



***Most readers will be familiar with the children's rhyme Old MacDonald Had a Farm. It's been around in one form or another for over three centuries, its earliest traceable version appearing in a 1706 English stage play. Over time, it became a nursery staple – each verse a simple formula: name an animal, add its sound, repeat. Comforting in its predictability.***

Is it just me, or is there something oddly appropriate about that today?

Each generation seems to produce its own version of Old MacDonald, the archetypal figure riding a new wave of economic promise. One generation raised cattle and corn, the next coded websites and traded options. Today's MacDonalds are fine-tuning transformer weights, renting GPUs by the hour, and raising seed rounds to *democratise intelligence*.

The surface changes, but the pattern repeats.

And so, as AI begins to reshape boardroom agendas and government budgets (to say nothing of stock indices) the tune is increasingly familiar: hype, hope, capital, conviction... then what?

In a recent episode of *The End Game*, Bill Fleckenstein and I were joined by Fred Hickey, ostensibly for a discussion about gold and gold mining shares (Fred is perhaps the best analyst of the sector you'll find and a subscription to *The High Tech Strategist* is, dollar-for-dollar, the best money you will spend in your entire research budget), but the discussion pivoted to AI. Fred was scathing in his criticism of a sector which has emerged as the biggest, baddest, shiniest corner of the investment world.

In his view, the fervour surrounding artificial intelligence—particularly the explosive excitement over Generative AI and large language models (LLMs)—is the latest in a long string of Wall Street-fuelled tech bubbles. With Fred having followed technology markets for over four decades, the direct and frequent parallels he draws between the current AI-driven rally and the dotcom mania of 1999-2000 are both stark and important.

To Fred, the names may have changed, but the next verse of the song remains eerily familiar.

At the core of his argument is the belief that Generative AI (GenAI) is vastly overhyped and poorly understood and, while Fred acknowledges that AI is real and will likely have long-term implications, he believes the present excitement is wildly out of proportion to the technology's current utility or commercial value—a viewpoint that stands completely at odds with Wall Street's, one in which AI will one day (soon) rule the world:

***(The End Game): So everybody had to pour more money into what was this generative AI area. And the problem is that there's no killer app. There are flaws, there's tremendous hallucinations, bad data. Companies don't really want to use it. I saw a... Wall Street Journal in February had a network***



*summit of Chief Information Officers. These are the tech guys, and they said there's some value in this generative AI stuff, but not enough. They haven't yet started using the technology in a widespread way, but we've seen them pour money into this generative AI area to the point where these four alone have \$325 billion that they're going to spend this year on CapEx spending, up 46% from last year. It is crazy. Now, I've seen this before, when you have stock bubbles and when there's too much money, and in this case you also have guys that were the richest people in the world and their stocks are the largest in the world.*

*There's massive egos involved. And we saw this in 2000 when they built 20 times more fiber optic capacity than they needed. They built all kinds of computer server and networking equipment than they needed. And it took over a decade for... It wasn't that the internet wasn't real, it was, but it took forever then to work that off...*

According to Fred, the persistent shortcomings of LLMs—particularly their tendency to hallucinate, fabricate facts, and deliver inconsistent results—are fundamental weaknesses that undermine their usefulness in real-world enterprise settings.

In the January edition of *The High Tech Strategist*, Fred took aim at AI, firing off a few well-sighted rounds:

*(The High Tech Strategist, January 2025): A few weeks ago, The Wall Street Journal titled a story: "Generative AI: Separating Hype from Reality." The Journal quoted Arvind Narayanan, director of Princeton University's Center for Information Policy and co-author of the book "AI Snake Oil": "If AI could reliably do all the things it's capable of today it would truly be an economic transformation.*

*But if it's going to fail 10%—it's going to order DoorDash to the wrong address 10% of the time—then it's a completely useless product. Those are the kinds of errors that people are actually reporting. In enterprise use cases you can tolerate even less error, I would say. So, it isn't a technology for automation. Then what is it for? Maybe creativity enhancement. But to take advantage of that you need a lot of reorientation."*

Back in December 2024, the *Wall Street Journal*

published an article headlined *The Next Great Leap in AI Is Behind Schedule and Crazy Expensive* and, it's fair to say, there was a surprising degree of truthiness contained therein:

*(WSJ): OpenAI isn't the only company worrying that progress has hit a wall. Across the industry, a debate is raging over whether improvement in AIs is starting to plateau.*

*[Former OpenAI Chief Science Officer, Ilya] Sutskever, who recently co-founded a new AI firm called Safe Superintelligence or SSI, declared at a recent AI conference that the age of maximum data is over. "Data is not growing because we have but one internet," he told a crowd of researchers, policy experts and scientists. "You can even go as far as to say that data is the fossil fuel of AI."*

*And that fuel was starting to run out.*

I mean, it makes sense. There's a finite amount of data and, even though it grows every second of every day, when you've made your bones and raised your billions while catching up on a couple of thousand years of the stuff, you're bound to see your progress slow and then plateau at some point. Perhaps we're there already? That would certainly shock many.

Not Fred, however, who, having seen that article, tweeted back in December:

*"This is bad news for the large language model (LLM) GenAI stock mania that has almost singlehandedly been driving recent stock market results (Mag 7 stocks). Hitting the wall early (before getting very far) is a recipe for disaster. The entire world owns these stocks in sizes that were already unjustifiable. Investors are beginning to question the Gen AI thesis. It's a ticking time bomb."*

We're all intimately familiar with the Mag 7 phenomenon (aren't we?) but the reality of the often-nebulous domination of those stocks is sometimes hard to contextualise.

One look at this chart, however, will give you a more grounded understanding of just how lopsided things have become, with Apple, Microsoft and NVIDIA accounting for over 20% of the entire S&P500—a previously unheard of kind of domination (Fig. 1).



Fig. 1 S&P500 Weighting Of Top Three Constituents (%) 1980 - 2024

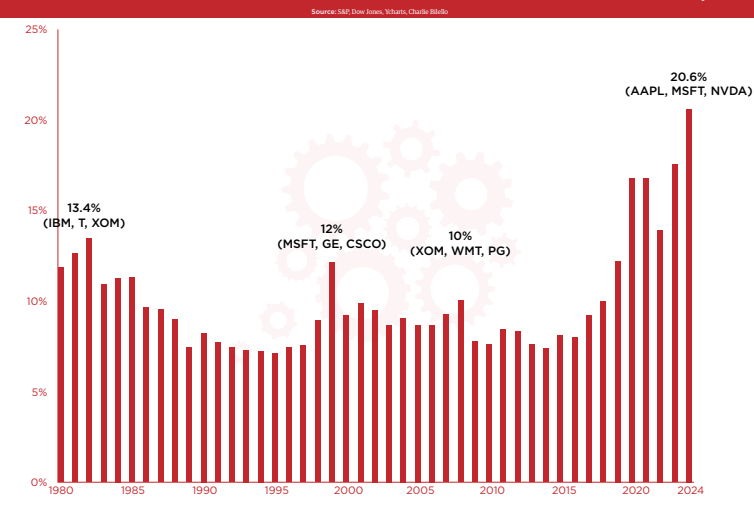
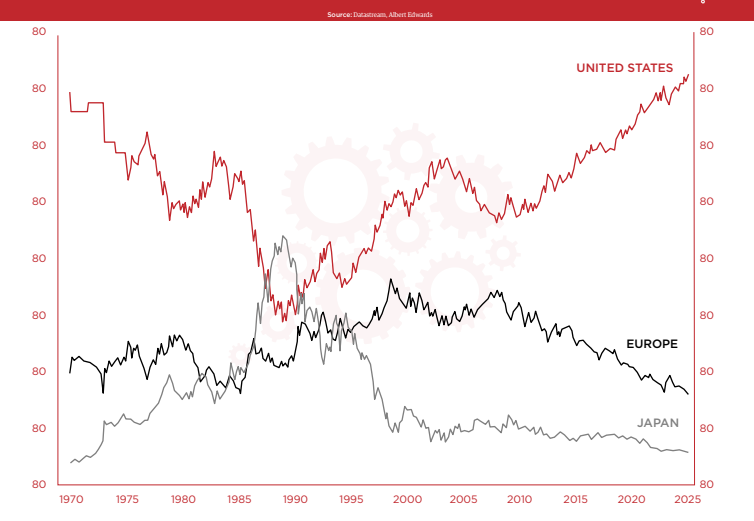


Fig. 2 MSCI World Index Composition By Region (%) 1970 - 2025



And, with US stocks accounting for some 70% of the MSCI All World Index (ACWI), concentration has enveloped the entire world, at the clear expense of European and Japanese stocks, both of which languish at or near the levels they commanded half a century ago (Fig. 2).

Chief among Fred's concerns is that AI's technological shortcomings are ignored or simply dismissed by investors and analysts, who instead continue to justify exorbitant valuations with their greedy, beady eyes fixed squarely on the promise of future AI riches.

The massive capital expenditure by those fighting tooth and nail to win the AI race is being justified not by present-day revenue, but by the promise of speculative future gains.

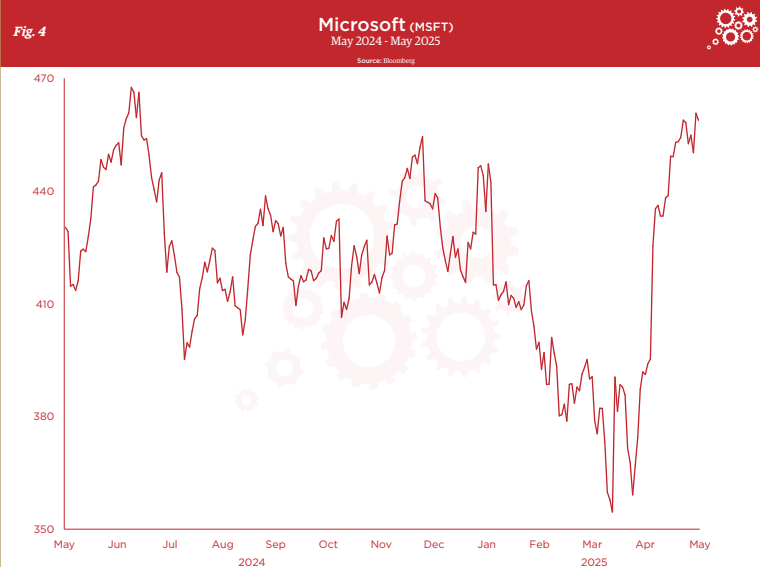
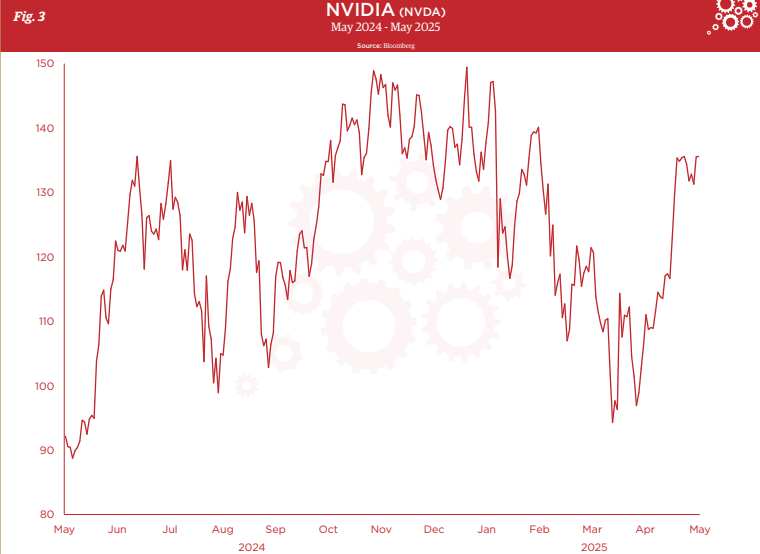
In 2024 alone, the four major hyperscalers—Microsoft, Google, Amazon, and Meta—spent an estimated \$236 billion on AI infrastructure, yet revenue directly attributable to those investments remains... let's say 'elusive', shall we?

This dynamic, Fred warns, echoes the worst excesses he saw as he chronicled the dotcom bubble, where growth was assumed, not demonstrated, and later proven to be, in too many cases, a complete and utter fallacy.

Fred is scathing about Microsoft, who he believes kicked off the AI arms race with its knee-jerk investment into OpenAI (more on that shortly). His views on the company's foray into the world of AI are so far from mainstream as to be posterous... except:

*(The High Tech Strategist, January 2025): Hyperscalers continue to pour hundreds of billion of dollars into Gen AI computer capacity (estimates are as high as \$300 billion in 2025). However, if all Gen AI is providing is "creativity enhancement," no "killer apps" and no return on investment - which seems to be the case as of now, the wild "cycle of competitive escalation" in spending that Microsoft kicked off in November of 2022 could collapse. Two weeks ago, Microsoft CEO Satya Nadella in an interview observed, "I am no longer chip supply constrained." By chips, he means Nvidia GPU chips which have been in shortage (and hoarded) over the past 2+ years.*

*Microsoft is the largest buyer of Nvidia's chips. In a typical semiconductor cycle, increased demand drives chips into a period of shortage, leading to double and triple ordering; supply eventually catches up with demand and then finally exceeds it - causing a "digestion period" to work off inventory oversupply. Per Nadella, supply has now caught up with demand. Next up is the "digestion period" (a term Microsoft and other hyperscalers have used in the past). A single "digestion" comment would likely be devastating for the bloated AI-driven Mag 7 stocks. As I've mentioned in recent letters, I've already started hearing industry rumblings and that may be the reason why NVDA's stock has notably underperformed (-12%) since peaking at 152.89 just prior to Thanksgiving. Tick, tick, tick (Fig. 3).*



**Microsoft typically releases its fiscal second quarter results during the last week of January. It was interesting to see a Financial Times headline earlier this week: “Nvidia bets on robotics to drive future growth.” There was little “robotics” talk from Nvidia over the past two years**

Fred’s criticism continued as he pulled apart the innards of what was actually *happening* at Microsoft versus the public perception:

**(The High Tech Strategist): Gen AI’s large language model features are lacking and despite lots of marketing and hype, most end users haven’t been persuaded to use them. Last week, the Wall Street Journal titled a story: “Microsoft Is Forcing Its AI Assistant on People - and Making Them Pay.”**

**First line from the article: “Microsoft is trying a new approach to build excitement for its artificial-intelligence assistant Copilot: Give it to customers whether they want it or not.” Another key line: “Microsoft has been trying to use generative AI to gain ground in the market for consumer apps, where it has long struggled. It first integrated the tech into its Bing search engine as a chat tool, but failed to gain much ground against Google. It later launched Copilot, a chatbot and content generator.” Now, it’s trying to force Copilot on users.**

Until its recent stellar run on the back of huge outperformance by its cloud computing division, Microsoft stock had dropped significantly from its late-2024 highs (Fig. 4). Now, however, it finds itself close to all-time highs as the embers of the AI mania have a little oxygen breathed back into them.

The bottom line is that there really is nothing new under the sun and the same dynamic (as well as a few of the same companies—including Microsoft) that Fred cautioned against a quarter of a century ago is raging once again.

For those who remember the late 1990s only too well, today’s AI fervour carries an uncanny whiff of déjà vu. Back then, it was a new technology called the *World Wide Web* which promised to upend business and daily life and its nascent promise saw tens of billions of dollars flood into anything with a ‘.com’ in its name. Investors needed little or no persuasion to ignore profits and chase sky-high valuations based purely on faith in a digital future.

Sound familiar?

The parallels to the current AI boom are both eerie and instructive—something Fred has been at great pains to try and point out:

**(Fred Hickey): None of this idiocy shocks me as I’ve seen it all before during the height of the 1999–2000 stock mania. The names change, but the actions are the same. The ending will be identical too—a gigantic crash.**

He’s likely not wrong.

Two decades ago, Wall Street analysts hyped *any* company with even a *remotely* credible internet angle,



just as many are now doing with AI. In 1999, Henry Blodget famously predicted Amazon's stock would hit \$400; after the bust, he was banned from the industry for materially misleading hype (Fig. 5).

The share price of Amazon at that time demonstrates beautifully what happens when hope, greed, and a saleable dream collide with an analyst class prepared to say anything and hype stocks (not companies or businesses, but stocks) to the moon.

Fast forward to 2023-24, and a whole slew of new prophets of tech are on television touting things like "10 Tech Winners for the 'AI Revolution'"—lists that inevitably include today's market darlings like Apple, Nvidia, and Alphabet (Dan Ives, Sandy Munro I'm looking at you).

The conviction that *this time is different*—that AI or the internet will guarantee limitless growth—is a consistent hallmark of the magical thinking present in all financial market bubbles.

Back in the dotcom days, many investors truly believed the internet had created a *New Era* for stocks and the economy. Traditional valuation metrics were discarded amid talk that *eyeballs* (website visitors) mattered more than earnings.

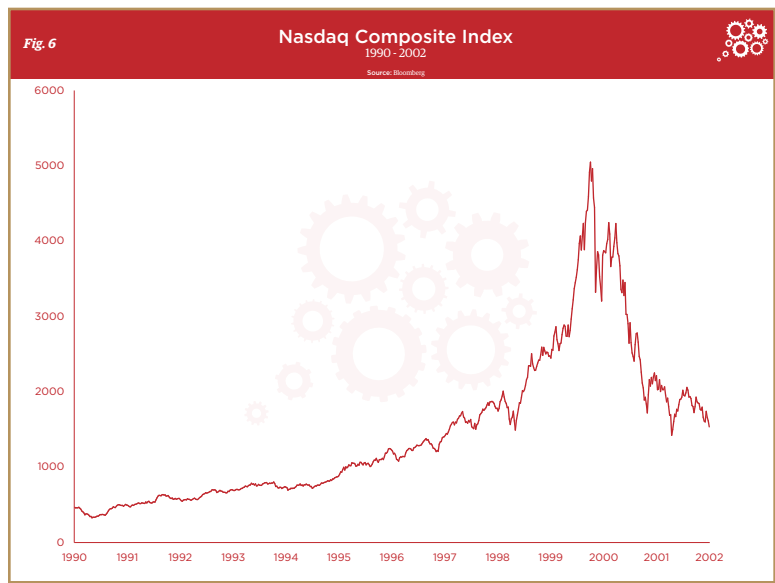
I mean, really, they that back then and people bought into it ~~willingly~~ rapaciously.

Fred chronicled (more comprehensively than most) how investors bought tech stocks all the way down

during the ensuing crash because they were utterly convinced the long-term story was so painfully good, with little or no chance of the hype ultimately being a bust.

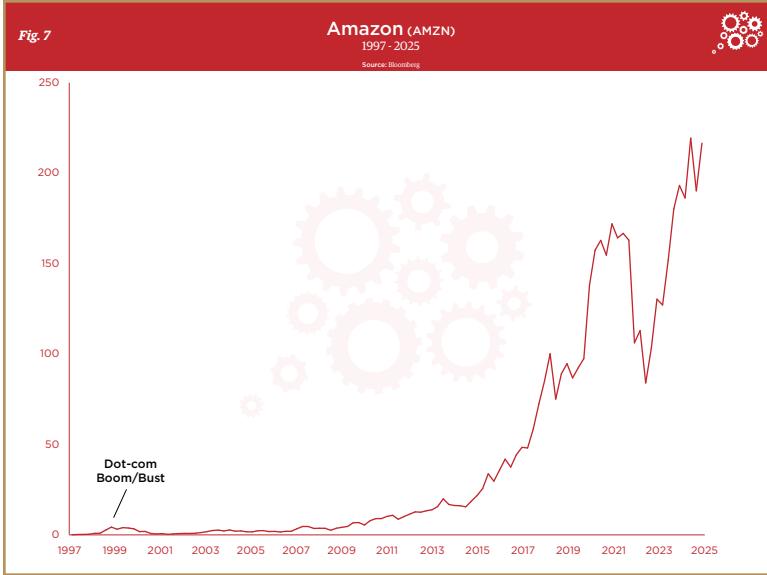
Of course, the Nasdaq ultimately plunged 78% (Fig. 6), and many high-flying companies vanished overnight, but the faith in technology's promise blinded investors to immediate fundamentals. It's a pattern as old as railroads and radio: transformative new tech sparks a financial mania, the flames of which are fanned by analysts and reporters painting pictures of unlimited upside with zero risk, which leads to prices far overshooting reality.

Now, despite the carnage of the dotcom bust, it's important to note that, in many cases, the technology itself *did* ultimately fulfil many of its promises (Amazon itself being a prime example (Fig. 7)), just



on a slower timeline and only *after* the speculative excess was wrung out. The internet *did* revolutionize commerce, communication, and media in the 2000s; companies like Amazon and eBay survived the crash and went on to thrive.

The bubble's bursting, painful as it was, also sowed the seeds for long-term growth by weeding out weaker players and enabling stronger ones to emerge, often enabling the newer, leaner, more robust companies with fresh capital to acquire infrastructure assets for pennies on the dollar as the bankruptcy process worked its magic, facilitating the creative destruction necessary to pass assets from weak to strong hands.



A bubble's bursting actually performs an incredibly important service, generating a capital investment cycle capable of yielding true long-term benefits. The fiber-optic cables, data centers, and software built during the late-'90s frenzy laid the groundwork for the online world we take for granted today. In other words, yesterday's speculative excess can paradoxically help produce tomorrow's breakthroughs—but only *after* the fever cools and billions of dollars of speculative excess has been wrung out of prices (and flushed out of investors' pockets).

This historical perspective casts today's AI excitement in a much more nuanced light. On one hand, the echoes of 1999 are loud and clear: once again we see sky-high valuations without profits, grandiose claims about world-changing potential, and a cascade of capital chasing a hot buzzword. However, on the flip-side of that, just as with the internet boom of the late-1990s, the genuine innovations of AI could one day potentially justify much of the excitement. It's highly unlikely to be in the straight-line trajectory boosters sell imagine, though.

It's absolutely crucial, when exploring the current landscape of AI investment and innovation, to keep this double-edged lesson of the dotcom era in mind: revolutionary technology can indeed transform the world, but not without enduring a rollercoaster ride of booms and busts as greed and market speculation get (inevitably) out of control.

Before we get to the *mania du jour* however, it's worth remembering where all this began.

Artificial intelligence (at least as a serious academic pursuit) is older than most of its modern-day, Silicon Valley evangelists. The formal birth of AI as a field can be traced to the summer of 1956, when a group of researchers gathered at Dartmouth College in New Hampshire for what would become a landmark event: the *Dartmouth Summer Research Project on Artificial Intelligence*. Proposed by John McCarthy (below, then a young assistant professor at Dartmouth, but later considered the father of AI) alongside Marvin Minsky, Nathaniel Rochester, and Claude Shannon, the workshop was based on a bold premise, namely that *every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it*. It was at this workshop that the term *artificial intelligence* was first coined, and with it began the framework for a new scientific discipline.



Although the workshop didn't produce immediate technological breakthroughs, it successfully established AI as a serious academic and engineering pursuit, distinct from earlier traditions in cybernetics and automata theory. Attendees included many of the field's future pioneers—among them Allen Newell, Herbert Simon, Ray Solomonoff, and Arthur Samuel—whose early work would go on to shape machine learning, symbolic reasoning, and algorithmic complexity. McCarthy himself would later develop



the LISP programming language and contribute foundational work in logic and time-sharing. In retrospect, the Dartmouth workshop marked not only the beginning of AI, but also the start of a decades-long attempt to define—and replicate—human intelligence in code (and to create videos where babies play famous characters from TV and movie history).

The group's optimism was unbounded. Within a generation, they believed, computers might match, or even exceed, human intellectual capability and, depending on the specific humans whose intellectual capacity they were trying to match or exceed, you could argue they've been successful—not necessarily because AI has moved forward, but because human intelligence seems to be headed backwards.

The decades that followed the Summer of '56, however, were a little less cooperative.

The 1970s and again the late 1980s brought what became known as "AI winters"—periods of heavy disillusionment, as funding dried up and real-world applications failed to materialise. Rule-based systems, it turned out, had limits, data was scarce and the processing power required to make the dream reality simply wasn't there.

Hype collided with hardware.

It wasn't until the 2010s that AI truly began to re-emerge, this time not as a philosophical experiment, but as a practical tool. The catalyst? A confluence of three factors:

- The availability of enormous datasets from the internet,
- Advances in neural network architectures, particularly deep learning, and
- Dramatic increases in computational power, thanks largely to GPUs – notably those designed by NVIDIA.

Breakthroughs in image and speech recognition gave the field new credibility. Tech giants poured in capital, algorithms learned to label cats, translate phrases, and win at Go and the Captcha was born. AI was back, and this time, it had some commercial traction.

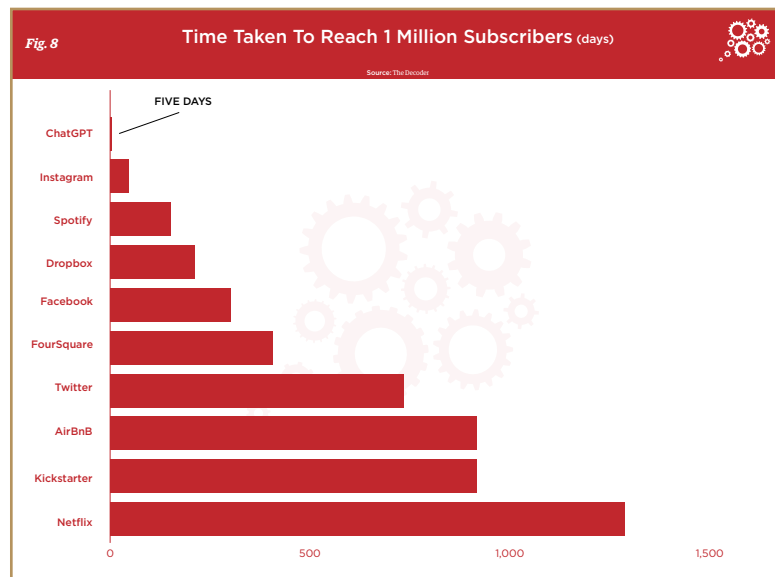
Still, most of this was happening in the background among the nerd community, many of whom had little real interest in the commercialization of their precious technology and, what interest they had wasn't matched by their business savvy.

It wasn't until November 2022 that artificial intelligence finally broke through to the mainstream.

OpenAI's release of ChatGPT was the watershed. It wasn't the most powerful model ever trained, but importantly, it was the first that felt usable, and millions upon millions of people signed up, spending hours asking their new plaything to write songs in the voice of Eminem or resolve arguments about Oscar winners from the 1950s.

Anyone with a browser could talk to it, ask questions, write poems, draft emails, draw up contracts and cheat on their homework and, consequently, the spread of ChatGPT made Covid look like child's play.

Within five days, ChatGPT had reached one million subscribers (Fig. 8). Within two months, it had crossed the 100 million user mark, making it the fastest user adoption of any product in history.



The explosion changed not only OpenAI's trajectory but also the entire structure of the AI industry almost overnight.

Inside the company, CEO Sam Altman (who, overnight, seemed to morph from tech geek to Bond villain) moved quickly. With global attention focused squarely



on OpenAI, he sought to consolidate its position as the clear leader in the emerging arms race.

Over its seven-year existence, OpenAI (originally founded in 2015 as a non-profit with the backing of Elon Musk, Reid Hoffman, Peter Thiel, and other members of the Silicon Valley Broligarchy) had by 2019 evolved into a *capped profit* hybrid, with Microsoft taking a \$1 billion stake and gaining privileged access to the company’s models.

That shift caused tension, particularly (and predictably) with Musk, who left the board in 2018 citing conflicts of interest with Tesla’s AI research, and has since become one of OpenAI’s loudest critics. In 2023, he ~~uncharacteristically~~ filed a lawsuit against the company, alleging it had abandoned its founding mission and was now, in effect, a tightly held commercial vehicle for Microsoft, stating ~~with zero sour grapes~~ that OpenAI had “...*strayed so far from its original mission that it’s become a closed-source de facto subsidiary of Microsoft.*”

Altman, meanwhile, embarked on a whirlwind funding tour. Between late 2022 and early 2024, OpenAI raised billions in successive tranches, pushing its private valuation as high as \$90 billion—despite generating minimal revenue and burning cash at extraordinary speed—before seeing its value explode to \$300 billion in March of this year (Fig. 9).

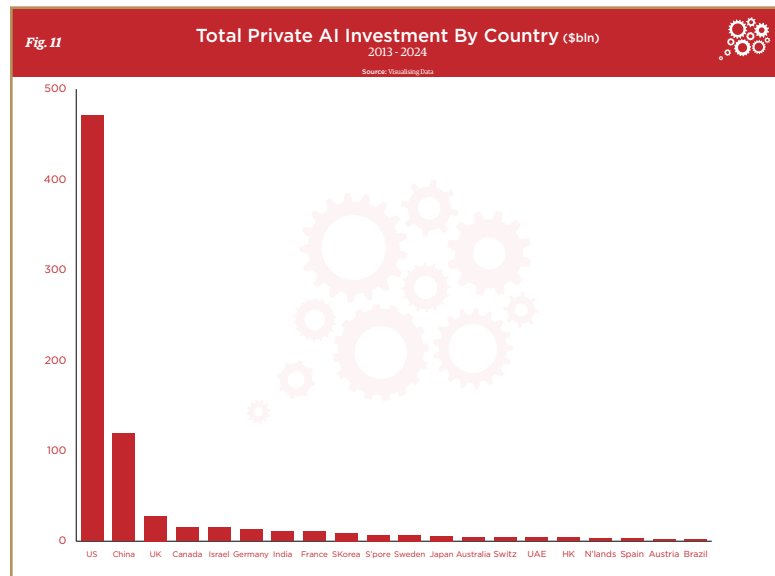
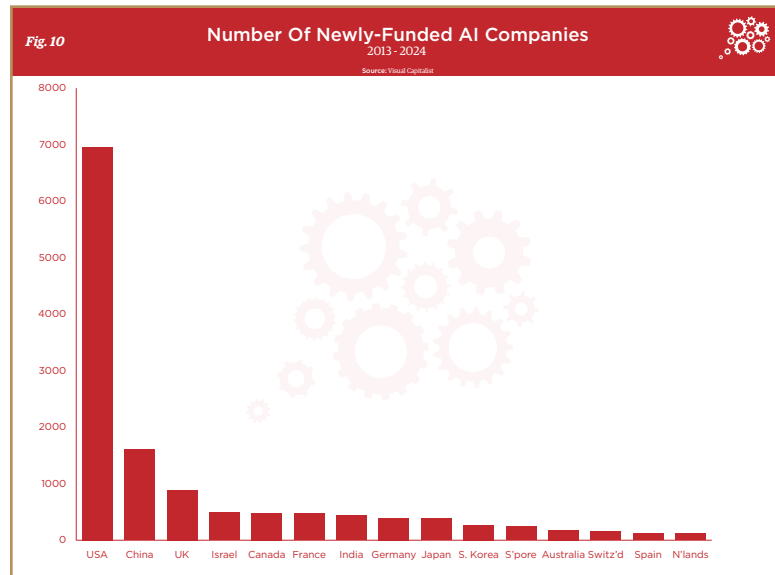
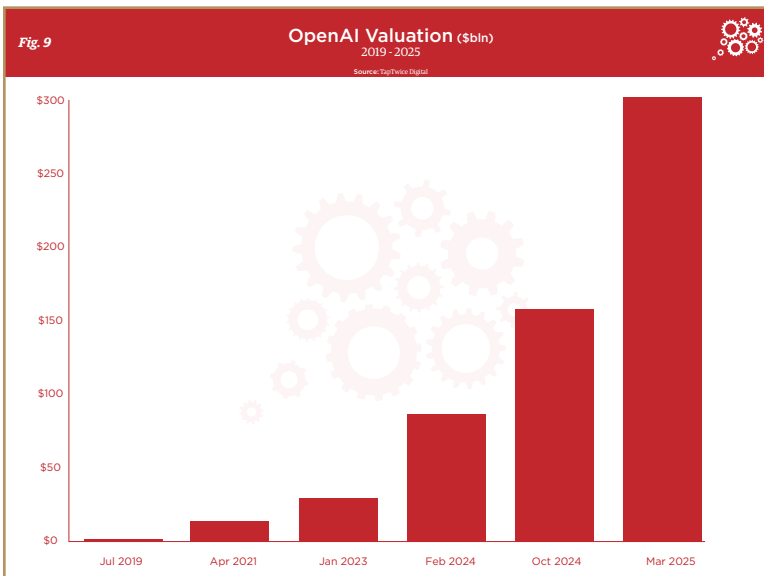
Altman, in typically grandiose Silicon Valley style, was pitching not just a company, but an entire platform shift—a self-styled *moment in history* akin to the

invention the internet, or electricity itself.

Naturally, the venture community bought in, as did (at increasingly lofty valuations) institutional allocators and, critically, a series of rivals.

Anthropic, Mistral, Inflection, and xAI (Musk’s counter-project) all accelerated their own fundraising efforts, with billions flowing from Amazon, Google, NVIDIA, and a slew of Middle Eastern sovereign wealth funds.

What had begun as an open-source experiment had now become a race for supremacy—geopolitical, financial, and existential. AI-adjacent companies began springing up like weeds, with the US far outpacing China and the rest of the world (for the time being) lagging way behind (Fig. 10 & 11).





With the competition coming for it, OpenAI, which had heretofore been cautious about releasing powerful models to the public, began to push one update after another: GPT-3.5, then GPT-4, then GPT-4 Turbo, each one accompanied by headlines, press conferences, and ever more aggressive integration into Microsoft's product suite.

The company launched an enterprise version, plug-in functionality, multimodal capabilities, and a custom GPT builder, all within 12 months.

And yet, for all the hype and hyperbole about how AI was changing the world in real-time, the revenue remained... let's go with 'modest'.

As of early 2025, estimates suggest OpenAI generates less than \$2 billion in revenue annually – far short of justifying its valuation, let alone its infrastructure spend (a subject we'll be coming back to shortly) (Fig. 12). Worse, the cost of inference (tech-speak for serving user queries) and the scale of capital needed to train the next generation of models appear to be rising exponentially.

The ripple effects were immediate. Microsoft embedded ChatGPT into its Bing search engine and Office products. Google scrambled to launch Bard. Meta, Amazon and Apple all began racing to stake a claim. Meanwhile, investors climbed over each other to plough billions into anything remotely AI-adjacent, no matter the absurdity of either the business plan, the TAM or the valuation:

*(Bloomberg): Microsoft, Amazon Web Services, Google and other big tech companies could collectively amp up capital spending to about \$200 billion in 2025, representing a two-year gain that's triple the 2020-23 average as generative-AI demand spurs outlays on data centers and new products, our analysis shows. It may take 2-3 years to see the financial benefit, which we anticipate will come in the form of higher cloud utilization, copilots and large language model licensing.*

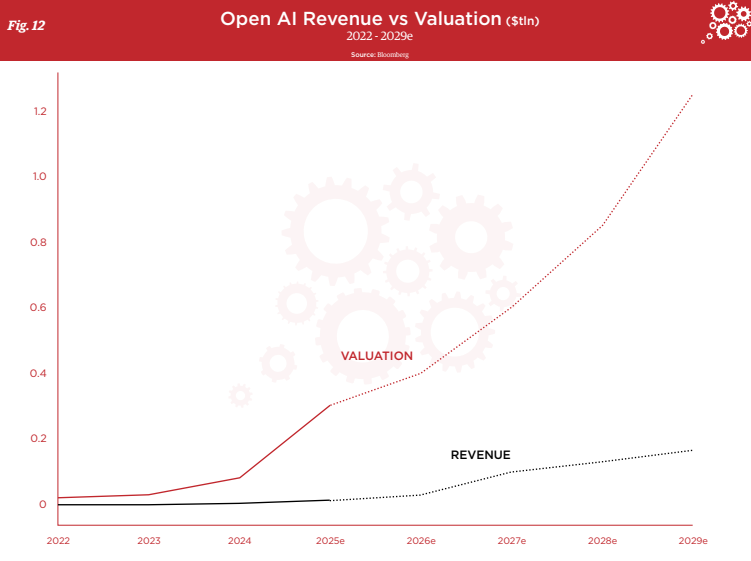
*Our analysis of the top tech companies shows over \$90 billion in incremental capital spending in 2024-25 vs. 2023, dedicated mostly to expanding generative-AI infrastructure. This group, which includes Amazon Web Services, Microsoft, Google, Oracle, Meta and Apple, added an average of \$14 billion annually to capex from 2020-23. The \$90 billion increase over a two-year period illustrates the increased demand and interest by clients, and appears different than other hyped technologies, such as the metaverse.*

*Our calculations point to an additional \$55 billion in 2024 and \$35 billion the following year, totaling \$200 billion spent in 2025 as these enterprises aggressively prioritize data-center expansion and creating copilots (Fig. 13).*

The market, as it tends to do these days, blindly rewarded not just purported capability but, far more importantly, proximity to the narrative.

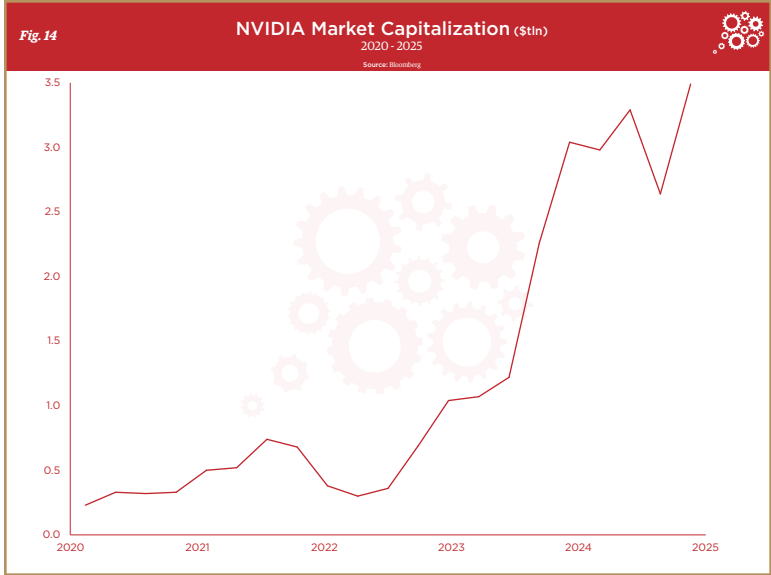
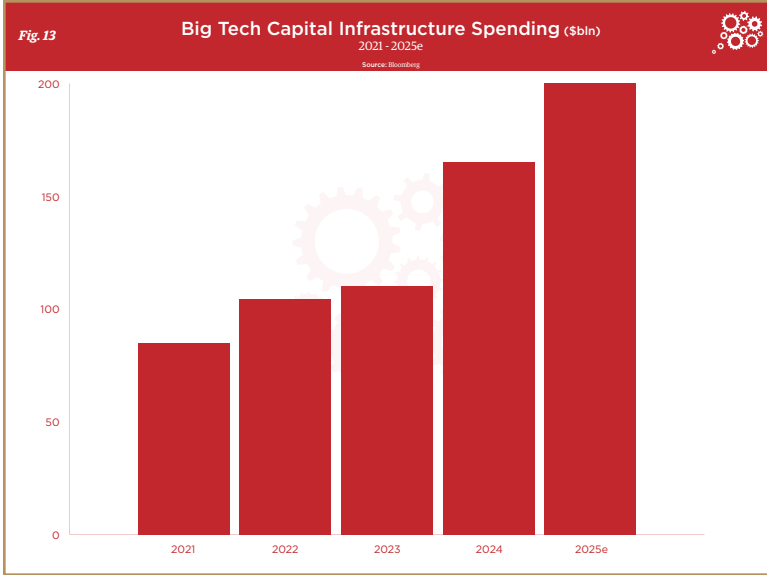
Datacentre operators, GPU manufacturers, LLM startups and chip foundries all saw surging valuations. NVIDIA, which makes the hardware on which most models are trained, found itself at the centre of the new gold rush. So too did lesser-known names like CoreWeave, which builds data infrastructure almost entirely around AI training demand.

The assumption across the board was simple: this



As Altman made clear in multiple interviews, OpenAI's ambition was never small. The company exists, in his words, to "build AGI" (artificial general intelligence) and to steer its development responsibly. But, as the billions have rolled in and competitors continued to circle, the emphasis increasingly shifted from stewardship to scale.

And scale, in this domain, is brutally expensive.



time is different. The future had arrived, and the only question left was how big and how fast it would grow.

However, assumptions ain't cheap, and beneath the surface, a different reality has started to emerge.

In every gold rush, there are those who dig and those who sell them the shovels. While the diggers *sometimes* strike it BIG, the shovel-sellers *always* get steadily rich, as do those who supply the rest of the infrastructure required.

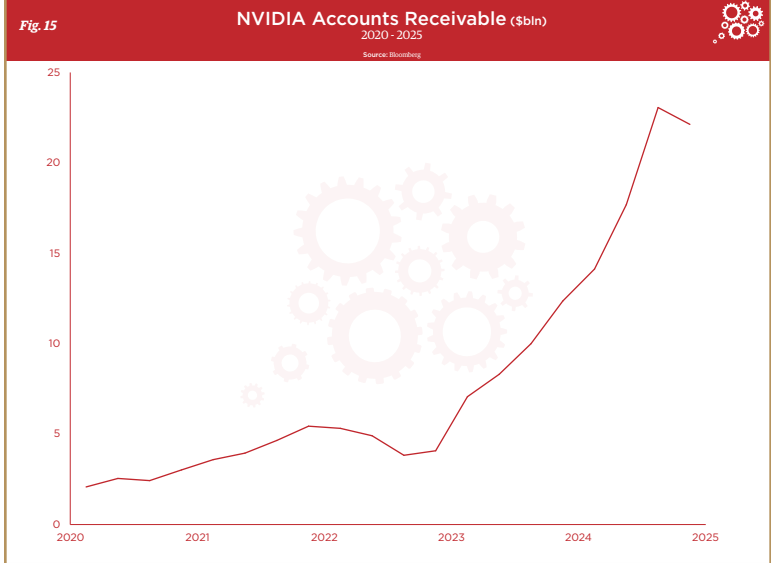
In the current AI boom, NVIDIA has emerged as the general store, the railway, and the mint all rolled into one. Its GPUs, particularly the H100, have become indispensable to train and deploy LLMs. Demand has become so fierce that NVIDIA has found itself not just selling hardware but, increasingly, financing it—effectively underwriting the ecosystem it supplies.

Despite a few little red flags (which we'll get to), it's worked—at least for now.

Since the launch of ChatGPT in late 2022, NVIDIA's market capitalisation has ballooned by over 800%. Analysts and investors alike have scrambled to keep pace, revising earnings projections upward with each quarter (Fig. 14).

And yet, buried inside those glowing results, a quieter signal has begun to flash red.

Between early 2022 and early 2025, NVIDIA's accounts receivable surged by over 500% (Fig. 15), far outpacing

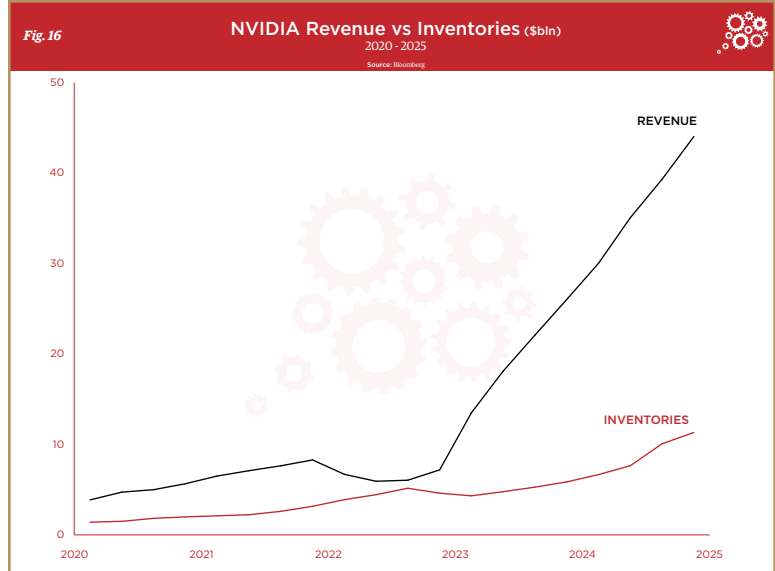


both revenue growth and the rise in inventory (Fig. 16). In effect, more and more of the company's 'sales' are now IOUs.

In isolation, rising receivables aren't always cause for alarm. But when they spike this sharply, and when they coincide with aggressive vendor financing, they raise a familiar spectre: a supply chain selling to buyers who increasingly can't pay, or whose business models don't support the purchases they're making.

**Some might go so far as to call it channel-stuffing but I wouldn't necessarily be one of them.**

Nowhere is this more obvious than in the case of CoreWeave.



Once a modest crypto-mining outfit, CoreWeave reinvented itself as an AI-focused cloud provider and, as such, over the past 18 months, it's expanded aggressively. As that rapid expansion has taken place, CoreWeave has facilitated its growth by purchasing billions in NVIDIA hardware, raising capital from Magnetar Capital and Blackstone, and preparing for a high-profile IPO.

Oh, it also received a \$1 billion investment from NVIDIA itself, which in turn receives future compute commitments from CoreWeave for use in training other firms' models using – yes – NVIDIA hardware.

The singularity circularity is here.

Now, let's do a little back-of-the-envelope maths, shall we?

Your average H100 chip costs somewhere in the region of \$50,000 installed. To earn even a 10% annual return on capital, its owner would need to rent its computing power for over \$6.25/hour.

In reality, the going rate is closer to \$1.15/hour.

You don't have to be a mathematical genius to figure out that those numbers imply operators are losing more than 70% on each unit.

The risks don't stop at profitability. They extend directly to credit quality. NVIDIA is now \$23 billion deep in vendor financing, and many of its customers – both private and public – are essentially unprofitable

intermediaries passing cash and compute around an increasingly crowded table.

Now, don't get me wrong. None of this is to say NVIDIA isn't a remarkable company, nor that its chips aren't world-leading.

The *market*, however, has done what it always does, pricing NVIDIA as though every dollar of AI spend is permanent, productive, and accretive.

That's a fragile assumption – particularly when the end use cases remain so uncertain.

That uncertainty isn't limited to the back end of the AI stack. It's just as visible (arguably more so) on the front end, where most people actually interact with the technology.

LLMs like GPT-4 may be the most sophisticated products ever offered to consumers without a clearly defined purpose. They're not quite tools, not quite platforms, and certainly not appliances. They generate, they respond and they mimic. What's more, for the most part, they seem intelligent.

However, the word 'seem' is the most crucial part of that sentence.

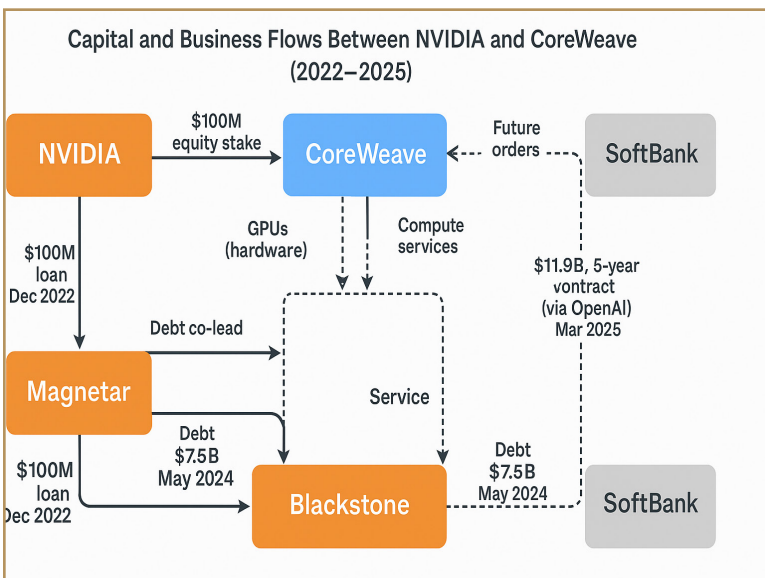
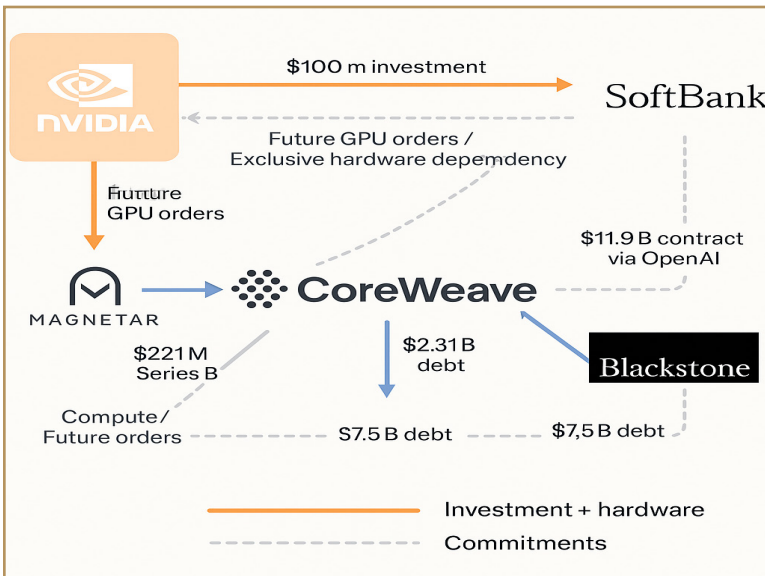
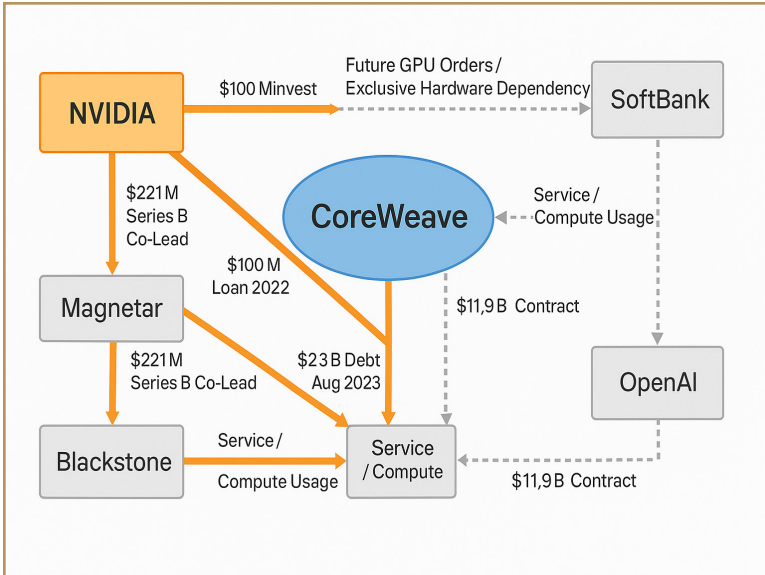
LLMs *don't* understand. They don't reason. They don't *know*. They produce language that resembles knowing (which, as it turns out, is often more than enough to impress humans, but rarely enough to generate dependable outcomes at scale), especially in enterprise contexts, where consistency matters.

Outside of narrow, highly-constrained tasks such as email drafting, simple code generation or marketing blurbs, the commercial utility of generative AI remains frustratingly elusive.

Predictably, the consumer hype cycle may have peaked with ChatGPT's early success and, since then, user novelty has faded and many of the use cases have proven either trivial or unreliable.

My own attempts at seeing how AI might help with researching this letter each month have met with an awful lot of frustration.

By way of an example, below you'll find just three



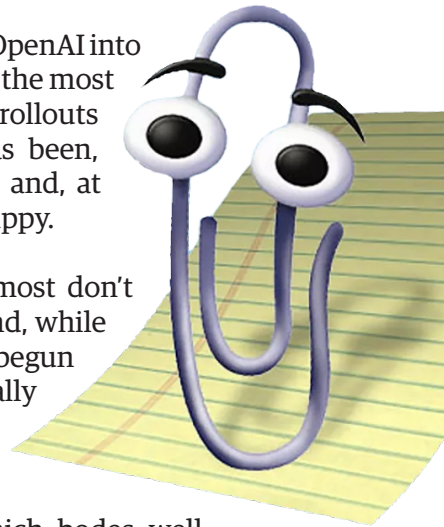
of multiple attempts ChatGPT made to take very precise instructions and create a graphic showing the circularity of the relationship between NVIDIA, CoreWeave, Magnetar and Blackstone.

The simple act of drawing an arrow from CoreWeave *back* to NVIDIA was a task ChatGPT's Deep Research was simply unable to manage.

It was very apologetic and perfectly polite, but with so many errors, the graphics are better-suited as a cautionary tale about ChatGPT's limits than its capabilities.

Enterprise adoption, meanwhile, has struggled to match the optimism baked into forecasts and capex budgets.

Microsoft's integration of OpenAI into Office via Copilot is one of the most high-profile commercial rollouts to date, but feedback has been, at best, somewhat mixed and, at worst...it's the return of Clippy.



Users are intrigued, but most don't change their workflows and, while some corporations have begun mandating usage internally to justify licensing costs, others are quietly pausing deployment altogether—neither of which bodes well for the short-term advancement of AI integration.

The issue isn't that the models don't *work*. It's that they work juuuust well enough to require human oversight, and that means time, which means cost, which undermines the supposed productivity gains.

All of which leaves the industry in a strange place:

- The models are good.
- The infrastructure is expensive.
- The valuations are eye-watering.
- ....And nobody is quite sure what to do with any of it.



The entire AI phenomenon is a market narrative built on latent potential, not present utility and, while that doesn't make it *wrong*, it does make it vulnerable, because while, in the real world, the models scale, and the costs rise, the returns are still stuck in the world of pure imagination.

The past several decades of financial market growth have moved more and more towards a constant narrative generation machine which finds a trend and then pulls as much capital as possible into that particular corner of the market, inflating valuations for the select few before the narrative machine is cranked up further, sucking retail investors in, driving valuations to the moon and, crucially, providing exit liquidity for the early and the inside.

Every financial mania has had its own flavour. Dotcom had the browser, the housing bubble had subprime, Crypto had the blockchain and Web3 had... well, vibes, mostly, but also the odd monkey picture here and there.

So there's that.

But what makes this particular cycle different (aside from the scale and sheer speed) is the role of the state.

Governments aren't just passively observing the AI race—they're in it. Funding it, nudging it, politicising it, and, in some cases, militarising it.

The reason is simple enough: artificial intelligence isn't just a productivity tool. It's a strategic technology, one that promises leverage in everything from economic competitiveness to cyber warfare, surveillance, defence, propaganda, and, inevitably, control of the population.

In Washington, the tone has shifted dramatically over the past 24 months. AI is now being talked about in the same breath as semiconductors, rare earths, and critical infrastructure. Legislation is being introduced, export controls are tightening and, of course, subsidies are flowing. The CHIPS Act was just the start, with billions being allocated with national security in mind:

***(WSJ): A bipartisan Senate group recommended tens of billions of dollars in new federal spending to guide the safe development of artificial intelligence and keep the U.S. ahead of rivals—particularly***

***China.***

***...The document, billed as a road map for AI policy, includes a long list of recommendations for encouraging AI while also addressing concerns about the technology's potential for harm.***

***The senators recommended raising federal spending for non-defense AI innovation as quickly as possible to at least \$32 billion annually—though they indicated that ramping up to that level could take years. That spending would cover initiatives ranging from assisting design and manufacturing of high-end AI chips to local election initiatives to a series of "AI Grand Challenge" programs to encourage innovation.***

***[Chuck] Schumer, speaking to reporters on Tuesday evening, called the \$32 billion investment "a major recommendation in the policy road map to keep our companies, our universities, our workers at the cutting edge and cement America's dominance in AI."***

***"This is a time in which the dollars we put into this particular investment will pay dividends for the taxpayers of this country long term," said Sen. Mike Rounds (R., S.D.), estimating that China significantly outspends the U.S. on AI development..***

China, for its part, has doubled down. State-backed LLMs, cloud compute consortia, and sovereign GPU initiatives are being rolled out at speed. The goal is strategic independence from US-controlled hardware and model supply chains:

***(SCMP): China has created a new artificial intelligence (AI) investment fund, with an initial capital of 60 billion yuan (US\$8.2 billion), days after the United States further tightened export controls for advanced semiconductors and placed more Chinese companies on its trade blacklist.***

***The National AI Industry Investment fund was incorporated in Shanghai last Friday as a joint venture of state-backed Guozhi Investment (Shanghai) Private Equity Fund Management and the China Integrated Circuit Industry Investment Fund (CICF) Phase III, according to information from local business registry service Qcc.com.***



*The new AI fund's scope of business includes general equity investment and asset management, according to the registry service, which did not provide any details.*

*Its creation reflects Beijing's determination to advance the nation's AI capabilities, despite greater tech restrictions imposed by Washington.*

*Beijing made AI a national priority amid a heightened tech war between the world's two largest economies. While the central government shores up its support for the nascent sector with favourable policies and mandates, China's AI market is expected to be worth 5.6 trillion yuan by 2030, according to state-backed investment vehicle China International Capital Corp.*

The result is a bifurcation of the AI stack – both technically and ideologically. On one side, the Western ecosystem: open-source projects, venture-backed startups, hyperscaler dominance, and softly worded manifestos about “alignment” and “responsibility.” On the other, a vertically integrated model run through party-aligned tech giants and enforced by a digital security state.

Neither approach is guaranteed to work. But both are committed to making sure the other doesn't win.

What could possibly go wrong?

Unlike the internet bubble of 2000 or the crypto frenzy of 2021, this isn't just about misallocated capital or overhyped valuations. It's about who gets to *write* the code, and whose values the code will encode.

While that tension adds durability to the AI boom, it also makes any correction far more politically-charged because bubbles driven by greed are painful when they pop, but bubbles driven by strategic rivalry?

They have a way of reinflating, with state backing, and very little regard for valuation.

When regular bubbles inflate, they follow a by now *very* familiar script: a big idea, a visible catalyst, the creation of a mainstream narrative, the promise of extraordinary gains, a rush of capital, and then—slowly at first, and then all at once—a reckoning.

This time, however, the idea is much, much bigger. The catalyst is more public, the capital is more committed, and the consequences are more entangled—economically, politically, even philosophically.

It's not just about whether OpenAI is worth \$90 billion or NVIDIA trades at 40 times sales. It's about where the limits of machine intelligence lie, about whether centralised models of power, data and capital are the best way to get there, and about what happens when too much of the financial system starts to rely on something it doesn't really understand.

In the meantime, capital is being allocated not based on need, but narrative. Tens of billions are pouring into AI startups that don't generate revenue, while infrastructure is being built on the assumption that future demand will not just grow, but justify the entire stack beneath it. Meanwhile, state subsidies are providing cover for commercial fragility and the few companies actually making money are being priced as though they'll keep doing so forever—and at ever-expanding margins.

None of this means AI isn't transformative. But transformation is rarely smooth, and almost never cheap. It comes in waves of enthusiasm, investment and ultimately, to some extent, disillusionment. Right now, we are smack in the middle of one of those waves and what follows may be the crash, or possibly some kind of a settling, or even, potentially, the reallocation of capital toward more durable use cases. But if history is any guide, the phase we're in now doesn't end quietly.

It ends with write-downs and pivot decks. It ends with SoftBank execs muttering something about “vision,” and with a trail of GPUs racked and blinking in half-filled datacentres across the world, waiting for someone to figure out what they were all actually for.

Andy Lees and Julian Garran of The Macro Strategy Partnership wrote a scathing assessment of the AI boom recently and pulled zero punches in their conclusions:

*(Lees/Garran): I draw on the book 'A brief history of intelligence' by Max Bennett. In it he discusses how 3.5bn years of evolution forged current human and animal intelligence, in a crucible of a physical world where animals had to sense the*



*world around them, to react to it, and then adapt to changing conditions, or else die. The corollary I draw... is that any business, and any business ecosystem, needs to do the same thing; it needs to observe, react and evolve to make a return over the cost of capital in a changing business environment, or die. The fundamental issue with LLM AI is that you can't make money building an LLM, you can't make any money running an LLM, you can't make any money creating an app that uses an LLM, and you can't make any money building a datacentre to service firms that train and run inference for LLMs. Worse than that, you not only can't make money, you are guaranteed to lose money, and a lot of it. This is an ecosystem on the edge of extinction.*

Read this sentence again:

*The fundamental issue with LLM AI is that you can't make money building an LLM, you can't make any money running an LLM, you can't make any money creating an app that uses an LLM, and you can't make any money building a datacentre to service firms that train and run inference for LLMs.*

That's both damning and conclusive and, while those trying to sell the AI dream will take issue with it, Andy and Julian make a solid case:

*(Lees/Garran): Counterfactual thinking (if I had done that, what would have happened?), along with conditional thinking (if I do this, what will happen?)—both of which have been observed in rat experiments—allow you to tease out the difference between cause and effect. If you see lightning strike in a dry forest and a fire, did the lightning cause the fire, or did the fire cause the lightning? Counterfactual and conditional thinking gets you there. LLMs do not employ counterfactual or conditional thinking (they apply probabilities to correlations), they don't understand cause and effect, and therefore they cannot understand or model the real world.*

*Awareness of where you are in the world, the ability to create a mental map, or an internal mental model, confers a huge competitive advantage in the animal kingdom. LLMs don't know where they are, what they are or how the world is meant to work. Without a world model, it is impossible to simulate actions and predict their consequences, and again*

*it is impossible to become truly intelligent.*

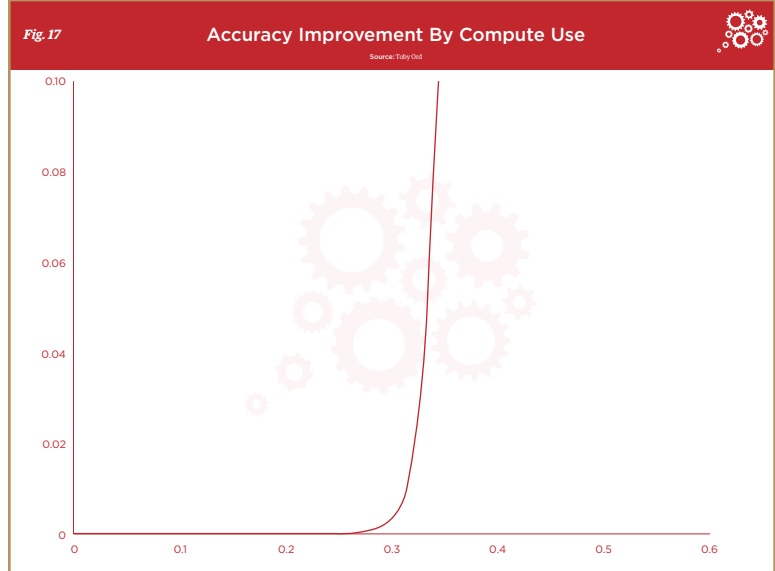
But this pulling apart of the cognitive flaws inherent in LLMs pales into insignificance when Andy and Julian turn their sights on the real-world AI infrastructure because, of course, that is where the door to narrative opens in order to generate the feeding frenzy driving speculation investment into AI:

*(Lees/Garran): The first fundamental flaw, that will end up destroying the LLM AI ecosystem, is that there is now no commercial justification whatsoever for spending a single cent on training new LLMs. There are two reasons for this. The first is the issue of scaling. LLMs use large vectors (Chat GPT3 uses 12,288 numbers in the vector with which it describes each word), and each number in the vector shows how that word is related to every other word.*

*The problem is that, if you want to add one number to your vector, you have to rerun all the correlations within the word vector, but then you have to run all the correlations within all the other (40k+ plus) words, and the 12,288 dimensions of each of those vectors. That's a lot of correlations, for a 0.008% increase in vector size, or accuracy. There is a connected problem with the availability of new data used for training, now that the LLM trainers have used up the web and the entire stock of historical printed books, of course without asking for permission.*

*The result is Toby Ord's great chart on the benefit, in terms of model accuracy, of greater compute use (Fig. 17). This theory on how LLMs scale has played out in real time at Open AI. Open AI released Chat GPT3 in November 2022 at a training cost of US\$50m. Five months later, in March 2023, Open AI issued Chat GPT4 at a cost of US\$500m. Given the compute works in parallel, the plan was to release Chat GPT5 in early Q3 2023, at a training cost of US\$5bn, with maybe 20-25x the compute applied to the training (due to the higher power of the H100s).*

*However, as the WSJ has documented, the model wasn't sufficiently better than Chat GPT 4, to justify the 10x bigger price tag. So Open AI kept training, and training, and training, until they used 80x the compute (my estimates), but still it wasn't good enough to justify the expense, so Open AI released*



it as Chat GPT4.5.

*What did the market think of it? Ars Technica, the online magazine, said 'It's a lemon'. It came sixth against pre-existing models, on an independent test on coding accuracy. Similar problems have beset other recent training ventures. The Columbia Journalism review tested Grok 3, Musk's AI, which is 15x bigger than Grok 2, on news searches and..... it had a 92% error rate.*

*In short, what this means is that companies who spend 10x more on training new models end up with models that are no better than the existing models.*

Indeed.

Let's get back to Fred Hickey, shall we?

In the June edition of *The High Tech Strategist* (seriously, if you didn't stop reading this to subscribe back on page 4, do it now), Fred offered some updated thoughts on the AI component to the continuing refusal on the part of speculators investors to believe that tech stock prices will ever stop climbing (regardless of the state of their underlying businesses), noting that, in certain corners of the investment world, some people were finally paying attention:

*(The High Tech Strategist): [T]he MAG 7 were propelled by continued enthusiasm over "AI" spending by the hyperscalers and by Middle East sovereign governments. They helped support Nvidia's results last week, which were "better-*

*than-expected," even though their results were depressed by lost business related to the Trump administration's restrictions on H2O chips that can no longer be shipped to China. That led to NVDA's \$4.5 billion first quarter charge associated with H2O excess inventories and purchase obligations. Middle East governments such as Saudi Arabia have a long history of wasting their oil generated monies. Witness Prince Mohammad bin Salman's megaflop NEOM planned city (estimated costs rising to exceed \$8.8 trillion - more than 25 times the annual Saudi budget), though that project is now being pared back. More money to waste on the AI spending craze/bubble.*

*Though the hyperscalers are loathe to admit it, their generative AI capital spending binge is still only producing limited results and revenues. A May 21 Economist article titled: "Welcome to the AI Trough of Disillusionment," noted that, "For many companies, excitement over the promise of genAI has given way to vexation over the difficulty of making productive use of the technology. The share of companies abandoning most of their genAI pilot projects has risen to 42%, up from 17% last year."*

*Key reasons for the growing corporate disillusionment include high costs, AI errors (hallucinations), privacy breaches and outdated data systems not ready for the new technology. Computex 2025, Asia's biggest annual tech conference, was held in Taipei, Taiwan late last month. Though AI was supposed to be the dominant theme of the conference, DigiTimes published a story last week titled: "Computex 2025 lacks spark, industry pushes for pragmatic AI innovation" - meaning usable features that are currently few in number. DigiTimes' subheading: "The honeymoon phase is over."*

Fred continued, looking ahead to upcoming results and parsing recent news. What he found was hardly encouraging:

*(The High Tech Strategist): The Q2 results from the hyperscalers in July and early August should be very interesting. Microsoft announced two weeks ago that it was cutting 8,000 employees (3%) from its workforce across all levels, teams and geographies. It was the second layoff this year at Microsoft. There was a smaller layoff in January.*



*But Microsoft is not alone, as all the hyperscalers have been cutting back spending (and reducing headcounts) to offset rapidly rising depreciation expenses from their AI hyperscale investments. Those depreciation expenses will keep rising every year for the next several years - even if the hyperscalers (heaven forbid!) stop escalating their capex spending for AI. Strategas reported that, excluding Nvidia, the hyperscalers' year-over-year free cash flows have turned negative.*

*Dan Niles, founder of Niles Investment Management and a former prominent tech analyst, tweeted on X last month that "Capex for Microsoft, Amazon, \$GOOGL and Meta in aggregate were actually down slightly in Q1 after being up mid-teens sequentially on average last year and is the first down sequential quarter since Q1:2023. I originally thought capex growth would slow to mid-single digits sequentially during the first half of the year and Q1 was below that."*

Then, Fred dropped the hammer:

*(The High Tech Strategist): There's a great race on, with the hyperscalers hoping that there will be some new GenAI use breakthrough that can generate a lot of revenues before they're forced to cut back capex spending as the result of deteriorating bottom-lines and cash flows. With the MAG 7 stocks dominating investors' attention again, the bull market (bear market rally) depends on it too.*

So where does AI go from here? Does the bubble inflated by the fascination for LLM-driven technology burst, or is it there a chance that valuations could gently come down as technological promise is delivered?

The classic bubble signs are definitely on display and it's easy to believe a sharp correction is imminent, if not already underway.

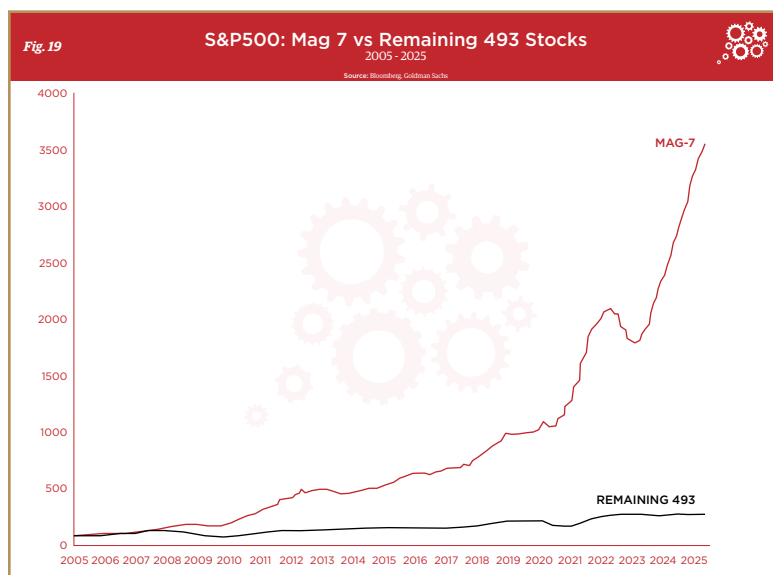
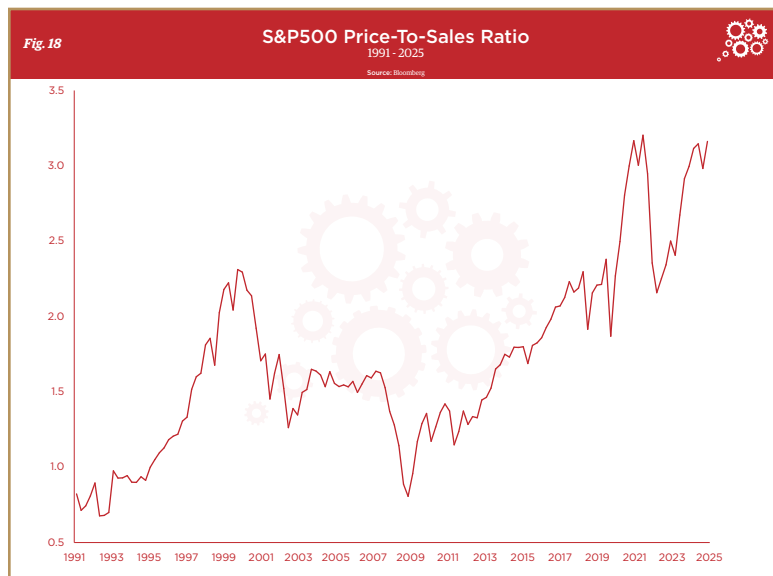
Extreme valuations, crowded trades, speculative behaviour, and a widening gap between prices and fundamental results have led to what Fred calls "another stock bubble equal to or greater than the great 1999-2000 tech bubble."

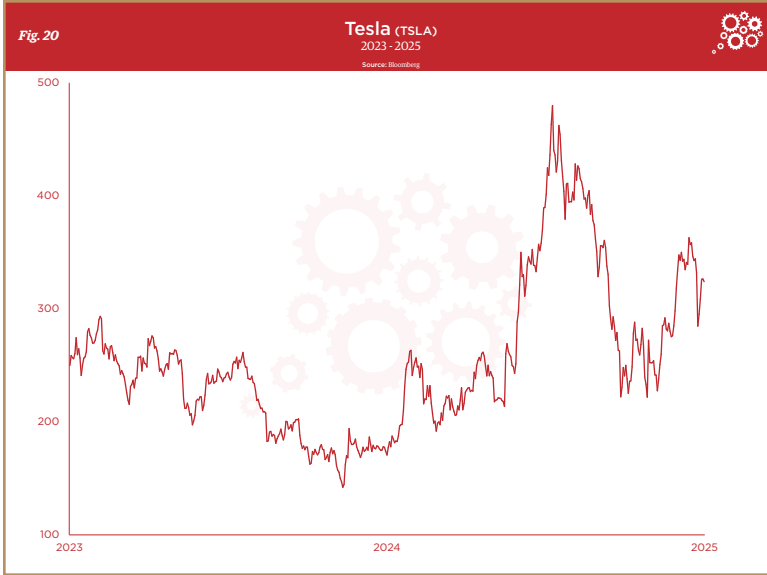
Whether you take the S&P 500's price-to-sales ratio, which hit 3.2x in late 2021 (significantly higher than 2000) and even after a Q1 2025 dip was ~2.8x, well

above historical norms (Fig. 18), corporate earnings (the 'E') having been relentlessly goosed by myriad accounting tricks, or simply the level of the index itself when including or omitting the Mag 7 (Fig. 19), it's impossible to deny things are out of whack.

Now, if we are, indeed, in the late stages of a bubble, the burst could be brutal. In 2000-2002, the Nasdaq lost 78% peak-to-trough and many individual tech stocks fell over 90%. A similar unwinding now could vaporize trillions in paper wealth. The Mag-7 tech giants, propped up by AI hopes, could quickly lose their aura of invincibility.

Perennial favourite in these pages, Tesla, is off 30% from its peak—largely driven by disillusionment over Elon Musk's political affiliation and, more recently, his behaviour (Fig. 20).





But now, with the marked deterioration in its core business becoming impossible for even the die-hard Musk fanboys (and girls) to ignore, the future for the stock looks bleak.

If the AI 'story' fades, other market leaders could follow suit. It's possible we see some highly touted startups (the ones with huge valuations and minimal revenue) crash to earth or even go under, as cash burn catches up and new funding dries up.

Remember Pets.com? Webvan?

Even Amazon famously lost 90% before recovering.

We've already seen the seeds of a negative surprise in the tech itself, with the discovery that scaling up models yields diminishing returns, but the potential triggers abound.

The good old-fashioned financial cycle, for example. Or the problems created should interest rates fail to fall (or worse still, rise again) to say nothing of the dangers presented by liquidity continuing to be withdrawn. In any of these straightforward cases, speculative assets are likely to suffer.

With the Fed still in hawkish mode, and global liquidity receding, this is hardly a friendly backdrop for a bubble to inflate further.

But what if the pie-in-the-sky outcome actually plays out this time? What if the valuations *are* justified?

Tell you what, let's ask AI, shall we?

**Prompt: If my contention is that there is currently a huge bubble in AI-related stocks similar to that in internet-related stocks in the late-1990s, make a case for how I could be proven wrong, factoring in how the technology of current AI might improve, how the next cycle could differ from the internet boom of the 1990s and what could happen to upend my thesis.**

*(ChatGPT): One can argue that despite the froth, AI truly is a general-purpose technology that will, in time, revolutionize the economy and daily life - more profoundly than the internet even. Proponents of this view acknowledge some hype but believe we're only in the early innings of a decades-long AI revolution. They would remind us that after the dotcom bust, the internet's impact accelerated - the 2000s saw online retail, search, social media, and cloud computing flourish beyond what most imagined in 1999. Similarly, what if today's large language models are like the Mosaic browser of 1993 - a glimpse of what's possible, sparking a boom, but the true boom (in usage and productivity) comes a bit later with refinement and complementary innovations?*

*From this angle, the massive investments being made now could indeed pay off in a big way. Think of the AI models as "learning to walk" - they stumble now (hallucinations, errors), but each iteration improves. Future models or AI systems might overcome current limits via better algorithms, integration of reasoning modules, or hybrid AI approaches. One breakthrough - say, an AI that can reliably perform a valuable task end-to-end (like fully autonomous customer service that customers actually prefer, or safe self-driving in geofenced areas) - could unlock huge economic value and validate the current spending. If, for instance, AI could automate half of all programming tasks in a decade, that's a multi-trillion dollar impact on productivity. McKinsey's projection of \$2.6-4.4 trillion annual value from AI might sound fanciful now, but if we extend the horizon 10-15 years, not entirely impossible. AI could augment or automate white-collar work just as industrial machines did for blue-collar work in the 20th century. That's a breakthrough-level impact.*



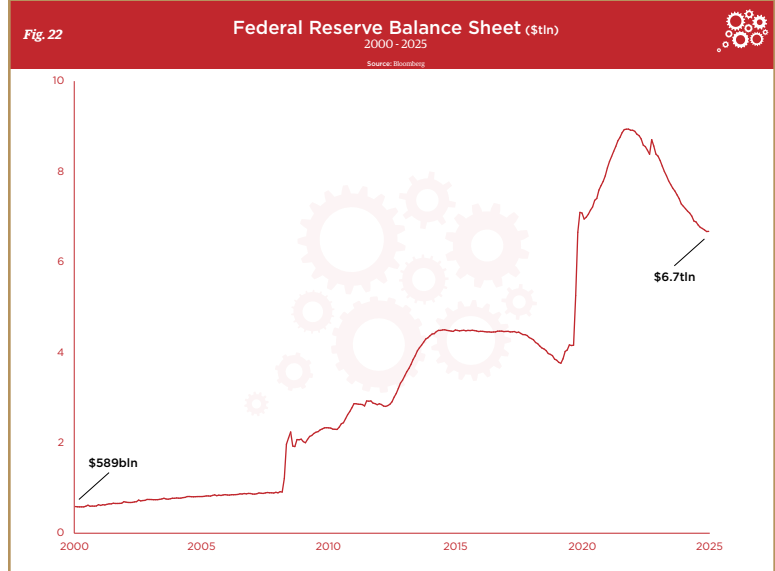
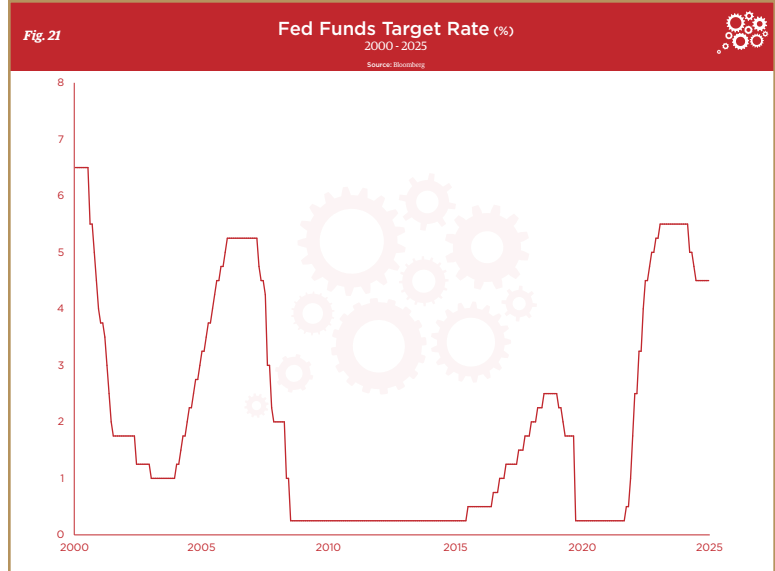
*The “breakthrough” case also posits that winners will emerge who do figure out the business side of AI. Maybe the current leaders - the OpenAIs and Anthropics - will stumble, but others (perhaps even companies we haven’t heard of yet, or academic open-source projects) might solve key problems and dominate new markets. Remember, “the most successful companies to emerge from tech transformations are often not the existing stars at the beginning.” The dotcom bubble’s biggest winners included Google (founded 1998, barely on the radar during the bubble) and Facebook (founded 2004, after the bubble). Likewise, it could be that the real AI revolution a few years down the road is led by firms that today are small or nonexistent. The current mania is laying groundwork, attracting talent into the field, and funding fundamental R&D. Those are positives that increase the chance of genuine breakthroughs ahead.*

*In this optimistic scenario, even if there is a correction, it won’t derail the overall upward trajectory of AI adoption. Instead of a devastating bust, we might get a more contained “valuation reset” or a series of mini-busts in certain segments (say, overly hyped startups quietly dying off) while the main storyline - AI getting better and more integrated into business - continues. Essentially, the technology’s utility, once fully realized, will ultimately validate much of the investment. As venture investor Que Nguyen wrote, “We believe GenAI has transformative potential... Using the internet bubble of the 1990s as a guide... although a bubble will end in a bust, the mania generates capital investment that yields long-term benefits.” From this perspective, embracing a bit of mania is rational because it accelerates progress. The key is surviving the bust to enjoy the benefits on the other side.*

Well there you have it, folks, a case for how this bubble could go on longer and lead to a ‘soft landing’ of sorts, where sky-high valuations prove justified over time, the business of AI and LLMs grow smoothly into lofty share prices and tens hundreds of billions of dollars all proves to have been wisely invested.

But, if I may...

When the dotcom bubble burst, the world’s central banks stood ready, willing and, crucially, able to pick



up the slack by slashing interest rates and, latterly, printing money to paper over the cracks and save risk assets from a meltdown (Fig. 21 & 22).

That was in turn enabled by a lack of inflationary pressure as central bankers (fortunately) found themselves trying to stave off deflation, affording them the cover they needed to run up their balance sheets and hold the world together.

Of course, the net result of all this monetary (and, more recently, in the wake of covid, fiscal) largesse has been an explosion in debt, with the total global debtload reaching \$324 trillion in 2024 (Fig. 23).

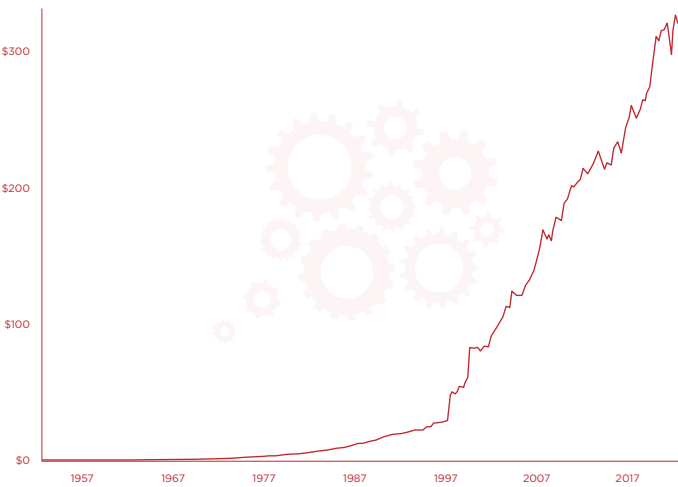
Consequently, when if the AI bubble bursts, with billions of dollars of both private and state capital tied



Fig. 23

Total Global Debt (\$trn)  
1954 - 2025

Source: Bloomberg, Borealis Research



up in the sector, it will create the kind of black hole that will be impossible to backstop with public coffers without a series of implosions.

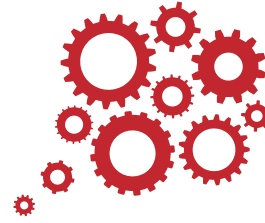
Tell you what, let's show AI that we humans have a magnanimity which is anything but artificial and give ChatGPT the last word, shall we?

**Prompt: What would happen if the AI bubble burst, given the total level of debt in the world and the size of central bank balance sheets as well as the latent inflationary pressure in the system? Would central banks be able to backstop the financial system or would it implode?**

*(ChatGPT): Central banks could stabilise the financial system after an AI bubble burst—but only at a price. The tools exist, but the trade-offs are far more dangerous than in previous crises. If they backstop too aggressively, they may reignite inflation or damage their currencies. If they hold the line, the global economy could slip into a debt-deflation spiral. Either way, the next crisis may not be resolved as cleanly or painlessly as the last. What lies ahead is not just a test of policy—but a test of the underlying sustainability of the post-2008 monetary regime.*

*Would you like a visual or narrative summary of this for use in a written piece or presentation?*

I'm good, thanks.



***Alrighty then, with that little lot out of the way, whaddya say we give ChatGPT one last outing before we put it back in its box and let it write the summary of what you can expect to read in the pages that follow. Here goes nothing.***

*Across the globe, a series of powerful undercurrents is reshaping the foundations of economies, markets, and institutions. Disillusionment with state capacity is bubbling over in places long considered stable, as "Middle-class vigilantes are turning against the State" in defence of values, services, or personal safety they feel have been eroded. Meanwhile, the world's most powerful currency—the dollar—is beginning to show signs of fatigue. As the "King dollar's crown wobbles", the implications stretch far beyond the FX markets: central banks are reassessing reserves, with the ECB now acknowledging gold has overtaken the euro as a global reserve asset. This sentiment is echoed on the ground, where dollar-obsessed Argentines have a newfound love for buying gold, abandoning their old habits in favour of something more tangible amid persistent inflation and currency debasement.*

*At the same time, the global economy is undergoing a critical rethink. In Germany, a new €500bn investment spree puts rail first, a nod to both climate realities and strategic autonomy, while Walmart and Amazon are exploring issuing their own stablecoins, an audacious attempt to marry retail dominance with financial infrastructure. Yet, even titans are not immune to geopolitical shifts: trouble is brewing in China for the West's retail giants, as local competition and political scrutiny tighten the screws on foreign incumbents. And in the ivory towers of U.S. academia, the long bull market in private capital may be turning, with Yale rushing to sell billions in private equity investments—a sign that liquidity is being prized over long-dated promises in an increasingly volatile*



*macro backdrop.*

*Financial markets, too, are wrestling with the consequences of too much leverage and too little scrutiny. TACO, the trade that ate itself, serves as a cautionary tale of self-referential financial engineering that collapses under its own weight. And behind the scenes, Wall Street is proving that no deal is too toxic to syndicate: \$13 billion of debt tied to Elon Musk's Twitter deal has been successfully offloaded, further fuelling concerns that systemic risk is once again being quietly passed from the powerful to the unsuspecting. Together, these stories sketch a world caught between the exhaustion of old systems and the emergence of new fault lines—economic, monetary, and institutional.*

What do you think?

There's a certain lack of flair missing if you ask me, plus, it didn't manage to work in the charts we have showing an extraordinary disparity between two groups in the US and China, the terrible returns made by investors in TLT over the last decade and the remarkably high level of global policy uncertainty.

It also failed to mention conversations between Adam Taggart and Melody Wright about the housing market, my old buddy Brent Johnson and Renaud Adorno about the possible end of dollar supremacy and the Geopolitical Cousins Jacob Shapiro and Marko Papic who discuss the escalating confrontation between Iran and Israel.

Lastly there's a beautiful tribute to the mercurial and supremely talented Brian Wilson who sadly passed away this week.

That;s it from me for another edition.

*Until next time...*



***Times must be tough when the Jaguar owners are becoming vigilantes. As this newspaper reported, Mia Forbes Pirie and Mark Simpson recently chased down their lovely navy E-Pace after it was stolen from outside their west London home. Naturally the Metropolitan Police declined to help – presumably too tied up on social media – so Forbes Pirie and Simpson became Hammersmith's answer to Bonnie and Clyde. Despite nervousness mixed with determination, they tracked down the £46,000 Jag, with the help of an Apple AirTag, in the far away badlands of Chiswick. With intrepid stealth the car was rescued by their own hand.***

You might think this Jag-saving duo were a one-off, warranting a wry smile. They are anything but. Times readers have filled the comments section with their tales of hunting down Toyotas, Range Rovers and Mercedes. With car thefts at their highest level in a decade – one is nicked every four minutes – drivers are naturally frustrated that the police can't keep up, despite the ubiquity of tracking devices. The fact ordinary folk are having to do their own police work speaks to a new trend: citizens are disengaging from the British state

We are obviously not yet a failed state, but its deep dysfunction is manifest and so self-reliance is spreading. In our corner of northwest London, home to one of the city's largest Jewish populations, private security cars are commonplace. In the prosperous streets of Belsize Park they reside in the parking bays, zipping out at the slightest sign of anything untoward. Organisations such as the Community Security Trust, which has reported a rise in antisemitic hate crimes of more than 50 per cent last year, have long helped to protect Jewish life. But homeowners, particularly the larger ones, have concluded they only trust themselves.

State failure is rife elsewhere. When Transport for London found itself unable (or unwilling) to tackle graffiti on Tube trains, a group of individuals went

underground last weekend to do something about it. It took a couple of hours for volunteers from the Looking for Growth movement to scrub away the worst of it. They were obviously not trained professional cleaners, but it says something about their sense of hopelessness that this troupe felt it was a good way to spend the weekend. TfL, by the way, has still yet to explain why the Tube is suddenly going the way of the Berlin U-Bahn.

And of course, the most blatant example of this vigilantism was Robert Jenrick's one-man effort to highlight the scourge of fare dodging. Instead of acknowledging the depths of the problem, the shadow justice secretary was treated to a barrage of complaints that his gambit was reckless, juvenile, and that the real crime was his lack of a filming permit. Such dumb attitudes are reminiscent of the hypernormalisation of the late Brezhnev era, when the Soviet state was knackered but citizens continued as if everything was fine. It was the easier course.

People are also disconnecting from the state for basic services. With NHS waiting lists rising and GP appointments few and far between, those who can afford to are going private. The UK's private healthcare market was worth £12.4 billion last year, a new high. Companies such as Spire Healthcare and the Circle Group grew their revenues last year by around 10 per cent. Why wait on the phone for your surgery to open at 8:30am when you can shell out £120 for an appointment at a time of your choosing?

Even when it comes to rubbish, people are giving up on local authorities that struggle with regular collections. You can pay as little as £8 a week to have a private bin collection. And in his personal great frustration, Sir Rod Stewart has swapped his handbags and gladrags for shovels and bitumen to personally fill in potholes near his Essex home after "no one can be bothered to do it". Thankfully he can now drive his Ferrari safely.

All this might reek of the bourgeois: prosperous individuals splashing their cash to steer clear of the state. But there is a glaring issue. If taxpayers are no longer engaging with the state, why should they fund it? If citizens opt for their own healthcare, they will revolt against the highest tax burden in 40 years to pour ever greater sums into the NHS. There are examples where this has happened, South Africa being one. Those with the means live in private compounds,



with private security and private generators, because they have no faith the state can deliver their basic needs.

In Britain, people with means are using them because they feel they have no other choice. The government should obviously ensure the state performs better. But as yesterday's spending review confirmed, the Starmer government's answer to reform is to throw ever larger chests of cash into the sinkhole of unreformed services. By the end of the decade, the government is expected to be spending £100 billion on health and disability benefits – yet it has maddeningly decided to delay the most minor of reforms for three years. Like the late-stage commissars, ministers seem to have decided it is just too damn hard.

The alternative is to accept this new reality. If citizens are increasingly paying for their own services, then the tax regime should acknowledge it and adapt to it. There is a virtue, not often argued, in allowing people to control more of their own money when it comes to the basics. It risks defunding the state, but it may be the only way of holding together some semblance of a social contract. Unless the state radically improves, it is not hard to see Britain dividing into haves and have nots – the middle class vigilantes will see to it...

## Trouble is brewing in China for the West's retail giants

Publication

***On Wednesday, a jubilant Donald Trump declared that his trade deal with Beijing would “open up China to American Trade”, delivering “a great WIN for both countries!!!”***

Yet even as the US president trumpets victory, a chorus of Western companies has been warning that the spoils may be underwhelming.

Cosmetics company Estee Lauder is grappling with “retail softness, reflecting subdued consumer sentiment” in China. Drinks giant Diageo, which makes Guinness and Johnnie Walker, said “consumers remain cautious and the macroeconomic recovery is taking longer than expected”.

Unilever, the consumer goods giant behind Dove soap and Ben & Jerry's ice cream, told its shareholders that “market growth in China remained subdued”. Burberry reported waning sales there, while KFC and Pizza Hut-owner Yum China said sales in the first quarter were flat.

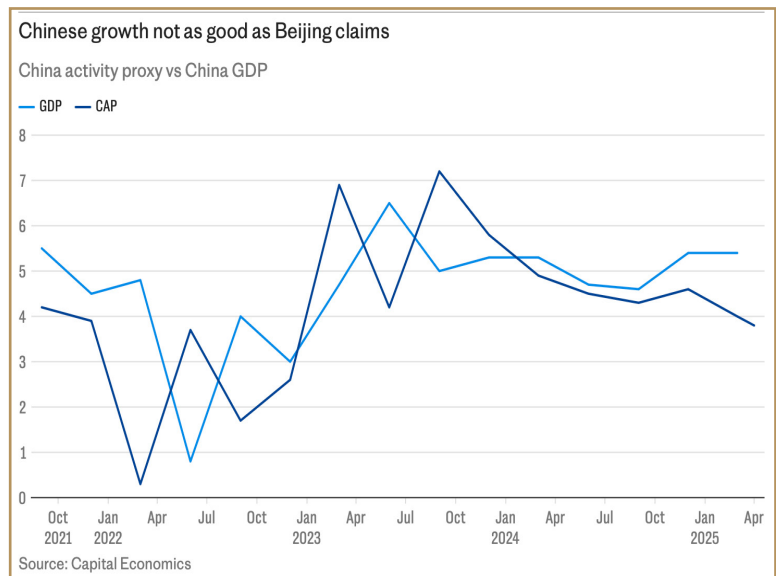
When Starbucks this week slashed the price of its tea lattes and frappuccinos in China by almost one fifth, it was only the latest sign that trouble was brewing in China for big Western businesses.

Trump wants Chinese consumers to buy more American goods, rebalancing what he sees as the lopsided trading relationship between the two countries. But the middle kingdom's economy is in a prolonged funk, reeling from a property crisis and a long hangover from harsh Covid restrictions.

With lingering US tariffs of up to 55pc taking a chunk out of China's exports, recovery in the world's second-largest economy depends on the willingness of Chinese consumers to open their wallets and start spending.

But unless companies cut prices, or the government steps in to boost demand, cautious Chinese consumers are at best spending selectively. Unlike China's gleaming motorways, the road to an economic rebound looks slow and uncertain - meaning Trump may well be disappointed.

Capital Economics compiles a measure of real-time indicators to gauge the health of the Chinese economy, and it's flagging a slowdown is in the works.





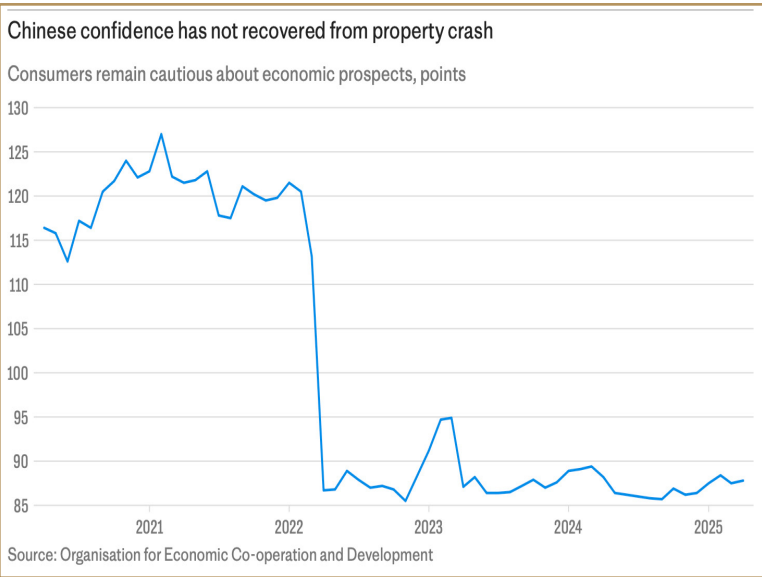
Ending the US president's anti-China crusade depends on the Chinese consumer taking out their wallets. It's the "excess savings" of China's households, coupled with the excess spending of the American government and consumers, that lie at the heart of the pair's unbalanced economic relationship.

In layman's terms, Chinese families save, while Americans buy - meaning China exports to the US far more than it imports.

"China has a singular opportunity to stabilise its economy by shifting away from excess production towards greater consumption," Scott Bessent, the US treasury secretary, said on Wednesday.

So far, there is little sign of the balance shifting. In a recent survey by McKinsey, Chinese households said they were not planning to increase how much they spend as a share of their income. (McKinsey saw this as progress; in the 2024 version of the survey, households had actually been planning to reduce consumption.)

The survey found that rural dwellers were slightly more enthusiastic about shopping than their urban counterparts. That's unsurprising: it's in the cities where the scars of the property crisis, which began with the collapse of the developer Evergrande in 2021, are most acute.



"Property prices have fallen by around 20pc since the onset of the property crisis," says Leah Fahy, a China analyst at Capital Economics. "That has been a

massive hit to household wealth and really dampened propensity to spend, and confidence as well."

"And then more recently, you add all this tension around the trade war, what's going to happen with US tariffs. Even if the actual hit from that hasn't been massive yet."

Justin Koh, a Shanghai-based director at consultancy AlixPartners, says: "When I first came to China about 15 years ago, there used to be an idea that everything would only go in one direction - up. People just thought sales would double every year.

"Now, the consumer companies we're working with are more pragmatic about growth. They're also very pragmatic about opening and closing stores, about what works and what doesn't work in the market."

Officially, China's economy is holding up, growing at 5.4pc in the first quarter from a year earlier. But the threat of a trade war looms over a country that still relies heavily on manufacturing.

Exports to the US slumped by almost 35pc in April from a year earlier and China is struggling with deflation. Consumer prices dipped 0.1pc, the fourth consecutive month of decline, led by food and fuel.

A survey by the EU Chamber of Commerce in China found that 83pc of food and beverage companies felt their business environment in the country was deteriorating.

Many consumers seem to be looking for bargains, waiting for price decreases, or keeping their yuan in the bank or under the bed.

Beijing has been encouraging people to spend, pushing them to buy more white goods by backing a trade-in scheme. It seems to have worked: according to the Xinhua news agency, it spurred 175bn renminbi (£18bn) of transactions this year, and 39pc year-on-year sales growth in April.

But that would only be a drop in the ocean of what is required. It might stack a percentage point or two on to GDP growth, but Capital Economics reckons consumption might need to expand by 4pc to offset the hit from falling exports.



Fahy says the government seems reluctant to wheel out the fiscal artillery needed to deliver this.

“You get a lot of lip service to the importance of supporting consumption, supporting demand, but they’re really hesitant to expand things like social security measures, pension payments, welfare benefits - the things that are most needed to boost households’ willingness to spend really and lower the savings rate,” she says.

Worryingly for Trump, even if there is an upturn in consumer spending, Chinese may not choose to buy American products.

“There was probably more bargain hunting back in 2022, 2023 - confidence was lower, there was a very clear dip,” says Koh.

“I think this bargain-hunting helped consumers understand other [non-Western] brands a little bit better - they realised that, ‘Hey, there might not be that much of a difference there.’”

Chinese business news site Caixin says there has been an increase in promotions for “repatriated foreign trade products” - items originally made to sell overseas that are now being sold at home. This includes marketing campaigns and exhibitions at supermarkets, department stores and shopping malls.

Local brands are also gaining ground. Koh’s 10-year-old daughter is wild for the Labubu dolls made by Chinese start-up Pop Mart, for example.

“They’re the latest craze. If consumer confidence was at an all-time low, we’d likely be seeing less people buying them - less of that type of consumer behaviour,” he says.

“It’s a sign of a more discerning consumer, and a consumer that’s expressing his or her consumer confidence in different ways.”

The ball is now in Beijing’s court: the government needs to do more if it wants a consumer-led kickstart for the economy, and a fix for the US-China trade imbalances. Without action, Trump’s “great WIN” may turn into a disappointing loss...



***Does he always chicken out, or doesn't he? Like all loyal listeners to the FT's Unhedged podcast, I've been telling my friends about Rob Armstrong's perfect new acronym: Taco – Trump Always Chickens Out. From this observation, the Taco trade logically follows: whenever President Trump announces something that causes markets to swoon, buy during the fainting spell and wait for the clucking sound to emerge from the White House. Deservedly, the Taco trade has gone viral.***

It all makes sense until you start to pull on the loose end of the logical thread. Why did Trump chicken out? Because the markets panicked when he announced a dramatic act of self-harm. But the fact that the markets were so alarmed in early April suggests that they weren’t really swallowing the Taco hypothesis.

Then came May; US equity markets had a great month despite the prospect of Trump’s 90-day “pause” expiring soon, the random imposition of further tariffs and the unsettling new prospect that Congress planned to give the administration powers to levy taxes on selected foreign investors at will. Perhaps the markets had finally digested the truth about Taco?

Which raises the possibility that the Taco trade will eat itself. (We are indebted to the FT’s markets guru Katie Martin for that phrase.) The markets could become overconfident, taking Trump neither literally nor seriously. The next time he announces that he is invading Switzerland, imposing tariffs on all exports from New York State or deporting to Peru every pygmy hippo he can find, traders and analysts will shrug, send each other Taco memes and ignore him.

Then the next step: the horrifying realisation that since the market has not blinked, Trump is not actually planning to chicken out. The step after that? The market will belatedly plunge, Trump will belatedly chicken out and the pygmy hippos will be saved – until the next time.



If that isn't enough to send you into a spin, consider this: perhaps Trump's pride will be so wounded by all the Taco talk that he will stop chickening out altogether.

This spiralling chain reaction may all seem like an Escher fever-dream, but the underlying point is simple and could come from a Greek tragedy: when you try to predict the future, you risk changing it. Some prophecies are self-fulfilling. Some prophecies are self-defeating. Any prophecy worthy of the name is going to interact with itself, one way or another.

This effect is at work in any financial market, in which the more efficient the market is at spotting overpriced assets to sell and underpriced assets to buy, the fewer mispriced assets there will be. Everyone who successfully spots a bargain contributes to that bargain vanishing. The same dynamic is at play any time you try to decide which line to join at a supermarket or at passport control: once everyone has rushed to join the shortest line, it is no longer the shortest.

But there are many other ways in which people change the future by trying to predict it. One notorious example from the history of computing is the "Osborne Effect", named, perhaps unfairly, after the shortlived Osborne Computer Corporation. In the early 1980s, Osborne made an early and enormously covetable portable computer, but went bankrupt after prematurely announcing that new and better models were on the horizon. Demand for Osborne's inventory is said to have collapsed because customers were waiting for the improved product to arrive.

Whether or not that was really Osborne Computer's problem is something we can leave to the business historians. The point is that credible pre-announcements can make or break the current offering, depending on whether the prospect on the horizon is a substitute for what is now on sale (as with Osborne) or a complement for the current product, such as games for a console.

An even more infamous example is the Y2K affair. As the year 2000 approached, people started to worry about the risk of computers malfunctioning because old software used only two digits to record dates, and would confuse the year 2000 with the year 1900.

There were indeed some system failures. Some

were minor but eye-catching, such as the failure of radiation monitoring systems at two Japanese nuclear power stations. Others were tragic, such as women in Sheffield terminating pregnancies after wrongly being told their babies were at high risk of Down's syndrome. True to the theme of this column, other problems were caused not by the Y2K date change itself, but by botched software updates aimed at preventing trouble.

It is fair to say that there were no catastrophes as a result of the Y2K issue, which led some commentators to declare that the whole thing had been a foolish scare story designed to sell newspapers and expensive IT consulting contracts. Others argued that the absence of major disruption should be viewed as a triumph of preventive prophecy.

This is the preparedness paradox: the better you prepare for a problem, the more it seems that you were being silly because there was never a serious problem in the first place. From pandemic surveillance to nuclear deterrence, it can be hard to distinguish a far-sighted policy from a foolish waste.

Consider vaccination. Successful vaccination campaigns make common illnesses seem rare – giving credence to those who suggest vaccination is a needless risk. Global agreements to restrict CFC gases have helped the ozone hole to heal – and now, of course, there are people on social media asking why everyone lost their minds about an environmental problem that was so fleeting. While we're on the subject, why do they waste all that money having guards at Fort Knox anyway? Everyone knows that place has never been robbed.

Even setting aside bad logic and bad faith, it is not easy to think clearly about the future. Serious forecasts, the ones that aim to be more than snack food for the mind, aim to change our understanding and therefore our actions. If they change our actions, they are changing the very future they hope to describe...

**Dollar-Obsessed Argentines Have a Newfound Love for Buying Gold**

Bloomberg



***Gold is winning over the hearts of Argentines, a nation once almost irrationally devoted to the dollar.***

Argentina's deep-rooted reliance on the greenback – the country ranks among top holders of the US currency, according to estimates by economists and former central bank officials – is now being challenged by a growing appetite for gold. From bullion and small bars to exchange-traded funds, Argentines are increasingly turning to the precious metal as an alternative store of value.

The shift signals a profound change in investor psychology as the dollar no longer offers the same inflation hedge it once did. The ongoing cost-of-living surge in the US, coupled with a rise in the peso under President Javier Milei, has diminished the greenback's lure. For many Argentines, it is now merely a "second-best" choice among safe-haven assets.

The recent removal of foreign exchange controls for individual investors has accelerated that trend. Argentines can now purchase gold directly in pesos, even through interest-free installment plans, eliminating the need for dollars. That opened the door for small savers in search of a more stable store of value.

"It is becoming very trendy," said Leonardo Echegoyen, director at Banco Piano, one of the few Argentine banks that legally sells physical gold with a certificate of origin and a purity rating of 999.9 parts per 1,000, the only type of gold that can be sold abroad. "People want to earn a return on their dollars, and they're looking for that return in this commodity," he said.

Another driver for Argentina's newfound love for gold are fears that the US dollar might lose more of its value. The US currency is already down 7.5% against a basket of international currencies since the beginning of the year, after surging 4.4% in late 2024 after Donald Trump's election win. "Little by little, people are starting to understand that monetary assets should be invested in something," said Juan Piantoni, chief executive officer of Ingot, a safe deposit box provider in Argentina.

Argentines have harbored a deep distrust of their banking system since the 2001 financial crisis, when dollar deposits were forcibly converted into pesos.

That trauma left an estimated \$200 billion outside the formal financial system – stashed in safe deposit boxes, real estate, or even unconventional hiding spots like mattresses.

Echegoyen recalls one customer who brought in a stack of \$100 bills fused into a solid block after storing them in a kitchen pipe that burst. "Gold is more practical for people who don't know where to keep cash without it getting ruined," he said. With a client base of around three million, Banco Piano has quadrupled the volume of gold imports from Switzerland in 2025. After making just two shipments in all of 2024, the bank has completed five so far this year.

Not surprisingly, gold is gaining space in Argentines' safe deposit boxes – a place traditionally reserved for US dollars. "Storing dollars in a safe deposit box isn't common practice in most countries. It's a uniquely Argentine habit," Piantoni said. The logic, he explains, is simple: safe deposit boxes are meant for valuables that need to stay out of the reach of others.

Globally, the price of gold has jumped more than 27% over the past year, hovering near record highs above \$3,300 an ounce. The surge has been fueled by geopolitical tensions, stubborn price pressures and mounting expectations of interest rate cuts by major central banks.

In Argentina, gold in jewelries is priced at around \$114 per gram, with a buy-sell spread of 10% to 15%, positioning it as a medium- to long-term investment. Some purchases can be made in three or six interest-free installments, while banks are offering cash back of up to 30% – an attractive perk in an economy still battling with double-digit inflation. Argentines are allowed to buy as much as \$7,200 in gold per month without disclosing the source of funds. A recent government bill aims to raise that cap to \$12,000.

Brokers, meanwhile, provide access to gold via exchange-traded funds like SPDR Gold Shares, known by its ticker GLD, rather than physical bullion. "There's more demand for gold this year," said Fabio Saraniti, a partner at local broker Win Securities. "That happens because when financial assets rise, people want to buy. And when they fall, they want to sell." Net inflows into the SPDR's ETF surged 170% year-over-year in the first quarter, pushing total investment demand to 552 tons, the highest level since early 2022, according to



the latest World Gold Council report.

Precious metals traders at top banks including JPMorgan Chase & Co. and Morgan Stanley posted their best performance in five years in the first quarter, in part thanks to an arbitrage opportunity that sparked a rush of bullion into the US.

The trend is extending beyond the financial world. Leiva Joyas – one of Argentina’s most established jewelers – has seen daily gold inquiries triple in 2025, reaching 300 a day. Sales have already doubled this year compared to 2024. “People want to preserve their capital amid economic uncertainty. They know time deposits offer low returns,” said Daiana Azcona, a sales executive at Leiva Joyas.

While companies remain barred from investing in physical gold, individual investors – many from the agriculture and finance sectors – are entering the market with a long-term perspective. Gold was once shunned by traditional investors, Echegoyen said. “Now, even seasoned investors who had never considered it before are getting involved...”



***Yale University’s famed endowment has been trying to offload one of the largest portfolios of private equity investments ever in a single sale, a move that reflects the pressures on both Wall Street and higher education under the Trump administration.***

The Ivy League school has sought buyers for up to \$6 billion in stakes in private equity and venture funds, according to three people briefed on the sales process, amid uncertainty about its federal funding and the reality that many of these investments have not delivered the outsize returns that Yale expected.

Yale is now close to completing a sale of roughly \$3 billion of the portfolio and is selling the assets at a slight discount, one of the people said.

“This is a big deal,” said Sandeep Dahiya, a professor of

finance at Georgetown University who has conducted research on the performance of endowments. “The investor that was the lead architect of investing in the private equity markets is pulling in its horns.”

For decades, Yale has been regarded as a pioneer for shifting its investments away from stocks and bonds into longer-term holdings managed by private equity and venture capital firms. But last year, Yale’s \$41 billion endowment generated returns of just 5.7 percent, underperforming the S&P 500 and other major indexes. Yale said its 10-year return averaged 9.5 percent annually.

Private equity investments typically generate cash for endowments and other investors after they sell or take public the companies in which they have invested. But lately, private equity and venture firms, which make up about half of Yale’s endowment, have struggled to sell their stakes in companies and return cash to investors. That has driven down returns.

Yale’s quest to exit investments in both well-known firms like Bain Capital and lesser-known ones like Golden Gate Capital, Clayton Dubilier & Rice and Insight Partners is a sharp U-turn for an endowment that has long proselytized the value of private equity and other long-term investments.

Knowing that some stakes would be harder to sell than others, Yale’s bankers offered potential bidders two separate lists of funds: “core” funds, the ones they most wanted to sell, and “sweeteners,” the better-performing ones, according to two of the people briefed on the sale.

While buyers would receive only a small discount of about 5 percent on the private equity stakes, Yale willingness to sell assets that were once highly desirable at less than full value reflects the industry’s challenges.

The sale comes at a critical juncture for universities. While President Trump has spared Yale the kind of punitive funding cuts he has leveled against other Ivy League schools such as Harvard, Yale is grappling with decreases in federal research funding that have hit higher education broadly. Republicans in Congress have also proposed steep tax increases on endowments.



Yale is on track to spend roughly \$2.1 billion from its endowment in 2025, which accounts for just over one-third of its annual budget.

In a statement provided to The New York Times, a representative for the Yale endowment acknowledged the sale, but called private equity “a core element of our investment strategy.” The statement added, “We are not reducing our long-term target to private equity.” The university said it was also looking to invest in other private equity firms.

Yale’s bankers tried to keep the process discreet by giving the sale the code name Project Gatsby. (Two of the main characters in F. Scott Fitzgerald’s novel set in the roaring 1920s went to Yale.) But Yale’s move is widely viewed on Wall Street as a harbinger.

At least two other large universities are preparing to sell some private equity assets, and dozens of U.S. and Asian pension funds are also looking at exits.

Lawrence Siegel, a former director of research at the Ford Foundation, called Yale’s move “a wake-up call” for investors.

“It’s also Yale trying to get out before everyone else,” Mr. Siegel said.

When David Swensen, a former Lehman Brothers banker, joined Yale as its chief investment officer in 1985, the university’s endowment was valued at about \$1.3 billion. (Harvard’s had \$2.7 billion.)

During 2021, the year that Mr. Swensen died, Yale’s endowment had swelled to \$42.3 billion, behind Harvard but billions ahead of almost every other university endowment.

To achieve that, Mr. Swensen shifted Yale’s investments from a traditional portfolio of 60 percent stocks and 40 percent bonds. After getting to know fund managers in private equity and venture firms, Mr. Swensen moved a relatively large slug of Yale’s endowment into long-term assets, often investing in those funds for decades.

Other universities watched Yale’s returns and started to follow the Swensen Model, as it came to be known.

Yale’s early affection for private equity provided the

perfect advertisement for an industry looking to attract new investors.

“Do you want to be smart like Yale?” said Ludovic Phalippou, an economist at the University of Oxford, in describing the pitch.

University endowments now invest an average of about 17.1 percent of assets in private equity funds, according to studies by the National Association of College and University Business Officers. That’s up from just 5.4 percent in 2007 before the financial crisis.

Universities and private equity firms have developed a symbiotic relationship. Endowments typically pay private equity firms roughly 2 percent of the money they manage and 20 percent of the profits they generate.

Those fees have helped mint slews of billionaires, many of whom sit on university boards and make large donations to the schools.

Yale’s senior trustee, for example, Joshua Bekenstein, has worked at Bain Capital since its inception in 1984, four years after he graduated from Yale. The Boston-based firm was one of the earliest to jump into the buyout business. It scooped up companies like Dunkin’ Donuts, Clear Channel Communications and Gymboree, added debt and then tried to sell them for a profit. Gymboree, a children’s clothing retailer, filed for bankruptcy seven years after Bain bought it.

Bain now manages \$185 billion, including at least roughly \$1 billion for Yale.

For more than a decade after the financial crisis, U.S. private equity firms reliably generated average returns, on paper, in the mid- to high teens, according to the data provider PitchBook. But the firms generated average returns below 10 percent in 2022 and 2023, and just over 10 percent in 2024.

Another challenge: Deal making has been slow for several years, and private equity firms have had difficulty selling stakes in companies and returning cash to investors at levels reached in previous years. Despite optimism that the second Trump administration would spur a deal-making resurgence, the volatility around tariffs has made companies wary...



**Germany plans to make its faulty railway network its first priority as it seeks to fast-track spending from its €500bn infrastructure fund designed to lift Europe's largest economy out of stagnation.**

Vice-chancellor and finance minister Lars Klingbeil wants to inject up to €10.5bn into the country's train links this year, giving state-owned Deutsche Bahn the lion's share of €22bn of infrastructure investments earmarked for 2025, according to people with knowledge of the plans.

Other planned investments this year include €3bn to improve broadband coverage in the country and €1bn to modernise bridges, they said. After 2025, the sums put towards infrastructure are expected to increase to as much as €35bn a year until 2029.

The plan is part of a series of measures the coalition government led by Chancellor Friedrich Merz wants to adopt this month, with the expectation they will be approved by both houses of parliament in September.

Alongside a massive spending drive to equip the German army, the €500bn 12-year infrastructure fund is central to the coalition's attempts to put an end to three years of economic stagnation. Last week the government approved a €46bn package of corporate tax breaks for the coalition's 2025-2029 term.

The infrastructure fund and its first allocations will be adopted in a cabinet meeting on June 24, at the same time as a budget for 2025, which was never finalised when the preceding coalition of Olaf Scholz collapsed over a funding dispute in November.

After his conservative party's victory in early elections in February, Merz relaxed the country's constitutional debt cap, allowing unlimited borrowing for defence and setting up the €500bn fund to modernise the country's ageing roads, bridges, hospitals and schools. The priority for the next two years is a quick deployment of cash, before the government

adopts a more strategic and longer-term approach to investments.

"The big question is: 'how quickly can we put this money to work' and the Deutsche Bahn is the obvious place to start because they already have detailed investment projects in their drawers," said Henning Meyer, professor of public policy at Tübingen university.

The poor state of German trains, which often run late, has become a symbol for the dire under-investment weighing on Europe's largest economy. Before the Scholz-led coalition broke down, Deutsche Bahn had identified €53bn worth of required investments.

A spokesperson for the finance ministry declined to comment on fund distributions but said that "a ramp-up of investments" in the federal railways was planned. The fund's "primary objective is to rapidly implement investments in Germany and thus quickly create new jobs and modern infrastructure" they added.

Deutsche Bahn declined to comment.

By fixing intercity commuting, the government is betting it will change the political mood in the country, where the far-right Alternative for Germany has become the second largest party in the Bundestag, with more than a fifth of the votes.

Meyer said: "Even though it means disruptions in the short run, this is where people are likely to experience concrete improvement in their daily lives."

The 46-year-old Klingbeil, who is also co-leader of the Social Democratic Party, hopes to reap the political rewards for upgrading the country's creaking infrastructure ahead of general elections in 2029.

With a 16 per cent vote tally in February, the SPD suffered its worst electoral result since the end of the 19th century. However it emerged as the only possible coalition partner for Merz's Christian Democrats, after he ruled out governing with the AfD.

This strong negotiation position helped Klingbeil secure the €500bn infrastructure fund – a SPD campaign pledge – in exchange for agreeing to back Merz's plan to relax the debt brake for defence spending...



**Gold has overtaken the euro as the world's second-most important reserve asset for central banks, driven by record purchases and soaring prices, according to the European Central Bank.**

Bullion accounted for 20 per cent of global official reserves last year, outstripping the euro's 16 per cent and second only to the US dollar at 46 per cent, data from an ECB report published on Wednesday showed.

"Central banks continued to accumulate gold at a record pace," the ECB wrote, adding that central banks for the third year in a row acquired more than 1,000 tonnes of gold in 2024, a fifth of the total global annual production and twice the annual amount in the decade of the 2010s.

"Central banks worldwide now hold almost as much gold as they did in 1965," the ECB report said.

Large buyers last year included India, China, Turkey and Poland, according to the World Gold Council.

A 30 per cent rise in the gold price last year was one factor behind the surge in its share of global foreign reserves. Since the start of the year, the gold price has surged by another 27 per cent, hitting a historic high of \$3,500 per troy ounce.

"This stockpile, together with high prices, made gold the second-largest global reserve asset at market prices in 2024 – after the US dollar," the ECB said.

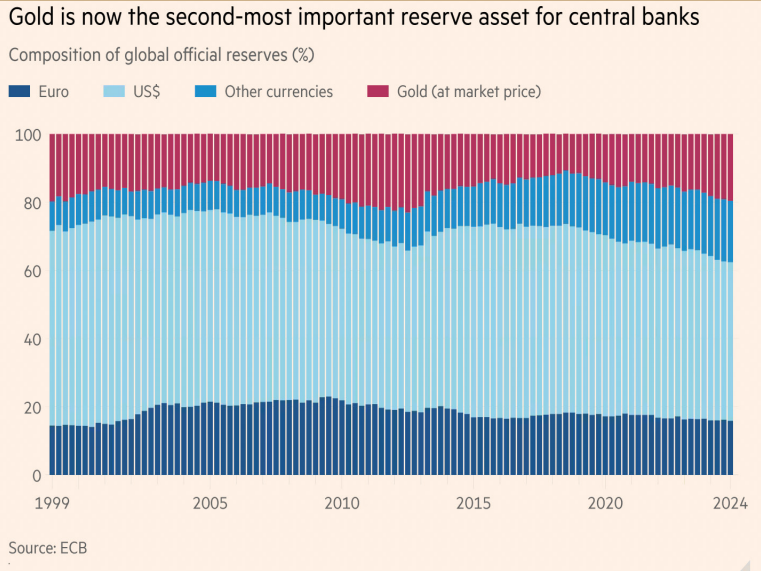
While gold does not bear interest and is costly to store, it is seen by investors globally as the ultimate safe asset that is highly liquid, and neither exposed to counterparty risk nor sanctions.

In recent years, central banks have also been trying to diversify away from the dollar amid concerns about geopolitical instability and US debt levels. The de-dollarisation trend accelerated, particularly among developing countries, after the Russian invasion of Ukraine, when the US targeted Russia's access to financial markets.

"Gold demand for monetary reserves surged sharply in the wake of Russia's full-scale invasion of Ukraine in 2022 and has remained high," the ECB report said, adding that gold purchases appeared to be seen as a hedge against sanctions such as the freezing of financial assets.

"In five of the 10 largest annual increases in the share of gold in foreign reserves since 1999, the countries involved faced sanctions in the same year or the previous year," the central bank's analysis showed, adding that "countries that are geopolitically close to China and Russia" bulked up on gold more than others over the past three years.

A survey among 57 central banks that were holding gold last year also revealed that concerns about sanctions, expected changes in the global monetary system and the desire to become less dependent on the dollar were drivers in emerging markets and developing countries.



The stock of gold held by central banks worldwide is approaching the historic highs of the postwar Bretton Woods era. Until 1971, global exchange rates were fixed to the dollar, which in turn could be converted into gold at a fixed exchange rate.

Central bank gold reserves, which peaked at 38,000 tonnes in the mid-1960s, rose again to reach 36,000 tonnes in 2024, according to the latest ECB numbers.



Moreover, while gold historically became cheaper when real yields of other assets rose, this long-standing correlation has broken down since early 2022, with investors drawn to gold as a hedge against political risk more than as a hedge against inflation.

The ECB noted that the supply of gold in recent decades increased during times of high prices: "If history is any guide, further increases in the official demand for gold reserves may also support further growth in global gold supply..."



***Some of the biggest merchants are exploring how to issue or use stablecoins, potentially shifting the high volumes of cash and card transactions that they handle outside the traditional financial system and saving them billions of dollars in fees.***

Walmart, Amazon.com and other multinational giants have recently explored whether to issue their own stablecoins in the U.S., according to people familiar with the matter.

Expedia Group and other large companies such as airlines have also discussed potential efforts to issue stablecoins, some of the people said.

A move to launch a payments system by Walmart or Amazon that bypasses the traditional payments system would send shivers through the nation's banks.

With vast networks of customers and employees, troves of data and far lighter regulations, retail and technology companies have long been viewed as particular threats to banks, including regional and community lenders.

Stablecoins are currently used to store cash or purchase other cryptocurrency tokens. They are supposed to maintain a one-to-one exchange ratio with dollars or other government currencies, and are backed by reserves of cash or cash-like assets such as Treasuries.

The retailers' final decisions would depend on a bill, called the Genius Act, which would begin to establish a regulatory framework for stablecoins. The bill recently passed another procedural hurdle but still needs to clear the Senate and House.

Stablecoins could allow merchants to circumvent traditional payment rails, which cost them billions of dollars in fees each year, including the interchange fee they pay when customers make purchases using their cards.

Payments can take days to settle, delaying the time it takes for merchants to receive the proceeds from sales. Stablecoins offer the possibility for a quicker process. They could be of particular interest to merchants with suppliers who are located abroad.

Merchants have long tried to launch payment alternatives to get around the card-based system that is dominated by Visa and Mastercard, though most of those have failed to gain traction.

Amazon's efforts are still in the early stages, a person familiar with discussions said, and some of the talks have centered on having the company's own coin for online purchases.

The companies have also weighed how to use outside stablecoins, some of the people said, even if they decide not to pursue their own. That could be through a consortium of merchants led by one stablecoin issuer, for example.

Megabanks have been considering a stablecoin consortium of their own, The Wall Street Journal has reported.

Merchant trade groups have been meeting with lawmakers in recent months to push for passage of the Genius Act. The trade groups, led by the Merchants Payments Coalition, have said that a regulatory framework for stablecoin would enable an alternative payment type for merchants that could significantly lower their expenses and create competition against Visa and Mastercard.

There is still some skepticism about the security of stablecoins and the regulatory implications of getting involved with digital assets.



Walmart has lobbied for adding a separate amendment that would introduce more competition in the credit-card sector to the Genius legislation, according to people familiar with the matter.

Walmart has long sought to get into financial services, where it could leverage its network of millions of weekly customers and employees. It has in recent years waded deeper into the industry through its fintech unit.

In the 2000s, the retailer withdrew an application for an industrial loan company charter after broad opposition...

**King Dollar's Crown Wobbles. Brace for Fallout**  
 Marcus Ashworth

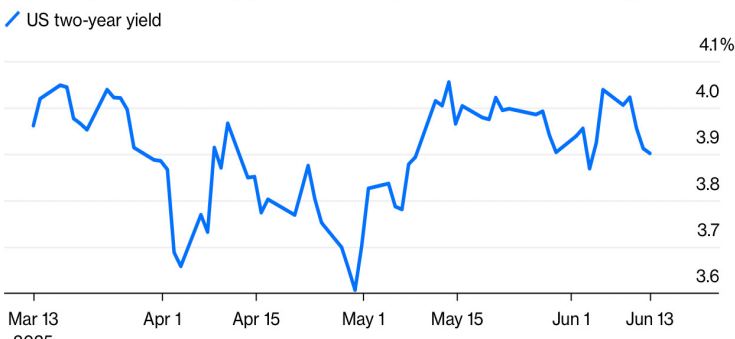
*The dollar is supposed to be the natural haven in times of global stress, yet the lack of flows into US assets after Israel's airstrikes on Iran is telling. The dollar index hit a three-year low Thursday before the military strikes, but that it's rebounded only about 0.5% subsequently suggests the 10% loss of relative value this year of the greenback to other major currencies may persist. Gold and oil both rose sharply so it's not that geopolitical risk doesn't matter. A weaker dollar has consequences globally, especially if that is being undermined by a lack of confidence.*

What is different about the weaker dollar this year is that it's not being driven, as is more normal, by interest-rate expectations. Nor is it being repriced by a sudden glaring relative growth differentials. Although the noise around tariffs can seem deafening, what is most impairing the dollar is its burgeoning budget deficit and more volatile political backdrop. Large government borrowing typically leads to a weaker US currency as inflation pressures pick up.

The logical beneficiary from high points of stress would be highly liquid instruments such as the US Treasury two-year note. Yet its yield briefly fell just three basis points on the Iran news before drifting back up to unchanged. That says a lot about US debt concerns and it doesn't bode well for the dollar.

**Frosty Rate Environment**

The two-year US treasury yield is in the higher end of its recent range



Source: Bloomberg

Recent US economic data has been on the softer side, with weekly jobless claims edging up and a lackluster May non-farm payroll report. But it's the inflation data that really should be driving interest-rate expectations lower, and with it the dollar. That dynamic may finally start to kick in and push the greenback to further lows.

The May producer prices data was the latest in a string of muted inflation reports failing to show much effect yet feeding through from the Trump tariffs. The Federal Reserve isn't about to have a Damascene conversion on what the longer-term inflationary and growth impacts might be on the US economy from such testing times.

Since Thursday's PPI, which came in below expectations at just 0.1% on both the headline and core measures, money-market pricing has moved to fully price in two rate cuts over the rest of this year. This can only make the dollar's gradual decline easier.

**Slipping Dollar**

The dollar index has broken below its three-year range



Source: Bloomberg



As my Markets Live colleague Simon White writes - it's hard to disagree with legendary hedge fund trader Paul Tudor Jones, who expects the dollar to fall a further 10% over the next year, driven by a "dramatic" cut in short-term rates.

Currency positioning is always hard to assess as the most readily available data is in futures but that's a very small part of the overall picture. Nonetheless, the overall dollar-short position in the Commodity Futures Trading Commission Commitment of Traders data is quite big, although it was larger as recently as 2023 in open interest terms. So this isn't likely to be either a smooth or one-way path for the dollar. Furthermore, although the Fed retains a bias to ease, it's yet to condone further rate cuts.

A weaker dollar, if it transpires, has benefits and negatives outside the US also. Many emerging-market currencies would enjoy the respite from what has been too strong a dollar since the pandemic - especially those that are resource poor. But equally those developing economies driven by exporting dollar-denominated commodities may struggle.

Certainly the European Central Bank will not jump for joy if the euro appreciates further as it's manufacturing export-led economy doesn't fare well if the common currency is too rich. Similarly, the Swiss National Bank doesn't really want to plunge its rates back below zero. The Japanese yen is in a similar boat to the euro, but as it's been on a steadily weakening trend for the past decade it's more concerned about avoiding too sharp or sudden changes.

China is also highly vigilant over letting the yuan appreciate to the dollar or other currencies such as the Korean won. Other Asian currencies, such as the Taiwan dollar, have been suffering from overly rapid appreciation. The Hong Kong dollar has shuttled far too suddenly for comfort from over appreciation back to the bottom of its fixed trading band with the US dollar.

A weaker dollar trend doesn't have to be too disruptive, although that doesn't seem a given anymore with the current political backdrop. Thereby, as bond markets have been rocked in recent months by aggressive positioning it's increasingly possible that FX vigilantes could start to spot an opportunity as Tudor Jones does...



***Elon Musk promised his bankers they would not lose money on the \$13bn they lent to finance his Twitter takeover in 2022. The world's richest man has now largely made good on his vow after Donald Trump's re-election helped rescue the debt deal.***

The sale by seven banks last month of the final slug of loans for Musk's \$44bn Twitter buyout marked an extraordinary turnaround for debt that had once appeared to be toxic. The lenders including Morgan Stanley and Bank of America faced a stark choice: offload the loans at a steep discount and lock in big losses, or trust guarantees Musk made in private.

Their decision to hold the debt began to pay off in November, after Trump won the US election. Musk, one of the president's closest allies, became a fixture in the White House – a shift that has elevated his influence and rippled across his business empire.

As bankers offloaded the final vestiges of the debt financing at the end of April, X took the unusual step of covering some losses that banks would usually absorb, people with knowledge of the matter said.

While the \$1.2bn of loans were priced with a small discount, at 98 cents on the dollar, X made up the difference, the people said.

"I could do cartwheels," one banker involved in the deal said. "It was a bet on the world's richest man, and it paid off," a second person said.

This account is based on more than a dozen interviews of people familiar with the financing of Musk's Twitter purchase, which marked one of the most difficult debt deals for Wall Street since the 2008 financial crisis.

Morgan Stanley had rallied six other banks as it raced to provide financing to Musk in April 2022, with lenders tripping over each other to cement their ties with the billionaire.



### Musk's bankers and the X debt stack

Bankers have sold off debt tied to Musk's purchase of Twitter (\$bn)

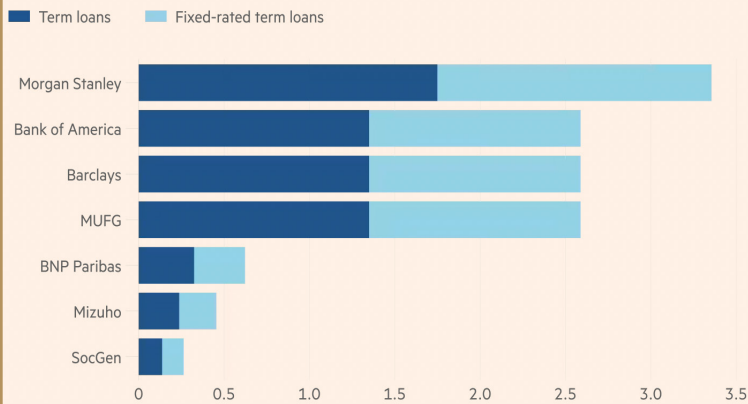


Chart shows split of debt commitments to fund Twitter buyout by bank  
Sources: Company filings, FT research

The cohort, which included Bank of America, Barclays and MUFG, had just days to conduct due diligence and sign up to the deal as Musk pushed forward with his hostile takeover.

But just weeks later, with Musk attempting to back out of the buyout, it became apparent that they would have to provide roughly \$12.7bn of loans themselves instead of selling the debt to large investors. They were “hung”, in Wall Street parlance.

As X’s business deteriorated, the banks were left holding billions of dollars of loans that were sinking in value. Federal Reserve rate rises in 2022 only made matters worse – as the banks had agreed to cap the interest rate on the debt they extended to X.

Investors, sensing the despair at the seven banks, began bidding on the debt. In 2023, some offered just 60 cents on the dollar, which would have implied losses of more than \$4bn.

Morgan Stanley held the lenders together, betting on the relationship of one of its then top bankers – Michael Grimes – and his client Musk, people familiar with the matter said. The bank led weekly calls to update the other lenders on X’s performance. Working together as a bloc helped avoid one single bank abruptly selling the debt at a discount.

“The banks knew if someone dumped a portion at 50 cents on the dollar they’d all have to take a massive hit,” one debt investor who did due diligence on the loans said.

Everything changed on election night 2024, which featured scenes of Musk side-by-side with a victorious Trump. The banks spotted their exit and Morgan Stanley finally began leading serious conversations with investors. Bids that were just 70 cents on the dollar before the election had shot up 75 to 80 cents on the dollar.

Morgan Stanley declined to comment, while X did not respond to requests for comment.

The importance X played in the election was not lost on the bankers and a rally in debt markets was only helping their book. Musk’s decision to give X a stake in his fast-growing artificial intelligence company xAI also burnished the social media company’s prospects.

“He’ll never let Twitter [X] fail,” a banker involved in the deal said. “I don’t think people even did their credit work. They just trusted the Musk halo.”

In January, the banks quietly sold the first chunk of debt they had been holding for years to two investors, Diameter Capital Partners and Darsana Capital Partners. The firms bought \$1bn of the loan at 93 cents on the dollar, according to three people familiar with transactions.

The sales to Diameter and Darsana helped “build interest” from other investors, one person who bought the debt said of Diameter’s role.

Bankers were enthusiastic with the result – and began contacting the world’s largest credit shops. Before they would share any of X’s financial information and performance, they wanted to know that an investor could buy \$250mn or more of the debt.

Some investors who looked at the debt were aghast with the information they were given. Financials were heavily adjusted and while the company’s revenues looked to have bottomed, the data on offer lacked many of the key figures most investors would need to conduct due diligence. Several told the Financial Times the business had shed cash at a rapid rate.

But buyers including Apollo Global and Citadel lined up and Morgan Stanley successfully sold \$5.5bn of term loans in early February, this time at 97 cents on the dollar. The price was important. Banks generally break-even on their underwritten debt deals at 96 or



97 cents on the dollar, as the fees they earn offset the discounts provided to entice buyers.

“They were able to sell it off some of the thinnest financials,” one investor who passed on the deal said. “It was surprising, you could do it as a trader – but to buy \$1bn, which they want us to do, we don’t do that...It was fucking wild.”

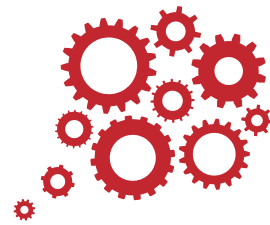
“Twitter was not an investment, it was a trade,” a second investor who bought some of the loans said. The person added it was “too early to know if they’re through the trough”.

Just days later the banks returned and sold another \$4.74bn of fixed-rate term loans at par – or 100 cents on the dollar – earning their fees on that portion of the sale. Demand was so strong that the size of the sale was increased, leaving the banks with roughly \$1.2bn junior loans – the riskiest part of the financing – they had agreed to provide.

“Our investment thesis was correct,” a banker involved in the deal said. “We backed Musk more than we were backing Twitter itself.”

Still, another banker complained that the offloading of the hung loans was not reflected in their compensation.

“We made fees. We wrote the loan back up. But we didn’t see that reflected in bonuses,” one banker said. But they acknowledged: “You can’t ring the bell on something you had to hold for two years...”

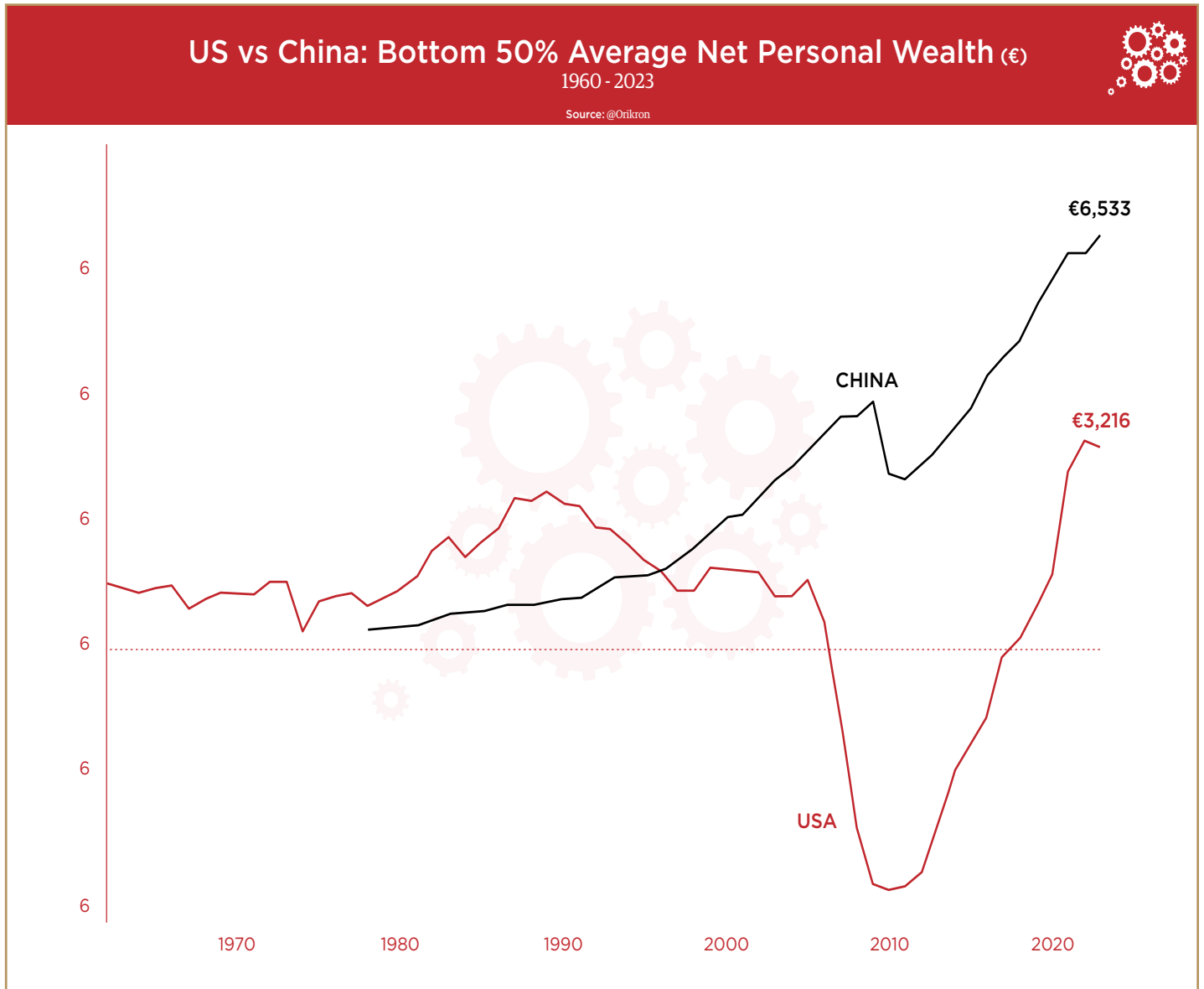


In April, the banking cohort sold the final \$1.2bn of debt, winning a reprieve from lenders to convert those junior loans into more senior debt, slashing the company’s interest costs in the process.

Morgan Stanley’s first-quarter earnings were bolstered by the debt sales, with the US lender reporting nearly \$700mn of “other” revenues within its investment bank, up from \$242mn a year earlier. A person familiar with the matter told the FT that much of the boost was related to selling X debt. The bank had previously taken mark-to-market losses on the loan.



# CHARTS THAT MAKE YOU GO HMMM...



**OK, this chart caught me off-guard... it shows the average per capita wealth of the bottom 50% of the population in both China and the United States.**

**The blue line is China.**

**The blue line is double that of the red line.**



# CHARTS THAT MAKE YOU GO HMMM...



**TLT**  
2015 - 2025  
Source: Bloomberg

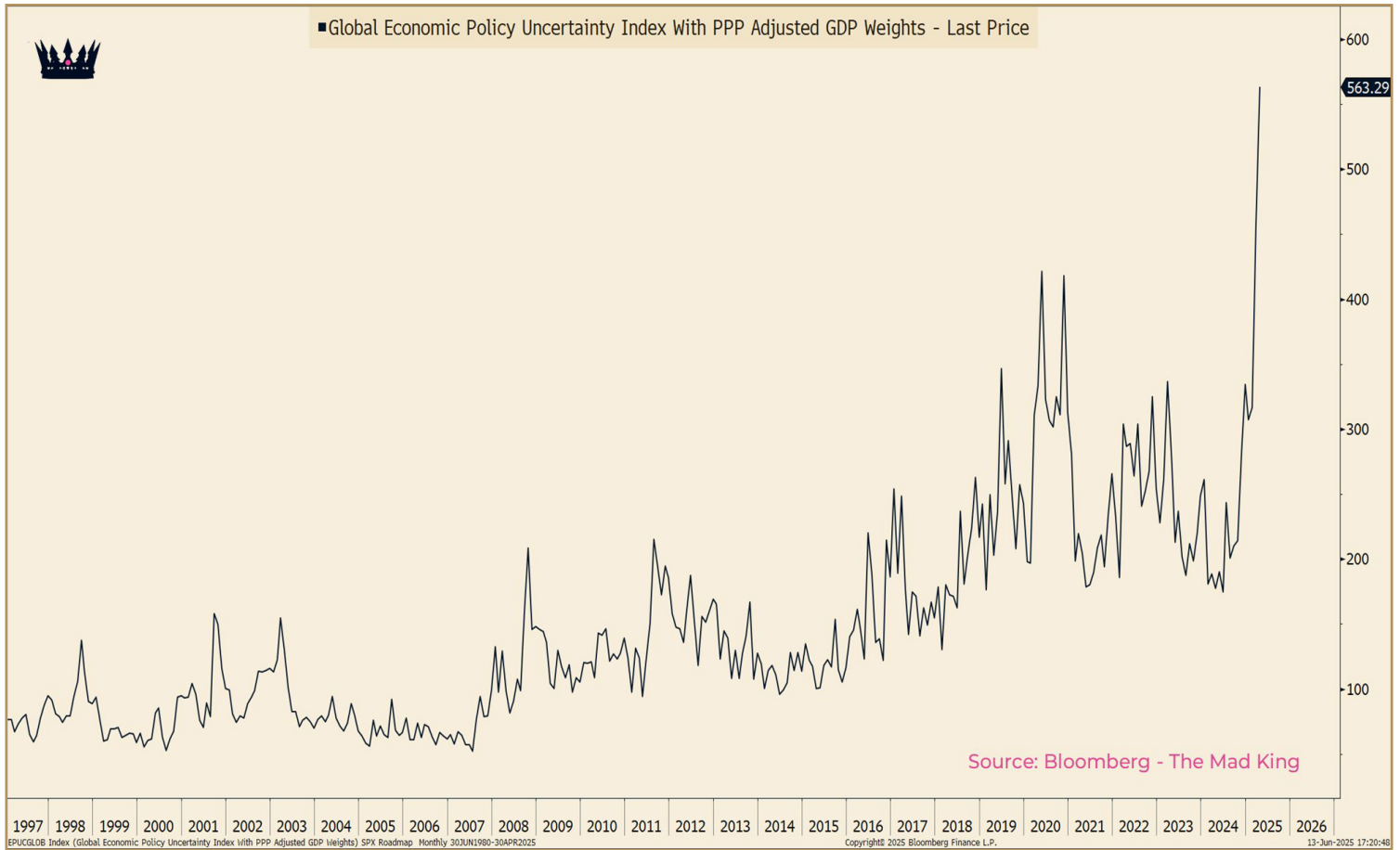


***If you invested \$10,000 in \$TLT exactly 10 years ago, you'd have \$9,500 today (dividends included, not inflation adjusted). Horrendous.***

- @BarChart



# CHARTS THAT MAKE YOU GO HMMM...



***We were promised a world of opportunities. What we're being delivered instead is a world defined by uncertainty.***

***Five years ago, the world shut down was less uncertain than now.***

***Like five years ago, there will be great opportunities.***

- @TheKingCourt



# WORDS THAT MAKE YOU GO HMMM...



**MELODY WRIGHT**

The US housing market is always a fascinating thing to watch and, the way things are shaping up, that dynamic shows no sign of changing as Melody Wright explains to Adam Taggart this week.

From rising inventories to no-bid markets, housing in the US is coming under significant pressure and Melody does a great job in fleshing out what's happening and why.



**BRENT JOHNSON & RENAUD ADORNO**

My old mate Brent Johnson is back (as expected, given the dollar's recent slide) to discuss the Milkshake Theory, China tariffs, MMT and much, much more.

As always, whether you agree with him or not, Brent is a calm voice of reason in an increasingly insane world and always good to listen to



**JACOB SHAPIRO & MARKO PAPIĆ**

The Geopolitical Cousins Jacob Shapiro and Marko Papic answer the Bat Signal with a typically entertaining and thought-provoking assessment of the situation in the Middle East after Israel's attack on Iran and the retaliation that followed in the early hours of Saturday morning.

Jacob and Marko are two of the very best geopolitical analysts you'll find anywhere so this was a welcome update in the wake of another escalation in the seemingly never-ending conflict in that part of the world.





***The Beach Boys' Brian Wilson, who sadly passed this week, was a true musical genius—but don't take my word for it, read any one of the countless tributes from the music world over the past few days as it mourned a generational talent.***

***Wilson is responsible for what may be one of the most perfect songs ever written in God Only Knows, the isolated vocal track of which is exquisitely beautiful.***

***Put your headphones on and lose yourself in musical perfection.***





***Much to his chagrin, Grant Williams has reached 40 years in finance.***

Over that period, he has held senior positions at a number of investment banks and brokers including Robert Fleming, UBS, Banc of America and Credit Suisse in locations as diverse as London, Tokyo, New York, Hong Kong, Sydney and Singapore.

From humble beginnings in 2009, *Things That Make You Go Hmm...* has grown to become one of the most popular and widely-read financial publications in the world.

Grant is a senior advisor to Vulpes Investment Management in Singapore, an advisor to Matterhorn Asset Management in Switzerland and also one of the founders of Real Vision—an online, on-demand TV channel featuring in-depth interviews with the brightest minds in finance.

A regular speaker at investment conferences across the globe, Grant blends history and humour with keen financial insight to produce unique presentations which have been enthusiastically received by audiences wherever he has travelled.

To find out more about Things That Make You Go Hmm... please visit:

**[www.grant-williams.com](http://www.grant-williams.com)**