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COMMENTARY

HONEY, I SHRUNK THE KIDS!

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HONEY, I SHRUNK THE KIDS!

In this 1989 classic, Wayne Szalinski shrunk his and his neighbor's kids to a quarter of an inch tall but was eventually able to restore the tiny kids who faced perilous backyard jungle, giant insects, lawnmowers, and other hazards. I believe we may recreate that movie in real life, at least the first part of it, i.e., putting our kids in danger's way. Whether we will be as successful as Wayne in restoring them … well, that remains to be seen.

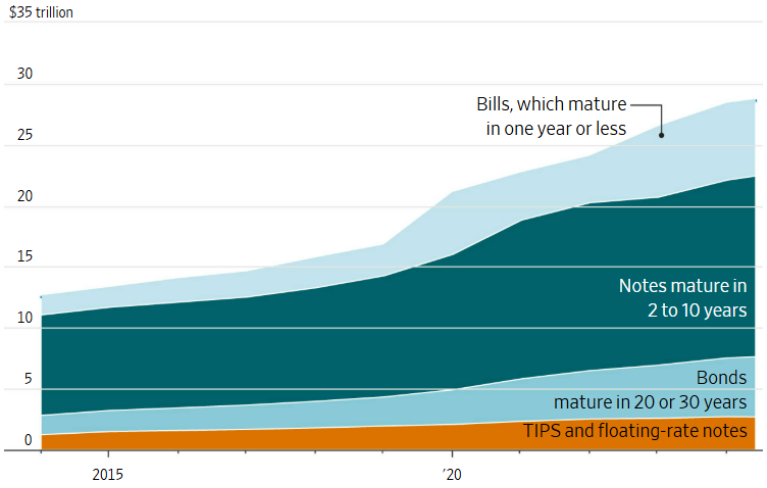
The reason for this predicament is two-fold: firstly, marching towards an unsustainable debt, and secondly, the sustained march of AI that might become unsustainable.

HOW DID WE GET HERE – THE EXPERIMENT

Outstanding Treasurys totaled nearly $29 trillion at the end of May 2025, equivalent to around 95% of annual U.S. economic output and roughly double the amount from eight years ago. The government is constantly issuing and paying down huge amounts of bills. But the bulk of its outstanding debt carries longer maturities.

The government raises money by auctioning off trillions of dollars of Treasurys each month—while also paying down trillions of dollars of debt that is coming due. Debt is identified by its maturity: Bills mature in one year or less. Notes mature in two to 10 years. Bonds mature in 20 or 30 years.

Treasurys outstanding



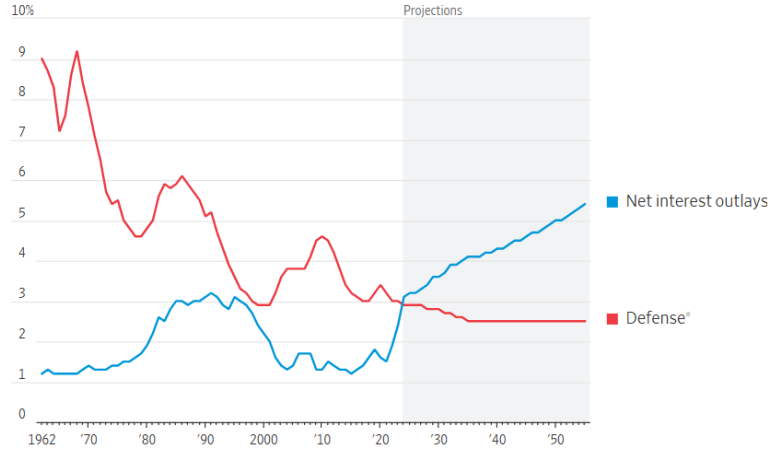
Source: Treasury Department via Sifma

The Scottish political theorist Adam Ferguson, whose "Essay on the History of Civil Society" (1767) brilliantly identified the perils of excessive public debt, states the Ferguson Law as: *any great power that spends more on debt service than on defense risks ceasing to be a great power*. His conclusion was prophetic: "An expense, whether sustained at home or

abroad, whether a waste of the present, or an anticipation of future, revenue, if it bring no proper return, is to be reckoned among the causes of national ruin."

The crucial threshold is the point where debt service exceeds defense spending, after which the centripetal forces of the aggregate debt burden tend to pull apart the geopolitical grip of a great power, leaving it vulnerable to military challenge.

U.S. net interest payments and defense spending as a % of GDP



Source: CBO and WSJ

The striking thing is that, for the first time in nearly a century, the U.S. began violating Ferguson's Law last year. Annual defense spending—to be precise, national defense consumption expenditures and gross investment—was $1.107 trillion in 2024, according to the Bureau of Economic Analysis (BEA), while federal expenditure on interest payments (the government long ago gave up on paying down principal) topped out at $1.124 trillion.

These outlays can also be expressed as percentages of gross domestic product. The Congressional Budget Office (CBO), which uses a narrower definition of defense spending than the BEA, places it at 2.9% of GDP for last year. Net interest payments (adjusting for the interest received by bonds held by government agencies) amounted to 3.1%.

According to the Wall Street Journal, Between 1962 and 1989, U.S. defense spending averaged 6.4% of GDP; debt service was less than a third of that at 1.8%. Even after the end of the Cold War, the federal government was still spending, on average, roughly twice as much on national security as on interest on the debt. The fact that the U.S. is currently projected to spend a rising share of its GDP on interest payments and a falling share on defense means that American power is much more fiscally constrained than most people realize. By 2049, according to the CBO's latest long-term budget projection, net

interest payments on the federal debt will have risen to 4.9% of GDP. If defense spending maintains its recent share of discretionary spending, it will amount to half that share of GDP.

Nor is there any real possibility that defense spending will increase dramatically. Because such spending is discretionary, it has to be appropriated by Congress every year, unlike spending on entitlement programs (which is mandatory) and interest payments (nonpayment of which would be default). If anything, budgetary constraints are likely to put downward pressure on defense spending in the decades ahead.

WARNING SIGNS

What are the implications for America today? Geopolitically, the U.S. finds itself in a situation comparable with that of Britain in the 1930s. Its military commitments are global, as has been true since 1945, and it confronts new wars on top of Russia-Ukraine and Israel-Gaza, notably the conflagration in Iran.

There are important differences between Britain in the 1930s and the U.S. in the 2020s, and all of them work to America's disadvantage. First, the term structure of U.S. debt is shorter, making it more sensitive to changes in interest rates. That makes it inherently harder to "inflate debt away" like the U.K. after World War II. Second, much more of it is in the hands of foreign investors. Third, the trend of real interest rates in the U.S. seems less likely to be downward than it was in 1930s Britain.

Whereas British real interest rates fell in the Depression, in America they are currently projected by the CBO to rise from 1.7% in 2024 to 1.9% in 2026, declining slightly to 1.8% in 2034. The real growth rate of the economy is projected to be almost identical. In this scenario, America's debt will cost more to service in the period 2025-2035 than it did in 2015-2025, when the average real rate was 0.3%, especially because the stock of debt will continue to grow.

Finally, the U.S. today is encumbered with an expensive welfare system designed for a society with a higher fertility rate and lower life expectancy. Entitlement programs such as Social Security and Medicare are now the biggest items of federal expenditure. They will only become more expensive as the population ages.

In the absence of radical reform of America's principal entitlement programs—which successive administrations this century have either failed to achieve or ruled out—the only plausible way that the U.S. can come back within the limit of Ferguson's Law is therefore through a **productivity miracle**.

GOOD THING BAD

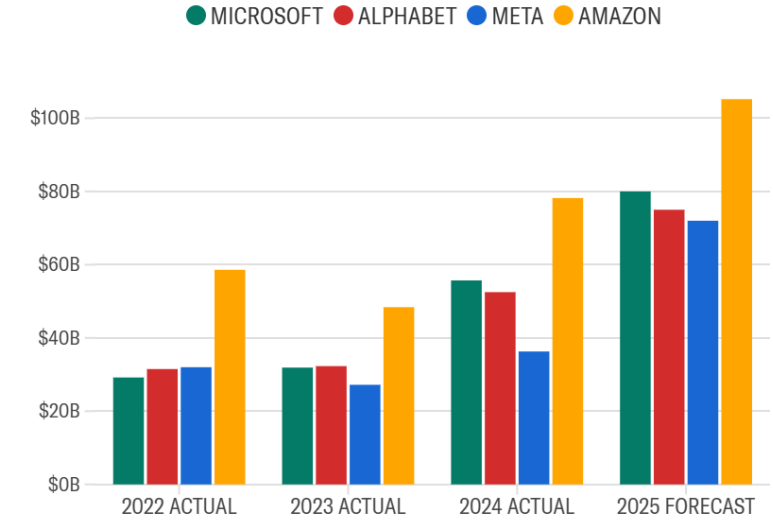
The productivity miracle, at the outset, seems like a plausible solution, but brings its own sets of problems.

Amazon CEO Andy Jassy recently said the company will reduce its workforce in the coming years, and Microsoft is reportedly planning thousands of layoffs, just as the two companies invest billions in artificial intelligence efforts. Andy further added "We'll be able to focus less on rote work and more on thinking strategically about how to improve customer experiences and invent new ones."

According to the most recent report from Challenger, Gray & Christmas, "technological updates" at companies, such as the implementation of AI, led to 20,000 layoffs in the first five months of 2025. Goldman Sachs estimated in a report last year that generative AI was set to automate nearly 25% of jobs across all industries.

Meanwhile, Amazon and Microsoft have been spending billions to advance their AI efforts. Amazon has consistently reported higher capital expenditures than its fellow Big Tech "hyperscalers" over the past several years, driven by its investments in AI infrastructure. In 2025, that trend is set to continue.

Actual and announced capital expenditure and investment plans as of June 2025



Source: Yahoo Finance and Company data • note: Microsoft fiscal years end June 31, and all figures include finance leases.

Amazon has projected it will spend roughly $105 billion, much higher than its peers, with the vast majority going to AI infrastructure for its cloud segment, Amazon Web Services. Microsoft is set to spend $80 billion in 2025 to build out AI data centers.

THE DAUNTING FUTURE FOR THE KIDS

As the kids enter the job market over the next decade, they will find themselves grappling with potentially higher inflation due to unsustainable debt, and ability to find tasks that will still require human intervention.

Max Tegmark, a professor of physics at the Massachusetts Institute of Technology, says our limited ability to gather specialized knowledge makes it much harder for us to recognize the disconcerting pace of improvements in technology. Most people aren't high-level mathematicians and may not know that, just in the past few years, AI's mastery has progressed from high-school-level algebra to ninja-level calculus. Similarly, there are relatively few musical virtuosos in the world, but AI has recently become adept at reading sheet music, understanding musical theory, even creating new music in major genres. "What a lot of people are underestimating is just how much has happened in a very short amount of time," Tegmark says. "Things are going very fast now."

Another fashionable trend is called agentic AI—autonomous programs that can (theoretically) perform tasks for a user without supervision, such as sending emails or booking restaurant reservations. Techies are also buzzing about "vibe coding"—not a new West Coast meditation practice but the art of positing general ideas and letting popular coding assistants like Microsoft Corp.'s GitHub Copilot or Cursor, made by the startup Anysphere Inc., take it from there.

It's not unusual in Silicon Valley to see tech companies and their leaders contort their ideologies to fit the shifting political winds. Still, the intensity over the past few months has been startling to watch. Many tech companies have stopped highlighting existential AI safety concerns, shed employees focused on the issue (along with diversity, sustainability and other Biden-era priorities) and become less apologetic about doing business with militaries at home and abroad, bypassing concerns from staff about placing deadly weapons in the hands of AI. Rob Reich, a professor of political science and senior fellow at the Institute for Human-Centered AI at Stanford University, says "there's a shift to explicitly talking about American advantage. AI security and sovereignty are the watchwords of the day, and the geopolitical implications of building powerful AI systems are stronger than ever."

The inexorable acceleration of AI development is occurring just outside the visible spectrum of most people on Earth, and that it could have economic and societal consequences beyond our current imagination.

THE ENDGAME

While the endgame of AI adventure is anyone's guess, we provide some practical solutions for our kids. While the overall debt burden of the U.S. isn't for an individual to tackle, we need to ensure that the next generation has the right assets that will grow over time. Kids that have access to assets now, or in the near future, will be able to hedge themselves against the rising interest rates and have a safety net when they enter the real world. In the absence of assets, their regular income will always play catch-up as the gap between the haves and the have nots will potentially widen further.

We also need to equip the kids with the right toolkit as the next *AI-native generation* will need mental, psychological, and emotional support, more than the previous generations. We need to continue to invest in technologies that provide better outcomes for the kids, while ensuring guardrails that prevent unfortunate and unpredictable outcomes from AI. We also need to make them aware of how the business world is adopting AI and why they will need to develop a keen eye to understand the unmet needs of the future.

At Eckuity, we continue to invest in the next generation AI, to ensure a sustainable world for our next generation. Artificial Intelligence is no longer a futuristic concept in healthcare, it is already here, quietly transforming everything from diagnostics to administrative workflows. As providers face increasing pressure to do more with less, AI is emerging as a powerful ally in delivering better care faster.

HOW AI IS ALREADY CHANGING PROVISION OF CARE

Smarter Decisions, Faster Diagnoses	One of AI's biggest strengths is its ability to sift through massive datasets in seconds. Whether it's reading medical images, identifying risk factors in patients' histories, or assisting in treatment planning, AI tools are becoming vital clinical decision support systems. In radiology and pathology especially, AI is improving accuracy and catching issues that might otherwise be missed.
Reducing the Burden of Documentation	Documentation remains one of the most time-consuming parts of clinical care. AI tools are now helping providers generate notes automatically, extract key insights from conversations, and keep records up to date, all while maintaining compliance and quality.
Automating the Back Office	Beyond the exam room, AI is streamlining the administrative chaos that burdens clinicians. From automating coding and billing to simplifying prior authorizations, AI helps to eliminate tedious tasks so

healthcare professionals can focus more on patients and less on paperwork.

The potential of AI in healthcare is huge, but it comes with challenges. Data bias, privacy concerns, regulatory hurdles, and provider trust are all important considerations. Still, as technology matures, it is imperative that we need to equip our kids such that their AI doesn't replace them, but empowers them.

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