CARLYLE

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THE CLARIFYING ROLE OF RATE CUTS

→ The time for rate cuts has arrived but don't expect the Fed to deliver the scale of easing anticipated by some market participants.

→ Talk of interest rate "normalization" often elides questions about what level of rates is "normal" in the context of current fiscal deficits, an industrial capex boom, and rising trade frictions.

→ As M&A volumes rebound, expect a symmetry to return to markets that had trivialized the risk of "overpaying" for the most sought-after assets during the easy money era.

The time for rate cuts has arrived. This is not just the assessment of Chair Powell and the Federal Open Markets Committee (FOMC), but virtually all analysts. When inflation declines, a central bank that doesn't cut rates is effectively tightening policy – a development no one could recommend for the U.S. economy at this point in the cycle.

Elevated interest rates have depressed residential investment and housing transactions, increased the effective cost of inventories, durable goods, and other items that need to be financed, and stressed households with high consumer credit balances. Cumulatively, this has resulted in a dramatic fall in job openings relative to the pool of job seekers and depressed input costs and pricing power (Figure 1). The post-pandemic inflation shock has ended; monetary tightening has done its job.

Perhaps base rates will fall as swiftly as they rose. Chair Powell hinted at this possibility. His speech at Jackson Hole coupled lighthearted self-deprecation with implicit reaffirmation that inflation was "transitory" after all; it simply required a more muscular policy response than initially surmised. With what Powell described as a temporary "collision" between pandemic-distorted labor and product markets in the rearview mirror, base rates should decline to more *normal* levels.

Before assuming this means cash and bond yields that prevailed in 2019-20, it may prove useful to ponder some questions:

→ Who today believes in a globalized economic future, where the free and frictionless flow of capital and goods across borders allows costs to decline geometrically as every component, part, and stage of the production process becomes its own contestable market, open to all competitors irrespective of geography?

Figure 1.
Cooling Labor Markets, Easing Price Pressures

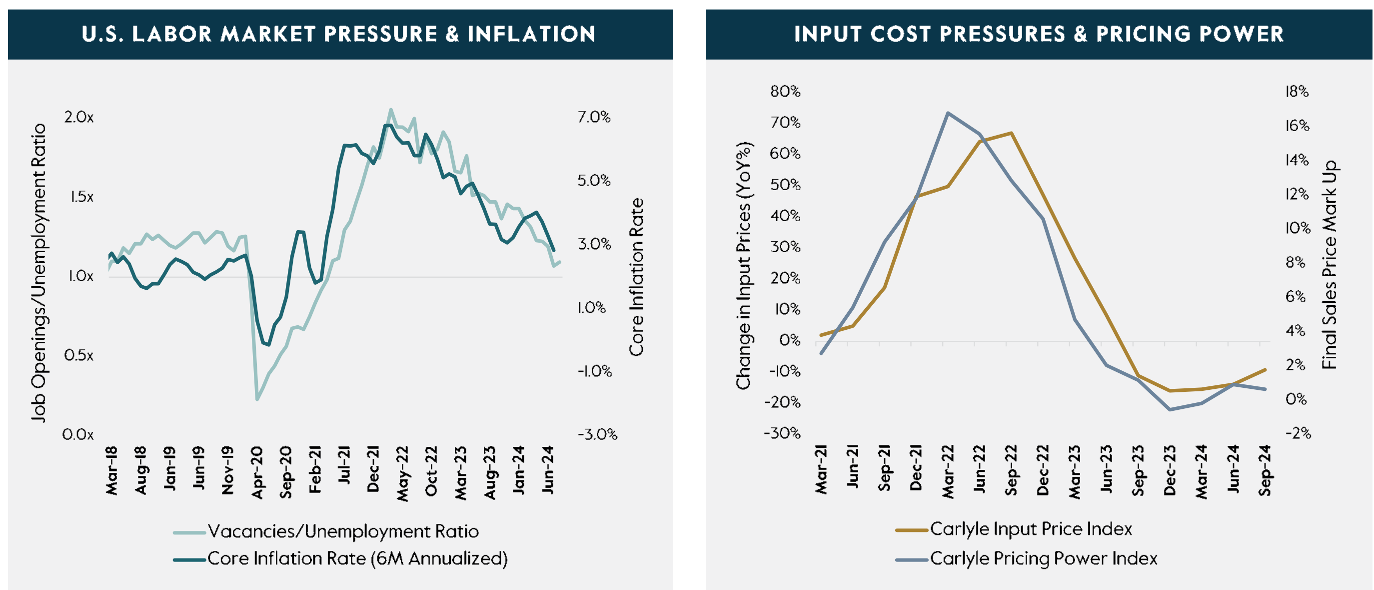


Figure 1. Source: Carlyle Analysis; Federal Reserve, Portfolio Company Data, September 2024. There is no guarantee any trends will continue.

→ What share of societal resources will be consumed by combatting climate change now that nearly everyone recognizes the problem cannot be solved without developing the green industries and employment opportunities for economies to remain competitive (viable?) during and after the energy transition?

→ How has the capital, computational, and energy intensity of Artificial Intelligence (AI) transformed the net cash flow profile of the digital businesses that previously accounted for most of the disinflationary rise in corporate savings?

→ Will past underinvestment in housing and defense procurement sharply reverse in light of migration-related shortages and heightened geopolitical risk?

→ To what extent will massive fiscal deficits constrain monetary policy in the years to come?

Central banks do not set policy in a vacuum or under self-selected circumstances. The world has changed since 2019 in ways likely to ensure that price pressures emerge before interest rates approach levels that prevailed during the pre-pandemic era.

THE DOG THAT DIDN'T BARK: ECONOMIC RESILIENCE IN THE FACE OF HIGH RATES

In 2020, the Fed signaled to market participants that base rates would be held near zero until 2024. When inflation rose to nearly 6% in June 2021, they reconsidered, indicating that two hikes might be necessary – in 2023. Observing the equivalent of 21 hikes over the next 24 months seemed less probable than alien contact (Figure 2). But even more surprising – and informative – has been the economy's resilience in the face of it.

Figure 2.
Current Interest Rates Less Probable than Alien Contact

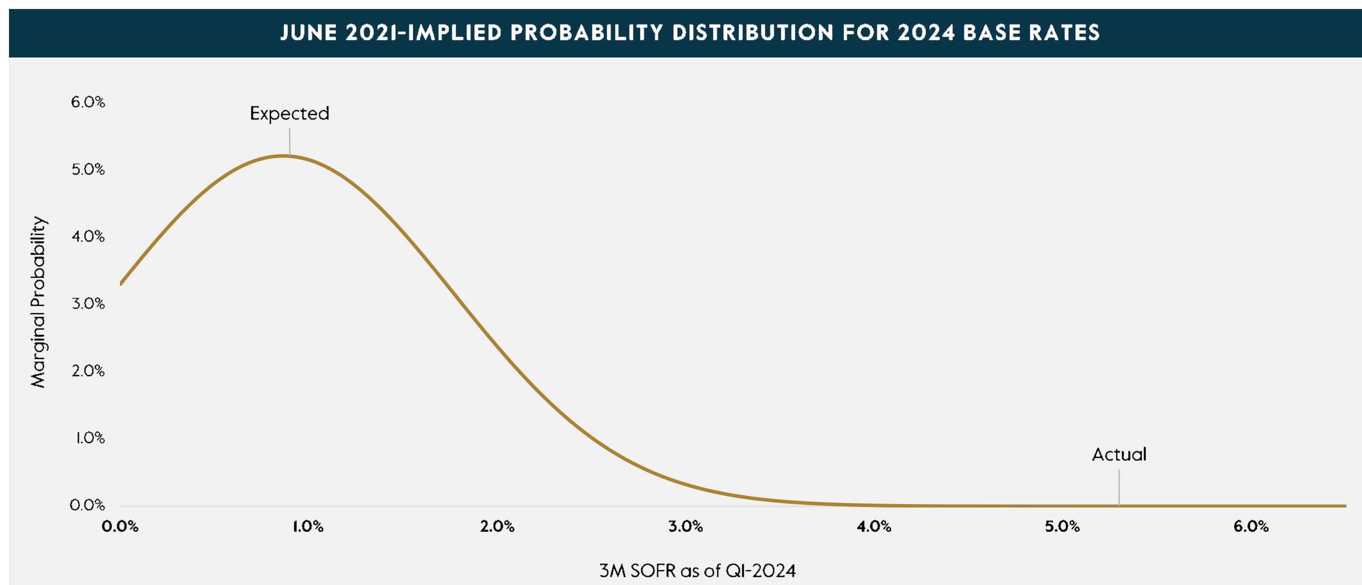


Figure 2. Source: Carlyle Analysis; Federal Reserve, Bloomberg, November 2023. There is no guarantee any trends will continue.

In late-2018, the U.S. economy didn't seem able to withstand base rates of 2.4%. The last hike of that cycle triggered a stock market sell-off of nearly 20% and signs of a potential meltdown in credit markets. The Fed relented, cutting rates by 75bps the following year.

When base rates blew through these levels in Q3-2022, it was natural that professional forecasters would call for a recession; that's the result yielded by models calibrated on pre-pandemic data. Silicon Valley Bank's failure in March 2023 all but confirmed these suspicions. Markets expected the Fed to retreat much as they had in 2019, with eight rate cuts priced over the next 12 months (Figure 3, page 6).

Instead, the Fed hiked rates three more times. And instead of falling into recession, the U.S. economy expanded at a 3.5% annual rate over the rest of the year and by 2.2% in the first half of 2024.

LONG AND VARIABLE LAGS?

It is thought that monetary policy works with long and variable lags. So, it's reasonable to wonder if recession forecasts weren't wrong so much as mistimed. Like motorists in the era before GPS, economic forecasters can be left wondering whether we're taking longer to arrive at the destination or on the wrong track entirely.

But it seems absurd to cite transmission lags when virtually all of the U.S. economic outperformance over the past two years has come from a once-in-a-generation surge in industrial fixed investment (Figure 4, page 6). This doesn't look like the same economy's slower-than-expected response to the rate shock, but a fundamentally different economy's ability to shrug off rates that would have once proved debilitating.

2022 AS INFLECTION POINT

The post-pandemic surge in industrial investment has many origins.[1]

The 2021-22 "supply chain crisis" revealed the fragility of globally distributed production networks, which had become too complex, too stretched geographically, and too sequentially dependent, all while operating with inventory levels that provided no buffer for the slightest perturbation to the system.[2] Russia's 2022 invasion of Ukraine effectively ended management teams' indifference to the geographic origin of components, parts, and other inputs, accelerating their plans to assert greater control over supply chains.

The natural inclination towards domestic sourcing and production was then augmented by governments transitioning from neutral observer to active participant in many markets.

Tariffs have proved a more enduring feature of the economic landscape than initially thought.[3] Rather than being oriented around the subject of the "consumer," with an eye towards driving prices down, U.S. trade policy since failure of the Trans-Pacific Partnership has focused increasingly on the "worker," willing to accept higher consumer prices in service of domestic investment and industrial capacity, especially in sectors of strategic interest.

The Inflation Reduction Act (IRA) of 2022 not only subsidizes investment in renewable generation assets – the U.S. will add a record 62.8 GW to the grid this year, over 80% of which comes from solar and storage – but also the construction of domestic facilities needed to meet green industrial demand, like battery manufacturing plants.[4]

1. "The Pit and the Pendulum," Carlyle, available at: https://www.carlyle.com/sites/default/files/2022-09/Carlyle_Global_Insights_Pit_and_Pendulum_Jason_Thomas_September_13_2022.pdf
2. "Supply Chains and Real Estate Implications," Pension Real Estate Association, available at: https://www.prea.org/publications/quarterly/supply-chains-and-real-estate-implications/
3. As a candidate, President Biden pledged to remove the tariffs if elected. Instead, he largely embraced them, expanding the goods subjected to tariffs and increasing the rate applied in many cases. C.f. https://abcnews.go.com/Politics/biden-slammed-trumps-china-tariffs-now-building-analysis/story?id=110234482
4. https://www.eia.gov/todayinenergy/detail.php?id=61424

Figure 3.
Recession Fears & Expected Rate Cuts

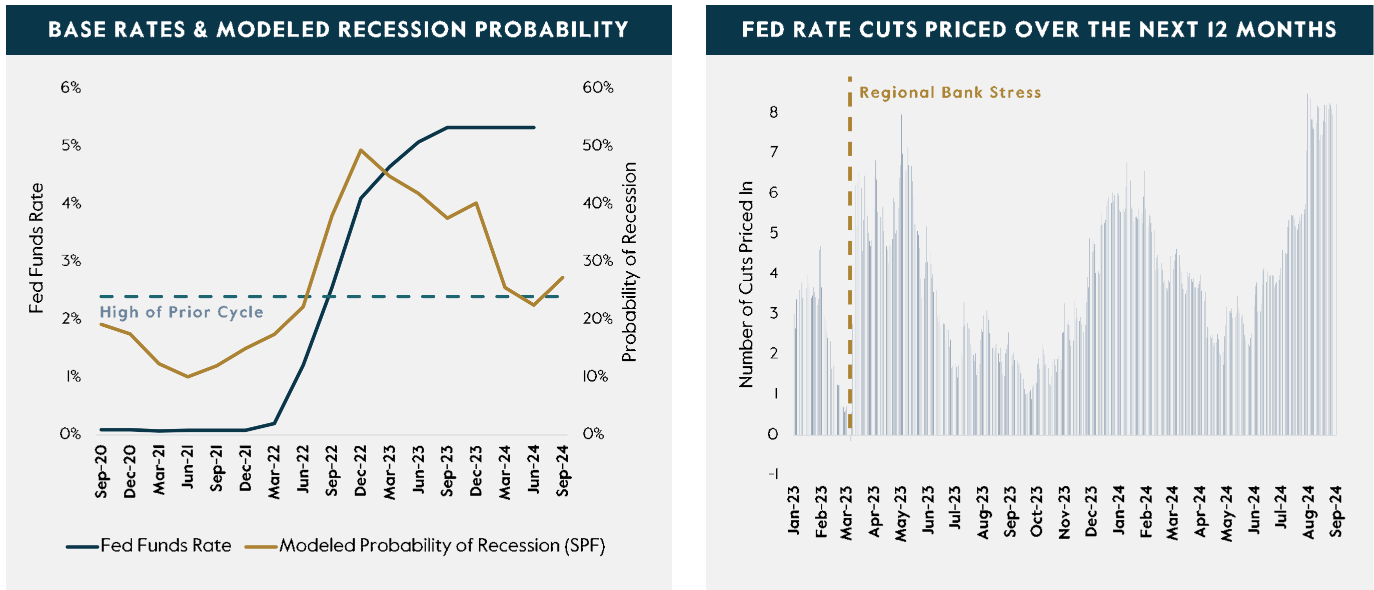


Figure 4.
U.S. Industrial Fixed Investment Boom

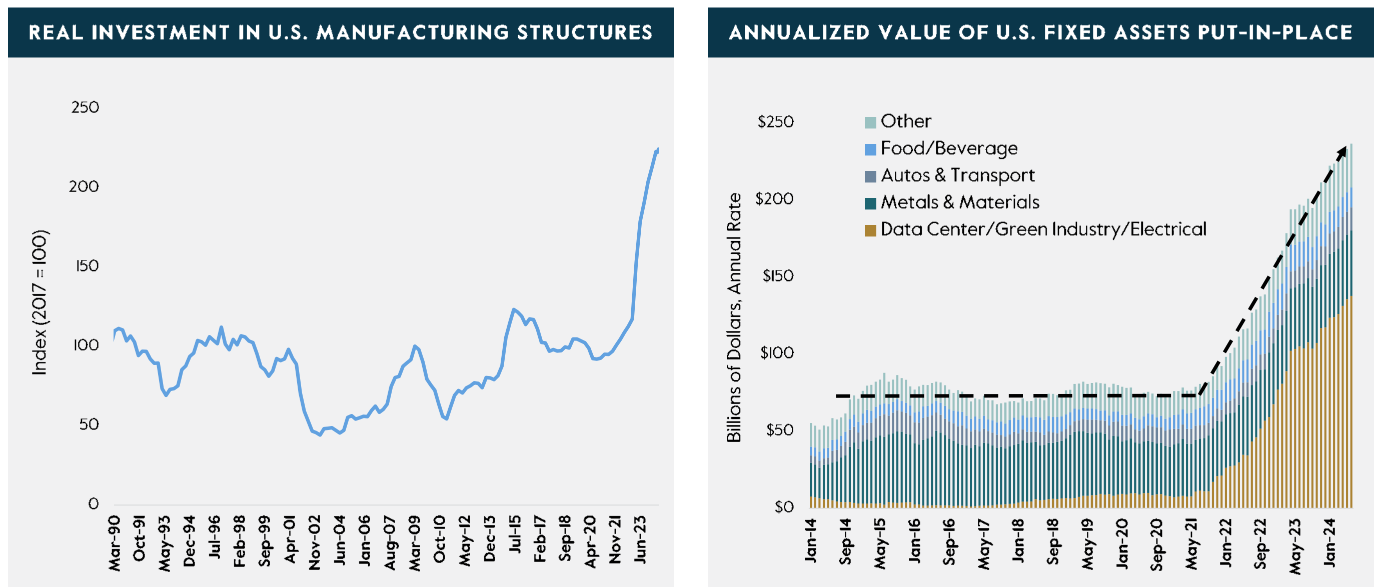


Figure 3. Source: Carlyle Analysis; Federal Reserve Bank of Philadelphia Survey of Professional Forecasters; Bloomberg, September 2024. There is no guarantee any trends will continue.
Figure 4. Source: Carlyle Analysis; BEA, U.S. Census Bureau, August 2024. There is no guarantee any trends will continue.

Concerns about external dependence on critical inputs also led to passage of the CHIPS Act of 2022, which subsidizes domestic semiconductor manufacturing and has already resulted in nearly $100 billion of planned investment in new fabrication plants.

Rather than contest the protectionist elements of these programs at the World Trade Organization (WTO), the European Union intends to unveil an industrial policy of its own.[5] Worries about China's lead in rare earths, battery technology, and electric vehicles has set off a global policy cascade, with trade barriers, mandates, and subsidies embraced to counteract trade barriers, mandates and subsidies.

Whether all of this amounts to "deglobalization" is a question of semantics. But it does seem likely to undermine the market dynamics responsible for so much of the disinflation observed over the past 25 years.

Growth in trade volumes has come primarily from the "unbundling" of production processes, as companies specialize in a single function, like product design and development, and outsource lower value-added functions to third parties, often located elsewhere in the world. While this process started at the top of the food chain, with the most valuable companies shedding physical assets and becoming "virtual" businesses, the same inclination was evident downstream, as global markets for components, parts, and specific tasks, like final assembly, proliferated. During this period, every 1% increase in trade intensity – the volume of cross-border shipments per unit of final output – has been associated with a 0.96% decline in durable goods prices (Figure 5).

Figure 5.
Trade Intensity Lowers Consumer Prices

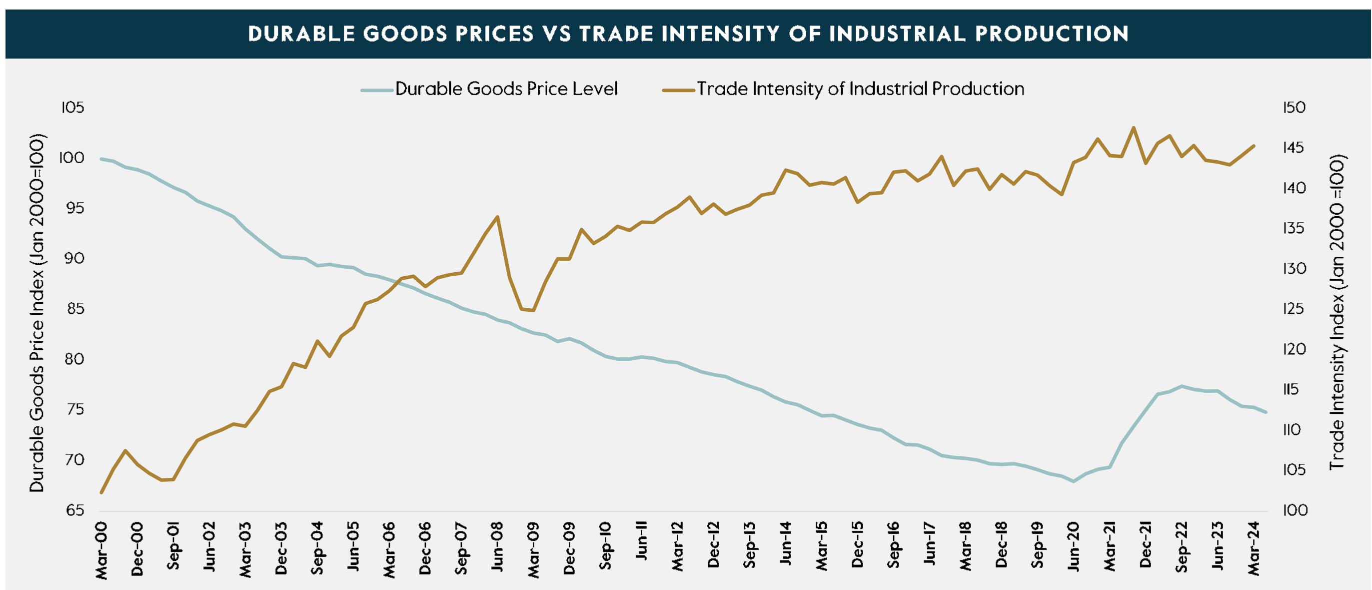


Figure 5. Source: Carlyle Analysis; BEA, CPB World Trade Monitor, September 2024. There is no guarantee any trends will continue.
5. EU Competitiveness: Looking Ahead, available at: https://commission.europa.eu/topics/strengthening-european-competitiveness/eu-competitiveness-looking-ahead_en.

FISCAL DEFICITS AS FACILITATOR

Fiscal deficits did not restrain the ambitions of policymakers in 2022 as they did in the years following the Global Financial Crisis (GFC). While large by historic standards, post-GFC deficits mainly resulted from the decline in tax receipts and corresponding rise in transfer payments associated with a weak economy. By 2011, policymakers lost their appetite for additional fiscal stimulus, making central banks "the only game in town."[6]

Today, by contrast, fiscal policy has become the prime mover. At $2 trillion (7% of GDP), current year U.S. fiscal deficits may look the same as those from 2011-12, but are roughly 2.5x larger, on a cyclically adjusted basis, than those observed after the GFC (Figure 6). This implies that net liquidity injections to private sector bank account balances from the U.S. Treasury are 5% of GDP ($1.4 trillion) larger than observed during that period.

While everyone can agree the current course is unsustainable, expectations for lower interest rates undermine the impetus for action; past deficit reduction only became politically feasible when viewed as necessary to reduce borrowing costs.[7]

TECHNOLOGY SHOCK OF 2022

And it was the technology shock of 2022 that may ultimately prove most consequential to the economy's development.

The advent of ChatGPT in November of that year set off a mad scramble for the data center capacity necessary to train deep learning models. While the scale of investment to-date in hardware, infrastructure, and related applications has been extraordinary (Figure 7, page 9), the exponential growth in AI's computational and energy demands suggests that assets put in-place over the past two years will account for a trivial fraction of total spending this decade (Figure 8, page 9).

Figure 6.
U.S. Fiscal Situation Incomparable to Past Periods

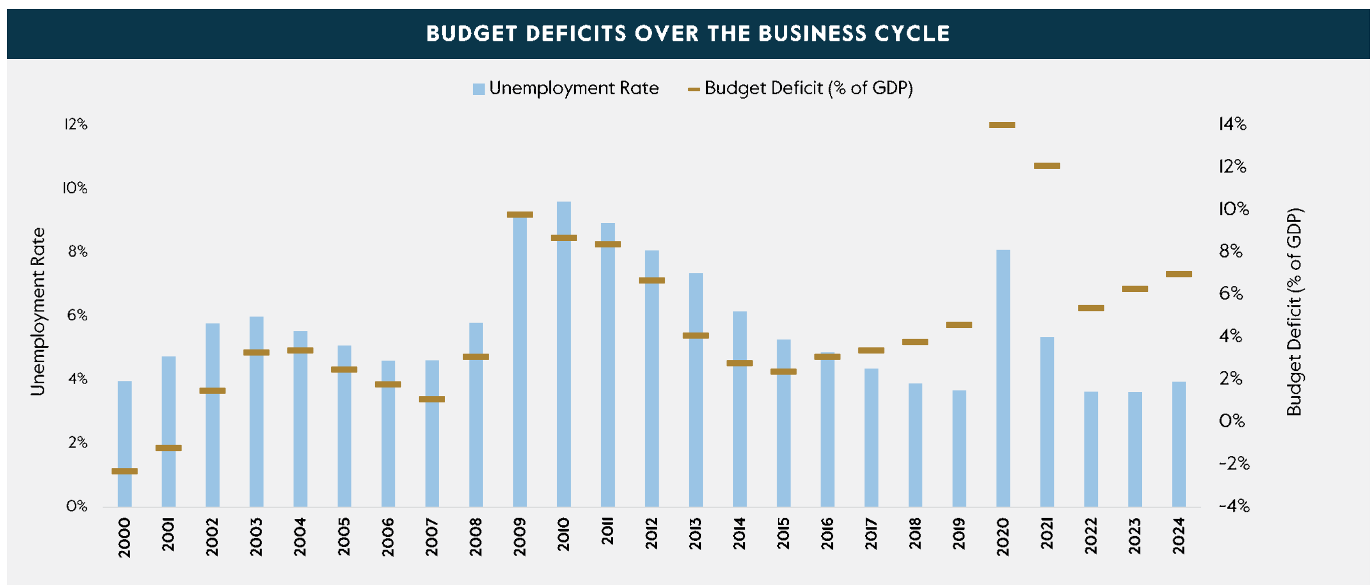


Figure 6. Source: Carlyle Analysis; Congressional Budget Office, September 2024. There is no guarantee any trends will continue.
6. El-Erian, M. (2016). *The Only Game in Town: Central Banks, Instability, and Avoiding the Next Collapse.*
7. In the 1992 campaign, then-governor Clinton famously promised his deficit reduction plans would push the 10-year Treasury yield below 7%, lowering rates on auto loans, home mortgages, and corporate bonds. Without the carrot of lower interest rates, the electorate is left with the sticks of tax increases and spending cuts. https://timesmachine.nytimes.com/timesmachine/1993/02/16/703793.html?pageNumber=53

Figure 7.
AI Hardware Spending Growing at 36% CAGR

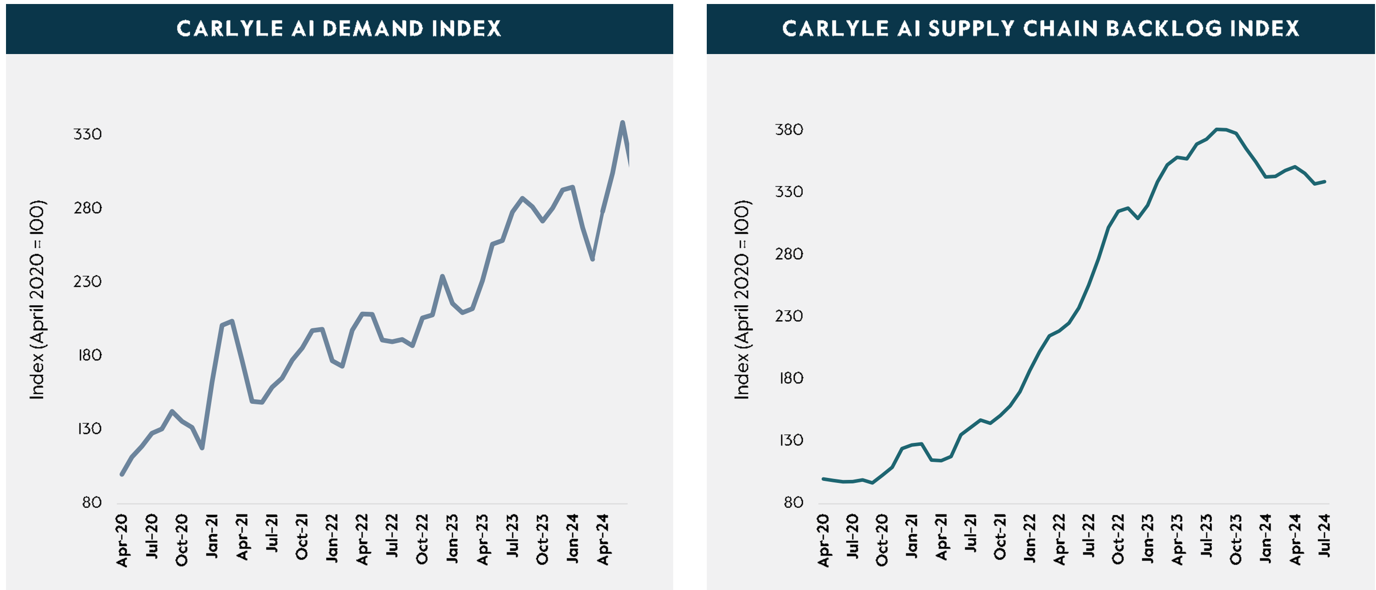


Figure 8.
20% Annualized Growth in Data Center Share of Global Electricity Consumption

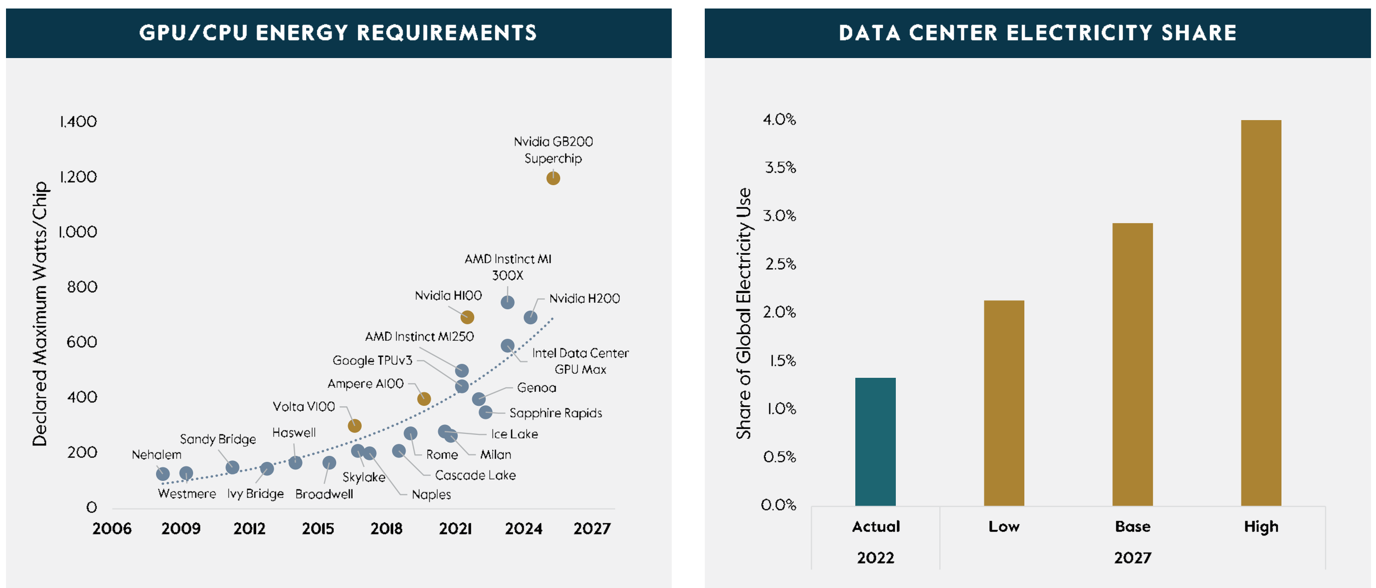


Figure 7. Source: Carlyle Analysis; Portfolio Company Data, August 2024. There is no guarantee any trends will continue.
Figure 8. Source: Carlyle Analysis; BofA Global Research, IMF, September 2024. There is no guarantee any trends will continue.

BALANCE OF RISKS TILTS TOWARDS *MORE* INVESTMENT

Some analysts have questioned the ultimate returns on some of these AI-related outlays given the enormous sums involved (Figure 9). CEOs in the space insist that the risk of underinvestment in AI is far greater than the risk of overinvestment.[8] The same balance of risks would seem to apply to policymakers' calculus when it comes to investment in energy transition and other strategic sectors, as the plight of the German economy would attest.

And all of this comes before accounting for what may amount to a generational increase in defense industrial capacity, as (European) economies grapple with security risks, and a boom in residential investment, as advanced economies address the housing shortages caused by migration and past underinvestment (Figure 10, page 11).

RATE CUTS AS THE MIRROR IMAGE OF THE "TAPER TANTRUM"

These all look like secular shifts, producing far higher investment and capital accumulation rates than observed in the decade prior to the pandemic. It would be unusual to see real interest rates – the equilibrium price of capital – revert to levels that prevailed during a much different era. Yet, that's exactly what many market participants seem to expect.

There's a costly tendency to evaluate interest rates relative to their past levels rather than economic fundamentals. This was evident in the years following the GFC. Esteemed investors then were as convinced rates were "unnaturally" low as some today are convinced they're unnaturally high.[9]

Figure 9.
Megacap Capex Rising 50% Faster than Revenues

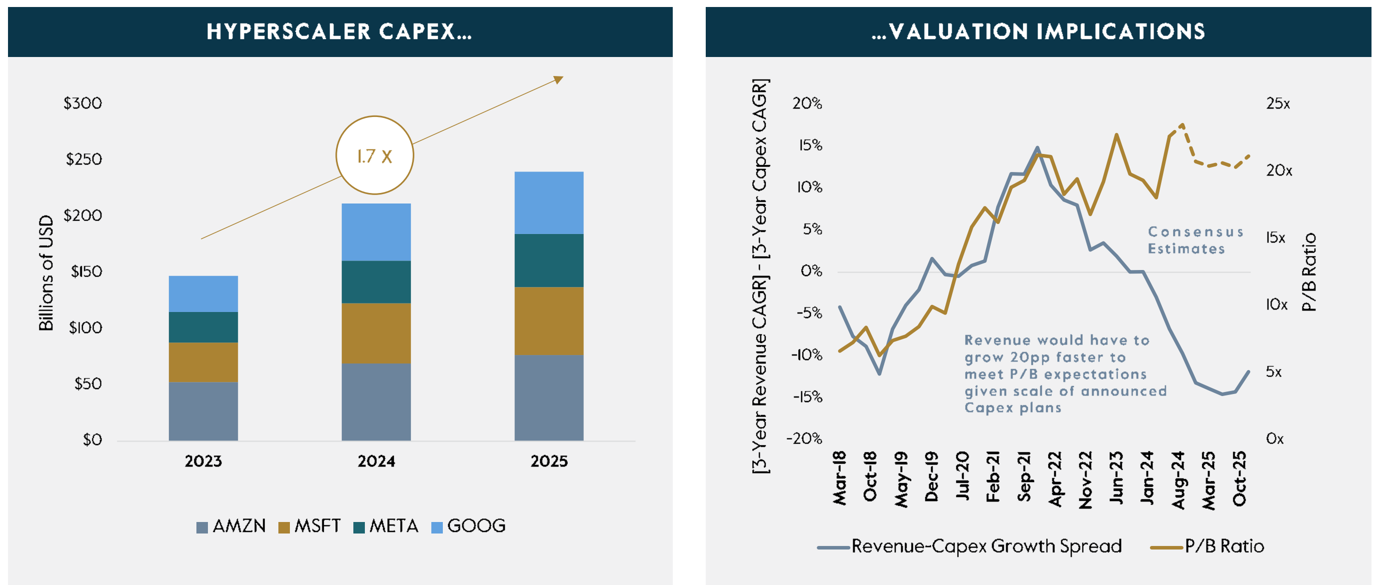
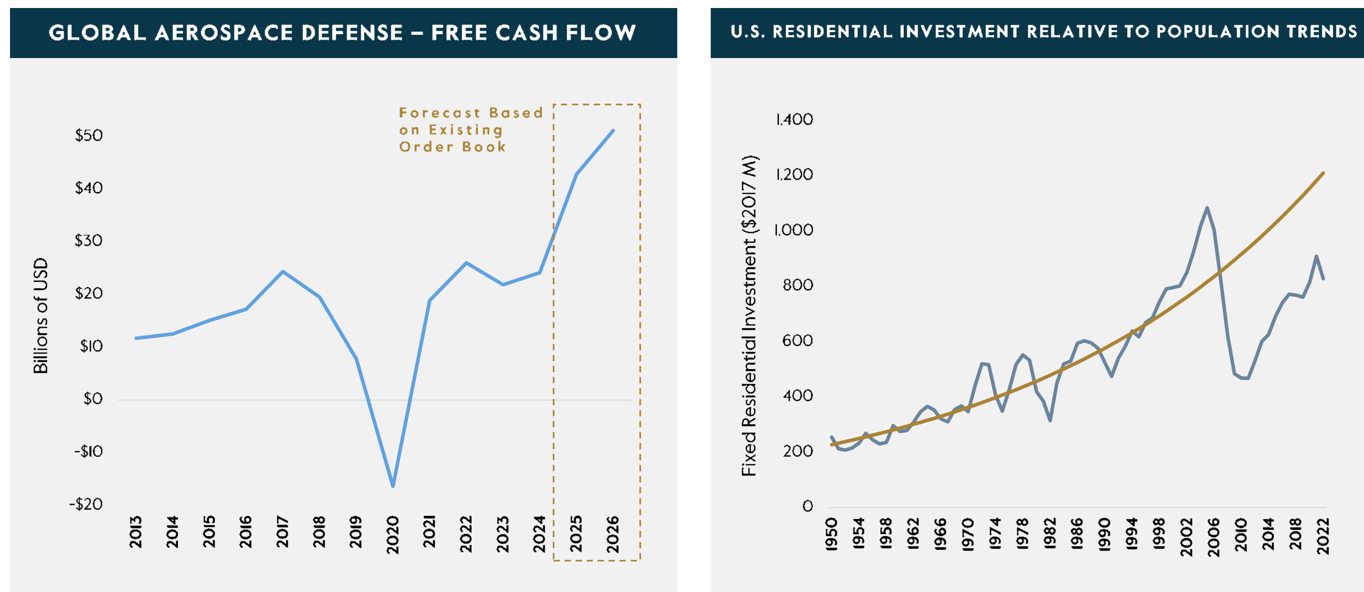


Figure 9. Source: Carlyle Analysis; Bloomberg, September 2024. There is no guarantee any trends will continue.
8. C.f. https://www.cnbc.com/2024/07/25/techs-splurge-on-ai-chips-has-meta-alphabet-tesla-in-arms-race.html
9. https://www.bloomberg.com/news/articles/2014-09-22/tiger-s-robertson-says-bond-bubble-will-end-in-very-bad-way-

Figure 10.
Coming Boom in Defense & Residential Investment



As long as the Fed was "printing money," these analysts could ignore anemic productivity growth (Figure 11, page 12) and below-target inflation and assume that low rates were just a ruse pulled by central banks to inflate asset prices artificially. With each new asset purchase program – "QE2" in 2010, "Operation Twist" in 2011, "QE3" in 2012 – warnings about a bond market "bubble" grew louder.[10]

It was only when Bernanke first raised the possibility that the Fed would "taper" asset purchases in May 2013 Congressional testimony that these theories could be put to the test. With the Fed stepping back, some analysts analogized the looming adjustment in bond yields to the release of a compressed coil spring and positioned portfolios accordingly.

The immediate market reaction was as expected: bond yields spiked and equity markets sold off. Yet, a surprising thing happened: bond yields were lower when the Fed stopped buying bonds in January 2015 than when Bernanke first surprised markets with the idea of scaling back purchases (Figure 12, page 12). Real yields remained 200bps below past averages for the rest of the decade.

After this experience, monetary chicanery proved a less satisfying explanation for low rates. Academics explored how demographics, globalization, and digitalization could alter savings and investment propensities in ways that cause "equilibrium" or "neutral" interest rates to evolve over time. This, in turn, propelled "r-star" from obscure monetary economics notation to a favorite discussion topic among finance media.

Don't be surprised to see the mirror image of these events play out over the next year. A series of cuts will help to clarify the extent to which the post-2021 adjustment in rates reflects fundamentally changed economic circumstances rather than a short-lived monetary response to pandemic distortions.

Figure 10. Source: Carlyle Analysis; Financial Times, BEA, September 2024. There is no guarantee any trends will continue.
10. C.f. https://www.cnbc.com/2012/12/13/when-will-the-bond-bubble-burst.html

Figure 11.
Annual Growth in U.S. Capital Stock & Labor Productivity

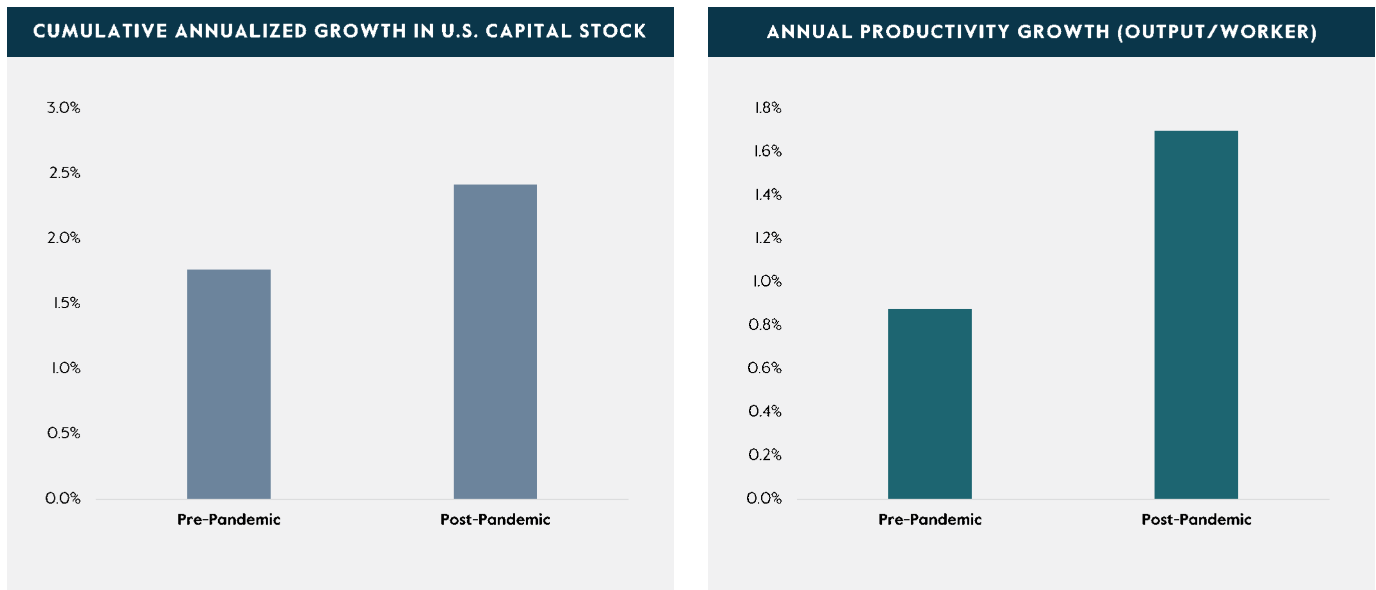


Figure 12.
A Look Back at the "Taper Tantrum"

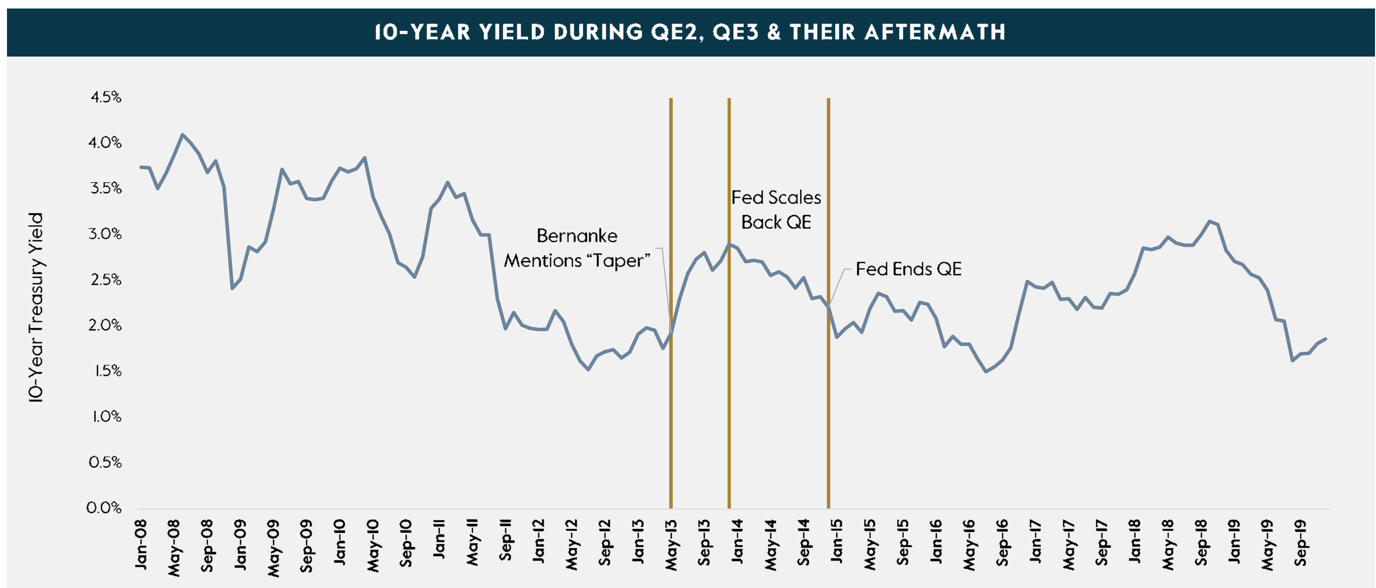


Figure 11. Source: Carlyle Analysis; IMF WEO Database, BEA, September 2024. There is no guarantee any trends will continue.
Figure 12. Source: Carlyle Analysis; Federal Reserve, September 2024. There is no guarantee any trends will continue.

INVESTMENT IMPLICATIONS

The winners in the past cycle were those who were the first to recognize that the rates environment had fundamentally changed. The same is likely to prove true this cycle.

One can sympathize with investors' concerns about a "bond bubble" a decade ago. Prior to the GFC, a 50-year Swiss sovereign bond traded at a modest premium. By 2012, it commanded a market value of 171 per 100 of par. And it turned out to be a tremendous buy at that price; in three more years, it traded at 209 – nearly a 9% annualized total return (for AAA risk) from that seemingly inflated level.[11]

What bonds no longer provided in yield they made up for in capital gains.[12] The magic of convexity ensured that their appreciation potential increased as their yields fell. The first to understand the implications of the secular shift in interest rates made a killing. Those who continued to rave lunatically about the "bubble" lost out.

The same dynamic was evident in other markets. Valuations that seemed nonsensical relative to a pre-GFC comp set looked cheap in retrospect (Figure 13). The more prized the asset for its growth and cash flow profile, the more costly it was to fret about valuation ratios that departed from historic norms (Figure 14, page 14). "Paying up" was rewarded, especially for assets that could be sold in the exit window that opened during the pandemic.

Rate cuts will almost certainly lead to a rebound in M&A, particularly among the strategic buyers who've been content to remain on the sidelines in recent quarters. Exits should accelerate as operating businesses seek accretive acquisitions to boost earnings growth. But the period of escalating valuations has almost certainly ended. Expect a symmetry to return to the market as overpaying for the most prized assets becomes a worse fate than losing it entirely.

Figure 13.
Stocks Cheap Relative to Bonds for Most of the Post-GFC Period

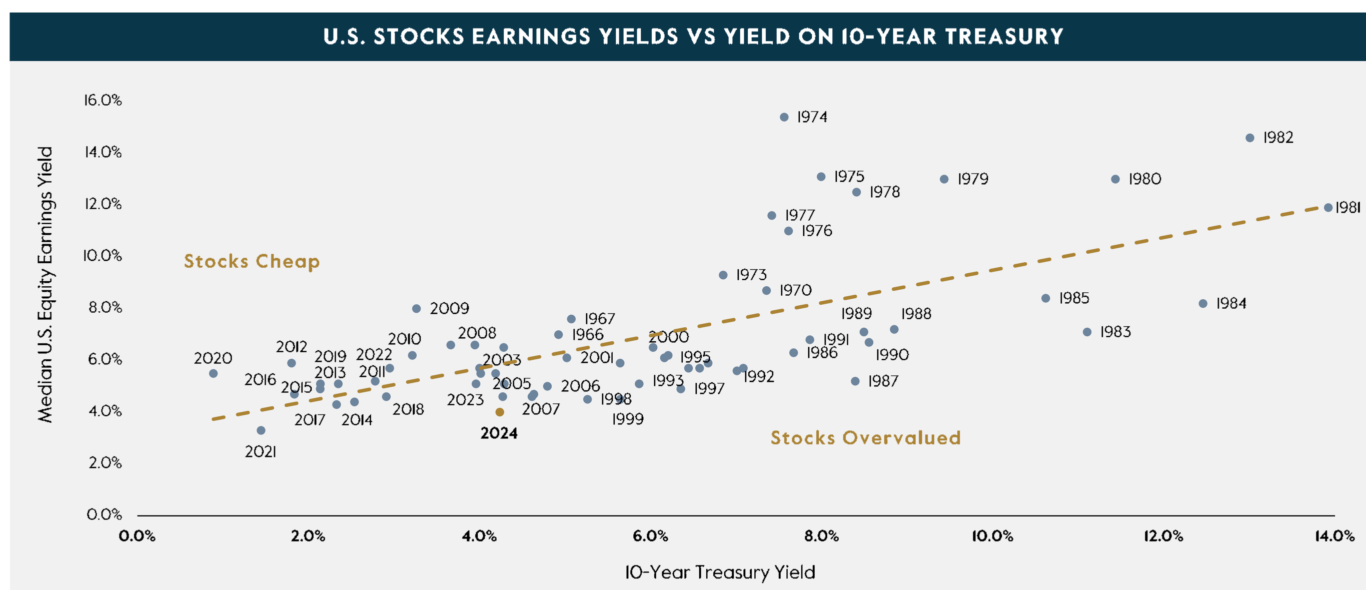
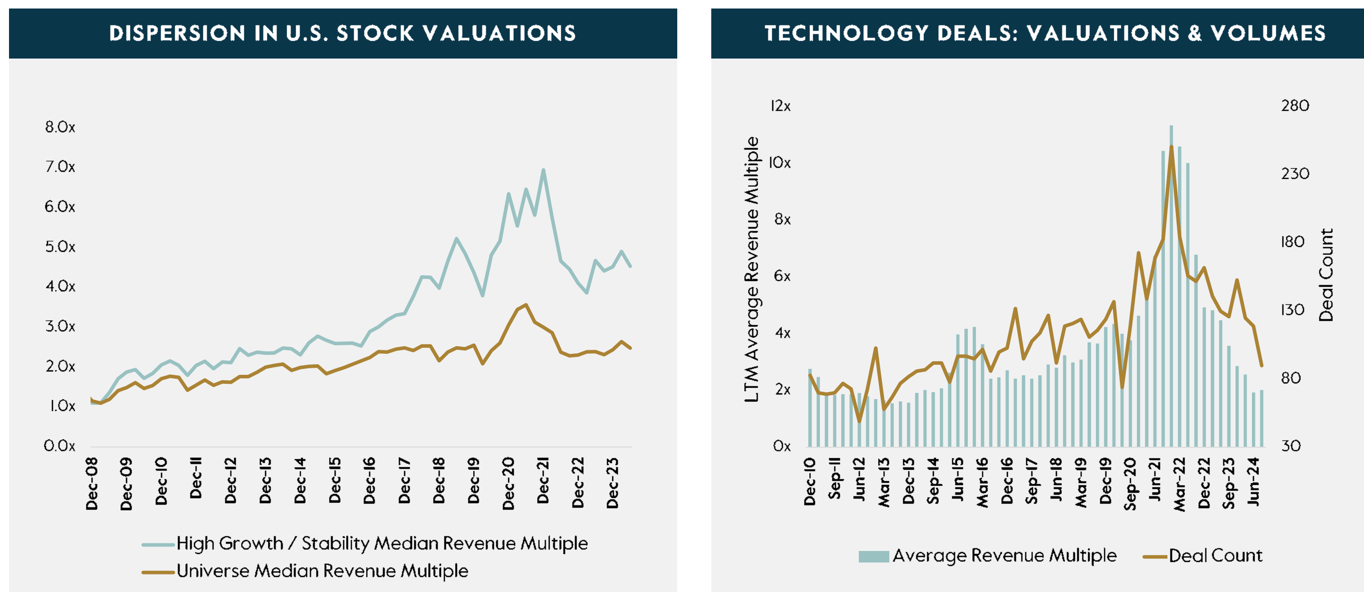


Figure 13. Source: Carlyle Analysis; Ken French Database, September 2024. There is no guarantee any trends will continue.
11. Bloomberg, September 2024.
12. C.f. https://www.ft.com/content/6cdd55a6-eff2-11e9-ad1e-4367d8281195

Figure 14.
Paying Up for Growth & Recurring Revenue



CONCLUSION

One could hear echoes of former Chair Bernanke's 2009 Jackson Hole address in Powell's remarks last month. Both had a valedictory character, waving goodbye to an era that had closed thanks to the actions and resolve of policymakers. A year later, Bernanke was singing a different tune. While the Global Financial Crisis (GFC) had indeed ended by August 2009, plans drafted in subsequent months to "normalize" interest rates and the Fed's balance sheet were soon discarded.

The decline in inflation has now pushed real interest rates to levels that nearly all observers could agree are too high. But rather than return interest rates to what some consider to be "normal" levels, the looming series of rate cuts may instead reset perceptions of what's normal.

Figure 14. Source: Carlyle Analysis; S&P Capital IQ, Pitchbook, September 2024. There is no guarantee any trends will continue.

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