APOLLO

Mid-Year Credit Outlook: Navigating the Crosswinds

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John Cortese,
Partner and Head of
Portfolio Management

Rob Bittencourt, Partner, Head of Thematic Investing

Akila Grewal, Partner, Global Head of Product Shobhit Gupta, Managing Director, Corporate Credit Tal Barak Harif, Principal, Head Credit Writer

KEY TAKEAWAYS

- Resilient Fundamentals and Robust Technicals Drove Performance: Tariff-driven headline risk, geopolitical volatility, and fiscal policy shifts caused temporary market dislocations in the first half—but failed to derail the credit cycle. Solid macro and corporate fundamentals, coupled with persistent institutional demand and limited net new supply, anchored credit spreads and performance. While downside risks have increased, we expect fundamentals and technicals to remain supportive through year-end.
- ▶ Public Credit Liquidity Is Breaking Down and Private Credit Could Offer a Better Alternative: The investmentgrade bond market is increasingly bifurcated—dominated by a core of large, liquid, recently issued bonds, while a long tail of older, smaller, dated vintages sees minimal trading activity. These off-the-run bonds offer little to no spread pickup and the spike in transaction costs made them virtually untradeable in the days after Liberation Day. Private credit may be an attractive alternative for long-term investors, offering a comparable liquidity profile to off-the-run investment grade (IG) bonds but with incremental spread compensation.
- Global Capital Is Rebalancing Away from the US: In the wake of the geopolitical tensions and US domestic policy

- shifts during the first half of the year, early signs of capital rotation out of US assets may be emerging. Sovereign funds and central banks are reallocating toward Europe—fueling strong inflows into the region's equity and credit markets.
- European Private Credit Is a Scalable, Undersupplied Opportunity: Europe's private credit market is large, underpenetrated, and gaining momentum. Non-bank lending represents an estimated 12% of corporate financing in the region, compared to 75% in the US. Structural tailwinds—regulatory reform, fiscal stimulus, and pricing advantages—are positioning Europe as a major growth market for direct lending.
- Al Is Becoming a Credit Market Catalyst: The generative Al buildout is no longer just an equity story: It's increasingly being financed through debt. Hyperscalers are issuing billions to fund data centers, compute infrastructure, and power upgrades, while early-stage Al firms are tapping private and public credit markets to fund their growth. As capex soars and adoption accelerates, credit investors are playing a growing role in funding the Al economy.

Introduction

In the first half of 2025, fixed income markets struggled free from the pull of mounting US tariffs and global geopolitical pressures, rising on the wings of resilient economic growth and strong technicals. The interplay between these factors set the tone and tempo for risk markets as investors navigated an unrelenting stream of headlines out of Washington and the Middle East. In the end, solid fundamentals and robust demand for fixed income assets prevailed.

NAVIGATING HEADLINE RISK

US trade policy took center stage with President Donald Trump's return to the White House. The new administration moved quickly to redefine American trade policy with a series of country- and sector-specific tariffs that culminated with its Liberation Day reciprocal tariff announcement in April. The markets recoiled as the abrupt shift introduced substantial uncertainty for businesses and consumers, sharply raising the probability of recession. Equity indices fell, volatility spiked, and credit spreads surged. Notably, US Treasury yields rose while the dollar fell to its lowest level in three years, suggesting that foreign investors were losing confidence in US capital markets.

The administration eventually relented, steadily softening its trade policy stance, which calmed markets and set the stage for a broad rally over the last two months of the second quarter. From its early April lows, the S&P 500 Index has set new all-time highs, high yield (HY) spreads are near their year-to-date tights, and volatility has collapsed. Still, the administration's new approach to trade and foreign policy, along with the growing animus between the President and Federal Reserve Chairman Jerome Powell, have raised questions about the "American exceptionalism" narrative that has anchored US asset leadership.

The frenzied tariff headlines throughout the first six months of the year made several major legislative and geopolitical events seem like sideshows in comparison. In June, the US and Israel launched joint airstrikes on Iranian nuclear facilities.

Oil and LNG prices surged on fears of supply disruption, but the rally quickly reversed after a limited Iranian response and an expedited ceasefire. In July, Congress passed the One Big Beautiful Bill Act (OBBBA) after several months of negotiations. The OBBBA extended and expanded elements of the 2017 tax law at an estimated cost of over \$3.4 trillion over 10 years. The bill temporarily revived fears around US fiscal sustainability, adding pressure to long-dated Treasuries and steepening the yield curve.

President Trump's swift return to his familiar market-soothing instincts was a key driver of the rebound in sentiment. However, the strength in fixed income markets was also underpinned by solid economic fundamentals and supported by strong technicals.

FUNDAMENTALS IN THE FACE OF MACRO SHOCKS:

Credit fundamentals wobbled amid the spring's policy shocks: Soft indicators like business and consumer confidence surveys initially inflected downward in sympathy with the slew of tariff announcements throughout the first and second quarters. Companies including Delta Air Lines, Ford and GM pulled or withdrew annual guidance amid uncertainty about the impact of tariffs. However, hard data—including employment and inflation—proved more stable.

As the administration moderated its trade policy approach in April and May, sentiment and economic growth rebounded. US real GDP expanded by 3% sequentially in the second quarter, reversing the prior quarter's contraction. June's US labor report showed little sign of economic fallout from tariffs with unemployment hovering near 4%. The consumer has held up better than expected, though underlying divergence is becoming more visible. Credit card spending dipped in April and May but has since rebounded across most income groups.

Second-quarter earnings have generally met or exceeded expectations, helping to anchor credit fundamentals despite the murkier macro backdrop. Balance sheets remain sound:

¹ Congressional Budget Office, July 2025.

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Leverage ratios across both IG and HY borrowers held steady (Exhibit 1), and full-year earnings growth expectations are still tracking near 10% year-over-year for S&P 500 Index companies. Interest coverage has declined in recent years as rates have risen, although absolute levels remain above historical stress thresholds especially for BBs (Exhibit 2). Still, performance dispersion is beginning to show—particularly in HY—where more cyclical sectors such as transportation, building materials, and retail have lagged defensive sectors like healthcare and utilities.²

Exhibit 1: Leverage remains stable for HY issuers



Note: Leverage and coverage data weighted by MV of debt Sources: S&P Capital IQ, Bloomberg Barclays Indices, Barclays

Exhibit 2: Coverage ratios falling, but no alarm yet



Note: Leverage and coverage data weighted by MV of debt Sources: S&P Capital IQ, Bloomberg Barclays Indices, Barclays

² BofA Indices, Apollo, June 2025.

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TECHNICALS TO THE FORE

While credit fundamentals remained relatively stable, it was robust technicals that ultimately guided markets through the turbulence of the first and second quarter.

In fixed income, strong demand from institutional buyers helped support both IG and HY markets amid ongoing policy and geopolitical uncertainty. After record retail outflows in early April, flows turned positive across IG and HY at the end of the month and sustained momentum through the end of the second quarter. Despite credit spreads holding near multi-year tights, persistently elevated Treasury yields have helped sustain historically attractive all-in yields. IG yields, at 5.2%, sit near the 90th percentile of the past decade—fueling continued demand from yield-sensitive buyers such as insurers and pensions, which are core components of the IG investor base. Defined benefit pension plans—many now in overfunded status—and fixed annuity providers, whose product demand has more than doubled over the past five years, provided a steady bid for high-quality credit.

On the supply side, issuance has failed to keep pace with this surge in demand. The IG market ended June on track for its lowest net new issuance since 2019. Two structural factors contributed to the supply squeeze. First, 2025 marks a heavy refinancing year for bonds issued during the 2020 cycle. Second, higher interest rates have substantially increased coupon income from existing portfolios—particularly in IG—creating a sizable pool of reinvestable cash. LBO and other M&A-related borrowing declined 31% in the second quarter.

This favorable technical backdrop did not fully shield credit markets from the April drawdown following Liberation Day, but it did set the stage for the powerful recovery that followed. Once US trade policy began to moderate, pent-up demand and constrained supply combined to drive a strong rally through the back half of the second quarter. We expect these technical forces to persist through year-end.

SECOND-HALF OUTLOOK

Looking ahead, a soft-landing scenario—with moderating but positive growth and inflation (although still above the Fed's target range) —remains our base case. Our chief economist Torsten Slok expects inflation to reach 3% at year-end. We believe this macro backdrop will continue to support the credit fundamentals of IG and most HY issuers. Slowing growth and evolving tariff policy may create incremental

headwinds to revenues and margins, but we expect the impact to be manageable outside of select lower-rated credits. With fundamentals largely intact, we believe technicals will remain the dominant driver of credit performance in the second half. With deal activity picking up, we expect M&A related issuance to increase in the second half of the year, which should help ease the supply-demand imbalance somewhat.

While the US economy has so far absorbed the initial tariff shock—continuing the pattern of resilience that has defined the post-pandemic expansion—growth expectations have softened. The consensus forecast for 2025 US GDP growth has fallen from 2.2% at the start of the year to 1.5%.³ As Slok noted in his Mid-Year Outlook: At the Crossroads of Stagflation—What's Next? the current trade policy path has meaningfully raised downside risks: he now places the 12-month probability of a US recession at 25%, up from near zero earlier this year.

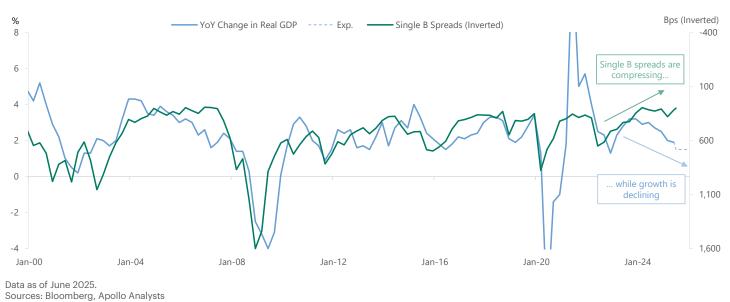
As such, we continue to monitor the evolving policy backdrop. The President continues to reset US tariff policy with bi-lateral trade deals and new or threatened sector- and country-specific levies. As of writing, the Budget Lab at Yale estimates that Trump's actions to date have raised the average effective US tariff rate to 18.6%, the highest since 1934.⁴ US tariff collections are tracking close to \$30 billion per month, marking an annualized increase of over \$250 billion relative to 2024 levels. Importantly, the bulk of these incremental tariffs have yet to be felt by consumers as retailers work down inventories stockpiled ahead of the anticipated levies. Trade policy uncertainty and the OBBBA are also likely serve as sources of sector-level dispersion over the next six months.

We expect valuations of investment grade and BB-rated debt to be well supported by strong insurance and pension demand and resilient corporate balance sheets. However, tight valuations leave limited room for further spread compression. Against this backdrop, we see better value in private IG debt given the private-public basis remains wide. In the lower-quality tiers, CCC spreads remain wide relative to the rest of the capital structure, creating fertile ground for bottom-up credit selection. Within this cohort, we see compelling opportunities for opportunistic credit strategies that can leverage restructuring expertise and strong analytical depth to unlock value. While higher-beta names can perform in a low-growth, low-inflation environment, any upside surprise in inflation or a downside shock to growth could result in meaningful spread widening. As shown in **Exhibit 3**, B-rated spreads continue to trade tight relative to underlying growth fundamentals—a dislocation that could persist if conditions remain stable, but one that leaves these credits vulnerable to macro deterioration.

With technicals expected to remain a key driver of performance, we now turn to three themes we believe will shape the credit landscape in the second half of 2025:

- Liquidity divergence: We examine the growing chasm between liquid and illiquid segments of the corporate bond market, and how this gap continues to influence relative value and allocation decisions.
- Revisiting US exceptionalism: We explore how shifting global capital flows are challenging the dominance of US credit markets and renewing investor interest in European private credit.
- Al and the credit stack: We assess how the rapid adoption of artificial intelligence is offering credit investors expanding deployment opportunities while simultaneously creating emerging competitive threats within existing portfolios.

Exhibit 3: Spreads tightening amid weakening growth



³ Bloomberg US GDP Economic Forecast, July 2025.

⁴ The Budget Lab, State of US Tariffs, August 2025.

1. Liquidity Inequality in Corporate Credit

In our 2024 Mid-Year Credit Outlook, we highlighted the growing divide in market functioning between liquid and illiquid corporate bonds—a theme we referred to as the "vanishing liquidity premium" in public credit. We noted that while headline trading volumes in IG credit appeared healthy, we believed that they masked deep fragmentation beneath the surface. Portfolio trading and ETFs have improved the liquidity of benchmark-sized, recently issued, bonds, but has not benefitted smaller, older vintages even as their liquidity premia has diminished.

This thesis has come into sharper focus during the first half of 2025—most notably in the period that immediately followed Liberation Day. The volatility shock triggered a surge in trading volumes for liquid instruments like ETFs and portfolio trades, which investors used to quickly reposition risk. But for a significant portion of corporate bonds—particularly smaller, off-the-run issues—liquidity deteriorated as transaction costs spiked and price discovery broke down. In short, Liberation Day delivered a real-time stress test of liquidity conditions—and revealed just how bifurcated the public credit market has become.

This divergence is obscured by top-line metrics. On the surface, liquidity appears abundant: trading volumes in corporate bonds have increased meaningfully—both in notional terms and as a share of debt outstanding, driven by the continued rise of portfolio trading. For instance, IG turnover (annual trading volume as a percentage of the total market size) has risen from 70% in 2015-2017 to almost 100% this year. Portfolio trading volumes for US corporate debt have surged, increasing from about \$25 billion per month in mid-2023 to as much as \$140 billion as of April 2025, offering investors a cost efficient way to move large blocks of risk (Exhibit 4). Dealers have responded by allocating more of their balance sheets to these trades, which are easier to hedge due to their diversified nature. The result has been lower transaction costs and greater efficiency for portfolio trades.

As market makers concentrate liquidity in large, recently issued bonds—the building blocks of ETFs and portfolio trades—liquidity for smaller, older securities hasn't improved and on the margin has deteriorated. In effect, the "liquidity inequality" in public credit markets has widened further.

To illustrate this dynamic, we took a closer look at two sections of the US IG universe:

Exhibit 4: Portfolio trading volumes surge as dealer support deepens

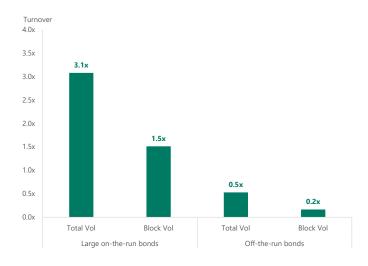


Data as of June 2025. Sources: TRACE, Apollo Analysts

- ◆ Large on-the-run bonds: Recent issuances (within the last 12 months) with deal sizes of at least \$1 billion.
- Off-the-run bonds: Older vintages (issued more than two years ago) with deal sizes below \$900 million. This segment makes up roughly 50% of the IG market by bond count.

The stark difference in volumes and especially block volumes (IG \$5 million+ trades) highlights the liquidity gap between the two cohorts. Specifically, block volumes in off-the-run bonds are just one-tenth of those for on-the-run paper (Exhibit 5).

Exhibit 5: Smaller, older-vintage bonds can be significantly less liquid, especially in large blocks



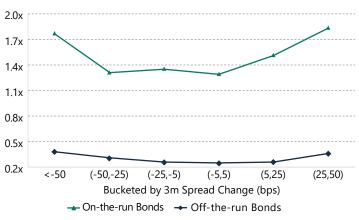
Data as of July 2025. Block volume refers to trades with a size of \$5mn+ Sources: TRACE, Apollo Analysts

More importantly, off-the-run bonds show minimal pickup in turnover even during periods of heightened volatility **(Exhibit 6)**, when trading volumes in on-the-run bonds typically rise as investors reposition risk. This asymmetry suggests that for much of the IG universe, price discovery is impaired, structurally suppressing the transfer of risk.

Transaction costs further reinforce this divide. Bid-ask spreads for off-the-run bonds are more than double those of on-the-run bonds in normal conditions—and this gap widens meaningfully during market stress. **Exhibit 7** shows quoted bid-ask spreads as a function of bond-level spread volatility: Both cohorts see higher transaction costs as spreads move, but the increase is far more pronounced for off-the-run bonds, helping explain why volumes remain depressed even in volatile periods.

Exhibit 6: Turnover in off-the-run bonds tend to stay muted even in volatile markets...

Turnover



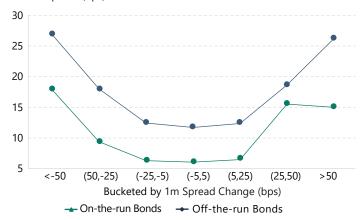
Data as of December 2024.

Liquid bonds defined as issued in <1y, \$1bn+ deal size. Illiquid bonds issued >2y, <\$900mn in size.

Sources: TRACE, Barclays, Apollo Analysts

Exhibit 7: ...But trading costs for off-the-run bonds can surge amid market volatility

Bid-Ask Spread (bps)



Data as of December 2024.

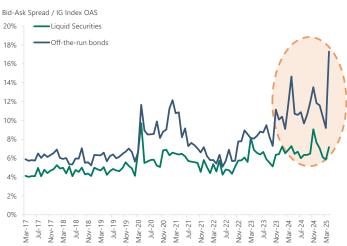
Liquid bonds defined as issued in <1y, \$1bn+ deal size. Illiquid bonds issued >2y, <\$900mn in size.

Sources: TRACE, Barclays, Apollo Analysts

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Recent volatility following the Liberation Day tariff rate shock offered a real-world case study. ETF volumes spiked—turnover in HYG, the iShares iBoxx \$ High Yield Corporate Bond ETF, hit all-time highs—as investors used these products to manage exposure to macro risk. Across corporate bonds, bid-ask spreads widened, but the increase was far more severe in the off-the-run cohort, rendering them effectively untradeable during peak of volatility. Bid-ask spread (normalized by index spread) for off-the-run bonds surpassed levels seen during the depths of the Covid pandemic in 2020 even as transaction costs for on-the-run paper remained fairly muted, highlighting the divide between the two cohorts (Exhibit 8).

Exhibit 8: Investors are being paid less to hold hard-to-trade bonds



Data as of April 2025. Sources: Barclays, Apollo Analysts Adding to the imbalance, off-the-run bonds have become harder to trade—yet investors are receiving even less relative compensation for holding them versus their more liquid counterparts. Barclays estimates the spread differentials between off-the-run and on-the-run bonds in IG has narrowed from a more than 50 basis points to parity (Exhibit 9). The similar trend holds in HY markets. The net outcome is investors are receiving no incremental compensation for holding bonds that are harder to trade, when liquidity is in highest demand.

Exhibit 9: Liquidity risk premium in IG corporates

Data as of June 2025. The data has been derived using the exposure-matched portfolio approach, optimizing for both minimum and maximum liquidity while aligning the portfolios with the underlying benchmark indices. Source: Barclays Research

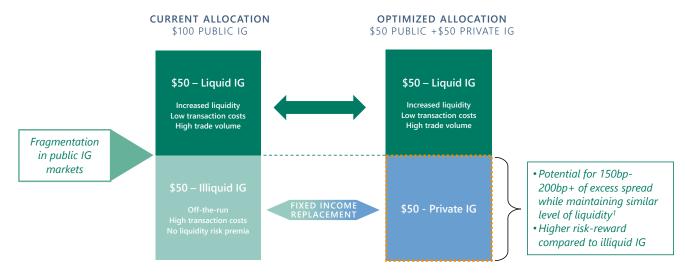
Today, a public fixed income portfolio is increasingly bifurcated:

- A liquid segment (on-the-run), where risk can be efficiently transferred in size—even during stress.
- ◆ An illiquid segment (off-the-run), where trading is limited and worsening, yet offering little excess spread in return.

For this latter allocation, we believe private credit can offer an attractive alternative. Liquidity conditions are comparable—and improving—as the private credit marketplace develops. But the spread compensation is meaningfully higher. By rotating out of off-the-run public bonds into IG private credit (Private IG), investors can enhance yield while maintaining some liquidity (Exhibit 10).

The growing fragmentation in public credit markets is no longer just a structural quirk—it has real consequences for portfolio construction, especially during periods of volatility. As liquidity becomes increasingly concentrated within a slice of the market, a significant portion of public credit is behaving more like a buy-and-hold asset, yet failing to compensate holders with excess spread typically associated with illiquidity. In this environment, we believe it may be time for investors to reassess the composition of their public credit IG portfolios. For exposures that cannot be reliably traded in size or amid stress, allocating to private credit—which can offer a significant spread pickup over public debt—can allow for a more efficient and intentional use of less liquid capital.

Exhibit 10: We believe a portion of public credit portfolios should be replaced with Private IG



(1) Apollo Analysts.

For illustrative purposes only. Actual results may vary.

2. Rethinking Capital Flows: From US Exceptionalism to European Opportunity

The global investment landscape may be in the initial stages of a strategic recalibration. Over the past five months, the Trump administration has rolled out a series of aggressive trade and geopolitical policies, challenging a global order that has persisted for over 75 years. These disruptive changes may reshape how global allocators think about the preeminence of US capital markets.

While the most pessimistic economic predictions made in the aftermath of Liberation Day have yet to be realized, the broader message is clear: The era of unrivaled US capital markets' leadership may be coming to an end. Against this backdrop, one of the clearest themes to emerge has been the shift **in capital flows**—where at least on the margin, money has flowed away from the US and toward European markets.

Large institutional allocators are already adjusting their behavior. China's wealth fund, China Investment Corp., is reportedly reducing its exposure to US private assets, including private equity and infrastructure, as the country's trade and economic rivalry with the US intensifies. Global central banks, too are diversifying: Treasuries held by official entities at the New York Fed have fallen \$48 billion since late March, while foreign participation in the Fed's reverse repurchase agreement facility also declined. Notably, Treasury bonds and the dollar didn't serve their traditional role as safehaven assets (Exhibit 11).

Exhibit 11: Dollar performance during volatility spikes

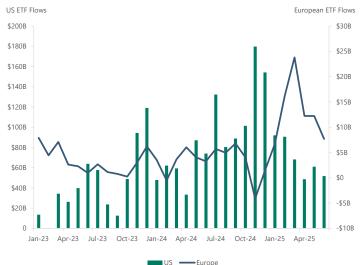
	Date	VIX Peak	∆ USD
1	Apr '25	52	-10.9%
2	Mar '20	83	+0.1%
3	Oct '11	45	+7.3%
4	May '10	46	+2.2%
5	Jan '09	57	+4.2%
6	Nov '08	81	+12.9%
7	Aug '02	45	-6.9%

Data as of July 2025.

Note: Data looks at times when the VIX surpassed 40 since 2000. Dollar performance represents changes in the DXY 3 months before and after the spike. Source: Bloomberg

Capital markets data reinforces the reallocation trend. US ETFs—across both equities and fixed income—saw \$505 billion of outflows in March and April.⁵ This suggests a modest deviation from trend: March and April's ETF net flows were 0.5 and 1.0 standard deviations below their respective 2024 average monthly values. Meanwhile, European ETFs saw \$36 billion of inflows in March and April. March saw an exceptionally large move—6.8 standard deviations above the 2024 average. In addition, as of the end of June, European ETF flows were up 295% compared to the same period last year (Exhibit 12).

Exhibit 12: US ETFs see heavy outflows while Europe gains momentum



Data as of June 2025. Source: Bloomberg

Looking at US Treasury flows, foreign residents sold \$51 billion in long-term securities in April, with \$30 billion from official institutions and \$21 billion from private investors. Germany's capital flow data paints a different picture: In April 2025, the country recorded a capital account surplus of €16 billion—nearly three times the monthly average of €6 billion—reflecting strong foreign inflows into Bunds.

These capital flow shifts are being reinforced by stronger relative performance in European assets. The euro posted its longest stretch of monthly gains against the dollar in eight years, rallying over the first six months of the year, boosted by rising confidence in Europe's economic prospects and a hunt for alternatives to the slumping dollar. The Bloomberg Dollar Spot Index hit its lowest level in more than three years in early July. Germany's DAX benchmark Index is up 33% so far this year in dollar terms, more than four times the gains of the S&P 500 Index.

⁵ Bloomberg, May 2025.

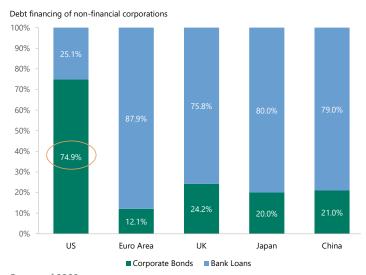
⁶ US Department of the Treasury, June 2025.

Still, the capital outflows from the US so far have been modest. Treasury auctions, while volatile, continue to find buyers. Recent 30-year bond sales illustrate this resilience: April's 2.4 bid-to-cover ratio came in slightly above the average for the past six reopenings, May's 2.3 was modestly below the average for new issues, and June's 2.4 matched the recent reopening average—highlighting steady demand even amid elevated uncertainty. ETF data suggests flows have reversed in recent months, and the dollar, despite recent weakness, still plays a central role in global trade. However, recent shifts in US policy have led some market participants to question whether an overconcentration in US assets remains prudent. For investors whose portfolios are built on the assumption of enduring US financial dominance, the case for geographic diversification—particularly into European private credit—is becoming harder to ignore.

For allocators focused on private credit, we believe this shift in flows into Europe may be more than just cyclical, perhaps reflecting the region's structural tailwinds. Europe's non-bank lending market remains underpenetrated, yet it is supported by strong demand from borrowers, favorable regulatory tailwinds, and increasing institutional acceptance. While the asset class has historically lagged behind the US in terms of size and maturity, we believe recent policy shifts leave Europe well positioned to close this gap. For investors already allocated to US private credit, Europe now offers more than just geographic diversification—it can provide access to a market that is increasingly positioned to rival its US counterpart in both scale and return potential.

A few dynamics support this view. First, Europe's banking system remains the dominant source of corporate financing, especially when compared to the US, where capital markets play a much larger role. Non-bank lending in Europe and the UK makes up just 12% of the corporate finance market, versus 75% in the US (Exhibit 13). This discrepancy highlights a large

Exhibit 13: US markets offer a more diverse range of corporate financing options



Data as of 2023. Source: SIFMA opportunity gap for private credit to expand in Europe—particularly in direct lending, which has already outgrown public leveraged finance markets in the region. At €440 billion, Europe's direct lending market exceeds the size of region's high-yield (€415 billion) and syndicated loan markets (€310 billion) (Exhibit 14).

Exhibit 14: Structural differences between the European and US financial systems



Sources: (1) IMF as of December 2024. (2) For the US data, Federal Reserve Bank of St. Louis, as of January 2025 and Bank Regulatory Reporting as of Q4 2024. For the European and UK data, ECB and EBA as of Q2 2024. (3) Federal Reserve Bank of St. Louis as of January 2025 and European Central Bank as of Q2 2024. (4) Leveraged Loan Index PitchBook as of December 2024. (5) ICE BofA High Yield as of December 2024. (6) Preqin, as of June 2024. (7) SIFMA as of December 2023 and AFME as of March 2024.

Second, policy is shifting in support of private capital. Policymakers at the European Commission (EC) are looking to redirect the €10 trillion in savings that EU citizens hold in bank accounts into more productive investments, including retail investments (such as stocks, bonds, and insurance products). The move is part of the EC's Savings and Investments Union initiative, which aims to enhance the EU's financial system's capabilities to connect savings and investments. Compounding this trend is the implementation of Basel III (and soon Basel IV) rules, which are pushing banks to hold more capital and reduce exposure to risk-weighted assets, including certain corporate and real estate loans. These developments are creating structural white space that private lenders can help fill.

Third, the macroeconomic picture in Europe may be turning more supportive. After a prolonged period of stagnation, fiscal policy has turned more expansionary. The EU's €800 billion ReArm Europe initiative—designed to boost defense spending and infrastructure investment—could provide a meaningful tailwind to growth, particularly in core economies like Germany. While the long-term impact of tariffs, trade tensions, and geopolitical instability remains uncertain, Europe's newfound political cohesion and commitment to fiscal stimulus could position it favorably compared to the US over the coming quarters (Exhibit 15).

Perhaps most compelling is the fact that European private credit continues to offer a pricing premium relative to the US. Direct lending transactions in Europe are still pricing 25–50 basis points wider on average than comparable deals in the US, even after adjusting for currency risk.^{7,8} This spread differential reflects a range of structural and legal factors, including market fragmentation, the complexity of local legal regimes, multi-currency structuring challenges, and varying degrees of creditor protection across jurisdictions. For investors with cross-border capabilities and local expertise, these inefficiencies can represent an opportunity to capture excess return.

In our view, these tailwinds—undersupply of non-bank capital, supportive regulatory reform, improving growth conditions, and attractive relative value—combine to make Europe one of the most promising private credit markets globally. But unlocking this opportunity requires scale, structuring expertise, and a local presence. The fragmented nature of the region means managers must underwrite deals jurisdiction by jurisdiction, build strong sourcing relationships, and manage through diverse legal and regulatory environments. Those able to do so will be well positioned to deliver strong risk-adjusted returns.

In conclusion, as highlighted in Apollo's recent white paper, The Continental Shift: Europe's Private Credit Moment, while US private credit remains the center of gravity for the asset class today, Europe is quickly emerging as a credible contender. For allocators seeking diversification and differentiated returns—objectives that are growing in importance in today's market environment—we believe Europe deserves close attention.

Exhibit 15: Europe outpacing the US due to ramp up in military spending





Data as of July 2025. Sources: Bloomberg, US Global Investors

⁷ Kroll Bond Rating Agency, data as of Q2 2024.

⁸ Valuation Research Corporation, European Private Market Update: Q2 2025 https://www.valuationresearch.com/insights/european-private-market-update/.

3. Al's Next Chapter: Credit Joins the Capital Stack

Science fiction writer Arthur C. Clarke famously observed that "any sufficiently advanced technology is indistinguishable from magic"—a sentiment that aptly captures the awe many of us felt when first encountering revolutionary products like the iPhone or ChatGPT. But magic, at its core, is also an exercise in misdirection—a way to conceal a transformative act in plain sight.

In our 2025 Credit Outlook, we highlighted the emerging opportunity to finance the data center boom fueled by generative AI. That theme was tested soon after publication, when Chinese AI lab DeepSeek released a low-cost, open-source large language model (LLM) that challenged many of the assumptions about the sustainability of the infrastructure buildout. Nvidia, the leading provider of GPUs used to train LLMs, and iShares AI ETF each fell about 25% in the ensuing two months.

However, fears of a slowdown proved unfounded, or at least premature. In fact, the four largest hyperscalers—Amazon, Microsoft, Alphabet, and Meta—have raised their 2025 capex guidance by more than \$70 billion collectively since the Deepseek news, with Al driving that growth. Goldman Sachs now projects that US hyperscalers will spend more than \$1 trillion in capex over the next three years. More recently, Meta CEO, Mark Zuckerberg, has made headlines with the creation of a new division called Meta Superintelligence Labs that is embarking on an aggressive investment in Al talent and infrastructure. OpenAl's Stargate joint venture—a \$500 billion Al supercomputing initiative—has begun construction on its first project, a 1.2GW data center in Abilene, Texas.

Since April, AI has firmly reasserted its control of the largecap US equity indices. In July, Nvidia became the first company in history to surpass a \$4 trillion market cap and we estimate that AI-related constituents of the S&P 500 contributed over 90% of the index's second-quarter return. In a twist of symmetry, the DeepSeek episode may have served as a moment of misdirection—drawing attention away from a more profound shift now underway in plain sight: the rapid acceleration of real-world AI adoption. And it's this growing adoption where we believe the next opportunity lies.

According to McKinsey's 2025 global AI survey, 92% of companies plan to increase AI investment over the next three years, yet fewer than 1% consider themselves fully Al-mature—suggesting that adoption is both broadening yet still in its infancy.11 This rising deployment is reflected in the surging volume of tokens—the fundamental units processed by AI models. For example, Microsoft processed more than 100 trillion tokens in the first guarter of 2025 alone,¹² representing a 5x increase year over year, while Google monthly token generation grew to 980 trillion in July from 480 trillion in May.13 Meanwhile, inference costs—the cost of running AI models in production, as opposed to training them—have dropped dramatically in recent years, with benchmark rates for large models falling by a median of 50× per year.¹⁴ As enterprises shift from experimentation to integration, this sharp decline in unit economics is removing barriers to the integration of AI into workflows across a variety of domains including customer support, software development and document review.

The broadening adoption of AI is also opening up new avenues for debt financing. Since the launch of ChatGPT in late 2022, investing in Gen AI has been primarily the domain of venture capitalists and public equity investors. Fixed income investors have had few direct investment opportunities beyond data center financings and public debt investments in derivative beneficiaries like equipment suppliers and fiber-based broadband providers. This mirrors the financing path of earlier technology cycles, where startups relied on equity before scaling into credit markets.

⁹ State Street, No Let-up in Capital Expenditures, February 2025.

 $^{^{\}rm 10}$ Bloomberg, Inside the First Stargate AI Data Center, May 2025.

¹¹ McKinsey & Company, The State of Al in 2025: How Organizations Are Rewiring to Capture Value, May 2025.

¹² Microsoft fiscal year 2025 third quarter-earnings call transcript, April 2025.

¹³ Alphabet earnings report, July 2025.

¹⁴ Epoch AI, LLM Inference Price Trends: A Year of Decline, July 2025.

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Uber, for example, issued its first public bond in 2018—nine years after its founding. We expect GenAl to follow a similar trajectory but at an accelerated pace. Al software startups are scaling more rapidly than many of their SaaS predecessors (Exhibit 16), which we believe will hasten their transition into the debt markets.

Earlier this year, Databricks—a cloud-based data and AI platform—raised \$10 billion in debt and preferred financing, including ~\$3 billion in secured term loans. Though founded in 2013, Databricks has leveraged GenAI to support its growth by integrating AI into its unified data platform. The company is reportedly growing at a 50% annual rate with recurring revenue expected to approach \$4 billion. We view this transaction as the beginning of a broader trend: scaled, AI-enabled private companies turning to debt

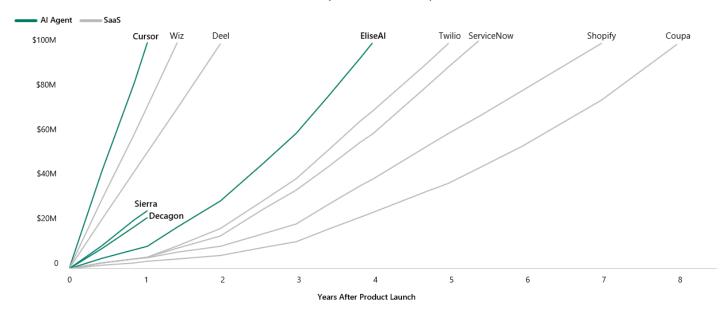
to diversify their funding base. The opportunity could be immense—venture funds invested over \$130 billion into AI startups in 2024 alone. In addition, AI startups in the US and Europe claimed over one-third of the \$30 billion of venture debt raised this year. In

Debt capital is also a logical financing source for many Alstartups, especially developers of LLMs, because of the tremendous amount of GPU compute capacity required to train and provision these systems. Last year, Dario Amodei, the CEO of AI lab Anthropic, estimated that training a leading-edge LLM cost \$100 million, with some models in development carrying estimated training price tags of \$1 billion. ¹⁸ Many research labs have partnered with hyperscalers to access the required capital and infrastructure:

Exhibit 16: AI startups outpace SaaS in speed of scale

Years to \$100 Million Annual Recurring Revenue (ARR) After Product Launch

ARR (in Millions of US Dollars)



Data as of July 2025. Source: Bain Capital

 $^{^{\}rm 15}$ Tech Funding News, January 2025.

¹⁶ PitchBook, AI Startups Grabbed a Third of Global VC Dollars in 2024, January 2025.

¹⁷ PitchBook, Al startups gobbling more than a third of venture debt dollars this year, July 2025.

¹⁸ Tom's Hardware, July 2024.

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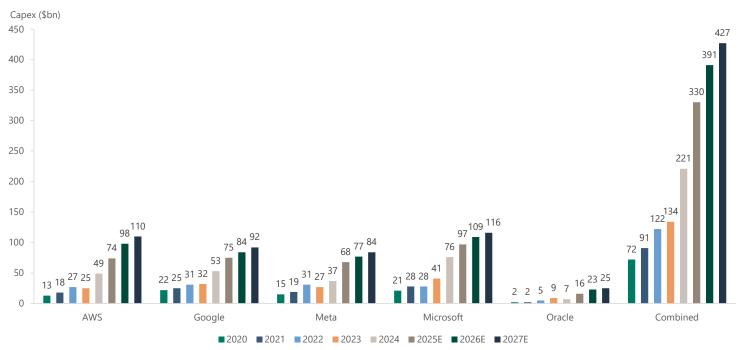
Amazon is a major investor in Anthropic, Microsoft backs OpenAI, and Oracle and SoftBank recently joined as strategic partners in Stargate. This has been a driving factor behind the huge increase in current and projected capex by the major US hyperscalers (Exhibit 17).

In June, public credit investors were offered their first direct exposure to a leading LLM developer with xAl's inaugural \$5 billion debt financing. The deal will help fund the construction of Tulane, xAl's next-generation data center projected to be the world's most powerful. CoreWeave, a GPU-cloud provider that went public in March, has issued \$3.75 billion in senior unsecured notes since its IPO, supplementing \$7.5 billion of GPU-backed loans raised last year. We expect an expanding opportunity for GPU-backed financings as LLM developers and cloud service providers add compute capacity to meet the growing demand for Al training and inference workloads.

The ultimate test for AI will be its ability to generate durable revenue. Sequoia Capital has described this endeavor as the industry's "\$600 billion question"—their estimate of the revenue needed to cover the investments made in AI infrastructure as of the fourth quarter of 2024. But signs point to an inflection in AI application revenues. OpenAI, for example, reportedly generates \$12 billion in ARR and aims to reach \$125 billion by 2029. As these new AI-enabled startups scale, they will increasingly challenge industry incumbents and legacy business models. The scope and intensity of this new competitive vector will vary by sector and be shaped by the pace of innovation in underlying AI technologies. However, we think credit investors would be wise to incorporate the future competitive risks that AI poses into their underwriting approach.

For example, ChatGPT—used by an estimated 800 million people weekly—is transforming workplace productivity, content creation, and increasingly, internet search.

Exhibit 17: Hyperscale capex surges amid strategic partnerships



Data as of June 2025. Source: Goldman Sachs

¹⁹ Bloomberg, June 2025.

²⁰ Bloomberg, July 2025; PitchBook LCD, May 2024.

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Although it's estimated that OpenAI holds just 2% of the search market, its share is growing, forcing incumbents like Google to respond with features like AI Overviews and AI Mode. AI agents that can navigate websites, book services, and execute online transactions could redefine customer acquisition models for online-native businesses and disintermediate some content publishers (Exhibit 18).

GenAI is also reshaping software development. Tools like Cursor, an AI-native code editor, are boosting developer productivity. Google's CEO recently estimated that AI generates over 25% of the company's new code. Some legacy DevOps vendors may be exposed to these changes, while the broader software industry could face headwinds from declining switching costs and increasing automation. Seat-based pricing models may come under pressure if AI enables leaner teams. Still, for some software companies, AI may serve as a sustaining innovation—offering meaningful cost takeout and revenue growth opportunities. How this all plays out remains to be seen, but we expect significant

dispersion in the software space, which now makes up over 15% of the US Leveraged Loan Index. Private credit portfolios are also heavily exposed to software-related companies with industry-wide exposure estimated at 21%.²¹

The AI revolution may be in the early stages of delivering on its promise of tangible economic impact. Infrastructure buildout, corporate adoption, and revenue monetization are accelerating in parallel. From data centers to AI applications, the investable universe for credit is expanding. As these businesses scale and access the debt markets, credit investors who understand the nuances of the technology—from falling inference costs to evolving software margins—will be best positioned to underwrite the next wave of growth. Like all transformational technologies, AI will bring disruption, dispersion, and, in some cases, consolidation. The trick for investors will be to identify where durable value is being created and at whose expense—before the magic becomes obvious.

Exhibit 18: Navigating the new digital economy with AI agents

Al Application	Representative Companies	Impacted Industry
Coding Agents	GitHub Copilot, Replit, Codeium, Cursor	Software Development, DevOps
Chatbots	ChatGPT (OpenAI), Claude (Anthropic), Gemini (Google)	General Productivity, Consumer Tech, Internet Search
Agent Platforms	ChatGPT Agent (OpenAI), Project Mariner (Google), Claude Research Agent (Anthropic)	Cross-industry Automation, BPOs, Webbased Commerce
Customer Service Agents	Sierra, Decagon, Zendesk Al	Call Center Operators & Solution Providers
Al Legal Assistants	Harvey, Casetext (Thomson Reuters), Spellbook	Legal Service Providers
AI Content Creation/ Sales & Marketing AI	Copy.ai, Runway, Meta Advantage, Hubspot Al	Advertising, Marketing, Media, Content Production

Data as of July 2025. Source: Apollo Analysts

²¹ Aggregate from PitchBook, Goldman Sachs, JPMorgan, July 2025.

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About the Authors



John Cortese, Partner and Head of Portfolio Management

Mr. Cortese is a Partner and Head of Portfolio Management at Apollo Asset Management, Prior to joining in 2021, John was Co-Head of US Credit Trading at Barclays. John is Vice-Chair of the Board of the Make-A-Wish Foundation's Metro & Western NY branch. He also sits on the Board of Advisors to Dartmouth College's Hopkins Center for the Arts. John graduated from Dartmouth with a BA in Economics and is a CFA charterholder.





Rob Bittencourt, Partner, **Head of Thematic** Investing

Since joining Apollo in 2006, Rob has focused on Apollo's credit businesses in a variety of capacities including as Co-Head of Liquid Opportunistic Credit, Head of Research for Global Corporate Credit, Co-Head of Opportunistic Credit and currently Head of Thematic Investing. He has also led research coverage of a variety of sectors including consumer/retail, technology, telecom/media and chemicals. Rob is a member of the Opportunistic Portfolio Management Team and serves on the Opportunistic Credit Investment Committee. He cofounded Apollo's digital asset strategy and is a member of Apollo's Credit Management Committee. Rob graduated cum laude from Harvard College with a BA in economics.

Akila Grewal, Partner, Global Head of Product

Akila Grewal is a Partner and Global Head of Product at Apollo Global Management, where she oversees product strategy and distribution, thought leadership and client engagement. She is a member of Apollo's Leadership Team, Asset Management Committee and Credit Management team. Akila also serves on the not-for-profit Braven's NYC board as well as PK AirFinance and Stable Asset Management's boards. Before joining Apollo in 2016, she held roles at Mariner Investment Group, MKP Capital and Credit Suisse. Akila holds a BS in Finance from NYU's Stern School of Business and is a CFA charterholder.

About the Authors (continued)



Shobhit Gupta, Managing Director, Corporate Credit

Shobhit Gupta joined Apollo in January 2024 as the Head of Multi-Credit Strategy and is responsible for identifying key themes and opportunities across global credit.

Prior to joining Apollo in 2024, Mr. Gupta spent 15 years at Barclays as the head of US credit strategy, covering investment grade, high yield, loans, credit derivatives and securitized products. He also worked at Citadel for two years focusing on opportunities in subordinated capital securities.

Mr. Gupta has a PhD in Operations Research from MIT, and a Bachelor's degree in Mechanical Engineering from IIT Bombay.



Tal Barak Harif, Principal, Head Credit Writer

Tal Barak Harif is a Principal and Head Credit Writer at Apollo, working in partnership with the Institutional Client & Product. Investing and Marketing/Branding teams on content creation and strategy. Prior to Apollo, Tal spent 17 years at Bloomberg News where she launched and led innovative news products, managed global teams across domains, and produced exclusive agenda-setting stories on companies, industries, markets and economies. Early in her career. Tal was a financial and emerging markets reporter, editor and team leader at Bloomberg. Wall Street Journal, and Dow Jones. Tal graduated from the University of Maryland, College Park with a BA in Journalism and Psychology.

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